(1) (I-DBF-1) DATA BUFFERS:

PROVIDES THREE-STATE INVERTING BUFFERS FOR INCOMING AND OUTGOING DATA BITS (/DB00-DB15) TO/FROM ALPHANUMERIC OTF PROCESSOR.

(2) (I-INV-1) THREE-STATE INVERTERS:

INVERTS AND BUFFERS INCOMING 16 DATA BITS (/DB00-DB15) FROM ALPHANUMERIC OTF PROCESSOR. U22 AND U24 PROVIDE THREE-STATE INVERTERS WITH OUTPUTS ENABLED CONSTANTLY WITH LOW LOGIC LEVEL.

(3) (I-INV-2) THREE-STATE INVERTERS:

INVERTS AND BUFFERS OUTGOING 16 DATA BITS (DI00-DI15) TO ALPHANUMERIC OTF PROCESSOR. U20 AND U26 PROVIDE THREE-STATE INVERTERS WITH OUTPUTS ENABLED BY /DATI (/DATA IN) SIGNAL PRODUCED BY I-UCB-1 (UNIT READ/WRITE CONTROL BUFFER).

(4) (N-RES-1) RESISTOR NETWORK:

PROVIDES IMPEDANCE MATCHING (BETWEEN TTL AND MOS) FOR OUTPUTS OF INVERTERS IN I-INV-1.

CONTROLLED DOCUMENT

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 2 of 24)

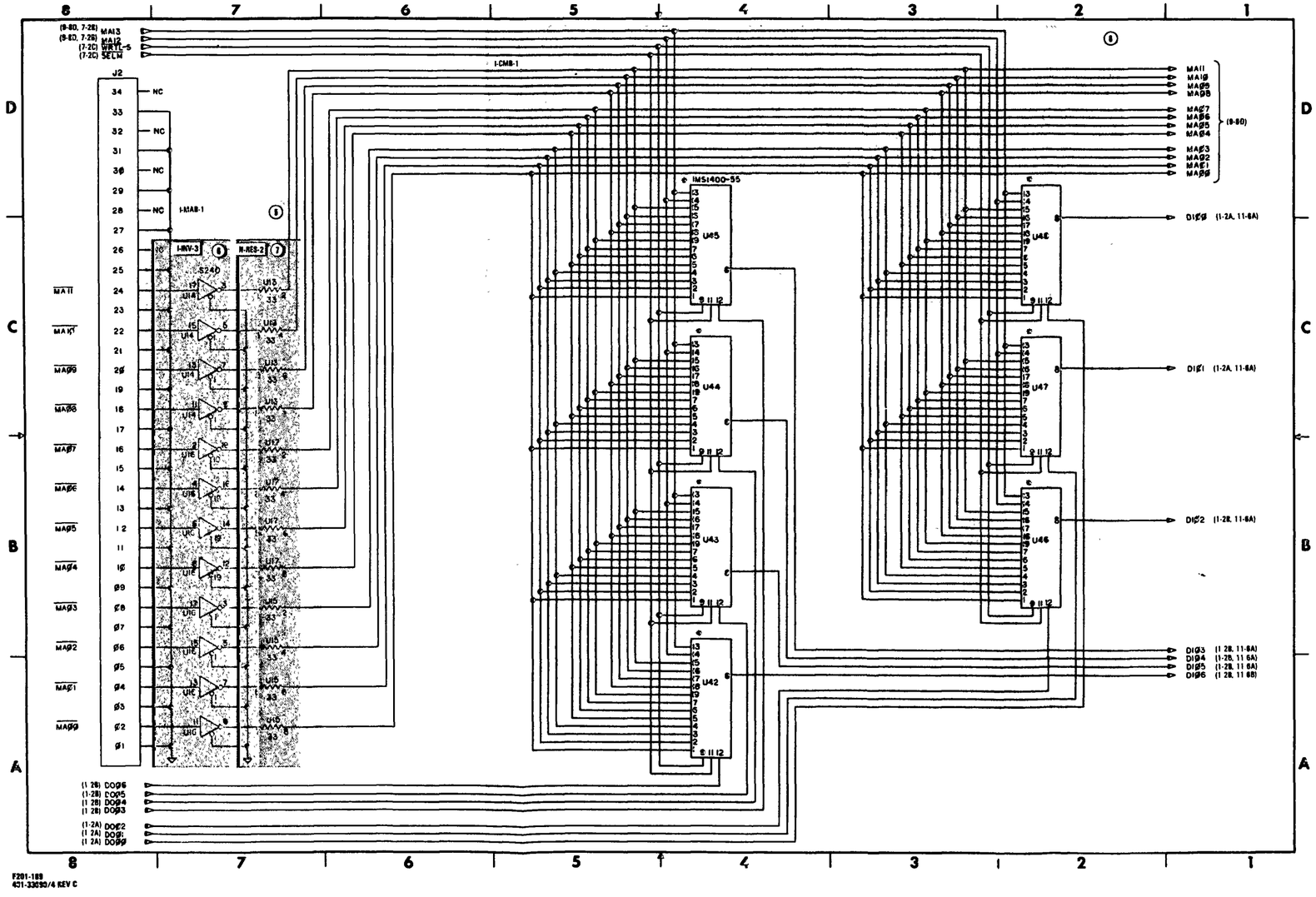

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 3 of 24)

(5) (I-MAB-1) MEMORY ADDRESS BUFFER:

PROVIDES THREE-STATE INVERTING BUFFERS FOR INCOMING MEMORY ADDRESS BITS (/MA00-MA11) FROM ALPHANUMERIC OTF PROCESSOR.

(6) (I-INV-3) THREE-STATE INVERTERS:

INVERTS AND BUFFERS 12 INCOMING MEMORY ADDRESS BITS (/MA00-MA11) FROM ALPHANUMERIC OTF PROCESSOR. U14 AND U16 PROVIDE THREE-STATE INVERTERS WITH OUTPUTS ENABLED CONSTANTLY WITH LOW LOGIC LEVEL.

(7) (N-RES-2) RESISTOR NETWORK:

PROVIDES IMPEDANCE MATCHING (BETWEEN TTL AND MOS) FOR OUTPUTS OF INVERTERS IN I-INV-3.

(8) (I-CMB-1) CACHE MEMORY LOW BANK:

PROVIDES STORAGE FOR ASCII INFORMATION FROM ALPHANUMERIC OTF PROCESSOR. CONSISTS OF SEVEN 16K X 1 BIT RAM (RANDOM ACCESS MEMORY) CHIPS. INPUTS /MA00-MA11 (/MEMORY ADDRESS 00-11) ARE OUTPUTS FROM ALPHANUMERIC OTF PROCESSOR USED TO ADDRESS PARTICULAR MEMORY LOCATION IN I-CMB-1. MA12-MA13 (MEMORY ADDRESS 12-13) ARE SIGNALS GENERATED BY QUAD CACHE TO SELECT ONE OF FOUR CRT MONITORS TO (1) RECEIVE ASCII INFORMATION READ OUT OF I-CMB-1, AND (2) TRANSFER DATA TO/FROM A/N OTF PROCESSOR. DI00-DI06 (DATA INPUT 00-06) ARE SEVEN BITS OF ASCII DATA READ FROM I-CMB-1 AND ARE SENT TO THE A/N OTF PROCESSOR.

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 4 of 24)

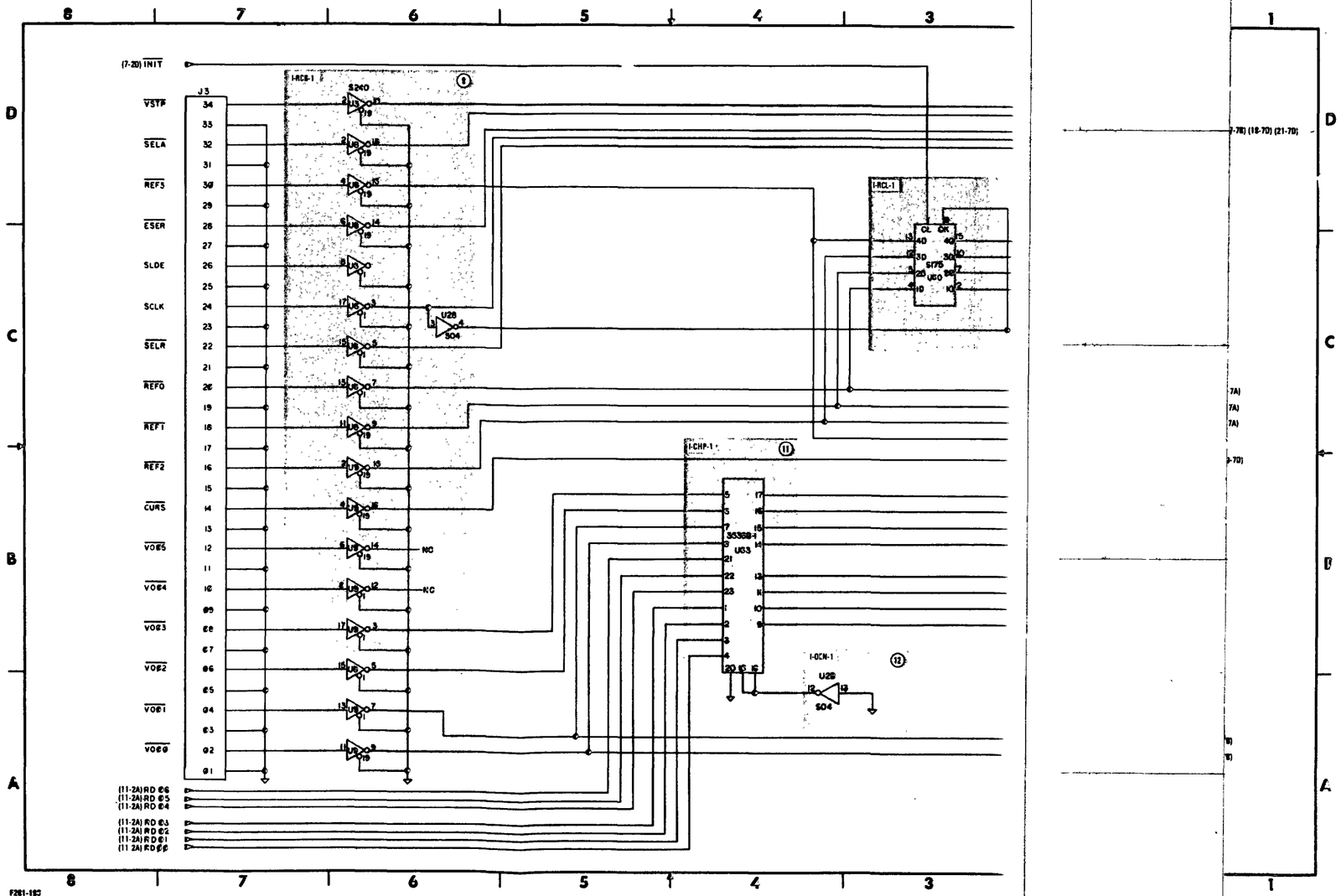

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 5 of 24)

(9) (I-RCB-1) REFRESH CONTROL BUFFER:

INVERTS AND BUFFERS REFRESH CONTROL SIGNALS FROM A/N OTF PROCESSOR. U3, U8, AND U9 ARE THREE-STATE INVERTERS WHICH ARE CONSTANTLY ENABLED WITH LOW LOGIC LEVEL. U28 SERVES TO INVERT /SCLK (/SHIFT CLOCK) TO PROVIDE SCLK SIGNAL FOR USE WITHIN QUAD CACHE.

(10) (I-RCL-1) REFRESH CONTROL LATCH:

LATCHES FOUR REFRESH SIGNALS (REF0-REF3) FROM A/N OTF PROCESSOR. OUTPUTS LOAD0-LOAD3 SIGNALS TO I-SHR-1 (SHIFT REGISTERS) TO LOAD SHIFT REGISTER WITH DOT MATRIX DATA.

(11) (I-CHP-1) CHARACTER PROM:

ACCEPTS ASCII CHARACTER FROM I-CMB-1 (CACHE MEMORY) AND OUTPUTS PROPER DOT MATRIX CODE FOR CHARACTER TO I-SHR-1 (SHIFT REGISTER) FOR OUTPUT TO PROPER CRT MONITOR. PROM (PROGRAMMABLE READ-ONLY MEMORY) U63 IS A 2K X 8 BIT MEMORY DEVICE.

(12) (I-OEN-1) OUTPUT ENABLE CIRCUIT:

PROVIDES LOGIC HIGH LEVEL TO CONSTANTLY ENABLE I-CHP-1 (CHARACTER PROM). INVERTER U28 INVERTS COMMON SIGNAL TO CREATE LOGIC HIGH LEVEL.

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 6 of 24)

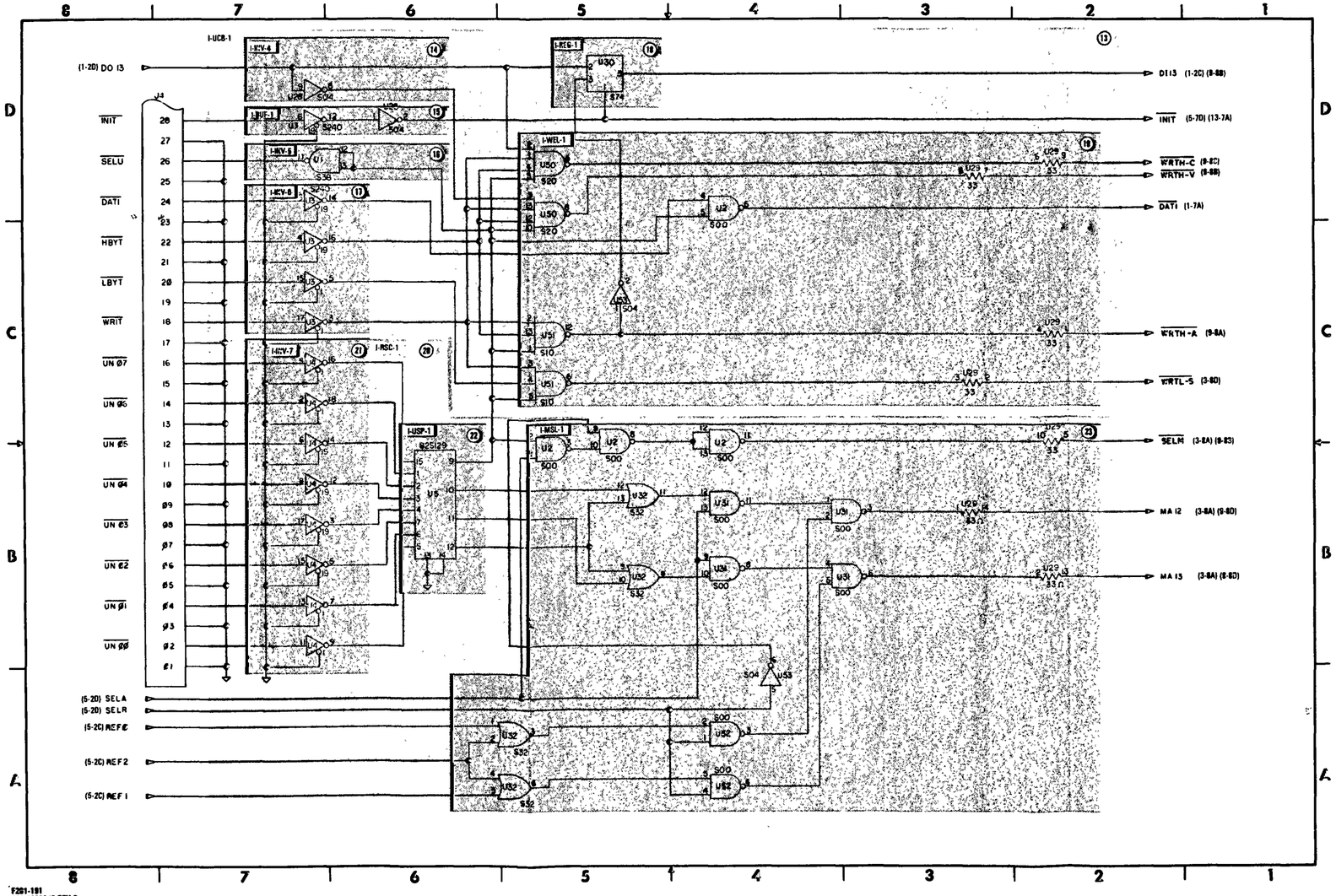

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Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 7 of 24)

(13) (I-UCB-1) UNIT READ/WRITE CONTROL BUFFER:

1) PROVIDES WRITE ENABLE SIGNALS FOR I-CMB-1 (LOW BANK CACHE MEMORY) AND I-CMB-2 (HIGH BANK CACHE MEMORY).
2) CREATES DI13 (DATA IN 13) SIGNAL WHICH IS SENT TO A/N OTF PROCESSOR TO ACKNOWLEDGE THAT EITHER COLOR OR VIDEO DATA IS BEING WRITTEN INTO I-CMB-2.
3) CREATES /DATI (/DATA INPUT) SIGNAL WHICH ENABLES I-INV-2 (INVERTERS) TO SEND DATA TO A/N OTF PROCESSOR.

(14) (I-INV-4) INVERTER:

INVERTS DO13 (DATA OUT 13) WHICH ALLOWS COLOR ATTRIBUTES TO BE READ OUT OF CACHE MEMORY WITH HIGH LOGIC LEVEL AND ALLOWS VIDEO ATTRIBUTES TO BE READ OUT OF MEMORY WITH LOW LOGIC LEVEL. INVERTER U28 INVERTS DO13 VIDEO ATTRIBUTE READ/WRITE SIGNAL (LOGIC LOW) INTO LOGIC HIGH LEVEL FOR USE BY I-WEL-1, (WRITE ENABLE LOGIC), U50.

(15) (I-BUF-1) BUFFERS:

BUFFERS /INIT (/INITIALIZE) SIGNAL USING TWO INVERTERS (U3 AND U28). BUFFERED /INIT SIGNAL IS USED AS CLEAR INPUT FOR REGISTER U30 IN I-REG-1 AND OUTPUT TO OTHER QUAD CACHE CIRCUITS.

(16) (I-INV-5) INVERTER:

CREATES /SELU (/SELECT UNIT) SIGNAL THAT INFORMS A/N OTF PROCESSOR THAT ONE OF FOUR CRT MONITORS HAS BEEN SELECTED BY QUAD CACHE FOR OUTPUT OF DATA. U1 IS TWO-INPUT NAND GATE WIRED AS INVERTER.

(17) (I-INV-6) INVERTERS:

INVERTS /DATI (/DATA INPUT), /HBYT (/HIGH BYTE), /LBYT (/LOW BYTE), AND /WRIT (/WRITE) SIGNALS TO ACTIVE HIGH LOGIC LEVEL FOR USE WITHIN I-WEL-1 (WRITE ENABLE LOGIC). THREE-STATE INVERTERS (U3) ARE USED WITH OUTPUT ENABLED CONSTANTLY BY LOGIC LOW SIGNAL.

(18) (I-REG-1) REGISTER:

CREATES DI13 (DATA INPUT 13) SIGNAL TO INFORM A/N OTF PROCESSOR WHETHER VIDEO OR COLOR ATTRIBUTE IS BEING READ FROM CACHE MEMORY. PIN 1 OF U30 IS CLEAR INPUT ACTIVATED BY /INIT (/INITIALIZE) SIGNAL FROM A/N OTF PROCESSOR. PIN 3 OF U30 IS CLOCK INPUT OF REGISTER AND IS ACTIVATED EACH TIME WRITE OPERATION HAS BEGUN.

(19) (I-WEL-1) WRITE ENABLE LOGIC:

ESTABLISHES LOW LOGIC ACTIVATED WRITE ENABLE SIGNALS WHICH ALLOW WRITING OF DATA INTO BOTH CACHE MEMORIES (I-CMB-1 AND I-CMB-2). ESTABLISHES /DATI (/DATA IN) SIGNAL WHICH ALLOWS 16 DATA IN BITS (DI00-DI15) TO BE TRANSFERRED FROM CACHE MEMORY TO A/N OTF PROCESSOR. U50 PIN 6 OUTPUTS /WRTH-C (/WRITE HIGH BYTE-COLOR) SIGNAL TO ALLOW WRITING OF COLOR ATTRIBUTES INTO I-CMB-2. U50 PIN 8 OUTPUTS /WRTH-V (/WRITE HIGH BYTE-VIDEO) SIGNAL TO ALLOW WRITING OF VIDEO ATTRIBUTES INTO I-CMB-2. U51 PIN 12 OUTPUTS /WRTH-A (/WRITE HIGH BYTE-ATTRIBUTE) SIGNAL TO ALLOW WRITING OF BACKGROUND, CURSOR, AND STOP ATTRIBUTES INTO I-CMB-2. U51 PIN 6 OUTPUTS /WRTL-S (/WRITE LOW BYTE-SYMBOL) SIGNAL TO ALLOW WRITING OF SYMBOL DATA INTO I-CMB-1. U2 PIN 6 OUTPUTS /DATI SIGNAL TO ESTABLISH QUAD CACHE TO A/N OTF PROCESSOR DATA BIT TRANSFERS. U53 PIN 2 OUTPUTS CLOCK PULSE SIGNIFYING HIGH BYTE ATTRIBUTE WRITE CONDITION TO I-REG-1, U30 ALLOWING DI13 SIGNAL TO INFORM A/N OTF PROCESSOR OF WRITE OPERATION. U29 RESISTORS PROVIDE IMPEDANCE MATCHING (BETWEEN TTL AND MOS).

(20) (I-RSC-1) RAM SELECT CIRCUIT:

ENABLES I-CMB-1 AND I-CMB-2 16K X 1 RAM (RANDOM ACCESS MEMORY) AND SELECTS SECTION OF RAM WHICH STORES DATA FOR PARTICULAR CRT MONITOR BEING ADDRESSED. /SELM (/SELECT MEMORY) SIGNAL IS OUTPUT TO ACTIVATE BOTH CACHE MEMORIES WHEN AT ACTIVE LOW LOGIC LEVEL. MA12 AND MA13 (MEMORY ADDRESS 12 AND 13) SELECT WHICH 4K SECTION OF 16K RAMS ARE ADDRESSED. (ONE 4K SECTION OF RAM CORRESPONDS TO EACH OF FOUR CRT MONITORS).

(21) (I-INV-7) INVERTERS:

INVERTS AND BUFFERS UN00-UN07 (UNIT NUMBER 00-07) SIGNALS FROM A/N OTF PROCESSOR WHICH INFORM I-RSC-1 (RAM SELECT CIRCUIT) WHICH CRT MONITOR IN SYSTEM IS TO BE ADDRESSED. THREE-STATE INVERTERS (U4) ARE CONSTANTLY ENABLED BY LOW LOGIC LEVEL.

(22) (I-USP-1) UNIT SELECT PROM:

DECODES UNIT NUMBER SIGNALS (UN00-07) AND OUTPUTS MEMORY ENABLE LOGIC SIGNALS IF QUAD CACHE OF WHICH IT IS PART IS INVOLVED IN MEMORY TRANSFER. PROM (PROGRAMMABLE READ-ONLY MEMORY) U5 IS 256 X 4 BIT MEMORY DEVICE.

(23) (I-MSL-1) MEMORY SELECT LOGIC:

ENABLES WRITE OPERATIONS FOR ATTRIBUTES AND SYMBOLS IF DECODER U5 SELECTS ONE OF FOUR CRT MONITORS ON PARTICULAR QUAD CACHE. OUTPUTS /SELM (/SELECT MEMORY) SIGNAL TO ENABLE I-CMB-1 AND I-CMB-2 (LOW BANK AND HIGH BANK CACHE MEMORIES). OUTPUTS MA12 AND MA13 (MEMORY ADDRESS 12 AND 13) TO SELECT, BY BINARY REPRESENTATION, WHICH 4K OF 16K RAM TO ADDRESS FOR PARTICULAR CRT MONITORS. U2 PROVIDES LOGIC TO OUTPUT /SELM (/SELECT MEMORY) WHEN REFRESH OR /SELA (/SELECT ADDRESS) SIGNAL IS APPLIED AND QUAD CACHE WAS SELECTED BY DECODER U5. U32, PINS 8 THROUGH 13 AND U31 FORM LOGIC CIRCUIT WHICH OUTPUTS MA12 AND MA13 SIGNALS. DECODER U5 OR REFRESH SIGNALS ALLOW OUTPUTS FROM THESE CIRCUITS. U32, PINS 1 THROUGH 6, AND U52 SYNCHRONIZE MEMORY REFRESH OPERATIONS USING REF 0-2 (REFRESH 0-2) SIGNALS FROM A/N OTF PROCESSOR. INVERTER U53 ALLOWS I-CMB-1 AND I-CMB-2 TO BE ENABLED FOR REFRESH PURPOSES. U29, R65, AND R66 ARE FOR IMPEDANCE MATCHING (BETWEEN TTL AND MOS).

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 8 of 24)

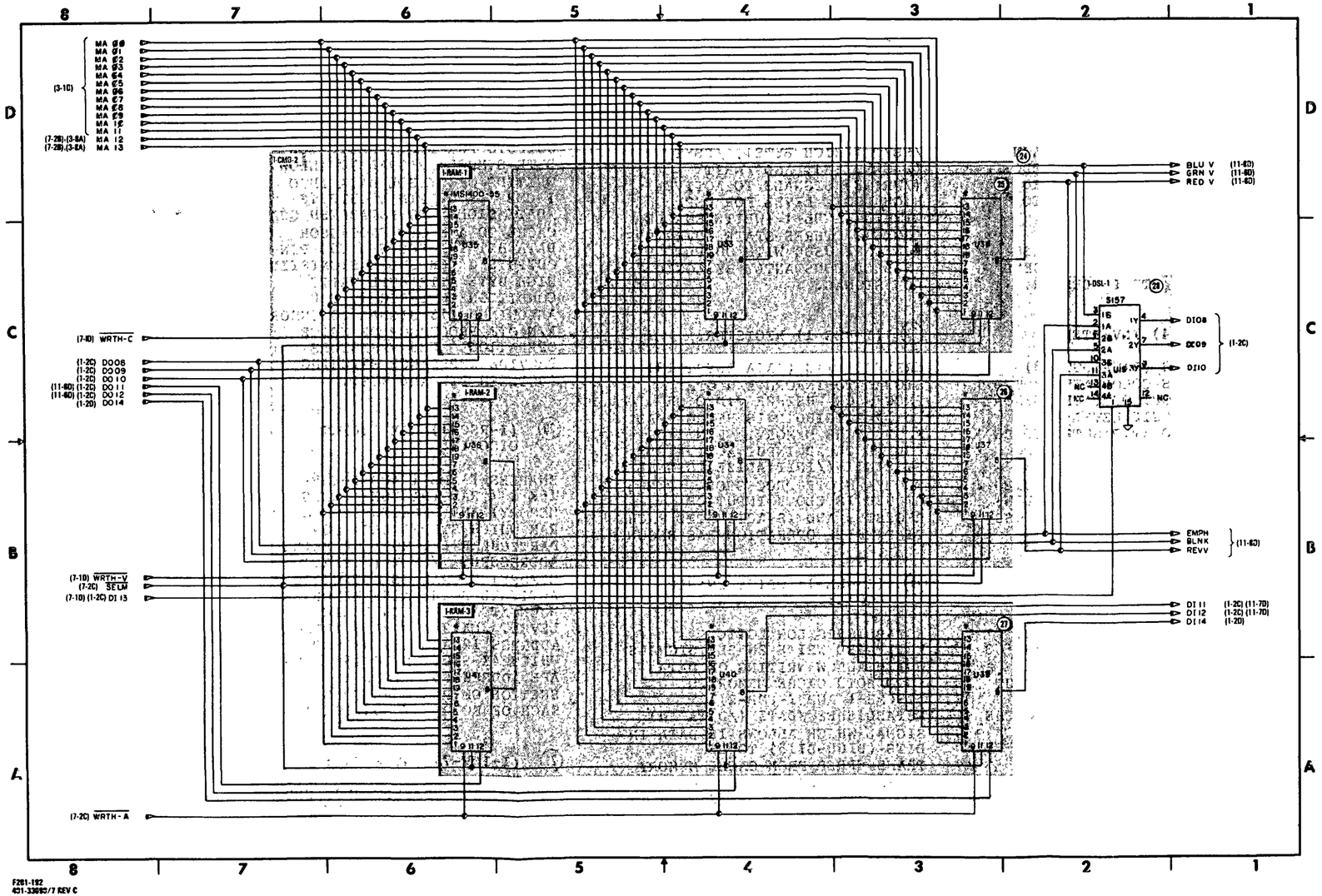

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 9 of 24)

(24) (I-CMB-2) CACHE MEMORY HIGH BANK:

PROVIDES STORAGE FOR ATTRIBUTE INFORMATION INCLUDING THE FOLLOWING:

1. BLUE VIDEO
2. GREEN VIDEO
3. RED VIDEO
4. EMPHASIS
5. BLINK
6. REVERSE VIDEO
7. BACKGROUND
8. CURSOR
9. STOP (STOP FILLING)

(25) I-RAM-1) RANDOM ACCESS MEMORY:

PROVIDES STORAGE FOR BLUE VIDEO, GREEN VIDEO, AND RED VIDEO ATTRIBUTES. ADDRESSED BY MA00-11 (MEMORY ADDRESS 00-11) SIGNALS FROM A/N OTF PROCESSOR. MA12 AND MA13 SIGNALS FROM I-RSC-1 (RAM SELECT CIRCUIT) DETERMINE WHICH 4K OF RAM TO ADDRESS FOR APPROPRIATE CRT MONITOR. /WRTH-C (/WRITE HIGH BYTE-COLOR) ALLOWS WRITE OPERATION OF DATA INTO RAM (16K X 1 BIT). /SELM (/MEMORY SELECT) SIGNAL ENABLES RAM. DO8-10 (DATA OUT 8-10) ARE THREE DATA BITS INPUT INTO RAM.

(26) (I-RAM-2) RANDOM ACCESS MEMORY:

PROVIDES STORAGE FOR EMPHASIS, BLINK, AND REVERSE VIDEO ATTRIBUTES. ADDRESSED BY MA00-11 (MEMORY ADDRESS 00-11) SIGNALS FROM A/N OTF PROCESSOR. MA12 AND MA13 SIGNALS FROM I-RSC-1 (RAM SELECT CIRCUIT) DETERMINE WHICH 4K OF RAM TO ADDRESS FOR APPROPRIATE CRT MONITOR. /WRTH-V (/WRITE HIGH BYTE-VIDEO) ALLOWS WRITE OPERATION OF DATA INTO RAM (16K X 1 BIT). /SELM (/MEMORY SELECT) SIGNAL ENABLES RAM. DO8-10 (DATA OUTPUT 8-10) ARE THREE DATA BITS INPUT INTO RAM.

(27) (I-RAM-3) RANDOM ACCESS MEMORY:

PROVIDES STORAGE FOR BACKGROUND, CURSOR, AND STOP ATTRIBUTES. ADDRESSED BY MA00-11 (MEMORY ADDRESS 00-11) SIGNALS FROM A/N OTF PROCESSOR. MA12 AND MA13 SIGNALS FROM I-RSC-1 (RAM SELECT CIRCUIT) DETERMINE WHICH 4K OF RAM TO ADDRESS FOR APPROPRIATE CRT MONITOR. /WRTH-A (/WRITE HIGH BYTE-ATTRIBUTE) ALLOWS WRITE OPERATION OF DATA INTO RAM (16K X 1 BIT). /SELM (/MEMORY SELECT) SIGNAL ENABLES RAM. D11-13 (DATA OUTPUT 11-13) ARE THREE DATA BITS INPUT INTO RAM.

(28) (I-DSL-1) DATA SELECTOR:

OUTPUTS DI08-10 (DATA INPUT 8-10) TO A/N OTF PROCESSOR. IF DI13 (DATA IN 13) AT PIN 1 OF U19 IS AT HIGH LOGIC LEVEL, OUTPUT DATA SELECTED WILL BE COLOR ATTRIBUTE DATA FROM I-RAM-1. IF DI13 IS AT LOW LOGIC LEVEL, OUTPUT DATA SELECTED WILL BE VIDEO ATTRIBUTE DATA FROM I-RAM-2.

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 10 of 24)

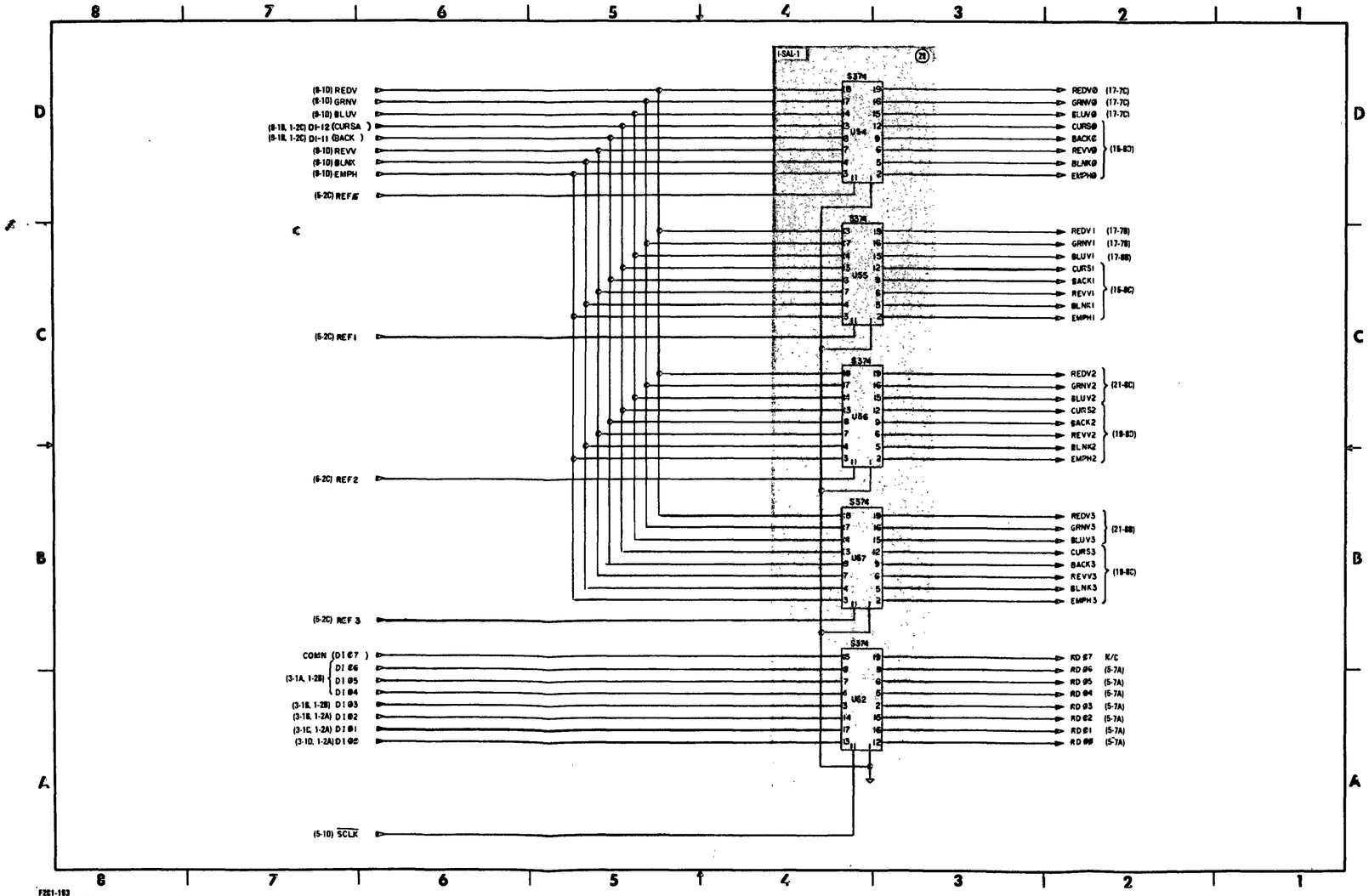

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 11 of 24)

(29) **(I-SAL-1)**
SYMBOL/ATTRIBUTE LATCH:

LATCHES SYMBOL AND ATTRIBUTE DATA FROM I-CMB-1 AND I-CMB-2. ATTRIBUTE LATCHES INCLUDE U54-57 AND ARE CLOCKED BY REF 0-3 (REFRESH 0-3) SYNCHRONIZATION SIGNALS FROM A/N OTF PROCESSOR. U62 LATCHES SYMBOL DATA CLOCKED BY /SCLK (/SYMBOL CLOCK) AND OUTPUT AS RD00-06 (READ 00-06) SIGNALS TO I-CHP-1 (CHARACTER PROM) FOR CONVERSION TO DOT MATRIX DATA.

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 12 of 24)

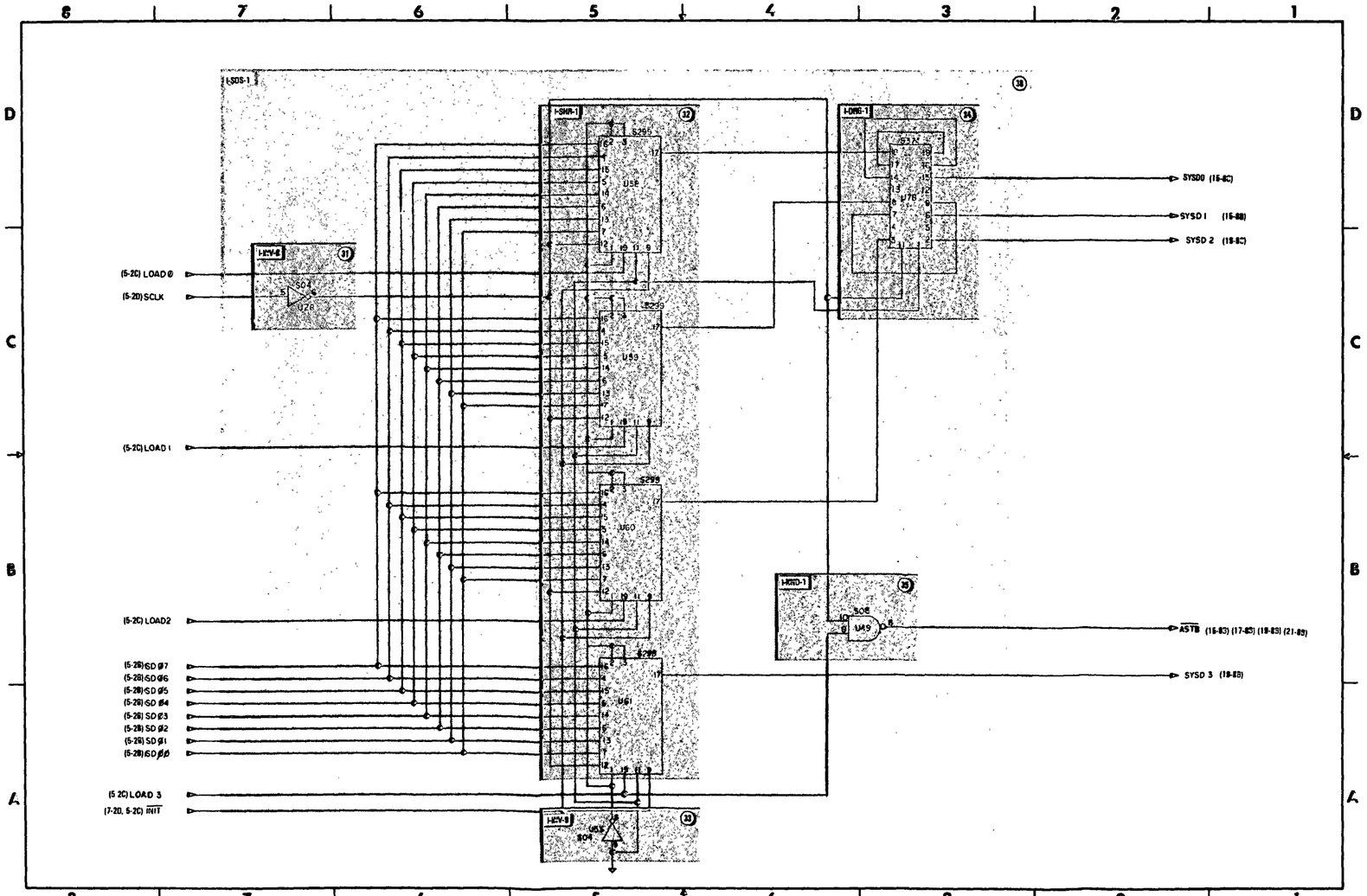

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 13 of 24)

(30) (I-SDS-1) SYMBOL DATA SERIALIZER:

PROVIDES PARALLEL LOADING OF SD00-07 (SYMBOL DATA 00-07) FOR FOUR CRT MONITORS INPUT BY QUAD CACHE.

(31) (I-INV-8) INVERTER:

INVERTS /SCLK (/SHIFT CLOCK) SIGNAL FOR USE BY I-SDS-1 (SYMBOL DATA SERIALIZER).

(32) (I-SHR-1) SHIFT REGISTER:

PROVIDES SERIAL OUTPUT OF SYMBOL DATA WHICH IS INPUT IN PARALLEL FORM. U58-61 PROVIDE FOUR SHIFT REGISTERS, WITH EACH REGISTER PROVIDING SERIAL SYMBOL DATA OUTPUT FOR SPECIFIC CRT MONITOR. REGISTERS ARE CLOCKED BY /SCLK (/SHIFT CLOCK) AND ARE LOADED BY LOAD 0-3 SIGNALS FROM I-RCL-1 (REFRESH CONTROL LATCH).

(33) (I-INV-9) INVERTER:

PROVIDES HIGH LOGIC LEVEL FOR USE BY SHIFT REGISTERS IN I-SHR-1.

(34) (I-DRG-1) DELAY REGISTER:

USES DELAY TO SYNCHRONIZE SYSD 0-2. A DELAY IS NEEDED BECAUSE THE CRT MONITORS SHARE SYNC SIGNALS. THIS MEANS THE VIDEO MUST BE IN COMMON SYNC BUT THE PARALLEL DATA IS LOADED INTO SHIFT REGISTERS AT DIFFERENT TIMES FOR EACH CRT MONITOR. U78 IS LATCH EXTERNALLY WIRED TO PROVIDE DELAY.

(35) (I-NND-1) NAND GATE:

CREATES /ASTB (/ATTRIBUTE STROBE) IN SYNCHRONIZATION WITH LOADING OF SYMBOL SERIALIZED DATA.

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 14 of 24)

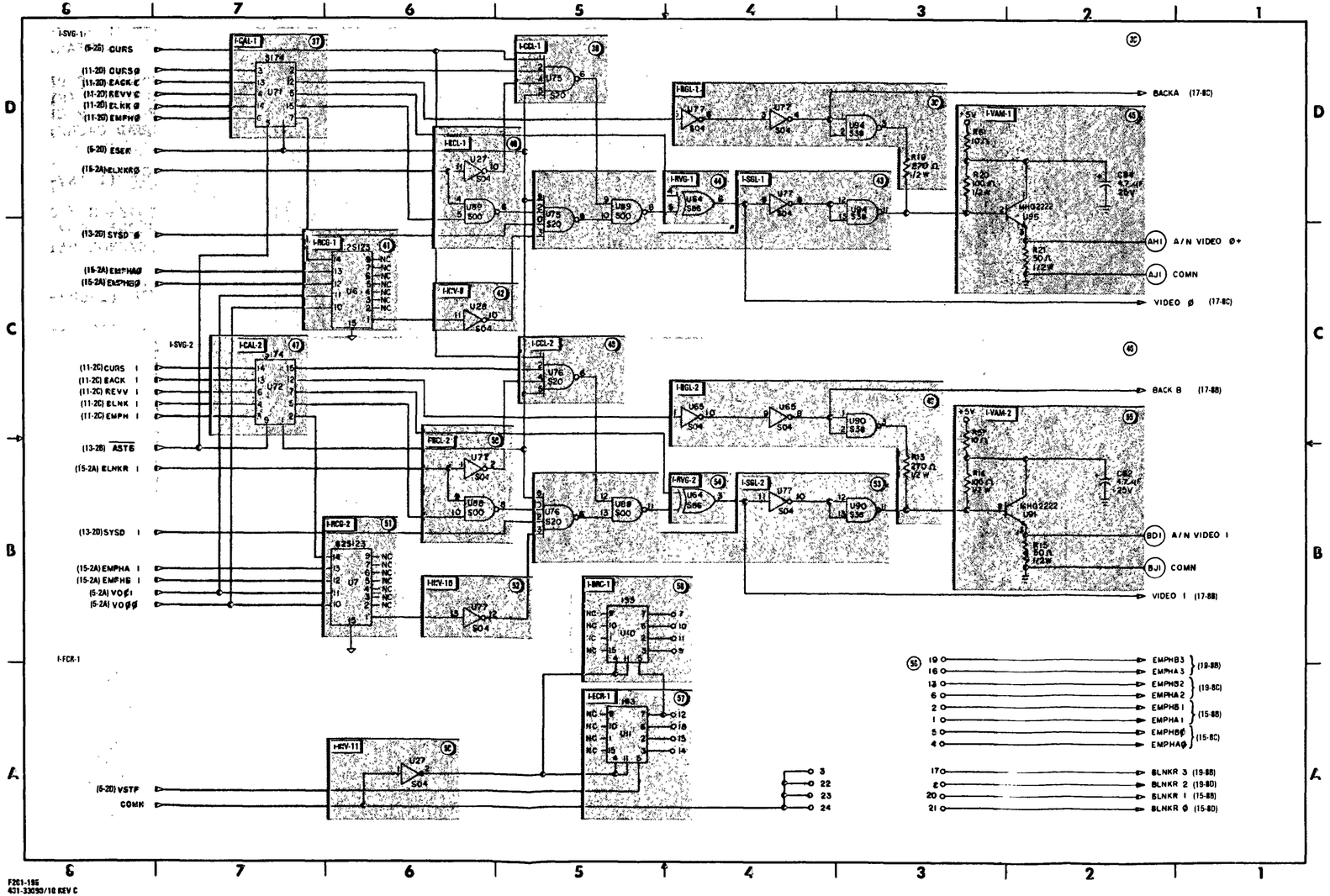

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 15 of 24)

(36) (I-SVG-1) SYMBOL VIDEO GENERATOR:

GENERATES SYMBOL DATA (CHARACTERS) AND THEIR RESPECTIVE ATTRIBUTES TO CRT MONITOR 1 OF 4.

(37) (I-CAL-1) CHARACTER ATTRIBUTE LATCH:

LATCHES ATTRIBUTES FROM I-SAL-1 (SYMBOL/ATTRIBUTE LATCH) FOR OUTPUT IN SYNCHRONIZATION WITH SYSD0 (SYMBOL SERIALIZED DATA 0) TO CRT MONITOR 1 OF 4. /ASTB (/ATTRIBUTE STROBE) IS APPLIED TO LATCH CLOCK INPUT (PIN 9) TO PROVIDE LATCHED ATTRIBUTE OUTPUT EACH TIME SYMBOL IS GENERATED. ESER (ENABLE SERIALIZER) INPUT IS USED TO CLEAR LATCH.

(38) (I-CCL-1) CURSOR CONTROL LOGIC:

ENABLES OR DISABLES CURSOR TO BE OUTPUT. CURS (CURSOR) SIGNAL IS INPUT FROM A/N OTF PROCESSOR AND ENABLES CURSOR TO APPEAR ON CORRECT LINE OF CRT MONITOR. OUTPUT OF I-CCL-1 IS APPLIED TO I-SGL-1 (SYMBOL GENERATOR LOGIC) FOR EVENTUAL OUTPUT TO CRT MONITOR 1 OF 4.

(39) (I-BGL-1) BACKGROUND LOGIC:

ENABLES OR DISABLES BACKGROUND ATTRIBUTE OUTPUT TO CRT MONITOR 1 OF 4. BACKGROUND IS ENABLED WITH HIGH LOGIC LEVEL FROM U71 PIN 12 INTO PIN 5 OF U77. PIN 6 OF U77 WILL BECOME LOGIC LOW CAUSING PIN 4 OF U77 TO BECOME LOGIC HIGH LEVEL. U94 PIN 3 WILL OUTPUT LOGIC LOW, CAUSING VOLTAGE DROP ACROSS R19 AND REDUCING OUTPUT VIDEO VOLTAGE. WHEN BACKGROUND SIGNAL IS DISABLED, FOREGROUND SIGNAL WILL BE PRESENT AT PIN 3 OF U94, CAUSING INCREASE IN OUTPUT VIDEO VOLTAGE (BRIGHTER CRT MONITOR SCREEN).

(40) (I-BCL-1) BLINK CONTROL LOGIC:

ENABLES BLINK ATTRIBUTE TO BE OUTPUT WITH GENERATED SYMBOL AT BLINK RATE CREATED BY I-BRC-1 (BLINK RATE COUNTER). U89 PIN 6 DISABLES SYMBOL GENERATOR LOGIC WITH BLINK RATE OUTPUT. INVERTER U27 APPLIES BLINK RATE TO THE CURSOR.

(41) (I-RCG-1) REFRESH CONTROL GENERATOR:

DECODES VERTICAL OFFSET FOR CRT MONITOR 1 OF 4 AND APPLIES OUTPUT BIT TO I-SGL-1 (SYMBOL GENERATOR LOGIC). OUTPUT TO I-SGL-1 CONTROLS WHICH LINES OF SYMBOL DOT MATRIX PATTERN ARE EMPHASIZED DURING REFRESH OPERATION. VO 00-01 (VERTICAL OFFSET 00-01), EMPHA0 (EMPHASIS A0) EMPHB 0, (EMPHASIS B0) AND EMPH 0 (EMPHASIS 0) SIGNALS ARE INPUT TO PROM (PROGRAMMABLE READ-ONLY MEMORY) U6 TO ENABLE EMPHASIS OF PROPER DOT MATRIX LINES IN INTERLACED PATTERN.

(42) (I-INV-9) INVERTER:

INVERTS OUTPUT ON PIN 1 OF U6 (I-RCG-1) TO PROPER LOGIC LEVEL TO ENABLE OR DISABLE I-SGL-1 (SYMBOL GENERATOR LOGIC) AT APPROPRIATE TIMES.

(43) (I-SGL-1) SYMBOL GENERATOR LOGIC:

OUTPUTS SERIAL DOT MATRIX SYMBOL DATA TO I-VAM-1 (VIDEO AMPLIFIER) AND TO COLOR VIDEO GENERATOR (I-CVG-1).

(44) (I-RVG-1) REVERSE VIDEO GENERATOR:

CHANGES VIDEO SYMBOL INTO REVERSE VIDEO SYMBOL WHEN PIN 4 OF U64 IS SET TO LOGIC HIGH FROM LATCHED REVV0 (REVERSE VIDEO 0) SIGNAL OF U71.

(45) (I-VAM-1) VIDEO AMPLIFIER:

AMPLIFIES SYMBOL VIDEO OUTPUT OF I-SGL-1 (SYMBOL GENERATOR LOGIC) AND OUTPUTS VIDEO SIGNAL TO CRT MONITOR 1 OF 4.

(46) (I-SVG-2) SYMBOL VIDEO GENERATOR:

GENERATES SYMBOL DATA (CHARACTERS) AND THEIR RESPECTIVE ATTRIBUTES TO CRT MONITOR 2 OF 4.

(47) (I-CAL-2) CHARACTER ATTRIBUTE LATCH:

LATCHES ATTRIBUTES FROM I-SAL-1 (SYMBOL/ATTRIBUTE LATCH) FOR OUTPUT IN SYNCHRONIZATION WITH SYSD1 (SYMBOL SERIALIZED DATA 1) TO CRT MONITOR 2 OF 4. /ASTB (/ATTRIBUTE STROBE) IS APPLIED TO LATCH CLOCK INPUT (PIN 9) TO PROVIDE LATCHED ATTRIBUTE OUTPUT EACH TIME SYMBOL IS GENERATED. ESER (ENABLE SERIALIZER) INPUT IS USED TO CLEAR LATCH.

(48) (I-CCL-2) CURSOR CONTROL LOGIC:

ENABLES OR DISABLES CURSOR TO BE OUTPUT. CURS (CURSOR) SIGNAL IS INPUT FROM A/N OTF PROCESSOR AND ENABLES CURSOR TO APPEAR ON CORRECT LINE OF CRT MONITOR. OUTPUT OF I-CCL-2 IS APPLIED TO I-SGL-2 (SYMBOL GENERATOR LOGIC) FOR EVENTUAL OUTPUT TO CRT MONITOR 2 OF 4.

(49) (I-BGL-2) BACKGROUND LOGIC:

ENABLES OR DISABLES BACKGROUND ATTRIBUTE OUTPUT TO CRT MONITOR 2 OF 4. BACKGROUND IS ENABLED WITH HIGH LOGIC LEVEL FROM U72 PIN 11 INTO PIN 11 OF U65. PIN 8 OF U65 WILL BECOME LOGIC HIGH LEVEL. U90 PIN 3 WILL OUTPUT LOGIC LOW, CAUSING VOLTAGE DROP ACROSS R13 AND REDUCING OUTPUT VIDEO VOLTAGE. WHEN BACKGROUND SIGNAL IS DISABLED, FOREGROUND SIGNAL WILL BE PRESENT AT PIN 3 OF U90, CAUSING INCREASE IN OUTPUT VIDEO VOLTAGE (BRIGHTER CRT MONITOR SCREEN).

(50) (I-BCL-2) BLINK CONTROL LOGIC:

ENABLES BLINK ATTRIBUTE TO BE OUTPUT WITH GENERATED SYMBOL AT BLINK RATE CREATED BY I-BRC-1 (BLINK RATE COUNTER). U88 PIN 8 DISABLES SYMBOL GENERATOR LOGIC WITH BLINK RATE OUTPUT. INVERTER U77 APPLIES BLINK RATE TO THE CURSOR.

(51) (I-RCG-2) REFRESH CONTROL GENERATOR:

DECODES VERTICAL OFFSET FOR CRT MONITOR 2 OF 4 AND APPLIES OUTPUT BIT TO I-SGL-2 (SYMBOL GENERATOR LOGIC). OUTPUT TO I-SGC-2 CONTROLS WHICH LINES OF SYMBOL DOT MATRIX PATTERN ARE EMPHASIZED DURING REFRESH OPERATION. VO00-01 (VERTICAL OFFSET 00-01), EMPHA 1 (EMPHASIS A1), EMPH B1 (EMPHASIS B1), AND EMPH1 (EMPHASIS 1) ARE INPUT TO PROM U6 TO ENABLE EMPHASIS OF PROPER DOT MATRIX LINES IN INTERLACED PATTERN.

(52) (I-INV-10) INVERTER:

INVERTS OUTPUT ON PIN 1 OF U7 (I-RCG-2) TO PROPER LOGIC LEVEL TO ENABLE OR DISABLE I-SGL-2 (SYMBOL GENERATOR LOGIC) AT APPROPRIATE TIMES.

(53) (I-SGL-2) SYMBOL GENERATOR LOGIC:

OUTPUTS SERIAL DOT MATRIX SYMBOL DATA TO I-VAM-2 (VIDEO AMPLIFIER) AND TO COLOR VIDEO GENERATOR (I-CVG-1).

(54) (I-RVG-2) REVERSE VIDEO GENERATOR:

CHANGES VIDEO SYMBOL INTO REVERSE VIDEO SYMBOL WHEN PIN 1 OF U64 IS SET TO LOGIC HIGH FROM LATCHED REVV1 (REVERSE VIDEO 1) SIGNAL OF U72.

(55) (I-VAM-2) VIDEO AMPLIFIER:

AMPLIFIES SYMBOL VIDEO OUTPUT OF I-SGL-2 (SYMBOL GENERATOR LOGIC) AND OUTPUTS VIDEO SIGNAL TO CRT MONITOR 2 of 4.

(56) (I-FCR-1) FRAME COUNTER:

PROVIDES BLINK RATE COUNTER AND EMPHASIS COUNTER TO PROVIDE SYNCHRONOUS BLINKING AND EMPHASIS DURING EACH FRAME OF INTERLACED VIDEO SCANNING.

(57) (I-ECR-1) EMPHASIS COUNTER:

PROVIDES EMPHASIS OF VIDEO OUTPUT BY ALTERNATELY ALLOWING DOT MATRIX LINES OF SYMBOLS TO BE DISPLAYED AT COUNTER RATE. VERTICAL START TEST POINT (VSTP) SIGNAL IS APPLIED AT START OF EACH FRAME.

(58) (I-BRC-1) BLINK RATE COUNTER:

CONTROLS BLINK RATE OF SYMBOLS OUTPUT TO CRT MONITORS. ONE BLINK RATE OUTPUT IS SENT TO I-BCL-1 THRU I-BCL-4 (BLINK CONTROL LOGIC) TO ENABLE BLINKING OF SYMBOLS.

(59) (I-INV-11) INVERTER:

PROVIDES HIGH LEVEL PULL-UP SIGNAL TO I-BRC-1 AND I-ECR-1.

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 16 of 24)

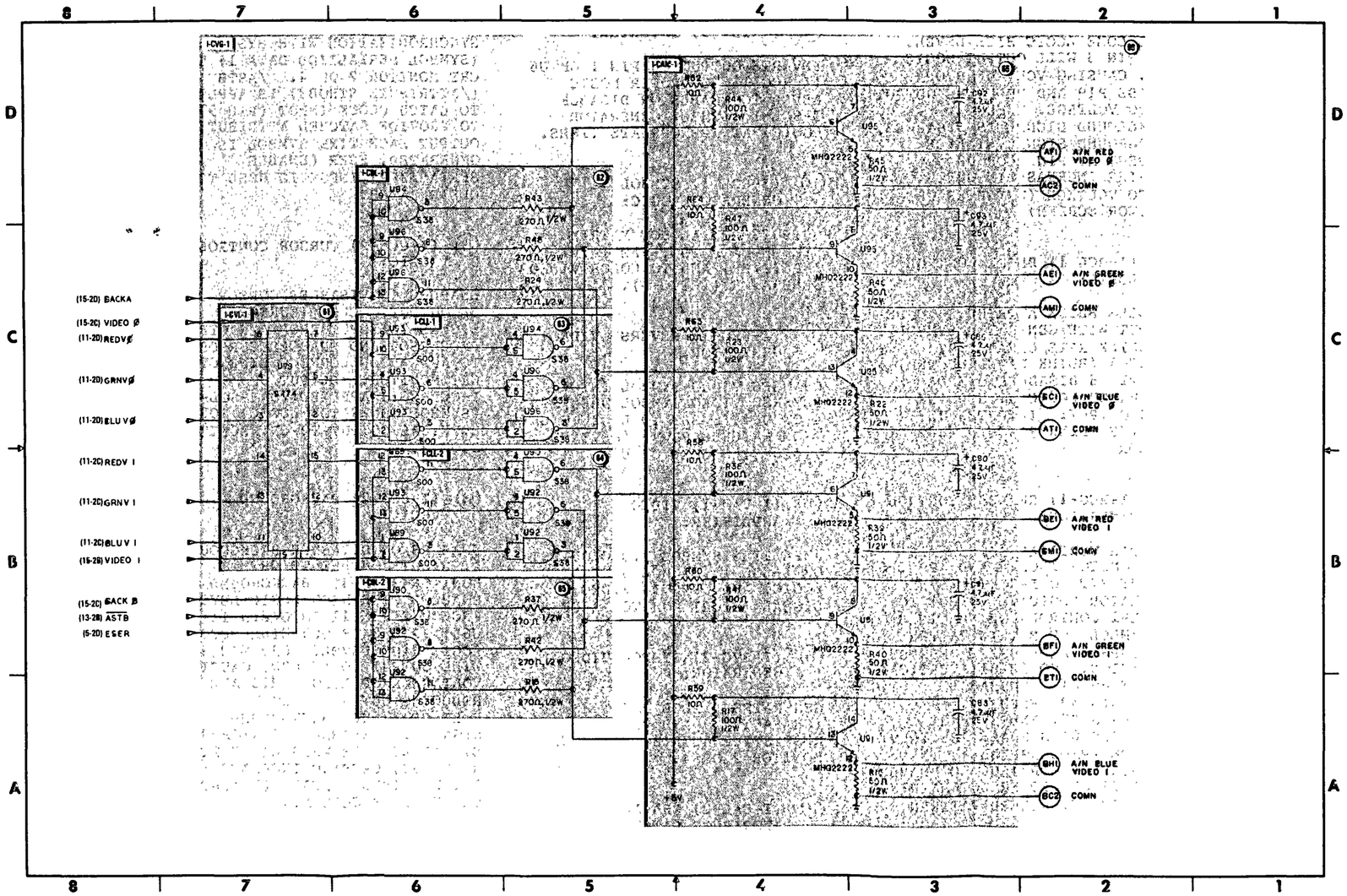

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 17 of 24)

(60) (I-CVG-1) COLOR VIDEO GENERATOR:

SUPPLIES OUTPUT OF RED, GREEN, OR BLUE COLOR VIDEO SIGNALS TO TWO CRT MONITORS.

(61) (I-CVL-1) COLOR VIDEO LATCH:

LATCHES COLOR VIDEO DATA FROM I-SAL-1 (SYMBOL/ATTRIBUTE LATCH). LATCH U79 IS CLOCKED BY ASTB (ATTRIBUTE STROBE) SIGNAL FROM I-SDS-1 (SYMBOL DATA SERIALIZER).

(62) (I-CBL-1) COLOR BACKGROUND LOGIC:

ESTABLISHES BACKGROUND ATTRIBUTE FOR RED, GREEN, AND BLUE VIDEO OUTPUTS OF CRT MONITOR UNIT 1 OF 4. WHEN BACKGROUND IS DESIRED, BACKA (BACKGROUND A) WILL BE AT LOGIC HIGH LEVEL. NAND GATES U94 AND U96 WILL INVERT SIGNAL TO LOGIC LOW LEVEL IN ORDER TO REDUCE AMPLIFIED COLOR VIDEO OUTPUTS AT I-CAM-1 (COLOR AMPLIFIER) U95.

(63) (I-CLL-1) COLOR VIDEO LOGIC:

OUTPUTS COLOR VIDEO DATA FROM I-CVL-1 (COLOR VIDEO LATCH) TO I-CAM-1 (COLOR AMPLIFIER) FOR OUTPUT TO CRT MONITOR 1 OF 4. NAND GATES U89 AND U93 PROVIDE ACTIVE LOW LOGIC LEVEL OUTPUTS WHEN VIDEO 0 OUTPUT AND COLOR OUTPUTS FROM LATCH U79 ARE HIGH LOGIC LEVELS. NAND GATES U94 AND U96 INVERT ACTIVE LOW INPUTS INTO ACTIVE HIGH OUTPUTS TO DRIVE I-CAM-1 (COLOR AMPLIFIER) FOR CRT MONITOR 1.

(64) (I-CLL-2) COLOR VIDEO LOGIC:

OUTPUTS COLOR VIDEO DATA FROM I-CVL-1 (COLOR VIDEO LATCH) TO I-CAM-1 (COLOR AMPLIFIER) FOR OUTPUT TO CRT MONITOR 2 OF 4. NAND GATES U89 AND U93 PROVIDE ACTIVE LOW LOGIC LEVEL OUTPUTS WHEN VIDEO 1 OUTPUT AND COLOR OUTPUTS FROM LATCH U79 ARE HIGH LOGIC LEVELS. NAND GATES U90 AND U92 INVERT ACTIVE LOW INPUTS INTO ACTIVE HIGH OUTPUTS TO DRIVE I-CAM-1 COLOR AMPLIFIER) FOR CRT MONITOR 2.

(65) (I-CBL-2) COLOR BACKGROUND LOGIC:

ESTABLISHES BACKGROUND ATTRIBUTE FOR RED, GREEN, AND BLUE VIDEO OUTPUTS OF CRT MONITOR 2 OF 4. WHEN BACKGROUND IS DESIRED, BACKA (BACKGROUND A) WILL BE AT LOGIC HIGH LEVEL. NAND GATES U90 AND U92 WILL INVERT SIGNAL TO LOGIC LOW LEVEL IN ORDER TO REDUCE AMPLIFIED COLOR VIDEO OUTPUTS AT I-CAM-1 (COLOR AMPLIFIER) U91.

(66) (I-CAM-1) COLOR AMPLIFIER:

OUTPUT COLOR VIDEO SIGNALS (GREEN, RED, AND BLUE) FOR CRT MONITORS 1 AND 2 OF 4. AMPLIFIES COLOR VIDEO DATA FROM I-CLL-1 AND I-CLL-2 (COLOR VIDEO LOGIC).

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 18 of 24)

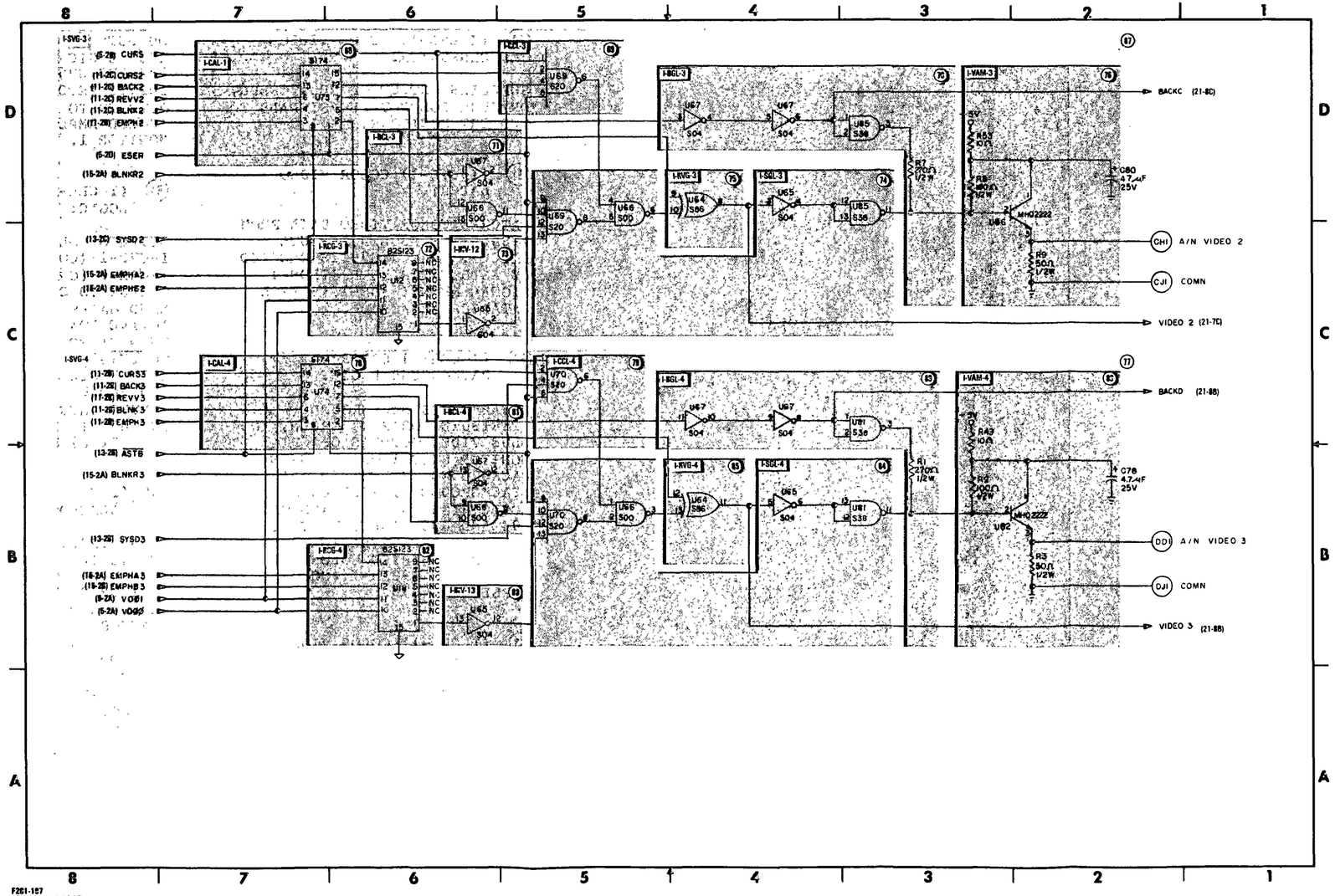

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 19 of 24)

(67) (I-SVG-3) SYMBOL VIDEO GENERATOR:

GENERATES SYMBOL DATA (CHARACTERS) AND THEIR RESPECTIVE ATTRIBUTES TO CRT MONITOR 3 OF 4.

(68) (I-CAL-1) CHARACTER ATTRIBUTE LATCH:

LATCHES ATTRIBUTES FROM I-SAL-1 (SYMBOL/ATTRIBUTE LATCH) FOR OUTPUT IN SYNCHRONIZATION WITH SYSD 2 (SYMBOL SERIALIZED DATA 2) TO CRT MONITOR 3 OF 4. /ASTB (/ATTRIBUTE STROBE) IS APPLIED TO LATCH CLOCK INPUT (PIN 9) TO PROVIDE LATCHED ATTRIBUTE OUTPUT EACH TIME SYMBOL IS GENERATED. ESER (ENABLE SERIALIZER) INPUT IS USED TO CLEAR LATCH.

(69) (I-CCL-3) CURSOR CONTROL LOGIC:

ENABLES OR DISABLES CURSOR TO BE OUTPUT. CURS (CURSOR) SIGNAL IS INPUT FROM A/N OTF PROCESSOR AND ENABLES CURSOR TO APPEAR ON CORRECT LINE OF DISPLAY. OUTPUT OF I-CCL-3 IS APPLIED TO I-SGL-3 (SYMBOL GENERATOR LOGIC) FOR EVENTUAL OUTPUT TO CRT MONITOR 3 OF 4.

(70) (I-BGL-3) BACKGROUND LOGIC:

ENABLES OR DISABLES BACKGROUND ATTRIBUTE OUTPUT TO CRT MONITOR 3 OF 4. BACKGROUND IS ENABLED WITH HIGH LOGIC LEVEL FROM U73 PIN 12 INTO PIN 3 OF U67. PIN 4 OF U67 WILL BECOME LOGIC LOW CAUSING PIN 6 OF U67 TO BECOME HIGH LOGIC LEVEL. U85 PIN 3 WILL OUTPUT LOGIC LOW, CAUSING VOLTAGE DROP ACROSS R7 AND REDUCING OUTPUT VIDEO VOLTAGE. WHEN BACKGROUND SIGNAL IS DISABLED, FOREGROUND SIGNAL WILL BE PRESENT AT PIN 3 OF U85, CAUSING INCREASE IN OUTPUT VIDEO VOLTAGE (BRIGHTER CRT MONITOR SCREEN).

(71) (I-BCL-3) BLINK CONTROL LOGIC:

ENABLES BLINK ATTRIBUTE TO BE OUTPUT WITH GENERATED SYMBOL AT BLINK RATE CREATED BY I-BRC-1 (BLINK RATE COUNTER). U66 PIN 11 DISABLES GENERATOR LOGIC SYMBOL WITH BLINK RATE OUTPUT. INVERTER U67 APPLIES BLINK RATE TO CURSOR.

(72) (I-RCG-3) REFRESH CONTROL GENERATOR:

DECODES VERTICAL OFFSET FOR CRT MONITOR 3 OF 4 AND APPLIES OUTPUT BIT TO I-SGL-3. CONTROLS WHICH LINES OF SYMBOL DOT MATRIX PATTERN ARE EMPHASIZED DURING REFRESH OPERATION V000-01 (VERTICAL OFFSET 000-01), EMPHA2 (EMPHASIS A 2), EMPHB2 (EMPHASIS B2), AND EMPH2 (EMPHASIS 2) SIGNALS ARE INPUT TO PROM U12 TO ENABLE EMPHASIS OF PROPER DOT MATRIX LINES IN INTERLACED PATTERN.

(73) (I-INV-12) INVERTER:

INVERTS OUTPUT ON PIN 1 OF U12 (I-RCG-3) (REFRESH CONTROL GENERATOR) TO PROPER LOGIC LEVEL TO ENABLE OR DISABLE I-SGL-1 (SYMBOL GENERATOR LOGIC) AT APPROPRIATE TIMES.

(74) (I-SGL-3) SYMBOL GENERATOR LOGIC:

OUTPUTS SERIAL DOT MATRIX SYMBOL DATA TO I-VAM-3 (VIDEO AMPLIFIER) AND TO COLOR VIDEO GENERATOR (I-CVG-3).

(75) (I-RVG-3) REVERSE VIDEO GENERATOR:

CHANGES VIDEO SYMBOL INTO REVERSE VIDEO SYMBOL WHEN PIN 9 OF U64 IS SET TO LOGIC HIGH FROM LATCHED REVV2 (REVERSE VIDEO 2) SIGNAL OF U73.

(76) (I-VAM-3) VIDEO AMPLIFIER:

AMPLIFIES SYMBOL VIDEO OUTPUT OF I-SGL-3 (SYMBOL GENERATOR LOGIC) AND OUTPUTS VIDEO SIGNAL TO CRT MONITOR 3 OF 4.

(77) (I-SVG-4) SYMBOL VIDEO GENERATOR:

GENERATES SYMBOL DATA (CHARACTERS) AND THEIR RESPECTIVE ATTRIBUTES TO CRT MONITOR 3 OF 4.

(78) (I-CAL-4) CHARACTER ATTRIBUTE LATCH:

LATCHES ATTRIBUTES FROM I-SAL-1 (SYMBOL/ATTRIBUTE LATCH) FOR OUTPUT IN SYNCHRONIZATION WITH SYSD3 (SYMBOL SERIALIZED DATA 3) TO CRT MONITOR 4 OF 4. /ASTB (/ATTRIBUTE STROBE) IS APPLIED TO LATCH CLOCK INPUT (PIN 9) TO PROVIDE LATCHED ATTRIBUTE OUTPUT EACH TIME A SYMBOL IS GENERATED. ESER (ENABLE SERIALIZER) INPUT IS USED TO CLEAR LATCH.

(79) (I-CCL-4) CURSOR CONTROL LOGIC:

ENABLES OR DISABLES CURSOR TO BE OUTPUT. CURS (CURSOR) SIGNAL IS INPUT FROM A/N OTF PROCESSOR AND ENABLES CURSOR TO APPEAR ON CORRECT LINE OF CRT MONITOR. OUTPUT OF I-CCL-4 IS APPLIED TO I-SGL-4 (SYMBOL GENERATOR LOGIC) FOR EVENTUAL OUTPUT TO CRT MONITOR 4 OF 4.

(80) (I-BGL-4) BACKGROUND LOGIC:

ENABLES OR DISABLES BACKGROUND ATTRIBUTE OUTPUT TO CRT MONITOR 4 OF 4. BACKGROUND IS ENABLED WITH HIGH LOGIC LEVEL FROM U74 PIN 12 INTO PIN 11 OF U67. PIN 10 OF U67 WILL BECOME LOGIC LOW CAUSING PIN 8 OF U67 TO BECOME LOGIC HIGH LEVEL. U81 PIN 3 WILL OUTPUT LOGIC LOW, CAUSING VOLTAGE DROP ACROSS R1 AND REDUCING OUTPUT VIDEO VOLTAGE. WHEN BACKGROUND SIGNAL IS DISABLED, FOREGROUND SIGNAL WILL BE PRESENT AT PIN 3 OF U81, CAUSING INCREASE IN OUTPUT VIDEO VOLTAGE (BRIGHTER CRT MONITOR SCREEN).

(81) (I-BCL-4) BLINK CONTROL LOGIC:

ENABLES BLINK ATTRIBUTE TO BE OUTPUT WITH GENERATED SYMBOL AT BLINK RATE CREATED BY I-BRC-1 (BLINK RATE COUNTER). U66 PIN 8 DISABLES SYMBOL GENERATOR LOGIC WITH BLINK RATE OUTPUT. INVERTER U67 APPLIES BLINK RATE TO CURSOR.

(82) (I-RCG-4) REFRESH CONTROL GENERATOR:

DECODES VERTICAL OFFSET FOR CRT MONITOR 4 OF 4 AND APPLIES OUTPUT BIT TO I-SGL-4 (SYMBOL GENERATOR LOGIC). OUTPUT TO I-SGL-4 CONTROLS WHICH LINES OF SYMBOL DOT MATRIX PATTERN ARE EMPHASIZED DURING REFRESH OPERATION. V000-01 (VERTICAL OFFSET 00-01), EMPHA 3 (EMPHASIS A3), EMPHB3 (EMPHASIS B3), AND EMPH3 (EMPHASIS 3) ARE INPUT TO PROM U18 TO ENABLE EMPHASIS OF PROPER DOT MATRIX LINES IN INTERLACED PATTERN.

(83) (INV-13) INVERTER:

INVERTS OUTPUT ON PIN 1 OF U18 (I-RCG-4) TO PROPER LOGIC LEVEL TO ENABLE OR DISABLE I-SGL-4 (SYMBOL GENERATOR LOGIC) AT APPROPRIATE TIMES.

(84) (I-SGL-4) SYMBOL GENERATOR LOGIC:

OUTPUTS SERIAL DOT MATRIX SYMBOL DATA TO I-VAM-4 (VIDEO AMPLIFIER) AND TO COLOR VIDEO GENERATOR (I-CVG-4).

(85) (I-RVG-4) REVERSE VIDEO GENERATOR:

CHANGES VIDEO SYMBOL INTO REVERSE VIDEO SYMBOL WHEN PIN 12 OF U64 IS SET TO LOGIC HIGH FROM LATCHED REVV3 (REVERSE VIDEO 3) SIGNAL OF U74.

(86) (I-VAM-4) VIDEO AMPLIFIER:

AMPLIFIES SYMBOL VIDEO OUTPUT OF I-SGL-4 (SYMBOL GENERATOR LOGIC) AND OUTPUTS VIDEO SIGNAL TO CRT MONITOR 4 of 4.

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 20 of 24)

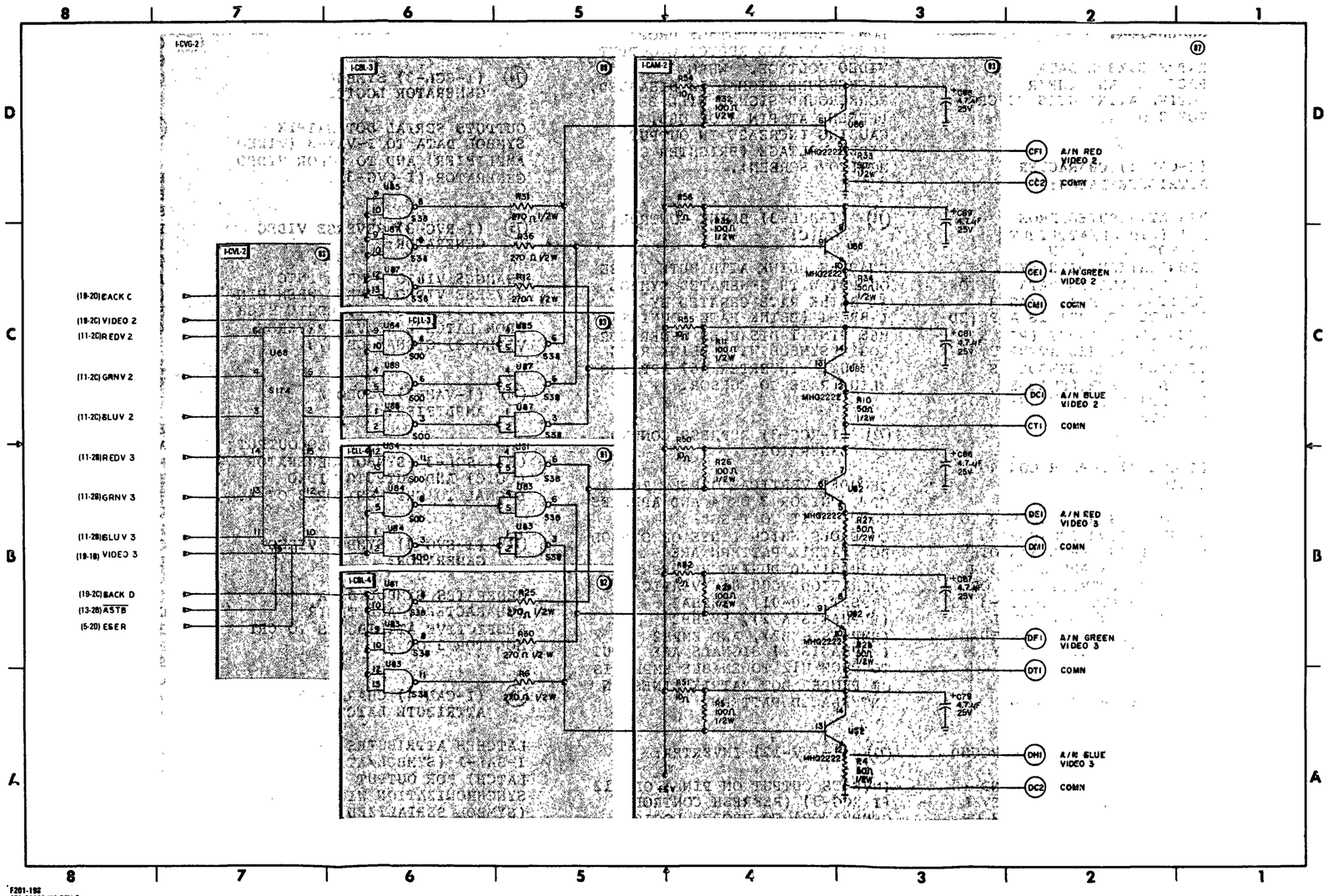

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Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 21 of 24)

(87) (I-CVG-2) COLOR VIDEO GENERATOR:

SUPPLIES OUTPUT OF RED, GREEN, OR BLUE COLOR VIDEO SIGNALS TO TWO CRT MONITORS.

(88) (I-CVL-2) COLOR VIDEO LATCH:

LATCHES COLOR VIDEO DATA FROM I-SAL-1 (SYMBOL/ATTRIBUTE LATCH). LATCH U68 IS CLOCKED BY /ASTB (/ATTRIBUTE STROBE) SIGNAL FROM I-SDS-1 (SYMBOL DATA SERIALIZER).

(89) (I-CBL-3) COLOR BACKGROUND LOGIC:

ESTABLISHES BACKGROUND ATTRIBUTE FOR RED, GREEN, AND BLUE VIDEO OUTPUTS OF CRT MONITOR 3 OF 4. WHEN BACKGROUND IS DESIRED, BACKA (BACKGROUND A) WILL BE AT LOGIC HIGH LEVEL. NAND GATES U85 AND U87 WILL INVERT SIGNAL TO LOGIC LOW LEVEL IN ORDER TO REDUCE AMPLIFIED COLOR VIDEO OUTPUTS AT I-CAM-1 (COLOR AMPLIFIER) U86.

(90) (I-CLL-3) COLOR VIDEO LOGIC:

OUTPUTS COLOR VIDEO DATA FROM I-CVL-2 (COLOR VIDEO LATCH) TO I-CAM-2 (COLOR AMPLIFIER) FOR OUTPUT TO CRT MONITOR 3 OF 4. NAND GATES U84 AND U88 PROVIDE ACTIVE LOW LOGIC LEVEL OUTPUTS WHEN VIDEO 2 OUTPUT AND COLOR OUTPUTS FROM LATCH U68 ARE HIGH LOGIC LEVELS. NAND GATES U85 AND U87 INVERT ACTIVE LOW INPUTS INTO ACTIVE HIGH OUTPUTS TO DRIVE I-CAM-2 (COLOR AMPLIFIER) FOR CRT MONITOR 3.

(91) (I-CLL-4) COLOR VIDEO LOGIC:

OUTPUTS COLOR VIDEO DATA FROM I-CVL-2 (COLOR VIDEO LATCH) TO I-CAM-2 (COLOR AMPLIFIER) FOR OUTPUT TO CRT MONITOR 4 OF 4. NAND GATE U84 PROVIDES ACTIVE LOW LOGIC LEVEL OUTPUTS WHEN VIDEO 3 OUTPUT AND COLOR OUTPUTS FROM LATCH U68 ARE HIGH LOGIC LEVELS. NAND GATES U81 AND U83 INVERT ACTIVE LOW INPUTS INTO ACTIVE HIGH OUTPUTS TO DRIVE I-CAM-2 (COLOR AMPLIFIER) FOR CRT MONITOR 4.

(92) (I-CBL-4) COLOR BACKGROUND LOGIC:

ESTABLISHES BACKGROUND ATTRIBUTE FOR RED, GREEN, AND BLUE VIDEO OUTPUTS OF CRT MONITOR 4 OF 4. WHEN BACKGROUND IS DESIRED, BACKD (BACKGROUND D) WILL BE AT LOGIC HIGH LEVEL. NAND GATES U81 AND U83 WILL INVERT SIGNAL TO LOGIC LOW LEVEL IN ORDER TO REDUCE AMPLIFIED COLOR VIDEO OUTPUTS AT I-CAM-2 (COLOR AMPLIFIER) U82.

(93) (I-CAM-2) COLOR AMPLIFIER:

OUTPUT COLOR VIDEO SIGNALS (GREEN, RED, AND BLUE) FOR CRT MONITORS 3 AND 4 OF 4. AMPLIFIES COLOR VIDEO DATA FROM I-CLL-3 AND I-CLL-4 (COLOR VIDEO LOGIC).

Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 22 of 24)

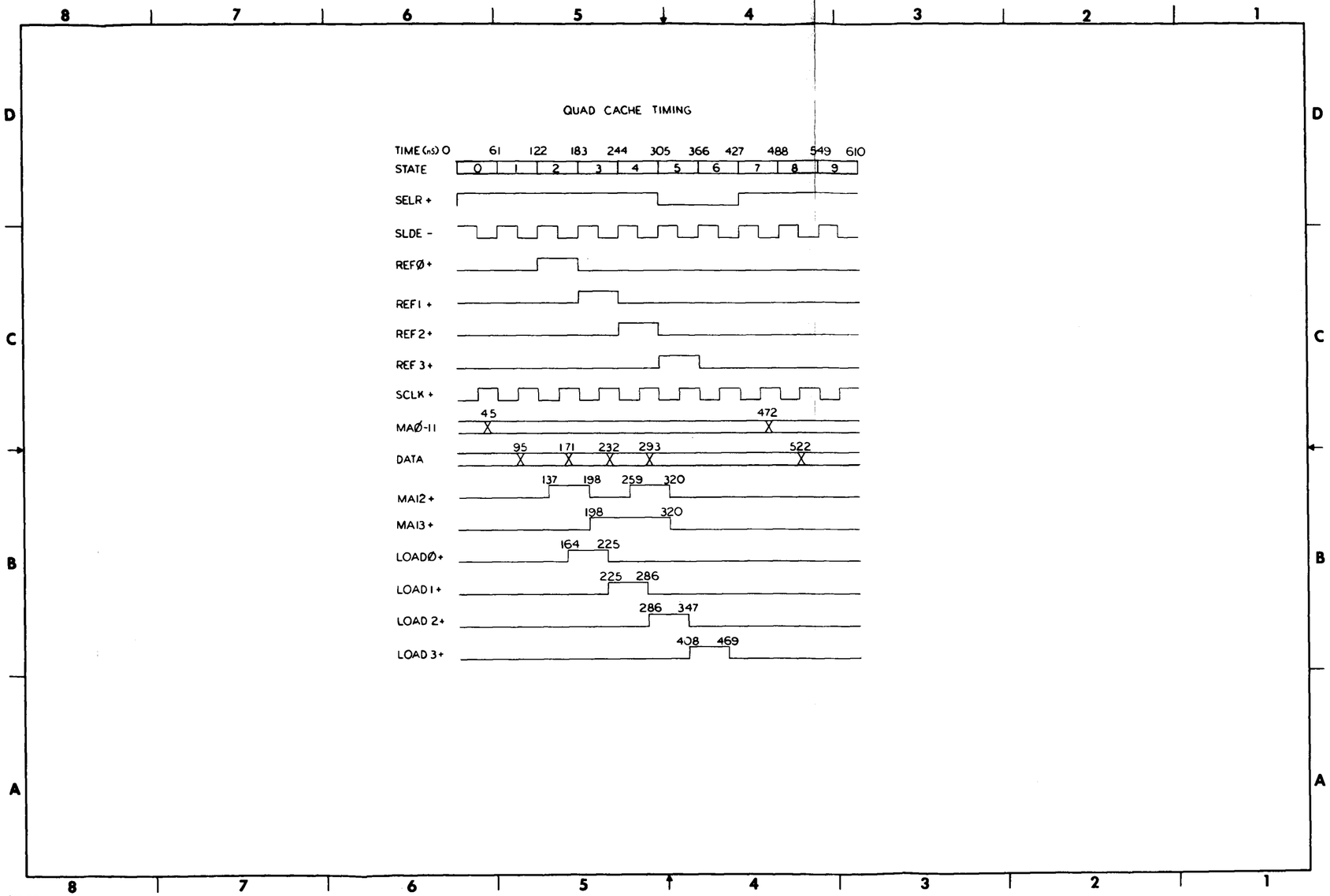

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Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 23 of 24)

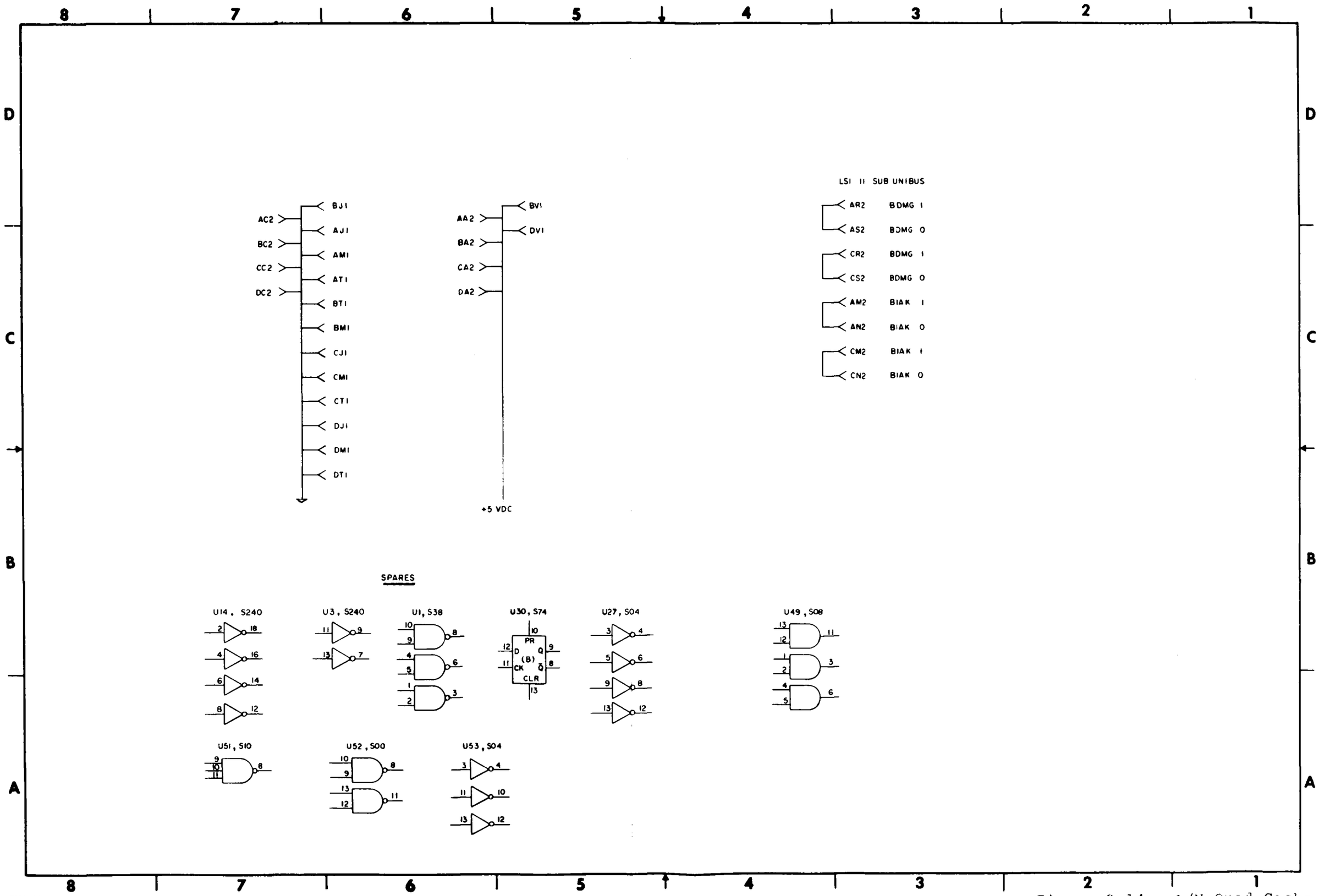

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Figure 2-14. A/N Quad Cache Blocked Schematic Diagram and Keyed Text (Sheet 24 of 24)

ASCII symbol data into dot matrix form which is applied to the symbol data serializer as SYMBOL DATA 00-07. The symbol data is serialized by the Symbol Data Serializer (I-SDS-1) which produces SYMBOL SERIALIZED DATA 0-3. Each of the symbol serialized data lines contains the symbol data for one of four CRT monitors.

The symbol serialized data and attribute data is applied to four symbol video generators (one for each CRT monitor) which develops video output signals (A/N VIDEO 0-3) for output to each of up to four associated CRT monitors.

The Color Video Generators (I-CVG-1 and I-CVG-2) and all color control signals are not used in the M1FC FSAS System. They are reserved for future applications.

Figure 2-14 provides a blocked schematic diagram with keyed text describing the operation of the A/N quad cache memory circuit card. Timing diagrams for this card are provided in figure 2-14.

2.1.1.3.15 Serial I/O Assembly. - The Serial I/O Assembly, 401-37274-02, provides for connections between digital patch panels and an eight-channel serial I/O circuit card.

2.1.1.3.16 Keyboard Junction Box. - The Keyboard Junction Box, 401-37179-07, and -08, provides for connections between keyboard assemblies and eight-channel serial I/O circuit cards.

2.1.1.3.17 Fan AC Junction Box. - The Fan AC Junction Box, 401-37231-02, receives primary AC power from the plain AC junction box in the communications equipment rack. It distributes 115 VAC to four power control modules and the blower assembly in the COTC processor rack. A wiring diagram of the fan AC junction box is shown in figure 10-9.

2.1.1.3.18 Power Supply Assembly. - Consult the manual listed in table 1-4 for the theory of operation of the Power Supply Assembly, 401-36716-01.

2.1.1.3.19 Blower Assembly. - The Blower Assembly, 401-37145-02, uses fans to provide air circulation inside the COTC processor rack. The blower assembly fans are powered by 115 VAC from the fan AC junction box. A wiring diagram of the blower assembly is shown in figure 10-7.

2.1.1.3.20 Thermal Sensor. - The Thermal Sensor, 401-37216-02, provides temperature dependent resistance to a 2 VDC voltage sent from the Thermal Alarm Unit, 401-37155-01. The voltage is then returned to comparator circuits in the thermal alarm unit.

2.1.1.4 Tandem Group. - The Tandem group in the FSDPS consists of the following equipment:

1. Processor, T16/1420
2. Disk Controller, T16/3106
3. Asynchronous Controller, T16/6303
4. Asynchronous Extension Board, T16/6304
5. Asynchronous Patch Panel, T16/7501
6. Bit Synchronous Controller, T16/6203
7. Synchronous Patch Panel, T16/7502
8. Magnetic Tape Controller, T16/3202
9. Magnetic Tape Drive, T16/5103.
10. Disk Patch Panel, T16/7504
11. Operations and Service Processor (OSP) Console, T16/3910
12. Video Display and Keyboard, T16/6530
13. Printer, T16/5520

Consult the manuals listed in table 1-4 for the theory of operation of the Tandem group equipment in the FSDPS.

2.1.1.5 Peripheral Group. - The peripheral group in the FSDPS consists of the following equipment:

1. Input/Output Terminal, LA34-AA/LA100-CA
2. Line Printer, P300
3. Keyboard Unit, 401-36735-03
4. Keyboard Power Supply, 5305-000-423
5. CRT Monitor, 401-37290-01
6. Disk Drive, DM9300TD.

Consult the manuals listed in table 1-4 for the theory of operation for the peripheral group equipment in the FSDPS. The keyboard unit is a Maxiswitch Keyboard, 2160069, which has circuit board modifications performed by E-Systems.

2.1.1.6 Communications Cable Group. - The communications cable group varies depending on the particular FSDPS site configuration. Cabling diagrams for the different configurations and schematic diagrams of cables are provided in section 10 of this manual.

2.1.2 Automated Flight Service Station (AFSS). - The AFSS consists of the following groups of equipment:

1. Communications Equipment Rack, 401-37614-01
2. Communications Processor Rack, 401-37615-01
3. Position Processor Rack, 401-37616
4. Peripheral Group, 401-37275-01
5. Keyboard Units, 401-36735-03
6. Keyboard Power Supplies, 5305-000-423

7. CRT Monitors, 401-37290-01
8. Cable Group (part number varies among sites).

Figure 2-15 provides a block diagram showing the individual equipment contained in each equipment group of the AFSS and their relationships.

2.1.2.1 Communications Equipment Rack. - The following paragraphs provide the theory of operation of the equipment provided in the communications equipment rack.

2.1.2.1.1 Thermal Alarm Unit. - Refer to paragraph 2.1.1.1.3 for the theory of operation of the Thermal Alarm Unit, 401-37155-01.

2.1.2.1.2 Analog Patch Panel. - Consult the manual listed in table 1-4 for the theory of operation of the analog patch panel.

2.1.2.1.3 RM-8E Modem Enclosure. - Consult the manual listed in table 1-4 for the theory of operation of the RM-8E Modem Enclosure and associated modem equipment.

2.1.2.1.4 Digital Patch Panel. - Consult the manual listed in table 1-4 for the theory of operation of the digital patch panel.

2.1.2.1.5 Disk Drive. - Consult the manual listed in table 1-4 for the theory of operation of the RL01-AK/RL02-AK Disk Drive.

2.1.2.1.6 Circuit Breaker AC Junction Box. - Refer to paragraph 2.1.1.1.6 for the theory of operation of the Circuit Breaker AC Junction Box, 401-37231-01.

2.1.2.2 Communications Processor Rack. - The following paragraphs provide the theory of operation of the equipment provided in the communications processor rack.

2.1.2.2.1 Communications Processor Card Cage. - The Communications Processor Card Cage, 401-37999-04, contains the circuit cards which comprise two communications processors in the communications processor rack. Another Communications Processor Card Cage, 401-37999-03, contains the circuit cards which comprise one communications processor in the communications processor rack.

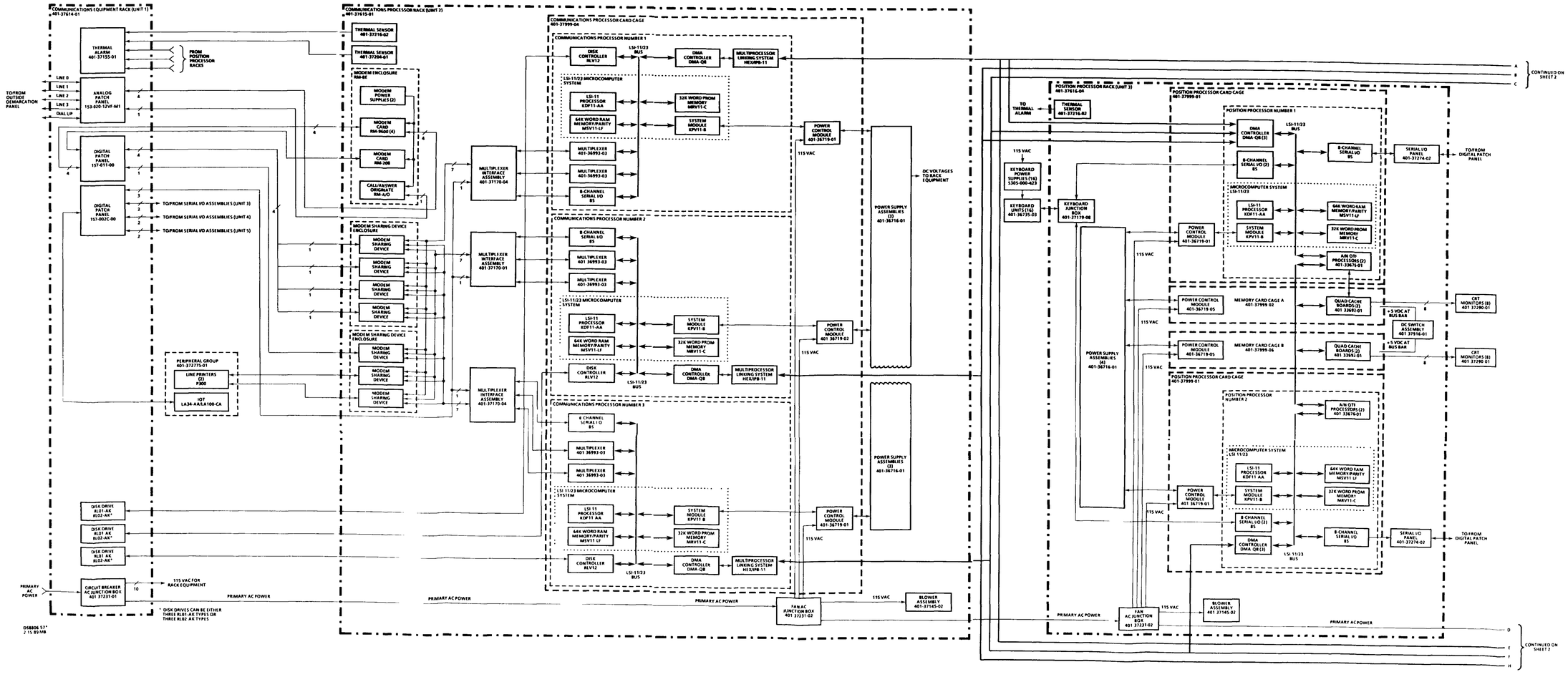


Figure 2-15. AFSS Block Diagram (Sheet 1 of 2)

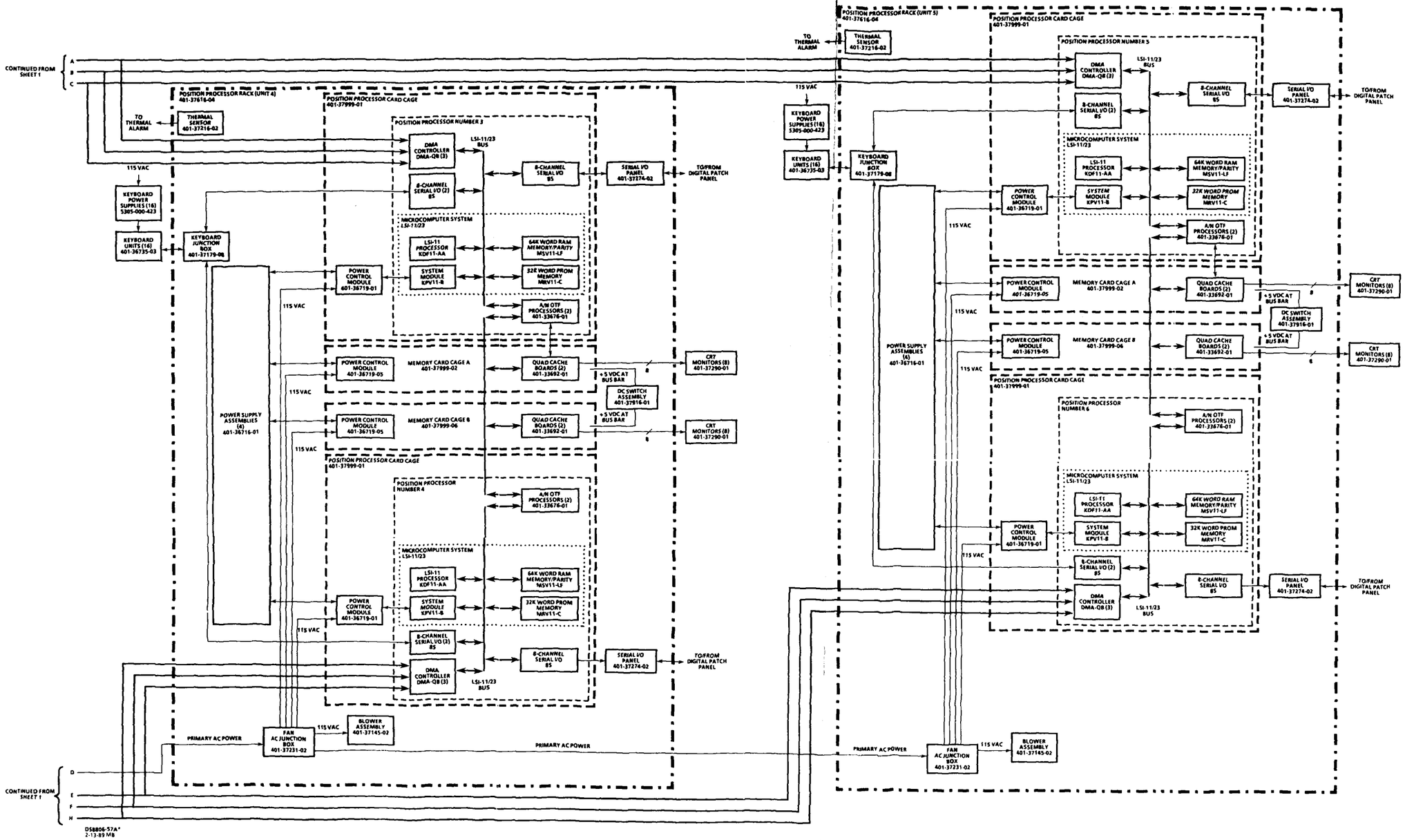


Figure 2-15. AFSS Block Diagram (Sheet 2 of 2)

2.1.2.2.1.1 Communications Processor. - Refer to paragraph 2.1.1.3.2.1 for the theory of operation of the communications processor.

2.1.2.2.2 Power Control Module. - Refer to paragraph 2.1.1.3.13 for the theory of operation of the Power Control Module, 401-36719.

2.1.2.2.3 Multi-Processor Linking System. - Consult the manual listed in table 1-4 for the theory of operation of the HEX/IPB-11.

2.1.2.2.4 DMA Controller Circuit Card, DMA-QB. - Consult the manual listed in table 1-4 for the theory of operation of the DMA-QB circuit card.

2.1.2.2.5 Disk Controller Circuit Card, RLV12. - Consult the manual listed in table 1-4 for the theory of operation of the RLV12 circuit card.

2.1.2.2.6 Multiplexer Circuit Card. - Refer to paragraph 2.1.1.3.10 for the theory of operation of the Multiplexer Circuit Card, 401-36993-03.

2.1.2.2.7 System Module Circuit Card, KPV11-B. - Consult the manual listed in table 1-4 for the theory of operation of the the KPV11-B circuit card.

2.1.2.2.8 LSI-11 Processor Circuit Card, KDF11-AA. - Consult the manual listed in table 1-4 for the theory of operation of the KDF11-AA circuit card.

2.1.2.2.9 32K Word PROM Circuit Card, MRV11-C. - Consult the manual listed in table 1-4 for the theory of operation of the MRV11-C circuit card.

2.1.2.2.10 64K RAM/Parity Circuit Card, MSV11-LF. - Consult the manual listed in table 1-4 for the theory of operation of the MSV11-LF circuit card.

2.1.2.2.11 Eight-Channel Serial I/O Circuit Card, 8S. - Consult the manual listed in table 1-4 for the theory of operation of the 8S circuit card.

2.1.2.2.12 Blower Assembly. - The Blower Assembly, 401-37145-02, uses fans to provide air circulation inside the communications processor rack. The blower assembly fans are powered by 115 VAC from the fan AC junction box. A wiring diagram for the blower assembly is shown in figure 10-7.

2.1.2.2.13 Power Supply Assembly. - Consult the manual listed in table 1-4 for the theory of operation of the power supply assembly.

2.1.2.2.14 Multiplexer Interface Assembly. - The Multiplexer Interface Assembly, 401-37170-01, interfaces the Multiplexer Circuit Card, 401-36993-03, with modems and Eight-Channel Serial I/O Circuit Card channels via the Digital Patch Panel. A schematic diagram of the multiplexer interface assembly is shown in figure 10-50.

2.1.2.2.15 Thermal Sensor. - The Thermal Sensors, 401-37190, 401-37204-01 and 401-37216-02, provide a specific electrical resistance to comparator circuits within the Thermal Alarm Unit, 401-37155-01, which corresponds to the temperature to which it is exposed. The 401-37204-01 sensor is mounted at the bottom of the rack and the 401-37216-02 sensor is mounted at the top of the rack.

2.1.2.2.16 Fan AC Junction Box. - The Fan AC Junction Box, 401-37231-02, in the communications processor rack receives primary AC power from the plain AC junction box in the communications equipment rack. It distributes 115 VAC to two power control modules and the blower assembly in the communications processor rack. A wiring diagram of the fan AC junction box is shown in figure 10-9.

2.1.2.2.17 Modem Sharing Device Enclosure. - The Modem Sharing Device Enclosure, 2005064, houses a maximum of four Modem Sharing Devices, 2005064.

2.1.2.2.18 Modem Sharing Device. - Consult the manual listed in table 1-4 for the theory of operation for the Modem Sharing Device, 2005064.

2.1.2.3 Position Processor Rack. - The following paragraphs provide the theory of operation of the equipment provided in a position processor rack.

2.1.2.3.1 Position Processor Card Cage. - Two Position Processor Card Cages, 401-37999-01, are provided in the position processor rack. Each card cage is used to house the circuit cards which make up a position processor.

2.1.2.3.1.1 Position Processor. - Refer to paragraph 2.1.1.3.2.2 for the theory of operation of the position processor.

2.1.2.3.2 Memory Card Cage "A". - Memory Card Cage "A", 401-37999-02, houses one power control module and two alphanumeric quad cache memory circuit cards in the position processor rack.

2.1.2.3.3 Memory Card Cage "B". - Memory Card Cage "B", 401-37999-06, houses one power control module and two alphanumeric quad cache memory circuit cards in the position processor rack. It provides a redundant +5 VDC power supply voltage for memory card cage "A" when needed.

2.1.2.3.4 Power Control Module. - Refer to paragraph 2.1.1.3.11 for the theory of operation of the Power Control Module, 401-36719.

2.1.2.3.5 32K Word PROM Circuit Card, MRV11-C. - Consult the manual listed in table 1-4 for the theory of operation of the MRV11-C circuit card.

2.1.2.3.6 64K Word RAM/Parity Circuit Card, MSV11-LF. - Consult the manual listed in table 1-4 for the theory of operation of the MSV11-LF circuit card.

2.1.2.3.7 A/N OTF Processor Circuit Card. - Refer to paragraph 2.1.1.3.13 for the theory of operation of the A/N OTF processor circuit card.

2.1.2.3.8 Eight-Channel Serial I/O Circuit Card, 8S. - Consult the manual listed in table 1-4 for the theory of operation of the 8S circuit card.

2.1.2.3.9 LSI-11 Processor Circuit Card, KDF11-AA. - Consult the manual listed in table 1-4 for the theory of operation of the KDF11-AA circuit card.

2.1.2.3.10 DMA Controller Circuit Card, DMA-QB. - Consult the manual listed in table 1-4 for the theory of operation of the DMA-QB circuit card.

2.1.2.3.11 System Module Circuit Card, KPV11-B. - Consult the manual listed in table 1-4 for the theory of operation of the KPV11-B circuit card.

2.1.2.3.12 Thermal Sensor. - The Thermal Sensor, 401-37216-02, provides temperature dependent resistance to a 2 VDC voltage sent from the Thermal Alarm Unit, 401-37155-01. The voltage is then returned to comparator circuits in the thermal alarm unit.

2.1.2.3.13 A/N Quad Cache Memory Circuit Card. - Refer to paragraph 2.1.1.3.14 for the theory of operation of the A/N quad cache memory circuit card.

2.1.2.3.14 Blower Assembly. - The Blower Assembly, 401-37145-02, uses fans to provide air circulation inside the position processor rack. The blower assembly fans are powered by 115 VAC from the fan AC junction box. A wiring diagram of the blower assembly is shown in figure 10-7.

2.1.2.3.15 Power Supply Assembly. - Consult the manual listed in table 1-4 for the theory of operation of the Power Supply Assembly, 401-36716-01.

2.1.2.3.16 Keyboard Junction Box. - The Keyboard Junction Box, 401-37179-08, provides for connections between keyboard assemblies and eight-channel serial I/O circuit cards.

2.1.2.3.17 Serial I/O Assembly. - The Serial I/O Assembly, 401-37274-02, provides for connections between digital patch panels and an eight-channel serial I/O circuit card.

2.1.2.3.18 Fan AC Junction Box. - The fan AC junction box in the Position Processor Rack, 401-37231-02, receives primary AC power from the fan AC junction box in the communications processor rack. It distributes 115 VAC to four power control modules and the blower assembly in the position processor rack. A wiring diagram of the Fan AC Junction Box is shown in figure 10-9.

2.1.2.4 Peripheral Group. - The Peripheral Group, 401-37275-01, contains the following equipment in the AFSS:

1. Input/Output Terminal (IOT), LA34-AA or LA100-CA
2. Line Printer, P300.

Consult the manuals listed in table 1-4 for the theory of operation of the peripheral group equipment.

2.1.2.5 Keyboard Units. - The Keyboard Units, 401-36735-03, are input devices for the position processor via the keyboard junction box. The keyboard units are Maxiswitch Keyboards, 2160069, which have circuit card modifications performed by E-Systems. A wiring diagram of the keyboard unit is shown in figure 10-6. Consult the manual listed in table 1-4 for the theory of operation of the keyboard unit.

2.1.2.6 Keyboard Power Supplies. - Consult the manual listed in table 1-4 for the theory of operation of the Keyboard Power Supply, 5305-000-423.

2.1.2.7 CRT Monitors. - Consult the manual listed in table 1-4 for the theory of operation of the CRT Monitor, 401-37290-01.

2.1.2.8 Cable Group. - The cable group at the AFSS varies depending on the particular AFSS site configuration. Cabling diagrams for the different configurations and schematic diagrams of cables are provided in section 10 of this instruction book. Consult the manual listed in table 1-4

2.1.3 Aviation Weather Processor (AWP). - The AWP consists of the following groups of equipment:

1. Communications Equipment Rack, 401-12301-01
2. Communications Processor Rack, 401-12302-01
3. Position Processor Rack, 401-12303-01
4. Tandem Group, 401-42690-04
5. Peripheral Group, 401-12305-01
6. Keyboard Units, 401-36735-03
7. Keyboard Power Supplies, 5305-000-423
8. CRT Monitors, 401-37290-01

Figure 2-16 provides a block diagram showing the individual equipment contained in each equipment group of the AWP and their relationships.

2.1.3.1 Communications Equipment Rack. - The following paragraphs provide the theory of operation of the equipment provided in the AWP communications equipment rack.

2.1.3.1.1 Coded Time Source. - Consult the manual listed in table 1-4 for the theory of operation of the Coded Time Source, 60-DC.

2.1.3.1.2 Coded Time Source Interface. - Refer to paragraph 2.1.1.1.1 for the theory of operation of the Coded Time Source Interface, 401-37207-01.

2.1.3.1.3 Thermal Alarm Unit. - Refer to paragraph 2.1.1.1.3 for the theory of operation of the Thermal Alarm Unit, 401-37155-01.

2.1.3.1.4 Digital Patch Panel. - Consult the manual listed in table 1-4 for the theory of operation of the Digital Patch Panel, 157-002C-00.

2.1.3.1.5 Disk Drive. - Consult the manual listed in table 1-4 for the theory of operation of the RL01-AK/RL02-AK Disk Drive.

2.1.3.1.6 Circuit Breaker AC Junction Box. - Refer to paragraph 2.1.1.1.6 for the theory of operation of the Circuit Breaker AC Junction Box, 401-37231-01.

2.1.3.2 Communications Processor Rack. - The following paragraphs provide the theory of operation of the equipment provided in the AWP communications processor rack.

2.1.3.2.1 Analog Patch Panel. - Consult the manual listed in table 1-4 for the theory of operation of the Analog Patch Panel, 153-020-12VF-M1.

2.1.3.2.2 RM-8E Modem Enclosure. - Consult the manual listed in table 1-4 for the theory of operation of the RM-8E Modem Enclosure and associated modem equipment.

2.1.3.2.3 Dual Communications Processor Card Cage. - The Dual Communications Processor Card Cage, 401-37999-04, contains the circuit cards which comprise two communications processors in the communications processor rack.

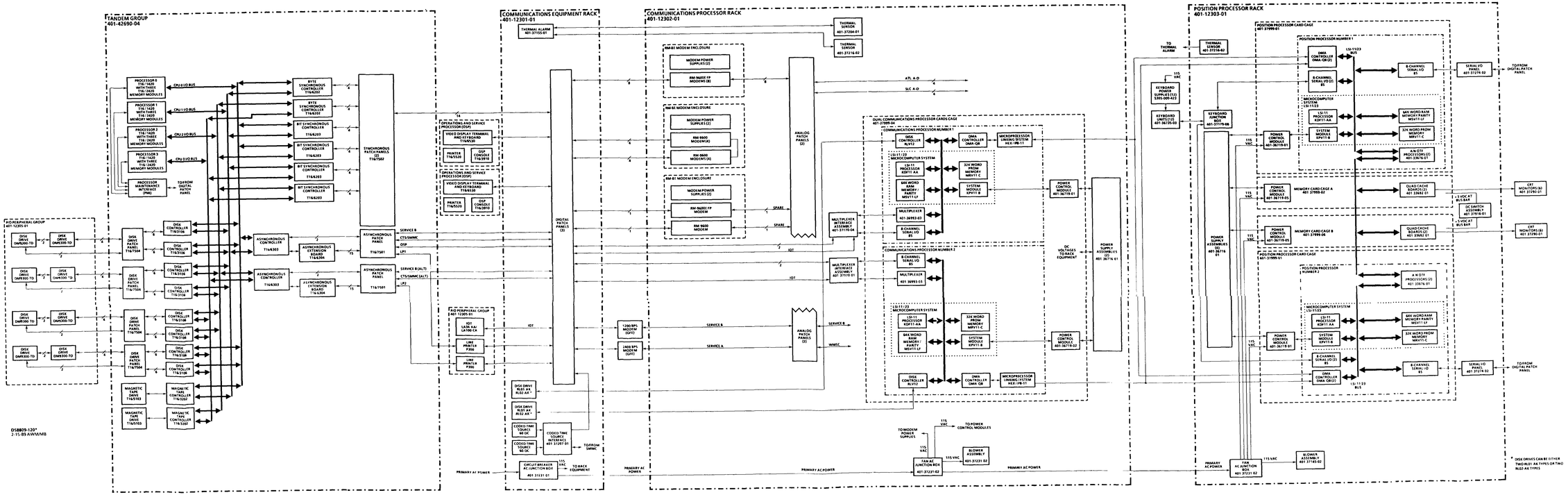


Figure 2-16. AWP Block Diagram

2.1.3.2.3.1 Communications Processor. - Refer to paragraph 2.1.1.3.2.1 for the theory of operation of the communications processor.

2.1.3.2.4 Power Control Module. - Refer to paragraph 2.1.1.3.11 for the theory of operation of the Power Control Module, 401-36719.

2.1.3.2.5 Multi-Processor Linking System. - Consult the manual listed in table 1-4 for the theory of operation of the HEX/IPB-11.

2.1.3.2.6 DMA Controller Circuit Card, DMA-QB. - Consult the manual listed in table 1-4 for the theory of operation of the DMA-QB circuit card.

2.1.3.2.7 Disk Controller Circuit Card, RLV12. - Consult the manual listed in table 1-4 for the theory of operation of the RLV12 circuit card.

2.1.3.2.8 Multiplexer Circuit Card. - Refer to paragraph 2.1.1.3.10 for the theory of operation of the Multiplexer Circuit Card, 401-36993-03.

2.1.3.2.9 System Module Circuit Card, KPV11-B. - Consult the manual listed in table 1-4 for the theory of operation of the the KPV11-B circuit card.

2.1.3.2.10 LSI-11 Processor Circuit Card, KDF11-AA. - Consult the manual listed in table 1-4 for the theory of operation of the KDF11-AA circuit card.

2.1.3.2.11 32K Word PROM Circuit Card, MRV11-C. - Consult the manual listed in table 1-4 for the theory of operation of the MRV11-C circuit card.

2.1.3.2.12 64K RAM/Parity Circuit Card, MSV11-LF. - Consult the manual listed in table 1-4 for the theory of operation of the MSV11-LF circuit card.

2.1.3.2.13 Eight-Channel Serial I/O Circuit Card, 8S. - Consult the manual listed in table 1-4 for the theory of operation of the 8S circuit card.

2.1.3.2.14 Blower Assembly. - The Blower Assembly, 401-37145-02, uses fans to provide air circulation inside the communications processor rack. The blower assembly fans are powered by 115 VAC from the fan AC junction box. A wiring diagram for the blower assembly is shown in figure 10-7.

2.1.3.2.15 Power Supply Assembly, 401-36716-01. - Consult the manual listed in table 1-4 for the theory of operation of the power supply assembly.

2.1.3.2.16 Multiplexer Interface Assembly. - The Multiplexer Interface Assembly, 401-37170-01, interfaces the Multiplexer Circuit Card, 401-36993-03, with modems and eight-channel serial I/O circuit card channels via the digital patch panel. A schematic diagram of the multiplexer interface assembly is shown in figure 10-50.

2.1.3.2.17 Thermal Sensor. - The Thermal Sensors, 401-37204-01 and 401-37216-02, provide a specific electrical resistance to comparator circuits within the Thermal Alarm Unit, 401-37155-01, which corresponds to the temperature to which it is exposed. The 401-37204-01 sensor is mounted at the bottom of the rack and the 401-37216-02 sensor is mounted at the top of the rack.

2.1.3.2.18 Fan AC Junction Box. - The Fan AC Junction Box, 401-37231-02, in the communications processor rack receives primary AC power from the plain AC junction box in the communications equipment rack. It distributes 115 VAC to two power control modules and the blower assembly in the communications processor rack. A wiring diagram of the fan AC junction box is shown in figure 10-9.

2.1.3.3 Position Processor Rack. - The following paragraphs provide the theory of operation of the equipment provided in a position processor rack.

2.1.3.3.1 Position Processor Card Cage. - Two Position Processor Card Cages, 401-37999-01, are provided in the position processor rack. Each card cage is used to house the circuit cards which make up a position processor.

2.1.3.3.1.1 Position Processor. - Refer to paragraph 2.1.1.3.2.2 for the theory of operation of the position processor.

2.1.3.3.2 Memory Card Cage "A". - Memory Card Cage "A", 401-37999-02, houses one power control module and two alphanumeric quad cache memory circuit cards in the position processor rack.

2.1.3.3.3 Memory Card Cage "B". - Memory Card Cage "B", 401-37999-06, houses one power control module and two alphanumeric quad cache memory circuit cards in the AWP position processor rack. It provides a redundant +5 VDC power supply voltage for memory card cage "A" when needed.

2.1.3.3.4 Power Control Module. - Refer to paragraph 2.1.1.3.11 for the theory of operation of the Power Control Module, 401-36719.

2.1.3.3.5 32K Word PROM Circuit Card, MRV11-C. - Consult the manual listed in table 1-4 for the theory of operation of the MRV11-C circuit card.

2.1.3.3.6 64K Word RAM/Parity Circuit Card, MSV11-LF. - Consult the manual listed in table 1-4 for the theory of operation of the MSV11-LF circuit card.

2.1.3.3.7 A/N OTF Processor Circuit Card. - Refer to paragraph 2.1.1.3.13 for the theory of operation of the A/N OTF processor circuit card.

2.1.3.3.8 Eight-Channel Serial I/O Circuit Card, 8S. - Consult the manual listed in table 1-4 for the theory of operation of the 8S circuit card.

2.1.3.3.9 LSI-11 Processor Circuit Card, KDF11-AA. - Consult the manual listed in table 1-4 for the theory of operation of the KDF11-AA circuit card.

2.1.3.3.10 DMA Controller Circuit Card, DMA-QB. - Consult the manual listed in table 1-4 for the theory of operation of the DMA-QB circuit card.

2.1.3.3.11 System Module Circuit Card, KPV11-B. - Consult the manual listed in table 1-4 for the theory of operation of the KPV11-B circuit card.

2.1.3.3.12 Thermal Sensor. - The Thermal Sensor, 401-37216-02, provides temperature dependent resistance to a 2 VDC voltage sent from the Thermal Alarm Unit, 401-37155-01. The voltage is then returned to comparator circuits in the thermal alarm unit.

2.1.3.3.13 A/N Quad Cache Memory Circuit Card. - Refer to paragraph 2.1.1.3.14 for the theory of operation of the A/N quad cache memory circuit card.

2.1.3.3.14 Blower Assembly. - The Blower Assembly, 401-37145-02, uses fans to provide air circulation inside the position processor rack. The blower assembly fans are powered by 115 VAC from the fan AC junction box. A wiring diagram of the blower assembly is shown in figure 10-7.

2.1.3.3.15 Power Supply Assembly. - Consult the manual listed in table 1-4 for the theory of operation of the Power Supply Assembly, 401-36716-01.

2.1.3.3.16 Keyboard Junction Box. - The Keyboard Junction Box, 401-37179-08, provides for connections between keyboard assemblies and eight-channel serial I/O circuit cards.

2.1.3.3.17 Serial I/O Assembly. - The Serial I/O Assembly, 401-37274-02, provides for connections between digital patch panels and an eight-channel serial I/O circuit card.

2.1.3.3.18 Fan AC Junction Box. - The Fan AC Junction Box, 401-37231-02, in the position processor rack, receives primary AC power from the fan AC junction box in the AWP communications processor rack. It distributes 115 VAC to four power control modules and the blower assembly in the position processor rack. A wiring diagram of the fan AC junction box is shown in figure 10-9.

2.1.3.4 Tandem Group. - The Tandem group in the AWP consists of the following equipment:

1. Processor, T16/1420
2. Disk Controller, T16/3106
3. Asynchronous Controller, T16/6303
4. Asynchronous Extension Board, T16/6304
5. Asynchronous Patch Panel, T16/7501
6. Byte Synchronous Controller, T16/6202
7. Bit Synchronous Controller, T16/6203
8. Synchronous Patch Panel, T16/7502
9. Magnetic Tape Controller, T16/3202

10. Magnetic Tape Drive, T16/5103.
11. Disk Patch Panel, T16/7504
12. Operations and Service Processor (OSP) Console, T16/3910
13. Video Display and Keyboard, T16/6530
14. Printer, T16/5520

Consult the manuals listed in table 1-4 for the theory of operation of the Tandem group equipment.

2.1.3.5 Peripheral Group. - The Peripheral Group, 401-37275-01, contains the following equipment in the AWP:

1. Input/Output Terminal, LA34-AA or LA100-CA
2. Line Printer, P300.

Consult the manuals listed in table 1-4 for the theory of operation of the peripheral group equipment.

2.1.3.6 Keyboard Units. - The Keyboard Units, 401-36735-03, are input devices for the position processor via the keyboard junction box. The keyboard units are Maxiswitch Keyboards, 2160069, which have circuit card modifications performed by E-Systems. A wiring diagram of the keyboard unit is shown in figure 10-6. Consult the manual listed in table 1-4 for the theory of operation of the keyboard unit.

2.1.3.7 Keyboard Power Supplies. - Consult the manual listed in table 1-4 for the theory of operation of the Keyboard Power Supply, 5305-000-423.

2.1.3.8 CRT Monitors. - Consult the manual listed in table 1-4 for the theory of operation of the CRT Monitor, 401-37290-01.

2.1.4 Integrated Circuit Data. - Table 2-7 lists all the integrated circuits that are found on the blocked schematic diagrams included in this manual. Integrated circuit data charts follow table 2-7 and provide logic diagrams, pin configuration, and descriptive data for each integrated circuit listed. Column one of table 2-7 has the IC number which is found at the top of each data chart. Column two is the generic number for each integrated circuit listed in alphanumeric order. Column three is a brief description of each integrated circuit.

Table 2-7. Integrated Circuit Index

IC NO.	Generic No.	Description
1	UA339A	Low Power, Low Offset Voltage Quad Comparators
2	AM26LS32	Quad Line Receiver
3	AM93S16	BCD Decade/Four-Bit Binary Counter
4	CDP1823SD	128-Word x 8-Bit Static Random-Access Memory
5	DC005	Transceiver Logic
6	DC006	Word Count/Bus Address Logic
7	DS3691	RS-422/RS-423 Line Drivers
8	DS8641	Quad Unified Bus Transceiver
9	HD-4702	CMOS Programmable Bit Rate Generator
10	HD-6402	CMOS/LSI Universal Asynchronous Receiver Transmitter (UART)
11	IMS1400	16K Static RAM
12	LM311	Voltage Comparator
13	MC14557B	1-to-64 Bit Variable Length Shift Register
14	MK4802	2K x 8 Static RAM
15	M3636	16K (2K X 8) PROM
16	SN74LS00 SN74S00	Quadruple 2-Input Positive NAND Gates
17	SN74LS02 SN74S02	Quadruple 2-Input Positive NOR Gates
18	SN74LS04 SN74S04	Hex Inverters

Table 2-7. Integrated Circuit Index (Continued)

IC NO.	Generic No.	Description
19	SN74LS08 SN74S08 SN7408	Quadruple 2-Input Positive AND Gates
20	SN74LS11	Triple 3-Input Positive AND Gates
21	SN74LS21	Dual 4-Input Positive-AND Gates
22	SN74LS27	Triple 3-Input Positive-NOR Gates
23	SN74LS30 SN74S30	8-Input Positive-NAND Gate
24	SN74LS74A	Dual D-Type Positive-Edge-Triggered Flip-Flop with Preset and Clear
25	SN74LS85	4-Bit Magnitude Comparator
26	SN74LS109	Dual J-K Positive-Edge-Triggered Flip-Flops with Preset and Clear
27	SN74LS123	Retriggerable Monostable Multivibrators
28	SN74LS125	Quadruple Bus Buffer Gates With 3-State Outputs
29	SN74LS126A	Quadruple Bus Buffer Gates with 3-State Outputs
30	SN74LS138	Decoder/Demultiplexer
31	SN74LS151	Data Selectors/Multiplexers
32	SN74LS158	Quadruple 2-Line-to-1 Line Data Selector/Multiplexer
33	SN74LS161A	Synchronous 4-Bit Counter
34	SN74LS162	Synchronous 4-Bit Counter
35	SN74LS260	Dual 5-Input Positive-NOR Gates
36	SN74LS279	Quad /S-/R Latch

Table 2-7. Integrated Circuit Index (Continued)

IC NO.	Generic No.	Description
37	SN74LS373	Octal D-type Transparent Latch Flip-Flop
38	SN74LS377	Octal D-Type Flip-Flop With Enable
39	SN74LS378	Hex D-Type Flip-Flop With Enable
40	SN74LS670	4-by-4 Register Files With 3-State Outputs
41	SN74S10	Triple 3-Input Positive-NAND Gates
42	SN74S20	Dual 4-Input Positive-NAND Gates
43	SN74S32	Quadruple 2-Input Positive-OR Gate
44	SN74S38	Quadruple 2-Input Positive-NAND Buffers With Open Collector Outputs
45	SN74S86	Quadruple 2-Input Exclusive-OR Gates
46	SN74S157	Quadruple 2-Line-to-1 Line Data Selectors/Multiplexers
47	SN74S174	Hex D-Type Flip-Flops With Clear
48	SN74S175	Quadruple D-Type Flip-Flops With Clear
49	SN74S240	Octal Buffers and Line Drivers With 3-State Outputs (Inverting)
50	SN74S241	Octal Buffers and Line Drivers With 3-State Outputs (Non-Inverting)
51	SN74S251	Data Selector/Multiplexer With 3-State Outputs
52	SN74S283	4-Bit Binary Full Adders With Fast Carry

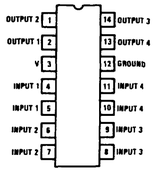
Table 2-7. Integrated Circuit Index (Continued)

IC NO.	Generic No.	Description
53	SN74S299	8-bit Universal Shift/Storage Register
54	SN74S374	Octal D-Type Edge-Triggered Flip-Flop
55	SN74166	8-Bit Shift Registers
56	SN74173	4-Bit D-Type Registers With 3-State Outputs
57	SN74193	Synchronous 4-Bit Up/Down Counter
58	SN74221	Double Monostable Multivibrators With Schmitt-Trigger Inputs
59	SN74276	Quadruple J-K Flip-Flops
60	SN75451B	Dual Peripheral Positive-AND Drivers
61	2764	8192 x 8-Bit EPROM
62	8x320	Bus Interface Register Array
63	8085A	Single Chip 8-Bit n-Channel Microprocessor
64	8155	2048-Bit Static MOS RAM With I/O Ports and Timer
65	82S123	256-Bit Bipolar PROM (32 x 8)
66	82S129	1024-Bit Bipolar PROM (256 x 4)
67	82S131	2048-Bit Bipolar PROM (512 x 4)
68	82S137	4096-Bit Bipolar PROM (1024 x 4)
69	8205	High Speed 1 Out of 8 Binary Decoder
70	8253	Programmable Interval Timer

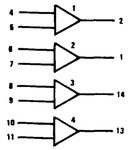
Table 2-7. Integrated Circuit Index (Continued)

IC NO.	Generic No.	Description
71	8274	Multi-Protocol Serial Controller
72	9616	Triple EIA RS-232-C/MIL-STD-188C Line Driver
73	9617	Triple EIA RS-232-C Line Receiver
74	82181	8192-Bit Bipolar PROM (1024x8)

IC NUMBER 1
Low Power, Low Offset Voltage Quad Comparators μ A339A



PIN CONFIGURATION

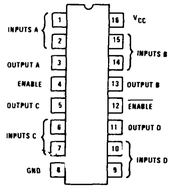


LOGIC DIAGRAM

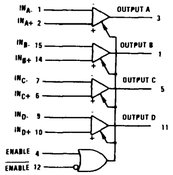
The μA339A series consists of four independent precision voltage comparators designed specifically to operate from a single power supply. Operation from split power supplies is also possible and the low power supply current drain is independent of the supply voltage range. Darlington connected PNP input stage allows the input common-mode voltage to include ground.

F201-57

IC NUMBER 2
Quad Line Receiver AM26LS32, DS26LS32



PIN CONFIGURATION



LOGIC DIAGRAM

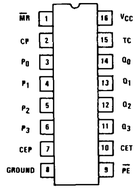
The Am26LS32 is a quad line receiver designed to meet the requirements of RS-422 and RS-423, and Federal Standards 1020 and 1030 for balanced and unbalanced digital data transmission.

The Am26LS32 features an input sensitivity of 200mV over the input voltage range of ±7V.

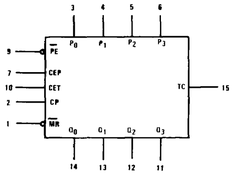
The Am26LS32 provides an enable and disable function common to all four receivers, 3-state outputs with 8mA sink capability, and incorporate a fail safe input-out relationship which keeps the outputs high when the inputs are open.

F201-44

IC NUMBER 3
BCD Decade/Four-Bit Binary Counter AM93S16



PIN CONFIGURATION

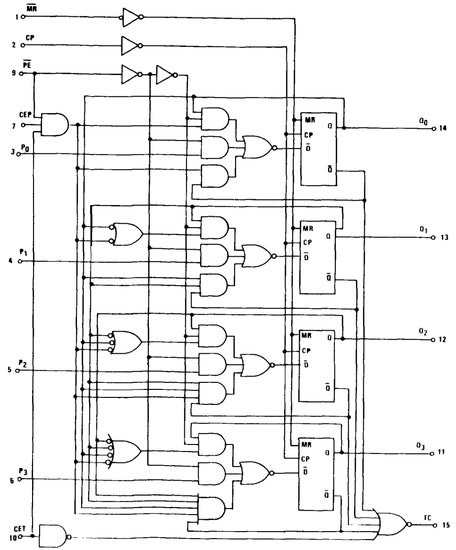


LOGIC SYMBOL

The Am93S16 is a fully synchronous 4-bit decimal and binary counter. With the parallel enable ($\overline{PE}$) LOW, data on the P_0-P_3 inputs is parallel loaded on the positive clock transition. When $\overline{PE}$ is HIGH and both count enables CEP and CET are also HIGH, counting will occur on the LOW-to-HIGH clock transition.

The terminal count state (1111 for the Am93S16) is decoded and ANDed with CET in the terminal count (TC) output. If CET is HIGH and the counter is in its terminal count state, then TC is HIGH.

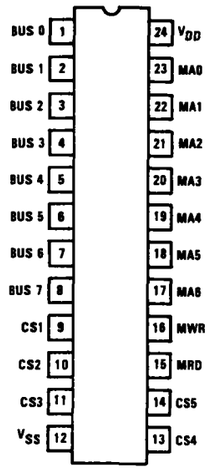
Both counters have an asynchronous master reset ($\overline{MR}$). A LOW on the $\overline{MR}$ input forces the Q outputs LOW independent of all other inputs. The only requirements on the $\overline{PE}$, CEP, CET and P_0-P_3 inputs is that they meet the set-up time requirements before the clock LOW-to-HIGH transition.



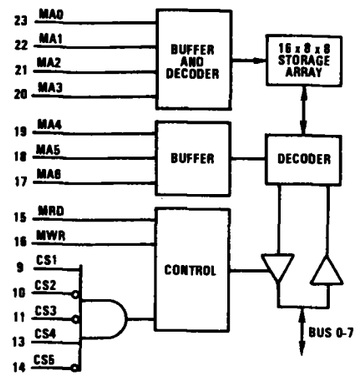
LOGIC DIAGRAM

F201-45

IC NUMBER 4
CDP1823SD 128-Word x 8-Bit Static Random-Access Memory



PIN CONFIGURATION



LOGIC DIAGRAM

The CDP1823SD is a 128-word x 8-bit COS/MOS SOS static random-access memory. The CDP1823SD has a recommended operating voltage range of 4 to 10 volts.

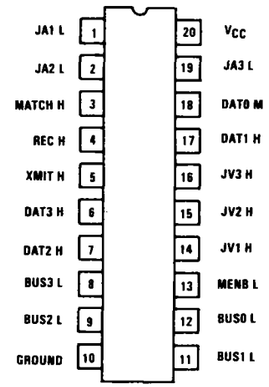
The CDP1823S memory has 8 common data input and data output terminals for direct connection to a bidirectional data bus and is operated from a single voltage supply. Five chip-select inputs are provided to simplify memory-system expansion. In order to enable the CDP1823S, the chip-select inputs CS2, CS3, and CS4 require a low input signal, and the chip-select inputs CS1 and CS5 require a high input signal.

The MRD signal enables all 8 output drivers when in the low state and should be in a high state during a write cycle.

After valid data appear at the output, the address inputs may be changed immediately. Output data will be valid until either the MRD signal goes high, the device is deselected, or t_{AA} (access time) after address changes.

F201-71

IC NUMBER 5
Transceiver Logic DC005



PIN CONFIGURATION

PIN NO.	TYPE	SYMBOL	NAME AND FUNCTION
		BUS(3:0) L	
12	II	BUS0	BUS DATA. This set of four lines constitutes the bus side of the transceiver. Open collector outputs; high-impedance inputs. Low = 1.
11	II	BUS1	
9	II	BUS2	
8	II	BUS3	
		DAT(3:0) H	
18	I	DAT0	PERIPHERAL DEVICE DATA. These four tristate lines carry the inverted received data from BUS(3:0) when the transceiver is in the receive mode. When in transmit data mode, the data carried on these lines is passed inverted to BUS(3:0). When in the disabled mode, these lines go open (HI-Z). High = 1.
17	I	DAT1	
7	I	DAT2	
6	I	DAT3	
		JV(3:1) H	
14	V	JV1	VECTOR JUMPERS. These inputs, with internal pull-down resistors, directly drive BUS(3:1). A low or open on the jumper pin will cause an open condition on the corresponding bus pin if XMIT H is low. A high will cause a one (low) to be transmitted on the bus pin. Note that BUS0 L is not controlled by any jumper input.
15	V	JV2	
16	V	JV3	
13	II	MENB L	MATCH ENABLE. A low on this line will enable Match output. A high will force Match low, overriding the match circuit.
3	III	MATCH H	ADDRESS MATCH. When BUS(3:1) match with the state of JA(3:1) and MENB L is low, this output is open; otherwise it is low.
		JA(3:1) L	
1	IV	JA1 L	ADDRESS JUMPERS. A strap to ground on these inputs will allow a match to occur with a one (low) on the corresponding BUS line; an open will allow a match with a zero (high; a strap to V_{CC} will disconnect the corresponding address bit from the comparison.
2	IV	JA2 L	
19	IV	JA3 L	
5	I	XMIT H	CONTROL INPUTS. These lines control the operation of the transceiver as follows.
4	I	REC H	

REC	XMIT	
0	0	DISABLE: BUS, DAT open
0	1	XMIT DATA: DAT → BUS
1	0	RECEIVE: BUS → DAT
1	1	RECEIVE: BUS → DAT

To avoid 3-state signal overlap conditions, an internal circuit delays the change of modes between XMIT DATA and RECEIVE mode and delays 3-state drivers on the DAT lines from enabling. This action is independent of the DISABLE mode.

The interrupt chip is an 18-pin, 0.762 cm center X 2.349 cm long (max) (0.3 in center X 0.925 in long) dual-in-line-package (DIP) device that provides the circuits to perform an interrupt transaction in a computer system that uses a daisy-chain type of arbitration scheme. The device is used in peripheral interfaces to provide two interrupt channels labeled "A" and "B," with the A section at a higher priority than the B section. Bus signals use high-impedance input circuits or high-current open collector outputs, which allow the device to directly attach to the computer system bus. Maximum current required from the V_{CC} supply is 140 mA.

Three address "jumper" inputs are used to compare against three bus inputs to generate the signal MATCH. The MATCH output is open collector, which allows the output of several transceivers to be wire-ANDed to form a composite address match signal. The address jumpers can also be put into a third logical state that disables jumpers for "don't care" address bits. In addition to the three address jumper inputs, a fourth high-impedence input line is used to enable/disable the MATCH output.

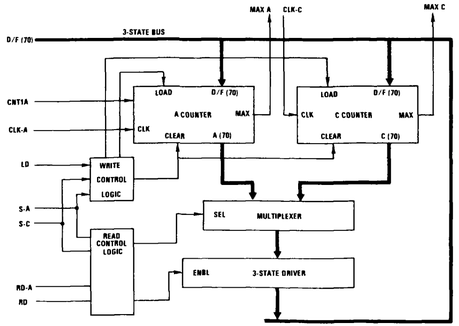
Three vector jumper inputs are used to generate a constant that can be passed to the compute bus. The three inputs directly drive three of the bus lines, overriding the action of the control lines.

Two control signals are decoded to give three optional states: receive data, transmit data, and disable.

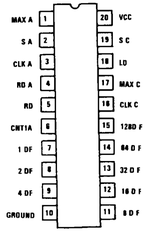
F201-54

IC NUMBER 6
Word Count/Bus Address Logic DC006

The word count/bus address (WC/BA) chip is a 20-pin, 0.762 cm center x 2.74 cm long (0.3 in. center x 1.08 in. long) DIP, low-power Schottky device. Its primary use is as a DMA peripheral device interface. This IC is designed to connect to the 3-state of the DC005 transceiver. The DC006 has two 8-bit binary up-counters, one for the word (byte) count and another for bus address. Two DC006 ICs may be cascaded to increase register implementation.



BLOCK DIAGRAM



PIN CONFIGURATION

READ CONTROL

INPUTS				OUTPUTS
LD H				
RD-A	RD	S-A	S-C	D/F (7:0)
L	L	L	L	CLEAR A&C AND READ C
L	L	L	H	A (7:0)
L	L	H	L	C (7:0)
L	L	H	H	Z
L	H	X	X	Z
H	L	L	L	CLEAR A&C AND READ A
H	L	L	H	A (7:0)
H	L	H	L	A (7:0)
H	L	H	H	A (7:0)
H	H	L	L	CLEAR A&C AND READ A
H	H	L	H	A (7:0)
H	H	H	L	A(7:0)
H	H	H	H	A (7:0)

TRUTH TABLE

WRITE CONTROL

INPUTS			FUNCTION
RD-A = L, RD = H			
LD	S-A	S-C	
*	L	L	*ILLEGAL
*	L	H	LOAD A (7:0)
*	H	L	LOAD C (7:0)
X	H	H	WC/BA NOT SELECTED
H	L	L	CLEAR BOTH COUNTERS
H	L	H	LOADING DISABLED
H	H	L	LOADING DISABLED

*ILLEGAL CONDITION BECAUSE A LOAD OPERATION AND A CLEAR OPERATION IS ATTEMPTED SIMULTANEOUSLY RESULT OF THIS CONDITION IS CLEAR.

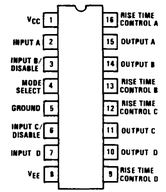
TRUTH TABLES
WHERE L = TTL LOW
H = TTL HIGH
X = DON'T CARE
Z = HIGH IMPEDANCE
* = HIGH TO LOW TRANSITION

TRUTH TABLE

PIN NO.	TYPE	SYMBOL	NAME AND FUNCTION
6		CNT1A	COUNT A COUNTER BY 1 (TTL INPUT). This signal controls the least significant bit of the A counter. When CNT1A is low, the A counter increments by one. When high, the LSB is prevented from toggling, hence the counter increments by two. When two counters are cascaded, CNT1A on the high-order counter should be grounded.
3		CLK-A	CLOCK A COUNTER (TTL INPUT). This clock signal increments the A counter on its negative edge. The counter is incremented by one or two, depending on CNT1A. CNT1A and LD must be stable while CLK-A is high.
16		CLK-C	CLOCK C COUNTER (TTL INPUT). This clock signal increments the C counter by one on its negative edge. LD must be stable while CLK-C is high.
2		S-A	SELECT A COUNTER (TTL INPUT). This signal allows the selection of the A counter according to the truth tables.
19		S-C	SELECT C COUNTER (TTL INPUT). This signal allows the selection of the C counter according to the truth tables.
4		RD-A	READ A COUNTER (TTL INPUT). This signal allows the selection of the A counter according to the truth tables.
5		$\overline{RD}$	READ (TTL INPUT). This signal allows the read operation to take place according to the truth tables.
18		LD	LOAD (TTL INPUT). When this signal goes through a high-to-low transition, the load operation is allowed to take place according to the truth table. No data changes permitted while LD is low.
7-9 11-15		D/F (7:0)	DATA BUS (BIDIRECTIONAL, 3-STATE OUTPUTS/ TTL INPUTS). These eight bidirectional lines are used to carry data in and out of the selected counter.
1		MAX-A	MAXIMUM A COUNT (TTL OUTPUT). This signal is generated by ANDing CLK-A and the maximum count condition of counter A (count 376 when counting by 2 or count 377 when counting by 1).
17		MAX-C	MAXIMUM C COUNT (TTL OUTPUT). This signal is generated by ANDing CLK-C and the maximum count conditions of counter C (count 377).

F201-53

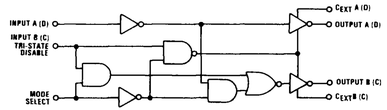
IC NUMBER 7
RS-422/RS-423 Line Drivers DS3691



PIN CONFIGURATION

INPUTS			OUTPUTS	
MODE	A (D)	B (C)	A (D)	B (C)
0	0	0	0	1
0	0	1	TRI-STATE	TRI-STATE
0	1	0	1	0
0	1	1	TRI-STATE	TRI-STATE
1	0	0	0	0
1	0	1	0	1
1	1	0	1	0
1	1	1	1	1

TRUTH TABLE

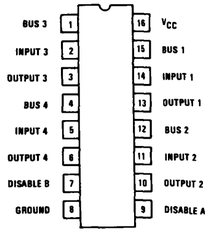


LOGIC DIAGRAM

The DS3691 has low power Schottkey TTL line drivers designed to meet the requirements of EIA Standards RS-422 and RS-423. The drivers feature 4 buffered outputs with high source and sink current capability with internal short circuit protection. A MODE CONTROL input provides a choice of operation either as 4 independent line drivers or 2 differential line drivers.

F201-95

IC NUMBER 8
Quad Unified Bus Transceiver DS8641



PIN CONFIGURATION

DRIVER SECTION

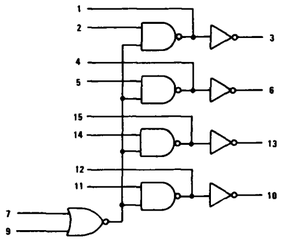
DISABLE 1	DISABLE 2	INPUT	BUS
L	L	L	H
L	L	H	L
L	H	L	H
L	H	H	H
H	L	L	H
H	L	H	H
H	H	L	H
H	H	H	H

RECEIVER SECTION

BUS	OUTPUT
$V_{IH(R)} > 1.7$ V	L
$V_{IL(R)} < 1.3$ V	H

Where: L = Low Logic State
H = High Logic State

TRUTH TABLE



LOGIC DIAGRAM

Consists of four pair of drivers and receivers with the output of each driver connected to the input of its mating receiver. These devices are intended for use in bus organized data transmission system employing terminated 120 Ω lines. A disable function consisting of a two-input NOR gate is provided to control all four drivers. Up to 27 driver/receiver pairs can share a common line.

F201-35

IC NUMBER 9
CMOS Programmable Bit Rate Generator HD-4702

CLOCK AND MODES INITIALIZATION

I_X	E_{CP}	CP	OPERATION
⎍	H	L	Clocked from I_X
X	L	⎍	Clocked from CP
X	H	H	Continuous Reset
X	L	⎍	Reset During 1ST CP = HIGH Time

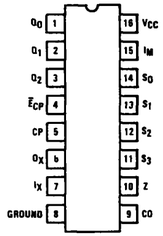
NOTE: Actual output frequency is 16 times the indicated Output Rate, assuming a clock frequency of 2.4576 MHz.

H = HIGH Level
L = LOW Level
X = Don't care
⎍ = 1st HIGH level Clock Pulse after E_{CP} goes LOW
⎍ = Clock Pulse

TRUTH TABLE FOR RATE SELECT INPUTS

S_3	S_2	S_1	S_0	OUTPUT RATE (Z)
L	L	L	L	MUX INPUT (I_M) *
L	L	L	H	MUX INPUT (I_M)
L	L	H	L	50 BAUD
L	L	H	H	75 BAUD
L	H	L	L	134.5 BAUD
L	H	L	H	200 BAUD
L	H	H	L	600 BAUD
L	H	H	H	2400 BAUD
H	L	L	L	9600 BAUD
H	L	L	H	4800 BAUD
H	L	H	L	1800 BAUD
H	L	H	H	1200 BAUD
H	H	L	L	2400 BAUD
H	H	H	L	300 BAUD
H	H	H	L	150 BAUD
H	H	H	H	110 BAUD

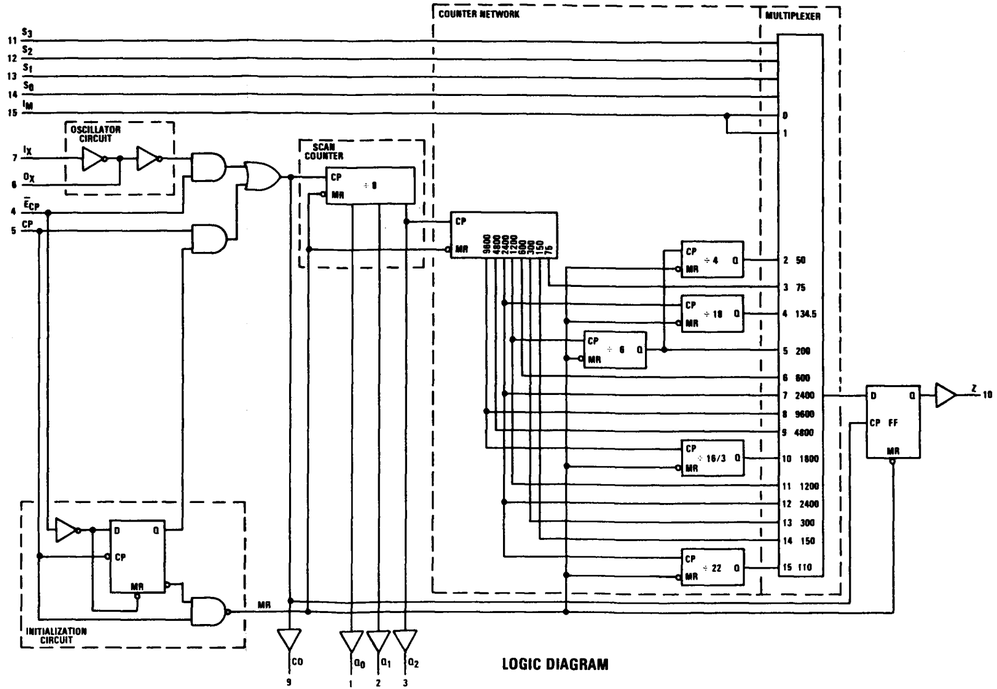
* 19200 BAUD by connecting Q_2 to I_M.



PIN NAMES

CP	External Clock Input
$\overline{E}_{CP}$	External Clock Enable Input (Active Low)
I_X	Crystal Input
I_M	Multiplexed Input
S_0-S_3	Rate Select Inputs
CO	Clock Output
Q_X	Crystal Drive Output
Q_0-Q_2	Scan Counter Outputs
Z	Bit Rate Output

PIN CONFIGURATION



LOGIC DIAGRAM

The HD-4702 Bit Rate Generator provides the necessary clock signals for digital data transmission systems, such as a UART. It generates 13 commonly used bit rates using an on-chip crystal oscillator or an external input. For coventional operation generating 16 output clock pulses per bit period, the input clock frequency must be 2,457.6 MHz (i.e. 9600 Baud x 16 x 16, since there is an internal ÷ 16 prescaler). A lower input frequency will result in a proportionally lower output frequency.

The HD-4702 can provide multi-channel operation with a minimum of external logic by having the clock frequency CO and the ÷ 8 prescaler outputs Q_0, Q_1, Q_2 available externally. All signals have a 50% duty cycle except 1800 Baud and 2000 Baud, which has less than 0.39% distortion and 3600 Baud, which has less than 0.78% distortion.

The four rate select inputs (S_0-S_3) select which bit rate is at the output (Z). The table lists select code and output bit rate. Two of the 16 for the HD-4702 do not select an internally generated frequency, but select an input into which the user can feed either a different frequency, or a static level (High or Low) to generate "ZERO BAUD".

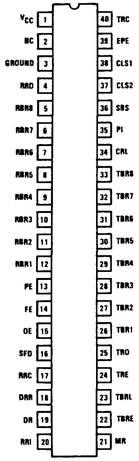
The bit rate most commonly used in modern data terminals (110, 150, 300, 1200, 2400 Baud) require that no more than one input be grounded for the HD-4702, which is easily achieved with a single 5-position switch.

The HD-4702 has an initialization circuit which generates a common master reset for all flip-flops. This signal is derived from a digital differentiator that senses the first high level on the CP input after the $\overline{E}_{CP}$ input goes low. When $\overline{E}_{CP}$ is high, selecting the crystal input, CP must be low. A high level on CP would apply a continous reset.

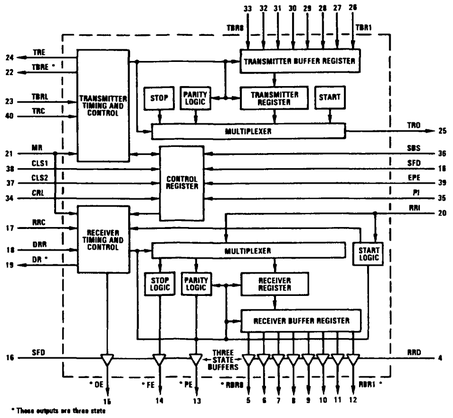
For the HD-4702, all inputs except I_X have on-chip pull-up circuits which provide TTL compatibility and eliminate the need to tie a permanently high input to V_{CC}.

F201-60

IC NUMBER 10
CMOS/LSI Universal Asynchronous Receiver Transmitter (UART) HD-6402



PIN CONFIGURATION



LOGIC DIAGRAM

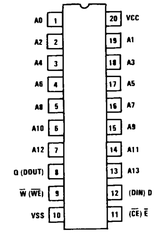
The HD-6402 is a CMOS/LSI subsystem for interfacing computers or microprocessors to an asynchronous serial data channel. The receiver converts serial start, data, parity and stop bits to parallel data verifying proper code transmission, parity, and stop bits. The transmitter converts parallel data into serial form and automatically adds start, parity, and stop bits. The data word length can be 5, 6, 7 or 8 bits. Parity may be odd or even. Parity checking and generation can be inhibited. The stop bits may be one or two or one and one-half when transmitting 5 bit code.

PIN		DESCRIPTION
1	V_{CC}	Positive Voltage Supply
2	NC	No Connection
3	GND	Ground
4	RRD	A high level on RECEIVER REGISTER DISABLE forces the receiver holding outputs RBR1-RBR8 to a high impedance state.
5	RBR8	The contents of the RECEIVER BUFFER REGISTER appear on these three-state outputs. Word formats less than 8 characters are right justified to RBR1.
6	RBR7	See Pin 5 - RBR8
7	RBR6	See Pin 5 - RBR8
8	RBR5	See Pin 5 - RBR8
9	RBR4	See Pin 5 - RBR8
10	RBR3	See Pin 5 - RBR8
11	RBR2	See Pin 5 - RBR8
12	RBR1	See Pin 5 - RBR8
13	PE	A high level on PARITY ERROR indicates received parity does not match parity programmed by control bits. When parity is inhibited this output is low
14	FE	A high level on FRAMING ERROR indicates the first stop bit was invalid.
15	OE	A high level on OVERRUN ERROR indicates the data received flag was not cleared before the last character was transferred to the received buffer register.
16	SFD	A high level on STATUS FLAGS DISABLE forces the outputs PE, FE, OE, DR, TBRE to a high impedance rate.
17	RRC	The RECEIVER REGISTER CLOCK is 16x the receiver data rate.
18	DRR	A low level on DATA RECEIVED RESET clears the data received output DR to a low level.
19	DR	A high level on DATA RECEIVED indicates a character has been received and transferred to the receiver buffer register.
20	RRI	Serial data on RECEIVER REGISTER INPUT is clocked into the receiver register.
21	MR	A high level on MASTER RESET clears PE, FE, OE, and DR to a low level and sets the transmitter output to a high level after 18 clock cycles. MR does not clear the receiver buffer register. This input must be pulsed at least once after power up.
22	TBRE	A high level on TRANSMITTER BUFFER REGISTER EMPTY indicates the transmitter buffer register has transferred its data to the transmitter register and is ready for new data.
23	TBRL	A low level on TRANSMITTER BUFFER REGISTER LOAD transfers data from inputs TBR1-TBR8 into the transmitter buffer register A low to high transition on TBRL indicates data transfer to the transmitter register is busy. Transfer is automatically delayed so that the two characters are transmitted end to end.
24	TRE	A high level on TRANSMITTER REGISTER EMPTY indicates completed transmission of a character including stop bits
25	TRO	Character data, start data and stop bits appear serially at the TRANSMITTER REGISTER OUTPUT.
26	TBR1	Character data is loaded into the TRANSMITTER BUFFER REGISTER via inputs TBR1-TBR8 For character formats less than 8 bits the TBR8, 7, and 6 inputs are ignored corresponding to the programmed work length.
27	TBR2	See Pin 26 - TBR1
28	TBR3	See Pin 26 - TBR1
29	TBR4	See Pin 26 - TBR1
30	TBR5	See Pin 26 - TBR1
31	TBR6	See Pin 26 - TBR1
32	TBR7	See Pin 26 - TBR1
33	TBR8	See Pin 26 - TBR1
34	CRL	A high level on CONTROL REGISTER LOAD loads the control register.
35	PI	A high level on PARITY INHIBIT inhibits parity generation, parity checking and forces PE output low.
36	SBS	A high level on STOP BIT SELECT selects 1.5 stop bits for 5 character format and 2 stop bits for other lengths.
37	CLS2	These inputs program the CHARACTER LENGTH SELECTED (CLS1 low CLS2 low 5 bits) (CLS1 high CLS2 low 6 bits) (CLS1 low CLS2 high 7 bits) (CLS1 high CLS2 high 8 bits)
38	CLS1	See Pin 37 - CLS2
39	EPE	When PI is low, a high level on EVEN PARITY ENABLE generates and checks even parity. A low level selects odd parity.
40	TRC	The TRANSMITTER REGISTER CLOCK IS 16x the transmit data rate.

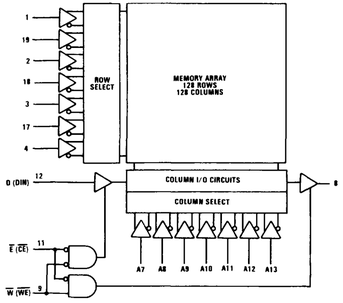
PIN ASSIGNMENT AND FUNCTIONS

F201-59

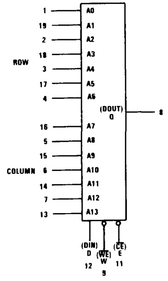
IC NUMBER 11
16K Static RAM IMS1400



PIN CONFIGURATION



BLOCK DIAGRAM



LOGIC DIAGRAM

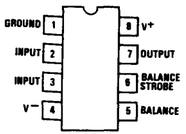
A0 - A13 ADDRESS INPUTS	VCC POWER (± 5V)
W (WE) WRITE ENABLE	VSS GROUND
E (CE) CHIP ENABLE	
D (DIN) DATA INPUT	
Q (DOUT) DATA OUTPUT	

The IMS1400 is a high performance 16K x 1 bit static RAM having access times of 45 and 55 ns and a maximum consumption of 660mW.

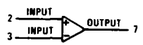
The IMS1400 features fully static operation requiring no external clocks or timing strobes, equal access and cycle times, full TTL compatibility and operation from a single +5V ±10% power supply. Additionally, a Chip Enable (E) function is provided that can be used to place the IMS1400 into a low power standby mode, reducing power consumption to less than 110mW.

F201-52

IC NUMBER 12
Voltage Comparator LM311



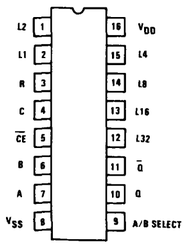
PIN CONFIGURATION



LOGIC SYMBOL

F201-96

IC NUMBER 13
1-to-64 Bit Variable Length Shift Register MC14557B

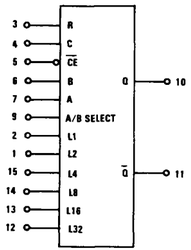


PIN CONFIGURATION

TRUTH TABLE

INPUTS				OUTPUT
R	A/B	CLOCK	CE	Q
0	0		0	B
0	1		0	A
0	0	1		B
0	1	1		A
1	X	X	X	0

Q is the output of the first selected shift register stage.
X = Don't Care.



BLOCK DIAGRAM

LENGTH SELECT TRUTH TABLE

L32	L16	L8	L4	L2	L1	REGISTER LENGTH
0	0	0	0	0	0	1-BIT
0	0	0	0	0	1	2-BITS
0	0	0	0	1	0	3-BITS
0	0	0	0	1	1	4-BITS
0	0	0	1	0	0	5-BITS
0	0	0	1	0	1	6-BITS
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
1	0	0	0	0	0	33-BITS
1	0	0	0	0	1	34-BITS
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
1	1	1	1	0	0	61-BITS
1	1	1	1	0	1	62-BITS
1	1	1	1	1	0	63-BITS
1	1	1	1	1	1	64-BITS

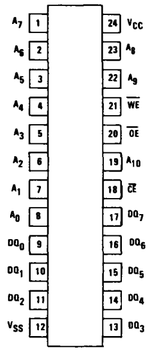
Note: Length equals the sum of the binary length control subscripts plus one.

The MC14557B is a static clocked serial shift register whose length may be programmed to be any number of bits between 1 and 64. The number of bits selected is equal to the sum of the subscripts of the enabled Length Control inputs (L1, L2, L4, L8, L16, and L32) plus one. Serial data may be selected from the A or B data inputs with the A/B select input. This feature is useful for recirculation purposes. A Clock Enable (CE) input is provided to allow gating of the clock or negative edge clocking capability.

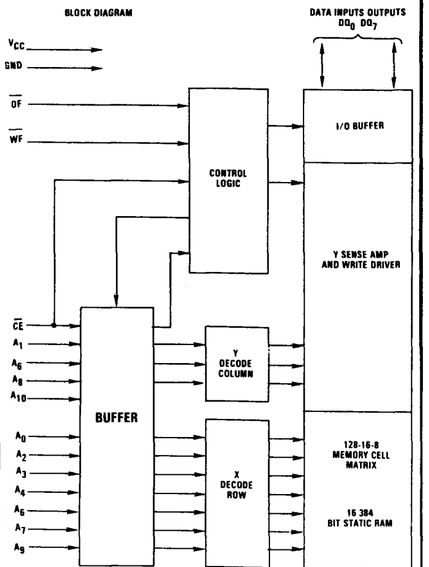
The device can be effectively used for variable digital delay lines or simply to implement odd length shift registers.

F201-36

IC NUMBER 14
2K x 8 Static RAM MK4802



PIN CONFIGURATION



BLOCK DIAGRAM

A_0-A_{10}	ADDRESS INPUTS	V_{CC}	POWER (+5V)
$\overline{CE}$	CHIP ENABLE	$\overline{WE}$	WRITE ENABLE
V_{SS}	GROUND	$\overline{OE}$	OUTPUT ENABLE
DQ_0-DQ_7	DATA IN/DATA OUT		

PIN NAMES

TRUTH TABLE

$\overline{CE}$	$\overline{OE}$	$\overline{WE}$	MODE	DQ
V_{IH}	X	X	DESELECT	HIGH Z
V_{IL}	X	V_{IL}	WRITE	D_{IN}
V_{IL}	V_{IL}	V_{IH}	READ	D_{OUT}
V_{IL}	V_{IH}	V_{IH}	READ	HIGH Z

X DON'T CARE

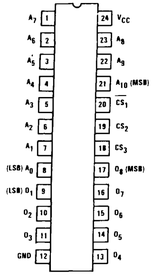
TRUTH TABLE

F201-38

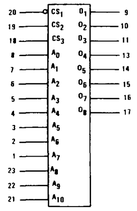
IC NUMBER 15
16K (2K x 8) Bipolar PROM M3636

A_0 - A_{10}	ADDRESS INPUTS
CS_1, CS_2, CS_3	CHIP SELECT INPUTS
O_1 - O_8	DATA OUTPUTS

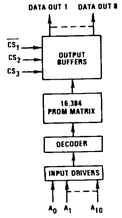
TRUTH TABLE



PIN CONFIGURATION



LOGIC DIAGRAM

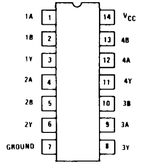


BLOCK DIAGRAM

The M3636 is a fully decoded 16,384 bit PROM organized as 2048 words by 8 bits. The worst case access time of 80 ns is specified over the - 55°C to + 125°C temperature range and 5% V_{CC} power supply tolerances. There are three chip selects provided to facilitate expansion into large PROM arrays. The PROMs use the Schottky clamped TTL technology with polycrystalline silicon fuses. All outputs are initially high and logic low levels can be electrically programmed in selected bit locations.

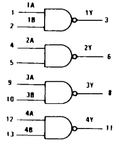
F201-50

IC NUMBER 16
Quadruple 2-Input Positive NAND Gates SN74LS00, SN74S00



PIN CONFIGURATION

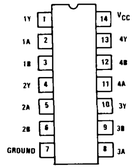
positive logic
$Y = \overline{AB}$



LOGIC DIAGRAM

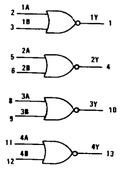
F201-11

IC NUMBER 17
Quadruple 2-Input Positive NOR Gates SN74LS02, SN74S02



PIN CONFIGURATION

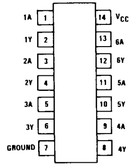
positive logic
$Y = \overline{A + B}$



LOGIC DIAGRAM

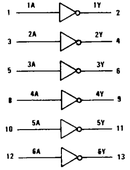
F201-12

IC NUMBER 18
Hex Inverters SN74LS04, SN74S04



PIN CONFIGURATION

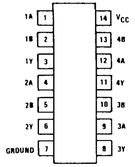
positive logic
$Y = \overline{A}$



LOGIC DIAGRAM

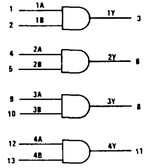
F201-13

IC NUMBER 19
Quadruple 2-Input Positive AND Gates SN74LS08, SN74S08, SN7408



PIN CONFIGURATION

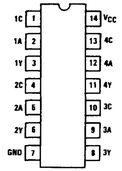
positive logic
$Y = A B$



LOGIC DIAGRAM

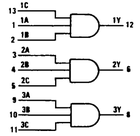
F201-28

IC NUMBER 20
Triple 3-Input Positive-AND Gates SN74LS11



PIN CONFIGURATION

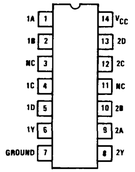
positive logic:
$Y = ABC$



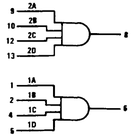
LOGIC DIAGRAM

F201-97

IC NUMBER 21
Dual 4-Input Positive-AND Gates SN74LS21



PIN CONFIGURATION

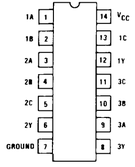


LOGIC DIAGRAM

Positive Logic
$Y = ABCD$

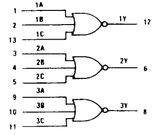
F201-66

IC NUMBER 22
Triple 3-Input Positive-NOR Gates SN74LS27



PIN CONFIGURATION

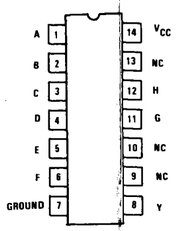
positive logic
$Y = \overline{A + B + C}$



LOGIC DIAGRAM

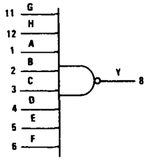
F201-2

IC NUMBER 23
8-Input Positive NAND Gate SN74LS30, SN74S30



PIN CONFIGURATION

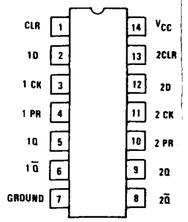
positive logic:
$Y = \overline{ABCDEFGH}$



LOGIC DIAGRAM

F201-16

IC NUMBER 24
Dual D-Type Positive-Edge-Triggered Flip-Flop with Preset and Clear SN74LS74A

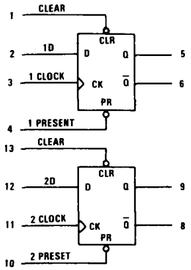


PIN CONFIGURATION

INPUTS				OUTPUTS	
PRESET	CLEAR	CLOCK	D	Q	$\overline{Q}$
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	H*	H*
H	H	↑	H	H	L
H	H	↑	L	L	H
H	H	L	X	Q_0	$\overline{Q}_0$

* This configuration is nonstable; that is, it will not persist when preset or clear inputs return to their inactive (high) level. The output levels in this configuration are not guaranteed to meet the minimum levels for V_{OH} if the lows at preset and clear are near V_{IL} maximum.

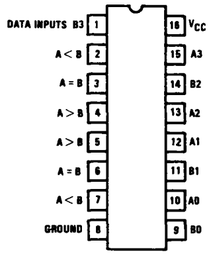
TRUTH TABLE



LOGIC DIAGRAM

F201-3

IC NUMBER 25
4-Bit Magnitude Comparator SN74LS85

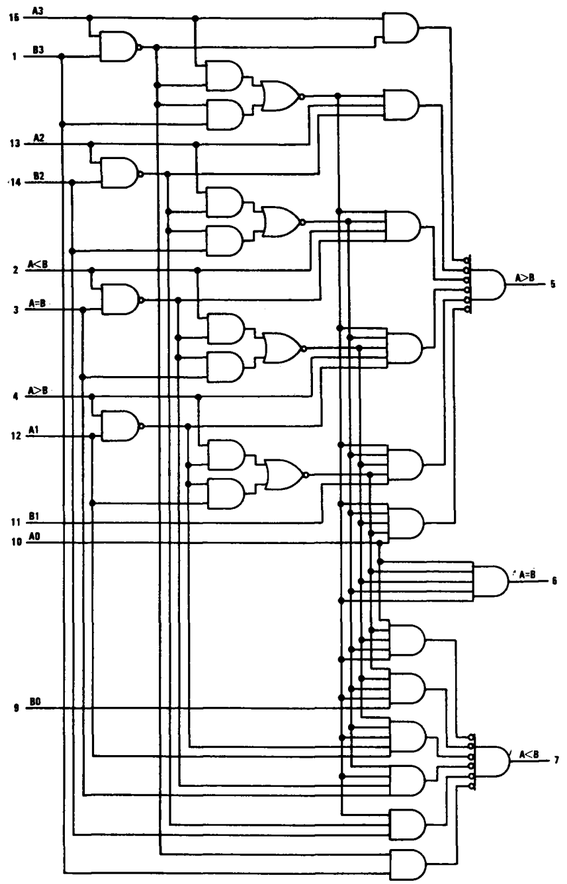


PIN CONFIGURATION

COMPARING INPUTS				CASCADING INPUTS			OUTPUTS		
A3, B3	A2, B2	A1, B1	A0, B0	A > B	A < B	A = B	A > B	A < B	A = B
A3 = B3	A2 = B2	A1 = B1	A0 = B0	X	X	H	L	L	H
A3 = B3	A2 = B2	A1 = B1	A0 = B0	H	H	L	L	L	L
A3 = B3	A2 = B2	A1 = B1	A0 = B0	L	L	L	L	L	L

FUNCTION TABLE

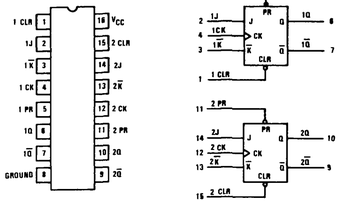
This four-bit magnitude comparator performs comparison of straight binary and straight BCD (8-4-2-1) codes. Three fully decoded decisions about two 4-bit words (A, B) are made and are externally available at three outputs. These devices are fully expandable to any number of bits without external gates. Words of greater length may be compared by connecting comparators in cascade. The A > B, A < B, and A = B outputs of a stage handling less-significant bits. The stage handling the least-significant bits must have a high-level voltage applied to the A = B input. The cascading paths are implemented with only a two-gate-level delay to reduce overall comparison times for long words. An alternate method of cascading which further reduces the comparison time is shown in the typical application data.



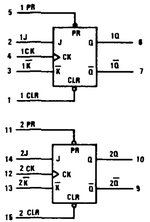
LOGIC DIAGRAM

F201-69

IC NUMBER 26
Dual J-$\overline{K}$ Positive-Edge-Triggered Flip-Flops With Preset and Clear SN74LS109



PIN CONFIGURATION



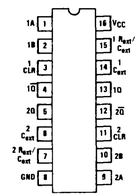
LOGIC DIAGRAM

INPUTS					OUTPUTS	
PRESET	CLEAR	CLOCK	J	$\overline{K}$	Q	$\overline{Q}$
L	H	X	X	X	H	L
H	L	X	X	X	L	H
L	L	X	X	X	H*	H*
H	H	↑	L	L	L	H
H	H	↑	H	L	TOGGLE	
H	H	↑	L	H	Q_0	$\overline{Q}_0$
H	H	↑	H	H	H	L
H	H	L	X	X	Q_0	$\overline{Q}_0$

TRUTH TABLE

F201-65

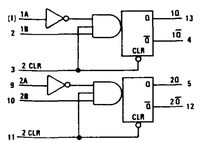
IC NUMBER 27
Retriggerable Monostable Multivibrators SN74LS123



PIN CONFIGURATION

INPUTS			OUTPUTS	
CLEAR	A	B	Q	$\overline{Q}$
L	X	X	L	H
X	H	X	L	H
X	X	L	L	H
H	L	↑	⎍	⎍
H	↓	H	⎍	⎍
↑	L	H	⎍	⎍

TRUTH TABLE

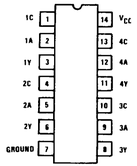


LOGIC DIAGRAM

These dc triggered multivibrators feature output pulse width control by three methods. The pulse time is programmed by selection of external resistance and capacitance values.

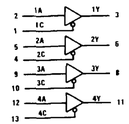
F201-98

IC NUMBER 28
Quadruple Bus Buffer Gates With 3-State Outputs SN74LS125



PIN CONFIGURATION

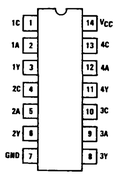
positive logic:
Y = A
Output is off (disabled) when C is high.



LOGIC DIAGRAM

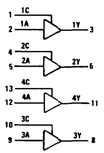
F201-4

IC NUMBER 29
Quadruple Bus Buffer Gates With 3-State Outputs SN74LS126A



PIN CONFIGURATION

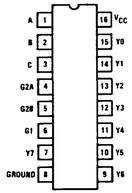
positive logic:
Y = A
Output is off (disabled) when C is low.



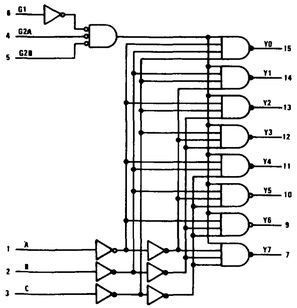
LOGIC DIAGRAM

F201-99

IC NUMBER 30
Decoder/Demultiplexer SN74LS138



PIN CONFIGURATION



LOGIC DIAGRAM

INPUTS					OUTPUTS							
ENABLE		SELECT										
G1	G2*	C	B	A	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
X	H	X	X	X	H	H	H	H	H	H	H	H
L	X	X	X	X	H	H	H	H	H	H	H	H
H	L	L	L	L	L	H	H	H	H	H	H	H
H	L	L	L	H	H	L	H	H	H	H	H	H
H	L	L	H	L	H	H	L	H	H	H	H	H
H	L	L	H	H	H	H	H	L	H	H	H	H
H	L	H	L	L	H	H	H	H	L	H	H	H
H	L	H	L	H	H	H	H	H	H	L	H	H
H	L	H	H	L	H	H	H	H	H	H	L	H
H	L	H	H	H	H	H	H	H	H	H	H	L

* G2 = G2A + G2B
H = high level, L = low level, X = irrelevant

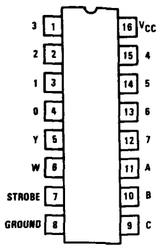
TRUTH TABLE

This Schottky-clamped TTL MSI circuit is designed to be used in high-performance memory-decoding or data-routing applications requiring very short propagation delay times. In high-performance memory systems these decoders can be used to minimize the effects of system decoding. When employed with high-speed memories utilizing a fast-enable circuit the delay times of these decoders and the enable time of the memory are usually less than the typical access time of the memory. This means that the effective system delay introduced by the Schottky-clamped system decoder is negligible.

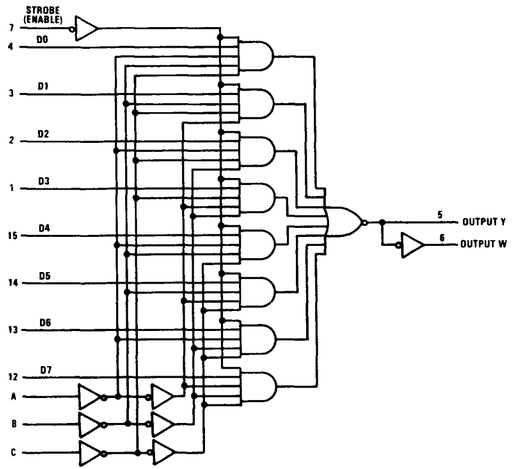
The 'LS138 and 'S138 decode one-of-eight lines dependent on the conditions at the three binary select inputs and the three enable inputs. Two active-low and one active-high enable inputs reduce the need for external gates or inverters when expanding. A 24-line decoder can be implemented without external inverters and a 32-line decoder requires only one inverter. An enable input can be used as a data input for demultiplexing applications.

F201-63

IC NUMBER 31
Data Selectors/Multiplexers SN74LS151



PIN CONFIGURATION



LOGIC DIAGRAM

INPUTS			OUTPUTS	
SELECT		STROBE	Y	W
C	B	A	S	
X	X	X	H	L H
L	L	L	L	D0 D0
L	L	H	L	D1 D1
L	H	L	L	D2 D2
L	H	H	L	D3 D3
H	L	L	L	D4 D4
H	L	H	L	D5 D5
H	H	L	L	D6 D6
H	H	H	L	D7 D7

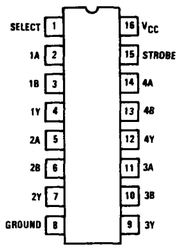
H = high level, L = low level, X = irrelevant
E0, E1 . . . E15 = the complement of the level of the respective E input
D0, D1 . . . D7 = the level of the D respective input

TRUTH TABLE

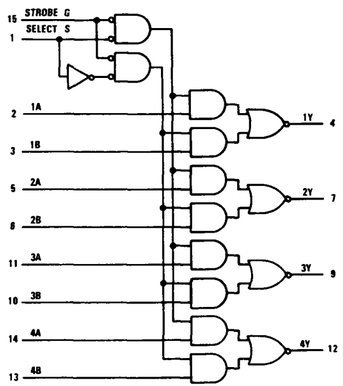
These monolithic data selectors/multiplexers contain full on-chip binary decoding to select the desired data source. 'LS151 selects one-of-eight data sources. The LS151, and 'S151 have a strobe input which must be at a low logic level to enable these devices. A high level at the strobe forces the W output high, and the Y output (as applicable) low.

F201-64

IC NUMBER 32
Quadruple 2-Line-To-1-Line Data Selector/Multiplexer SN74LS158



PIN CONFIGURATION



LOGIC DIAGRAM

INPUTS				OUTPUT Y
STROBE	SELECT	A	B	
H	X	X	X	H
L	L	L	X	H
L	L	H	X	L
L	H	X	L	H
L	H	X	H	L

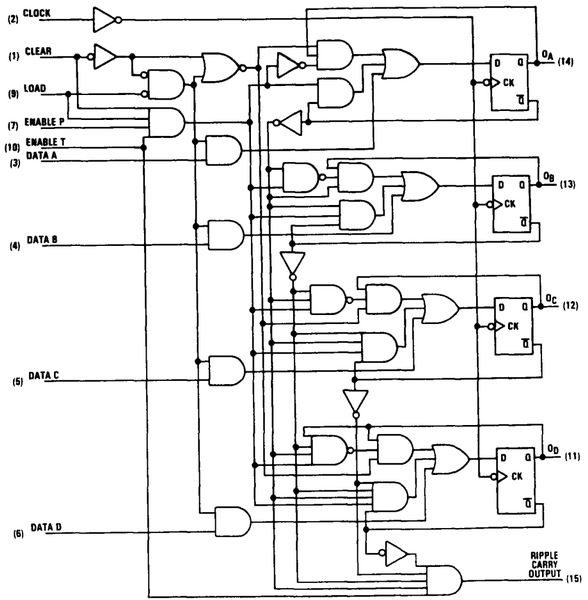
H = High Level, L = Low Level, X = Irrelevant

LOGIC TABLE

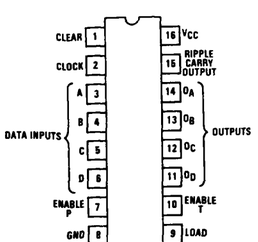
This monolithic data selector/multiplexer contains inverters and drivers to supply full on-chip data selection to the four output gates. A separate strobe input is provided. A 4-bit word is selected from one of two sources and is routed to the four outputs. The 'LS158 presents inverted data to minimize propagation delay time.

F201-67

IC NUMBER 33
Synchronous 4-Bit Counter SN74LS161A



LOGIC DIAGRAM

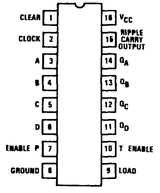


PIN CONFIGURATION

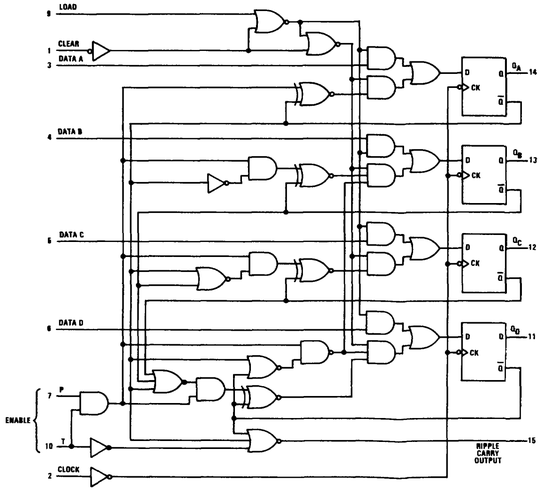
This counter is fully programmable; that is, the outputs may be preset to either level. As presetting is synchronous, setting up a low level at the load input disables the counter and causes the outputs to agree with the setup data after the next clock pulse regardless of the levels of the enable inputs.

F201-100

IC NUMBER 34
Synchronous 4-Bit Counter SN74LS162



PIN CONFIGURATION



LOGIC DIAGRAM

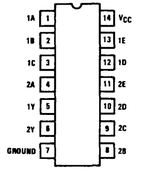
This synchronous, presettable counter features an internal carry look-ahead for application in high-speed counting designs. The LS162A is a decade counter. Synchronous operation is provided by having all flip-flops clocked simultaneously so that the outputs change coincident with each other when so instructed by the count-enable inputs and internal gating. This mode of operation eliminates the output counting spikes that are normally associated with asynchronous (ripple clock) counters. A buffered clock input triggers the four flip-flops on the rising (positive-going) edge of the clock input waveform.

This counter is fully programmable; that is, the outputs may be preset to either level. As presetting is synchronous, setting up a low level at the load input disables the counter and causes the outputs to agree with the setup data after the next clock pulse regardless of the levels of the enable inputs. The clear function is synchronous and a low level at the clear input sets all four of the flip-flop outputs low after the next clock pulse, regardless of the levels of the enable inputs. This synchronous clear allows the count length to be modified easily as decoding the maximum count desired can be accomplished with one external NAND gate. The gate output is connected to the clear input to synchronously clear the counter to 0000 (LLLL). Low-to-high transitions at the clear input of the ´162 and ´163 should be avoided when the clock is low if the enable and load inputs are high at or before the transition.

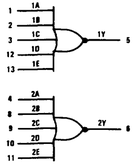
The carry look-ahead circuitry provides for cascading counters for n-bit synchronous applications without additional gating. Instrumental in accomplishing this function are two count-enable inputs and a ripple carry output. Both count-enable inputs (P and T) must be high to count, and input T is fed forward to enable the ripple carry output. The ripple carry output thus enabled will produce a high-level output pulse with a duration approximately equal to the cascaded stages. Transitions at the enable P or T inputs are allowed regardless of the level of the clock input.

F201-68

IC NUMBER 35
Dual 5-Input Positive-NOR Gates SN74LS260



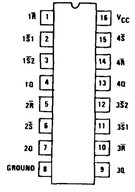
PIN CONFIGURATION



LOGIC DIAGRAM

F201-81

IC NUMBER 36
Quad $\overline{S}$-$\overline{R}$ Latch SN74LS279

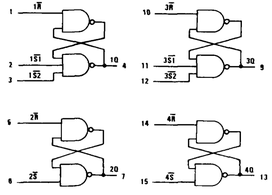


PIN CONFIGURATION

INPUTS		OUTPUT
$\overline{S}$†	$\overline{R}$	Q
H	H	Q_0
L	H	H
H	L	L
L	L	H*

H = high level
L = low level
Q_0 = the level of Q before the indicated input conditions were established.
* This output level is pseudo stable, that is, it may not persist when the $\overline{S}$ and $\overline{R}$ inputs return to their inactive (high) level
† For latches with double $\overline{S}$ inputs:
H = both $\overline{S}$ inputs high
L = one or both $\overline{S}$ inputs low

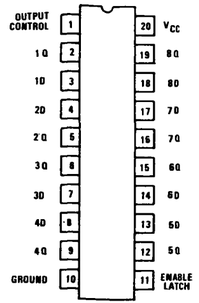
TRUTH TABLE



LOGIC DIAGRAM

F201-5

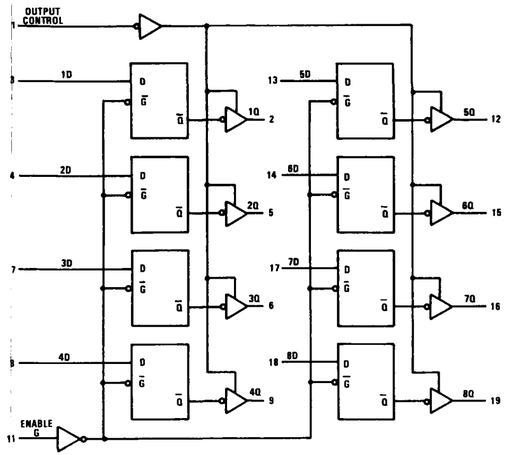
IC NUMBER 37
Octal D-Type Transparent Latch Flip-Flop SN74LS373



PIN CONFIGURATION

OUTPUT ENABLE	ENABLE LATCH	D	OUTPUT
L	H	H	H
L	H	L	L
L	L	X	Q_0
H	X	X	Z

TRUTH TABLE



LOGIC DIAGRAM

These 8-bit registers feature totem-pole three-state outputs designed specifically for driving highly-capacitive or relatively low-impedance loads. The high-impedance third state and increased high-logic-level drive provide these registers with the capability of being connected directly to and driving the bus lines in a bus-organized system without need for interface or pull-up components. They are particularly attractive for implementing buffer registers, I/O ports, bidirectional bus drivers, and working registers.

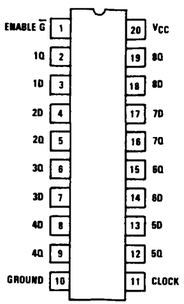
The eight latches of the 'LS373 are transparent D-type latches meaning that while the enable (G) is high the Q outputs will follow the data (D) inputs. When the enable is taken low the output will be latched at the level of the data that was set up.

Schmitt-trigger buffered inputs at the enable lines simplify system design as ac and dc noise rejection is improved by typically 400 mV due to the input hysteresis. A buffered output control input can be used to place the eight outputs in either a normal logic state (high or low logic levels) or a high-impedance state. In the high-impedance state the outputs neither load nor drive the bus lines significantly.

The output control does not affect the internal operation of the latches or flip-flops. That is, the old data can be retained or new data can be entered even while the outputs are off.

F201-6

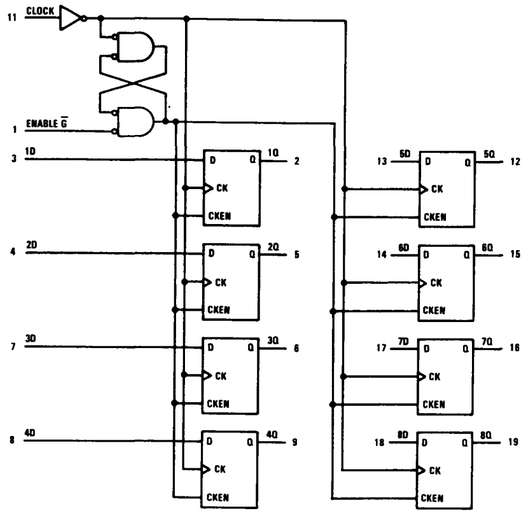
IC NUMBER 38
Octal D-Type Flip-Flop With Enable SN74LS377



PIN CONFIGURATION

INPUTS			OUTPUTS	
$\overline{G}$	CLOCK	DATA	Q	$\overline{Q}$
H	X	X	Q_0	$\overline{Q}_0$
L	↑	H	H	L
L	↑	L	L	H
X	L	X	Q_0	$\overline{Q}_0$

TRUTH TABLE



LOGIC DIAGRAM

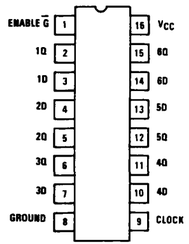
These monolithic, positive-edge-triggered flip-flops utilize TTL circuitry to implement D-type flip-flop logic with an enable input.

Information at the D inputs meeting the setup time requirements is transferred to the Q outputs on the positive-going edge of the clock pulse if the enable input $\overline{G}$ is low. Clock triggering occurs at a particular voltage level and is not directly related to the transition time of the positive-going pulse. When the clock input is at either the high or low level, the D input signal has no effect at the output. The circuits are designed to prevent false clocking by the transitions at the $\overline{G}$ input.

These flip-flops are guaranteed to respond to clock frequencies ranging from 0 to 30 MHz while maximum clock frequency is typically 40 megahertz. Typical power dissipation is 10 milliwatts per flip-flop.

F201-8

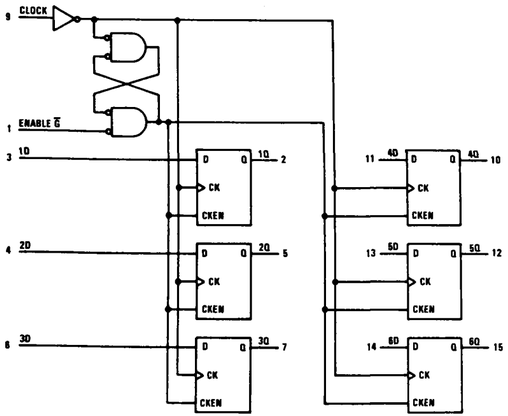
IC NUMBER 39
Hex D-Type Flip-Flop With Enable SN74LS378



PIN CONFIGURATION

INPUTS			OUTPUTS	
$\overline{G}$	CLOCK	DATA	Q	$\overline{Q}$
H	X	X	Q_0	$\overline{Q}_0$
L	↑	H	H	L
L	↑	L	L	H
X	L	X	Q_0	$\overline{Q}_0$

TRUTH TABLE



LOGIC DIAGRAM

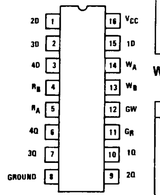
These monolithic, positive-edge-triggered flip-flops utilize TTL circuitry to implement D-type flip-flop logic with an enable input.

Information at the D inputs meeting the setup time requirements is transferred to the Q outputs on the positive-going edge of the clock pulse if the enable input $\overline{G}$ is low. Clock triggering occurs at a particular voltage level and is not directly related to the transition time of the positive-going pulse. When the clock input is at either the high or low level, the D input signal has no effect at the output. The circuits are designed to prevent false clocking by the transitions at the $\overline{G}$ input.

These flip-flops are guaranteed to respond to clock frequencies ranging from 0 to 30 MHz while maximum clock frequency is typically 40 megahertz. Typical power dissipation is 10 milliwatts per flip-flop.

F201-9

IC NUMBER 40
4-By-4 Register Files With 3-State Outputs SN74LS670



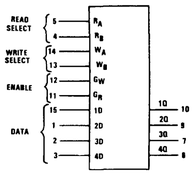
PIN CONFIGURATION

WRITE INPUTS			WORD			
W_B	W_A	G_W	0	1	2	3
L	L	L	Q = D	Q_0	Q_0	Q_0
L	H	L	Q_0	Q = D	Q_0	Q_0
H	L	L	Q_0	Q_0	Q = D	Q_0
H	H	L	Q_0	Q_0	Q_0	Q = D
X	X	H	Q_0	Q_0	Q_0	Q_0

WRITE FUNCTION TABLE (SEE NOTES A, B, AND C)

READ INPUTS			OUTPUTS			
R_B	R_A	G_R	Q1	Q2	Q3	Q4
L	L	L	W0B1	W0B2	W0B3	W0B3
L	H	L	W1B1	W1B2	W1B3	W1B4
H	L	L	W2B1	W2B2	W2B3	W2B14
H	H	L	W3B1	W3B2	W3B3	W3B4
X	X	H	Z	Z	Z	Z

READ FUNCTION TABLE (SEE NOTES A AND D)



LOGIC DIAGRAM

NOTES: A. H = high level, L = low level, X = irrevelent, Z = high impedance (off)
B (Q = D) = The four selected internal flip-flop outputs will assume the states applied to the four external data inputs.
C. Q_0 = the level of Q before the indicated input conditions were established.
D. W0B1 = The first bit of word 0, etc.

The SN74LS670 MSI 16-bit TTL register files incorporate the equivalent of 98 gates. The register file is organized as 4 words of 4 bits each as separate on-chip decoding is provided for addressing the four word locations to either write-in or retrieve data. This permits simultaneous writing into one location and reading from another word location.

When this condition exists, data at the D input is transferred to the latch output. When the write-enable input, GW is high, the data inputs are inhibited as their levels can cause no change in the information stored in the internal latches. When the read-enable input, G_R, is high, the data outputs are inhibited and go into the high-impedance state.

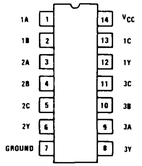
The individual address lines permit direct acquisition of data stored in any four of the latches. Four individual decoding gates are used to complete the address for reading a word. When the read addresss is made in conjuction with the read-enable signal, the word appears at the four outputs.

This arrangement — data-entry addressing separate from data-read addressing and individual sense line — eliminates recovery times, permits simultaneous reading and writing, and is limited in speed only by the write time (27 nanoseconds typical) and the read time (24 nanoseconds typical). The register file has a nondestructive readout in that data is not lost when addressed.

All inputs except read enable and write enable are buffered to lower the drive requirements to one Series 54LS/74LS standard load, and input-clamping diodes minimize switching transients to simplify system design. High-speed, double-ended AND-OR-INVERT gates are employed for the read-address function and have high-sink-current, three-state outputs. Up to 128 of these outputs may be wire-AND connected for increasing the capacity up to 512 words. Any number of these registers may be paralleled to provide n-bit word length.

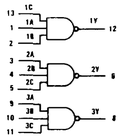
F201-10

IC NUMBER 41
Triple 3-Input Positive-NAND Gates SN74S10



PIN CONFIGURATION

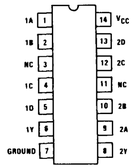
positive logic:
$Y = \overline{ABC}$



LOGIC DIAGRAM

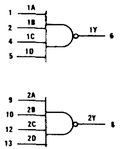
F201-1

IC NUMBER 42
Dual 4-Input Positive-NAND Gates SN74S20



PIN CONFIGURATION

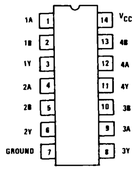
positive logic:
Y = ABCD



LOGIC DIAGRAM

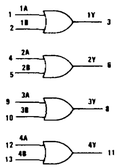
F201-15

IC NUMBER 43
Quadruple 2-Input Positive-OR Gates SN74S32



PIN CONFIGURATION

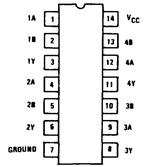
positive logic
Y = A + B



LOGIC DIAGRAM

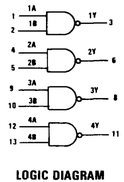
F201-17

IC NUMBER 44
Quadruple 2-Input Positive-NAND Buffers With Open Collector Outputs SN74S38



PIN CONFIGURATION

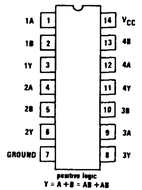
positive logic:
$Y = \overline{AB}$



LOGIC DIAGRAM

F201-18

IC NUMBER 45
Quadruple 2-Input Exclusive-OR Gates SN74S86



positive logic:
$Y = \overline{A \cdot B} = \overline{AB}$

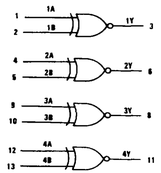
PIN CONFIGURATION

positive logic:
$Y = A \oplus B = \overline{A}B + A\overline{B}$

INPUTS		OUTPUT
A	B	Y
L	L	L
L	H	H
H	L	H
H	H	L

H = high level, L = low level

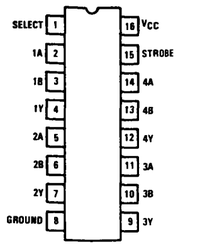
TRUTH TABLE



LOGIC DIAGRAM

F201-19

IC NUMBER 46
Quadruple 2-Line-to-1-Line Data Selectors/Multiplexers SN74S157



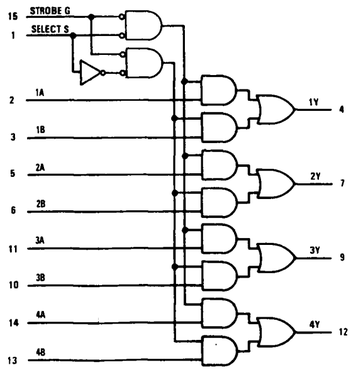
positive logic: Low level at S selects A inputs
High level at S selects B inputs

PIN CONFIGURATION

INPUTS				OUTPUT Y
STROBE	SELECT	A	B	
H	X	X	X	L
L	L	L	X	L
L	L	H	X	H
L	H	X	L	L
L	H	X	H	H

H = high level, L = low level, X = irrelevant

TRUTH TABLE

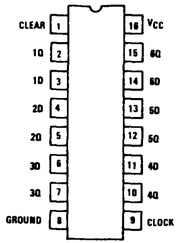


LOGIC DIAGRAM

These monolithic data selectors/multiplexers contain inverters and drivers to supply full on-chip data selection to the four output gates. A separate strobe input is provided. A 4-bit word is selected from one of the two sources and is routed to the four outputs.

F201-62

IC NUMBER 47
Hex D-Type Flip-Flops With Clear SN74S174

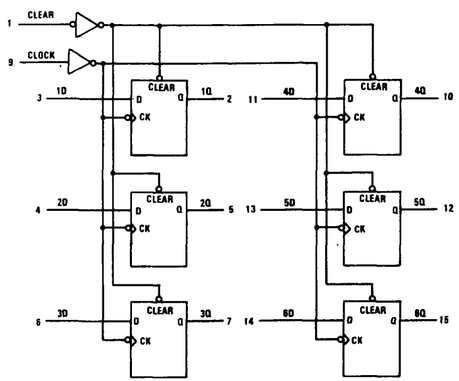


PIN CONFIGURATION

INPUTS		OUTPUTS	
CLEAR	CLOCK	D	Q
L	X	X	L
H	↑	H	H
H	↑	L	L
H	L	X	Q_0

H = high level (steady state)
L = low level (steady state)
X = irrelevant
↑ = transition from low to high level
Q_0 = the level of Q before the indicated steady-state input conditions were established.

TRUTH TABLE



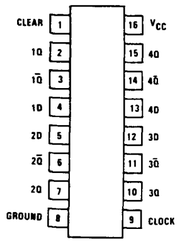
LOGIC DIAGRAM

These monolithic, positive-edge-triggered flip-flops utilize TTL circuitry to implement D-type flip-flop logic.

Information at the D inputs meeting the setup time requirements is transferred to the Q outputs on the positive-going edge of the clock pulse. Clock triggering occurs at a particular voltage level and is not directly related to the transition time of the positive-going pulse. When the clock input is at either the high or low level, the D input signal has no effect at the output.

F201-21

IC NUMBER 48
Quadruple D-Type Flip-Flops With Clear SN74S175

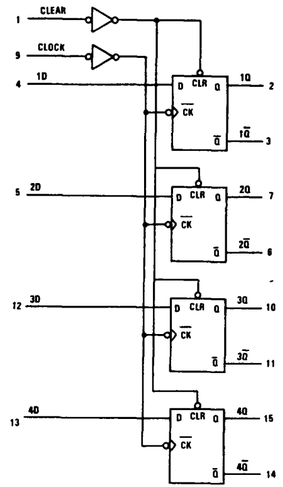


PIN CONFIGURATION

INPUTS			OUTPUTS	
CLEAR	CLOCK	D	Q	Q̄
L	X	X	L	H
H	↑	H	H	L
H	↑	L	L	H
H	L	X	Q_0	$\bar{Q}_0$

H = high level (steady state)
L = low level (steady state)
X = irrelevant
↑ = transition from low to high level
Q_0 = the level of Q before the indicated steady-state input conditions were established.

TRUTH TABLE



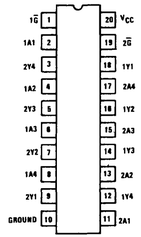
LOGIC DIAGRAM

These monolithic, positive-edge-triggered flip-flops utilize TTL circuitry to implement D-type flip-flop logic.

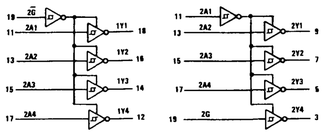
Information at the D inputs meeting the setup time requirements is transferred to the Q outputs on the positive-going edge of the clock pulse. Clock triggering occurs at a particular voltage level and is not directly related to the transition time of the positive-going pulse. When the clock input is at either the high or low level, the D input signal has no effect at the output.

F201-22

IC NUMBER 49
Octal Buffers and Line Drivers With 3-State Outputs (Inverting) SN74S240



PIN CONFIGURATION

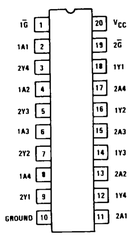


LOGIC DIAGRAM

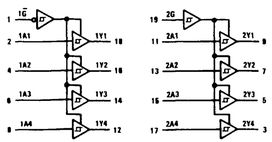
These octal buffers and line drivers are designed specifically to improve both the performance and density of three-state memory address drivers, clock drivers, and bus-oriented receivers and transmitters. This device features high fan-out, improved fan-in, and 400 mV noise-margin.

F201-23

IC NUMBER 50
Octal Buffers and Line Drivers With 3-State Outputs (Non-Inverting) SN74S241



PIN CONFIGURATION

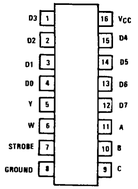


LOGIC DIAGRAM

These octal buffers and line drivers are designed specifically to improve both the performance and density of three-state memory address drivers, clock drivers, and bus-oriented receivers and transmitters. The designer has a choice of selected combinations of inverting and noninverting outputs, symmetrical G (active-low output control) inputs, and complementary G and G̅ inputs. This device features high fan-out, improved fan-in, and 400 mV noise margin.

F201-24

IC NUMBER 51
Data Selector/Multiplexer With 3-State Outputs SN74S251

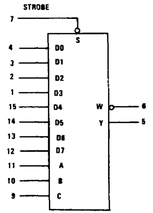


PIN CONFIGURATION

INPUTS					OUTPUTS	
SELECT			STROBE			
C	B	A	S		Y	W
X	X	X	H		Z	Z
L	L	L	L		D0	$\overline{D0}$
L	L	H	L		D1	$\overline{D1}$
L	H	L	L		D2	$\overline{D2}$
L	H	H	L		D3	$\overline{D3}$
H	L	L	L		D4	$\overline{D4}$
H	L	H	L		D5	$\overline{D5}$
H	H	L	L		D6	$\overline{D6}$
H	H	H	L		D7	$\overline{D7}$

H = high logic level, L = low logic level
X = irrelevant, Z = high impedance (off)
D0, D1 . . . D7 = the level of the respective D input

TRUTH TABLE

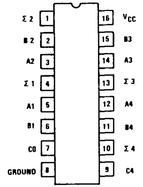


LOGIC DIAGRAM

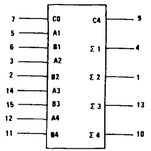
This monolithic data selector/multiplexer contains full on-chip binary decoding to select one-of-eight data sources and feature a strobe-controlled three-state output. The strobe must be at low logic level to enable these devices. The three-state outputs permit a number of outputs to be connected to a common bus. When the strobe input is high, both outputs are in a high-impedance state in which both the upper and lower transistors of each totem-pole output are off, and the output neither drives nor loads the bus significantly. When the strobe is low, the outputs are activated and operate as standard TTL totem-pole outputs.

F201-25

IC NUMBER 52
4-Bit Binary Full Adders With Fast Carry SN74S283



PIN CONFIGURATION

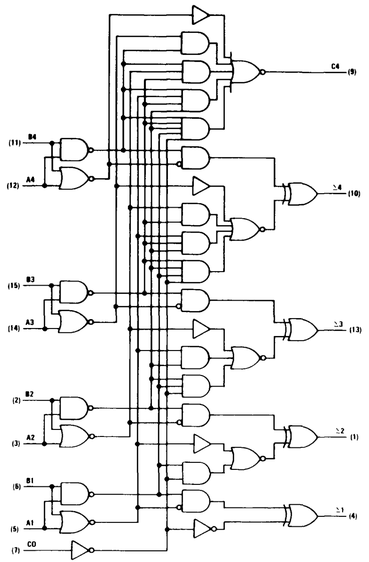


LOGIC SYMBOL

INPUT				OUTPUT					
				WHEN C0 = L			WHEN C0 = H		
				WHEN C2 = L			WHEN C2 = H		
A1 / A3	B1 / B3	A2 / A4	B2 / B4	Σ1 / Σ3	Σ2 / Σ4	C2 / C4	Σ1 / Σ3	Σ2 / Σ4	C2 / C4
L	L	L	L	L	L	L	H	L	L
H	L	L	L	H	L	L	L	H	L
L	H	L	L	H	L	L	L	H	L
H	H	L	L	L	H	L	H	H	L
L	L	H	L	L	H	L	H	H	L
H	L	H	L	H	H	L	L	L	H
L	H	H	L	H	H	L	L	L	H
H	H	H	L	L	L	H	H	L	H
L	L	L	H	L	H	L	H	H	L
H	L	L	H	H	H	L	L	L	H
L	H	L	H	H	H	L	L	L	H
H	H	L	H	L	L	H	H	L	H
L	L	H	H	L	L	H	H	L	H
H	L	H	H	H	L	H	L	H	H
L	H	H	H	H	L	H	L	H	H
H	H	H	H	L	H	H	H	H	H

H = high level, L = low level NOTE: Input conditions at A1, B1, A2, B2 and C0 are used to determine outputs Σ 1 and Σ 2 and the value of the internal carry C2. The values at C2, A3, B3 an B4 are then used to determine outputs Σ 3, C4.

TRUTH TABLE



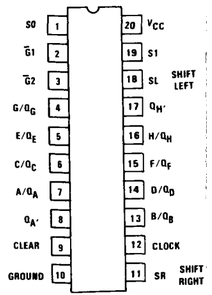
LOGIC DIAGRAM

These improved full adders perform the addition of two 4-bit binary words. The sum (Σ) outputs are provided for each bit and the resultant carry (C4) is obtained from the fourth bit. These adders feature full internal look-ahead across all for bits generating the carry term in 7.5 nanoseconds. This capability provides the system designer with partial look-ahead performance at the economy and reduced package count of a ripple-carry implementation.

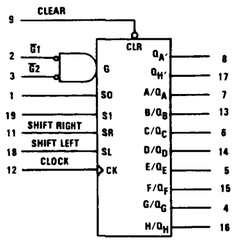
The adder logic, including the carry, is implemented in its true form. End-around-carry can be accomplished without the need for logic or level inversion.

F201-26

IC NUMBER 53
8-Bit Universal Shift/Storage Register SN74S299



PIN CONFIGURATION



LOGIC DIAGRAM

MODE	INPUTS								INPUTS/OUTPUTS								OUTPUTS	
	CLEAR	FUNCTION SELECT		OUTPUT CONTROL		CLOCK	SERIAL		A/Q_A	B/Q_B	C/Q_C	D/Q_D	E/Q_E	F/Q_F	G/Q_G	H/Q_H	$Q_{A'}$	$Q_{H'}$
		S1	S0	$\overline{G1}$†	$\overline{G2}$†		SL	SR										
CLEAR	L	X	L	L	L	↑	X	X	L	L	L	L	L	L	L	L	L	L
	L	L	X	L	L	↑	X	X	L	L	L	L	L	L	L	L	L	L
	L	H	H	X	X	↑	X	X	X	X	X	X	X	X	X	X	L	L
HOLD	H	L	L	L	L	X	X	X	Q_{A0}	Q_{B0}	Q_{C0}	Q_{D0}	Q_{E0}	Q_{F0}	Q_{G0}	Q_{H0}	Q_{A0}	Q_{H0}
	H	X	X	L	L	L	X	X	Q_{A0}	Q_{B0}	Q_{C0}	Q_{D0}	Q_{E0}	Q_{F0}	Q_{G0}	Q_{H0}	Q_{A0}	Q_{H0}
SHIFT RIGHT	H	L	H	L	L	↑	X	H	H	Q_{An}	Q_{Bn}	Q_{Cn}	Q_{Dn}	Q_{En}	Q_{Fn}	Q_{Gn}	H	Q_{Gn}
	H	L	H	L	L	↑	X	L	L	Q_{An}	Q_{Bn}	Q_{Cn}	Q_{Dn}	Q_{En}	Q_{Fn}	Q_{Gn}	L	Q_{Gn}
SHIFT LEFT	H	H	L	L	L	↑	H	X	Q_{Bn}	Q_{Cn}	Q_{Dn}	Q_{En}	Q_{Fn}	Q_{Gn}	Q_{Hn}	H	Q_{Rn}	H
	H	H	L	L	L	↑	L	X	Q_{Bn}	Q_{Cn}	Q_{Dn}	Q_{En}	Q_{Fn}	Q_{Gn}	Q_{Hn}	L	Q_{Bn}	L
LOAD	H	H	H	X	X	↑	X	X	a	b	c	d	e	f	g	h	a	h

†When one or both output controls are high the eight input/output terminals are disabled to the high-impedance state; however, sequential operation or clearing of the register is not affected.

a . . . h = the level of the steady-state input at inputs A through H, respectively. These data are loaded into the flip-flops while the flip-flop outputs are isolated from the input/output terminals.

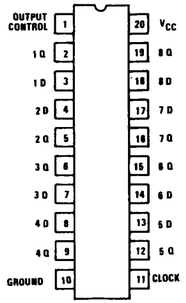
TRUTH TABLE

These Schottky† TTL eight-bit universal registers feature multiplexed inputs/outputs to achieve full eight-bit data handling in a single 20-pin package. Two function-select inputs and two output-control inputs can be used to choose the modes of operation listed in the function table.

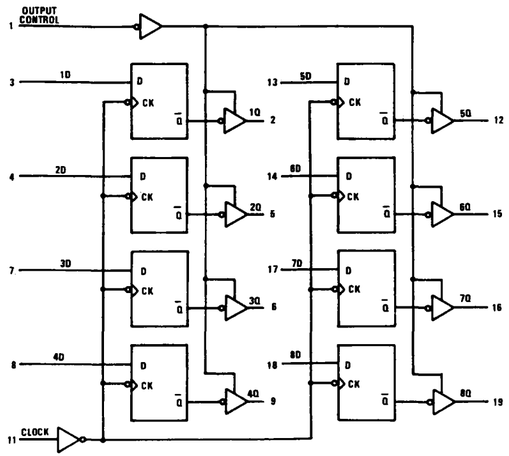
Synchronous parallel loading is accomplished by taking both function-select lines, S0 and S1, high. This places the three-state outputs in a high-impedance state, which permits data that is applied on the input/output lines to be clocked into the register. Reading out of the register can be accomplished while the outputs are enabled in any mode. A direct overriding input is provided to clear the register whether the outputs are enabled or off.

F201-27

IC NUMBER 54
Octal D-Type Edge-Triggered Flip-Flop SN74S374



PIN CONFIGURATION



LOGIC DIAGRAM

OUTPUT ENABLE	CLOCK	D	OUTPUT
L	↑	H	H
L	↑	L	L
L	L	X	Q_0
H	X	X	Z

TRUTH TABLE

These 8-bit registers feature totem-pole three-state outputs designed specifically for driving highly-capacitive or relatively low-impedance loads. The high-impedance third state and increased high-logic-level drive provide these registers with the capability of being connected directly to and driving the bus lines in a bus-organized system without need for interface or pull-up components. They are particularly attractive for implementing buffer registers, I/O ports, bidirectional bus drivers, and working registers.

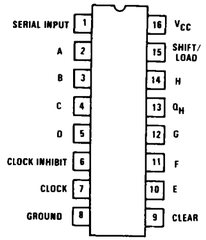
The eight flip-flops of the 'S374 are edge-triggered D-type flip-flops. On the positive transition of the clock, the Q outputs will be set to the logic states that were setup at the D inputs.

Schmitt-trigger buffered inputs at the enable lines simplify system design as ac and dc noise rejection is improved by typically 400 mV due to the input hysteresis. A buffered output control input can be used to place the eight outputs in either a normal logic state (high or low logic levels) or a high-impedance state. In the high-impedance state the outputs neither load nor drive the bus lines significantly.

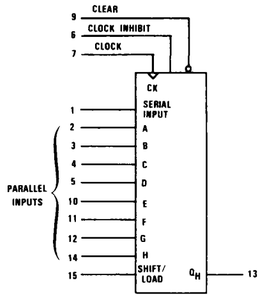
The output control does not affect the internal operation of the latches or flip-flops. That is, the old data can be retained or new data can be entered even while the outputs are off.

F201-7

IC NUMBER 55
8-Bit Shift Registers SN74166



PIN CONFIGURATION



LOGIC DIAGRAM

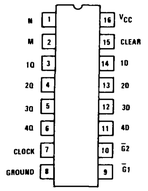
INPUTS						INTERNAL		
CLEAR	SHIFT/LOAD	CLOCK INHIBIT	CLOCK	SERIAL	PARALLEL A . . . H	OUTPUTS Q_A	Q_B	OUTPUT Q_H
L	X	X	X	X	X	L	L	L
H	X	L	L	X	X	Q_{A0}	Q_{B0}	Q_{H0}
H	L	L	↑	X	a . . . h	a	b	h
H	H	L	↑	H	X	H	Q_{An}	Q_{Gn}
H	H	L	↑	L	X	L	Q_{An}	Q_{Gn}
H	X	H	↑	X	X	Q_{A0}	Q_{B0}	Q_{H0}

TRUTH TABLE

These parallel-in or serial-in, serial-out shift registers have a complexity of 77 equivalent gates on a monolithic chip. They feature gated clock inputs and an overriding clear input. The parallel-in or serial-in modes are established by the shift/load input. When high, this input enables the serial data input and couples the eight flip-flops for serial shifting with each clock pulse. When low, the parallel (broadside) data inputs are enabled and synchronous loading occurs on the next clock pulse. During parallel loading, serial data flow is inhibited. Clocking is accomplished on the low-to-high-level edge of the clock pulse through a two-input positive NOR gate permitting one input to be used as a clock-enable or clock-inhibit function. Holding either of the clock inputs high inhibits clocking; holding either low enables the other clock input. This, of course, allows the system clock to be free-running and the register can be stopped on command with the other clock input. The clock-inhibit input should be changed to the high level only while the clock input is high. A buffered, direct clear input overrides all other inputs, including the clock, and sets all flip-flops to zero.

F201-30

IC NUMBER 56
4-Bit D-Type Registers With 3-State Outputs SN74173

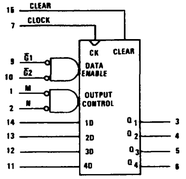


PIN CONFIGURATION

INPUTS					OUTPUT
CLEAR	CLOCK	DATA ENABLE G̅1	DATA ENABLE G̅2	DATA D	Q
H	X	X	X	X	L
L	L	X	X	X	Q_0
L	↑	H	X	X	Q_0
L	↑	X	H	X	Q_0
L	↑	L	L	L	L
L	↑	L	L	H	H

When either M or N (or both) is (are) high the output is disabled to the high-impedance state; however sequential operation of the flip-flops is not affected.

TRUTH TABLE



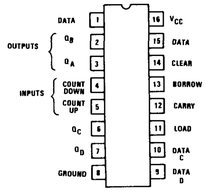
LOGIC DIAGRAM

The four bit registers include D-type flip-flops featuring totem-pole three-state outputs capable of driving highly capacitive or relatively impendance loads. The high-impendance third state and increased high-logic-level drive provide these flip-flops with the capability of being connected directly to and driving the bus lines in a bus-organized system without need for interface or pull-up components. Up to 128 of the outputs may be connected to a common bus and still drive two Series 74 TTL normalized loads, respectively. Similarly, up to 49 of the outputs can be connected to a common bus and drive one additional Series 74 TTL normalized load, respectively. To minimize the possibility that two outputs will attempt to take a common bus to opposite logic levels, the output control circuitry is designed so that the average output disable times are shorter than the average output enable times.

Gated enable inputs are provided on these devices for controlling the entry of data into the flip-flops. When both data-enable inputs are low, data at the D inputs are loaded into their respective flip-flops on the next positive transition of the buffered clock input. Gate output control inputs are also provided. When both are low, the normal logic states (high or low levels) of the four outputs are available for driving the loads or bus lines. The outputs are disabled independently from the level of the clock by a high logic level at either output control input. The outputs then present a high impedance and neither load nor drive the bus line.

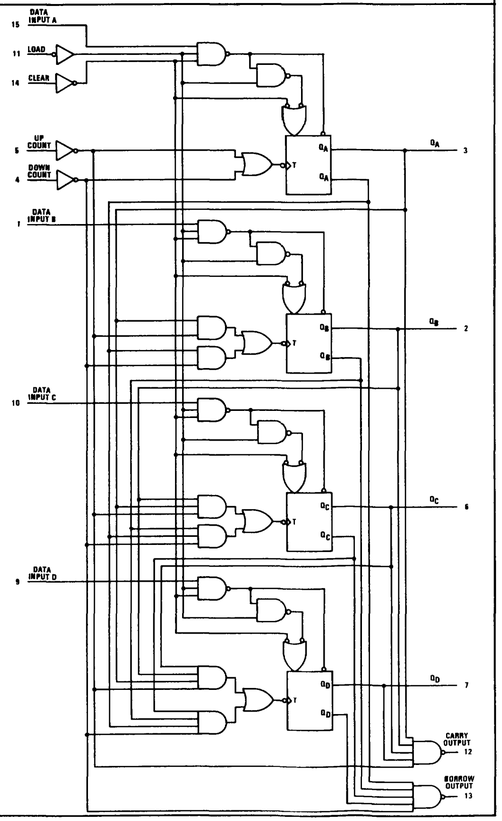
F201-31

IC NUMBER 57
Synchronous 4-Bit Up/Down Counter SN74193



LOGIC: LOW INPUT TO LOAD SETS $Q_A = A$
$Q_A = B$, $Q_C = C$, AND $Q_D = D$

PIN CONFIGURATION



This monolithic circuit is a synchronous reversible (up/down) counter having a complexity of 55 equivalent gates. It is a 4-bit binary counter. Synchronous operation is provided by having all flip-flops clocked simultaneously so that the outputs change coincidently with each other when so instructed by the steering logic. This mode of operation eliminates the output counting spikes which are normally associated with asynchronous (ripple-clock) counters.

The outputs of the four master-slave flip-flops are triggered by a low-to-high level transition of either count (clock) input. The direction of counting is determined by which count input is pulsed while the other count input is high.

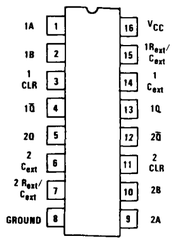
All four counters are fully programmable; that is, each output may be preset to either level by entering the desired data at the data inputs while the load input is low. The output will change to agree with the data inputs independently of the count pulses. This feature allows the counters to be used as modulo-N dividers by simply modifying the count length with the preset inputs.

A clear input has been provided which forces all outputs to the low level when a high level is applied. The clear function is independent of the count and load inputs. The clear, count, and load inputs are buffered to lower the drive requirements. This reduces the number of clock drivers, etc., required for long words.

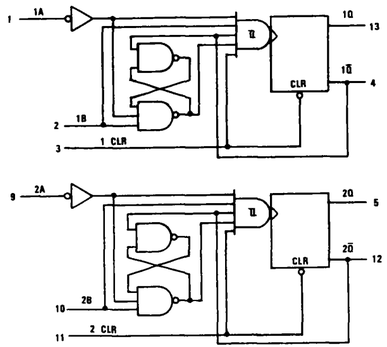
These counters were designed to be cascaded without the need for external circuitry. Both borrow and carry outputs are available to cascade both the up- and down-counting functions. The borrow output produces a pulse equal in width to the count-down input when the counter underflows. Similarly, the carry output produces a pulse equal in width to the count-up input when an overflow condition exists. The counters can then be easily cascaded by feeding the borrow and carry outputs to the count-down and count-up inputs respectively of the succeeding counter.

F201-32

IC NUMBER 58
Double Monostable Multivibrators With Schmitt-Trigger Inputs SN74221



PIN CONFIGURATION



LOGIC DIAGRAM

INPUTS			OUTPUTS	
CLEAR	A	B	Q	Q̄
L	X	X	L	H
X	H	X	L	H
X	X	L	L	H
H	L	↑	⎍	⎍
H	↓	H	⎍	⎍
↑	L	H	⎍	⎍

TRUTH TABLE

positive logic:
Low input to clear resets Q low and Q̄ high regardless of d-c levels at A or B inputs.

Each multivibrator features a negative-transition-triggered input and a positive-transition-triggered input either of which can be used as an inhibit input.

Pulse triggering occurs at a particular voltage level and is not directly related to the transition time of the input pulse. Schmitt-trigger input circuitry (TTL hysteresis) for B input allows jitter-free triggering from inputs with transition rates as slow as 1 volt/second, providing the circuit with excellent noise immunity of typically 1.2 volts. A high immunity to V_{CC} noise of typically 1.5 volts is also provided by internal latching circuitry.

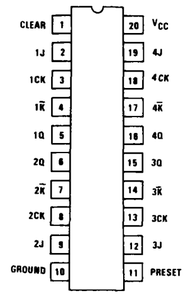
Once fired, the outputs are independent of further transitions of the A and B inputs and are a function of the timing components, or the output pulses can be terminated by the overriding clear. Input pulses may be of any duration relative to the output pulse. Output pulse length may be varied from 35 nanoseconds to the maximums shown in the above table by choosing appropriate timing components. With $R_{ext} = 2k\Omega$ and $C_{ext} = 0$, an output pulse of typically 30 nanoseconds is achieved which may be used as a d-c-triggered reset signal. Output rise and fall times are TTL compatible and independent of pulse length. Typical triggering and clearing sequences are illustrated as a part of the switching characteristics waveforms.

Pulse width stability is achieved through internal compensation and is virtually independent of V_{CC} and temperature. In most applications, pulse stability will only be limited by the accuracy of external timing components.

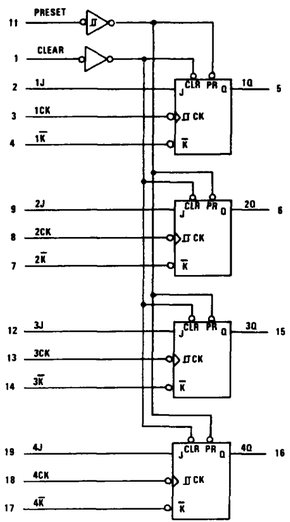
Jitter-free operation is maintained over the full temperature and V_{CC} ranges for more than six decades of timing capacitance (10 pF to 10 μF) and more than one decade of timing resistance. Throughout these ranges, pulse width is defined by the relationship: $t_{w(out)} C_{ext} R_{ext} \ln 2 \approx 0.7\, C_{ext} R_{ext}$. In circuits where pulse cutoff is not critical, timing capacitance up to 1000 μF and timing resistance as low as 1.4 kΩ may be used. Also the range of jitter-free output pulse widths is extended if V_{CC} is held to 5 volts and free-air temperature is 25°C. Duty cycles as high as 90% are achieved when using maximum recommended R_T. Higher duty cycles are available if a certain amount of pulse-width jitter is allowed.

F201-33

IC NUMBER 59
Quadruple J-K̄ Flip-Flops SN74276



PIN CONFIGURATION



LOGIC DIAGRAM

COMMON INPUTS		INPUTS			OUTPUT
PRESET	CLEAR	CLOCK	J	K̄	Q
L	H	X	X	X	H
H	L	X	X	X	L
L	L	X	X	X	H†
H	H	↓	L	H	Q_0
H	H	↓	H	H	H
H	H	↓	L	L	L
H	H	↓	H	L	TOGGLE
H	H	H	X	X	Q_0

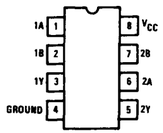
†This configuration is nonstable; that is, it may not persist when preset and clear return to their inactive (high) level.

TRUTH TABLE

These quadruple TTL J-K̄ flip-flops incorporate a number of third-generation IC features that can simplify system design and reduce flip-flop package count by up to 50%. They feature hysteresis at each clock input, fully buffered outputs, and direct clear capability, and are presettable through a buffer that also features an input hysteresis loop. The negative-edge-triggering clocks are directly compatible with earlier Series 54/74 single and dual pulse-triggered flip-flops. These circuits can be used to emulate D or T type flip-flops by hard-wiring the inputs, or to implement asynchronous sequential functions.

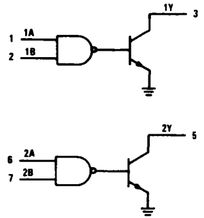
F201-34

IC NUMBER 60
Dual Peripheral Positive-AND Drivers SN75451B



positive logic: Y = AB

PIN CONFIGURATION



LOGIC DIAGRAM

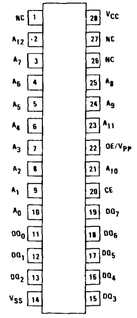
A	B	Y
L	L	L (on state)
L	H	L (on state)
H	L	L (on state)
H	H	H (off state)

H = high level, L = low level

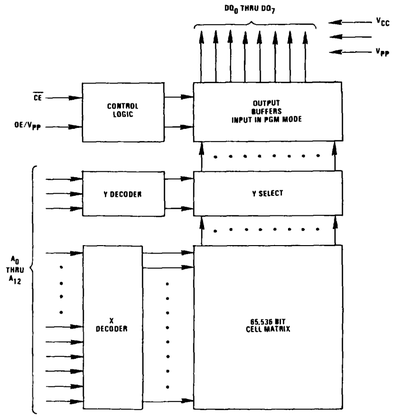
TRUTH TABLE

F201-70

IC NUMBER 61
8192 x 8-Bit EPROM 2764



PIN CONFIGURATION



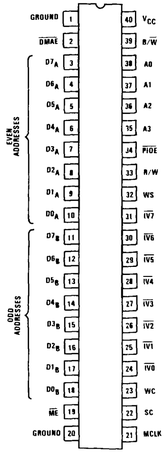
BLOCK DIAGRAM

MODE	CE	OE/V_{PP}	OUTPUTS
PIN	(20)	(22)	
READ	V_{IL}	V_{IL}	VALID
STANDBY	V_{IH}	DON'T CARE	OPEN
PROGRAM	PULSED V_{IH} TO V_{IL}	+25	INPUTS
DESELECT	V_{IL}	V_{IH}	OPEN
PROGRAM INHIBIT	V_{IH}	+25	OPEN
V_{CC} (28) = 5V ALL MODES			

TRUTH TABLE

F201-37

IC NUMBER 62
Bus Interface Register Array 8X320



PIN CONFIGURATION

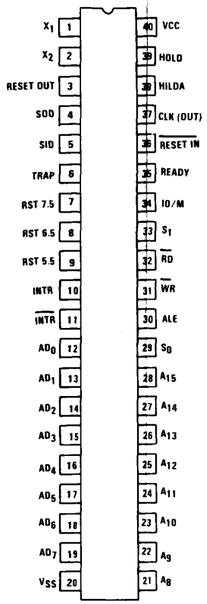
PIN NO	TYPE SYMBOL	NAME AND FUNCTION
1, 20	GND	GROUND. Circuit Ground.
2	DMAE	DIRECT MEMORY ACCESS ENABLE. Enables primary port to facilitate DMA transfers; does not affect secondary port.
3-18	$D0_A$-$D7_A$/ $D0_B$-$D7_B$/	PRIMARY DATA PORT Sixteen 3-state lines used for data transfers to-and-from the primary data port; most significant bit is $D0_A$ and least significant bit is $D7_B$.
19	ME	MASTER ENABLE. Enables secondary port when active low (ME).
21	MCLK	MASTER CLOCK. When MCLK is high, and 8X320 is enabled (ME), a register location may be either selected or written-into under control of SC and WC.
22	SC	SELECT COMMAND. With SC high, WC low, MCLK high and ME low, data on IV0 through IV7 is interpreted as an address. If any one of the 16 register addresses 60_B-77_B) matches that on the I/O (IV) bus, that particular register is selected and remains selected until another address on the same bank (i.e. ME = low) is output on the I/O bus-at which time, the old register is deselected and a new register may or may not be selected.
23	WC	WRITE COMMAND. With WC high, SC low, MCLK high, and ME low, the selected register stores contents of IV0-IV7 as data.
24-31	IV0-IV7	SECONDARY DATA PORT. Eight 3-state lines used to transfer data or I/O address to-and-from the secondary data port, most significant bit is IV0 and least significant bit is IV7
32	WS	WRITE STROBE. When active high, data appearing at the primary port ($D0_A$-$D7_A$/$D0_B$-$D7_B$) is stored in the register array if the primary port is in the write mode.
33	W/R	READ/WRITE CONTROL. When this signal is high, primary port is in read mode, when signal is low, primary port is in write mode
34	PIOE	PROGRAMMED I/O ENABLE When active low, primary port operates in programmed input/output mode with register to be read-from or written-into selected by A0-A3.
35-38	A0-A3	PRIMARY PORT ADDRESS SELECT Selects register or register-pair that primary port is to read-from or write-into Most significant bit is A3, least significant bit is A0.
39	B/W	BYTE/WORD WHEN SIGNAL IS HIGH, the primary port operates in the byte (8-bit) mode; when signal is low, the primary port operates in the word (16-bit) mode.
40	V_{CC}	POWER. +5 volts.

TRUTH TABLE

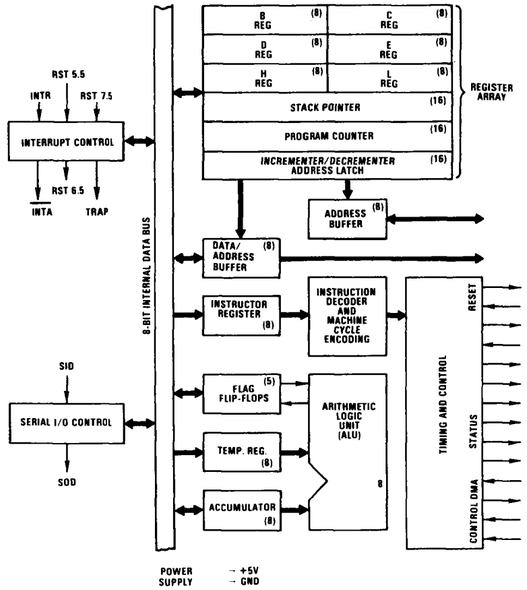
F201-43

IC NUMBER 63

Single Chip 8-Bit n-Channel Microprocessor 8085A



PIN CONFIGURATION



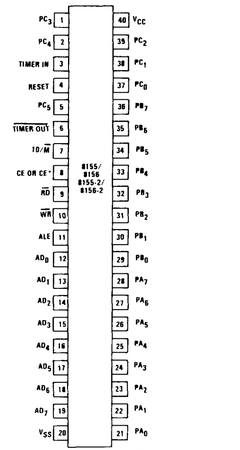
BLOCK DIAGRAM

PIN DESCRIPTION

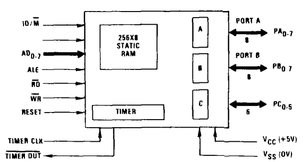
TYPE	SYMBOL	NAME AND FUNCTION
O	A_8A_{15}	**ADDRESS BUS:** The most significant 8 bits of the memory address or the 8 bits of the I/O address, 3-stated during Hold and Halt modes and during RESET.
I/O	AD_{0-7}	**MULTIPLEXED ADDRESS/DATA BUS:** Lower 8 bits of the memory address (or I/O address) appear on the bus during the first clock cycle (T state) of a machine cycle. It then becomes the data bus during the second and third clock cycles.
O	ALE	**ADDRESS LATCH ENABLE:** It occurs during the first clock state of a machine cycle and enables the address to get latched into the on-chip latch of peripherals. The falling edge of ALE is set to guarantee setup and hold times for the address information. The falling edge of ALE can also be used to strobe the status information. ALE is never 3-stated.
O	S_0, S_1, and $IO/\overline{M}$	**MACHINE CYCLE STATUS:** $IO/\overline{M}$ S_1 S_0 STATUS 0 0 1 Memory write 0 1 0 Memory read 1 0 1 I/O write 1 1 0 I/O read 0 1 1 Opcode fetch 1 1 1 Opcode fetch 1 1 1 Interrupt Acknowledge * 0 0 Halt * X X Hold * X X Reset * = 3-state (high impedance) X = unspecified S_1 can be used as an advanced R/W status. $IO/\overline{M}$, S_0 and S_1 become valid at the beginning of a machine cycle and remain stable throughout the cycle. The falling edge of ALE may be used to latch the state of these lines.
O	$\overline{RD}$	**READ CONTROL:** A low level on RD indicates the selected memory or I/O device is to be read and that the Data Bus is available for the data transfer, 3-stated during Hold and Halt modes and during RESET.
O	$\overline{WR}$	**WRITE CONTROL:** A low level on WR indicates the data on the Data Bus is to be written into the selected memory or I/O location. Data is set up at the trailing edge of WR. 3-stated during Hold and Halt modes and during RESET.
I	READY	**READY:** If READY is high during a read or write cycle, it indicates that the memory or peripheral is ready to send or receive data. If READY is low, the cpu will wait an integral number of clock cycles for READY to go high before completing the read or write cycle. READY must conform to specified setup and hold times.
I	HOLD	**HOLD:** Indicates that another master is requesting the use of the address and data buses. The cpu, upon receiving the hold request, will relinquish the use of the bus as soon as the completion of the current bus transfer. Internal processing can continue. The processor can regain the bus only after the HOLD is removed. When the HOLD is acknowledged, the Address, Data RD, WR, and IO/M lines are 3-stated.
O	HLDA	**HOLD ACKNOWLEDGE:** *Indicates that the cpu has received the HOLD request and that it will relinquish the* bus in the next clock cycle. HLDA goes low after the Hold request is removed. The cpu takes the bus one half clock cycle after HLDA goes low.
I	INTR	**INTERRUPT REQUEST:** Is used as a general purpose interrupt. It is sampled only during the next to the last clock cycle of an instruction and during Hold and Halt states. If it is active, the Program Counter (PC) will be inhibited from incrementing and INTA will be issued. During this cycle a RESTART or CALL instruction can be inserted to jump to the interrupt service routine. The INTR is enabled and disabled by software. It is disabled by Reset and immediately after an interrupt is accepted.
O	$\overline{INTA}$	**INTERRUPT ACKNOWLEDGE:** Is used instead of (and has the same timing as) $\overline{RD}$ during the Instruction cycle after an INTR is accepted. It can be used to activate an 8259A Interrupt chip or some other interrupt port.
I	RST 5.5 RST 6.5 RST 7.5	**RESTART INTERRUPTS:** These three inputs have the same timing as INTR except they cause an internal RESTART to be automatically inserted. The priority of these interrupts is ordered as shown in Table 2. These interrupts have a higher priority than INTR. In addition, they may be individually masked out using the SIM instruction.
I	TRAP	**TRAP:** Trap interrupt is a nonmaskable RESTART interrupt. It is recognized at the same time as INTR or RST 5.5-7.5. It is unaffected by any mask or Interrupt Enable. It has the highest priority of any interrupt. (See Table 2.)
I	$\overline{RESET\ IN}$	**RESET IN:** Sets the Program Counter to zero and resets the Interrupt Enable and HLDA flip-flops. The data and address buses and the control lines are 3-stated during RESET and because of the asynchronous nature of RESET, the processor's internal registers and flags may be altered by $\overline{RESET\ IN}$ is a Schmitt-triggered input, allowing connection to an R-C network for power-on RESET delay. The cpu is held in the reset condition as long as $\overline{RESET\ IN}$ is applied.
O	RESET OUT	**RESET OUT:** Reset Out indicates cpu is being reset. Can be used as a system reset. The signal is synchronized to the processor clock and lasts an integral number of clock periods.
I	X_1, X_2	**X_1 AND X_2:** Are connected to a crystal, LC, or RC network to drive the internal clock generator. X_1 can also be an external clock input from a logic gate. The input frequency is divided by 2 to give the processor's internal operating frequency.
O	CLK	**CLOCK:** Clock output for use as a system clock. The period of CLK is twice the X_1, X_2 input period.
I	SID	**SERIAL INPUT DATA LINE:** The data on this line is loaded into accumulator bit 7 whenever a RIM instruction is executed.
O	SOD	**SERIAL OUTPUT DATA LINE:** The Output SOD is set or reset as specified by the SIM instruction.
	V_{CC}	**POWER:** +5 volt supply
	V_{SS}	**GROUND:** Reference.

F201-46

IC NUMBER 64
2048-Bit Static MOS RAM With I/O Ports and Timer 8155



PIN CONFIGURATION

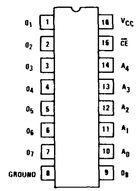


BLOCK DIAGRAM

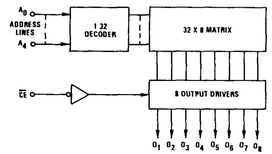
TYPE	SYMBOL	NAME AND FUNCTION
I	RESET	RESET Pulse provided by the 8085A to initialize the system (connect to 8085A RESET OUT). Input high on this line resets the chip and initializes the three I/O ports to input mode. The width of RESET pulse should typically be two 8085A clock cycle times.
I/O	AD_{0-7}	ADDRESS/DATA. 3-state Address/Data lines that interface with the CPU lower 8-bit Address/Data Bus. The 8-bit address is latched into the address latch inside the 8155/86 on the falling edge of ALE. The address can be either for the memory section or the I/O section depending on the IO/$\overline{M}$ input. The 8-bit data is either written into the chip or read from the chip, depending on the $\overline{WR}$ or $\overline{RD}$ input signal.
I	CE or $\overline{CE}$	CHIP ENABLE. On the 8155, this pin is $\overline{CE}$ and is ACTIVE LOW. On the 8156, this pin is CE and is ACTIVE HIGH.
I	$\overline{RD}$	READ CONTROL Input low on this line with the Chip Enable active enables and AD_{0-7} buffers. If IO/$\overline{M}$ pin is low, the RAM content will be read out to the AD bus Otherwise the contents of the selected I/O port or command/status registers will be read to the AD bus.
I	$\overline{WR}$	WRITE CONTROL Input low on this line with the Chip Enable active causes the data on the Address/Data bus to be written to the RAM or I/O ports and command/status register, depending on IO/$\overline{M}$.
I	ALE	ADDRESS LATCH ENABLE This control signal latches both address on the AD_{0-7} lines and the state of the Chip Enable and IO/$\overline{M}$ into the chip at the falling edge of ALE.
I	IO/$\overline{M}$	I/O MEMORY. Selects memory if low and I/O and command/status registers if high.
I/O	PA_{0-7}(8)	PORT A These 8 pins are general purpose I/O pins. The in/out direction is selected by programming the command register
I/O	PB_{0-7}(8)	PORT B These 8 pins are general purpose I/O pins. The in/out direction is selected by programming the command register
I/O	PC_{0-5}(6)	PORT C These 6 pins can function as either input port, output port, or as control signals for PA and PB. Programming is done through the command register When PC_{0-5} are used as control signals, they will provide the following: PC_0 — A INTR (Port A Interrupt) PC_1 — A BF (Port A Buffer Full) PC_2 — A $\overline{STB}$ (Port A Strobe) PC_3 — A INTR (Port B Interrupt) PC_4 — B BF (Port B Buffer Full) PC_5 — B $\overline{STB}$ (Port B Strobe)
I	TIMER IN	TIMER INPUT Input to the counter-timer.
O	$\overline{TIMER\ OUT}$	TIMER OUTPUT This output can be either a square wave or a pulse, depending on the timer mode
	V_{CC}	VOLTAGE +5 volt supply
	V_{SS}	GROUND Ground reference.

F201-51

IC NUMBER 65
256-Bit Bipolar PROM (32 x 8) 82S123



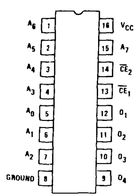
PIN CONFIGURATION



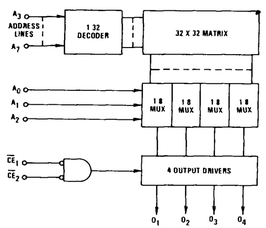
LOGIC DIAGRAM

F201-41

IC NUMBER 66
1024-Bit Bipolar PROM (256 x 4) 82S129



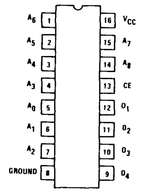
PIN CONFIGURATION



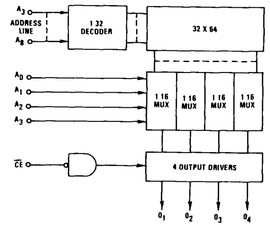
BLOCK DIAGRAM

F201-40

IC NUMBER 67
2048-Bit Bipolar PROM (512 x 4) 82S131



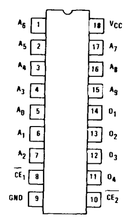
PIN CONFIGURATION



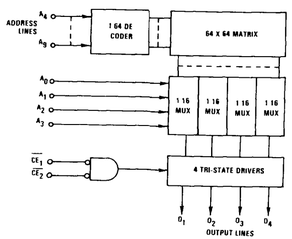
BLOCK DIAGRAM

F201-39

IC NUMBER 68
4096-Bit Bipolar PROM (1024 x 4) 82S137



PIN CONFIGURATION

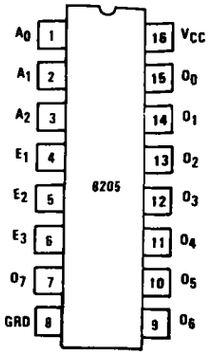


BLOCK DIAGRAM

F201-47

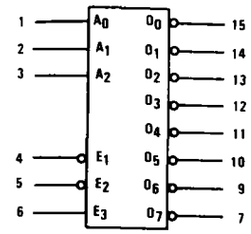
IC NUMBER 69
High Speed 1 Out of 8 Binary Decoder 8205

$A_0 . A_2$	ADDRESS INPUTS
$\overline{E_1} . \overline{E_3}$	ENABLE INPUTS
$\overline{O_0} . \overline{O_7}$	DECODED OUTPUTS



PIN CONFIGURATION

ADDRESS			ENABLE			OUTPUTS							
A_0	A_1	A_2	E_1	E_2	E_3	0	1	2	3	4	5	6	7
L	L	L	L	L	H	L	H	H	H	H	H	H	H
H	L	L	L	L	H	H	L	H	H	H	H	H	H
L	H	L	L	L	H	H	H	L	H	H	H	H	H
H	H	L	L	L	H	H	H	H	L	H	H	H	H
L	L	H	L	L	H	H	H	H	H	L	H	H	H
H	L	H	L	L	H	H	H	H	H	H	L	H	H
L	H	H	L	L	H	H	H	H	H	H	H	L	H
H	H	H	L	L	H	H	H	H	H	H	H	H	L
X	X	X	L	L	L	H	H	H	H	H	H	H	H
X	X	X	H	L	L	H	H	H	H	H	H	H	H
X	X	X	L	H	L	H	H	H	H	H	H	H	H
X	X	X	H	H	L	H	H	H	H	H	H	H	H
X	X	X	H	L	H	H	H	H	H	H	H	H	H
X	X	X	L	H	H	H	H	H	H	H	H	H	H
X	X	X	H	H	H	H	H	H	H	H	H	H	H



LOGIC SYMBOL

DECODER

The 8205 contains a one out of eight binary decoder. It accepts a three bit binary code and by gating this input, creates an exclusive output that represents the value of the input code.

For example, if a binary code of 101 was present on the A0, A1 and A2 address input lines, and the device was enabled, an active low signal would appear on the 05 output line. Note that all of the other output pins are sitting at a logic high, thus the decoded output is said to be exclusive. The decoders outputs will follow the truth table in the same manner for all other input variations.

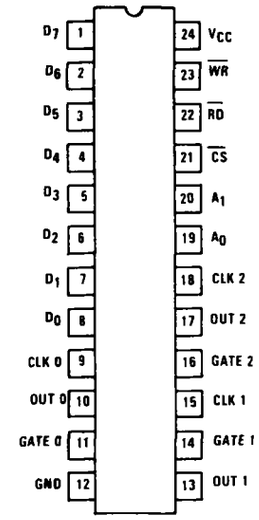
ENABLE GATE

When using a decoder it is often necessary to gate the outputs with timing or enabling signals so that the exclusive output of the decoded value is synchronous with the overall system.

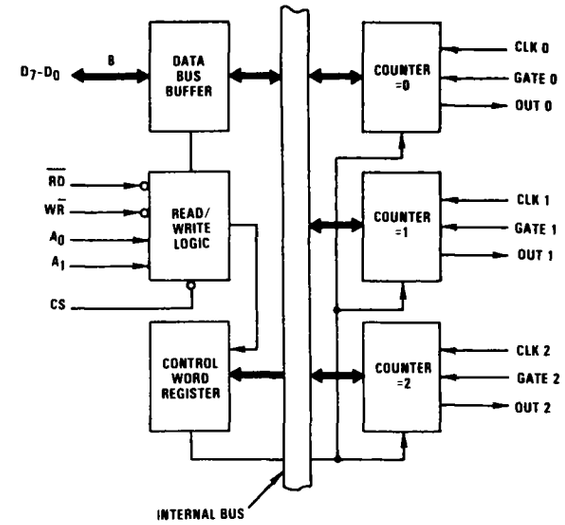
The 8205 has a built-in function for such gating. The three enable inputs (E1, E2, E3) are ANDed together and create a single enable signal for the decoder. The combination of both active "high" and active "low" device enable inputs provides the designer with a powerfully flexible gating function to help reduce package count in his system.

F201-47

IC NUMBER 70
Programmable Interval Timer 8253



PIN CONFIGURATION



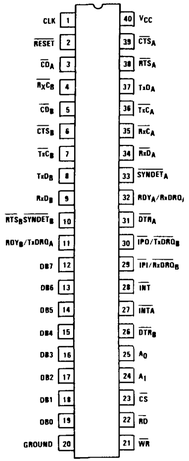
BLOCK DIAGRAM

The 8253 is a programmable counter/timer chip designed for use as a microcomputer peripheral. It uses nMOS technology with a single +5V supply and is packaged in a 24-pin plastic DIP.

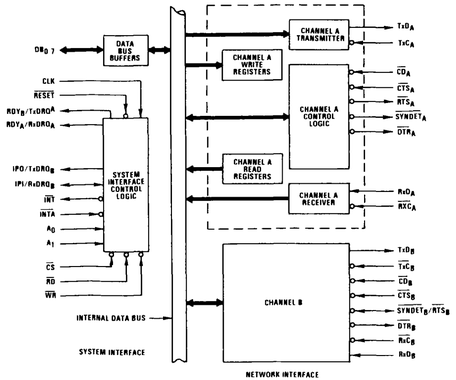
It is organized as 3 independent 18-bit counters, each with a count rate of up to 2 MHz. All modes of operation are software programmable.

F201-48

IC NUMBER 71
Multi-Protocol Serial Controller 8274



PIN CONFIGURATION



BLOCK DIAGRAM

The 8274 Multi-Protocol Series Controller (MPSC) is designed to interface High Speed Communications Lines using Asynchronous, IBM Bisync, and SDLC/HDLC protocol to microcomputer systems. It can be interfaced in polled, interrupt driven, or DMA driven modes of operation.

PIN DESCRIPTION

PIN NO	TYPE	SYMBOL	NAME AND FUNCTION
1	I	CLK	CLOCK System clock, TTL compatible
2	I	$\overline{RESET}$	RESET A low signal on this pin will force the MPSC to an idle state. TxD_A and TxD_B are forced high The modem interface output signals are forced high. The MPSC will remain idle until the control registers are initialized Reset must be true for one complete CLK cycle
3	I	$\overline{CD}_A$	CARRIER DETECT (CHANNEL A) Carrier Detect (Channel A) signals that the line transmission has started. The MPSC will begin to sample data on the RxD_A line if modem enables are selected
4	I	$\overline{RxC}_B$	RECEIVER CLOCK. The Receiver Clock (Channel B) clocks in data on the RxD_B pin.
5	I	$\overline{CD}_B$	CARRIER DETECT (CHANNEL B). Carrier Detect (Channel B) signals that the line transmission has started The MPSC will begin to sample data on the RxD_B line if modem enables are selected.
6	I	$\overline{CTS}_B$	CLEAR TO SEND (CHANNEL B) Clear To Send (Channel B) signals that the modem is ready to accept data from the MPSC Clear To Send will enable Channel B transmitter if modem enables are selected, otherwise this pin may be used as a general purpose input.
7	I	TxC_B	TRANSMIT CLOCK (CHANNEL B) Transmit Clock (Channel B) for TxD_B pin.
8	O	TxD_A	TRANSMIT DATA (CHANNEL B) This line transmits the serial data to the communications channel (Channel B).
9	I	RxD_B	RECEIVE DATA (CHANNEL B) This line receives serial data from the communications channel (Channel B)
10	I/O	$\overline{SYNDET}_B/\overline{RTS}_B$	SYNCHRONOUS DETECTION (CHANNEL B) This pin is used in byte synchronous mode as either an internal sync detect (output) or as a means to force external synchronization (input). In SDLC mode, this pin is an output indicating Flag detection In asynchronous mode it is a general purpose input (Channel B) Request To Send (Channel B) is a general purpose output, generally used to signal that Channel B is ready to send data
11	I/O	$RDY_B/TxDRQ_A$	READY TRANSMIT DATA: In mode 0 this pin is used to synchronize data transfers for both Receive and Transmit of Channel B to the controlling processor's READY line (open collector). In modes 1 and 2 this pin requests a DMA transfer of data for a transmit operation (Channel A)
12	I/O	DB7	DATA BUS The Data Bus lines are bi-directional three state lines which interface with the system's Data Bus
13		DB6	
14		DB5	
15		DB4	
16		DB3	
17		DB2	
18		DB1	
19		DB0	
20		GND	GROUND
40		V_{CC}	POWER +5V Supply
39	I	$\overline{CTS}_A$	CLEAR TO SEND (CHANNEL A) This signals that the modem is ready to accept data from the MPSC Clear To Send will enable Channel B transmitter if modem enables are selected, otherwise this pin may be used as a general purpose input
38	O	$\overline{RTS}_A$	REQUEST TO SEND (CHANNEL A): Request to Send (Channel A) is a general purpose output generally used to signal that Channel A is ready to send data.
37	O	TxD_A	TRANSMIT DATA (CHANNEL A) This line transmits the serial data to the communications channel (Channel A).
36	I	$\overline{TxC}_A$	TRANSMITTER CLOCK (CHANNEL A) The transmitter clock (Channel A) clocks out data on the TxD_A pin
35	I	$\overline{RxC}_A$	RECEIVER CLOCK (CHANNEL A) The receiver clock (Channel A) clocks in data on the RxD_A pin
34	I	RxD_A	RECEIVE DATA (CHANNEL A) This line receives serial data from the communications channel (Channel A).
33	I/O	$\overline{SYNDET}_A$	SYNCHRONOUS DETECTION (CHANNEL A) This pin is used in byte synchronous mode as either an internal sync detect (output) or as a means to force external synchronization (input) In SDLC mode, this pin is an output indicating flag detection. In asynchronous mode it is a general purpose input (Channel A).
32	O	$\overline{RDY}_A/RxDRQ_A$	READY In mode 0 this pin is used to synchronize data transfers for both receive and transmit of Channel A to the controlling processor's READY line (open collector) In modes 1 and 2 $RxDRQ_A$ requests a DMA transfer of data for a receive operation for Channel A
31	O	DTR_A	DATA TERMINAL READY This pin is Data Terminal Ready (Channel A) which is a general purpose output
30	O	$IPO/TxDRQ_B$	INTERRUPT PRIORITY OUT In modes 0 and 1, IPO is Interrupt Priority Out It is used to establish a hardware interrupt priority scheme with IPI It is low only if IPI is low and the controlling processor is not servicing an interrupt from this MPSC. In mode 2, $TxDRQ_B$ requests a DMA transfer of data for a transmit operation for Channel B
29	I/O	$\overline{IPI}/RxDRQ_B$	INTERRUPT PRIORITY IN In modes 0 and 1, IPI is Interrupt Priority In A low on IPI means that no higher priority device is being serviced by the controlling processor's interrupt service routine In mode 2, $RxDRQ_B$ requests a DMA transfer of data for a receive operation for Channel B
28	O	$\overline{INT}$	INTERRUPT The interrupt signal indicates that the highest priority internal interrupt requires service (open collector) Priority can be resolved via an external interrupt controller or a daisy-chain scheme
27	I	$\overline{INTA}$	INTERRUPT ACKNOWLEDGE: This interrupt Acknowledge allows the highest priority interrupting device to generate an interrupt vector
26	O	$\overline{DTR}_B$	DATA TERMINAL READY (CHANNEL B) This is a general purpose output
25	I	A_0	ADDRESS This line selects Channel A or B during data or command transfers A low selects Channel A.
24	I	A_1	ADDRESS: This line selects between data or command information transfer A low means data
23	I	$\overline{CS}$	CHIP SELECT Chip Select enables RD or WR
22	I	$\overline{RD}$	READ Read controls a data byte or status byte transfer from the MPSC to CPU
21	I	$\overline{WR}$	WRITE Write controls transfer of data or commands to the MPSC

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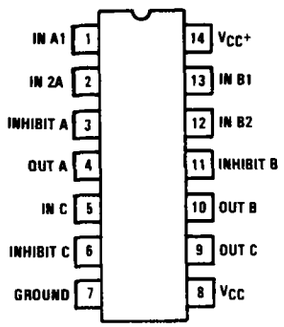
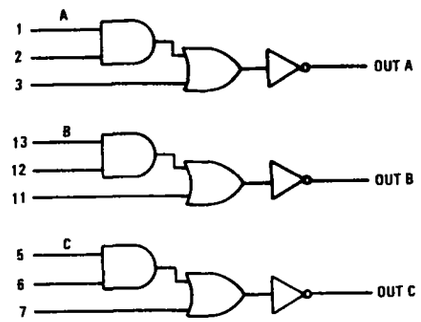
IC NUMBER 72
Triple EIA RS-232-C/MIL-STD-188C Line Driver 9616



PIN CONFIGURATION



LOGIC DIAGRAM

INPUT 1	INPUT 2	INHIBIT	OUTPUT
All Sections:			
L	L	L	H
H	H	L	L
L	L	H	L
H	H	H	L
For Channels A and B add:			
L	H	L	H
H	L	L	H
L	H	H	L
H	L	H	L
(For Channel C, omit INPUT 2 Column)			

TRUTH TABLE

The 9616 is a Triple Line Driver which meets the electrical interface specifications of EIA RS-232-C and CCITT V.24 and/or MIL-STD-188C (by the appropriate device selection). Each driver converts TTL/DTL logic levels to EIA/CCITT and/or MIL-STD-188C logic levels for transmission between data terminal equipment and data communications equipment. The output slew rate is internally limited and can be lowered by an external capacitor; all output currents are short-circuit limited. The outputs are protected against RS-232-C fault conditions. A logic HIGH on the inhibit terminal interrupts signal transfer and forces the output to a V_{OL} (EIA/CCITT MARK) state.

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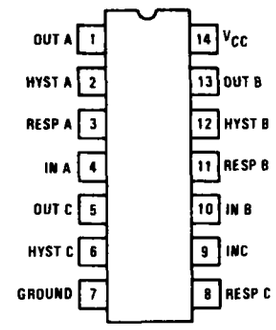
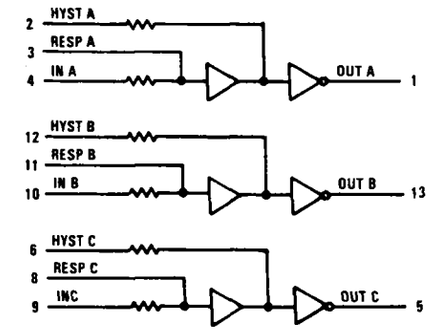
IC NUMBER 73
Triple EIA RS-232-C Line Receiver 9617



PIN CONFIGURATION

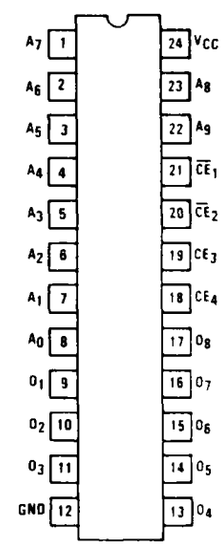


LOGIC DIAGRAM

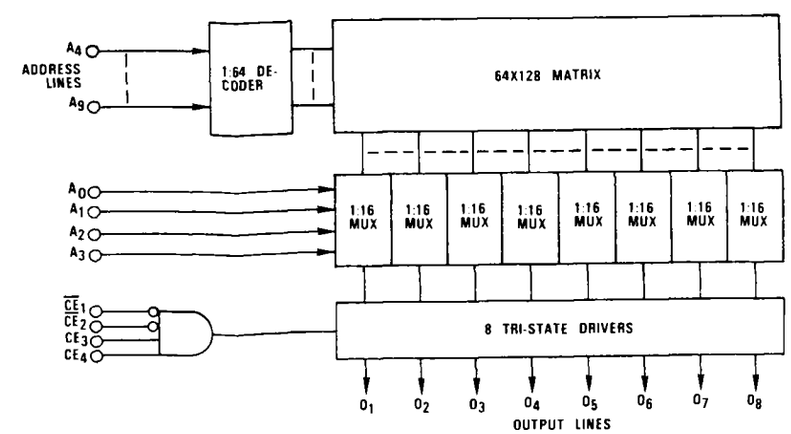
The 9617 is a monolithic Triple Line Receiver designed to meet the terminator electrical requirements of EIA RS-232-C and CCITT V.24. It receives line signals produced by the 9616, an EIA/CITT driver, and converts them to TTL compatible logic levels. The inputs have a resistance between 3 kΩ and 7 kΩ and can withstand ±25 V. Each receiver can operate in either hysteresis or non-hysteresis (slicing) modes, and each receiver provides fail-safe operation as defined by Section 2.5 of RS-232-C. Noise immunity may be increased by connecting a capacitor between the response control pin and ground.

F201-72

IC NUMBER 74
8192-Bit Bipolar PROM (1024 × 8) 82181



PIN CONFIGURATION



LOGIC DIAGRAM

The 82181 is supplied with all outputs at logical low. Outputs are programmed to a logic high level at any specified address by fusing a Ni-Cr link matrix. The 82181 includes on chip decoding.

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SECTION 3

OPERATION

3.1 INTRODUCTION. - The Model 1 Full Capacity Flight Service Automation System (M1FC FSAS) is a computer controlled system. Operator interface is provided via the Computer Operator Terminal Console (COTC) at a Flight Service Data Processing System (FSDPS) and via the Input/Output Terminal (IOT) at an Automated Flight Service Station (AFSS). The Aviation Weather Processor (AWP) maintains external interfaces to WMSC and A-BDIS and internal interfaces to terminal equipment at the AWP, to all FSDPSs, and to the other AWP.

This section provides a description of the controls and indicators provided with M1FC FSAS equipment and provides operating procedures. For System operating procedures refer to the M1FC FSAS User's Manual or table 1-4 for related operating manuals.

3.2 CONTROLS AND INDICATORS. - The controls and indicators of the M1FC FSAS equipment are described below. Consult the manuals listed in table 1-4 for descriptions of the controls and indicators of additional related equipment within the M1FC FSAS.

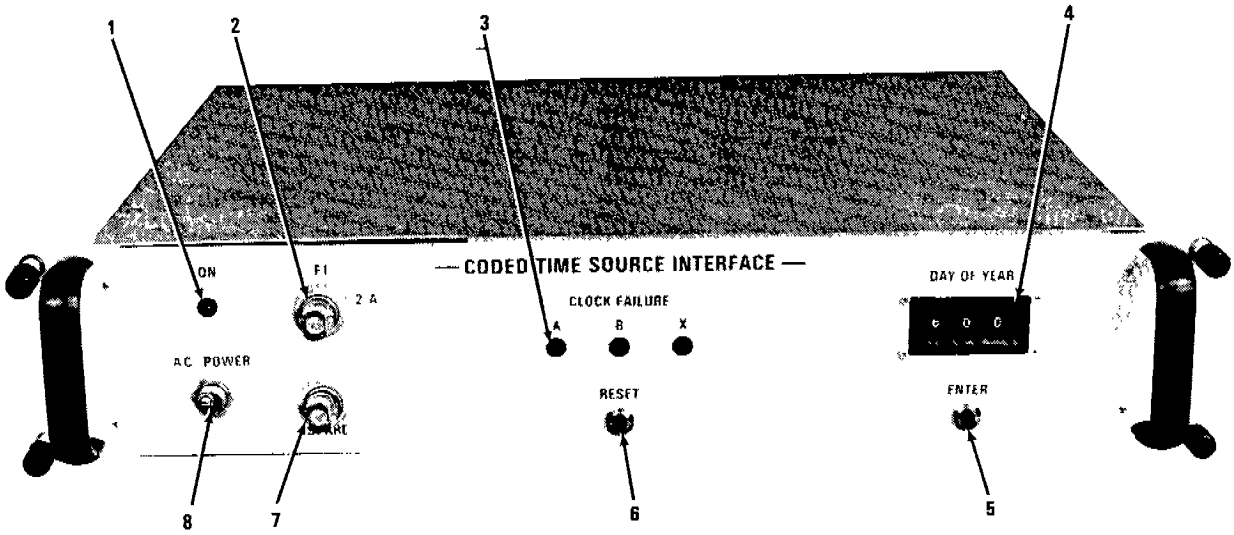
3.2.1 Coded Time Source Interface. - The controls and indicators for the Coded Time Source Interface, 401-37207-01, are shown and described in figure 3-1.

3.2.2 Thermal Alarm Unit. - The controls and indicators for the Thermal Alarm Unit, 401-37155-01, are shown and described in figures 3-2 and 3-3.

3.2.3 Power Control Module. - The controls and indicators for the Power Control Module, 401-36719, are shown and described in figure 3-4.

3.2.4 Multiplexer Circuit Card. - The controls and indicators for the Multiplexer Circuit Card, 401-36993-03, are shown and described in figure 3-5.

3.2.5 Circuit Breaker AC Junction Box. - The controls and indicators for the Circuit Breaker AC Junction Box, 401-37231-01, are shown and described in figure 3-6.



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CONTROL/INDICATOR	REFERENCE DESIGNATOR	FUNCTION
1. Power ON indicator	DS4	Signifies that AC power is on when lighted.
2. Fuse, 2A	F1	Provides fuse protection between Coded Time Source Interface (CTSI) and AC input voltage.
3. CLOCK FAILURE indicators	DS1-DS3	Signifies a clock failure when one or more indicators are lighted.
4. DAY OF YEAR thumbwheel switch	S4	Provides means of entering Julian date into CTSI.
5. ENTER pushbutton switch	S1	Enters Julian date into CTSI when pressed.
6. RESET pushbutton switches	S2	Resets CTSI clock when pressed.
7. SPARE fuse		Provides spare 2A fuse.
8. AC POWER switch	S3	Provides 115 VAC to CTSI when in ON position.

Figure 3-1. Coded Time Source Interface Controls and Indicators

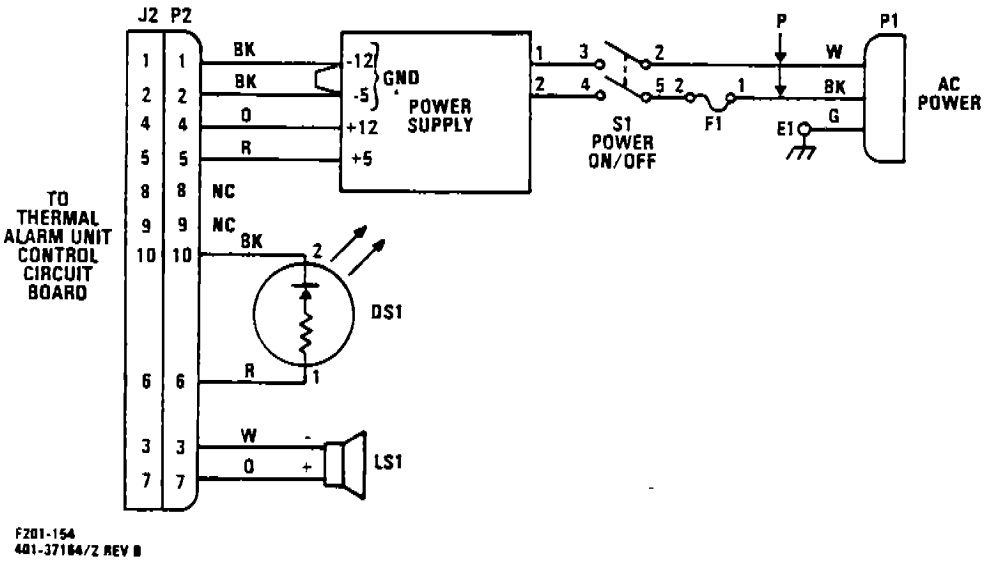


Figure 10-5. Thermal Alarm Unit, 401-37155-01, Wiring Diagram

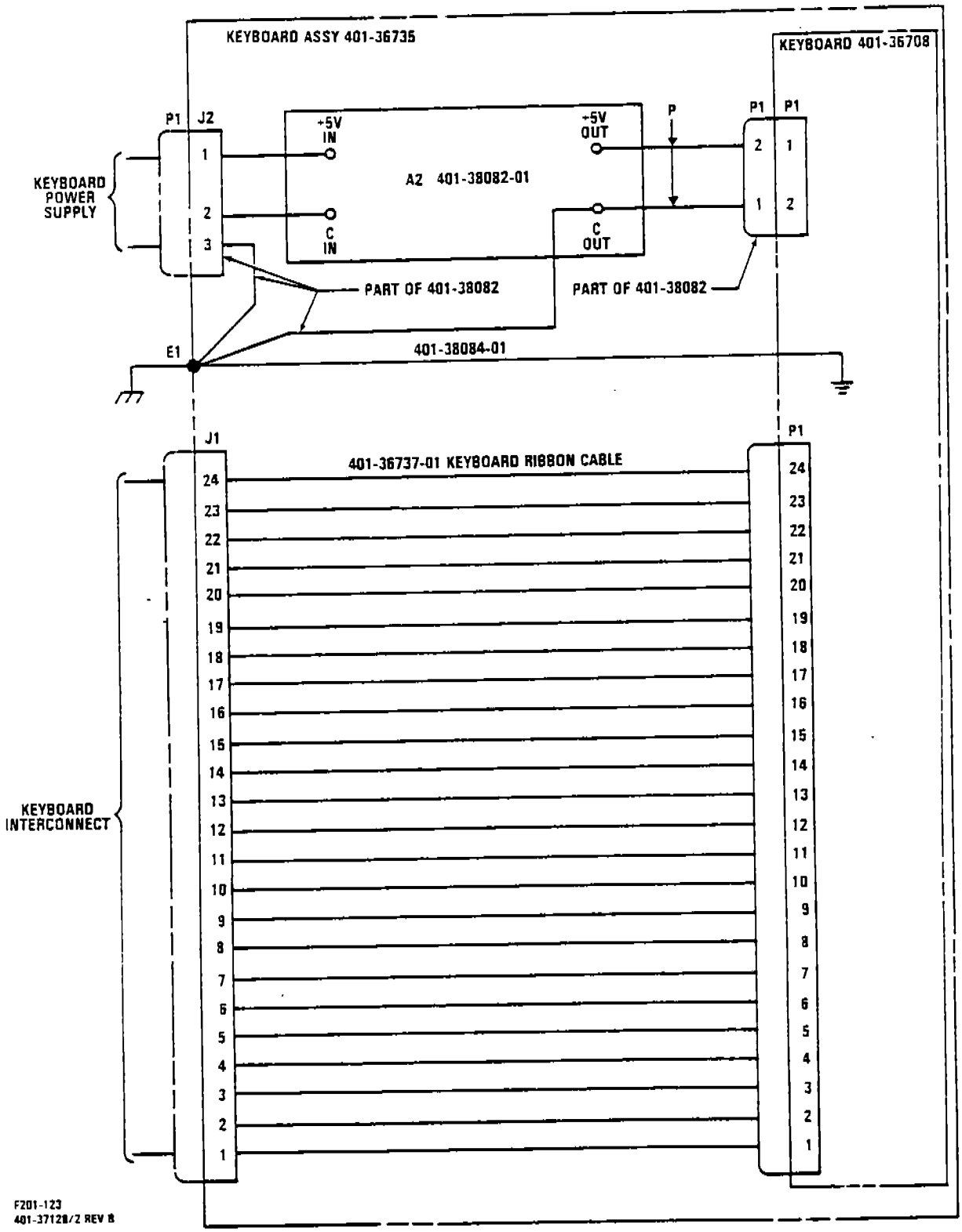


Figure 10-6. Keyboard Assembly, 401-36735-03, Wiring Diagram

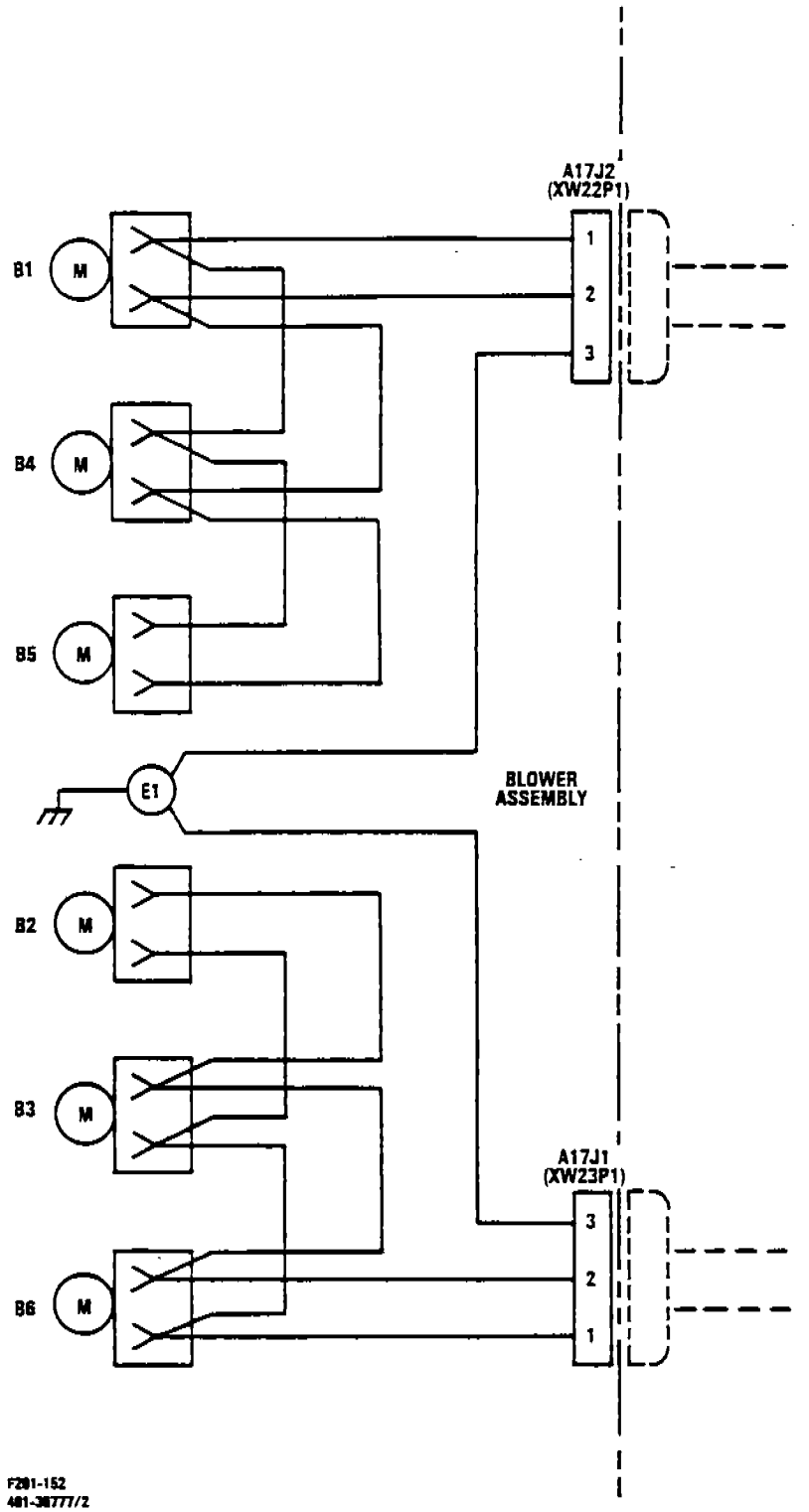


Figure 10-7. Blower Assembly, 401-37145-02, Wiring Diagram

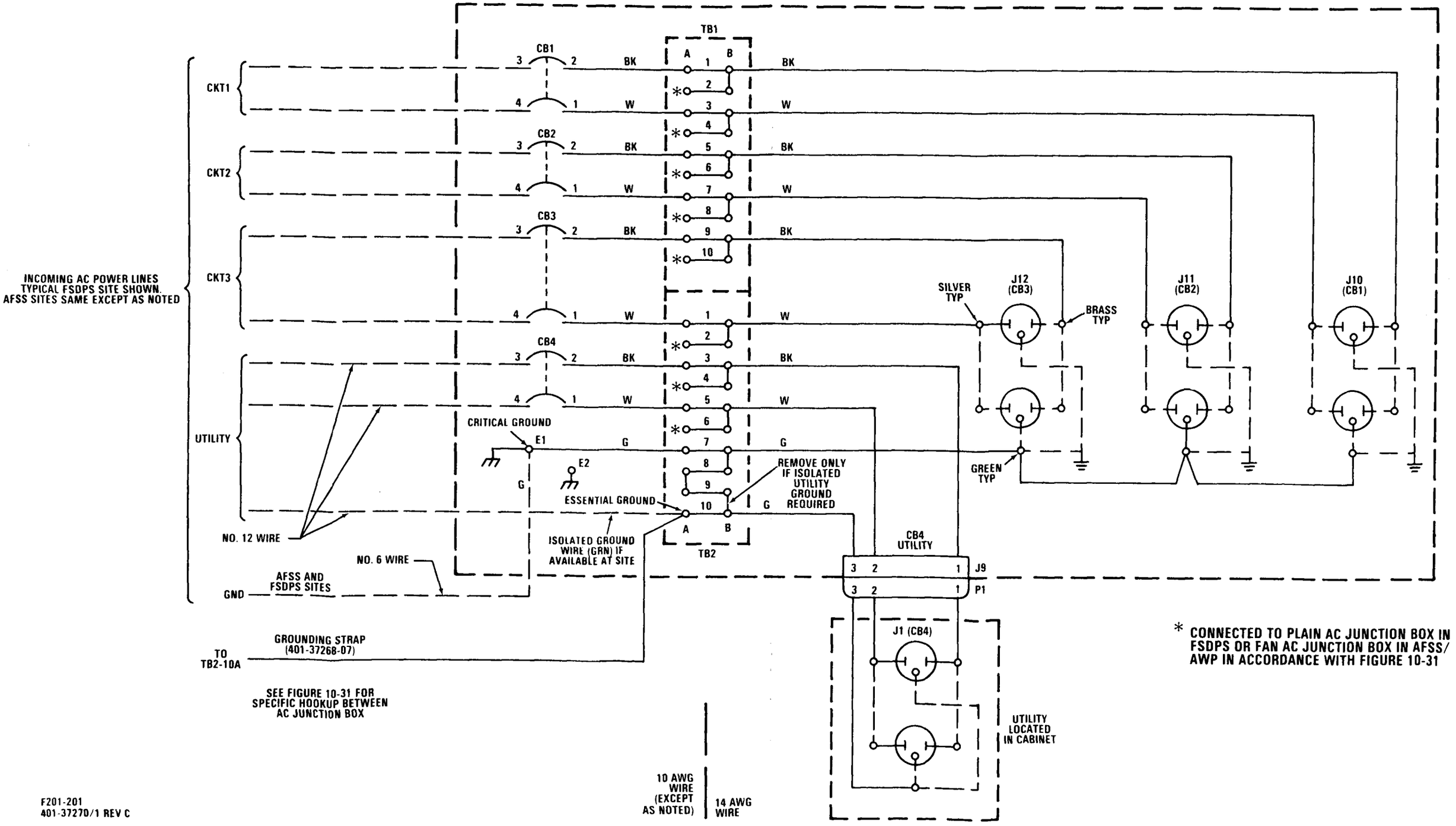


Figure 10-8. Circuit Breaker AC Junction Box, 401-37231-01, Wiring Diagram

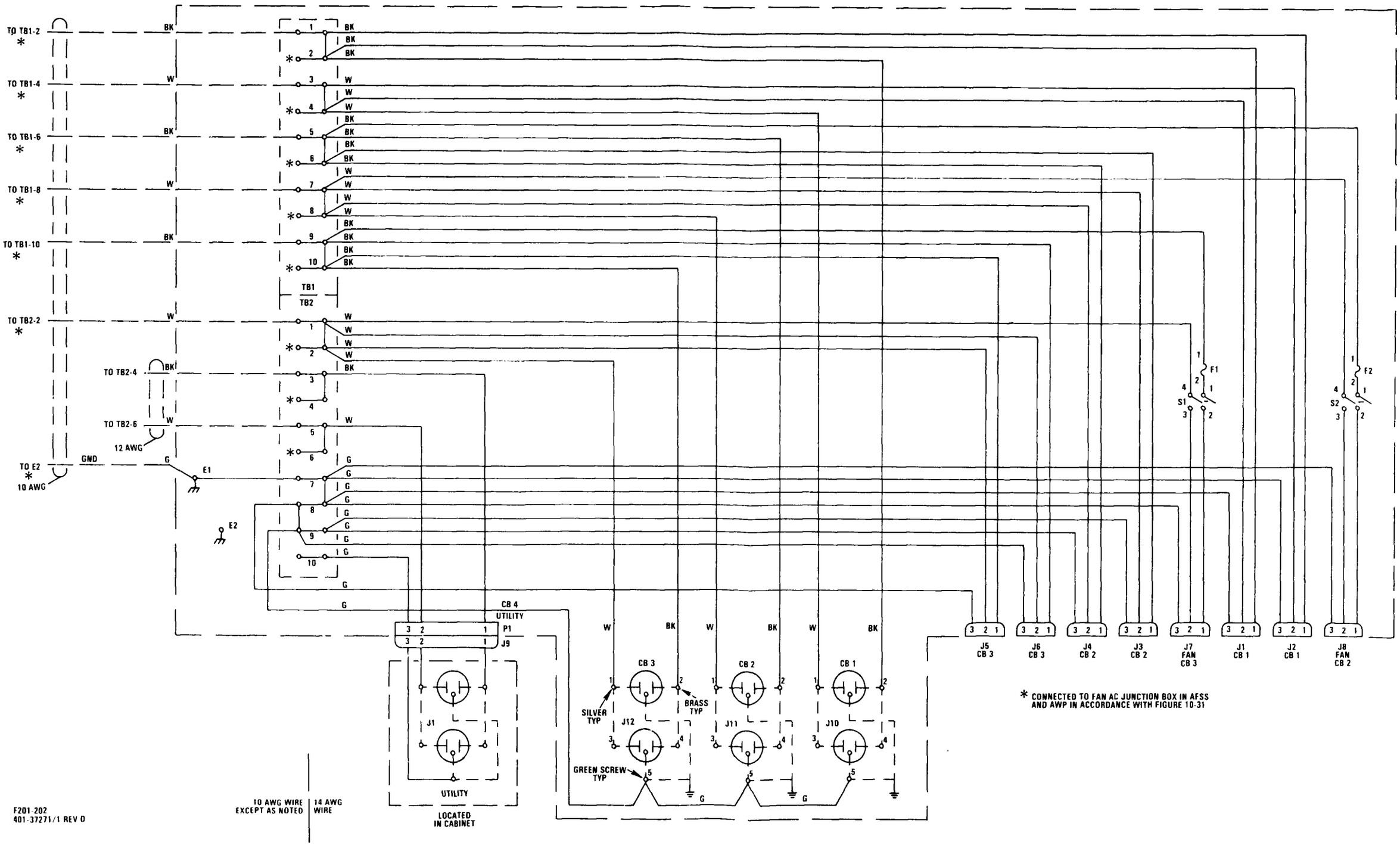


Figure 10-9. Fan AC Junction Box, 401-37231-01, Wiring Diagram

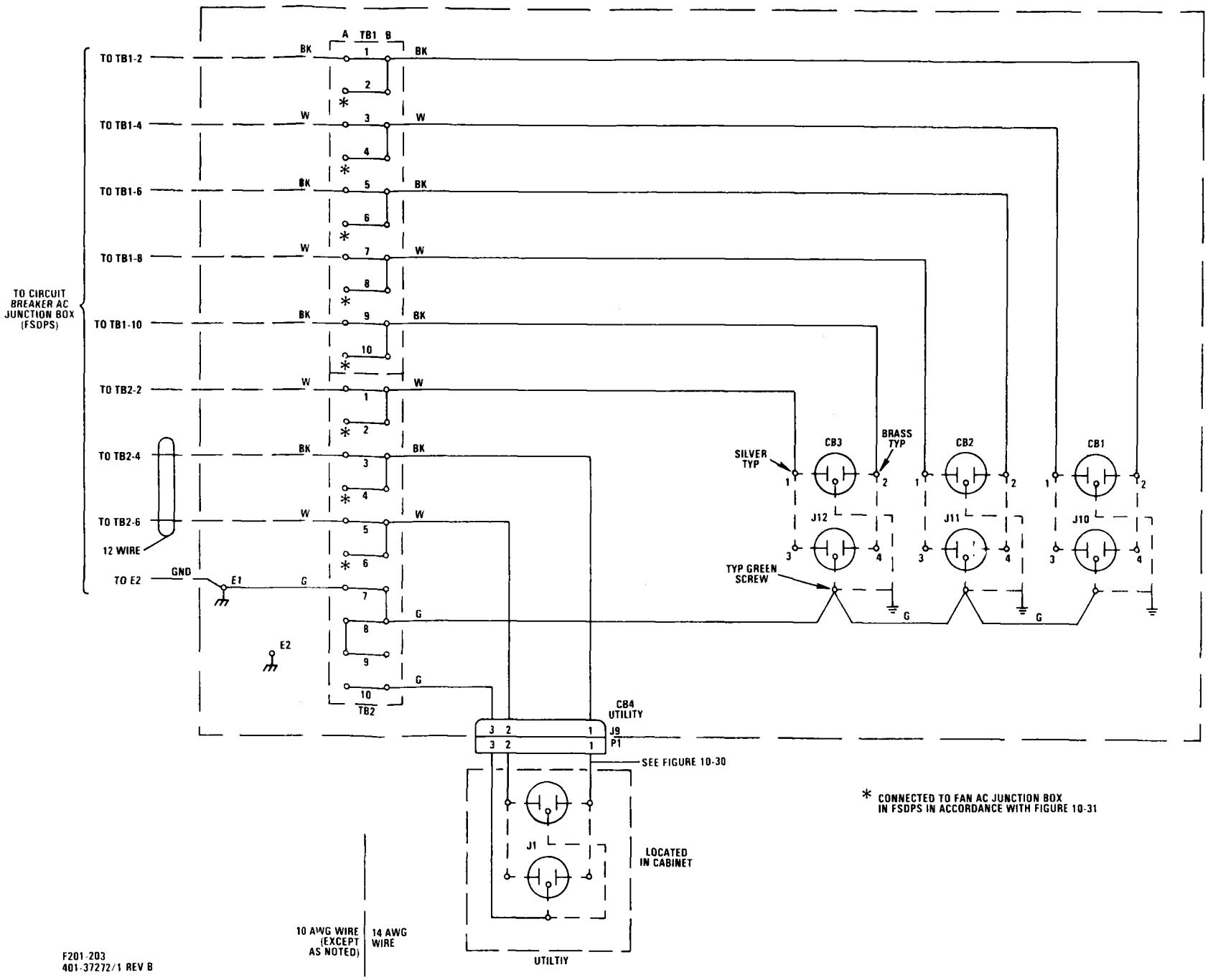


Figure 10-10. Plain AC Junction Box, 401-37231-03, Wiring Diagram

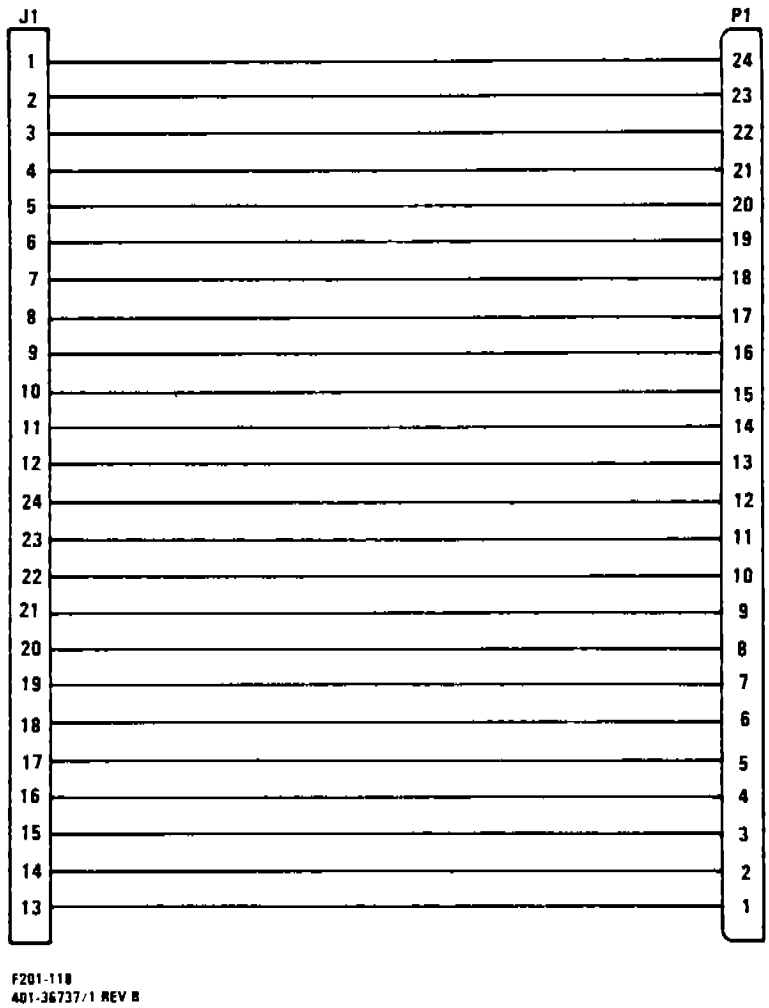


Figure 10-11. Keyboard Ribbon Cable, 401-36737-02, Schematic Diagram

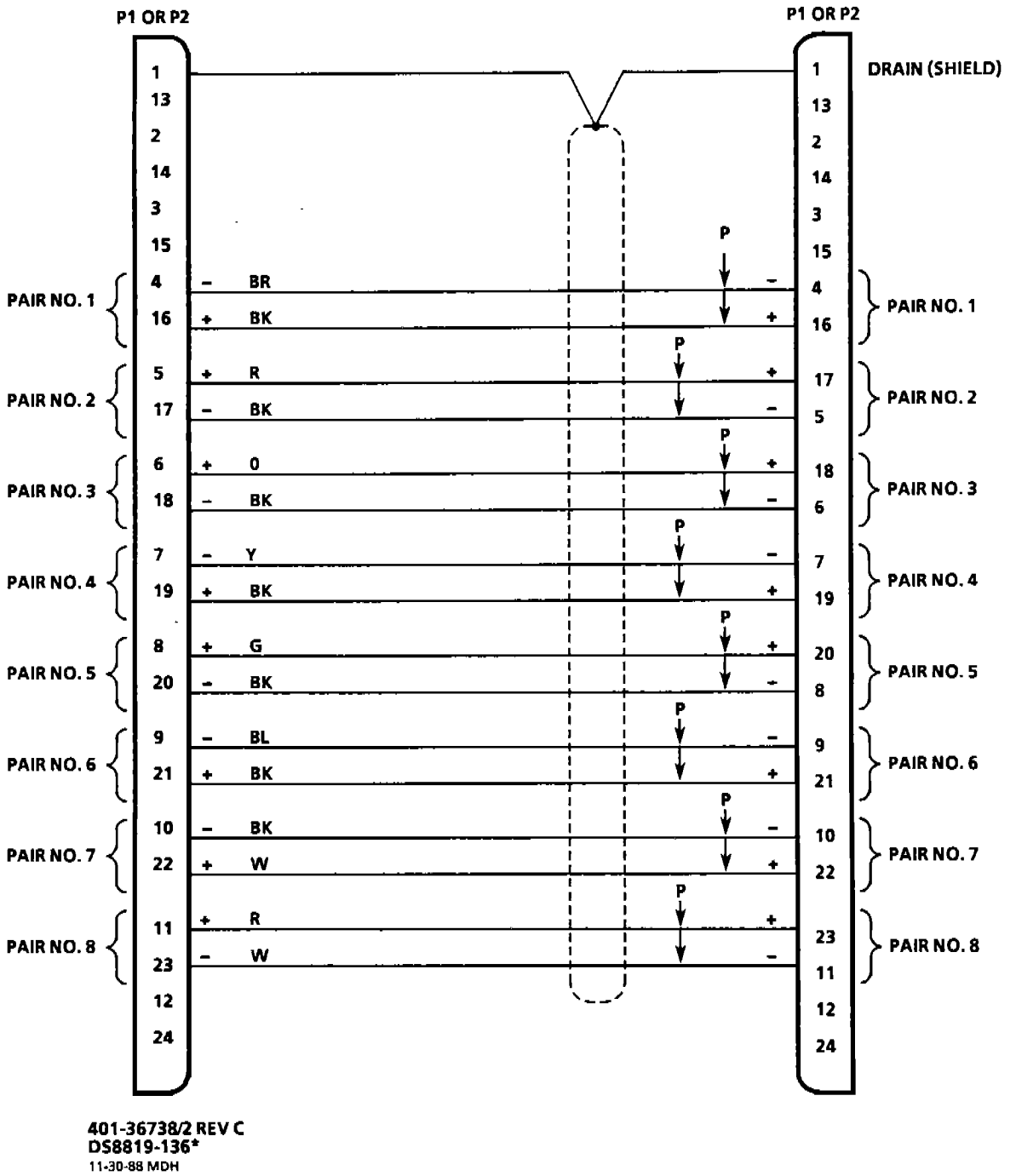


Figure 10-12. Keyboard Interconnect Cable, 401-36738-01 thru -11, Schematic Diagram

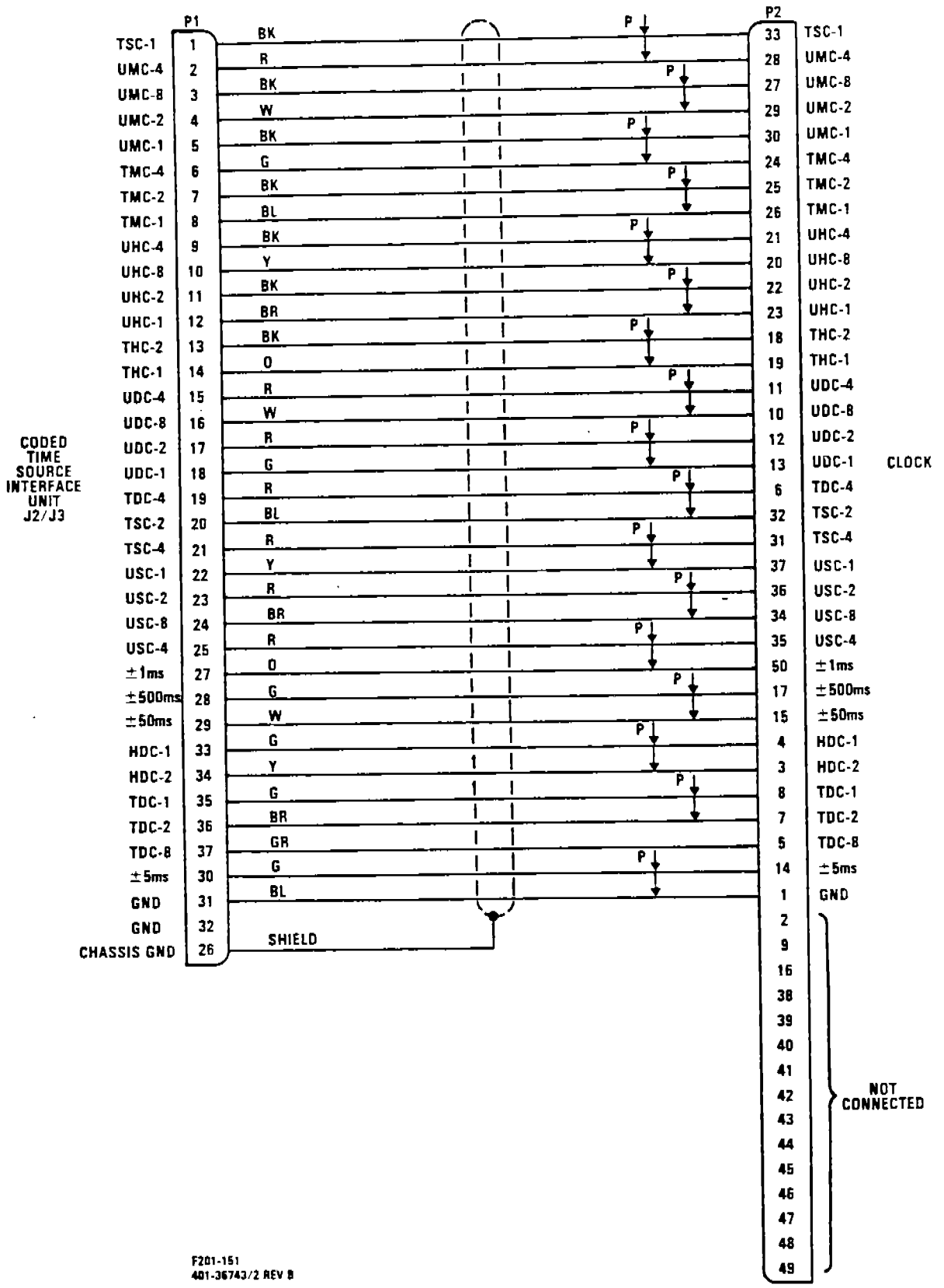


Figure 10-13. Coded Time Source Interface/ Coded Time Source Cable, 401-36743-01, Schematic Diagram

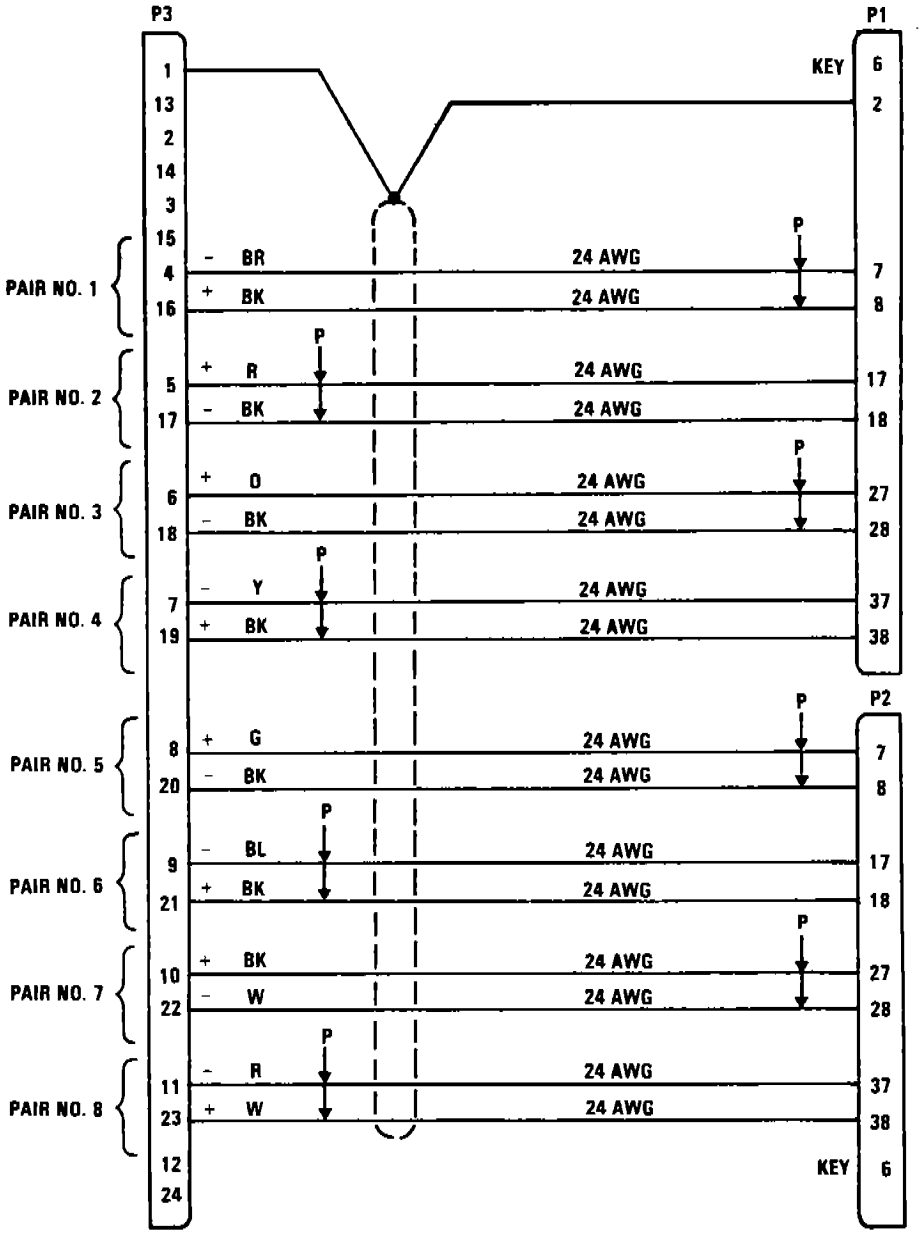
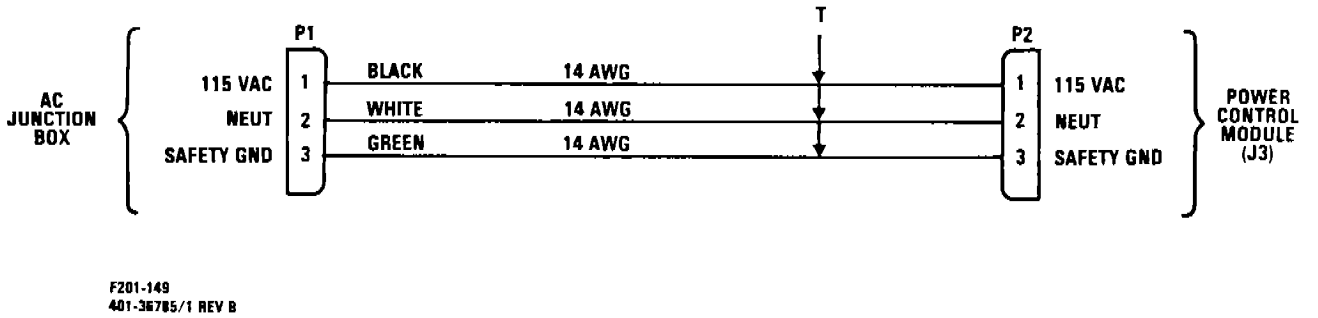


Figure 10-14. Keyboard Position Processor Cable, 401-36773-01, Schematic Diagram



F201-149
401-36785/1 REV B

Figure 10-15. Power Control Module AC Cable, 401-36785-01 thru -03, Schematic Diagram

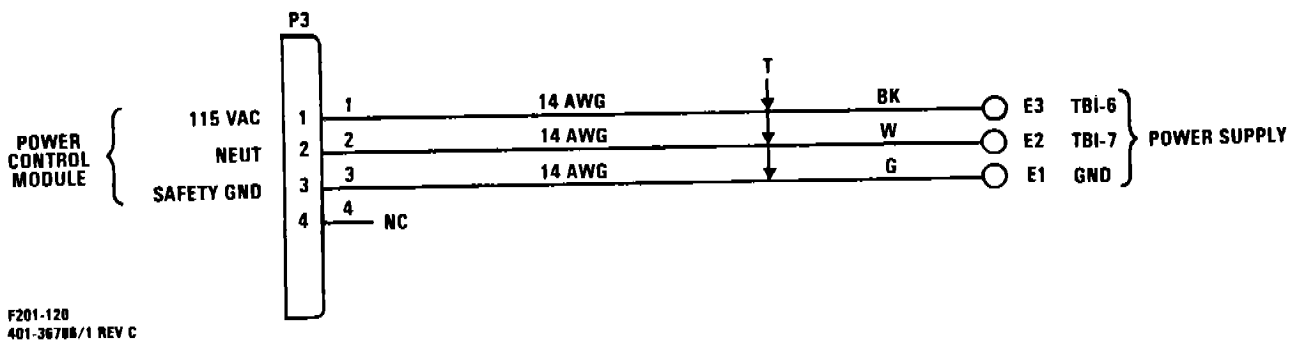


Figure 10-16. AC Power Supply Cable, 401-36786-01, Schematic Diagram

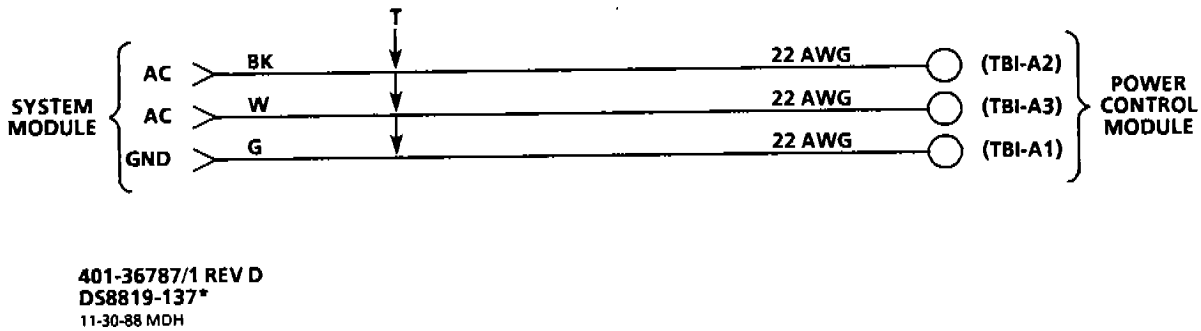


Figure 10-17. Power Fail/Restart Cable, 401-36787-02, Schematic Diagram

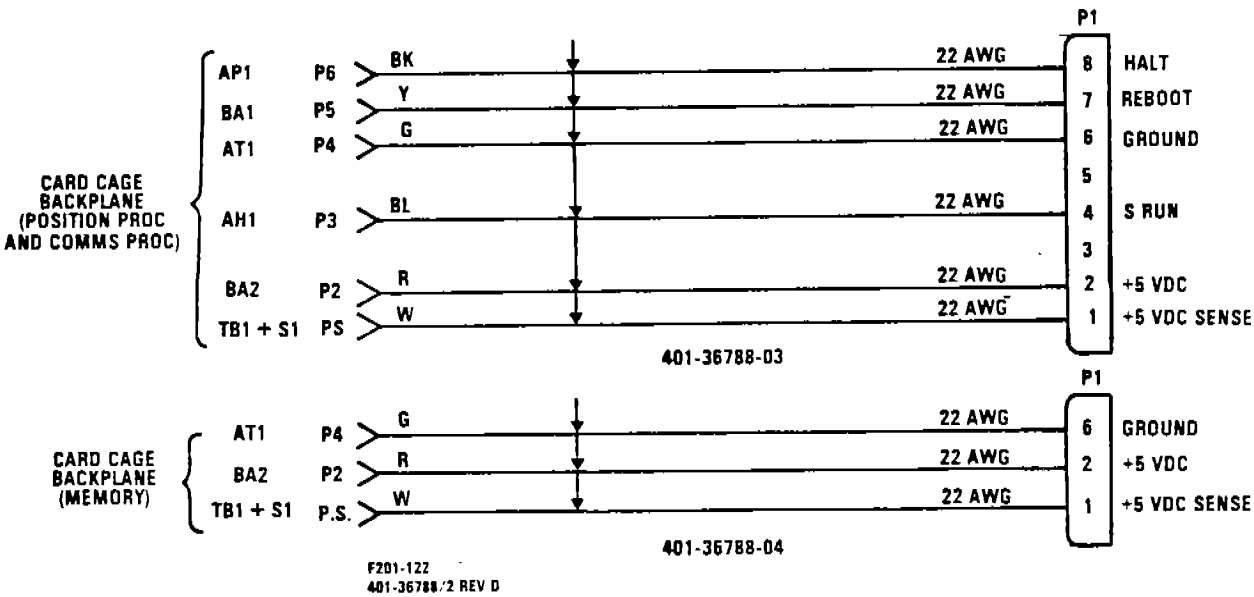


Figure 10-18. Power Control Module Signal Cable, 401-36788-03 and -04, Schematic Diagram

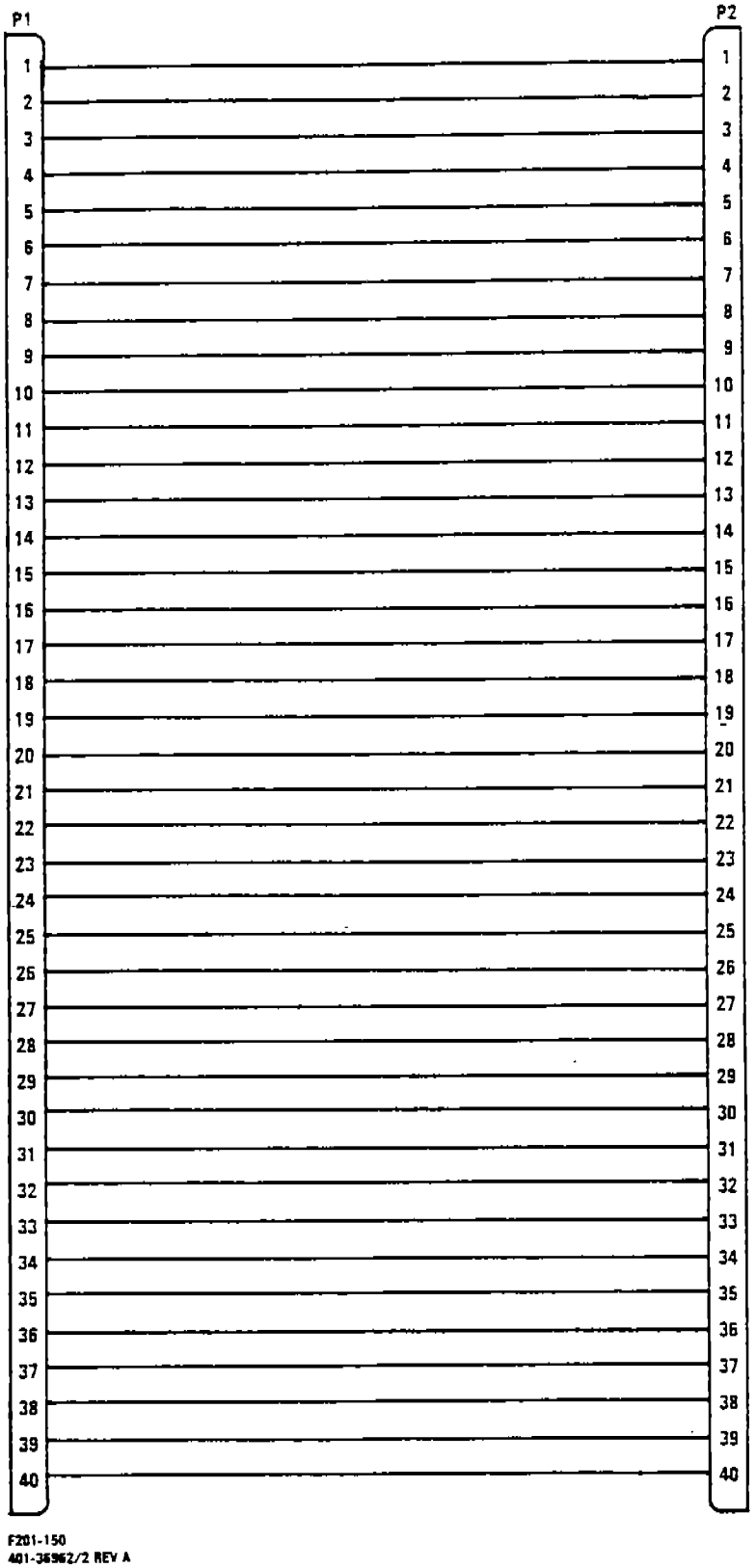


Figure 10-19. Interprocessor Bus Ribbon Cable, 401-36962-01 thru -04, Schematic Diagram

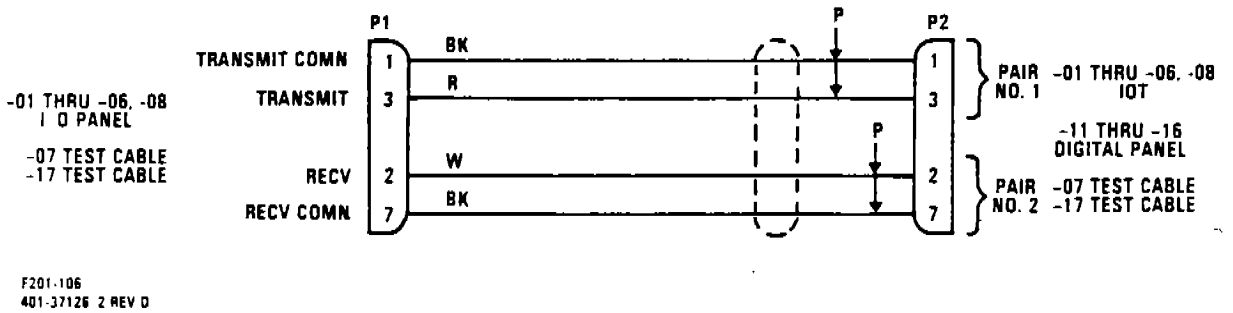


Figure 10-20. Serial I/O Cable, 401-37126-01 thru -16, Schematic Diagram

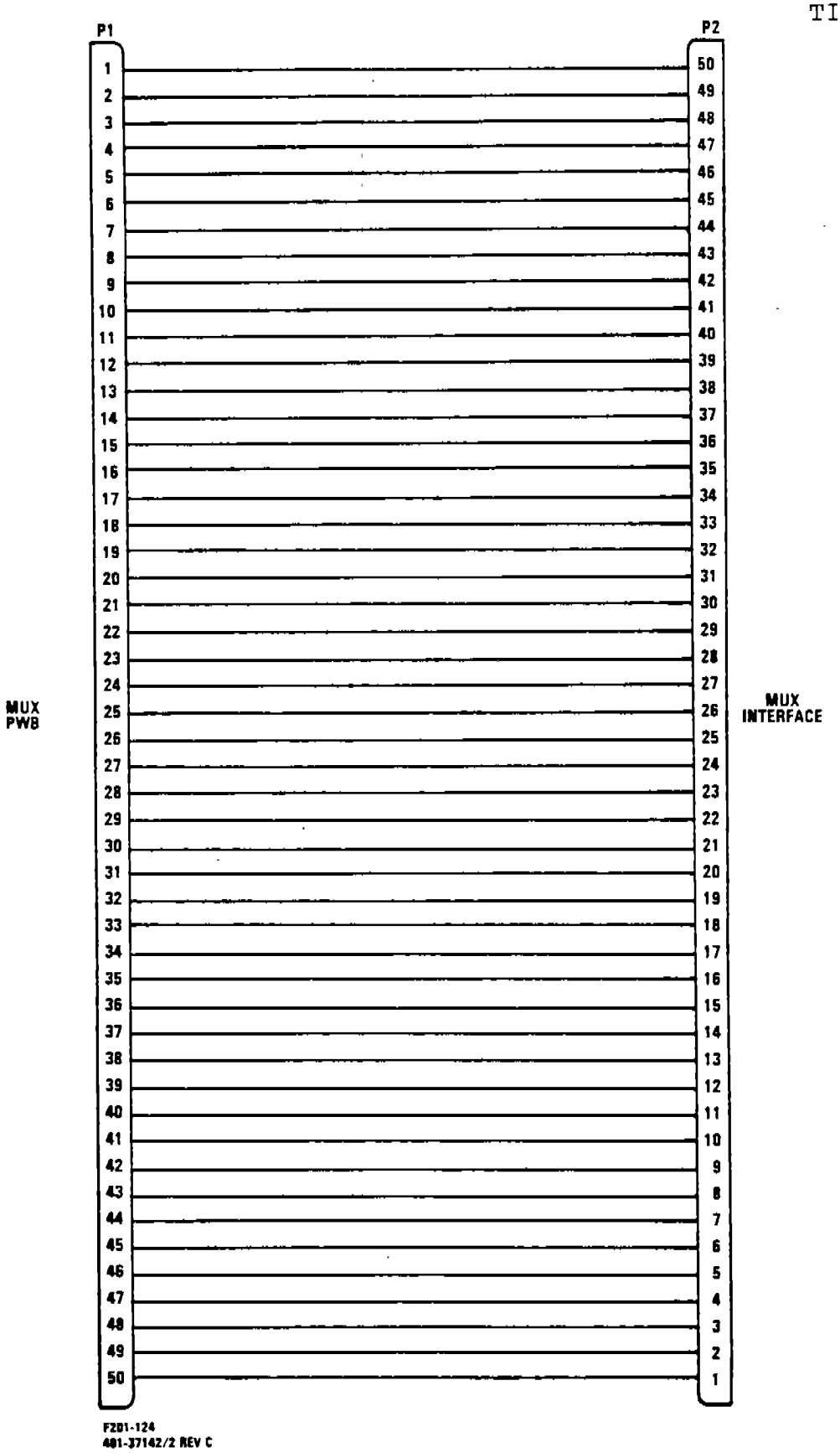
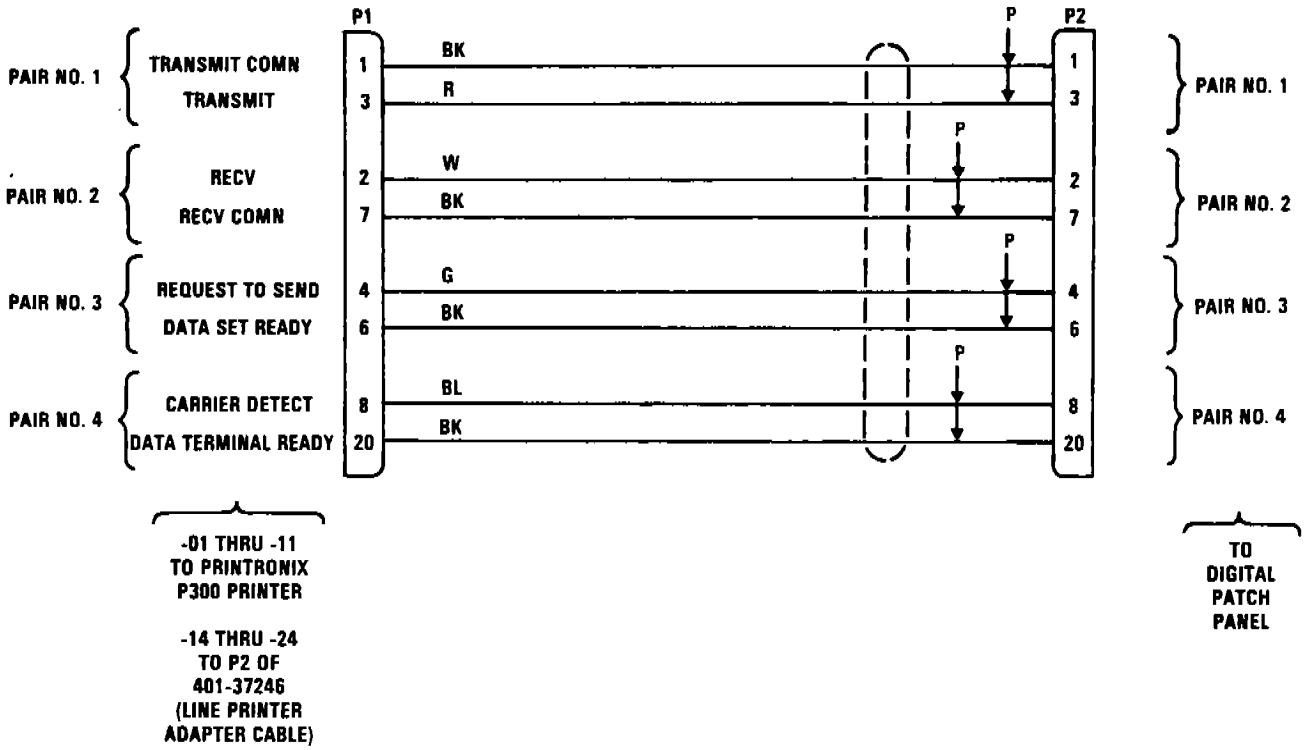


Figure 10-21. Multiplexer I/O Cable, 401-37142-01, Schematic Diagram



F201-105
401-37147/2 REV C

Figure 10-22. Line Printer Cable, 401-37147-01 thru -12, and -14 thru -25, Schematic Diagram

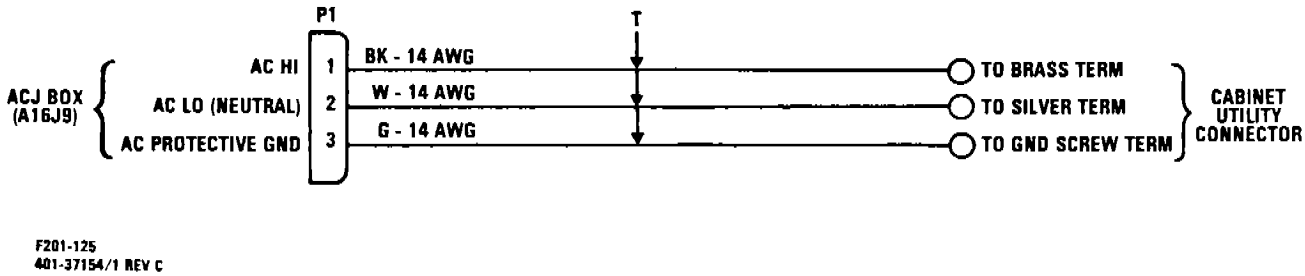


Figure 10-23. Utility Outlet Cable, 401-37154-01, Schematic Diagram

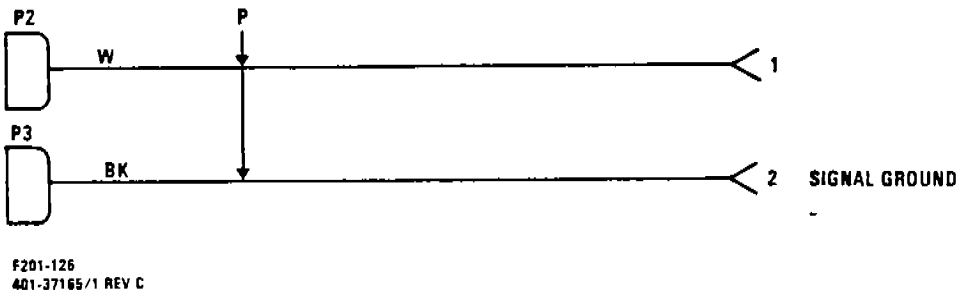


Figure 10-24. Video Processor/Memory Cable, 401-37165-01, Schematic Diagram

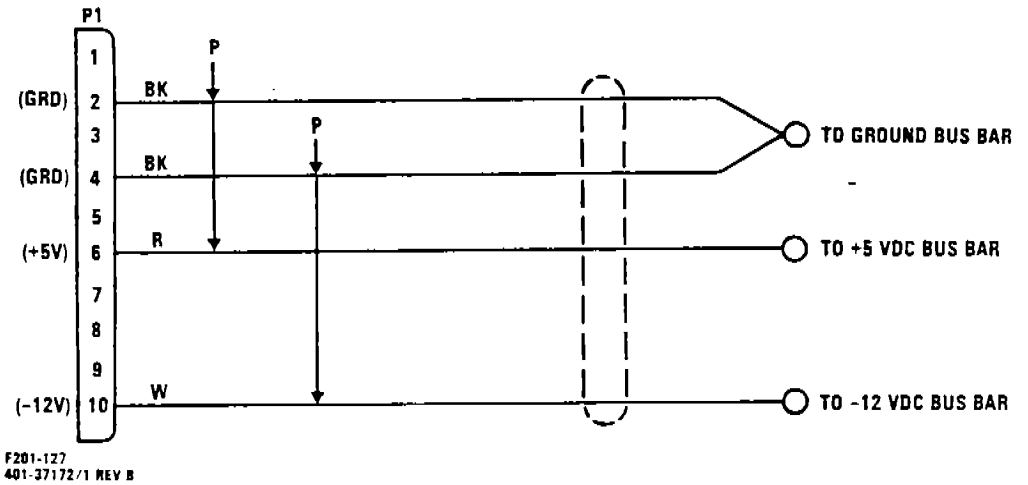


Figure 10-25. Multiplexer Interface Power Cable, 401-37172-01, Schematic Diagram

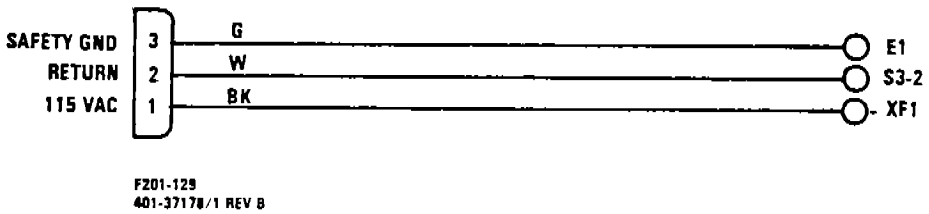


Figure 10-26. Coded Time Source AC Cable, 401-37178-01, Schematic Diagram

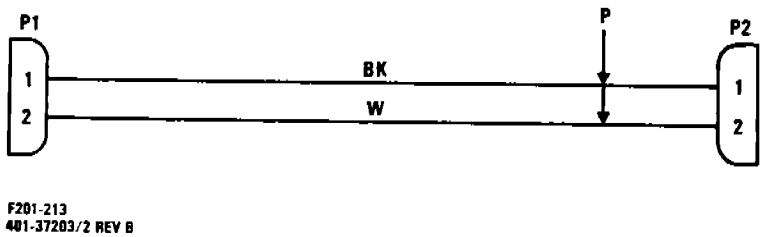


Figure 10-27. Thermal Sensor Cable, 401-37203-01 thru -05, Schematic Diagram

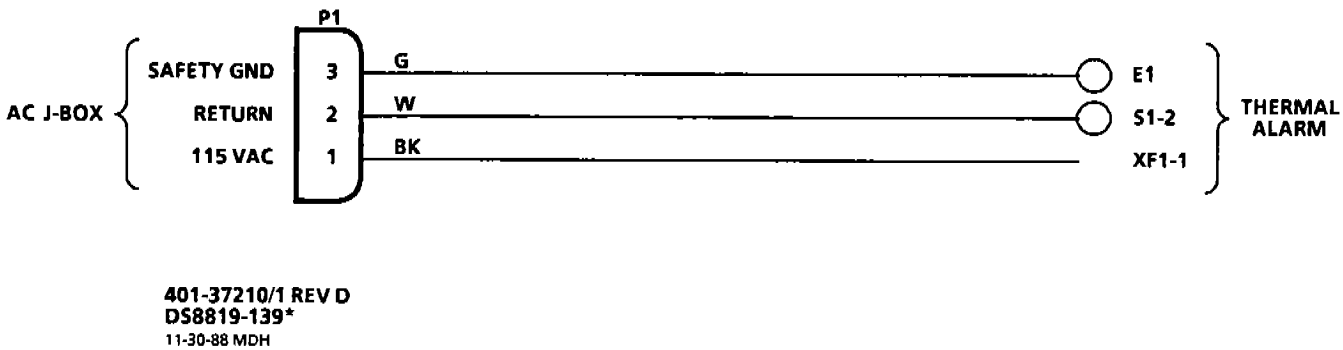


Figure 10-28. Thermal Alarm AC Cable, 401-37210-01 and -02, Schematic Diagram

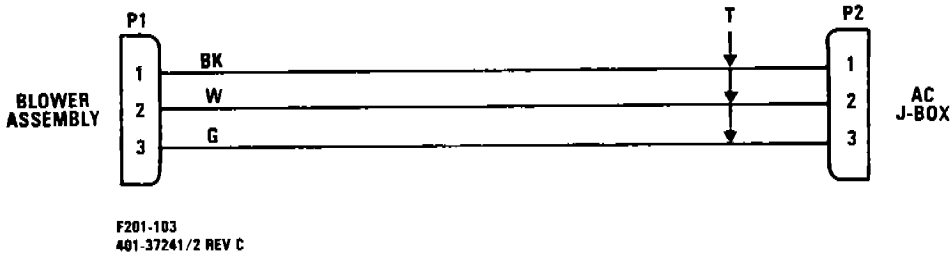


Figure 10-29. Fan AC Cable, 401-37241-01 and -03, Schematic Diagram

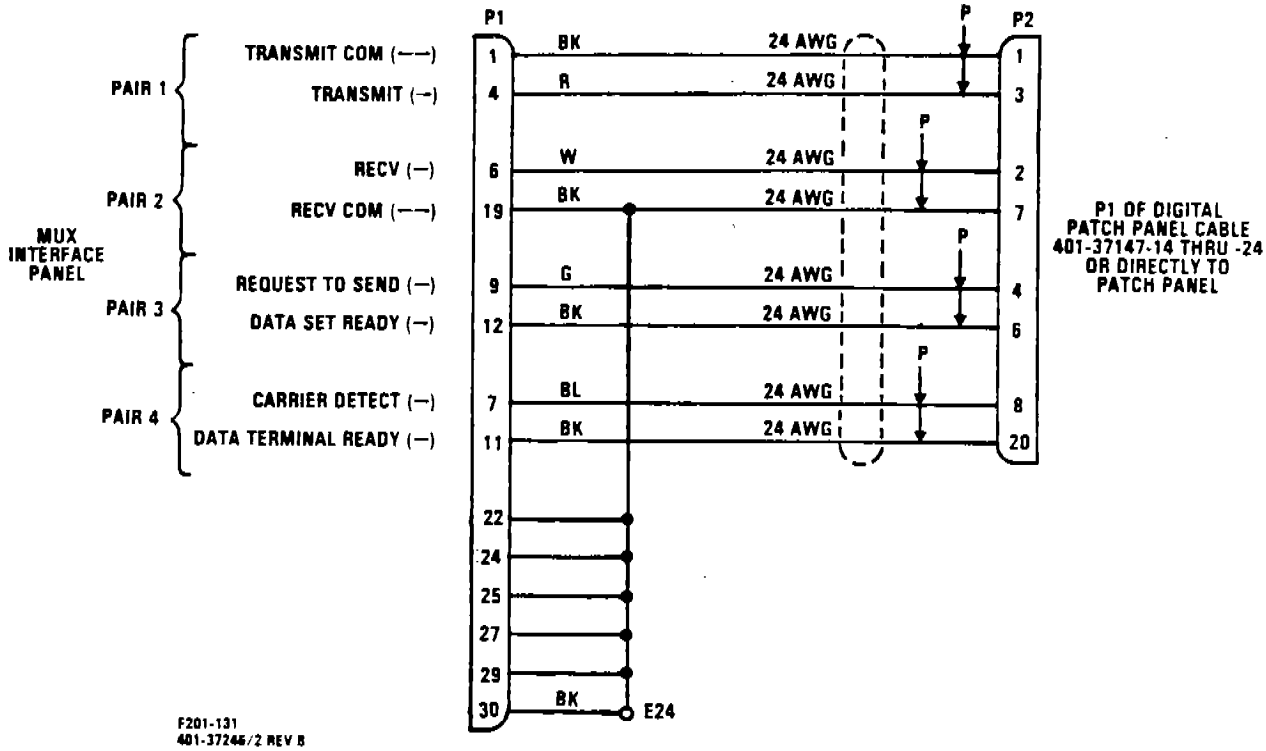
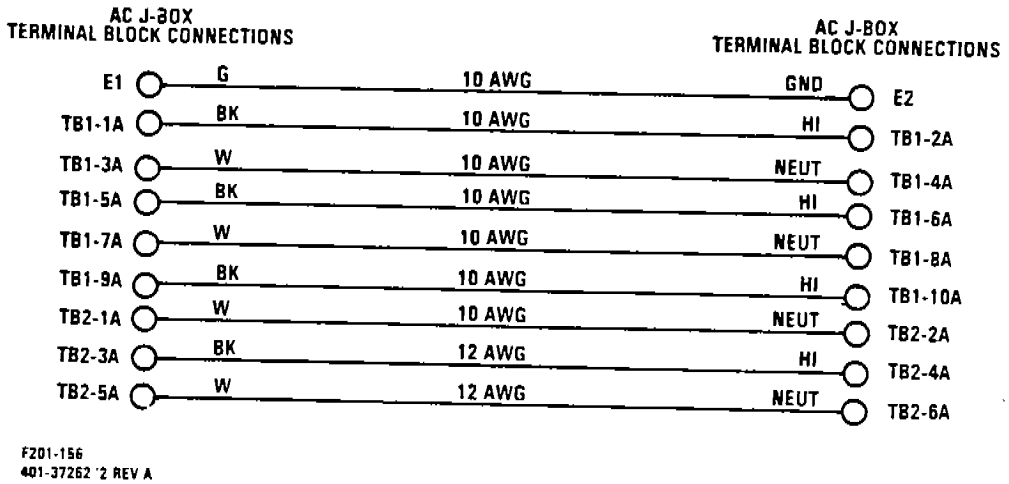


Figure 10-30. Line Printer Adapter Cable, 401-37246-01 and -02, Schematic Diagram



NOTE: THE PARTICULAR AC JUNCTION BOXES CONNECTED TO EITHER END OF THIS CABLE ARE DEFINED IN FIGURES 10-2 AND 10-6

Figure 10-31. Inter-Junction Box AC Cable, 401-37262-01, Schematic Diagram

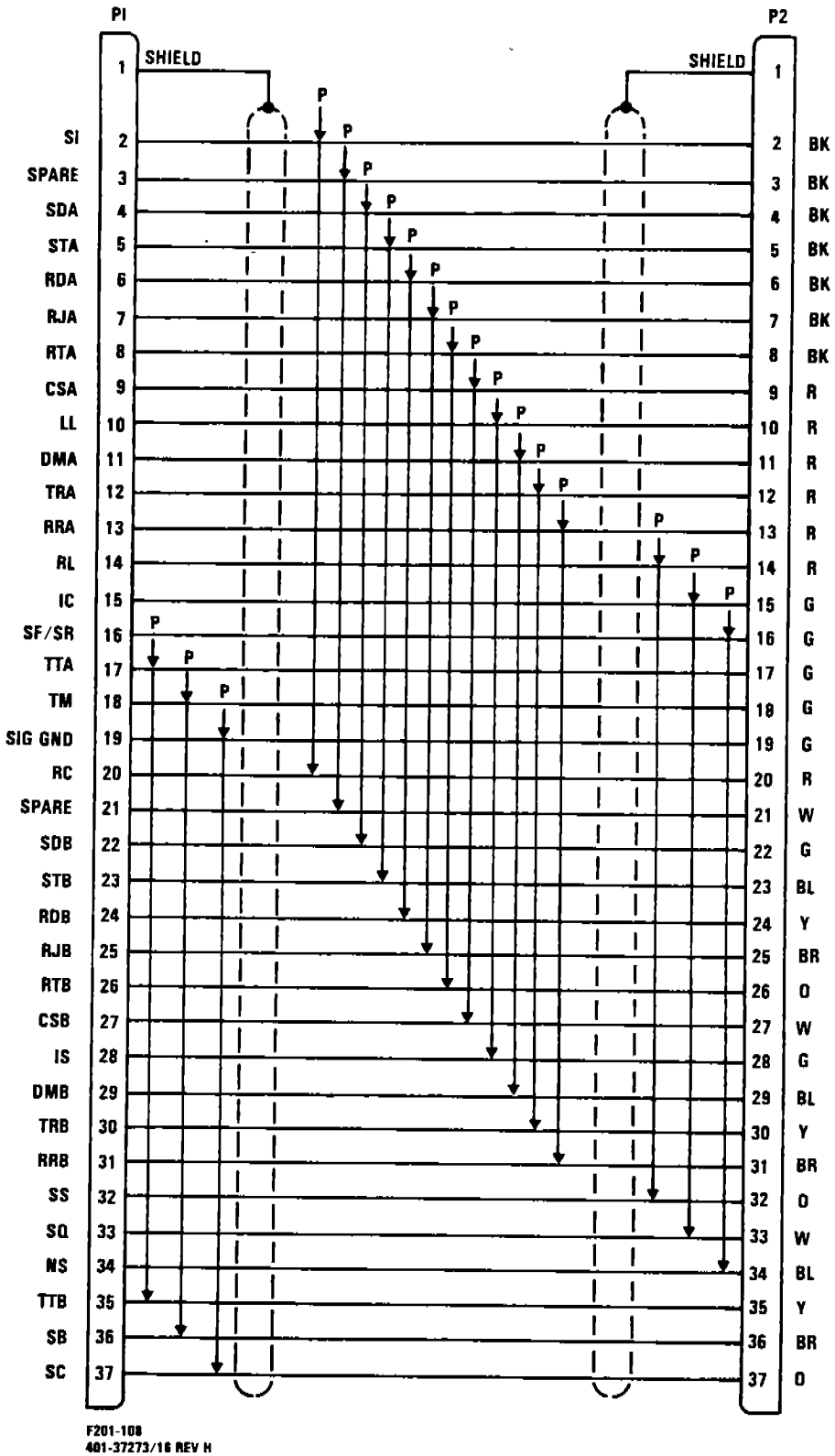


Figure 10-32. Communications Cable, 401-37273-01, -02, -14, -19, -22, and -27, Schematic Diagram

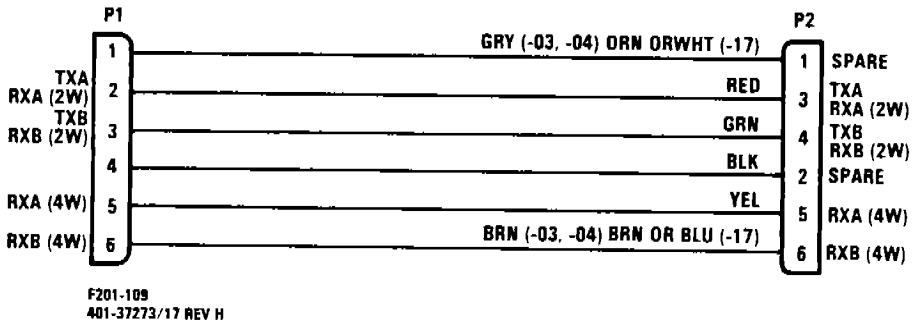


Figure 10-33. Communications Cable, 401-37273-03, -04, and -17, Schematic Diagram

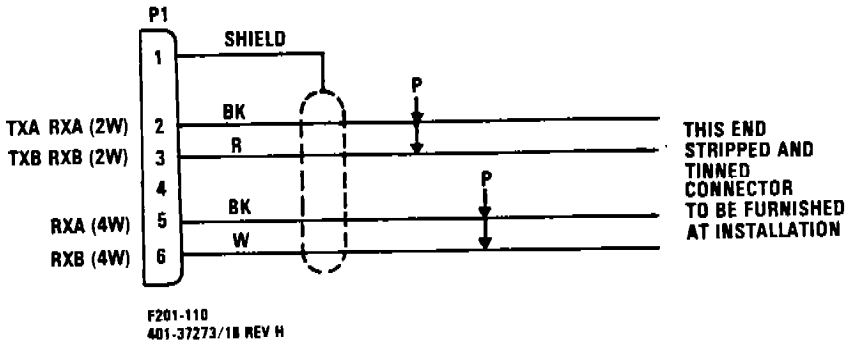


Figure 10-34. Communications Cable, 401-37273-05 and -18, Schematic Diagram

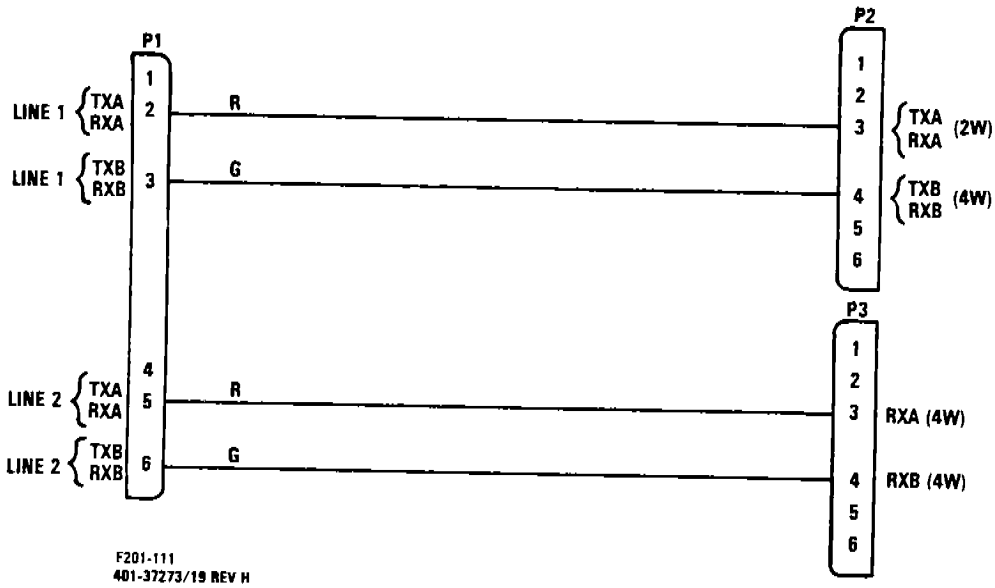


Figure 10-35. Communications Cable, 401-37273-06 and -07, Schematic Diagram

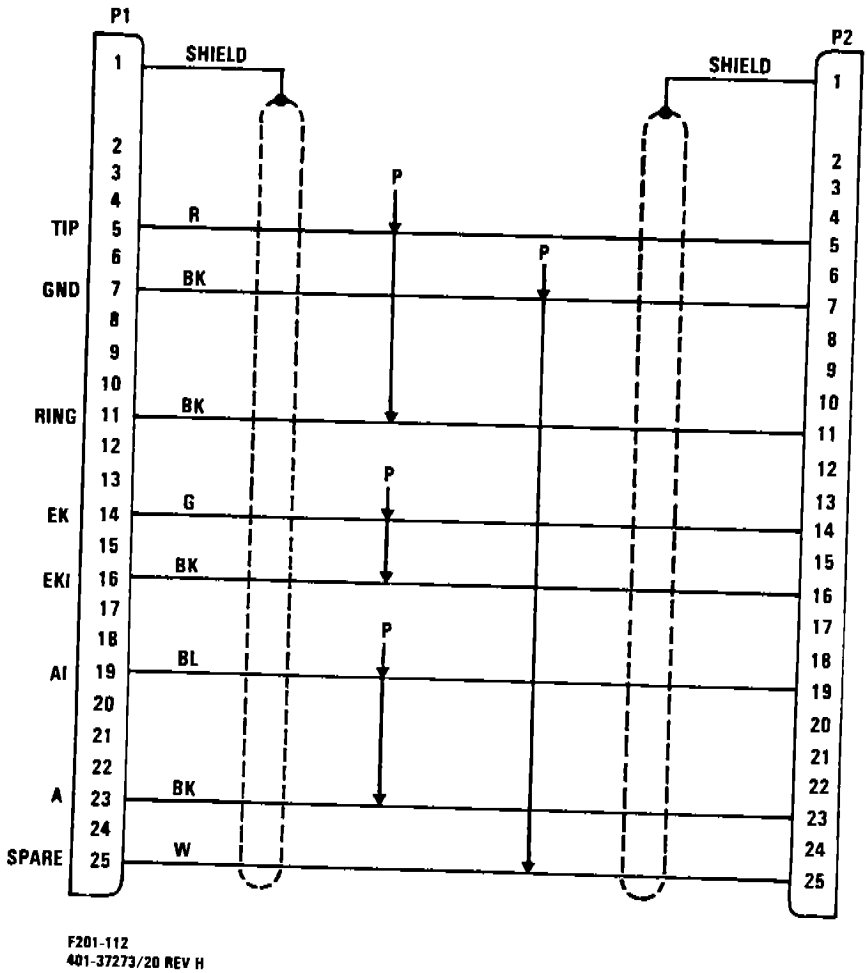


Figure 10-36. Communications Cable, 401-37273-08 and -23, Schematic Diagram

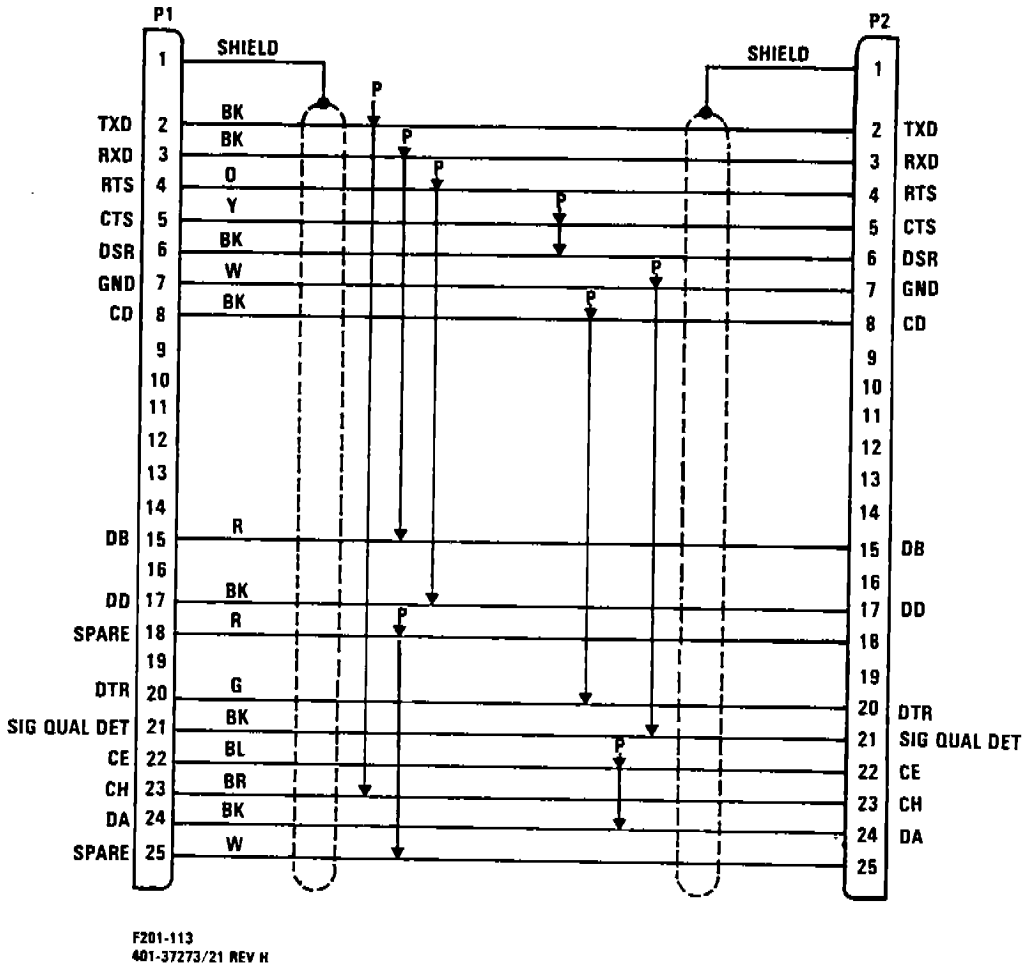


Figure 10-37. Communications Cable, 401-37273-09, -10, and -13, Schematic Diagram

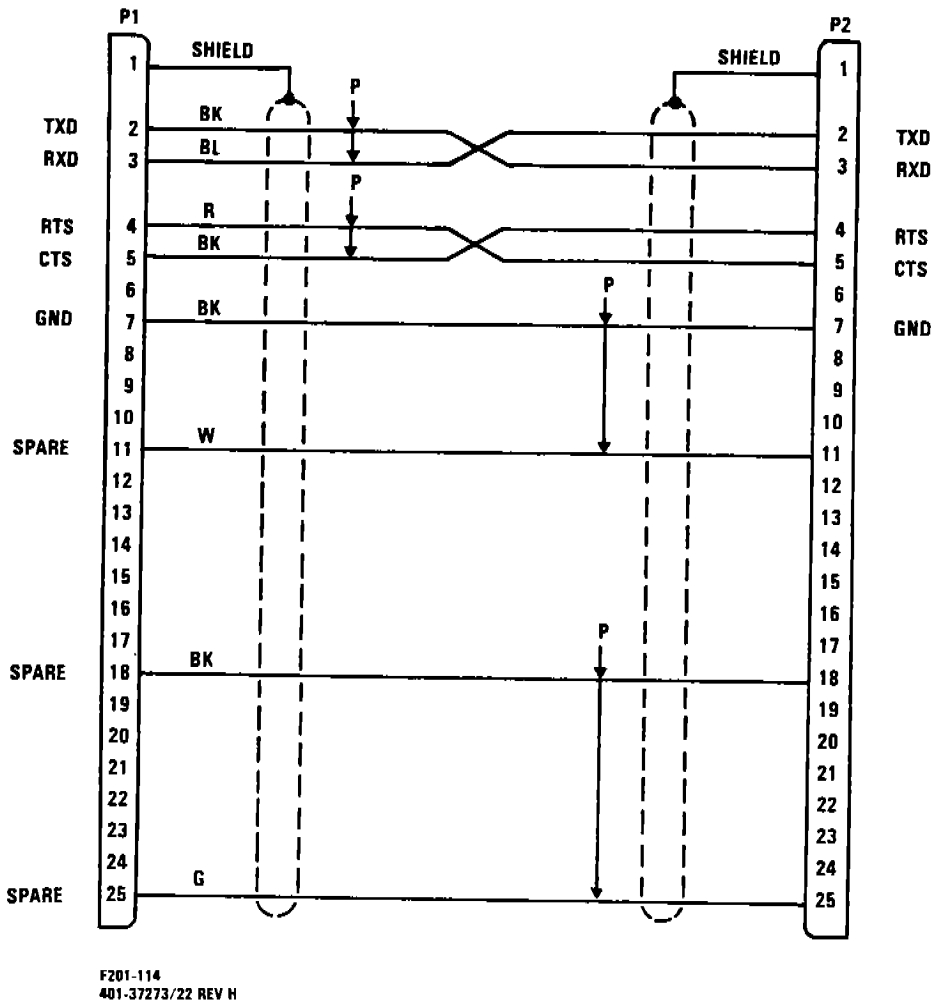


Figure 10-38. Communications Cable, 401-37273-11, Schematic Diagram

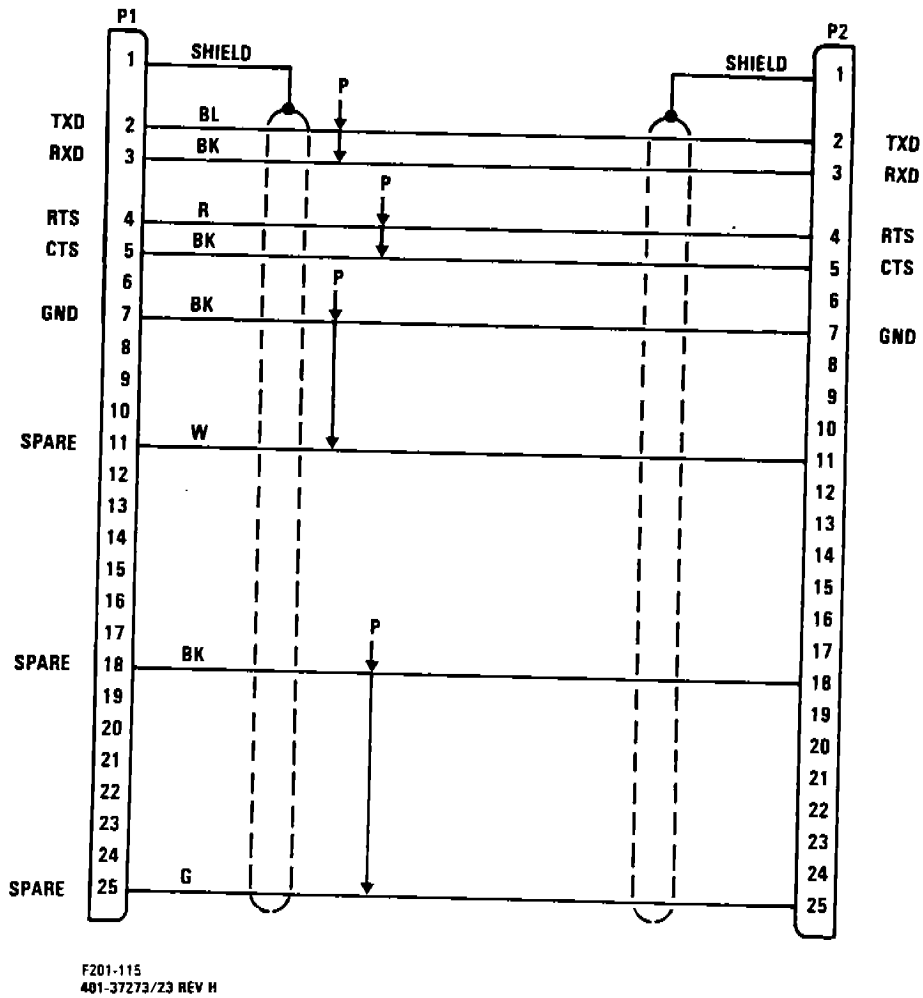


Figure 10-39. Communications Cable, 401-37273-12 and -20, Schematic Diagram

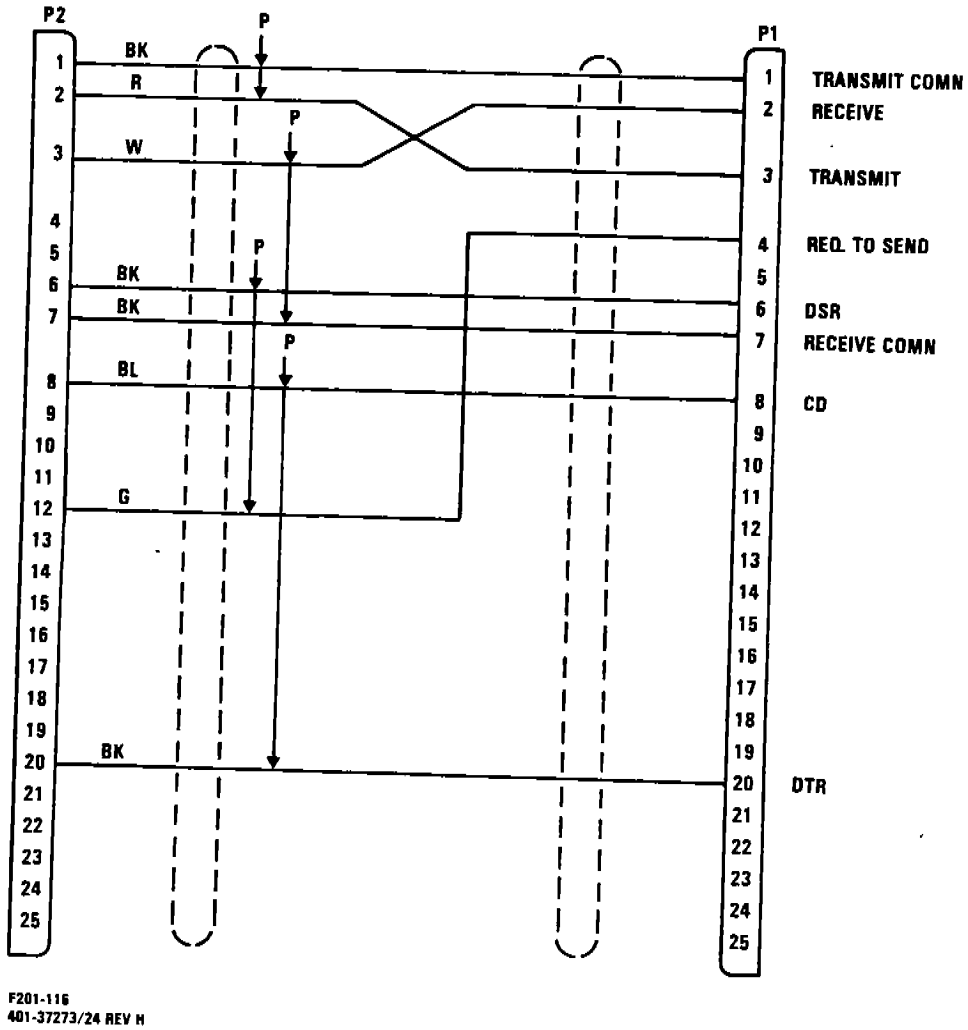


Figure 10-40. Communications Cable, 401-37273-15, Schematic Diagram

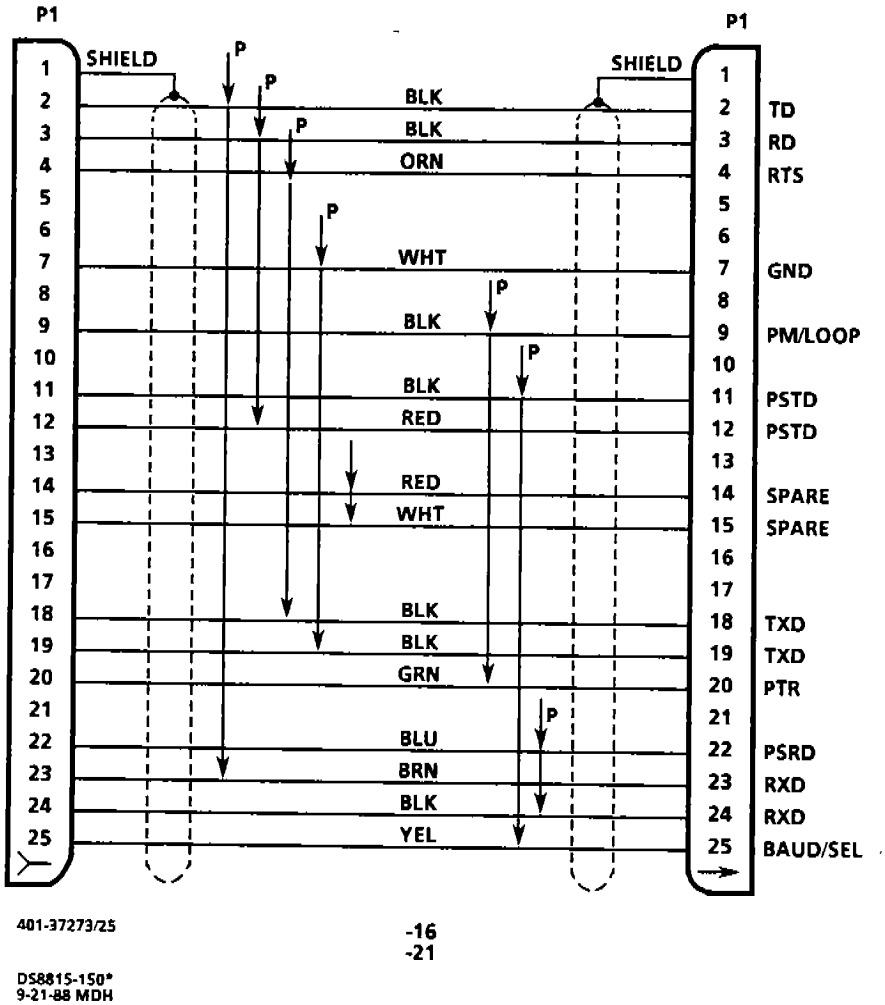


Figure 10-41. Communications Cable, 401-37273-16 and -21, Schematic Diagram

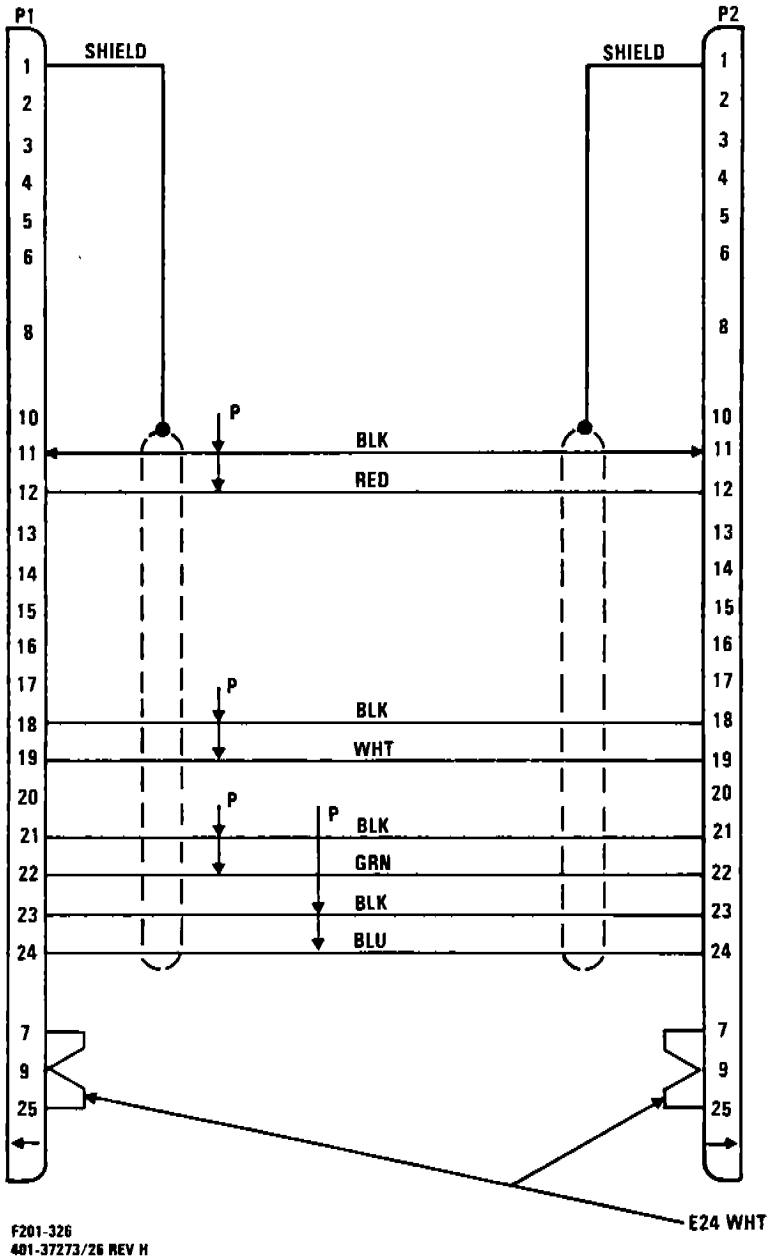


Figure 10-42. Communications Cable, 401-37273-30, Schematic Diagram

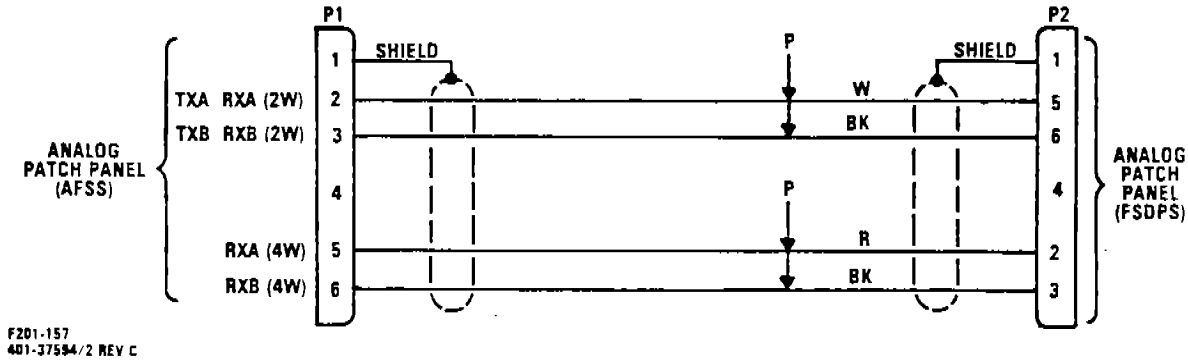


Figure 10-43. Analog Patch Cable, 401-37594-01 thru -09, Schematic Diagram

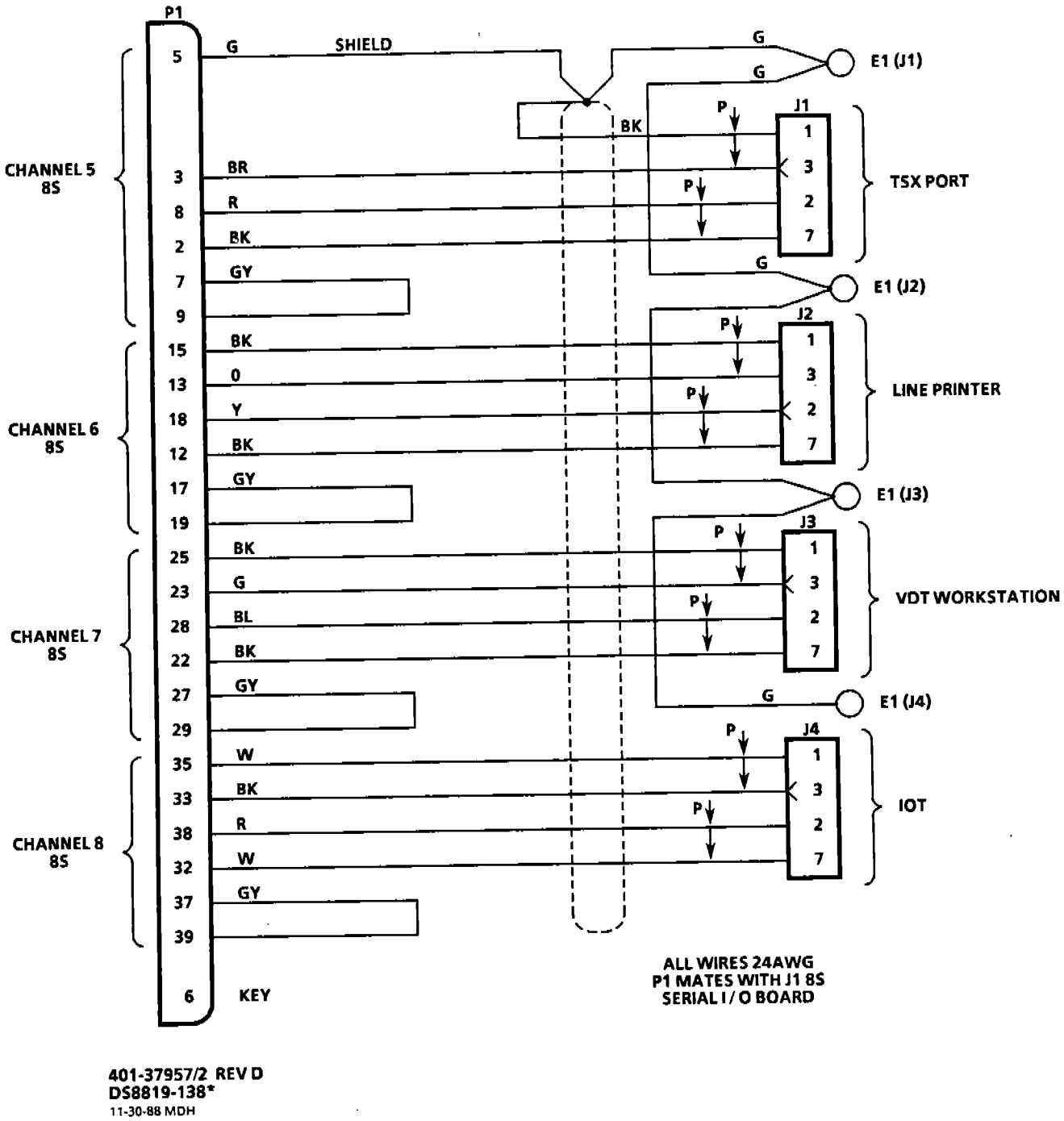


Figure 10-44. Serial Signal Cable, 401-37957-01, Schematic Diagram

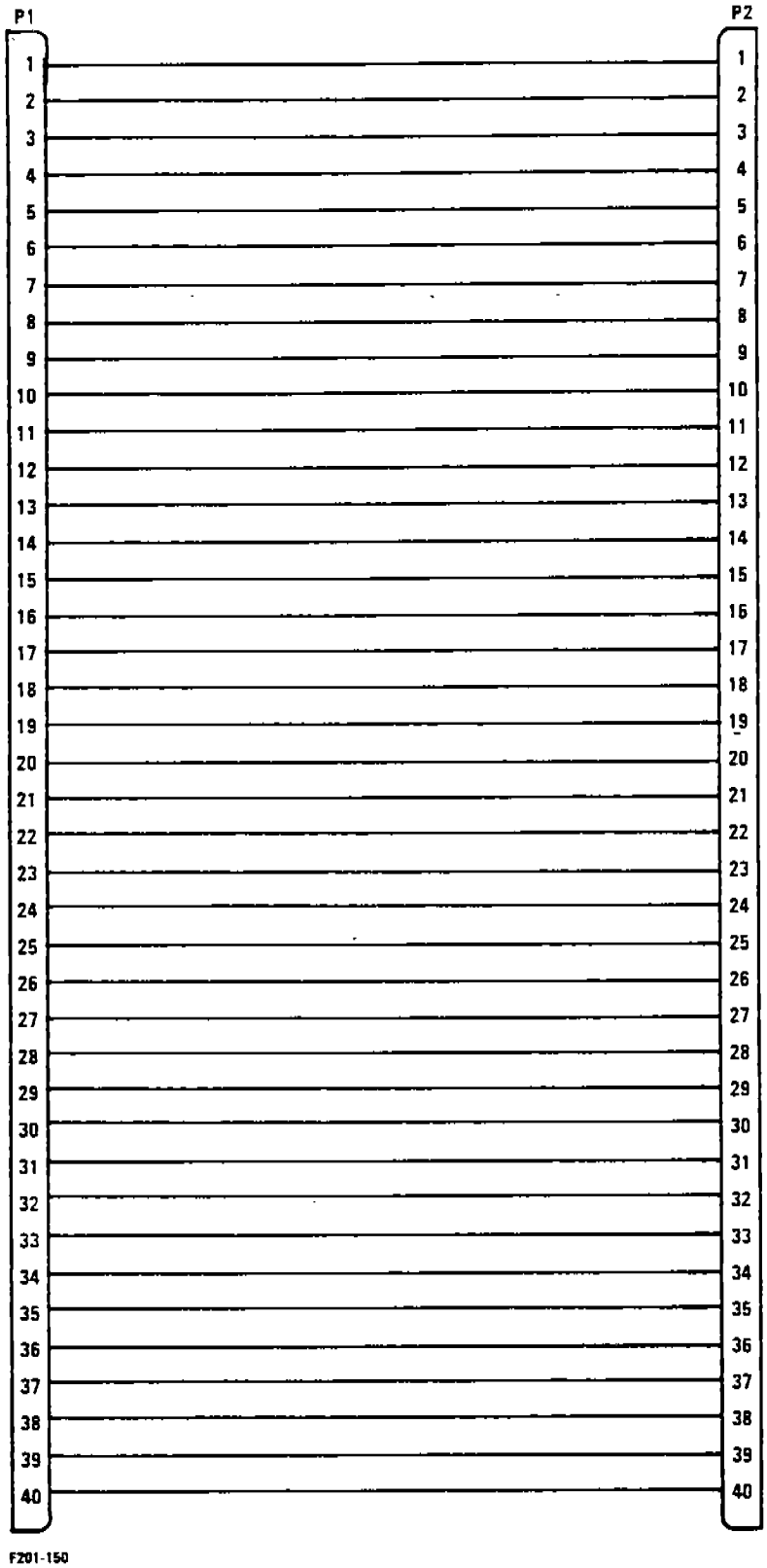


Figure 10-45. DMA Cable, 401-37976-01 thru 401-37993-01, Schematic Diagram

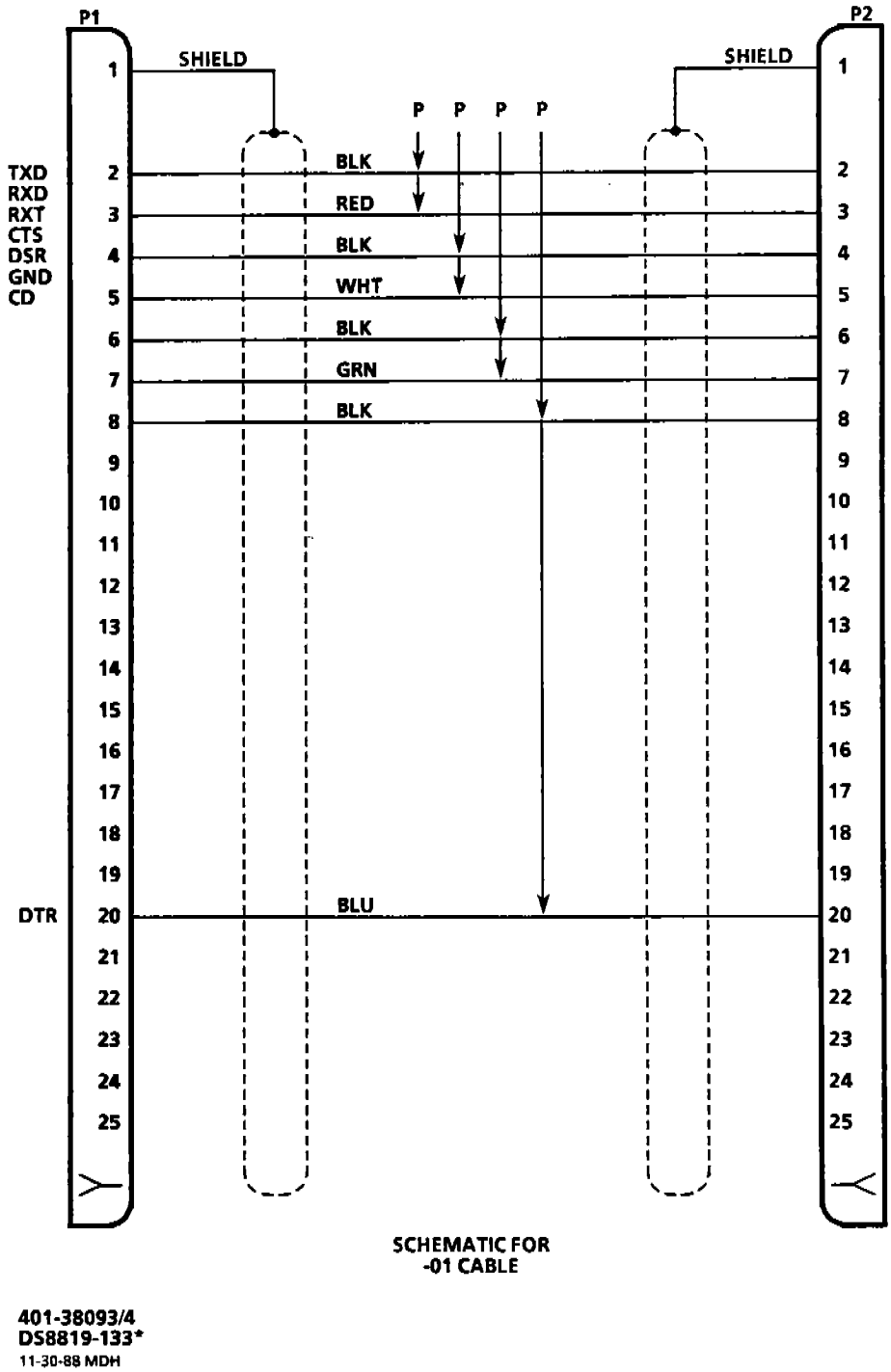


Figure 10-46. Communications Cable, Tandem/OSP, 401-38093-01, Schematic Diagram

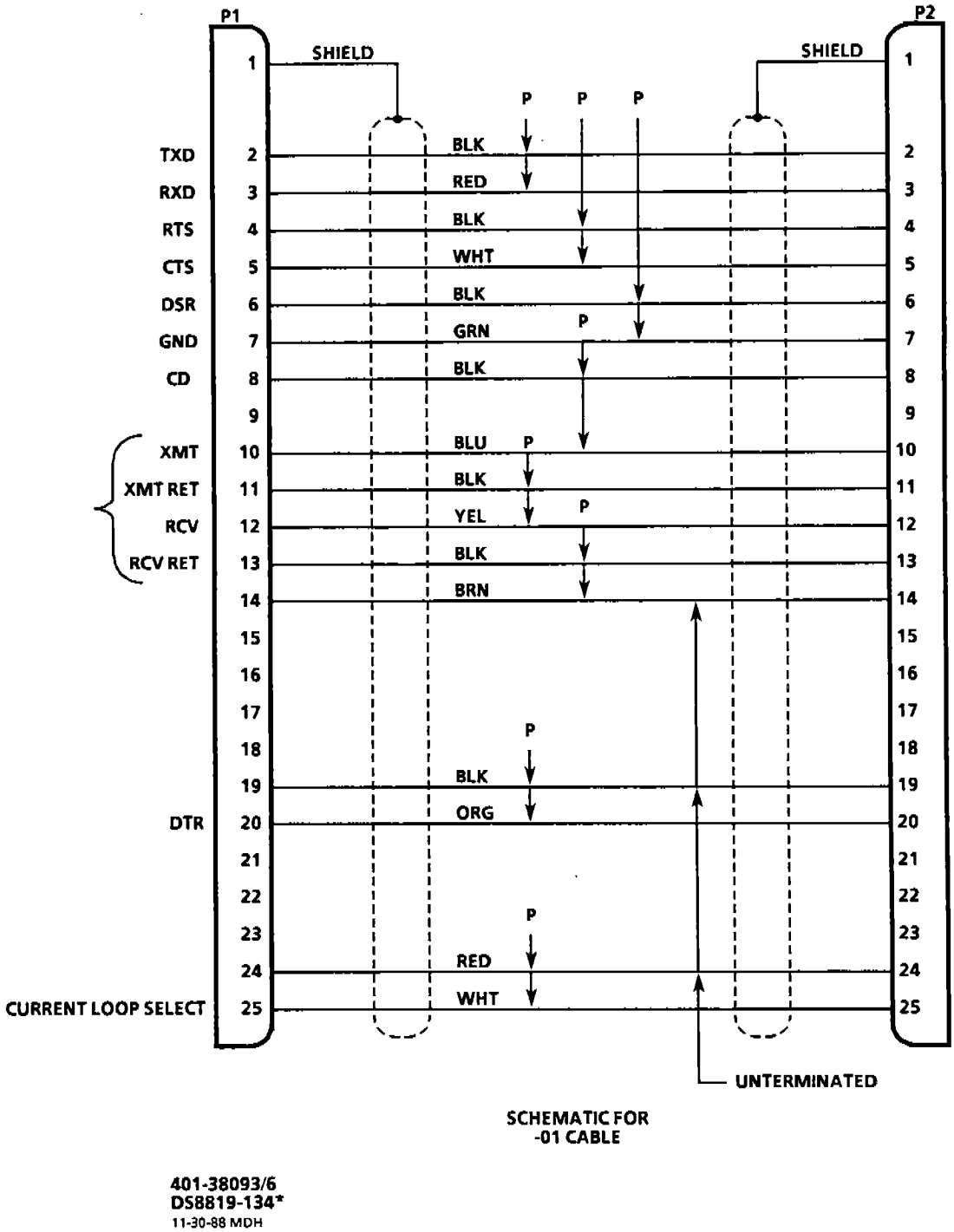


Figure 10-47. Communications Cable, Tandem/OSP, 401-38093-02, Schematic Diagram

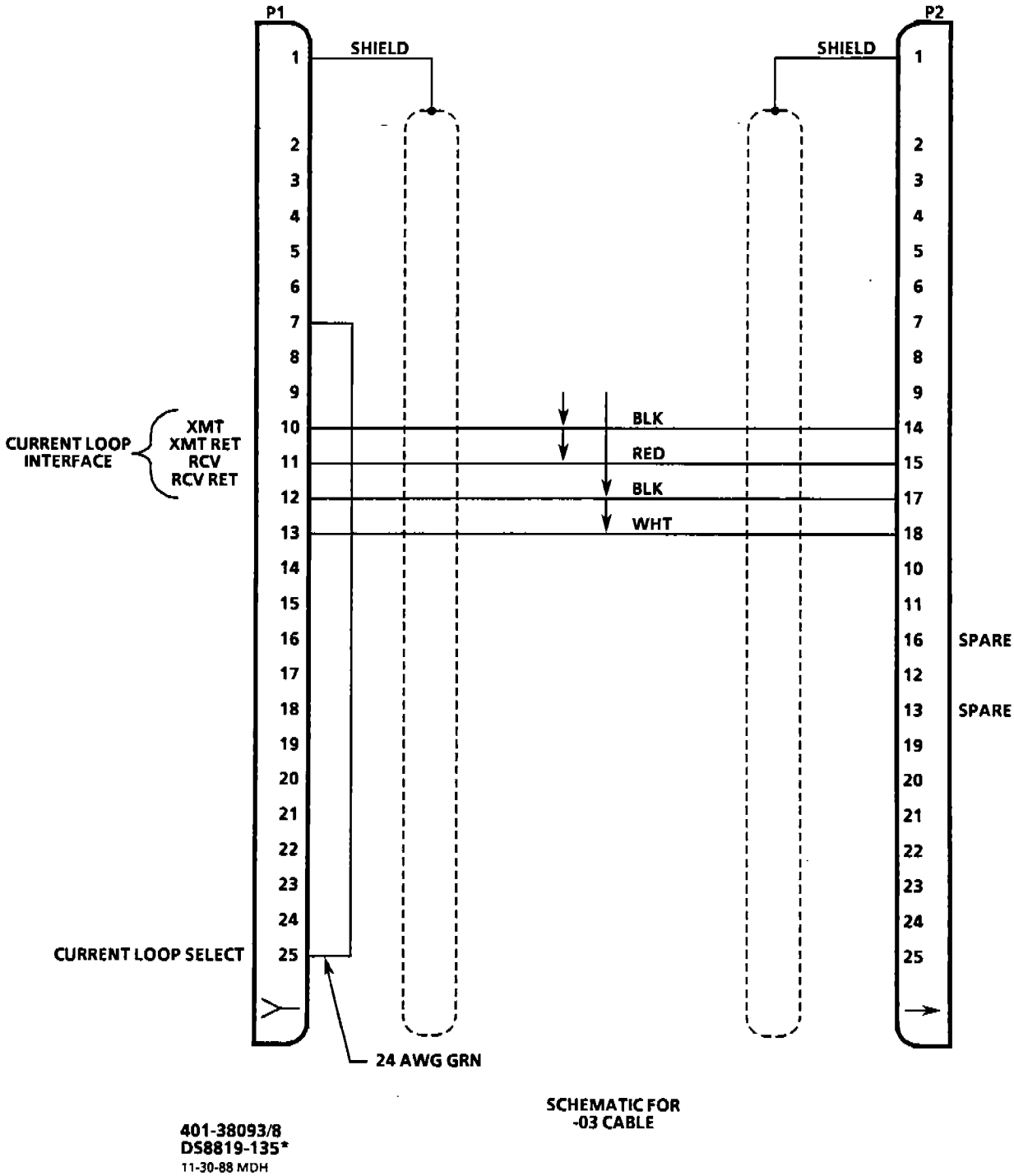


Figure 10-48. Communications Cable, Tandem/OSP, 401-38093-03, Schematic Diagram

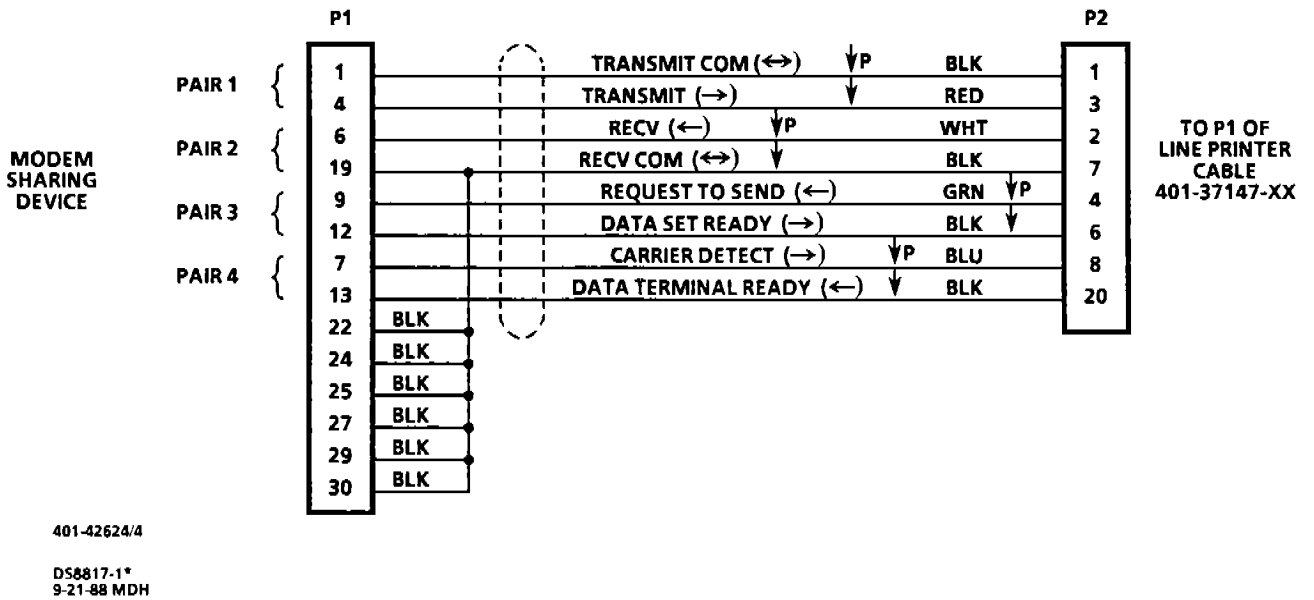


Figure 10-49. Line Printer Adaptor Cable, 401-42624-01, Schematic Diagram

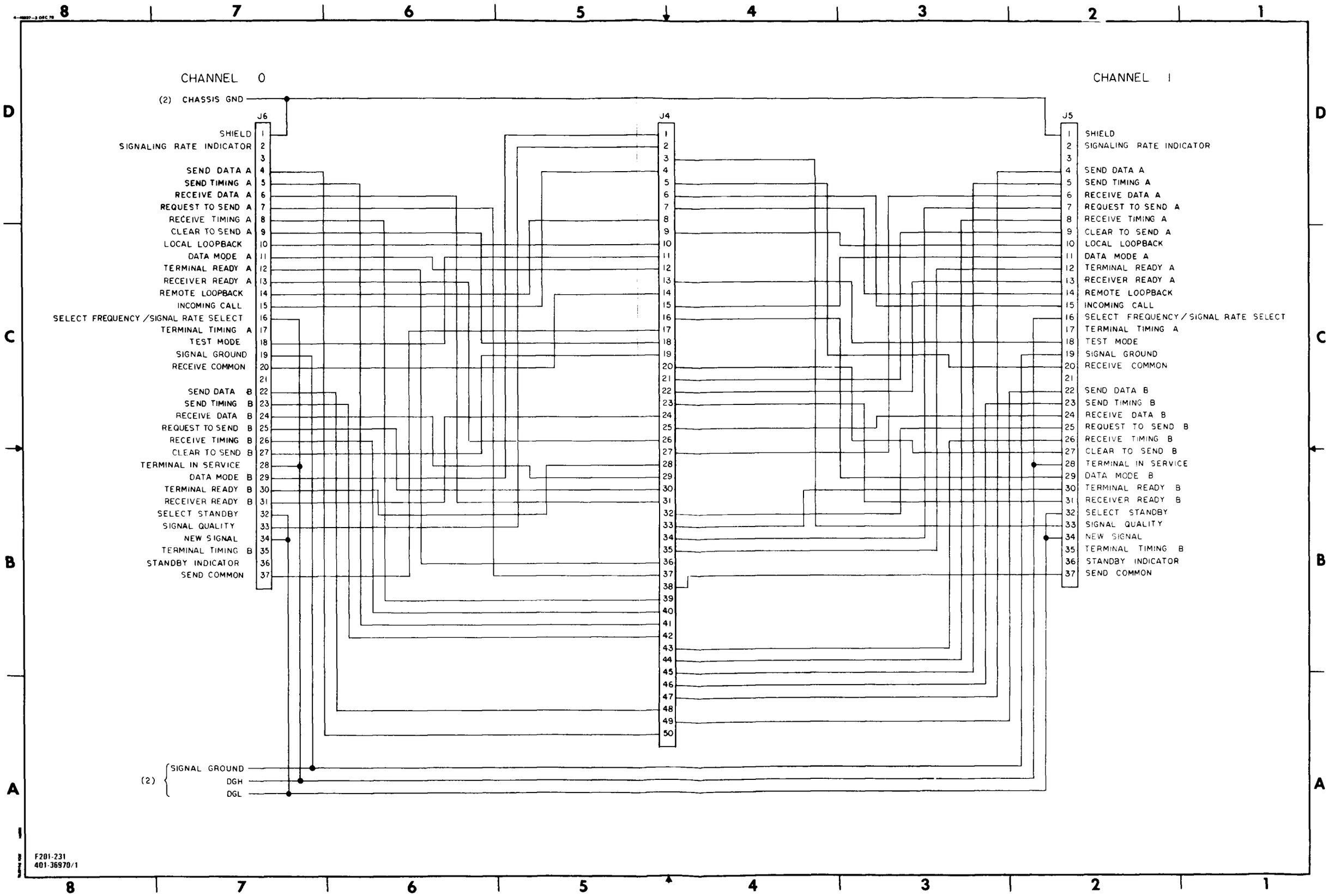


Figure 10-50. Multiplexer Interface Circuit Card, 401-36968-02, 401-37170, Schematic Diagram (Sheet 1 of 3)

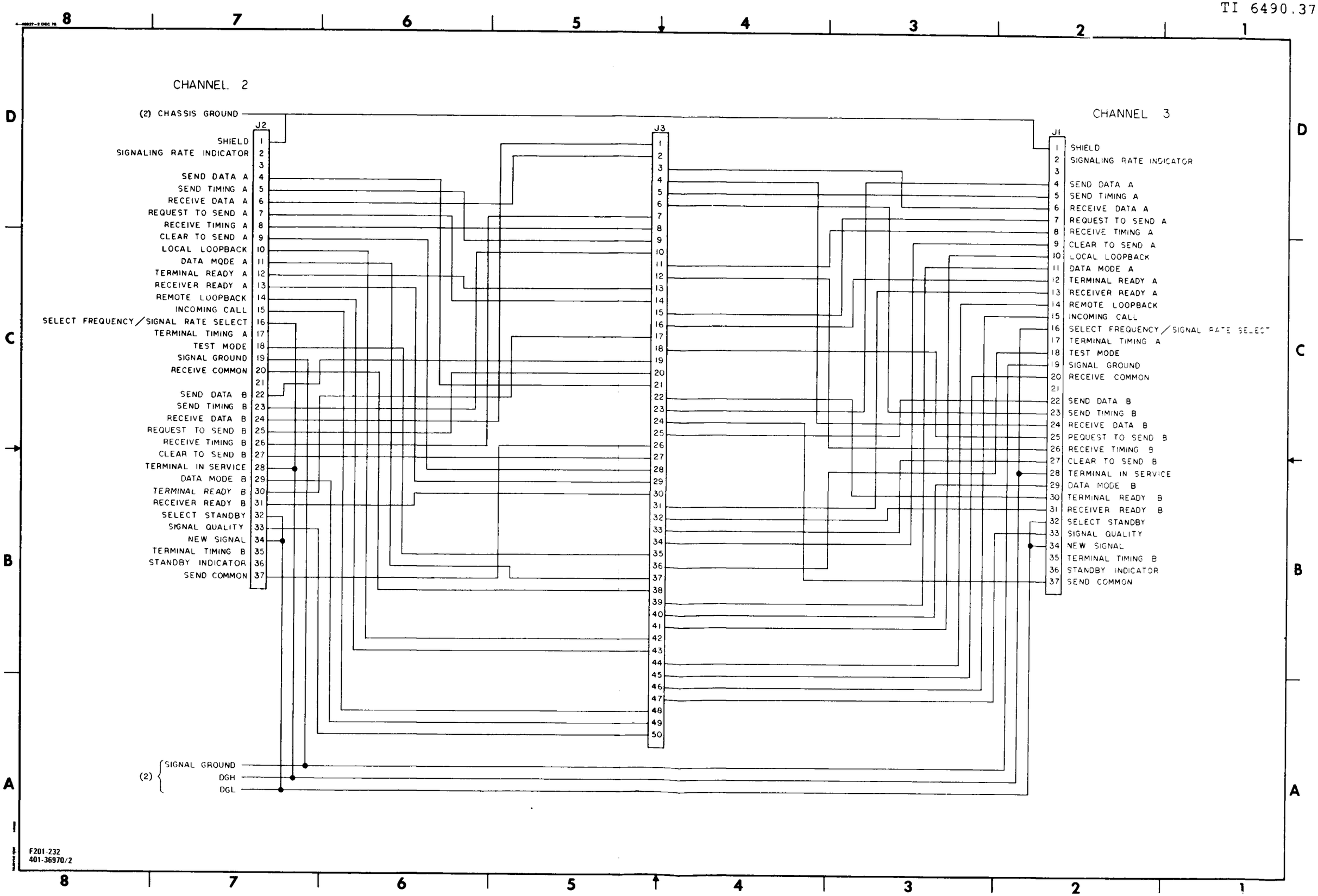


Figure 10-50. Multiplexer Interface Circuit Card, 401-36968-02, 401-37170, Schematic Diagram (Sheet 2 of 3)

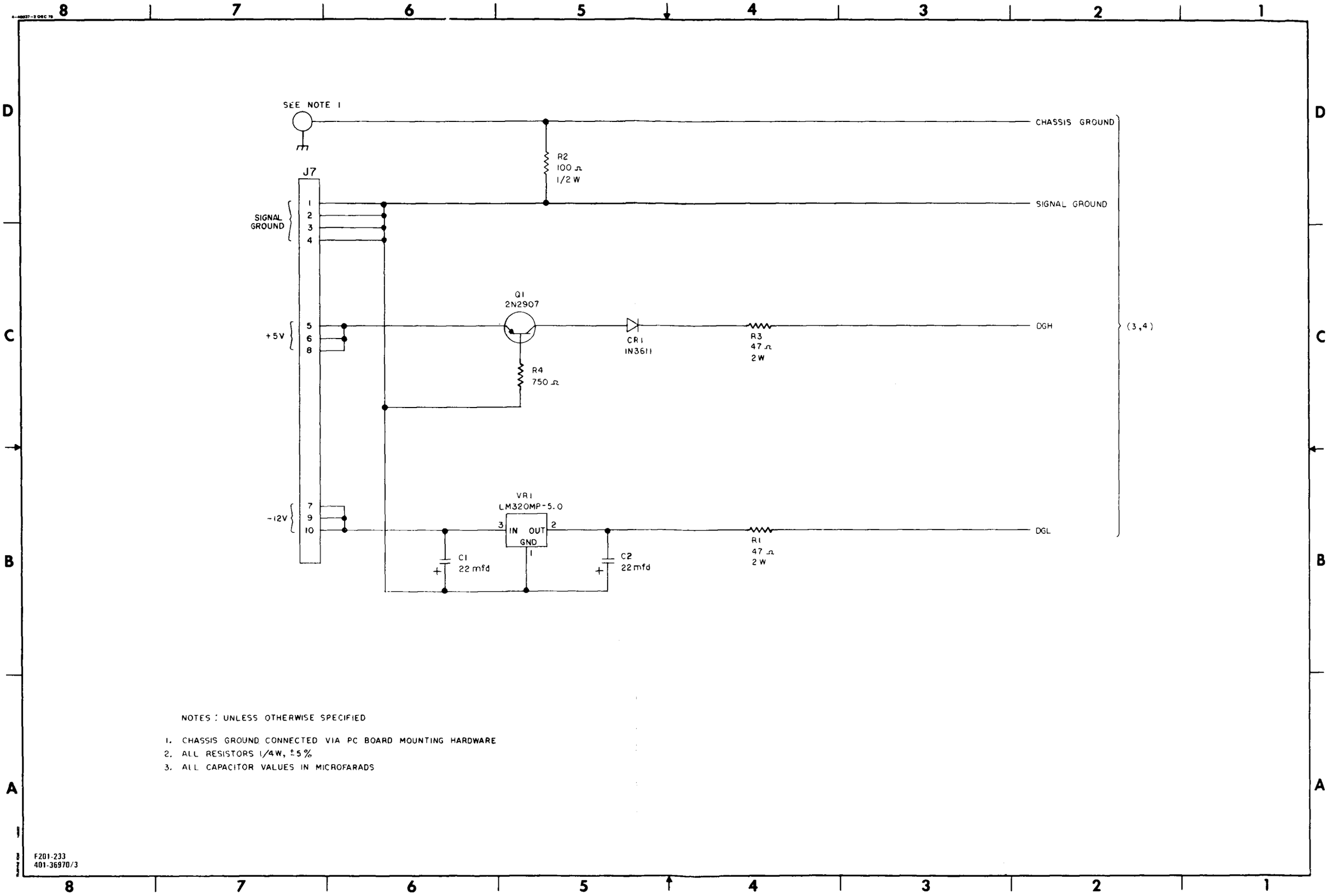


Figure 10-50. Multiplexer Interface Circuit Card, 401-36968-02, 401-37170, Schematic Diagram (Sheet 3 of 3)

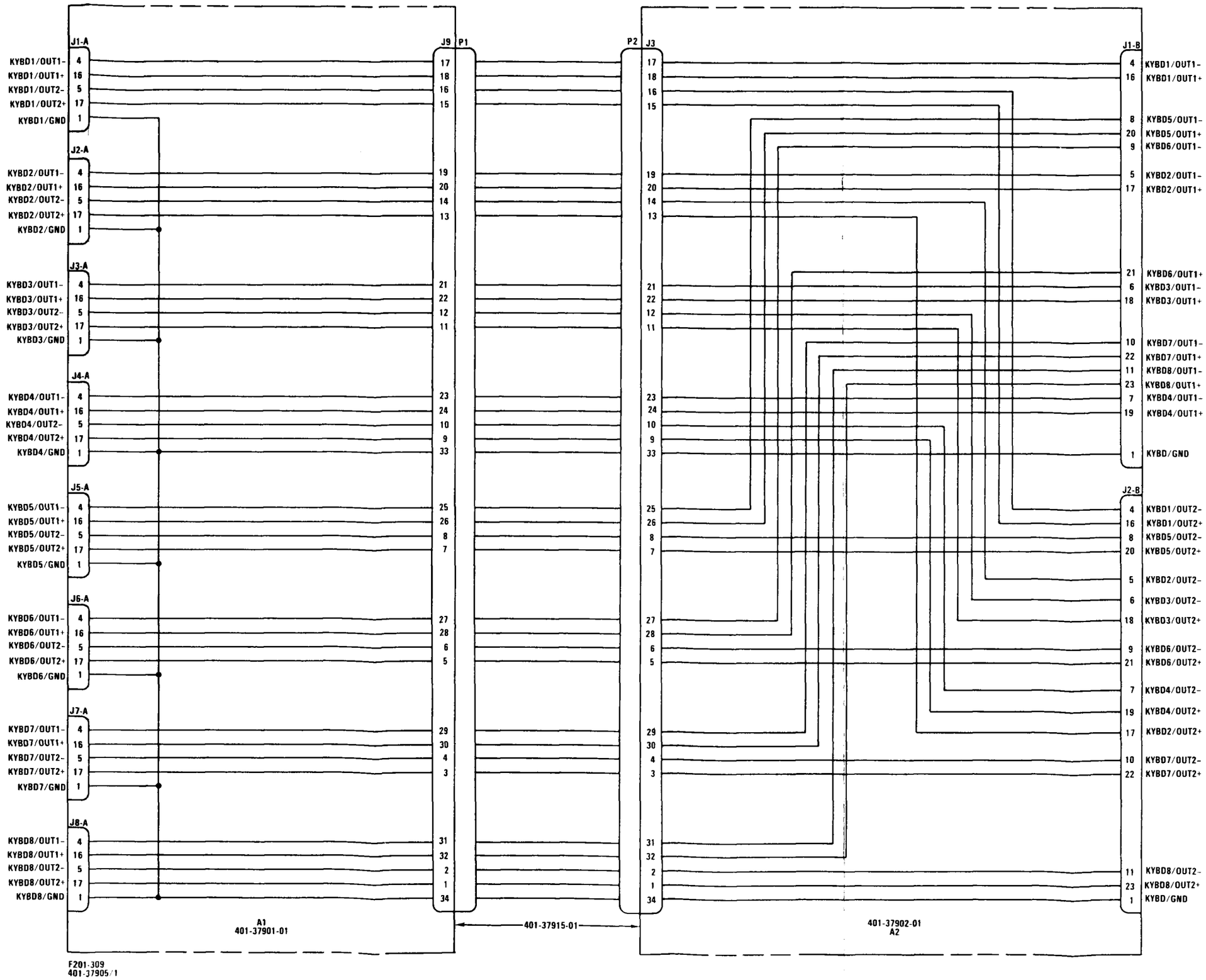
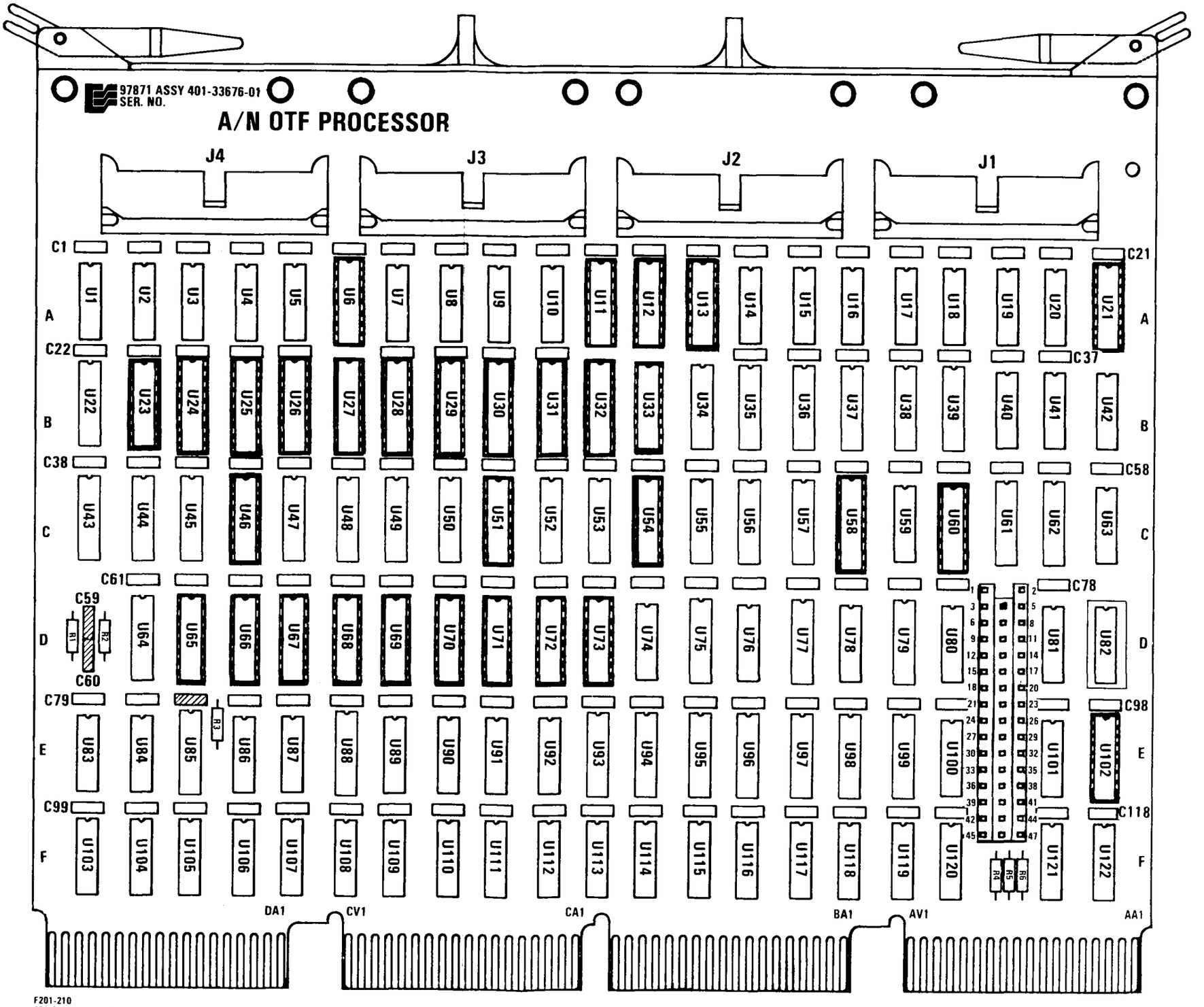


Figure 10-51. Keyboard J-Box, 401-37179, Schematic Diagram

Figure 10-52. Multiplexer, 401-36993-03, Circuit Card Assembly



F201-210
401-33676/1 REV C
401-33679/1 REV F

Figure 10-53. A/N OTF Processor, 401-33676-01, Circuit Card Assembly

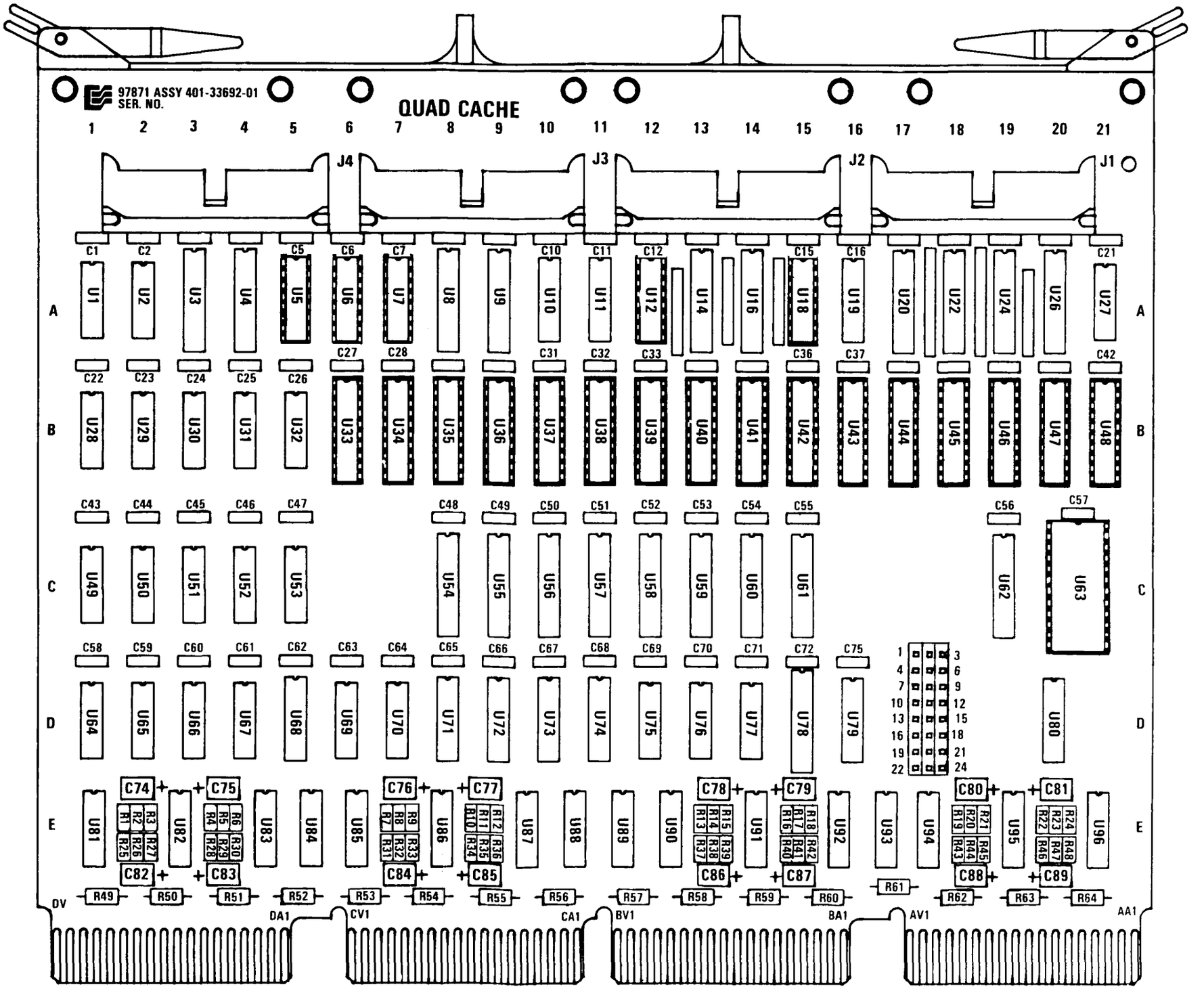
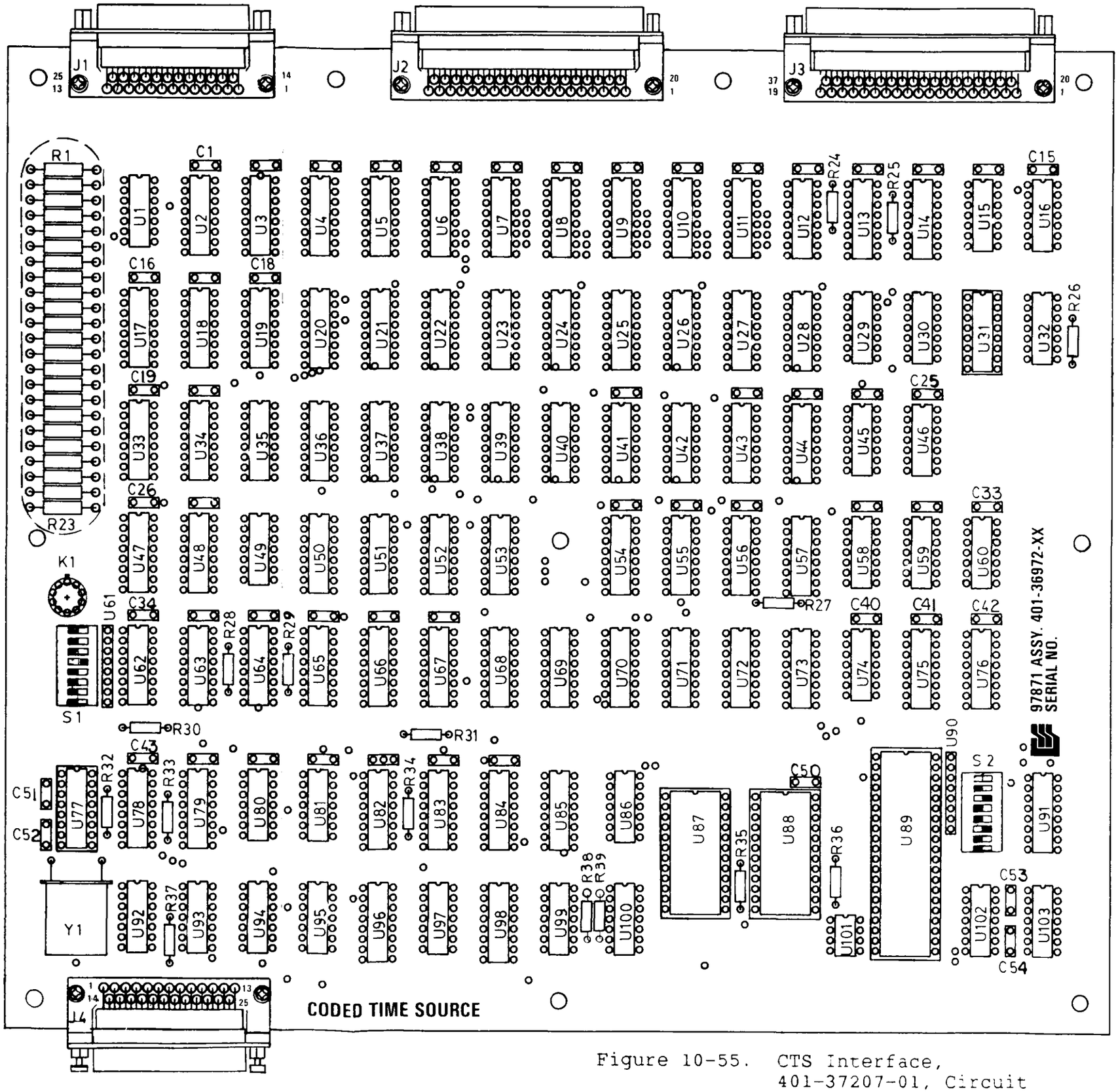


Figure 10-54. A/N Quad Cache, 401-33692-01, Circuit Card Assembly



F201-211
401-36972-1 REV D
401-36973-1 REV A

Figure 10-55. CTS Interface, 401-37207-01, Circuit Card Assembly, 401-36972-01

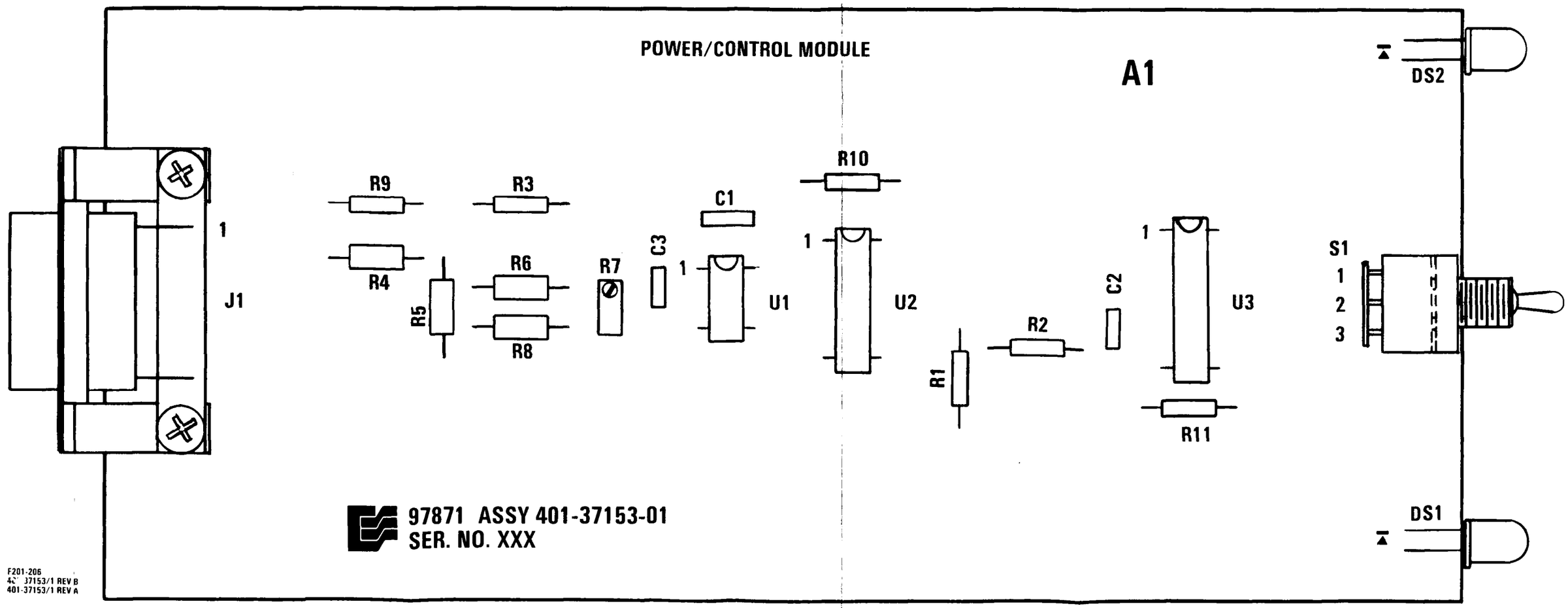


Figure 10-56. Power Control Module, 401-36719, Circuit Card Assembly

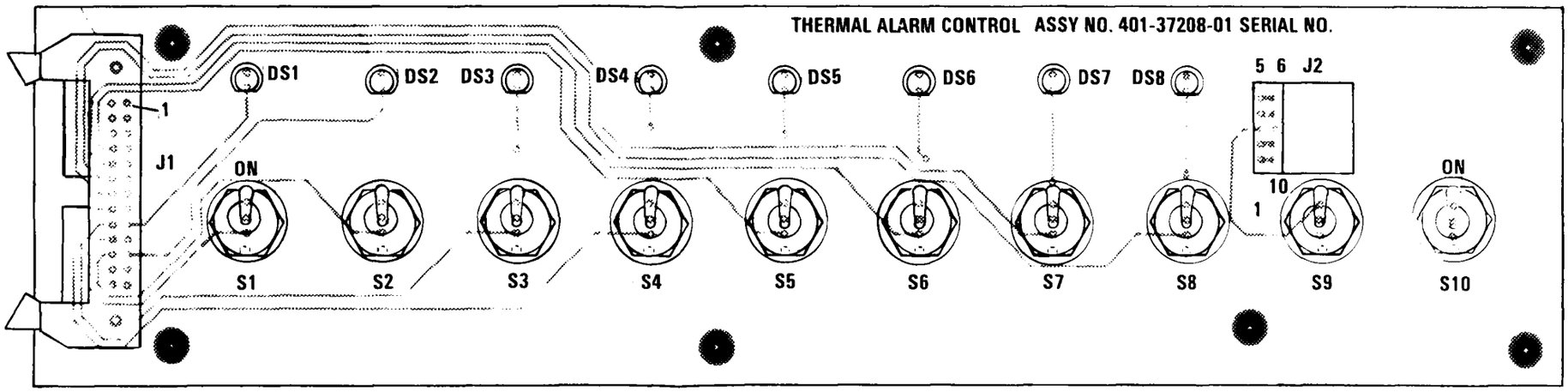


Figure 10-57. Thermal Alarm Unit Control Board, 401-37208-01, Circuit Card Assembly

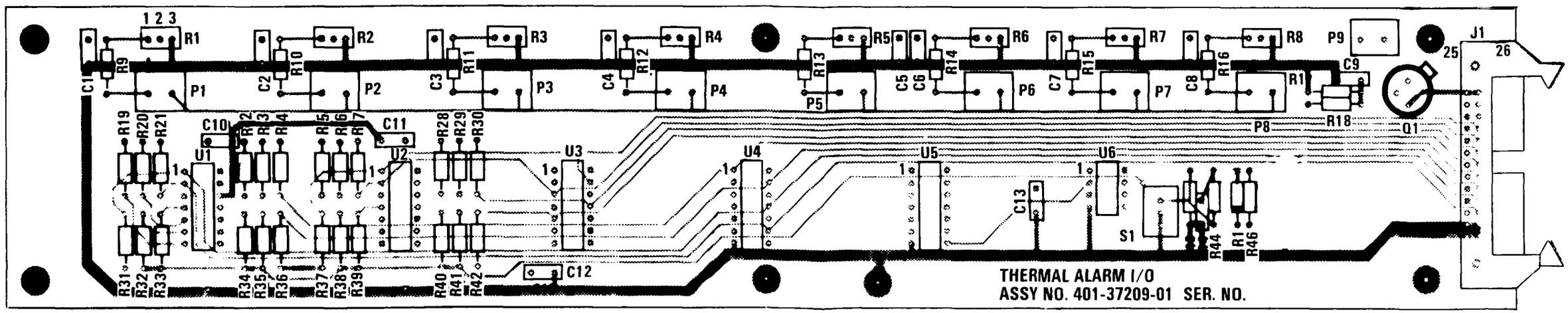


Figure 10-58. Thermal Alarm I/O Board, 401-37209-01, Circuit Card Assembly

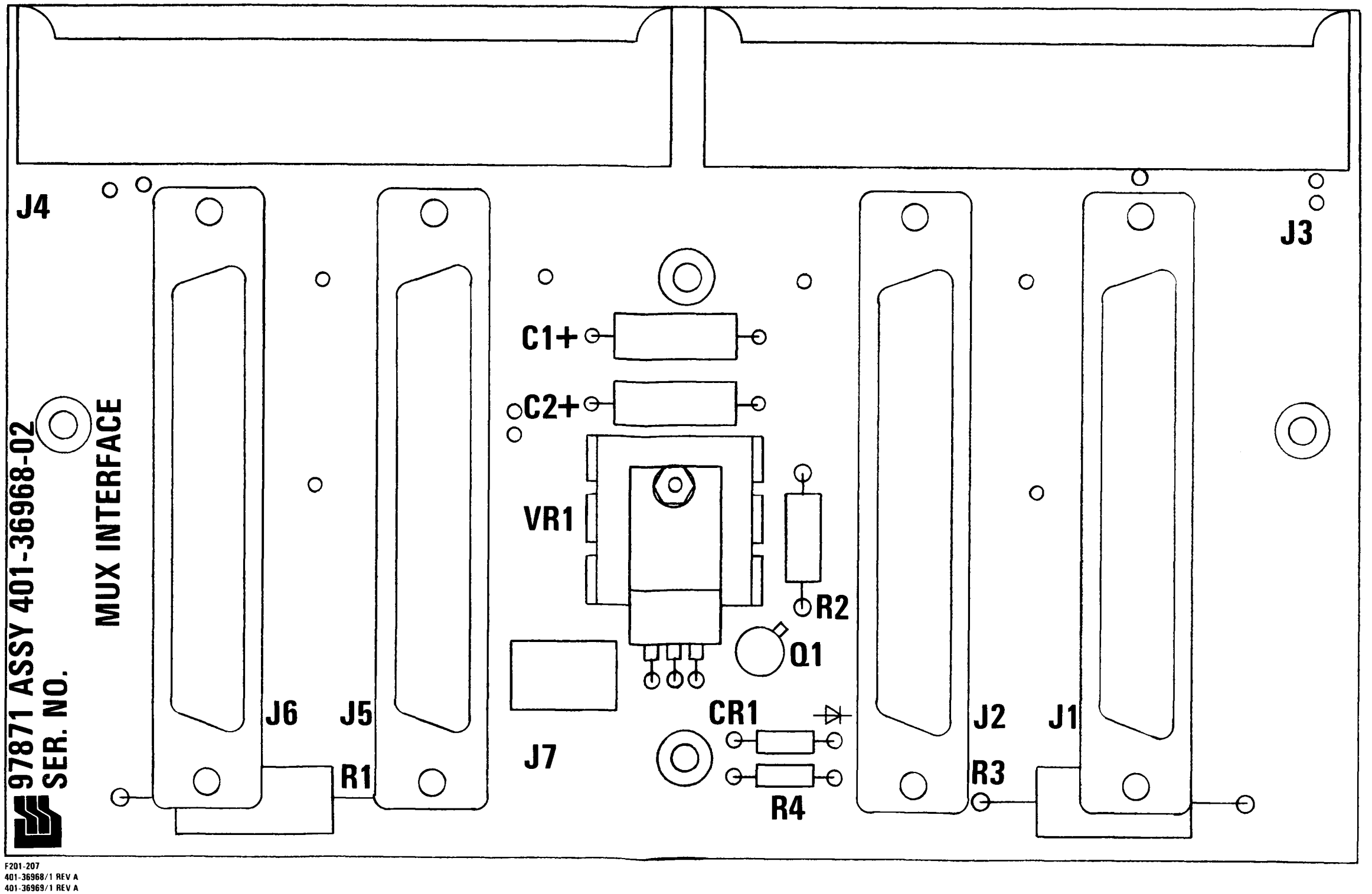


Figure 10-59. Mux Interface Assembly, 401-37170, Circuit Card Assembly, 401-36968-02

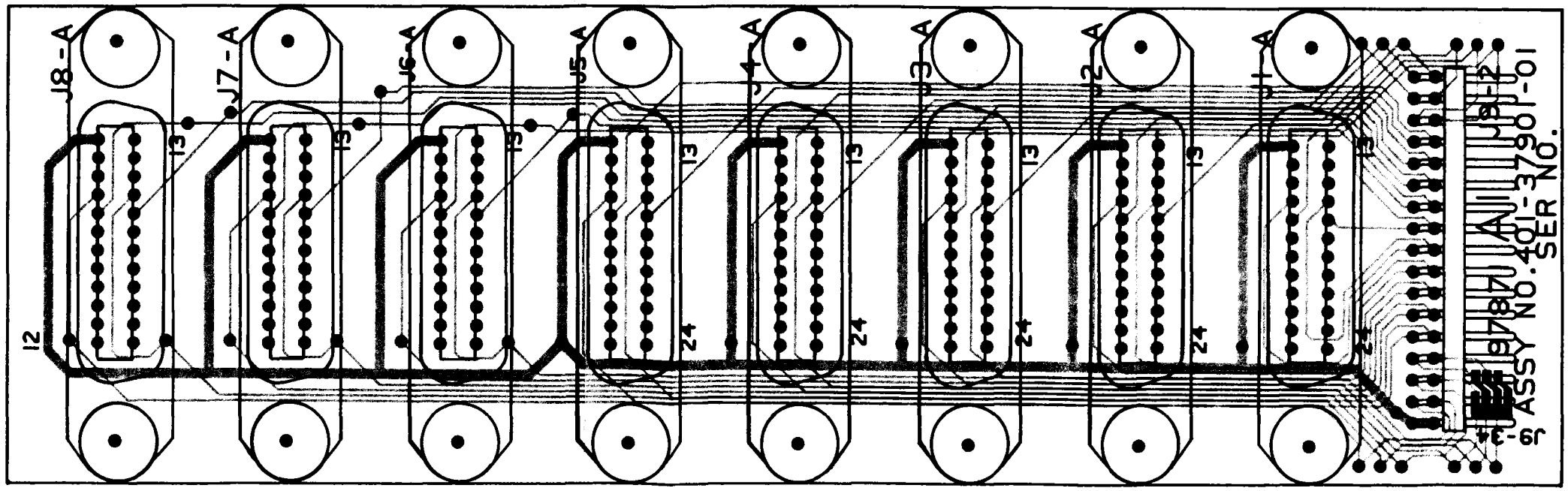


Figure 10-60. Keyboard J-Box, 401-37179, Circuit Card Assembly A1, 401-37901-01

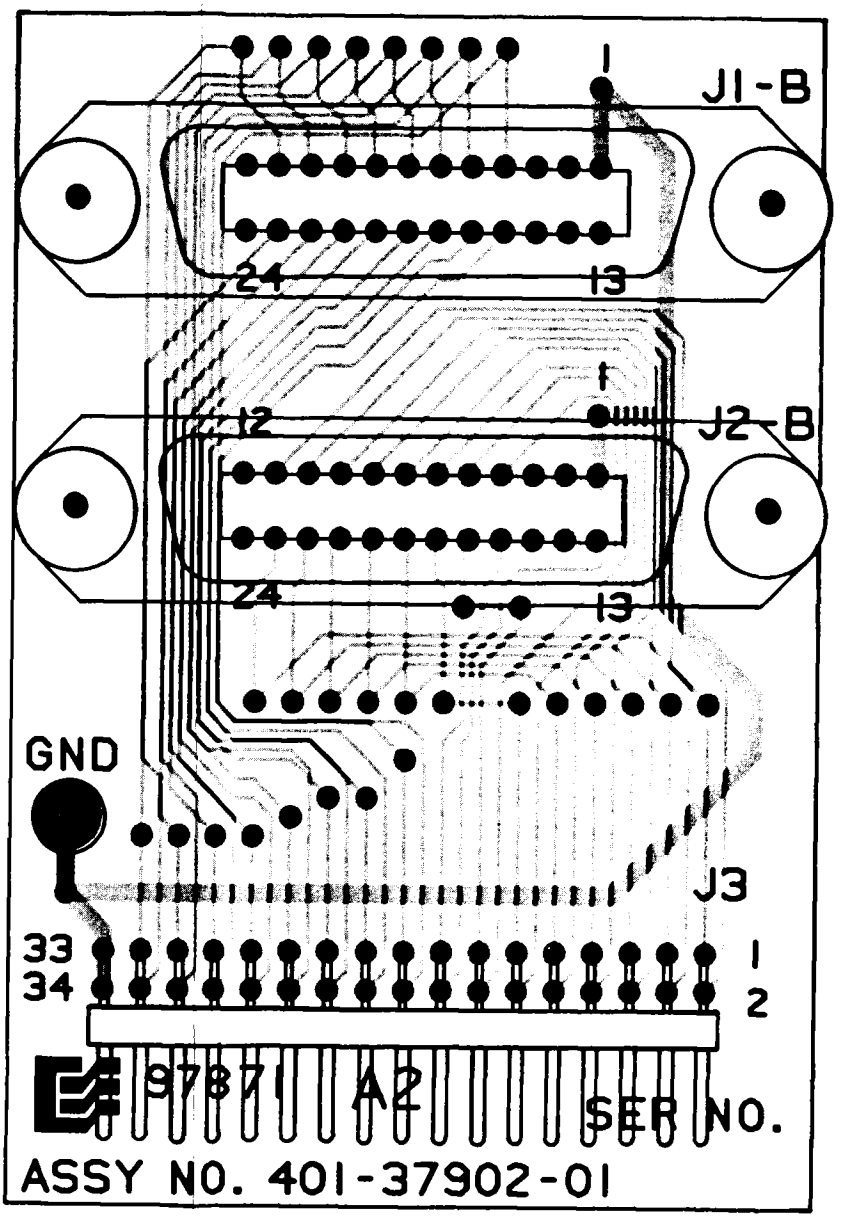


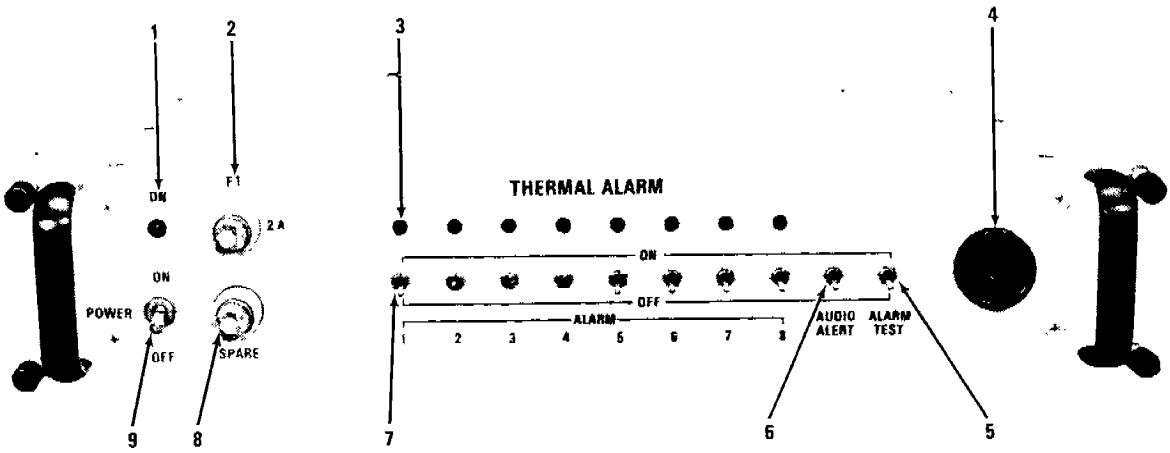
Figure 10-61. Keyboard J-Box, 401-37179, Circuit Card Assembly A2, 401-37902-01

SECTION 11

COMPUTER SOFTWARE

11.1 DIAGNOSTIC SOFTWARE. - The following computer diagnostic software manuals provide diagnostic maintenance support for the M1FC FSAS system:

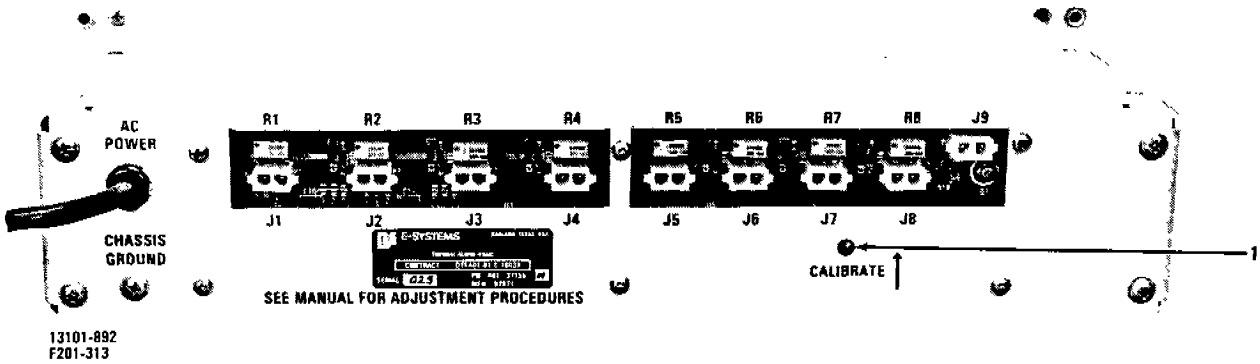
1. Operator's Manual for FSDPS/AFSS, 416-321501
2. Operator's Manual for AWP, 416-32149
3. Maintenance and Diagnostic Test Set (MADTS) Instruction Book, TI 6490.41



13101-893
F201-314

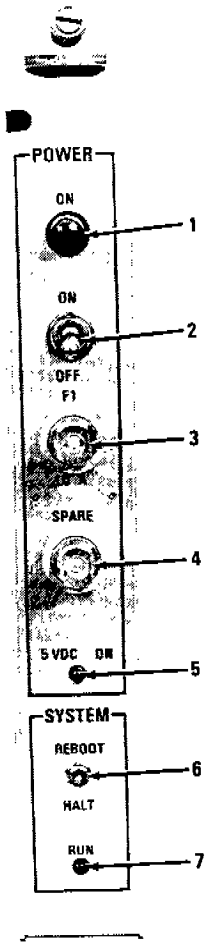
CONTROL/INDICATOR	REFERENCE DESIGNATOR	FUNCTION
1. Power on indicator	DS1	Indicates power is applied to Thermal Alarm Unit when lighted.
2. Fuse 2A	F1	Provides in line fuse protection between power supply and AC voltage input.
3. Thermal alarm indicators	DS1-DS8	Provides visual indication that an over temperature condition exists in one of the equipment racks.
4. Sonalarm	LS1	Provides audible indication of alarm condition.
5. ALARM TEST ON/OFF switch	S10	Activates all thermal alarm indicators for test purposes when set to ON position.
6. AUDIO ALERT ON/OFF switch	S9	Enables sonalarm when set to ON position.
7. ALARM ON/OFF switches	S1-S8	Enables thermal alarm indicators when set to ON position.
8. SPARE fuse		Provides spare 2A fuse.
9. POWER ON/OFF switch	S1	Connects 115 VAC to Thermal Alarm Unit when set to ON position.

Figure 3-2. Thermal Alarm Unit Front Panel Controls and Indicators



CONTROL/INDICATOR	REFERENCE DESIGNATOR	FUNCTION
1. CALIBRATE switch	SW1	Allows calibration of comparator circuits within Thermal Alarm Unit using potentiometers R9 thru R16 when set to on (up) position.

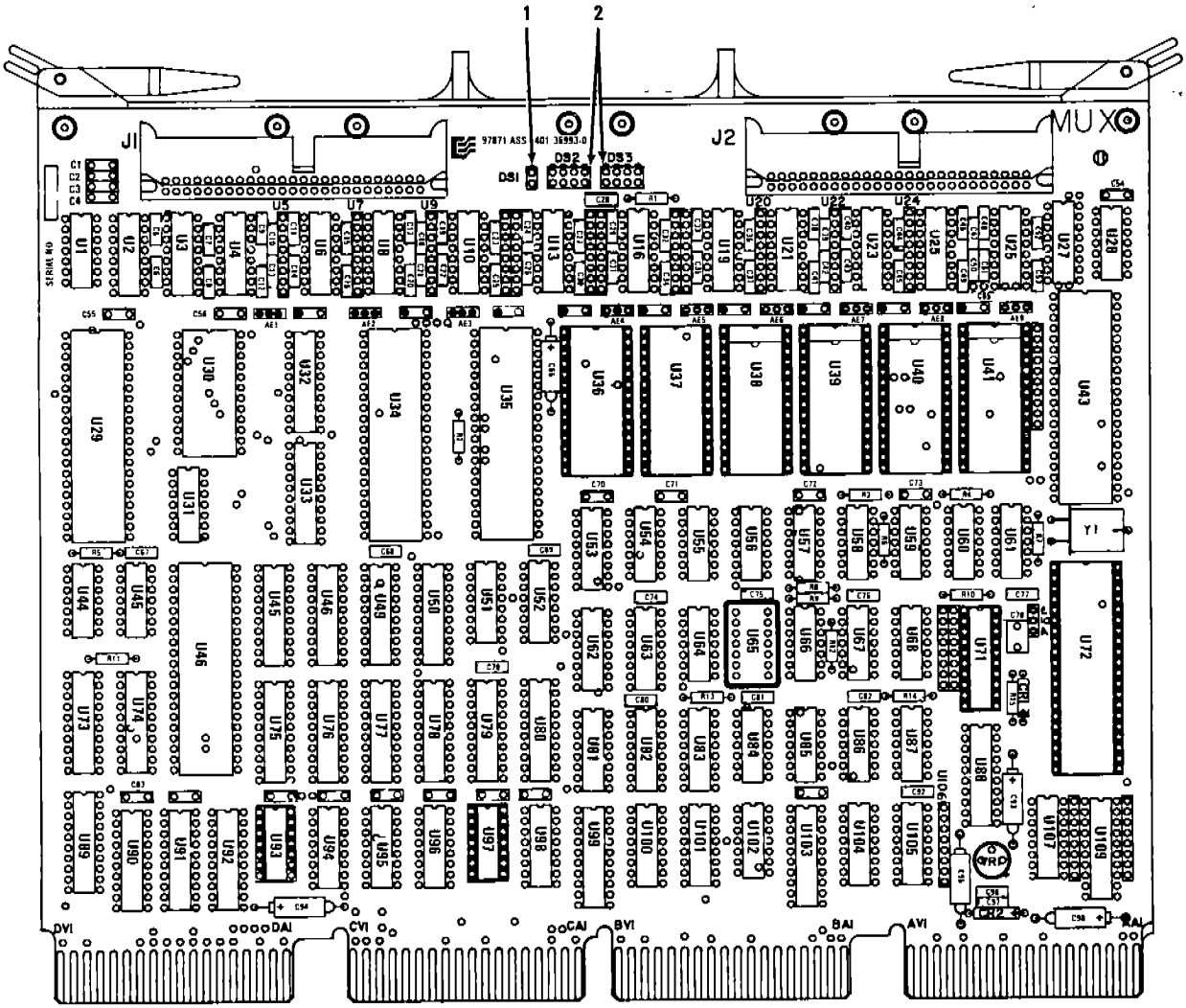
Figure 3-3. Thermal Alarm Unit Rear Panel Controls and Indicators



F201-263

CONTROL/INDICATOR	REFERENCE DESIGNATOR	FUNCTION
1. POWER ON indicator	DS1	Indicates power is applied when lighted.
2. POWER ON/OFF switch	S1	Applies power to Power Control Module when set to ON position.
3. Fuse, 10A	F1	Provides fuse protection between 115 VAC input and Power Control Module.
4. SPARE fuse		Provides spare 10A fuse.
5. 5 VDC ON indicator	DS2	Indicates 5 VDC is being output from Chassis Power Supply to Power Control Module when lighted.
6. SYSTEM REBOOT/HALT switch	S1	Reboots LSI-11 System when set to REBOOT position. Halts LSI-11 System when set to HALT position.
7. RUN indicator	DS1	Indicates LSI-11 System is running when lighted.

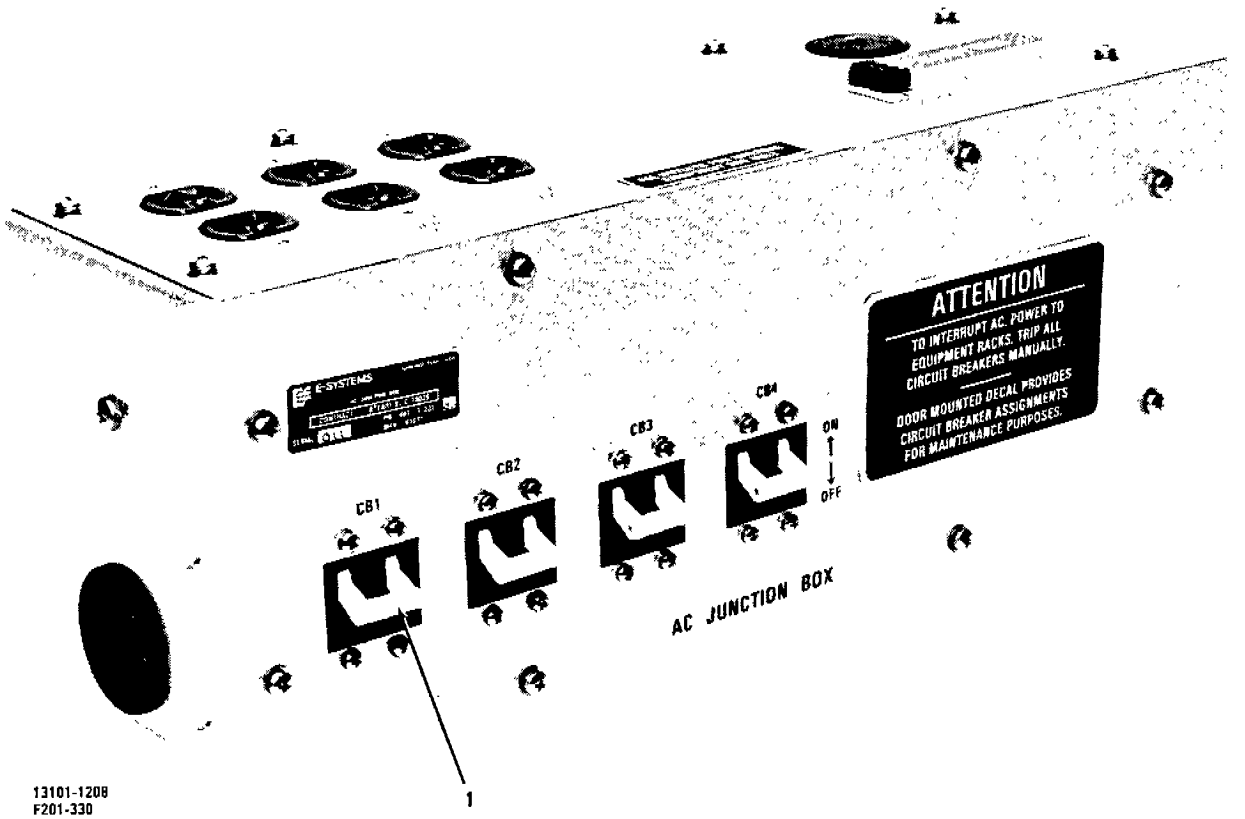
Figure 3-4. Power Control Module Controls and Indicators



F201-264

CONTROL/INDICATOR	REFERENCE DESIGNATOR	FUNCTION
1. Self-test indicator	DS1	Indicates self-test has successfully completed when lighted.
2. Error code indicators	DS2, DS3	Indicates binary coded error for Multiplexer Circuit Board (refer to table 2-5).

Figure 3-5. Multiplexer Circuit Board Controls and Indicators



CONTROL/INDICATOR	REFERENCE DESIGNATOR	FUNCTION
1. Circuit breakers	CB1-CB4	Connects or disconnects AC power to/from equipment racks.

Figure 3-6. Circuit Breaker AC Junction Box Controls and Indicators

3.2.6 Fan AC Junction Box. - The controls and indicators for the Fan AC Junction Box, 401-37231-02, are shown and described in figure 3-7.

3.2.7 Keyboard Unit. - The controls and indicators for the Keyboard Unit, 401-36735-03, are shown and described in figure 3-8.

3.3 OPERATING PROCEDURES. - Operating Procedures for the FSAS equipment generally are restricted to startup and shutdown. Once the equipment is operating no further operator intervention is required. The following paragraphs describe the operating procedures for the M1FC FSAS equipment. Consult the manuals listed in table 1-4 for the operating procedures of related M1FC FSAS equipment.

3.3.1 Coded Time Source Interface. - The operating procedures for the Coded Time Source Interface are as follows:

a. Set AC POWER switch to on (up) position.

b. Ensure that power ON indicator is illuminated.

c. Ensure that CLOCK FAILURE indicators are extinguished. If not, press RESET button.

d. Observe that DAY OF YEAR thumbwheel switch shows correct Julian date. If not, set switch to correct date and then press ENTER pushbutton switch.

2. Operational Modes - Under normal operating conditions no operation interface is required. However, in the event of an alarm indication, perform the following steps:

a. Press RESET pushbutton switch.

b. Ensure that CLOCK FAILURE indicators are extinguished.

3. Shutdown - Remove power from the unit by performing the following steps:

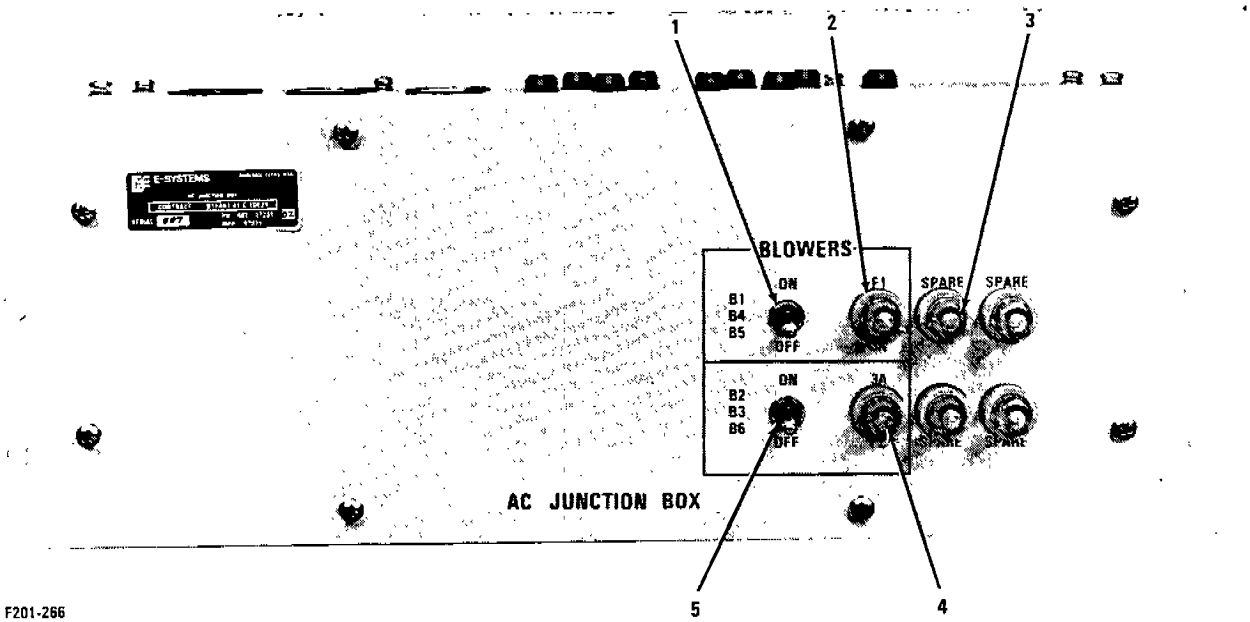
a. Set AC POWER switch to off (down) position.

b. Ensure that power ON indicator is extinguished.

3.3.2 Thermal Alarm Unit. - The operating procedures for the Thermal Alarm Unit are as follows:

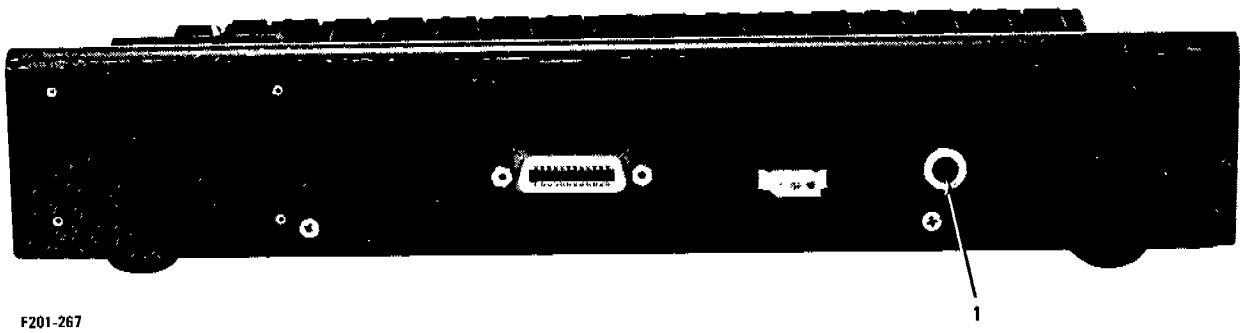
a. Set POWER ON/OFF switch to ON position.

b. Ensure that power ON indicator is illuminated.



CONTROL/INDICATOR	REFERENCE DESIGNATOR	FUNCTION
1. BLOWERS B1, B4, B5 ON/OFF switch	S1	Applies AC power to blower fans B1, B4, and B5 when set to ON position.
2. Fuse, 3A	F1	Provides fuse protection for blower fans B1, B4, and B5 in Blower Assembly.
3. SPARE fuses		Provides spare 3A fuses.
4. Fuse, 3A	F2	Provides fuse protection for blower fans B2, B3, and B6 in Blower Assembly.
5. BLOWERS B2, B3, B6 ON/OFF switch	S2	Applies AC power to blower fans B2, B3, and B6 when set to ON position.

Figure 3-7. Fan AC Junction Box Controls and Indicators



CONTROL/INDICATOR	REFERENCE DESIGNATOR	FUNCTION
1. Reset momentary pushbutton switch	S1	Resets Keyboard Unit for proper operation during startup when pressed.

Figure 3-8. Keyboard Unit Controls and Indicators

2. Operational Modes - Under normal operating conditions no operator interface is required. However, in the event of an alarm indication, perform the following steps:

   a. Disable the alarm by setting appropriate ALARM ON/OFF switch to OFF position.

   b. Check associated equipment rack for an over-temperature condition.

   c. Set ALARM ON/OFF switch to ON position after alarm condition is resolved.

3. Shutdown - Remove power from the unit by performing the following steps:

   a. Set POWER ON/OFF switch to OFF position.

   b. Ensure that power on indicator is extinguished.

3.3.3 Power Control Module. - The operating procedures for the Power Control Module are as follows:

   a. Set POWER ON/OFF switch to ON position.

   b. Ensure that POWER ON indicator is illuminated.

   c. Ensure that 5 VDC ON indicator is illuminated.

2. Operational Modes - Under normal operating conditions no operator interface is required. However, in the event the need to halt or reboot an LSI-11 Processor occurs, perform the following steps:

   a. Set momentary contact SYSTEM HALT/REBOOT switch to HALT position, then release switch allowing it to return to normal position.

   b. Ensure that SYSTEM RUN indicator is extinguished.

   To reboot, perform the following steps:

   a. Set SYSTEM HALT/REBOOT switch to REBOOT position, then release switch allowing it to return to the normal position.

   b. Ensure that SYSTEM RUN indicator is lighted.

3. Shutdown

   a. Set POWER ON/OFF switch to OFF position.

b. Ensure that POWER ON indicator is extinguished.

c. Ensure that 5 VDC ON indicator is extinguished.

3.3.4 Circuit Breaker AC Junction Box. - The operating procedures for the Circuit Breaker AC Junction Box are as follows:

1. Startup

   a. Connect primary AC power to junction box.

   b. Set CB1 thru CB4 to on (up) position.

2. Shutdown

   a. Set CB1 thru CB4 to off (down) position.

   b. Disconnect primary AC power from junction box.

3.3.5 Fan AC Junction Box. - The operating procedures for the Fan AC Junction Box are as follows:

1. Startup

   Set BLOWERS ON/OFF switches to ON position.

2. Shutdown

   Set BLOWERS ON/OFF switches to OFF position.

3.3.6 Keyboard Unit. - The only operating procedure for the Keyboard Unit is to press the RESET button on the rear of the Keyboard Unit to ensure a correct startup.

SECTION 4

STANDARDS AND TOLERANCES

4.1 GENERAL. - Table 4-1 provides the standards and tolerances for MIFC FSAS equipment.

Table 4-1. Standards and Tolerances

Parameter	Reference Paragraph (Performance Check Procedures)	Standard	Tolerance/Limit Initial	Tolerance/Limit Operating
1. Coded Time Source I/F a. Timing	MADTS User's Manual	N.B.S. time	± 1 Sec.	± 1 Sec.
2. Thermal Alarm Unit a. Temperature	7.1.4, 7.1.5, 7.2.1	12° above ambient	12°±2°C above ambient	12°±2°C above ambient
3. Power Control Module a. Current	7.2.2	10 amps	±10%	±10%
4. AC Junction Box a. Voltage b. Current	Check voltage and current at junction box utility outlet	115 vac 3 amps	90-250vac ±10%	90-250vac ±10%

SECTION 5

PERIODIC MAINTENANCE

5.1 GENERAL. - Periodic maintenance at the FSDPSs, AFSSs, and AWPs is essential to ensure optimum performance, minimize service interruptions, and avoid major equipment failures. All periodic maintenance instructions for the electronic equipment which comprises the M1FC FSAS are contained in the related equipment manuals which are listed in table 1-4.

5.1.1 Cleaning. - Generally, good housekeeping procedures should be employed. The FSAS equipment is designed to operate under conditions where humidity, temperature, dust, and dirt levels are controlled. Under these conditions the equipment should be cleaned as required.

Air filters are located in the COTC Processor Rack at FSDPS and in the Communications Processor Rack and the Position Processor Rack at the AFSSs and AWPs. Recommended cleaning schedule is every 60 days or as required.

5.2 PERFORMANCE CHECKS. - The Thermal Alarm Units, located in the Communications Switching Rack at FSDPS and in the Communications Equipment Rack at the AFSSs require that maintenance personnel test the units weekly to ensure that the alarm system is functioning properly.

SECTION 6

MAINTENANCE PROCEDURES

6.1 GENERAL. - The M1FC FSAS maintenance concept evolves around the computer operating software error detection and alert routines. Refer to the FSAS System Manual and the Maintenance Software User's manuals listed in table 1-4.

6.2 GENERAL CLEANING PROCEDURES. - The M1FC FSAS equipment is to be cleaned externally and internally as required.

6.2.1 External Cleaning. - As required.

1. Inspect the exterior of the equipment for any accumulation of dust.

2. Remove any accumulation of dust with a vacuum cleaner equipped with a soft brush.

3. Inspect the air filter in the COTC Processor Rack at FSDPS by removing it; slide out horizontally from location in rack just below blower fans.

4. If necessary, wash air filter in warm soapy water and rinse clean.

5. Dry air filter completely before placing it back into the equipment rack.

6. Inspect air filters in the Communications Processor Rack and in the Position Processor Rack at AFSS and AWP.

7. If necessary, repeat step 4 and 5 above.

6.2.2 Internal Cleaning. - As required.

WARNING

Opening rear equipment rack door exposes 115 VAC line voltage. Power shall be removed from equipment rack before cleaning interior of rack.

Cleaning and inspecting the interior of the equipment racks at the FSDPS, AFSS, and AWP requires that the equipment racks be powered down by placing the main power circuit breakers in the OFF position. This procedure will cause the system to go down. It

should be performed only when a system outage can be scheduled for the FSDPS, AFSS, or AWP where the cleaning and inspection is to take place.

1. Open rear rack doors and inspect the interior for any accumulation of dust. Blow out dust with low pressure air source.

2. Inspect rear panel cables to see that they are not cut or chafed; relocate or repair as necessary.

3. Inspect and tighten rear panel connectors as required.

4. Close rack doors.

6.3 PERFORMANCE PROCEDURES. - Weekly.

6.3.1 Thermal Alarm Test. - The Thermal Alarm Units are designed to detect any over-temperature conditions that may develop in the equipment racks at the FSDPS, AFSS, and AWP. Verification of the Alarm system is required weekly to ensure proper operation. Proceed as follows:

1. Set ALARM TEST ON/OFF switch to ON position. All alarm lamps should light and the sonalarm should sound.

2. Set AUDIO ALERT DISABLE switch to ON position. Sonalarm should become inaudible.

3. Individually set each ALARM DISABLE ON/OFF switch to ON position. Thermal alarm indicator lamps located above each ALARM DISABLE ON/OFF switch should extinguish as respective ALARM DISABLE ON/OFF switch is set to ON position.

4. Set ALARM TEST ON/OFF switch to OFF position.

5. Set AUDIO ALERT DISABLE switch to OFF position.

6. Set each ALARM DISABLE ON/OFF switch to OFF position.

SECTION 7

CORRECTIVE MAINTENANCE

7.1 TESTING AND TROUBLESHOOTING. - The following paragraphs provide testing and troubleshooting information for the M1FC FSAS equipment. Testing and troubleshooting procedures for the equipment are provided in the AFSS software diagnostics, MADTS (Maintenance and Diagnostics Test Set), equipment manuals listed in table 1-3, and procedures in this section. Table 7-1 provides a list of recommended test equipment and table 7-2 provides a list of recommended special tools.

NOTE

Two spring-loaded slide bolts are provided on the inside of the front and rear equipment rack doors. Removal of these bolts allows the rear door removal for maintenance purposes.

7.1.1 AFSS Software Diagnostics. - Software diagnostics are provided in the AFSS on the Digital Equipment MRV11-C, 32K Word PROM Circuit Card. These diagnostics are explained in the M1FC FSAS Operator's Manual for FSDPS/AFSS, 416-32150, and provide testing for the following equipment:

1. Position Processor
2. Communications Processor
3. Keyboard Unit, 401-36735-02
4. Line Printer, P300
5. Input/Output Terminal (IOT), LA34-AA/LA100-CA

7.1.2 MADTS (Maintenance and Diagnostic Test Set). - The MADTS provides maintenance diagnostics for the equipment listed in table 7-3. The MADTS is located in the FSDPS. Testing and troubleshooting procedures using the MADTS can be found in the Maintenance and Diagnostic Test Set Instruction Book, TI 6490.41.

7.1.3 Related Equipment Manuals. - The manuals listed in table 1-3 provide testing and troubleshooting procedures for all FSDPS, AFSS, and AWP equipment not covered by diagnostic testing with the exception of the thermal alarm unit.

Table 7-1. Recommended Test Equipment

ITEM/DESCRIPTION	AFSS	FSDPS/AWP	FAA Technical Center/ Academy	FAA Repair Depot	FAA Sector Maint. Facility
Oscilloscope, Dual Channel (Tektronix 2236 or equivalent with Tektronix K212 Portable Instrument Cart	1	1	1	1	3
Digital Multimeter (Fluke 8062A or equivalent)	1	1	1	1	3
Protocol Analyzer (Hewlett-Packard 4951A or equivalent with 18180A Interface Unit)	1	1	1	1	1
SPECIAL TEST EQUIPMENT					
Maintenance and Diagnostics Test Set (MADTS) (E-Systems)	0	1	1	1	1
Modem Eliminator Model 3 ARK Electronics Inc.					
Asynchronous Loop Back Cable (INMAC Mfg., P.N. 40351)	0	8	1	8	0
Disk Exerciser, Model DDX900B Ampex	0	1	1	1	1

Table 7-2. Recommended Tools List

Tool	Manufacturer	Part/Model No.	FSDPS	AFSS
PC Card Extender	TANDEM	T50507	1	
Card Extender (Card Cage)	Ampex	3302153-01	1	
Card Extender (Pwr. Supply)	Ampex	3308053-01	1	
Head Install Tool	Ampex	3303728-01	1	
Torque-Limit Screwdriver	Ampex	3302778-01	1	
Head Position Tool	Ampex	3302377-01	1	
Head Spring Tensioner	Ampex	3302379-01	1	
Filter Pressure Gauge	Ampex	3300937-01	1	
Disk Pack	Ampex	---	1	
Retaining Ring Pliers	Ampex	---	1	
Skewmaster Tape	Kennedy	154-0036-001	1	
Card Extender	Kennedy	190-2224-001	1	
Speed Tester	Kennedy	190-4536-001	1	
Alignment Tool	Kennedy	154-0006-001	1	
300 MByte CE Disk Pack	Dysan	702026	1	
Q-Bus Extender Board	Technical	XTNDR-4	1	1

Table 7-3. MADTS Testable Equipment

Equipment	Manufacturer	Part Number
LSI-11/23 Processor (CPU)	Digital Equipment	KDF11-AA
32K Word PROM Memory Circuit Card	Digital Equipment	MRV11-C
64K Word RAM Memory/Parity Circuit Card	Digital Equipment	MSV11-LF
System Module Circuit Card	Digital Equipment	KPV11-B
Multi-Processor Linking System	Peritek	HEX/IPB-L11
DMA Controller Circuit Card	Peritek	DMA-QB
Disk Controller Circuit Card	Digital Equipment	RLV12
Disk Drive	Digital Equipment	RL01-AK/RL02-AK
Multiplexer Circuit Card	E-Systems	401-36993-03
Eight-Channel Serial I/O Circuit Card	Technical Magic	TMI-8S
A/N OTF Processor Circuit Card	E-Systems	401-33676-01
A/N Quad Cache Memory Circuit Card	E-Systems	401-33692-01
Input/Output Terminal (IOT)	Digital Equipment	LA34-AA/ LA100-CA
Keyboard Unit	E-Systems	401-36735-03
CRT Monitor	Ball/E-Systems	401-37290-01
Line Printer	Printronix	P-300
Modem Card	Universal Data Systems	RM-9600
Modem Card	Universal Data Systems	RM-9600E FP
Modem Card	Universal Data Systems	RM-208A
Answer/Originate Card	Universal Data Systems	RM-A/O

Table 7-3. MADTS Testable Equipment (Continued)

Equipment	Manufacturer	Part Number
Coded Time Source Interface	E-Systems	401-37207-01
Magnetic Tape Drive	Kennedy	T16/5103
Magnetic Disk Drive	Ampex	DM 9300 TD
Power Control Module	E-Systems	401-36719
Modem Sharing Device	Universal Data Systems	2005064

7.1.4 Thermal Alarm Unit Testing. - Perform the following steps to test the Thermal Alarm Unit, 401-37155:

a. Set POWER ON/OFF switch to ON position.

b. Set ALARM TEST ON/OFF switch to ON position.

c. Ensure that all alarm lamps are lighted and sonalarm is audible.

d. Set AUDIO ALERT ON/OFF switch to OFF position.

e. Ensure that sonalarm is inaudible.

f. Individually set each ALARM ON/OFF switch to ON position. Ensure that each thermal alarm indicator above respective ALARM ON/OFF switch illuminates when switch is set to ON position.

g. Individually set each ALARM ON/OFF switch to OFF position. Ensure that each thermal alarm indicator above respective ALARM ON/OFF switch extinguishes when switch is set to OFF position.

h. Set ALARM TEST ON/OFF switch to OFF position.

i. Set AUDIO ALERT ON/OFF switch to ON position.

j. Return each ALARM ON/OFF switch to ON position.

7.1.5 Thermal Alarm Unit Troubleshooting. - Table 7-4 lists typical fault indications that can possibly occur as a result of failure in thermal alarm circuitry. Consult Thermal Alarm Unit Blocked Schematic Diagram (figure 2-3) and Thermal Alarm Unit Wiring Diagram (figure 10-10) when using table 7-2. Corresponding remedial actions relative to each fault indication are listed in the order to be performed. Fault indications/remedial actions relative to specific alarm circuits are described using the alarm circuit connected to plug P1 as an example, and for purposes of brevity. Faults occurring in other alarm circuits may be addressed by performing associated remedial actions, substituting corresponding components for those referenced as plug P1 alarm circuit components.

Table 7-4. Thermal Alarm Troubleshooting

Fault Indication	Remedial Action
POWER ON/OFF switch is in ON position but power on indicator is not illuminated.	1. Check 2A FUSE (F1) and substitute a known good fuse if failed fuse found. 2. If step 1 fails to restore thermal alarm unit to normal operation, use Triplett Model 630-A VOM, or equivalent, to monitor 115 VAC input to thermal alarm unit (refer to section 10 for thermal alarm unit wiring diagram). If power is not present, thermal alarm unit is probably functional. 3. If step 2 fails to restore thermal alarm unit to normal operation, set ALARM TEST ON/OFF switch to ON position. If THERMAL ALARM indicators illuminate, substitute a known good LED in place of the faulty LED (DS1).
P1 alarm present but equipment cabinet temperature within tolerance.	4. (a) Set ALARM ON/OFF switch S1 to OFF position. (b) Disconnect plug P1. (c) Disconnect one plug (P2 thru P8) from a circuit not experiencing an alarm and set the associated ALARM ON/OFF switch (S2-S8) to ON position. (d) Connect plug removed in step (C) to plug P1. (e) Return ALARM ON/OFF switch S1 to ON position.

Table 7-4. Thermal Alarm Troubleshooting (Continued)

Fault Indication	Remedial Action
	(f) If alarm not present, remove thermal sensor connected by cable (401-37203) to plug P1 and substitute a known good thermal sensor. 5. (a) If step 4 (f) results in alarm condition, restore thermal alarm unit to normal configuration by reversing actions performed in steps 4 (d), (c) and (b). (b) Perform thermal alarm unit adjustment per paragraph 7.2.1. 6. If steps 4 and 5 fail to restore the thermal alarm unit to normal operation, perform the following: (a) Set POWER ON/OFF switch to OFF position. (b) Use VOM, Triplett model 630-A or equivalent, to measure resistance of potentiometer R1 and resistors R9, R19, R32 and R31, in the order listed. (c) Substitute a known good resistor for any defective resistor found while performing step b. 7. If steps 4 thru 6 fail to restore thermal alarm unit to normal operation, substitute a known good thermal I/O circuit card in place of defective card.

Table 7-4. Thermal Alarm Troubleshooting (Continued)

Fault Indication	Remedial Action
Sonalarm is audible but indicator DS1 fails to illuminate.	8. (a) Ensure switch S1 is in ON position. (b) Set POWER ON/OFF switch to OFF position. (c) Substitute known good LED in place of DS1 LED. (d) Set POWER ON/OFF switch to ON position. (e) If sonalarm is not audible, set ALARM TEST ON/OFF switch to ON position while observing DS1. 9. If step 8 actions fail to restore thermal alarm unit to normal operation, substitute a known good thermal alarm control circuit card in place of defective card.
All alarms activate simultaneously.	10. (a) Ensure switch SW1 on rear panel is set to off (down) position. (b) Ensure ALARM TEST ON/OFF switch on front panel is set to OFF position. (c) Set POWER ON/OFF switch to OFF position. (d) Use Triplett Model 630-A VOM, or equivalent, to check resistors R43 and R44, diode CR1, and resistor R46 in the order listed. (e) Substitute known good component in place of any faulty component found while performing step (d).

Table 7-4. Thermal Alarm Troubleshooting (Continued)

Fault Indication	Remedial Action
	(f) Use Triplett Model 630-A VOM, or equivalent, to check resistors R17 and R18. (g) Substitute known good resistor in place of faulty resistor found while performing step (f). (h) Set POWER ON/OFF switch to ON position. (i) Use the Triplett Model 630-A VOM, or equivalent, to check transistor Q1. (j) Substitute known good transistor in place of Q1 if found to be faulty while performing step (i). 11. If step 10 actions fail to restore thermal alarm unit to normal operation, substitute known good thermal alarm I/O circuit card in place of faulty card. 12. Check U1 and U4 and substitute known good IC in place of faulty IC discovered while performing this step. 13. If step 12 actions fail to restore thermal alarm unit to normal operation, substitute known good thermal alarm I/O circuit card in place of faulty card.
Alarms at plugs P5 thru P8 activate simultaneously.	14. Repeat steps 12 and 13, checking U2 and U3 instead of U1 and U4.

Table 7-4. Thermal Alarm Troubleshooting (Continued)

Fault Indication	Remedial Action
Visual alarm present but sonalarm fails to sound.	15. (a) Ensure AUDIO ALERT ON/OFF switch S9 is set to ON position. (b) Monitor J2 pins 4 and 5 for + 12 VDC using VOM. (c) If + 12 VDC is not present at pins 4 and 5, substitute known good sonalarm in place of faulty sonalarm. (d) If + 12 VDC is present at pins 4 and 5, check U4, U5 and U6. (e) Substitute known good IC for faulty IC found while performing step (d). 16. If step 15 actions fail to restore thermal alarm unit to normal operation, substitute known good thermal I/O circuit card in place of faulty card.

7.2 ADJUSTMENTS. - The following paragraphs provide adjustment procedures for the M1FC FSAS equipment.

7.2.1 Thermal Alarm Unit Adjustment. - Perform the following steps to adjust the Thermal Alarm Unit, 401-37155-01:

a. Remove thermal sensors located in remote equipment cabinets (i.e., those connected to plugs P1 thru P8) and expose thermal sensors to ambient (room) temperature.

b. At thermal alarm unit, set POWER ON/OFF switch to ON position and allow 15 minutes for thermal sensors to minimize at ambient temperature.

c. At rear panel of thermal alarm unit, set switch SW1 to on (up) position.

d. At rear panel, use screwdriver to adjust potentiometers R1 thru R8 in following manner:

   (1) If associated alarm indicator (DS1 thru DS8) is illuminated, adjust appropriate potentiometer (R1 thru R8) clockwise until indicator is extinguished.

   (2) If associated alarm indicator is extinguished, adjust appropriate potentiometer counterclockwise until indicator illuminates and then adjust potentiometer clockwise until indicator is extinguished.

e. At rear panel, set switch SW1 to off (down) position.

f. Remount remotely located thermal sensors (removed in step a) in their respective equipment cabinets.

7.2.2 Power Control Module Adjustment. - Perform the following steps to adjust the Power Control Module, 401-36719:

a. At power control module, set POWER ON/OFF switch to ON position.

b. Turn thumbscrew at top of front panel counterclockwise until thumbscrew disengages.

c. Pull power control module out from equipment rack until potentiometer R7 adjustment access hole on the side cover is exposed.

d. Use small, flat-blade screwdriver and adjust potentiometer R7 in clockwise or counterclockwise direction until 5 VDC ON indicator is intermittently lighted.

e. Reverse direction (clockwise/counterclockwise) of adjustment in step d by one-fourth to one-half turn until 5 VDC ON indicator is fully illuminated.

7.2.3 Coded Time Source Interface Power Supply Adjustment. -

Perform the following steps to adjust the output voltage of the power supply within the coded time source interface:

a. Place AC POWER switch on front cover of coded time source interface to off (down) position.

b. Remove four cross slot screws securing top cover of coded time source interface using screwdriver, and remove top cover.

c. Disconnect connector P2 from connector J7.

d. Connect positive DVM lead to P2 pin 3 and negative DVM lead to P2 pin 1.

e. Place AC POWER switch on front cover of coded time source interface to on (up) position.

f. Adjust potentiometer (available through access hole in bottom of chassis) using cross slot screwdriver for a reading of +12 VDC ± 0.25 VDC.

g. Place AC POWER switch on front cover of coded time source interface to off (down) position.

h. Connect connector P2 to connector J7.

i. Connect positive DVM lead to J4 pin 16 and negative DVM lead to J4 pin 17.

j. Adjust potentiometer used in step f for a reading of +12 VDC ± 0.25 VDC.

k. Place AC POWER switch on front cover of coded time source interface to off (down) position.

l. Place top cover of coded time source interface in proper position and secure to chassis with four cross slot screws using screwdriver.

7.3 REMOVAL AND REPLACEMENT. - The following paragraphs provide removal and replacement procedures for all rack-mounted M1FC FSAS equipment.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.1 Multiplexer Interface Assembly. - The Multiplexer Interface Assemblies, 401-37170-01 and -04, are shown in figures 1-1, 1-2, and 1-3. These assemblies are accessible from the rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.1.1 Multiplexer Interface Assembly Removal. - Perform the following steps to remove the multiplexer interface assembly from the equipment rack:

a. Open rear cabinet door to expose multiplexer interface assembly.

b. Use small screwdriver to release retaining screws of all plugs and remove plugs from jacks.

c. Remove power input cables connected at top of multiplexer interface assembly.

d. Remove ribbon cables from connectors at bottom of multiplexer interface assembly.

e. Trace cable 401-37176 from multiplexer interface assembly to 8S Circuit Card and disconnect two plugs.

f. Use screwdriver to release thumbscrew on end of multiplexer interface assembly nearest rear of equipment cabinet.

g. Pull multiplexer interface assembly back and away from side mount being careful not to drop assembly.

h. Remove multiplexer interface assembly from equipment rack.

7.3.1.2 Multiplexer Interface Card Removal. - Perform the following steps to remove the Multiplexer Interface Circuit Cards, 401-36968-02, from the multiplexer interface assembly:

a. Use nut-driver to remove nuts connecting jacks to assembly chassis.

b. Remove two circuit cards from assembly chassis.

7.3.1.3 Multiplexer Interface Card Replacement. - Perform the following steps to replace the multiplexer interface circuit cards in the multiplexer interface assembly:

a. Align board-mounted jacks with jack holes in assembly chassis.

b. Place nuts on jack bolts protruding through assembly chassis and tighten nuts with nut driver.

7.3.1.4 Multiplexer Interface Assembly Replacement. - Perform the following steps to replace the multiplexer interface assembly in the equipment rack:

a. Open rear cabinet door.

b. Align Multiplexer Interface Assembly double slotted end with two retaining studs in side mounting bracket.

c. Slide assembly forward toward side mounting bracket to align single thumbscrew on end of assembly with thumbscrew hole.

d. Use screwdriver to tighten single thumbscrew.

e. Plug ribbon cables into cable connectors at bottom of multiplexer interface printed circuit cards.

f. Connect power plugs to jacks at top of multiplexer interface printed circuit cards.

g. Connect cables to appropriate jacks on multiplexer interface assembly.

h. Route cable 401-37176 to front of rack and connect to 8S Circuit Card.

7.3.2 Serial I/O Assembly. - The Serial I/O Assembly, 401-37274-02, is shown in figures 1-1, 1-2, and 1-3. This assembly is accessible from the rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.2.1 Serial I/O Assembly Removal. - Perform the following steps to remove the serial I/O assembly from the equipment rack:

a. Open rear cabinet door.

b. Use small screwdriver to release plug-retaining screws and remove plugs from jacks.

c. Trace cable 401-37176 from serial I/O assembly to 8S Circuit Card at front of rack and disconnect two plugs.

d. Use screwdriver to release thumbscrew located nearest rear of equipment cabinet.

e. Pull serial I/O assembly back and away from the side mounting chassis to free assembly from two retaining studs in slots at rear of serial I/O assembly.

f. Remove serial I/O assembly from equipment rack.

7.3.2.2 Serial I/O Assembly Replacement. - Perform the following steps to replace the serial I/O assembly in the equipment rack:

a. Open rear cabinet door.

b. Align serial I/O assembly double slotted end with two retaining studs in side mounting bracket.

c. Slide assembly forward and toward side mounting bracket to align single thumbscrew on end of serial I/O assembly with thumbscrew hole.

d. Use screwdriver to tighten thumbscrew.

e. Connect all external cables to appropriate jacks on assembly.

f. Route cable 401-37176 to front of rack and connect to 8S Circuit Card.

7.3.3 Keyboard Junction Box. - The Keyboard Junction Box, 401-37179-07, -08, is shown in figures 1-1, 1-2, and 1-3. The box is accessible from the rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.3.1 Keyboard Junction Box Removal. - Perform the following steps to remove the keyboard junction box from the equipment rack:

a. Open rear cabinet door.

b. Use small screwdriver to release plug-retaining screws; remove all plugs from keyboard junction box jacks.

c. Use screwdriver to release two thumbscrews mounting keyboard junction box to inside of equipment cabinet, and slide keyboard junction box toward rear of rack to release from two retaining studs.

d. Remove the keyboard junction box from equipment rack.

7.3.3.2 Keyboard Junction Box Replacement. - Perform the following steps to replace the keyboard junction box in the equipment rack:

a. Open rear cabinet door.

b. Place keyboard junction box in equipment rack, aligning double-slotted end with retaining studs in side of equipment cabinet.

c. Use screwdriver to tighten two thumbscrews mounting keyboard junction box to side of cabinet.

d. Connect all external plugs to keyboard junction box jacks.

7.3.4 Printed Circuit/Wiring Cards. - The following paragraphs provide procedures for removing and replacing all printed circuit/wiring cards contained in M1FC FSAS card cages.

7.3.4.1 Printed Circuit/Wiring Card Removal. - Perform the following steps to remove printed circuit/wiring cards from equipment racks:

NOTE

A/N quad cache memory circuit card should be removed without performing step a. This is because all memory in memory card cage is erased when power is shut-down.

a. Place POWER ON/OFF switch(es) on power control module(s) to OFF position to remove power from card cage.

b. Remove all external connections from front of printed circuit card.

c. Disengage connecting levers at top and bottom of printed circuit card.

d. Pull printed circuit card from the card cage.

7.3.4.2 Printed Circuit/Wiring Card Replacement. - Perform the following steps to replace printed circuit/wiring cards in equipment racks:

NOTE

A/N quad cache memory circuit card should be replaced without performing step a. This is because all memory in memory card cage is erased when power is shut-down.

a. Set POWER ON/OFF switch(es) on power control module(s) to OFF position to remove power from card cage.

b. Align printed circuit card in appropriate slot in rack and push until printed circuit card is properly seated with connecting levers properly engaged.

c. Connect all external plugs to connectors located on exposed end of printed circuit card.

7.3.5 Fan AC Junction Box. - The Fan AC Junction Box, 401-37231-02, is shown in figures 1-1, 1-2, and 1-3. This box is accessible from the rear of the cabinet.

7.3.5.1 Fan AC Junction Box Removal. - Perform the following steps to remove the fan AC junction box from the equipment rack:

a. Open rear cabinet door.

b. Set BLOWERS ON/OFF switches to OFF position.

WARNING

115 VAC is present at fan AC junction box unless CB1, CB2, CB3, and CB4 on circuit breaker AC junction box are set to off (down) position.

c. Set circuit breakers CB1 thru CB4 on circuit breaker AC junction box to OFF position to remove power from equipment rack.

d. Disconnect all plugs from jacks at top of blower AC junction box.

e. Remove top cover from fan AC junction box to gain access to interior of box.

f. Disconnect input power wires from terminal block inside fan AC junction box.

g. Disconnect green ground wire.

h. Use cross slot screwdriver to remove mounting screws from right and left side of fan AC junction box.

i. Remove fan AC junction box from equipment rack.

7.3.5.2 Fan AC Junction Box Replacement. - Perform the following steps to replace the fan AC junction box in the equipment rack:

a. Set circuit breakers CB1 thru CB4 on circuit breaker AC junction box to OFF position to remove power from equipment rack.

b. Open rear cabinet door.

c. Place fan AC junction box in cabinet and align unit with screw holes in side mounting brackets.

d. Position mounting screws in holes on left and right side of fan AC junction box, and tighten with cross slot screwdriver.

e. Connect external plugs to their appropriate jacks at top of fan AC junction box.

f. Connect green ground wire.

g. Connect input power wires on terminal block inside fan AC junction box.

h. Replace top cover on fan AC junction box.

i. Set circuit breakers CB1 thru CB4 on circuit breaker AC junction box to ON position, and activate power at the power distribution panel.

j. Set BLOWERS ON/OFF switches to ON position.

7.3.6 Blower Assembly. – The Blower Assembly, 401-37145-02, is shown in figures 1-1, 1-2, and 1-3. This assembly is accessible from both the front and rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.6.1 Blower Assembly Removal. – Perform the following steps to remove the blower assembly from the equipment rack:

a. At fan AC junction box, set both BLOWERS ON/OFF switches to OFF position.

b. Unplug both AC power cords.

c. At front of equipment rack, unscrew two mounting thumbscrews.

d. Remove blower assembly from equipment rack.

7.3.6.2 Blower Assembly Replacement. – Perform the following steps to replace the blower assembly in the equipment rack:

a. At front of rack, place blower assembly in equipment rack, aligning two thumbscrews with screw holes.

b. Use screwdriver to tighten two thumbscrews.

c. Plug-in both AC power cords.

d. At fan AC junction box, set both BLOWERS ON/OFF switches to ON position.

7.3.7 Circuit Breaker AC Junction Box. - The Circuit Breaker AC Junction Box, 401-37231-01, is shown in figures 1-1, 1-2, and 1-3. This box is accessible from the rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.7.1 Circuit Breaker AC Junction Box Removal. - Perform the following steps to remove the circuit breaker AC junction box from the equipment rack:

a. Set all circuit breakers CB1 thru CB4 to off (down) position.

WARNING

Power must be shut-down at the power distribution panel to ensure that 115 VAC will not exist internal to circuit breaker AC junction box.

b. Secure power at power distribution panel.

c. Unplug all connections from circuit breaker AC junction box jacks.

d. Remove top cover from circuit breaker AC junction box to gain access to interior of box.

e. Disconnect input power wires from terminal block.

f. Disconnect output power wires from terminal block.

g. Disconnect green ground wire.

h. Use cross slot screwdriver to remove mounting screws from right and left side of junction box.

i. Remove circuit breaker AC junction box from equipment rack.

7.3.7.2 Circuit Breaker AC Junction Box Replacement. - Perform the following steps to replace the circuit breaker junction box in the equipment rack:

WARNING

Power must be shut-down at the power distribution panel to ensure that 115 VAC will not exist internal to circuit breaker AC junction box.

a. Secure power at power distribution panel.

b. Place circuit breaker AC junction box in equipment cabinet and align unit with screw holes in side mounting bracket.

c. Position four screws in holes and tighten with cross slot screwdriver.

d. Connect all external plugs to jacks on junction box and connect appropriate wires to remote terminal lugs.

e. Connect green ground wire.

f. Connect output power wires to terminal block.

g. Connect input power wires to terminal block.

h. Replace top cover on circuit breaker AC junction box.

i. Apply power to rack by plugging power plug into wall outlet.

j. Set all circuit breakers CB1 thru CB4 to on (up) position, and activate power at power distribution panel.

7.3.8 Plain AC Junction Box. - The Plain AC Junction Box, 401-37231-03, is shown in figure 1-1. This box is accessible from the rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.8.1 Plain AC Junction Box Removal. - Perform the following steps to remove the plain AC junction box from equipment rack:

WARNING

115 VAC is present at plain AC junction box unless CB1, CB2, CB3, and CB4 on circuit breaker AC junction box are set to off (down) position.

a. Set circuit breakers CB1 thru CB4 on circuit breaker AC junction box to off (down) position to remove power from equipment rack.

b. Unplug and tag all external connections from plain AC junction box.

c. Remove top cover from plain AC junction box.

d. Disconnect and tag input power wires from terminal block inside plain AC junction box.

e. Remove four cross slot screws securing plain AC Junction box to equipment cabinet.

f. Remove plain AC junction box from equipment rack.

7.3.8.2 Plain AC Junction Box Replacement. - Perform the following steps to replace the plain AC junction box in the equipment rack:

WARNING

115 VAC is present at plain AC junction box unless CB1, CB2, CB3, and CB4 on circuit breaker AC junction box are set to off (down) position.

a. Set circuit breakers CB1 thru CB4 on circuit breaker AC junction box to off (down) position to remove power from equipment rack.

b. Place plain AC junction box in rear of equipment cabinet, aligning junction box screw holes with equipment cabinet screw holes.

c. Place four screws in screw holes and tighten with screwdriver.

d. Connect tagged input power wires to terminal block inside plain AC junction box.

e. Replace top cover on plain AC junction box.

f. Plug all tagged external connections in plain AC junction box.

7.3.9 Power Supply Assembly. - The Power Supply Assemblies, 401-36716-01, are shown in figures 1-1, 1-2, and 1-3. These power supplies mount internally on the right and left sides of equipment racks and are accessible from the rear of the rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

WARNING

Power supply assemblies connected to memory card cages are redundant. This means that DC power is still present on the bus bar assembly and on the rear of both power supply assemblies even if one of the supplies is turned off or has failed. Refer to recommended replacement procedure to avoid injury to personnel or damage to the equipment.

CAUTION

In the event of memory card cage power supply assembly failure in the AFSS position processor rack or AWP position processor rack, the redundant power supply assembly will assume the load. It is recommended that the defective power supply assembly not be removed or replaced until an idle period at the site. This is because the redundant power supply assembly is still providing power to the bus bar assembly, and hence to the terminals on the rear of the failed power supply. Recommended replacement procedure is to turn off power to BOTH power control modules prior to replacement of the failed power supply assembly.

7.3.9.1 Power Supply Assembly Removal. - Perform the following steps to remove the power supply assembly from the equipment rack:

a. Set POWER ON/OFF switch on each power control module in effected card cage assembly in the equipment rack to OFF position.

b. Loosen two screws holding caution cover to end of power supply assembly and remove cover.

c. Disconnect all leads from terminal boards TB1 and TB2, and from V1 (+) and (-) terminal lugs.

d. Disconnect green ground wire from power supply assembly.

e. Use screwdriver to loosen two thumbscrews located nearest rear of equipment rack.

f. Pull power supply assembly back to remove from two retaining studs at rear of power supply assembly.

NOTE

When a serial I/O or multiplexer interface assembly is mounted next to power supply assembly, the power supply assembly must be lifted up and over the serial I/O or multiplexer interface assembly to remove power supply assembly from the equipment rack.

g. Remove power supply assembly from equipment rack.

7.3.9.2 Power Supply Assembly Replacement. - Perform the following steps to replace the power supply assembly in the equipment rack:

a. Ensure that POWER ON/OFF switch on each power control module in effected card cage is in the OFF position.

NOTE

When a serial I/O or multiplexer interface assembly is mounted next to power supply assembly, the power supply assembly must be lifted up and over the serial I/O or multiplexer interface assembly to remove power supply assembly from the equipment rack.

b. Place power supply assembly in equipment cabinet and engage slotted end of mounting bracket with two retaining studs toward front of equipment cabinet.

c. Align two thumbscrews nearest rear of equipment cabinet with screw holes and tighten thumbscrews with screwdriver.

d. Connect external leads to appropriate terminals (TB1, TB2) and connect V1 (+) and (−) leads to appropriate terminal lugs.

e. Connect green ground wire to ground stud on power supply assembly.

f. Turn on power supply assembly by switching on associated power control module. Adjust power supply voltages as required.
The settings are: +5VDC ±25mv, and ± 12VDC ± 10mV measured at the bus bar assembly.

g. Install caution cover over end of power supply assembly and secure with two screws.

7.3.10 Patch Panels. – The Digital Patch Panel, 157-011-00 or 157-002C-00, and the Analog Patch Panel, 153-020-12VF-M1, are shown in figures 1-1, 1-2, and 1-3. The patch panels are accessible from the front and rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.10.1 Patch Panel Removal. – Perform the following steps to remove the patch panel from the equipment rack:

NOTE

Step a. does not apply to the digital patch panel which has no external power connections.

a. Remove power from the analog patch panel by unplugging AC power cord from power strip or AC junction box (whichever is appropriate).

b. Disconnect all patch plugs at front of equipment cabinet.

c. At rear of equipment cabinet, use small screwdriver to release plug retaining screws and disconnect all plugs from jacks in rear of the patch panel.

CAUTION

Provide support to patch panel from rear of cabinet before performing step d.

d. At front of equipment cabinet, use cross slot screwdriver to remove four mounting screws (two located on each side of patch panel).

e. Remove patch panel from equipment rack.

7.3.10.2 Patch Panel Replacement. – Perform the following steps to replace the patch panel in the equipment rack:

a. At front of equipment cabinet, position the patch panel in rack, aligning mounting screw holes and insert two mounting screws on each side of patch panel.

b. Use cross slot screwdriver to tighten mounting screws.

c. At rear of the equipment cabinet connect appropriate plugs to jacks in rear of patch panel.

NOTE

Step d. does not apply to the digital patch panel.

d. Plug AC power cord into power strip or AC junction box (whichever is appropriate).

7.3.11 RM-8E Modem Enclosure. – The RM-8E Modem Enclosure is shown in figures 1-1, 1-2, and 1-3. The enclosure is accessible from the front and rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.11.1 RM-8E Modem Enclosure Removal. - Perform the following steps to remove the RM-8E Modem Enclosure from the equipment rack:

a. At rear of modem enclosure, set both BREAKER ON/OFF switches to OFF position.

b. Disconnect both AC power cords from power strip or AC junction box (whichever is appropriate) to remove power from RM-8E Modem Enclosure.

c. At rear of equipment cabinet, unplug all external connections from modem enclosure.

CAUTION

Provide support to modem enclosure from rear of cabinet before performing step d.

d. At front of equipment cabinet, use cross slot screwdriver to remove four mounting screws from equipment rack.

e. Remove modem enclosure from equipment rack.

7.3.11.2 RM-8E Modem Enclosure Replacement. - Perform the following steps to replace the RM-8E Modem Enclosure in the equipment rack:

CAUTION

Provide support to modem enclosure from rear of cabinet before performing step a.

a. At front of the equipment cabinet, position modem enclosure in rack, aligning mounting screw holes and insert two mounting screws on each side of modem enclosure.

b. Use cross slot screwdriver to tighten mounting screws.

c. At rear of equipment cabinet, connect appropriate plugs to jacks on rear of modem enclosure.

d. Connect both AC power cords at power strip or AC junction box (whichever is appropriate).

e. At rear of modem enclosure, set both BREAKER ON/OFF switches to ON position.

7.3.12 RL01-AK/RL02-AK Disk Drive. - The RL01-AK/RL02-AK Disk Drive is shown in figures 1-1, 1-2, and 1-3. The disk drive is accessible from the front and rear of the equipment rack:

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.12.1 RL01-AK/RL02-AK Disk Drive Removal. - Perform the following steps to remove the RL01-AK/RL02-AK Disk Drive from the equipment rack:

a. At rear of disk drive, set circuit breaker to off (down) position.

b. Unplug AC power cord from power strip or AC junction box (whichever is appropriate) to remove power from disk drive.

c. At rear of equipment cabinet, disconnect plug from jack on rear of disk drive.

d. Disconect and/or remove cable clamps and cable ties to free signal cable from power cord and rear of disk drive.

e. At front of equipment cabinet, pull disk drive out from rack on support slides.

WARNING

Two persons are required to remove or replace disk drive from or to the equipment rack.

f. Press release mechanisms on support slides and lift disk drive from the slides to remove from equipment rack.

7.3.12.2 RL01-AK/RL02-AK Disk Drive Replacement. - Perform the following steps to replace the RL01-AK/RL02-AK Disk Drive in the equipment rack:

CAUTION

Replace RL01-AK Disk Drives with RL01-AK Disk Drives, and replace RL02-AK Disk Drives with RL02-AK Disk Drives..

a. At front of equipment cabinet, pull support slides out from cabinet.

WARNING

Two persons are required to remove or replace disk drive from or to the equipment rack.

b. Place disk drive on support slides and align slide mechanism to ensure proper latching and operation.

c. Slide disk drive into equipment cabinet.

d. At rear of equipment cabinet, plug power cord into power strip or AC junction box (whichever is appropriate).

e. Connect appropriate cable to jack on rear of disk drive.

f. Attach signal cable to power cord and rear of disk drive using cable clamps and cable ties.

7.3.13 Power Control Module. - The Power Control Modules, 401-36719-01, -02, and -05, are shown in figures 1-1, 1-2, and 1-3. This module is accessible from the front and rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.13.1 Power Control Module Removal. - Perform the following steps to remove the power control module from the equipment rack:

a. Momentarily press HALT/REBOOT switch to HALT position.

b. Set POWER ON/OFF switch to OFF position.

c. At front of KPV11-B System Module Circuit Card, remove terminal connectors at plugs P1, P2, and P3 (green, white and black wires, respectively).

d. At front of power control module, turn thumb screw located at top of front panel counterclockwise until thumbscrew releases.

e. Grasp power control module thumbscrew, and pull out to remove module from equipment rack far enough to gain access to connectors on rear of module.

f. At rear of power control module, disconnect plugs connected to jacks J1, J2, and J3.

7.3.13.2 Power Control Module Replacement. - Perform the following steps to replace the power control module in the equipment rack:

CAUTION

Ensure that POWER ON/OFF switch on power control module is in OFF position before performing step a.

a. Connect plugs to jacks J1, J2, and J3 at rear of power control module.

NOTE

Power control module must be flush against inside of card cage for proper insertion of power control module in card cage when performing step b.

b. Place power control module in appropriate slot; push until power control module is firmly seated, being careful not to bind cables.

c. Turn thumbscrew located at top of the power control module front panel clockwise to secure power control module to card cage.

d. At front of KPV11-B System Module Circuit Card, connect green, white and black wires to plugs P1, P2, and P3, respectively.

7.3.14 Coded Time Source Interface. - The Coded Time Source Interface, 401-37207-01, is shown in figures 1-1 and 1-3. This unit is accessible from the front and rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.14.1 Coded Time Source Interface Removal. - Perform the following steps to remove the coded time source interface from the equipment rack:

a. At front of coded time source interface, set AC POWER switch to off (down) position.

b. At rear of equipment cabinet, disconnect coded time source interface AC power cord from power strip or AC junction box (whichever is appropriate).

c. At rear of equipment cabinet, disconnect external connections from rear of coded time source interface assembly.

d. At front of equipment cabinet, unscrew four thumbscrews mounting coded time source interface assembly to equipment rack.

e. Pull coded time source interface assembly out from rack on support slides.

f. Press release mechanisms on support slides to remove equipment from rack.

7.3.14.2 Coded Time Source Interface PCB Removal. - Perform the following steps to remove the printed circuit card from the coded time source interface:

a. Remove screws and cover from coded time source interface assembly.

b. Disconnect plug from jack J4 on the PCB.

c. Remove ten screws mounting PCB to chassis standoffs.

d. Remove PCB from assembly.

7.3.14.3 Coded Time Source Interface Power Supply Removal. - Perform the following steps to remove the power supply from the coded time source interface:

a. Remove screws and cover from coded time source interface assembly.

b. Disconnect externally connected plugs P1 and P2 from J6 and J7.

c. Use socket wrench to remove four nuts mounting power supply to chassis.

d. Remove power supply from assembly.

7.3.14.4 Coded Time Source Interface Power Supply Replacement. - Perform the following steps to replace the power supply in the coded time source interface:

CAUTION

After replacing coded time source interface power supply, the adjustment procedure provided in paragraph 7.2.3 must be performed. Damage can occur to coded time source interface if this adjustment is not performed.

a. Place power supply in assembly, aligning mounting bolts through four screw holes.

b. Place nuts on mounting bolts and tighten with socket wrench.

c. Connect plugs P1 and P2 to jacks J6 and J7 respectively.

7.3.14.5 Coded Time Source Interface PCB Replacement. - Perform the following steps to replace the PBC in the coded time source interface:

a. Place PCB in assembly align jacks with holes in chassis and screw holes with standoffs.

b. Insert ten screws in PCB holes and tighten with screwdriver.

c. Connect appropriate plug to jack J4.

7.3.14.6 Coded Time Source Interface Replacement. - Peform the following steps to replace the coded time source interface in the equipment rack:

a. At front of equipment cabinet, pull support slide out from cabinet.

b. Place coded time source interface on support slides and align slide mechanism to ensure proper latching and operation.

c. Slide coded time source interface into cabinet and tighten thumbscrews using screwdriver.

d. Connect power cord and signal cables.

7.3.15 Thermal Alarm Unit. - The Thermal Alarm Unit, 401-37155-01, is shown in figures 1-1, 1-2, and 1-3. This unit is accessible from the front and rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.15.1 Thermal Alarm Unit Removal. - Perform the following steps to remove the thermal alarm unit from the equipment rack:

a. At front of thermal alarm unit, set POWER ON/OFF switch to OFF position.

b. At rear of equipment cabinet, unplug thermal alarm unit AC power cord from power strip or AC junction box (whichever is appropriate).

c. At rear of equipment cabinet, remove connections at plugs P1 thru P9.

d. At front of equipment cabinet, loosen four thumbscrews mounting assembly to equipment rack.

e. Remove thermal alarm unit from equipment rack.

7.3.15.2 Thermal Alarm Control Panel PCB Removal. - Perform the following steps to remove the thermal alarm control panel circuit card from the thermal alarm unit:

a. Unplug external connections from jacks on the printed circuit card.

b. Remove retaining nuts from ALARM DISABLE ON/OFF switch, AUDIO ALERT DISABLE ON/OFF switch, and ALARM TEST ON/OFF switches (S1 thru S10).

c. Remove printed circuit card from thermal alarm unit.

7.3.15.3 Thermal Alarm I/O Panel PCB Removal. - Perform the following steps to remove the thermal alarm I/O panel circuit card from the thermal alarm unit:

a. Unplug external connections from jacks on the printed circuit card.

b. Unscrew six screws mounting PCB to standoffs.

c. Remove printed circuit card from thermal alarm unit.

7.3.15.4 Thermal Alarm Unit Power Supply Removal. - Perform the following steps to remove the power supply from the thermal alarm unit:

a. Unplug external connections from power supply and/or external devices.

b. Unscrew four cross slot screws from power supply chassis bottom.

c. Remove power supply from thermal alarm unit.

7.3.15.5 Thermal Alarm Unit Power Supply Replacement. - Perform the following steps to replace the power supply in the thermal alarm unit:

a. Place power supply in center of thermal alarm unit; align four screw holes in power supply chassis with screw holes in thermal alarm unit.

b. Place screws in four holes and tighten with screwdriver.

c. Connect all external connections to appropriate devices.

7.3.15.6 Thermal Alarm I/O Panel PCB Replacement. - Perform the following steps to replace the thermal alarm I/O panel circuit card in the thermal alarm unit:

a. Place circuit card in rear of thermal alarm unit; align screw holes on the circuit card with standoffs at the thermal alarm unit's rear panel.

b. Place screws in circuit card screw holes and tighten with a screwdriver.

c. Connect external plugs to appropriate jacks on circuit card.

7.3.15.7 Thermal Alarm Control Panel PCB Replacement. - Perform the following steps to replace the thermal alarm control panel circuit card in the thermal alarm unit:

a. Place circuit card in front of thermal alarm unit; align switches S1 thru S10 with switch holes in the thermal alarm unit's front panel.

b. Place retaining nuts on switch screw threads protruding thru front panel; tighten to secure circuit card against front panel.

c. Connect external plugs to appropriate jacks on circuit card.

7.3.15.8 Thermal Alarm Unit Replacement. - Perform the following steps to replace the thermal alarm unit in the equipment rack:

a. At the front of the equipment cabinet, position the thermal alarm unit assembly in the equipment rack; align four thumbscrews with mounting screw holes.

b. Tighten four thumbscrews with screwdriver.

c. At rear of equipment cabinet, connect appropriate external cables to plugs P1 thru P9.

d. Connect AC power cord to power strip or AC junction box (whichever is appropriate).

7.3.16 Model 60-DC WWVB Synchronized Digital Clock. - The Model 60-DC WWVB Synchronized Digital Clock (Coded Time Source) is shown in figures 1-1 and 1-3. This unit is accessible from the front and rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.16.1 Model 60-DC WWVB Synchronized Digital Clock Removal. - Perform the following steps to remove the Model 60-DC WWVB Synchronized Digital Clock (Coded Time Source) from the equipment rack:

a. At front of equipment cabinet, set POWER ON/OFF switch on coded time source to off (down) position.

b. At rear of equipment cabinet, remove all connections on rear of coded time source, including power cord.

c. At front of equipment cabinet, use screwdriver to remove four screws mounting coded time source to rack mounts.

d. Remove coded time source from equipment cabinet.

7.3.16.2 Model 60-DC WWVB Synchronized Digital Clock Replacement.

- Perform the following steps to replace the Model 60-DC WWVB Synchronized Digital Clock (Coded Time Source) in the equipment cabinet:

a. Position coded time source in the front of equipment cabinet, aligning screw holes with holes in rack mounts.

b. Insert four screws in screw holes and tighten with screwdriver.

c. At rear of equipment cabinet, connect power and other cables to appropriate jacks on rear of coded time source.

7.3.17 Thermal Sensors.

- The thermal sensors are located as shown in figures 1-1, 1-2, and 1-3. A thermal sensor is shown in figure 1-23. The thermal sensors are accessible from the rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.17.1 Thermal Sensor Removal.

- Perform the following steps to remove the thermal sensor from the equipment cabinet:

a. Disconnect connector from bottom of thermal sensor.

b. Using cross slot screwdriver, remove two screws holding thermal sensor to equipment cabinet, and remove thermal sensor.

7.3.17.2 Thermal Sensor Replacement.

- Perform the following steps to replace the thermal sensor in the equipment cabinet:

a. Align two screw holes in thermal sensor with screw holes in equipment cabinet.

b. Using cross slot screwdriver, tighten two screws securing thermal sensor to equipment cabinet.

c. Connect connector to bottom of thermal sensor.

7.3.18 Card Cage Closures. - Two types of transparent, plastic, card cage closures are provided in the M1FC FSAS System. One type, 401-37286, is mounted on the side of a card cage . The other type, 401-37287, is mounted in the front of a card cage. The card cage closures are accessible from the front of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.18.1 Card Cage Closure, 401-37286, Removal. - Perform the following steps to remove the card cage closure from the card cage:

a. Grip front end of closure with fingers and bend slightly to form small arc.

b. Pull closure straight out from front of card cage.

7.3.18.2 Card Cage Closure, 401-37287, Removal. - Perform the following steps to remove the card cage closure from the card cage:

a. Apply pressure with finger to center of closure and push closure toward rear of card cage.

b. Turn closure inside card cage so that smaller sides are pointing toward front and rear of card cage.

c. Grip front end of closure with fingers and bend slightly to form small arc.

d. Pull closure straight out from front of card cage.

7.3.18.3 Card Closure, 401-37286, Replacement. - Perform the following steps to replace the card closure in the card cage:

a. Grip closure with fingers and bend slightly to form small arc.

b. Gently push closure into position from front of card cage.

7.3.18.4 Card Closure, 401-37287, Replacement. - Perform the following steps to replace the card closure in the card cage:

a. Grip closure with fingers and bend slightly to form small arc.

b. Gently push closure into card cage.

c. Turn closure to proper position inside card cage; maintain small arc.

d. Release small arc in closure and allow closure to spring into proper position.

7.3.19 Card Cages. - The following card cages are used in the MIFC FSAS System:

1. Memory Card Cage "A", 401-37999-02.

2. Memory Card Cage "B", 401-37999-06.

3. Single Communications Processor Card Cage, 401-37999-03

4. Dual Communications Processor Card Cage, 401-37999-04

5. Position Processor Card Cage, 401-37999-01

6. COTC Processor Card Cage, 401-42600-01

The card cages are shown in figures 1-1, 1-2, and 1-3. The card cages are accessible from the front and rear of the equipment rack.

WARNING

When equipment is removed from or replaced in equipment cabinets, power may be present at other units in the cabinet. Exercise extreme caution to prevent injury to personnel or damage to equipment.

7.3.19.1 Card Cage Removal. - Perform the following steps to remove the memory card cage, communications processor card cage, position processor card cage, or COTC processor card cage from the equipment rack:

a. Remove all power control modules from card cage by performing steps provided in paragraph 7.3.13.1.

b. Remove all circuit cards from card cage by performing steps provided in paragraph 7.3.4.1.

c. Remove and tag power wires at bus bar assembly (two black, two white, one violet, and one orange) coming from power supply assembly. Two sets of these wires exist on memory card cage.

d. Remove and tag wires on bus bar assembly coming from multiplexer interface assembly, (cable 401-37172).

e. Remove and tag coaxial cables connected to rear of card cage.

f. Remove any wires routed through cable clamps connected to card cage.

g. Remove green ground wire connected to right side of card cage.

h. Using cross slot screwdriver, remove four screws on front of card cage attaching card cage to equipment rack, and remove card cage from equipment rack.

7.3.19.2 Card Cage Replacement. - Perform the following steps to replace the memory card cage, communications processor card cage, position processor card cage, or COTC processor card cage in the equipment rack:

a. Position card cage in the front of equipment rack, aligning screw holes with holes in rack mounts.

b. Insert four screws in screw holes and tighten with cross slot screwdriver.

c. Connect green ground wire to ground screw on right side of card cage.

d. Connect any wires removed in step f of paragraph 7.3.19.1 to cable clamps on card cage.

e. Connect tagged coaxial cables to proper positions on rear of card cage.

f. Connect tagged wires from multiplexer interface assembly (cable 401-37172) to bus bar assembly on card cage.

g. Connect tagged power wires from power supply assembly to bus bar assembly. Two sets of these wires exist on memory card cages.

h. Replace all circuit cards removed in step b of paragraph 7.3.19.1 by performing steps provided in paragraph 7.3.4.2.

CAUTION

Ensure that power control module POWER ON/OFF switch is in OFF position before performing step i.

i. Replace all power control modules used in card cage according to steps in paragraph 7.3.13.2.

7.3.20 DC Power Switch Assembly. - The DC Power Switch Assembly, 401-37916-01, is shown in figures 1-2 and 1-3. The assembly is accessible from the rear of the equipment rack.

7.3.20.1 DC Power Switch Assembly Removal. - Perform the following steps to remove the DC power switch assembly from the equipment rack:

WARNING

Remove power from DC power switch assembly by removing, AC power from all power control modules in memory card cages "A" and "B" before performing the following steps.

a. Loosen captive screw on DC power switch assembly cover and swing cover open.

b. Disconnect and tag power connections to DC power switch assembly.

CAUTION

Support bottom of DC power switch before performing step c.

c. Loosen two captive screws on DC power switch assembly mount and slide DC power switch assembly out of equipment rack.

7.3.20.2 DC Power Switch Assembly Replacement. - Perform the following steps to replace the DC power switch assembly in the equipment rack:

WARNING

Ensure that AC power has been removed from all power control modules in memory card cages "A" and "B" before performing the following steps.

a. Place DC power switch assembly in proper position in equipment rack and engage slotted end of mounting bracket with two retaining studs toward front of equipment cabinet.

CAUTION

Support bottom of DC power switch before performing step b.

b. Secure DC switch assembly to equipment rack by tightening two captive screws on DC power switch assembly mount.

c. Connect tagged power connections to DC power switch assembly.

d. Swing DC power switch assembly cover closed and tighten captive screw on cover.

7.3.21 Modem Sharing Device. - The Modem Sharing Device, 2005064, is shown in figure 1-2. The modem sharing device is accessible from the front and rear of the equipment rack.

7.3.21.1 Modem Sharing Device Removal. - Perform the following steps to remove the modem sharing device from the equipment rack:

a. Set BREAKER switch on rear of modem sharing device to OFF position.

b. Disconnect AC power cord at rear of modem sharing device.

c. Disconnect all connectors from rear of modem sharing device.

d. Using screwdriver, remove two slotted screws at front of modem sharing device which secure modem sharing device to modem sharing device enclosure

e. Gently pull modem sharing device out of front of modem sharing device enclosure.

7.3.21.2 Modem Sharing Device Replacement. - Perform the following steps to replace the modem sharing device in the equipment rack:

a. Set BREAKER switch on rear of modem sharing device to OFF position.

b. Connect AC power cord on rear of modem sharing device.

c. Connect all connectors removed during removal of modem sharing device.

d. With modem sharing device in proper position, tighten two screws at front of modem sharing device.

e. Set BREAKER switch on rear of modem sharing device to ON position.

SECTION 8

PARTS LIST

8.1. INTRODUCTION. - This section contains the parts list for FSDPS, AFSS, and AWP subsystems. Table 8-1 is the FSDPS parts listing, table 8-2 is the AFSS parts listing, and table 8-3 is the AWP parts listing. The major assemblies of each subsystem are broken down into their component parts, either in this manual or the manual supplied by the manufacturer of the assembly.

NOTE

The FAA type numbers that appear on equipment name plates are not item identifying in all cases. One FAA type number may represent more than one configuration of an equipment or subsystem. Therefore, the FAA type numbers should not be used to identify a specific configuration. For complete identification of specific configurations, use the part number that appears on the E-Systems parts list in this manual.

8.2 INDENTURE LETTER COLUMN. - The indenture letter column (INDENT) of tables 8-1, 8-2, and 8-3 are used to show the top-down breakdown. A letter is inserted in this column to indicate the relationship of the line item to the end article/item. The end article, at whatever level it may be (system, set, group, unit) is always indicated by indenture "A". All other items are then indent-related to the end article.

Table 8-1. FSDPS Equipment Parts List

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
Unit 1	A	Communications Switching Rack	97871	401-37622-04
1A1	B	Coded Time Source	56738	60DC
1A2	B	CTS Interface	97871	401-37207-01
1A2A1	C	Circuit Card Assy	97871	401-36972-01
1A2A1A1	D	Printed Wiring Board	97871	401-36973-04
1A12A1C1-C40	D	Capacitor	81349	CKO6BX104K
1A2A1C41	D	Capacitor	81349	CKO6BX103K
1A2A1C42-C50	D	Capacitor	81349	CKO6BX104K
1A2A1C51-C52	D	Capacitor	81349	CK05BX560K
1A2A1C53-C54	D	Capacitor	81349	CKO6BX104K
1A2A1J1	D	Connector	71468	DBC-25PAA
1A2A1J2	D	Connector	71468	DBC-37PAA
1A2A1J3	D	Connector	71468	DBC-37PAA
1A2A1J4	D	Connector	71468	DBC-25PAA
1A2A1K1	D	Relay	11532	732D-12
1A2A1R1-R23	D	Resistor	81349	RCR20G101JS
1A2A1R24-R31	D	Resistor	81349	RCRO7G202JS
1A2A1R32	D	Resistor	81349	RCRO7G106JS
1A2A1R33-R39	D	Resistor	81349	RCRO7G202JS
1A2A1S1	D	Switch	00779	435640-5
1A2A1S2	D	Switch	00779	435640-5
1A2A1U1	D	Integrated Circuit	01295	SN74LS11J
1A2A1U2	D	Integrated Circuit	01295	SN74LS158J
1A2A1U3-U12	D	Integrated Circuit	01295	SN74LS157J
1A2A1U13	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U14	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U15	D	Integrated Circuit	01295	SN74LS32J
1A2A1U16	D	Integrated Circuit	01295	SN74LS04J
1A2A1U17	D	Integrated Circuit	01295	SN74LS151J
1A2A1U18	D	Integrated Circuit	01295	SN74LS151J
1A2A1U19	D	Integrated Circuit	01295	SN74LS157J
1A2A1U20-U28	D	Integrated Circuit	01295	SN74LS85J
1A2A1U29	D	Integrated Circuit	01295	SN74LS11J

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A2A1U30	D	Integrated Circuit	01295	SN74LS11J
1A2A1U31	D	Integrated Circuit	18324	316-3042-1
1A2A1U32	D	Integrated Circuit	01295	SN74LS08J
1A2A1U33	D	Integrated Circuit	01295	SN74LS151J
1A2A1U34	D	Integrated Circuit	01295	SN74LS151J
1A2A1U35	D	Integrated Circuit	01295	SN74LS157J
1A2A1U36-U44	D	Integrated Circuit	01295	SN74LS85J
1A2A1U45	D	Integrated Circuit	01295	SN74LS21J
1A2A1U46	D	Integrated Circuit	01295	SN74LS32J
1A2A1U47	D	Integrated Circuit	01295	SN74LS151J
1A2A1U48	D	Integrated Circuit	01295	SN74LS151J
1A2A1U49	D	Integrated Circuit	01295	SN74LS32J
1A2A1U50-U57	D	Integrated Circuit	01295	SN74LS85J
1A2A1U58	D	Integrated Circuit	01295	SN74LS04J
1A2A1U59	D	Integrated Circuit	01295	SN74LS86J
1A2A1U60	D	Integrated Circuit	01295	SN74LS08J
1A2A1U61	D	Resistor Network	32997	4308R-101-202
1A2A1U62	D	Integrated Circuit	01295	SN74LS151J
1A2A1U63	D	Integrated Circuit	01295	SN74LS151J
1A2A1U64	D	Integrated Circuit	01295	SN74LS138J
1A2A1U65-U68	D	Integrated Circuit	01295	SN74LS162AJ
1A2A1U69	D	Integrated Circuit	01295	SN74LS85J
1A2A1U70-U73	D	Integrated Circuit	01295	SN74LS162AJ
1A2A1U74	D	Integrated Circuit	01295	SN74LS11J
1A2A1U75	D	Integrated Circuit	01295	SN74LS174AJ
1A2A1U76	D	Integrated Circuit	01295	SN74LS157J
1A2A1U77	D	Integrated Circuit	34371	HD3-4702-9
1A2A1U78	D	Integrated Circuit	01295	SN74LS161AJ
1A2A1U79	D	Integrated Circuit	01295	SN74LS161AJ
1A2A1U80	D	Integrated Circuit	01295	SN74LS32J
1A2A1U81	D	Integrated Circuit	01295	SN74LS00J
1A2A1U82	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U83	D	Integrated Circuit	01295	SN74LS161AJ

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A2A1U84	D	Integrated Circuit	01295	SN74LS161AJ
1A2A1U85	D	Integrated Circuit	01295	SN74LS162AJ
1A2A1U86	D	Integrated Circuit	01295	SN74LS260J
1A2A1U87	D	Integrated Circuit	86684	CDP1823CD
1A2A1U88	D	Integrated Circuit	18324	316-3043-001
1A2A1U89	D	Integrated Circuit	34371	HD3-6402C-9
1A2A1U90	D	Resistor Network	32997	4308R-101-202
1A2A1U91	D	Integrated Circuit	01295	SN74LS157J
1A2A1U92-U94	D	Integrated Circuit	01295	SN74LS74AJ
1A2A1U95	D	Integrated Circuit	01295	SN74LS04J
1A2A1U96	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U97	D	Integrated Circuit	01295	SN74LS08J
1A2A1U98	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U99	D	Integrated Circuit	01295	SN74LS11J
1A2A1U100	D	Integrated Circuit	01295	SN74LS00J
1A2A1U101	D	Integrated Circuit	01295	SN75451BJG
1A2A1U102	D	Integrated Circuit	07263	9616EPC
1A2A1U103	D	Integrated Circuit	07263	9617DC
1A2A1Y1	D	Crystal	23875	MP-2-2.457600MHZ
1A2K1	C	Relay	77342	R10-E1-YZ-V185
1A2F1	C	Fuse	81349	FO2B250V2A
1A2F2	C	Fuse	81349	FO2B250V2A
1A2PS1	C	Power Supply	54407	401-37123-01
1A2XF1	C	Fuse Holder	81349	FHL17G1
1A2XF2	C	Fuse Holder	81349	FHL17G1
1A3	B	Coded Time Source	56738	60-DC
1A4	B	Thermal Alarm Unit	97871	401-37155-01
1A4A1	C	Circuit Card Assy	97871	401-37208-01
1A4A1A1	D	Printed Wiring Board	97871	401-37212-02
1A4A1DS1-DS8	D	Light Emitting Diode	28480	HLMP-3105
1A4A1J1	D	Connector	00779	102333-6
1A4A1J2	D	Connector	00779	87571-2
1A4A1SW1-SW10	D	Switch	95146	TT11AG-PC-9T-1/4

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A4A2	C	Circuit Card Assy	97871	401-37209-01
1A4A2A1	D	Printed Wiring Board	97871	401-37215-03
1A4A2C1-C14	D	Capacitor	81349	M39014/02-1407
1A4A2CR1	D	Diode	07688	IN3611
1A4A2J1	D	Connector	00779	102333-6
1A4A2P1-P9	D	Connector	00779	350428-1
1A4A2Q1	D	Transistor	07688	2N2222
1A4A2R1-R8	D	Resistor, Variable	81349	M39015/2-003-W-M
1A4A2R9-R16	D	Resistor	81349	RNC50H7500FS
1A4A2R17	D	Resistor	81349	RNC50H1001FS
1A4A2R18	D	Resistor	81349	RNC50H1001FS
1A4A2R19	D	Resistor	81349	RNC50H103JS
1A4A2R20	D	Resistor	81349	RNC50H103JS
1A4A2R21	D	Resistor	81349	RCR07G202JS
1A4A2R22	D	Resistor	81349	RNC50H103JS
1A4A2R23	D	Resistor	81349	RNC50H103JS
1A4A2R24	D	Resistor	81349	RCR07G202JS
1A4A2R25	D	Resistor	81349	RNC50H103JS
1A4A2R26	D	Resistor	81349	RNC50H103JS
1A4A2R27	D	Resistor	81349	RCR07G202JS
1A4A2R28	D	Resistor	81349	RNC50H103JS
1A4A2R29	D	Resistor	81349	RNC50H103JS
1A4A2R30	D	Resistor	81349	RCR07G202JS
1A4A2R31	D	Resistor	81349	RCR07G202JS
1A4A2R32	D	Resistor	81349	RNC50H103JS
1A4A2R33	D	Resistor	81349	RNC50H103JS
1A4A2R34	D	Resistor	81349	RNC50H103JS
1A4A2R35	D	Resistor	81349	RNC50H103JS
1A4A2R36	D	Resistor	81349	RCR07G202JS
1A4A2R37	D	Resistor	81349	RCR07G202JS
1A4A2R38	D	Resistor	81349	RNC50H103JS
1A4A2R39	D	Resistor	81349	RNC50H103JS
1A4A2R40	D	Resistor	81349	RNC50H103JS

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A4A2R41	D	Resistor	81349	RNC50H103JS
1A4A2R42	D	Resistor	81349	RCR07G202JS
1A4A2R43	D	Resistor	81349	RCR07G561JS
1A4A2R44	D	Resistor	81349	RNC50H1001FS
1A4A2R46	D	Resistor	81349	RCR07G202JS
1A4A2S1	D	Switch	95146	TT11AG-PC-1-ES
1A4A2U1-U2	D	Integrated Circuit	15476	UA339DC
1A4A2U3-U4	D	Integrated Circuit	01295	SN74S04J
1A4A2U5	D	Integrated Circuit	01295	SN74LS30J
1A4A2U6	D	Integrated Circuit	01295	SN75451BJG
1A4DS1	C	Light Emitting Diode	28480	HLMP-3105
1A4LS1	C	Sonalarm	90201	SC628A
1A4PS1	C	Power Supply	54407	HAA512
1A4S1	C	Switch	27191	7560K6
1A5	B	Digital Patch Panel	25064	157-002C-00
1A6	B	Digital Patch Panel	25064	157-002C-00
1A7	B	Digital Patch Panel	25064	157-002C-00
1A8	B	Digital Patch Panel	25064	157-002C-00
1A9	B	Digital Patch Panel	25064	157-002C-00
1A10	B	Digital Patch Panel	25064	157-002C-00
1A11	B	Disk Drive	15476	RL01-AK/RL02-AK
1A16	B	Circuit Breaker AC Junction Box	97871	401-37231-01
1A16CB1-CB3	C	Circuit Breaker	74193	JA2-A3-A-30-2
1A16CB4	C	Circuit Breaker	74193	JA2-A3-A-20-2
1A16F1-F4	C	Fuse	81349	FO2A250V3A
1A16J10-J12	C	Receptacle, Duplex	74545	5000M9
1A16S1	C	Switch DPST	27193	7560K6
1A16S2	C	Switch DPST	27193	7560K6
1A16TB1-TB2	C	Terminal Block	81349	38TB10
1A16XF1-XF4	C	Fuse Holder	81349	FHL17G1
1W1	B	Coded Time Source Cable	97871	401-36743-01
1W2	B	Coded Time Source Cable	97871	401-36743-01
1W3	B	Communication Cable	97871	401-37273-12

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
Unit 2	A	Communications Equipment Rack	97871	401-37623-05
2A1	B	RM-8E Modem Enclosure	57112	2005060
2A1A0	C	RM-800 Modem	57112	1020377
2A1A1, A3, A5, A7	C	RM-208 Modem	57112	2082278
2A1A2, A4, A6, A8	C	RM-A/O Modem	57112	1020364
2A1A9-A10	C	RM-8E Power Supply	57112	1020249
2A2	B	RM-8E Modem Enclosure	57112	2005060
2A2A1-A4	C	RM-9600E FP Modem	57112	2092842
2A2A5-A8	C	RM-9600 Modem	57112	2092284
2A2A9-A10	C	RM-8E Power Supply	57112	1020249
2A3	B	RM-8E Modem Enclosure	57112	2005060
2A3A1	C	RM-9600E FP Modem	57112	2092842
2A3A2, A5-A8	C	RM-9600 Modem	57112	2092284
2A3A9-A10	C	RM-8E Power Supply	57112	1020249
2A4	B	RM-8E Modem Enclosure	57112	2005060
2A4A1-A8	C	RM-9600 Modem	57112	2092284
2A4A9-A10	C	RM-8E Power Supply	57112	1020249
2A5	B	RM-8E Modem Enclosure	57112	2005060
2A5A1-A8	C	RM-9600 Modem	57112	2092284
2A5A9-A10	C	RM-8E Power Supply	57112	1020249
2A6	B	RM-8E Modem Enclosure	57112	2005060
2A6A1-A8	C	RM-9600 Modem	57112	2092284
2A6A9-A10	C	RM-8E Power Supply	57112	1020249
2A7	B	RM-8E Modem Enclosure	57112	2005060
2A7A1-A4	C	RM-9600 Modem	57112	2092284
2A7A9-A10	C	RM-8E Power Supply	57112	1020249
2A8-A10	B	Outlet Strip	22012	602
2A16	B	AC Junction Box	97871	401-37231-03
Unit 3	A	COTC Rack	97871	401-37265-01
3A1-3A4	B	Analog Patch Panel	56657	153-020-12VF-M1
3A5	B	COTC Processor Card Cage	97871	401-42600-01
3A5A1 LSI 11/23	C	LSI-11/23 Mic. Circ. Card	15476	KDF11-AA
3A5A1 MUX	C	Multiplexer Circuit Card	97871	401-36993-03

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A1 MUX A1	D	Printed Wiring Board	97871	401-36991-05
3A5A1 MUX C1-C4	D	Capacitor		CK05BX151K
3A5A1 MUX C9-C65	D	Capacitor		CK05BX104K
3A5A1 MUX C67-C77	D	Capacitor		CK055BX104K
3A5A1 MUX C78	D	Capacitor	90201	T1M226M010P0X
3A5A1 MUX C79-C92	D	Capacitor		CK05BX104K
3A5A1 MUX C93-C95	D	Capacitor		M39006/09-8283
3A5A1 MUX C96-C97	D	Capacitor		CK05BX103K
3A5A1 MUX C98	D	Capacitor		M39006/09-8283
3A5A1 MUX CR1	D	Diode		1N4148
3A5A1 MUX CR2	D	Diode		1N4148
3A5A1 MUX DS1	D	Light Emitting Diode	72619	555-2303
3A5A1 MUX DS2	D	Light Emitting Diode	72619	555-4007
3A5A1 MUX DS3	D	Light Emitting Diode	72619	555-4007
3A5A1 MUX E1-E10	D	Header	89497	65507-136
3A5A1 MUX J1-J2	D	Connector	22526	65823-043
3A5A1 MUX R1-R3	D	Resistor		RCR07G102JS
3A5A1 MUX R4	D	Resistor		RCR07G330JS
3A5A1 MUX R5	D	Resistor		RCR07G102JS
3A5A1 MUX R6	D	Resistor		RCR07G470JS
3A5A1 MUX R7	D	Resistor		RCR07G330JS
3A5A1 MUX R8	D	Resistor		RCR07G822JS
3A5A1 MUX R9	D	Resistor		RCR07G103JS
3A5A1 MUX R10	D	Resistor		RCR07G330JS
3A5A1 MUX R11	D	Resistor		RCR07G102JS
3A5A1 MUX R12	D	Resistor		RCR07G331JS
3A5A1 MUX R13-R14	D	Resistor		RCR07G102JS
3A5A1 MUX R15	D	Resistor		RCR07G393JS
3A5A1 MUX TP1	D	Terminal	83330	2029B
3A5A1 MUX U1	D	Integrated Circuit	01295	SN74LS04J
3A5A1 MUX U2	D	Integrated Circuit	27014	DS3691J
3A5A1 MUX U3	D	Integrated Circuit	27014	DS26LS32CJ
3A5A1 MUX U4	D	Integrated Circuit	27014	DS3691J

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A1 MUX U5	D	Resistor Network	32997	4308-R-102-472
3A5A1 MUX U6	D	Integrated Circuit	27014	DS26LS32CJ
3A5A1 MUX U7	D	Resistor Network	32997	4308R-102-472
3A5A1 MUX U8	D	Integrated Circuit	27014	DS3691J
3A5A1 MUX U9	D	Resistor Network	32997	4308R-102-472
3A5A1 MUX U10	D	Integrated Circuit	27014	DS26LS32CJ
3A5A1 MUX U11-U12	D	Resistor Network	32997	4308R-102-472
3A5A1 MUX U13	D	Integrated Circuit	27014	DS26LS32CJ
3A5A1 MUX U14-U15	D	Resistor Network	32997	4308R-102-472
3A5A1 MUX U16	D	Integrated Circuit	27014	DS26LS32CJ
3A5A1 MUX U17-U18	D	Resistor Network	32997	4308R-102-472
3A5A1 MUX U19	D	Integrated Circuit	27014	DS26LS32CJ
3A5A1 MUX U20	D	Resistor Network	32997	4308R-102-472
3A5A1 MUX U21	D	Integrated Circuit	27014	DS3691J
3A5A1 MUX U22	D	Resistor Network	32997	4308R-102-472
3A5A1 MUX U23	D	Integrated Circuit	27014	DS26LS32CJ
3A5A1 MUX U24	D	Resistor Network	32997	4308R-102-472
3A5A1 MUX U25	D	Integrated Circuit	27014	DS3691J
3A5A1 MUX U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
3A5A1 MUX U28	D	Integrated Circuit	01295	SN74LS04J
3A5A1 MUX U29	D	Integrated Circuit	34649	D8274
3A5A1 MUX U30	D	Integrated Circuit	34649	D8253-5
3A5A1 MUX U31	D	Integrated Circuit	01295	SN74LS02J
3A5A1 MUX U32	D	Integrated Circuit	01295	SN74LS377J
3A5A1 MUX U33	D	Integrated Circuit	01295	SN74LS241J
3A5A1 MUX U34-U35	D	Integrated Circuit	34649	D8155-2
3A5A1 MUX U36	D	Integrated Circuit		316-3009-003
3A5A1 MUX U37	D	Integrated Circuit		316-3010-003
3A5A1 MUX U38-U41	D	Integrated Circuit	50088	MK4802P-3
3A5A1 MUX U42	D	Resistor Network	32997	4310R-102-181
3A5A1 MUX U43	D	Integrated Circuit	34649	D8274
3A5A1 MUX U44	D	Integrated Circuit	01295	SN74LS125AJ
3A5A1 MUX U45	D	Integrated Circuit	01295	SN74LS126AJ

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A1 MUX U46	D	Integrated Circuit	18324	N8X320N
3A5A1 MUX U47-U50	D	Integrated Circuit	01295	SN74LS377J
3A5A1 MUX U51-52	D	Integrated Circuit	07263	93S16DC
3A5A1 MUX U53	D	Integrated Circuit	01295	SN74LS279J
3A5A1 MUX U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
3A5A1 MUX U56	D	Integrated Circuit	01295	SN74LS00J
3A5A1 MUX U57	D	Integrated Circuit	01295	SN74LS04J
3A5A1 MUX U58	D	Integrated Circuit	01295	SN74S02J
3A5A1 MUX U59	D	Integrated Circuit	01295	SN74LS125AJ
3A5A1 MUX U60	D	Integrated Circuit	01295	SN74LS126AJ
3A5A1 MUX U61	D	Integrated Circuit	01295	SN74S08J
3A5A1 MUX U62	D	Integrated Circuit	07263	93S16DC
3A5A1 MUX U63	D	Integrated Circuit	01295	SN74S251J
3A5A1 MUX U64	D	Integrated Circuit	01295	SN74S86J
3A5A1 MUX U65	D	Oscillator	04713	K1115A-9.12MHz
3A5A1 MUX U66	D	Integrated Circuit	01295	SN74LS74AJ
3A5A1 MUX U67	D	Integrated Circuit	01295	SN74LS125AJ
3A5A1 MUX U68	D	Integrated Circuit	01295	SN74S74J
3A5A1 MUX U69-U70	D	Integrated Circuit	32997	4308R-102-330
3A5A1 MUX U71	D	Integrated Circuit		316-3007-001
3A5A1 MUX U72	D	Integrated Circuit	34649	D8085A-2
3A5A1 MUX U73-U74	D	Integrated Circuit	15476	19-14035-00
3A5A1 MUX U75	D	Integrated Circuit		316-3003-001
3A5A1 MUX U76	D	Integrated Circuit		316-3005-001
3A5A1 MUX U77	D	Integrated Circuit		316-3006-001
3A5A1 MUX U78	D	Integrated Circuit		316-3004-001
3A5A1 MUX U79	D	Integrated Circuit		316-3002-001
3A5A1 MUX U80	D	Integrated Circuit		316-3001-1
3A5A1 MUX U81-U82	D	Integrated Circuit	01295	SN74S251J
3A5A1 MUX U83	D	Integrated Circuit	04713	MC14557BCL
3A5A1 MUX U84	D	Integrated Circuit	01295	SN74LS02J
3A5A1 MUX U85	D	Integrated Circuit	01295	SN74LS04J
3A5A1 MUX U86	D	Integrated Circuit	01295	SN74LS08J

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A1 MUX U87	D	Integrated Circuit	01295	SN74LS00J
3A5A1 MUX U88	D	Integrated Circuit		316-3008-001
3A5A1 MUX U89-U92	D	Integrated Circuit	15476	19-13040-00
3A5A1 MUX U93	D	Option Plug	978781	401-37124
3A5A1 MUX U94-U96	D	Integrated Circuit	27014	DS8641J
3A5A1 MUX U97	D	Option Plug	97871	401-37125-01
3A5A1 MUX U98	D	Integrated Circuit	27014	DS8641J
3A5A1 MUX U99	D	Integrated Circuit	01295	SN74LS377J
3A5A1 MUX U100-U101	D	Integrated Circuit	01295	SN74LS378J
3A5A1 MUX U102	D	Integrated Circuit	01295	SN74LS27J
3A5A1 MUX U103	D	Integrated Circuit	01295	SN74276J
3A5A1 MUX U104-U105	D	Integrated Circuit	27014	DS8641J
3A5A1 MUX U106	D	Resistor Network	32997	4308R-104-181/391
3A5A1 MUX U107	D	Integrated Circuit	34649	D3205
3A5A1 MUX U108	D	Resistor Network	32997	4308R-102-181
3A5A1 MUX U109	D	Integrated Circuit	01295	SN74LS373J
3A5A1 MUX U110	D	Resistor Network	32997	4308R-102-181
3A5A1 MUX VR1	D	Voltage Regulator	27014	2M120H-5.0
3A5A1 MUX XU29	D	Socket	09922	DILB40P-108
3A5A1 MUX XU30	D	Socket	09922	DILB24P-108
3A5A1 MUX XU34-XU35	D	Socket	09922	DILB40P-108
3A5A1 MUX XU36-XU41	D	Socket	09922	DILB28P-108
3A5A1 MUX XU43	D	Socket	09922	DILB40P-108
3A5A1 MUX XU46	D	Socket	09922	DILB40P-108
3A5A1 MUX XU71	D	Socket	09922	DILB20P-108
3A5A1 MUX XU72	D	Socket	09922	DILB40P-108
3A5A1 MUX XU75-XU80	D	Socket	09922	DILB40P-108
3A5A1 MUX XU88	D	Socket	09922	DILB40P-108
3A5A1 MUX XU93	D	Socket	09922	DILB14P-108
3A5A1 MUX XU97	D	Socket	09922	DILB14P-108
3A5A1 MUX Y1	D	Crystal	00RCD	MP18-9.830400MHz
3A5A1 64KW RAM	C	64 KW RAM Circuit Board	15476	MSV11-LF
3A5A2 HEX/IPB-L11	C	Multiprocessor Linking System	D0008	HEX-L11, IPB-L11

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A2 QBUS DMA	C	DMA Controller Circuit Card	D0008	DMA-QB
3A5A2 SER I/O	C	8-Channel Serial I/O Circuit Card	D0007	8S
3A5A2 DISC CONT	C	Disk Controller Circuit Card	15476	M8061-00 (RLV12)
3A5A3 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
3A5A3 32KW PROM	C	32 KW PROM Circuit Card	15476	MRV11-C
3A5A3 64KW RAM	C	64 KW RAM Circuit Board	15476	MSV11-LF
3A5A4 A/N OTF	C	A/N OTF Processor Circuit Card	97871	401-33676-01
3A5A4 A/N OTF C1-C58	D	Capacitor	81349	CK05BX104K
3A5A4 A/N OTF C59	D	Capacitor	81349	CK05BX221K
3A5A4 A/N OTF C60	D	Capacitor	81349	CK05BX101K
3A5A4 A/N OTF C61-C80	D	Capacitor	81349	CK05BX104K
3A5A4 A/N OTF C81	D	Capacitor	81349	CK05BX100K
3A5A4 A/N OTF C82-C118	D	Capacitor	81349	CK05BX104K
3A5A4 A/N OTF J1-J4	D	Connector	22526	65496-019
3A5A4 A/N OTF R1-R2	D	Resistor	81349	RCR07G562JS
3A5A4 A/N OTF R3	D	Resistor	81349	RCR07G222JS
3A5A4 A/N OTF R4-R6	D	Resistor	81349	RCR07G472JS
3A5A4 A/N OTF U1	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U2-U5	D	Integrated Circuit	01295	SN74S38J
3A5A4 A/N OTF U6	D	Resistor Network	73138	898-5-R180/390
3A5A4 A/N OTF U7-U10	D	Integrated Circuit	01295	SN74S38J
3A5A4 A/N OTF U11-U13	D	Resistor Network	73138	898-5-R180/390
3A5A4 A/N OTF U14-U20	D	Integrated Circuit	01295	SN74S38J
3A5A4 A/N OTF U21	D	Resistor Network	73138	898-5-R180/390
3A5A4 A/N OTF U22	D	Integrated Circuit	01295	SN74S174J
3A5A4 A/N OTF U24-U32	D	Integrated Circuit	18324	N82S137F
3A5A4 A/N OTF U33	D	Integrated Circuit	18324	N82S131F
3A5A4 A/N OTF U34-U36	D	Integrated Circuit	01295	SN74173J
3A5A4 A/N OTF U37-U39	D	Integrated Circuit	01295	SN74S174J
3A5A4 A/N OTF U40-U42	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U43	D	Integrated Circuit	01295	SN74S174J
3A5A4 A/N OTF U44	D	Integrated Circuit	01295	SN74S175J
3A5A4 A/N OTF U45	D	Integrated Circuit	01295	SN74S174J

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A4 A/N OTF U47-U50	D	Integrated Circuit	01295	SN74S174J
3A5A4 A/N OTF U52-U53	D	Integrated Circuit	01295	SN74S174J
3A5A4 A/N OTF U54	D	Integrated Circuit	18324	N82S131F
3A5A4 A/N OTF U55-U57	D	Integrated Circuit	01295	SN74S283J
3A5A4 A/N OTF U58	D	Integrated Circuit	18324	N82S137F
3A5A4 A/N OTF U59	D	Integrated Circuit	01295	SN74S08J
3A5A4 A/N OTF U60	D	Integrated Circuit	18324	N82S131F
3A5A4 A/N OTF U61-U62	D	Integrated Circuit	01295	SN74S175J
3A5A4 A/N OTF U63	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U64	D	Integrated Circuit	01295	SN74221J
3A5A4 A/N OTF U65-U68	D	Integrated Circuit	18324	N82S131F
3A5A4 A/N OTF U69-U73	D	Integrated Circuit	18324	N82S129F
3A5A4 A/N OTF U74	D	Integrated Circuit	01295	SN74LS125AJ
3A5A4 A/N OTF U75	D	Integrated Circuit	01295	SN74S174J
3A5A4 A/N OTF U76	D	Integrated Circuit	01295	SN74LS125AJ
3A5A4 A/N OTF U77	D	Integrated Circuit	01295	SN74S174J
3A5A4 A/N OTF U78	D	Integrated Circuit	01295	SN74LS125AJ
3A5A4 A/N OTF U79	D	Integrated Circuit	01295	SN74S175J
3A5A4 A/N OTF U80	D	Integrated Circuit	01295	SN74S74J
3A5A4 A/N OTF U81	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U82	D	Crystal Oscillator	01538	K1115A-32.76 MHz
3A5A4 A/N OTF U83	D	Integrated Circuit	01295	SN74S74J
3A5A4 A/N OTF U84	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U85	D	Integrated Circuit	01295	SN74221J
3A5A4 A/N OTF U86-U87	D	Integrated Circuit	01295	SN74S74J
3A5A4 A/N OTF U88	D	Integrated Circuit	01295	SN74S175J
3A5A4 A/N OTF U89-U90	D	Integrated Circuit	01295	SN74S00J
3A5A4 A/N OTF U91	D	Integrated Circuit	01295	SN74S08J
3A5A4 A/N OTF U92	D	Integrated Circuit	01295	SN7408J
3A5A4 A/N OTF U93	D	Integrated Circuit	01295	SN74S157J
3A5A4 A/N OTF U94	D	Integrated Circuit	01295	SN74193J
3A5A4 A/N OTF U95	D	Integrated Circuit	01295	SN74S157J
3A5A4 A/N OTF U96	D	Integrated Circuit	01295	SN74193J

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A4 A/N OTF U97	D	Integrated Circuit	01295	SN74S157J
3A5A4 A/N OTF U98	D	Integrated Circuit	01295	SN74193J
3A5A4 A/N OTF U99	D	Integrated Circuit	01295	SN74S157J
3A5A4 A/N OTF U100	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U101	D	Integrated Circuit	01295	SN74S00J
3A5A4 A/N OTF U102	D	Resistor Network	73138	898-5-R180/390
3A5A4 A/N OTF U103	D	Integrated Circuit	01295	SN74S00J
3A5A4 A/N OTF U104	D	Integrated Circuit	01295	SN74S74J
3A5A4 A/N OTF U105-U106	D	Integrated Circuit	01295	SN74S00J
3A5A4 A/N OTF U107	D	Integrated Circuit	01295	SN74S10J
3A5A4 A/N OTF U108	D	Integrated Circuit	01295	SN74S00J
3A5A4 A/N OTF U109	D	Integrated Circuit	01295	SN74S30J
3A5A4 A/N OTF U110	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U111	D	Integrated Circuit	01295	SN74S10J
3A5A4 A/N OTF U112	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U113	D	Integrated Circuit	01295	SN74S38J
3A5A4 A/N OTF U114	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U115	D	Integrated Circuit	01295	SN74S38J
3A5A4 A/N OTF U116	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U117	D	Integrated Circuit	01295	SN74S38J
3A5A4 A/N OTF U118	D	Integrated Circuit	01295	SN74S04J
3A5A4 A/N OTF U119	D	Integrated Circuit	01295	SN74S38J
3A5A4 A/N OTF U120	D	Integrated Circuit	01295	SN74S86J
3A5A4 A/N OTF U121-U122	D	Integrated Circuit	01295	SN74S38J
3A5A4 A/N OTF XU6	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU21	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU23	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU24-XU32	D	Socket	71279	703-4218-01-03-10
3A5A4 A/N OTF XU33	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU46	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU51	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU54	D	Socket	71279	703-4216-01-03-10

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A4 A/N OTF XU58	D	Socket	71279	703-4218-01-03-10
3A5A4 A/N OTF XU60	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A5A4 A/N OTF XU102	D	Socket	71279	703-4216-01-03-10
3A5A4 CACHE	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A5A4 CACHE C1-C73	D	Capacitor	04222	CK05BX104K
3A5A4 CACHE C74-C89	D	Capacitor	90201	TIM475M025P0X
3A5A4 CACHE J1-J4	D	Connector	22526	65496-019
3A5A4 CACHE R1	D	Resistor	19647	MK120-270
3A5A4 CACHE R2	D	Resistor	19647	MK120-100
3A5A4 CACHE R3-R4	D	Resistor	19647	MK120-50
3A5A4 CACHE R5	D	Resistor	19647	MK120-100
3A5A4 CACHE R6-R7	D	Resistor	19647	MK120-270
3A5A4 CACHE R8	D	Resistor	19647	MK120-100
3A5A4 CACHE R9-R10	D	Resistor	19647	MK120-50
3A5A4 CACHE R11	D	Resistor	19647	MK120-100
3A5A4 CACHE R12-R13	D	Resistor	19647	MK120-270
3A5A4 CACHE R14	D	Resistor	19647	MK120-100
3A5A4 CACHE R15-R16	D	Resistor	19647	MK120-50
3A5A4 CACHE R17	D	Resistor	19647	MK120-100
3A5A4 CACHE R18-R19	D	Resistor	19647	MK120-270
3A5A4 CACHE R20	D	Resistor	19647	MK120-100
3A5A4 CACHE R21-R22	D	Resistor	19647	MK120-50
3A5A4 CACHE R23	D	Resistor	19647	MK120-100
3A5A4 CACHE R24-R25	D	Resistor	19647	MK120-270
3A5A4 CACHE R26	D	Resistor	19647	MK120-100
3A5A4 CACHE R27-R28	D	Resistor	19647	MK120-50
3A5A4 CACHE R29	D	Resistor	19647	MK120-100
3A5A4 CACHE R30-R31	D	Resistor	19647	MK120-270
3A5A4 CACHE R32	D	Resistor	19647	MK120-100
3A5A4 CACHE R33-R34	D	Resistor	19647	MK120-50
3A5A4 CACHE R35	D	Resistor	19647	MK120-100
3A5A4 CACHE R36-R37	D	Resistor	19647	MK120-270

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A4 CACHE R38	D	Resistor	19647	MK120-100
3A5A4 CACHE R39-R40	D	Resistor	19647	MK120-50
3A5A4 CACHE R41	D	Resistor	19647	MK120-100
3A5A4 CACHE R42-R43	D	Resistor	19647	MK120-270
3A5A4 CACHE R44	D	Resistor	19647	MK120-100
3A5A4 CACHE R45-R46	D	Resistor	19647	MK120-50
3A5A4 CACHE R47	D	Resistor	19647	MK120-100
3A5A4 CACHE R48	D	Resistor	19647	MK120-270
3A5A4 CACHE R49-R64	D	Resistor	81349	RW81U10R0F
3A5A4 CACHE U1	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE U2	D	Integrated Circuit	01295	SN74S00J
3A5A4 CACHE U3-U4	D	Integrated Circuit	01295	SN74S240J
3A5A4 CACHE U5	D	Integrated Circuit	01295	N82S129F
3A5A4 CACHE U6-U7	D	Integrated Circuit	01295	N82S123F
3A5A4 CACHE U8-U9	D	Integrated Circuit	01295	SN74S240J
3A5A4 CACHE U10-U11	D	Integrated Circuit	01295	SN74193J
3A5A4 CACHE U12	D	Integrated Circuit	01295	N82S123F
3A5A4 CACHE U13	D	Resistor Network	32997	4308R-102-330
3A5A4 CACHE U14	D	Integrated Circuit	01295	SN74S240J
3A5A4 CACHE U15	D	Resistor Network	32997	4308R-102-330
3A5A4 CACHE U16	D	Integrated Circuit	01295	SN74S240J
3A5A4 CACHE U17	D	Resistor Network	32997	4308R-102-330
3A5A4 CACHE U18	D	Integrated Circuit	18324	N82S123F
3A5A4 CACHE U19	D	Integrated Circuit	01295	SN74S157J
3A5A4 CACHE U20	D	Integrated Circuit	01295	SN74S240J
3A5A4 CACHE U21	D	Resistor Network	32997	4308R-102-330
3A5A4 CACHE U22	D	Integrated Circuit	01295	SN74S240J
3A5A4 CACHE U23	D	Resistor Network	32997	4310R-102-330
3A5A4 CACHE U24	D	Integrated Circuit	01295	SN74S240J
3A5A4 CACHE U25	D	Resistor Network	32997	4308R-102-330
3A5A4 CACHE U26	D	Integrated Circuit	01295	SN74S240J
3A5A4 CACHE U27-U28	D	Integrated Circuit	01295	SN74S04J
3A5A4 CACHE U29	D	Resistor Network	73138	899-3-R33

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A4 CACHE U30	D	Integrated Circuit	01295	SN74S74J
3A5A4 CACHE U31	D	Integrated Circuit	01295	SN74S00J
3A5A4 CACHE U32	D	Integrated Circuit	01295	SN74S32J
3A5A4 CACHE U33-U48	D	Integrated Circuit	INMOS	IMS1400-55
3A5A4 CACHE U49	D	Integrated Circuit	01295	SN74S08J
3A5A4 CACHE U50	D	Integrated Circuit	01295	SN74S20J
3A5A4 CACHE U51	D	Integrated Circuit	01295	SN74S10J
3A5A4 CACHE U52	D	Integrated Circuit	01295	SN74S00J
3A5A4 CACHE U53	D	Integrated Circuit	01295	SN74S04J
3A5A4 CACHE U54-U57	D	Integrated Circuit	01295	SN74S374J
3A5A4 CACHE U58-U61	D	Integrated Circuit	01295	SN74S299J
3A5A4 CACHE U62	D	Integrated Circuit	01295	SN74S374J
3A5A4 CACHE U63	D	Integrated Circuit	34649	D3636B-1
3A5A4 CACHE U64	D	Integrated Circuit	01295	SN74S86J
3A5A4 CACHE U65	D	Integrated Circuit	01295	SN74S04J
3A5A4 CACHE U66	D	Integrated Circuit	01295	SN74S00J
3A5A4 CACHE U67	D	Integrated Circuit	01295	SN74S04J
3A5A4 CACHE U68	D	Integrated Circuit	01295	SN74S04J
3A5A4 CACHE U69-U70	D	Integrated Circuit	01295	SN74S20J
3A5A4 CACHE U71-U74	D	Integrated Circuit	01295	SN74S174J
3A5A4 CACHE U75-U76	D	Integrated Circuit	01295	SN74S20J
3A5A4 CACHE U77	D	Integrated Circuit	01295	SN74S04J
3A5A4 CACHE U78	D	Integrated Circuit	01295	SN74S374J
3A5A4 CACHE U79	D	Integrated Circuit	01295	SN74S174J
3A5A4 CACHE U80	D	Integrated Circuit	01295	SN74S175J
3A5A4 CACHE U81	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE U82	D	Integrated Circuit	04713	MHQ2222
3A5A4 CACHE U83	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE U84	D	Integrated Circuit	01295	SN74S00J
3A5A4 CACHE U85	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE U86	D	Integrated Circuit	04713	MHQ2222
3A5A4 CACHE U87	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE U88-U89	D	Integrated Circuit	01295	SN74S00J

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A4 CACHE U90	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE U91	D	Integrated Circuit	04713	MHQ2222
3A5A4 CACHE U92	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE U93	D	Integrated Circuit	01295	SN74S00J
3A5A4 CACHE U94	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE U95	D	Integrated Circuit	01295	MHQ2222
3A5A4 CACHE U96	D	Integrated Circuit	01295	SN74S38J
3A5A4 CACHE XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A5A4 CACHE XU12	D	DIP Socket	71279	703-4216-01-03-10
3A5A4 CACHE XU18	D	DIP Socket	71279	703-4216-01-03-10
3A5A4 CACHE XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A5A4 CACHE XU63	D	DIP Socket	71279	703-4224-01-03-10
3A5A5 QBUS DMA	C	DMA Controller Circuit Card	D0008	DMA-QB
3A5A5 SER I/O	C	8-Channel Serial I/O Circuit Card	D0007	8S
3A5A5 KYBD	C	8-Channel Serial I/O Circuit Card	D0007	8S
3A5A5 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
3A5A5 32KW PROM	C	32 KW PROM Circuit Card	15476	MRV11-C
3A5A6	C	Power Control Module	97871	401-36719-05
3A5A6A1	D	Circuit Board Assembly	97871	401-37153-01
3A5A6A1C1	D	Capacitor	81349	CK06BX105K
3A5A6A1C2	D	Capacitor	81349	CK05BX473K
3A5A6A1C3	D	Capacitor	81349	CK05BX103K
3A5A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
3A5A6A1J1	D	Connector	00779	205867-1
3A5A6A1R1	D	Resistor	81349	RCR07G272JS
3A5A6A1R2	D	Resistor	81349	RCR07G153JS
3A5A6A1R3	D	Resistor	81349	RCR07G272JS
3A5A6A1R4	D	Resistor	81349	RNC55H4991FM
3A5A6A1R5	D	Resistor	81349	RNC55H1002FM
3A5A6A1R6	D	Resistor	81349	RNC55H4991FM
3A5A6A1R7	D	Resistor	81349	RJ24FW202
3A5A6A1R8	D	Resistor	81349	RNC55H1002FM
3A5A6A1R9	D	Resistor	81349	RCR07G2R7JS

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A6A1R10-R11	D	Resistor	54869	0H-ZT42
3A5A6A1S1	D	Switch	09353	7105R
3A5A6A1U1	D	Integrated Circuit	01295	LM311P
3A5A6A1U2	D	Integrated Circuit	01295	SN7438J
3A5A6A1U3	D	Integrated Circuit	01295	SN74LS123J
3A5A6DS1	D	Lamp	0C0ML	C7A
3A5A6F1	D	Fuse	81349	F02A125V10A
3A5A6J2	D	Connector	00779	350780-1
3A5A6J3	D	Connector	00779	350767-1
3A5A6S1	D	Switch	27191	7560K6
3A5A6TB1	D	Terminal Board	81349	38TB10
3A5A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
3A5A6XF1	D	Fuse Holder	81349	FHL17G1
3A5A7	C	Power Control Module	97871	401-36719-05
3A5A7A1	D	Circuit Board Assembly	97871	401-37153-01
3A5A7A1C1	D	Capacitor	81349	CK06BX105K
3A5A7A1C2	D	Capacitor	81349	CK05BX473K
3A5A7A1C3	D	Capacitor	81349	CK05BX103K
3A5A7A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
3A5A7A1J1	D	Connector	00779	205867-1
3A5A7A1R1	D	Resistor	81349	RCR07G272JS
3A5A7A1R2	D	Resistor	81349	RCR07G153JS
3A5A7A1R3	D	Resistor	81349	RCR07G272JS
3A5A7A1R4	D	Resistor	81349	RNC55H4991FM
3A5A7A1R5	D	Resistor	81349	RNC55H1002FM
3A5A7A1R6	D	Resistor	81349	RNC55H4991FM
3A5A7A1R7	D	Resistor	81349	RJ24FW202
3A5A7A1R8	D	Resistor	81349	RNC55H1002FM
3A5A7A1R9	D	Resistor	81349	RCR07G2R7JS
3A5A7A1R10-R11	D	Resistor	54869	0H-ZT42
3A5A7A1S1	D	Switch	09353	7105R
3A5A7A1U1	D	Integrated Circuit	01295	LM311P
3A5A7A1U2	D	Integrated Circuit	01295	SN7438J

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A5A7A1U3	D	Integrated Circuit	01295	SN74LS123J
3A5A7DS1	D	Lamp	0C0ML	C7A
3A5A7F1	D	Fuse	81349	F02A125V10A
3A5A7J2	D	Connector	00779	350780-1
3A5A7J3	D	Connector	00779	350767-1
3A5A7S1	D	Switch	27191	7560K6
3A5A7TB1	D	Terminal Board	81349	38TB10
3A5A7XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
3A5A7XF1	D	Fuse Holder	81349	FHL17G1
3A6	C	Multiplexer Interface Assembly	97871	401-37170-04
3A9	C	Serial I/O Panel	97871	401-37274-02
3A10	C	Keyboard I/O J-Box	97871	401-37179-07
3A16	C	AC J-Box Assy	97871	401-37231-02
3A16 F1-F4	D	Fuse	81349	F02A250V3A
3A16 J10-J12	D	Duplex Receptacle	74545	5000M9
3A16 S1-S2	D	Switch DPST	27193	7560K6
3A16 TB1-TB2	D	Terminal Block	81349	38TB10
3A17	C	Blower Assembly	97871	401-37145-02
3A18	C	Thermal Sensor Assy	97871	401-37216-02
3A19	C	Thermal Sensor Assy	97871	401-37204-01
3PS5	C	Power Supply Assembly	97871	401-36716-01
3PS5A1	D	Power Supply	53719	MM43-12Y2Y/115
3PS6	C	Power Supply Assembly	97871	401-36716-01
3PS6A1	D	Power Supply	53719	MM43-12Y2Y/115
3W1	B	Cable Assembly, +12V	97871	401-36715-01
3W2	B	Cable Assembly, -12V	97871	401-36715-03
3W3	B	Cable Assembly, +5V	97871	401-36715-05
3W4	B	Cable Assembly, +12V	97871	401-36715-02
3W5	B	Cable Assembly, -12V	97871	401-36715-04
3W6	B	Cable Assembly, +5V	97871	401-36715-06
3W7-3W8	B	Cable Assembly, Mux. Int. Pwr.	97871	401-37172-01
3W9	B	Cable, AC Supply	97871	401-36786-01
3W10	B	Cable, AC Control	97871	401-36785-01

Table 8-1. FSDPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3W11	B	Cable Assembly, Interprocessor Bus	97871	401-37958-01
3W12	B	Cable Assembly, DMA/HEX-L11	97871	401-42686-01
3W13-3W14	B	Cable Assembly, Mux. Interface	97871	401-37142-01
3W15	B	Cable Assembly, Kybd. J-Box	97871	401-36773-01
3W16	B	Cable, AC Supply	97871	401-36786-01
3W17	B	Cable, AC Control	97871	401-36785-01
3W19-3W20	B	Cable Assembly, Blower	97871	401-37241-01
3W21	B	Cable Assembly, OTF/Cache	97871	401-42685-01
3W22	B	Cable Assembly, OTF/Cache	97871	401-42685-02
3W23	B	Cable Assembly, OTF/Cache	97871	401-42685-03
3W24	B	Cable Assembly, OTF/Cache	97871	401-42685-04
3W25-3W26	B	Cable Assembly, Analog Patch	97871	401-37594-08
W901-W944	A	Cable Assembly	97871	401-37273-09
W945-W948	A	Cable Assembly	97871	401-37273-07
W949-W990	A	Cable Assembly	97871	401-37273-04
W991-W992	A	Cable Assembly	97871	401-37273-14
W993	A	Cable Assembly	97871	401-37203-05
W994	A	Cable Assembly	97871	401-37203-02

Table 8-2. AFSS Equipment Parts List

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
Unit 1	A	Communication Equipment Rack	97871	401-37614-01
1A1	B	Thermal Alarm Unit	97871	401-37155-01
1A1A1	C	Circuit Card Assembly	97871	401-37208-01
1A1A1A1	D	Printed Wiring Board	97871	401-37212-02
1A1A1DS1-DS8	D	Light Emitting Diode	28480	HLMP-3105
1A1A1J1	D	Connector	00779	102333-6
1A1A1J2	D	Connector	00779	87571-2
1A1A1SW1-SW10	D	Switch	95146	TT11AG-PC-9T1/4-ES
1A1A2	C	Circuit Card Assembly	97871	401-37209-01
1A1A2A1	D	Printed Wiring Board	97871	401-37215-03
1A1A2C1-C14	D	Capacitor	81349	M39014/02-1407
1A1A2CR1	D	Diode	07688	1N3611
1A1A2J1	D	Connector	00779	102333-6
1A1A2P1-P9	D	Connector	00779	350428-1
1A1A2Q1	D	Transistor	07688	2N2222
1A1A2R1-R8	D	Variable Resistor	81349	MS9015/2-003-W-M
1A1A2R9-R16	D	Resistor	81349	RNC50H7500FS
1A1A2R17	D	Resistor	81349	RNC50H1001FS
1A1A2R18	D	Resistor	81349	RNC50H1001FS
1A1A2R19	D	Resistor	81349	RNC50H103JS
1A1A2R20	D	Resistor	81349	RNC50H103JS
1A1A2R21	D	Resistor	81349	RCR07G202JS
1A1A2R22	D	Resistor	81349	RNC50H103JS
1A1A2R23	D	Resistor	81349	RNC50H103JS
1A1A2R24	D	Resistor	81349	RCR07G202JS
1A1A2R25	D	Resistor	81349	RNC50H103JS
1A1A2R26	D	Resistor	81349	RNC50H103JS
1A1A2R27	D	Resistor	81349	RCR07G202JS
1A1A2R28	D	Resistor	81349	RNC50H103JS
1A1A2R29	D	Resistor	81349	RNC50H103JS
1A1A2R30-R31	D	Resistor	81349	RCR07G202JS
1A1A2R32-R35	D	Resistor	81349	RNC50H103JS
1A1A2R36-R37	D	Resistor	81349	RCR07G202JS

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A1A2R38-R41	D	Resistor	81349	RNC50H103JS
1A1A2R42	D	Resistor	81349	RCR07G202JS
1A1A2R43	D	Resistor	81349	RCR07G561JS
1A1A2R44	D	Resistor	81349	RNC50H1001FS
1A1A2R46	D	Resistor	81349	RCR07G202JS
1A1A2S1	D	Switch	95146	TT11AG-PC-1-ES
1A1A2U1-U2	D	Integrated Circuit	07263	UA339DC
1A1A2U3-U4	D	Integrated Circuit	01295	SN74S04J
1A1A2U5	D	Integrated Circuit	01295	SN74LS30J
1A1A2U6	D	Integrated Circuit	01295	SN75451BJG
1A1DS1	C	Light Emitting Diode	28480	HLMP-3105
1A1LS1	C	Sonalarm	90201	SC628A
1A1PS1	C	Power Supply	54407	HAA512
1A1S1	C	Switch	27191	7560K6
1A2	B	Analog Patch Panel	25064	153-020-12VF-M1
1A3	B	Digital Patch Panel	25064	157-011-00
1A4	B	Digital Patch Panel	25064	157-002C-00
1A5-1A7	B	Disk Drive	15476	RL01-AK/RL02-AK
1A16	B	AC Junction Box	97871	401-37231-01
Unit 2	A	Communications Processor Rack	97871	401-37615-01
2A1-2A2	B	Modem Sharing Device Enclosure	57112	2005061
2A1A1-2A1A4, 2A2A1-2A2A3	C	Modem Sharing Device	57112	2005064
2A3	B	RM-8E Modem Enclosure	57112	2005060
2A3A3	C	RM-208A Modem	57112	2082278
2A3A4	C	RM-A/O Modem	57112	1020364
2A3A5-2A3A8	C	RM-9600 Modem	57112	2092284
2A4	B	Dual Comm. Processor Card Cage	97871	401-37999-04
2A4A1 CP1 LSI 11/23	C	LSI-11/23 Microprocessor Circuit Card	15476	KDF11-AA
2A4A1 CP1 MUX#1	C	Multiplexer Circuit Card	97871	401-36993-03
2A4A1 CP1 MUX#1 A1	D	Printed Wiring Board	97871	401-36991-05
2A4A1 CP1 MUX#1 C1-C4	D	Capacitor		CK05BX151K
2A4A1 CP1 MUX#1 C9-C65	D	Capacitor		CK05BX104K
2A4A1 CP1 MUX#1 C67-C77	D	Capacitor		CK05BX104K

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A1 CP1 MUX#1 C78	D	Capacitor	90201	T1M226M010POX
2A4A1 CP1 MUX#1 C79-C92	D	Capacitor		CK05BX104K
2A4A1 CP1 MUX#1 C93-C95	D	Capacitor		M39006/09-8283
2A4A1 CP1 MUX#1 C96-C97	D	Capacitor		CK05BX103K
2A4A1 CP1 MUX#1 C98	D	Capacitor		M39006/09-8283
2A4A1 CP1 MUX#1 CR1-CR2	D	Diode		1N4148
2A4A1 CP1 MUX#1 DS1	D	Light Emitting Diode	72619	555-2303
2A4A1 CP1 MUX#1 DS2-DS3	D	Light Emitting Diode	72619	555-4007
2A4A1 CP1 MUX#1 E1-E10	D	Header	89497	65507-136
2A4A1 CP1 MUX#1 J1-J2	D	Connector	22526	65823-043
2A4A1 CP1 MUX#1 R1-R3	D	Resistor		RCR07G102JS
2A4A1 CP1 MUX#1 R4	D	Resistor		RCR07G330JS
2A4A1 CP1 MUX#1 R5	D	Resistor		RCR07G102JS
2A4A1 CP1 MUX#1 R6	D	Resistor		RCR07G470JS
2A4A1 CP1 MUX#1 R7	D	Resistor		RCR07G330JS
2A4A1 CP1 MUX#1 R8	D	Resistor		RCR07G822JS
2A4A1 CP1 MUX#1 R9	D	Resistor		RCR07G103JS
2A4A1 CP1 MUX#1 R10	D	Resistor		RCR07G330JS
2A4A1 CP1 MUX#1 R11	D	Resistor		RCR07G102JS
2A4A1 CP1 MUX#1 R12	D	Resistor		RCR07G331JS
2A4A1 CP1 MUX#1 R13-R14	D	Resistor		RCR07G102JS
2A4A1 CP1 MUX#1 R15	D	Resistor		RCR07G393JS
2A4A1 CP1 MUX#1 TP1	D	Terminal	83330	2029B
2A4A1 CP1 MUX#1 U1	D	Integrated Circuit	01295	SN74LS04J
2A4A1 CP1 MUX#1 U2	D	Integrated Circuit	27014	DS3691J
2A4A1 CP1 MUX#1 U3	D	Integrated Circuit	27014	DS26LS32CJ
2A4A1 CP1 MUX#1 U4	D	Integrated Circuit	27014	DS3691J
2A4A1 CP1 MUX#1 U5	D	Resistor Network	32997	4308-R-102-472
2A4A1 CP1 MUX#1 U6	D	Integrated Circuit	27014	DS26LS32CJ
2A4A1 CP1 MUX#1 U7	D	Resistor Network	32997	4308R-102-472
2A4A1 CP1 MUX#1 U8	D	Integrated Circuit	27014	DS3691J
2A4A1 CP1 MUX#1 U9	D	Resistor Network	32997	4308R-102-472
2A4A1 CP1 MUX#1 U10	D	Integrated Circuit	27014	DS26LS32CJ

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A1 CP1 MUX#1 U11-U12	D	Resistor Network	32997	4308R-102-472
2A4A1 CP1 MUX#1 U13	D	Integrated Circuit	27014	DS26LS32CJ
2A4A1 CP1 MUX#1 U14-U15	D	Resistor Network	32997	4308R-102-472
2A4A1 CP1 MUX#1 U16	D	Integrated Circuit	27014	DS26LS32CJ
2A4A1 CP1 MUX#1 U17-U18	D	Resistor Network	32997	4308R-102-472
2A4A1 CP1 MUX#1 U19	D	Integrated Circuit	27014	DS26LS32CJ
2A4A1 CP1 MUX#1 U20	D	Resistor Network	32997	4308R-102-472
2A4A1 CP1 MUX#1 U21	D	Integrated Circuit	27014	DS3691J
2A4A1 CP1 MUX#1 U22	D	Resistor Network	32997	4308R-102-472
2A4A1 CP1 MUX#1 U23	D	Integrated Circuit	27014	DS26LS32CJ
2A4A1 CP1 MUX#1 U24	D	Resistor Network	32997	4308R-120-472
2A4A1 CP1 MUX#1 U25	D	Integrated Circuit	27014	DS3691J
2A4A1 CP1 MUX#1 U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
2A4A1 CP1 MUX#1 U28	D	Integrated Circuit	01295	SN74LS04J
2A4A1 CP1 MUX#1 U29	D	Integrated Circuit	34649	D8274
2A4A1 CP1 MUX#1 U30	D	Integrated Circuit	34649	D8253-5
2A4A1 CP1 MUX#1 U31	D	Integrated Circuit	01295	SN74LS02J
2A4A1 CP1 MUX#1 U32	D	Integrated Circuit	01295	SN74LS377J
2A4A1 CP1 MUX#1 U33	D	Integrated Circuit	01295	SN74LS241J
2A4A1 CP1 MUX#1 U34-U35	D	Integrated Circuit	34649	D8155-2
2A4A1 CP1 MUX#1 U36	D	Integrated Circuit		316-3009-003
2A4A1 CP1 MUX#1 U37	D	Integrated Circuit		316-3010-003
2A4A1 CP1 MUX#1 U38-U41	D	Integrated Circuit	50088	MK4802P-3
2A4A1 CP1 MUX#1 U42	D	Resistor Network	32997	4310R-102-181
2A4A1 CP1 MUX#1 U43	D	Integrated Circuit	34649	D8274
2A4A1 CP1 MUX#1 U44	D	Integrated Circuit	01295	SN74LS125AJ
2A4A1 CP1 MUX#1 U45	D	Integrated Circuit	01295	SN74LS126AJ
2A4A1 CP1 MUX#1 U46	D	Integrated Circuit	18324	N8X320N
2A4A1 CP1 MUX#1 U47-U50	D	Integrated Circuit	01295	SN74LS377J
2A4A1 CP1 MUX#1 U51-U52	D	Integrated Circuit	07263	93S16DC
2A4A1 CP1 MUX#1 U53	D	Integrated Circuit	01295	SN74LS279J
2A4A1 CP1 MUX#1 U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
2A4A1 CP1 MUX#1 U56	D	Integrated Circuit	01295	SN74LS00J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A1 CP1 MUX#1 U57	D	Integrated Circuit	01295	SN74LS04J
2A4A1 CP1 MUX#1 U58	D	Integrated Circuit	01295	SN74S02J
2A4A1 CP1 MUX#1 U59	D	Integrated Circuit	01295	SN74LS125AJ
2A4A1 CP1 MUX#1 U60	D	Integrated Circuit	01295	SN74LS126AJ
2A4A1 CP1 MUX#1 U61	D	Integrated Circuit	01295	SN74S08J
2A4A1 CP1 MUX#1 U62	D	Integrated Circuit	07263	93S16DC
2A4A1 CP1 MUX#1 U63	D	Integrated Circuit	01295	SN74S251J
2A4A1 CP1 MUX#1 U64	D	Integrated Circuit	01295	SN74S86J
2A4A1 CP1 MUX#1 U65	D	Oscillator	04713	K1115A-9.12MHz
2A4A1 CP1 MUX#1 U66	D	Integrated Circuit	01295	SN74LS74AJ
2A4A1 CP1 MUX#1 U67	D	Integrated Circuit	01295	SN74LS125AJ
2A4A1 CP1 MUX#1 U68	D	Integrated Circuit	01295	SN74S74J
2A4A1 CP1 MUX#1 U69-U70	D	Resistor Network	32997	4308R-102-330
2A4A1 CP1 MUX#1 U71	D	Integrated Circuit		316-3007-001
2A4A1 CP1 MUX#1 U72	D	Integrated Circuit	34649	D8085A-2
2A4A1 CP1 MUX#1 U73-U74	D	Integrated Circuit	15476	19-14035-00
2A4A1 CP1 MUX#1 U75	D	Integrated Circuit		316-3003-001
2A4A1 CP1 MUX#1 U76	D	Integrated Circuit		316-3005-001
2A4A1 CP1 MUX#1 U77	D	Integrated Circuit		316-3006-001
2A4A1 CP1 MUX#1 U78	D	Integrated Circuit		316-3004-001
2A4A1 CP1 MUX#1 U79	D	Integrated Circuit		316-3002-001
2A4A1 CP1 MUX#1 U80	D	Integrated Circuit		316-3001-1
2A4A1 CP1 MUX#1 U81-U82	D	Integrated Circuit	01295	SN74S251J
2A4A1 CP1 MUX#1 U83	D	Integrated Circuit	04713	MC14557BCL
2A4A1 CP1 MUX#1 U84	D	Integrated Circuit	01295	SN74LS02J
2A4A1 CP1 MUX#1 U85	D	Integrated Circuit	01295	SN74LS04J
2A4A1 CP1 MUX#1 U86	D	Integrated Circuit	01295	SN74LS08J
2A4A1 CP1 MUX#1 U87	D	Integrated Circuit	01295	SN74LS00J
2A4A1 CP1 MUX#1 U88	D	Integrated Circuit		316-3008-001
2A4A1 CP1 MUX#1 U89-U92	D	Integrated Circuit	15476	19-13040-00
2A4A1 CP1 MUX#1 U93	D	Integrated Circuit	97871	401-37124
2A4A1 CP1 MUX#1 U94-U96	D	Integrated Circuit	27014	DS8641J
2A4A1 CP1 MUX#1 U97	D	Option Plug	97871	401-37125-01

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A1 CP1 MUX#1 U98	D	Integrated Circuit	27014	DS8641J
2A4A1 CP1 MUX#1 U99	D	Integrated Circuit	01295	SN74LS377J
2A4A1 CP1 MUX#1 U100-U101	D	Integrated Circuit	01295	SN74LS378J
2A4A1 CP1 MUX#1 U102	D	Integrated Circuit	01295	SN74LS27J
2A4A1 CP1 MUX#1 U103	D	Integrated Circuit	01295	SN74276J
2A4A1 CP1 MUX#1 U104-U105	D	Integrated Circuit	27014	DS8641J
2A4A1 CP1 MUX#1 U106	D	Resistor Network	32997	4308R-104-181/391
2A4A1 CP1 MUX#1 U107	D	Integrated Circuit	34649	D3205
2A4A1 CP1 MUX#1 U108	D	Resistor Network	32997	4308R-102-181
2A4A1 CP1 MUX#1 U109	D	Integrated Circuit	01295	SN74LS373J
2A4A1 CP1 MUX#1 U110	D	Resistor Network	32997	4308R-102-181
2A4A1 CP1 MUX#1 VR1	D	Voltage Regulator	27014	LM120H-5.0
2A4A1 CP1 MUX#1 XU29	D	Socket	09922	DILB40P-108
2A4A1 CP1 MUX#1 XU30	D	Socket	09922	DILB24P-108
2A4A1 CP1 MUX#1 XU34-XU35	D	Socket	09922	DILB40P-108
2A4A1 CP1 MUX#1 XU36-XU41	D	Socket	09922	DILB28P-108
2A4A1 CP1 MUX#1 XU43	D	Socket	09922	DILB40P-108
2A4A1 CP1 MUX#1 XU46	D	Socket	09922	DILB40P-108
2A4A1 CP1 MUX#1 XU71	D	Socket	09922	DILB20P-108
2A4A1 CP1 MUX#1 XU72	D	Socket	09922	DILB40P-108
2A4A1 CP1 MUX#1 XU75-XU80	D	Socket	09922	DILB20P-108
2A4A1 CP1 MUX#1 XU88	D	Socket	09922	DILB20P-108
2A4A1 CP1 MUX#1 XU93	D	Socket	09922	DILB14P-108
2A4A1 CP1 MUX#1 XU97	D	Socket	09922	DILB14P-108
2A4A1 CP1 MUX#1 Y1	D	Crystal	00RCD	MP18-9.830400MHz
2A4A1 CP1 64KW RAM	C	64K Word RAM Circuit Card	15476	MSV11-LF
2A4A2 CP1 HEX/IPB-L11	C	Multiprocessor Linking System	D0008	HEX-L11,IPB-L11
2A4A2 CP1 MUX#2	C	Multiplexer Circuit Card	97871	401-36993-03
2A4A2 CP1 MUX#2 A1	D	Printed Wiring Board	97871	401-36991-05
2A4A2 CP1 MUX#2 C1-C4	D	Capacitor		CK05BX151K
2A4A2 CP1 MUX#2 C9-C65	D	Capacitor		CK05BX104K
2A4A2 CP1 MUX#2 C67-C77	D	Capacitor		CK05BX104K
2A4A2 CP1 MUX#2 C78	D	Capacitor	90201	TIM226M010P0X

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A2 CP1 MUX#2 C79-C92	D	Capacitor		CK05BX104K
2A4A2 CP1 MUX#2 C93-C95	D	Capacitor		M39006/09-8283
2A4A2 CP1 MUX#2 C96-C97	D	Capacitor		CK05BX103K
2A4A2 CP1 MUX#2 C98	D	Capacitor		M39006/09-8283
2A4A2 CP1 MUX#2 CR1-CR2	D	Diode		1N4148
2A4A2 CP1 MUX#2 DS1	D	Light Emitting Diode	72619	555-2303
2A4A2 CP1 MUX#2 DS2-DS3	D	Light Emitting Diode	72619	555-4007
2A4A2 CP1 MUX#2 E1-E10	D	Header	89497	65507-136
2A4A2 CP1 MUX#2 J1-J2	D	Connector	22526	65823-043
2A4A2 CP1 MUX#2 R1-R3	D	Resistor		RCR07G102JS
2A4A2 CP1 MUX#2 R4	D	Resistor		RCR07G330JS
2A4A2 CP1 MUX#2 R5	D	Resistor		RCR07G102JS
2A4A2 CP1 MUX#2 R6	D	Resistor		RCR07G470JS
2A4A2 CP1 MUX#2 R7	D	Resistor		RCR07G330JS
2A4A2 CP1 MUX#2 R8	D	Resistor		RCR07G822JS
2A4A2 CP1 MUX#2 R9	D	Resistor		RCR07G103JS
2A4A2 CP1 MUX#2 R10	D	Resistor		RCR07G330JS
2A4A2 CP1 MUX#2 R11	D	Resistor		RCR07G102JS
2A4A2 CP1 MUX#2 R12	D	Resistor		RCR07G331JS
2A4A2 CP1 MUX#2 R13-R14	D	Resistor		RCR07G102JS
2A4A2 CP1 MUX#2 R15	D	Resistor		RCR07G393JS
2A4A2 CP1 MUX#2 TP1	D	Terminal	83330	2029B
2A4A2 CP1 MUX#2 U1	D	Integrated Circuit	01295	SN74LS04J
2A4A2 CP1 MUX#2 U2	D	Integrated Circuit	27014	DS3691J
2A4A2 CP1 MUX#2 U3	D	Integrated Circuit	27014	DS26LS32CJ
2A4A2 CP1 MUX#2 U4	D	Integrated Circuit	27014	DS3691J
2A4A2 CP1 MUX#2 U5	D	Resistor Network	32997	4308-R-102-472
2A4A2 CP1 MUX#2 U6	D	Integrated Circuit	27014	DS26LS32CJ
2A4A2 CP2 MUX#2 U7	D	Resistor Network	32997	4308R-102-472
2A4A2 CP1 MUX#2 U8	D	Integrated Circuit	27014	DS3691J
2A4A2 CP1 MUX#2 U9	D	Resistor Network	32997	4308R-102-472
2A4A2 CP1 MUX#2 U10	D	Integrated Circuit	27014	DS26LS32CJ
2A4A2 CP1 MUX#2 U11-U12	D	Resistor Network	32997	4308R-102-472

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A2 CP1 MUX#2 U13	D	Integrated Circuit	27014	DS26LS32CJ
2A4A2 CP1 MUX#2 U14-U15	D	Resistor Network	32997	4308R-102-472
2A4A2 CP1 MUX#2 U16	D	Integrated Circuit	27014	DS26LS32CJ
2A4A2 CP1 MUX#2 U17-U18	D	Resistor Network	32997	4308R-102-472
2A4A2 CP1 MUX#2 U19	D	Integrated Circuit	27014	DS26LS32CJ
2A4A2 CP1 MUX#2 U20	D	Resistor Network	32997	4308R-102-472
2A4A2 CP1 MUX#2 U21	D	Integrated Circuit	27014	DS3691J
2A4A2 CP1 MUX#2 U22	D	Resistor Network	32997	4308R-102-472
2A4A2 CP1 MUX#2 U23	D	Integrated Circuit	27014	DS26LS32CJ
2A4A2 CP1 MUX#2 U24	D	Resistor Network	32997	4308R-102-472
2A4A2 CP1 MUX#2 U25	D	Integrated Circuit	27014	DS3691J
2A4A2 CP1 MUX#2 U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
2A4A2 CP1 MUX#2 U28	D	Integrated Circuit	01295	SN74LS04J
2A4A2 CP1 MUX#2 U29	D	Integrated Circuit	34649	D8274
2A4A2 CP1 MUX#2 U30	D	Integrated Circuit	34649	D8253-5
2A4A2 CP1 MUX#2 U31	D	Integrated Circuit	01295	SN74LS02J
2A4A2 CP1 MUX#2 U32	D	Integrated Circuit	01295	SN74LS377J
2A4A2 CP1 MUX#2 U33	D	Integrated Circuit	01295	SN74LS241J
2A4A2 CP1 MUX#2 U34-U35	D	Integrated Circuit	34649	D8155-2
2A4A2 CP1 MUX#2 U36	D	Integrated Circuit		316-3009-003
2A4A2 CP1 MUX#2 U37	D	Integrated Circuit		316-3010-003
2A4A2 CP1 MUX#2 U38-U41	D	Integrated Circuit	50088	MK4802P-3
2A4A2 CP1 MUX#2 U42	D	Resistor Network	32997	4310R-102-181
2A4A2 CP1 MUX#2 U43	D	Integrated Circuit	34649	D8274
2A4A2 CP1 MUX#2 U44	D	Integrated Circuit	01295	SN74LS125AJ
2A4A2 CP1 MUX#2 U45	D	Integrated Circuit	01295	SN74LS126AJ
2A4A2 CP1 MUX#2 U46	D	Integrated Circuit	18324	N8X320N
2A4A2 CP1 MUX#2 U47-U50	D	Integrated Circuit	01295	SN74LS377J
2A4A2 CP1 MUX#2 U51-U52	D	Integrated Circuit	07263	93S16DC
2A4A2 CP1 MUX#2 U53	D	Integrated Circuit	01295	SN74LS279J
2A4A2 CP1 MUX#2 U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
2A4A2 CP1 MUX#2 U56	D	Integrated Circuit	01295	SN74LS00J
2A4A2 CP1 MUX#2 U57	D	Integrated Circuit	01295	SN74LS04J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A2 CP1 MUX#2 U58	D	Integrated Circuit	01295	SN74S02J
2A4A2 CP1 MUX#2 U59	D	Integrated Circuit	01295	SN74LS125AJ
2A4A2 CP1 MUX#2 U60	D	Integrated Circuit	01295	SN74LS126AJ
2A4A2 CP1 MUX#2 U61	D	Integrated Circuit	01295	SN74S08J
2A4A2 CP1 MUX#2 U62	D	Integrated Circuit	07263	93S16DC
2A4A2 CP1 MUX#2 U63	D	Integrated Circuit	01295	SN74S251J
2A4A2 CP1 MUX#2 U64	D	Integrated Circuit	01295	SN74S86J
2A4A2 CP1 MUX#2 U65	D	Oscillator	04713	K1115A-9.12MHz
2A4A2 CP1 MUX#2 U66	D	Integrated Circuit	01295	SN74LS74AJ
2A4A2 CP1 MUX#2 U67	D	Integrated Circuit	01295	SN74LS125AJ
2A4A2 CP1 MUX#2 U68	D	Integrated Circuit	01295	SN74S74J
2A4A2 CP1 MUX#2 U69-U70	D	Resistor Network	32997	4308R-102-330
2A4A2 CP1 MUX#2 U71	D	Integrated Circuit		316-3007-001
2A4A2 CP1 MUX#2 U72	D	Integrated Circuit	34649	D8085A-2
2A4A2 CP1 MUX#2 U73-U74	D	Integrated Circuit	15476	19-14035-00
2A4A2 CP1 MUX#2 U75	D	Integrated Circuit		316-3003-001
2A4A2 CP1 MUX#2 U76	D	Integrated Circuit		316-3005-001
2A4A2 CP1 MUX#2 U77	D	Integrated Circuit		316-3006-001
2A4A2 CP1 MUX#2 U78	D	Integrated Circuit		316-3004-001
2A4A2 CP1 MUX#2 U79	D	Integrated Circuit		316-3002-001
2A4A2 CP1 MUX#2 U80	D	Integrated Circuit		316-3001-1
2A4A2 CP1 MUX#2 U81-U82	D	Integrated Circuit	01295	SN74S251J
2A4A2 CP1 MUX#2 U83	D	Integrated Circuit	04713	MC14557BCL
2A4A2 CP1 MUX#2 U84	D	Integrated Circuit	01295	SN74LS02J
2A4A2 CP1 MUX#2 U85	D	Integrated Circuit	01295	SN74LS04
2A4A2 CP1 MUX#2 U86	D	Integrated Circuit	01295	SN74LS08J
2A4A2 CP1 MUX#2 U87	D	Integrated Circuit	01295	SN74LS00J
2A4A2 CP1 MUX#2 U88	D	Integrated Circuit		316-3008-001
2A4A2 CP1 MUX#2 U89-U92	D	Integrated Circuit	15476	19-13040-00
2A4A2 CP1 MUX#2 U93	D	Integrated Circuit	97871	401-37124
2A4A2 CP1 MUX#2 U94-U96	D	Integrated Circuit	27014	DS8641J
2A4A2 CP1 MUX#2 U97	D	Option Plug	97871	401-37125-01
2A4A2 CP1 MUX#2 U98	D	Integrated Circuit	27014	DS8641J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A2 CP1 MUX#2 U99	D	Integrated Circuit	01295	SN74LS377J
2A4A2 CP1 MUX#2 U100-U101	D	Integrated Circuit	01295	SN74LS378J
2A4A2 CP1 MUX#2 U102	D	Integrated Circuit	01295	SN74LS27J
2A4A2 CP1 MUX#2 U103	D	Integrated Circuit	01295	SN74276J
2A4A2 CP1 MUX#2 U104-U105	D	Integrated Circuit	27014	DS8641J
2A4A2 CP1 MUX#2 U106	D	Resistor Network	32997	4308R-104-181/391
2A4A2 CP1 MUX#2 U107	D	Integrated Circuit	34649	D3205
2A4A2 CP1 MUX#2 U108	D	Resistor Network	32997	4308R-102-181
2A4A2 CP1 MUX#2 U109	D	Integrated Circuit	01295	SN74LS373J
2A4A2 CP1 MUX#2 U110	D	Resistor Network	32997	4308R-102-181
2A4A2 CP1 MUX#2 VR1	D	Voltage Regulator	27014	LM120H-5.0
2A4A2 CP1 MUX#2 XU29	D	Socket	09922	DILB40P-108
2A4A2 CPI MUX#2 XU30	D	Socket	09922	DILB24P-108
2A4A2 CP1 MUX#2 XU34-XU35	D	Socket	09922	DILB40P-108
2A4A2 CP1 MUX#2 XU36-XU41	D	Socket	09922	DILB28P-108
2A4A2 CP1 MUX#2 XU43	D	Socket	09922	DILB40P-108
2A4A2 CP1 MUX#2 XU46	D	Socket	09922	DILB40P-108
2A4A2 CP1 MUX#2 XU71	D	Socket	09922	DILB20P-108
2A4A2 CP1 MUX#2 XU72	D	Socket	09922	DILB40P-108
2A4A2 CP1 MUX#2 XU75-XU80	D	Socket	09922	DILB20P-108
2A4A2 CP1 MUX#2 XU88	D	Socket	09922	DILB20P-108
2A4A2 CP1 MUX#2 XU93	D	Socket	09922	DILB14P-108
2A4A2 CP1 MUX#2 XU97	D	Socket	09922	DILB14P-108
2A4A2 CP1 MUX#2 Y1	D	Crystal	00RCD	MP18-9.830400MHz
2A4A2 CP1 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
2A4A2 CP1 QBUS DMA	C	DMA Controller Circuit Card	D0008	DMA-QB
2A4A3 CP1 DISC CONT	C	Disk Controller Circuit Card	15476	RLV12
2A4A3 CP1 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
2A4A3 CP1 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
2A4A3 CP2 LSI 11/23	C	LSI 11/23 Microprocessor Circuit Card	15476	KDF11-AA
2A4A3 CP2 64KW RAM	C	64K Word RAM/Parity Circuit Card	15476	MSV11-LF
2A4A4 CP2 HEX/IPB-L11	C	Multiprocessor Linking System	D0008	HEX-L11,IPB-L11
2A4A4 CP2 MUX#1	C	Multiplexer Circuit Card	97871	401-36993-03

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A4 CP2 MUX#1 A1	D	Printed Wiring Board	97871	401-36991-05
2A4A4 CP2 MUX#1 C1-C4	D	Capacitor		CK05BX151K
2A4A4 CP2 MUX#1 C9-C47	D	Capacitor		CK05BX104K
2A4A4 CP2 MUX#1 C49-C50	D	Capacitor		CK05BX104K
2A4A4 CP2 MUX#1 C54-C65	D	Capacitor		CK05BX104K
2A4A4 CP2 MUX#1 C66	D	Capacitor		M39006/09-8283
2A4A4 CP2 MUX#1 C67-C76	D	Capacitor		CK05BX104K
2A4A4 CP2 MUX#1 C78	D	Capacitor	90201	TIM226M010P0X
2A4A4 CP2 MUX#1 C79-C92	D	Capacitor		CK05BX104K
2A4A4 CP2 MUX#1 C93-C95	D	Capacitor		M39006/09-8283
2A4A4 CP2 MUX#1 C96-C97	D	Capacitor		CK05BX103K
2A4A4 CP2 MUX#1 C98	D	Capacitor		M39006/09-8283
2A4A4 CP2 MUX#1 CR1-CR2	D	Diode		1N4148
2A4A4 CP2 MUX#1 DS1	D	Light Emitting Diode	72619	555-2303
2A4A4 CP2 MUX#1 DS2-DS3	D	Light Emitting Diode	72619	555-4007
2A4A4 CP2 MUX#1 E1-E10	D	Header	89497	65507-136
2A4A4 CP2 MUX#1 J1-J2	D	Connector	22526	65823-043
2A4A4 CP2 MUX#1 R1-R3	D	Resistor		RCR07G102JS
2A4A4 CP2 MUX#1 R4	D	Resistor		RCR07G330JS
2A4A4 CP2 MUX#1 R5	D	Resistor		RCR07G102JS
2A4A4 CP2 MUX#1 R6	D	Resistor		RCR07G470JS
2A4A4 CP2 MUX#1 R7	D	Resistor		RCR07G330JS
2A4A4 CP2 MUX#1 R8	D	Resistor		RCR07G822JS
2A4A4 CP2 MUX#1 R9	D	Resistor		RCR07G103JS
2A4A4 CP2 MUX#1 R10	D	Resistor		RCR07G330JS
2A4A4 CP2 MUX#1 R11	D	Resistor		RCR07G102JS
2A4A4 CP2 MUX#1 R12	D	Resistor		RCR07G331JS
2A4A4 CP2 MUX#1 R13-R14	D	Resistor		RCR07G102JS
2A4A4 CP2 MUX#1 R15	D	Resistor		RCR07G393JS
2A4A4 CP2 MUX#1 TP1	D	Terminal	83330	2029B
2A4A4 CP2 MUX#1 U1	D	Integrated Circuit	01295	SN74LS04J
2A4A4 CP2 MUX#1 U2	D	Integrated Circuit	27014	DS3691J
2A4A4 CP2 MUX#1 U3	D	Integrated Circuit	27014	DS26LS32CJ

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A4 CP2 MUX#1 U4	D	Integrated Circuit	27014	DS3691J
2A4A4 CP2 MUX#1 U5	D	Resistor Network	32997	4308-R-102-472
2A4A4 CP2 MUX#1 U6	D	Integrated Circuit	27014	DS26LS32CJ
2A4A4 CP2 MUX#1 U7	D	Resistor Network	32997	4308R-102-472
2A4A4 CP2 MUX#1 U8	D	integrated Circuit	27014	DS3691J
2A4A4 CP2 MUX#1 U9	D	Resistor Network	32997	4308R-102-472
2A4A4 CP2 MUX#1 U10	D	Integrated Circuit	27014	DS26LS32CJ
2A4A4 CP2 MUX#1 U11-U12	D	Resistor Network	32997	4308R-102-472
2A4A4 CP2 MUX#1 U13	D	Integrated Circuit	27014	DS26LS32CJ
2A4A4 CP2 MUX#1 U14-U15	D	Resistor Network	32997	4308R-102-472
2A4A4 CP2 MUX#1 U16	D	Integrated Circuit	27014	DS26LS32CJ
2A4A4 CP2 MUX#1 U17-U18	D	Resistor Network	32997	4308R-102-472
2A4A4 CP2 MUX#1 U19	D	Integrated Circuit	27014	DS26LS32CJ
2A4A4 CP2 MUX#1 U20	D	Resistor Network	32997	4308R-102-472
2A4A4 CP2 MUX#1 U21	D	Integrated Circuit	27014	DS3691J
2A4A4 CP2 MUX#1 U22	D	Resistor Network	32997	4308R-102-472
2A4A4 CP2 MUX#1 U23	D	Integrated Circuit	27014	DS26LS32CJ
2A4A4 CP2 MUX#1 U24	D	Resistor Network	32997	4308R-102-472
2A4A4 CP2 MUX#1 U25	D	Integrated Circuit	27014	DS3691J
2A4A4 CP2 MUX#1 U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
2A4A4 CP2 MUX#1 U28	D	Integrated Circuit	01295	SN74LS04J
2A4A4 CP2 MUX#1 U29	D	Integrated Circuit	34649	D8274
2A4A4 CP2 MUX#1 U30	D	Integrated Circuit	34649	D8253-5
2A4A4 CP2 MUX#1 U31	D	Integrated Circuit	01295	SN74LS02J
2A4A4 CP2 MUX#1 U32	D	Integrated Circuit	01295	SN74LS377J
2A4A4 CP2 MUX#1 U33	D	Integrated Circuit	01295	SN74LS241J
2A4A4 CP2 MUX#1 U34-U35	D	Integrated Circuit	34649	D8155-2
2A4A4 CP2 MUX#1 U36	D	Integrated Circuit		316-3009-001
2A4A4 CP2 MUX#1 U37	D	Integrated Circuit		316-3010-001
2A4A4 CP2 MUX#1 U38-U41	D	Integrated Circuit	50088	MK4802P-3
2A4A4 CP2 MUX#1 U42	D	Resistor Network	32997	4310R-102-181
2A4A4 CP2 MUX#1 U43	D	Integrated Circuit	34649	D8274
2A4A4 CP2 MUX#1 U44	D	Integrated Circuit	01295	SN74LS125AJ

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A4 CP2 MUX#1 U45	D	Integrated Circuit	01295	SN74LS126AJ
2A4A4 CP2 MUX#1 U46	D	Integrated Circuit	18324	N8X320N
2A4A4 CP2 MUX#1 U47-U50	D	Integrated Circuit	01295	SN74LS377J
2A4A4 CP2 MUX#1 U51-U52	D	Integrated Circuit	07263	93S16DC
2A4A4 CP2 MUX#1 U53	D	Integrated Circuit	01295	SN74LS279J
2A4A4 CP2 MUX#1 U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
2A4A4 CP2 MUX#1 U56	D	Integrated Circuit	01295	SN74LS00J
2A4A4 CP2 MUX#1 U57	D	Integrated Circuit	01295	SN74LS04J
2A4A4 CP2 MUX#1 U58	D	Integrated Circuit	01295	SN74S02J
2A4A4 CP2 MUX#1 U59	D	Integrated Circuit	01295	SN74LS125AJ
2A4A4 CP2 MUX#1 U60	D	Integrated Circuit	01295	SN74LS126AJ
2A4A4 CP2 MUX#1 U61	D	Integrated Circuit	01295	SN74S08J
2A4A4 CP2 MUX#1 U62	D	Integrated Circuit	07263	93S16DC
2A4A4 CP2 MUX#1 U63	D	Integrated Circuit	01295	SN74S251J
2A4A4 CP2 MUX#1 U64	D	Integrated Circuit	01295	SN74S86J
2A4A4 CP2 MUX#1 U65	D	Oscillator	04713	K1115A-9.12MHz
2A4A4 CP2 MUX#1 U66	D	Integrated Circuit	01295	SN74LS74AJ
2A4A4 CP2 MUX#1 U67	D	Integrated Circuit	01295	SN74LS125AJ
2A4A4 CP2 MUX#1 U68	D	Integrated Circuit	01295	SN74S74J
2A4A4 CP2 MUX#1 U69-U70	D	Resistor Network	32997	4308R-102-330
2A4A4 CP2 MUX#1 U71	D	Integrated Circuit		316-3007-001
2A4A4 CP2 MUX#1 U72	D	Integrated Circuit	34649	D8085A-2
2A4A4 CP2 MUX#1 U73-U74	D	Integrated Circuit	15476	19-14035-00
2A4A4 CP2 MUX#1 U75	D	Integrated Circuit		316-3003-001
2A4A4 CP2 MUX#1 U76	D	Integrated Circuit		316-3005-001
2A4A4 CP2 MUX#1 U77	D	Integrated Circuit		316-3006-001
2A4A4 CP2 MUX#1 U78	D	Integrated Circuit		316-3004-001
2A4A4 CP2 MUX#1 U78	D	Integrated Circuit		316-3004-001
2A4A4 CP2 MUX#1 U79	D	Integrated Circuit		316-3002-001
2A4A4 CP2 MUX#1 U80	D	Integrated Circuit		316-3001-001
2A4A4 CP2 MUX#1 U81-U82	D	Integrated Circuit	01295	SN74S251J
2A4A4 CP2 MUX#1 U83	D	Integrated Circuit	04713	MC14557BCL
2A4A4 CP2 MUX#1 U84	D	Integrated Circuit	01295	SN74LS02J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A4 CP2 MUX#1 U85	D	Integrated Circuit	01295	SN74LS04J
2A4A4 CP2 MUX#1 U86	D	Integrated Circuit	01295	SN74LS08J
2A4A4 CP2 MUX#1 U87	D	Integrated Circuit	01295	SN74LS00J
2A4A4 CP2 MUX#1 U88	D	Integrated Circuit		316-3008-001
2A4A4 CP2 MUX#1 U89-U92	D	Integrated Circuit	15476	19-13040-00
2A4A4 CP2 MUX#1 U93	D	Option Plug	97871	401-37124
2A4A4 CP2 MUX#1 U94-U96	D	Integrated Circuit	27014	DS8641J
2A4A4 CP2 MUX#1 U97	D	Option Plug	97871	401-37125-01
2A4A4 CP2 MUX#1 U98	D	Integrated Circuit	27014	DS8641J
2A4A4 CP2 MUX#1 U99	D	Integrated Circuit	01295	SN74LS377J
2A4A4 CP2 MUX#1 U100-U101	D	Integrated Circuit	01295	SN74LS378J
2A4A4 CP2 MUX#1 U102	D	Integrated Circuit	01295	SN74LS27J
2A4A4 CP2 MUX#1 U103	D	Integrated Circuit	01295	SN74276J
2A4A4 CP2 MUX#1 U104-U105	D	Integrated Circuit	27014	DS8641J
2A4A4 CP2 MUX#1 U106	D	Resistor Network	32997	4308R-104-181/391
2A4A4 CP2 MUX#1 U107	D	Integrated Circuit	34649	D3205
2A4A4 CP2 MUX#1 U108	D	Resistor Network	32997	4308R-102-181
2A4A4 CP2 MUX#1 U109	D	Integrated Circuit	01295	SN74LS373J
2A4A4 CP2 MUX#1 U110	D	Resistor Network	32997	4308R-102-181
2A4A4 CP2 MUX#1 VR1	D	Voltage Regulator	27014	LM120H-5.0
2A4A4 CP2 MUX#1 XU29	D	Socket	09922	DILB40P-108
2A4A4 CP2 MUX#1 XU30	D	Socket	09922	DILB24P-108
2A4A4 CP2 MUX#1 XU34-XU35	D	Socket	09922	DILB40P-108
2A4A4 CP2 MUX#1 XU36-XU41	D	Socket	09922	DILB28P-108
2A4A4 CP2 MUX#1 XU43	D	Socket	09922	DILB40P-108
2A4A4 CP2 MUX#1 XU46	D	Socket	09922	DILB40P-108
2A4A4 CP2 MUX#1 XU71	D	Socket	09922	DILB20P-108
2A4A4 CP2 MUX#1 XU72	D	Socket	09922	DILB40P-108
2A4A4 CP2 MUX#1 XU75-XU80	D	Socket	09922	DILB20P-108
2A4A4 CP2 MUX#1 XU88	D	Socket	09922	DILB20P-108
2A4A4 CP2 MUX#1 XU93	D	Socket	09922	DILB14P-108
2A4A4 CP2 MUX#1 XU97	D	Socket	09922	DILB14P-108
2A4A4 CP2 MUX#1 Y1	D	Crystal	00RCD	MP18-9.830400MHz

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A4 CP2 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
2A4A4 CP2 QBUS DMA	C	DMA Controller Circuit Card	D0008	DMA-QB
2A4A5 CP2 DISC CONT	C	Disk Controller Circuit Card	15476	RLV12
2A4A5 CP2 MUX#2	C	Multiplexer Circuit Card	97871	401-36993-03
2A4A5 CP2 MUX#2 A1	D	Printed Wiring Board	97871	401-36991-05
2A4A5 CP2 MUX#2 C1-C4	D	Capacitor		CK05BX151K
2A4A5 CP2 MUX#2 C9-C47	D	Capacitor		CK05BX104K
2A4A5 CP2 MUX#2 C49-C50	D	Capacitor		CK05BX104K
2A4A5 CP2 MUX#2 C54-C65	D	Capacitor		CK05BX104K
2A4A5 CP2 MUX#2 C66	D	Capacitor		M39006/09-8283
2A4A5 CP2 MUX#2 C67-C76	D	Capacitor		CK05BX104K
2A4A5 CP2 MUX#2 C78	D	Capacitor	90201	TIM226M010P0X
2A4A5 CP2 MUX#2 C79-C92	D	Capacitor		CK05BX104K
2A4A5 CP2 MUX#2 C93-C95	D	Capacitor		M39006/09-8283
2A4A5 CP2 MUX#2 C96-C97	D	Capacitor		CK05BX103K
2A4A5 CP2 MUX#2 C98	D	Capacitor		M39006/09-8283
2A4A5 CP2 MUX#2 CR1-CR2	D	Diode		1N4148
2A4A5 CP2 MUX#2 DS1	D	Light Emitting Diode	72619	555-2303
2A4A5 CP2 MUX#2 DS2-DS3	D	Light Emitting Diode	72619	555-4007
2A4A5 CP2 MUX#2 E1-E10	D	Header	89497	65507-136
2A4A5 CP2 MUX#2 J1-J2	D	Connector	22526	65823-043
2A4A5 CP2 MUX#2 R1-R3	D	Resistor		RCR07G102JS
2A4A5 CP2 MUX#2 R4	D	Resistor		RCR07G330JS
2A4A5 CP2 MUX#2 R5	D	Resistor		RCR07G102JS
2A4A5 CP2 MUX#2 R6	D	Resistor		RCR07G470JS
2A4A5 CP2 MUX#2 R7	D	Resistor		RCR07G330JS
2A4A5 CP2 MUX#2 R8	D	Resistor		RCR07G822JS
2A4A5 CP2 MUX#2 R9	D	Resistor		RCR07G103JS
2A4A5 CP2 MUX#2 R10	D	Resistor		RCR07G330JS
2A4A5 CP2 MUX#2 R11	D	Resistor		RCR07G102JS
2A4A5 CP2 MUX#2 R12	D	Resistor		RCR07G331JS
2A4A5 CP2 MUX#2 R13-R14	D	Resistor		RCR07G102JS
2A4A5 CP2 MUX#2 R15	D	Resistor		RCR07G393JS

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A5 CP2 MUX#2 TP1	D	Terminal	83330	2029B
2A4A5 CP2 MUX#2 U1	D	Integrated Circuit	01295	SN74LS04J
2A4A5 CP2 MUX#2 U2	D	Integrated Circuit	27014	DS3691J
2A4A5 CP2 MUX#2 U3	D	Integrated Circuit	27014	DS26LS32CJ
2A4A5 CP2 MUX#2 U4	D	Integrated Circuit	27014	DS3691J
2A4A5 CP2 MUX#2 U5	D	Resistor Network	32997	4308-R-102-472
2A4A5 CP2 MUX#2 U6	D	Integrated Circuit	27014	DS26LS32CJ
2A4A5 CP2 MUX#2 U7	D	Resistor Network	32997	4308R-102-472
2A4A5 CP2 MUX#2 U8	D	Integrated Circuit	27014	DS3691J
2A4A5 CP2 MUX#2 U9	D	Resistor Network	32997	4308R-102-472
2A4A5 CP2 MUX#2 U10	D	Integrated Circuit	27014	DS26LS32CJ
2A4A5 CP2 MUX#2 U11-U12	D	Resistor Network	32997	4308R-102-472
2A4A5 CP2 MUX#2 U13	D	Integrated Circuit	27014	DS26LS32CJ
2A4A5 CP2 MUX#2 U14-U15	D	Resistor Network	32997	4308R-102-472
2A4A5 CP2 MUX#2 U16	D	Integrated Circuit	27014	DS26LS32CJ
2A4A5 CP2 MUX#2 U17-U18	D	Resistor Network	32997	4308R-102-472
2A4A5 CP2 MUX#2 U19	D	Integrated Circuit	27014	DS26LS32CJ
2A4A5 CP2 MUX#2 U20	D	Resistor Network	32997	4308R-102-472
2A4A5 CP2 MUX#2 U21	D	Integrated Circuit	27014	DS3691J
2A4A5 CP2 MUX#2 U22	D	Resistor Network	32997	4308R-102-472
2A4A5 CP2 MUX#2 U23	D	Integrated Circuit	27014	DS26LS32CJ
2A4A5 CP2 MUX#2 U24	D	Resistor Network	32997	4308R-102-472
2A4A5 CP2 MUX#2 U25	D	Integrated Circuit	27014	DS3691J
2A4A5 CP2 MUX#2 U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
2A4A5 CP2 MUX#2 U28	D	Integrated Circuit	01295	SN74LS04J
2A4A5 CP2 MUX#2 U29	D	Integrated Circuit	34649	D8274
2A4A5 CP2 MUX#2 U30	D	Integrated Circuit	34649	D8253-5
2A4A5 CP2 MUX#2 U31	D	Integrated Circuit	01295	SN74LS02J
2A4A5 CP2 MUX#2 U32	D	Integrated Circuit	01295	SN74LS377J
2A4A5 CP2 MUX#2 U33	D	Integrated Circuit	01295	SN74LS241J
2A4A5 CP2 MUX#2 U34-U35	D	Integrated Circuit	34649	D8155-2
2A4A5 CP2 MUX#2 U36	D	Integrated Circuit		316-3009-001
2A4A5 CP2 MUX#2 U37	D	Integrated Circuit		316-3010-001

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A5 CP2 MUX#2 U38-U41	D	Integrated Circuit	50088	MK4802P-3
2A4A5 CP2 MUX#2 U42	D	Resistor Network	32997	4310R-102-181
2A4A5 CP2 MUX#2 U43	D	Integrated Circuit	34649	D8274
2A4A5 CP2 MUX#2 U44	D	Integrated Circuit	01295	SN74LS125AJ
2A4A5 CP2 MUX#2 U45	D	Integrated Circuit	01295	SN74LS126AJ
2A4A5 CP2 MUX#2 U46	D	Integrated Circuit	18324	N8X320N
2A4A5 CP2 MUX#2 U47-U50	D	Integrated Circuit	01295	SN74LS377J
2A4A5 CP2 MUX#2 U51-U52	D	Integrated Circuit	07263	93S16DC
2A4A5 CP2 MUX#2 U53	D	Integrated Circuit	01295	SN74LS279J
2A4A5 CP2 MUX#2 U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
2A4A5 CP2 MUX#2 U56	D	Integrated Circuit	01295	SN74LS00J
2A4A5 CP2 MUX#2 U57	D	Integrated Circuit	01295	SN74LS04J
2A4A5 CP2 MUX#2 U58	D	Integrated Circuit	01295	SN74S02J
2A4A5 CP2 MUX#2 U59	D	Integrated Circuit	01295	SN74LS125AJ
2A4A5 CP2 MUX#2 U60	D	Integrated Circuit	01295	SN74LS126AJ
2A4A5 CP2 MUX#2 U61	D	Integrated Circuit	01295	SN74S08J
2A4A5 CP2 MUX#2 U62	D	Integrated Circuit	07263	93S16DC
2A4A5 CP2 MUX#2 U63	D	Integrated Circuit	01295	SN74S251J
2A4A5 CP2 MUX#2 U64	D	Integrated Circuit	01295	SN74S86J
2A4A5 CP2 MUX#2 U65	D	Oscillator	04713	K1115A-9.12MHz
2A4A5 CP2 MUX#2 U66	D	Integrated Circuit	01295	SN74LS74AJ
2A4A5 CP2 MUX#2 U67	D	Integrated Circuit	01295	SN74LS125AJ
2A4A5 CP2 MUX#2 U68	D	Integrated Circuit	01295	SN74S74J
2A4A5 CP2 MUX#2 U69-U70	D	Resistor Network	32997	4308R-102-330
2A4A5 CP2 MUX#2 U71	D	Integrated Circuit		316-3007-001
2A4A5 CP2 MUX#2 U72	D	Integrated Circuit	34649	D8085A-2
2A4A5 CP2 MUX#2 U73-U74	D	Integrated Circuit	15476	19-14035-00
2A4A5 CP2 MUX#2 U75	D	Integrated Circuit		316-3003-001
2A4A5 CP2 MUX#2 U76	D	Integrated Circuit		316-3005-001
2A4A5 CP2 MUX#2 U77	D	Integrated Circuit		316-3006-001
2A4A5 CP2 MUX#2 U78	D	Integrated Circuit		316-3004-001
2A4A5 CP2 MUX#2 U79	D	Integrated Circuit		316-3002-001
2A4A5 CP2 MUX#2 U80	D	Integrated Circuit		316-3001-001

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A5 CP2 MUX#2 U81-U82	D	Integrated Circuit	01295	SN74S251J
2A4A5 CP2 MUX#2 U83	D	Integrated Circuit	04713	MC14557BCL
2A4A5 CP2 MUX#2 U84	D	Integrated Circuit	01295	SN74LS02J
2A4A5 CP2 MUX#2 U85	D	Integrated Circuit	01295	SN74LS04J
2A4A5 CP2 MUX#2 U86	D	Integrated Circuit	01295	SN74LS08J
2A4A5 CP2 MUX#2 U87	D	Integrated Circuit	01295	SN74LS00J
2A4A5 CP2 MUX#2 U88	D	Integrated Circuit		316-3008-001
2A4A5 CP2 MUX#2 U89-U92	D	Integrated Circuit	15476	19-13040-00
2A4A5 CP2 MUX#2 U93	D	Option Plug	097871	401-37124
2A4A5 CP2 MUX#2 U94-U96	D	Integrated Circuit	27014	DS8641J
2A4A5 CP2 MUX#2 U97	D	Option Plug	97871	401-37125-01
2A4A5 CP2 MUX#2 U98	D	Integrated Circuit	27014	DS8641J
2A4A5 CP2 MUX#2 U99	D	Integrated Circuit	01295	SN74LS377J
2A4A5 CP2 MUX#2 U100-U101	D	Integrated Circuit	01295	SN74LS378J
2A4A5 CP2 MUX#2 U102	D	Integrated Circuit	01295	SN74LS27J
2A4A5 CP2 MUX#2 U103	D	Integrated Circuit	01295	SN74276J
2A4A5 CP2 MUX#2 U104-U105	D	Integrated Circuit	27014	DS8641J
2A4A5 CP2 MUX#2 U106	D	Resistor Network	32997	4308R-104-181/391
2A4A5 CP2 MUX#2 U107	D	Integrated Circuit	34649	D3205
2A4A5 CP2 MUX#2 U108	D	Resistor Network	32997	4308R-102-181
2A4A5 CP2 MUX#2 U109	D	Integrated Circuit	01295	SN74LS373J
2A4A5 CP2 MUX#2 U110	D	Resistor Network	32997	4308R-102-181
2A4A5 CP2 MUX#2 VR1	D	Voltage Regulator	27014	LM120H-5.0
2A4A5 CP2 MUX#2 XU29	D	Socket	09922	DILB40P-108
2A4A5 CP2 MUX#2 XU30	D	Socket	09922	DILB24P-108
2A4A5 CP2 MUX#2 XU34-XU35	D	Socket	09922	DILB40P-108
2A4A5 CP2 MUX#2 XU36-XU41	D	Socket	09922	DILB28P-108
2A4A5 CP2 MUX#2 XU43	D	Socket	09922	DILB40P-108
2A4A5 CP2 MUX#2 XU46	D	Socket	09922	DILB40P-108
2A4A5 CP2 MUX#2 XU71	D	Socket	09922	DILB20P-108
2A4A5 CP2 MUX#2 XU72	D	Socket	09922	DILB40P-108
2A4A5 CP2 MUX#2 XU75-XU80	D	Socket	09922	DILB20P-108
2A4A5 CP2 MUX#2 XU88	D	Socket	09922	DILB20P-108

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A5 CP2 MUX#2 XU93	D	Socket	09922	DILB14P-108
2A4A5 CP2 MUX#2 XU97	D	Socket	09922	DILB14P-108
2A4A5 CP2 MUX#2 Y1	D	Crystal	00RCD	MP18-9.830400MHz
2A4A5 CP2 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
2A4A5 CP2 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
2A4A6	C	Power Control Module	97871	401-36719-01
2A4A6A1	D	Circuit Board Assembly	97871	401-37153-01
2A4A6A1C1	D	Capacitor	81349	CK06BX105K
2A4A6A1C2	D	Capacitor	81349	CK05BX473K
2A4A6A1C3	D	Capacitor	81349	CK05BX103K
2A4A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
2A4A6A1J1	D	Connector	00779	205867-1
2A4A6A1R1	D	Resistor	81349	RCR07G272JS
2A4A6A1R2	D	Resistor	81349	RCR07G153JS
2A4A6A1R3	D	Resistor	81349	RCR07G272JS
2A4A6A1R4	D	Resistor	81349	RNC55H4991FM
2A4A6A1R5	D	Resistor	81349	RNC55H1002FM
2A4A6A1R6	D	Resistor	81349	RNC55H4991FM
2A4A6A1R7	D	Resistor	81349	RJ24FW202
2A4A6A1R8	D	Resistor	81349	RNC55H1002FM
2A4A6A1R9	D	Resistor	81349	RCR07G2R7JS
2A4A6A1R10-R11	D	Resistor	54869	OH-ZT42
2A4A6A1S1	D	Switch	09353	7105R
2A4A6A1U1	D	Integrated Circuit	01295	LM311P
2A4A6A1U2	D	Integrated Circuit	01295	SN7438J
2A4A6A1U3	D	Integrated Circuit	01295	SN74LS123J
2A4A6DS1	D	Lamp	OCOML	C7A
2A4A6F1	D	Fuse	81349	F02A125V10A
2A4A6J2	D	Connector	00779	350780-1
2A4A6J3	D	Connector	00779	350767-1
2A4A6RT1-RT2	D	Current Limiter	97871	CCL175.09
2A4A6S1	D	Switch	27191	7560K6
2A4A6TB1	D	Terminal Block	81349	38TB10

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A6T1	D	Transformer	97871	241-4-24
2A4A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
2A4A6XF1	D	Fuse Holder	81349	FHL17G1
2A4A7	C	Power Control Module	97871	401-36719-02
2A4A7A1	D	Circuit Board Assembly	97871	401-37153-01
2A4A7A1C1	D	Capacitor	81349	CK06BX105K
2A4A7A1C2	D	Capacitor	81349	CK05BX473K
2A4A7A1C3	D	Capacitor	81349	CK05BX103K
2A4A7A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
2A4A7A1J1	D	Connector	00779	205867-1
2A4A7A1R1	D	Resistor	81349	RCR07G272JS
2A4A7A1R2	D	Resistor	81349	RCR07G153JS
2A4A7A1R3	D	Resistor	81349	RCR07G272JS
2A4A7A1R4	D	Resistor	81349	RNC55H4991FM
2A4A7A1R5	D	Resistor	81349	RNC55H1002FM
2A4A7A1R6	D	Resistor	81349	RNC55H4991FM
2A4A7A1R7	D	Resistor	81349	RJ24FW202
2A4A7A1R8	D	Resistor	81349	RNC55H1002FM
2A4A7A1R9	D	Resistor	81349	RCR07G2R7JS
2A4A7A1R10-R11	D	Resistor	54869	OH-ZT42
2A4A7A1S1	D	Switch	09353	7105R
2A4A7A1U1	D	Integrated Circuit	01295	LM311P
2A4A7A1U2	D	Integrated Circuit	01295	SN7438J
2A4A7A1U3	D	Integrated Circuit	01295	SN74LS123J
2A4A7DS1	D	Lamp	0C0ML	C7A
2A4A7F1	D	Fuse	81349	F02A125V10A
2A4A7J2	D	Connector	00779	350780-1
2A4A7J3	D	Connector	00779	350767-1
2A4A7RT1-RT2	D	Current Limiter	97871	CCL175.09
2A4A7S1	D	Switch	27191	7560K6
2A4A7TB1	D	Terminal Block	81349	38TB10
2A4A7T1	D	Transformer	97871	241-4-24
2A4A7XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A4A7XF1	D	Fuse Holder	81349	FHL17G1
2A5	B	Single Comm. Processor Card Cage	97871	401-37999-03
2A5A1 LSI 11/23	C	LSI-11/23 Microprocessor Circuit Card	15476	KDF11-AA
2A5A1 MUX#1	C	Multiplexer Circuit Card	97871	401-36993-03
2A5A1 MUX#1 A1	D	Printed Wiring Board	97871	401-36991-05
2A5A1 MUX#1 C1-C4	D	Capacitor		CK05BX151K
2A5A1 MUX#1 C9-C65	D	Capacitor		CK05BX104K
2A5A1 MUX#1 C67-C77	D	Capacitor		CK05BX104K
2A5A1 MUX#1 C78	D	Capacitor	90201	T1M226M010POX
2A5A1 MUX#1 C79-C92	D	Capacitor		CK05BX104K
2A5A1 MUX#1 C93-C95	D	Capacitor		M39006/09-8283
2A5A1 MUX#1 C96-C97	D	Capacitor		CK05BX103K
2A5A1 MUX#1 C98	D	Capacitor		M39006/09-8283
2A5A1 MUX#1 CR1-CR2	D	Diode		1N4148
2A5A1 MUX#1 DS1	D	Light Emitting Diode	72619	555-2303
2A5A1 MUX#1 DS2-DS3	D	Light Emitting Diode	72619	555-4007
2A5A1 MUX#1 E1-E10	D	Header	89497	65507-136
2A5A1 MUX#1 J1-J2	D	Connector	22526	65823-043
2A5A1 MUX#1 R1-R3	D	Resistor		RCR07G102JS
2A5A1 MUX#1 R4	D	Resistor		RCR07G330JS
2A5A1 MUX#1 R5	D	Resistor		RCR07G102JS
2A5A1 MUX#1 R6	D	Resistor		RCR07G470JS
2A5A1 MUX#1 R7	D	Resistor		RCR07G330JS
2A5A1 MUX#1 R8	D	Resistor		RCR07G822JS
2A5A1 MUX#1 R9	D	Resistor		RCR07G103JS
2A5A1 MUX#1 R10	D	Resistor		RCR07G330JS
2A5A1 MUX#1 R11	D	Resistor		RCR07G102JS
2A5A1 MUX#1 R12	D	Resistor		RCR07G331JS
2A5A1 MUX#1 R13-R14	D	Resistor		RCR07G102JS
2A5A1 MUX#1 R15	D	Resistor		RCR07G393JS
2A5A1 MUX#1 TP1	D	Terminal	83330	2029B
2A5A1 MUX#1 U1	D	Integrated Circuit	01295	SN74LS04J
2A5A1 MUX#1 U2	D	Integrated Circuit	27014	DS3691J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A5A1 MUX#1 U3	D	Integrated Circuit	27014	DS26LS32CJ
2A5A1 MUX#1 U4	D	Integrated Circuit	27014	DS3691J
2A5A1 MUX#1 U5	D	Resistor Network	32997	4308-R-102-472
2A5A1 MUX#1 U6	D	Integrated Circuit	27014	DS26LS32CJ
2A5A1 MUX#1 U7	D	Resistor Network	32997	4308R-102-472
2A5A1 MUX#1 U8	D	Integrated Circuit	27014	DS3691J
2A5A1 MUX#1 U9	D	Resistor Network	32997	4308R-102-472
2A5A1 MUX#1 U10	D	Integrated Circuit	27014	DS26LS32CJ
2A5A1 MUX#1 U11-U12	D	Resistor Network	32997	4308R-102-472
2A5A1 MUX#1 U13	D	Integrated Circuit	27014	DS26LS32CJ
2A5A1 MUX#1 U14-U15	D	Resistor Network	32997	4308R-102-472
2A5A1 MUX#1 U16	D	Integrated Circuit	27014	DS26LS32CJ
2A5A1 MUX#1 U17-U18	D	Resistor Network	32997	4308R-102-472
2A5A1 MUX#1 U19	D	Integrated Circuit	27014	DS26LS32CJ
2A5A1 MUX#1 U20	D	Resistor Network	32997	4308R-102-472
2A5A1 MUX#1 U21	D	Integrated Circuit	27014	DS3691J
2A5A1 MUX#1 U22	D	Resistor Network	32997	4308R-102-472
2A5A1 MUX#1 U23	D	Integrated Circuit	27014	DS26LS32CJ
2A5A1 MUX#1 U24	D	Resistor Network	32997	4308R-120-472
2A5A1 MUX#1 U25	D	Integrated Circuit	27014	DS3691J
2A5A1 MUX#1 U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
2A5A1 MUX#1 U28	D	Integrated Circuit	01295	SN74LS04J
2A5A1 MUX#1 U29	D	Integrated Circuit	34649	D8274
2A5A1 MUX#1 U30	D	Integrated Circuit	34649	D8253-5
2A5A1 MUX#1 U31	D	Integrated Circuit	01295	SN74LS02J
2A5A1 MUX#1 U32	D	Integrated Circuit	01295	SN74LS377J
2A5A1 MUX#1 U33	D	Integrated Circuit	01295	SN74LS241J
2A5A1 MUX#1 U34-U35	D	Integrated Circuit	34649	D8155-2
2A5A1 MUX#1 U36	D	Integrated Circuit		316-3009-003
2A5A1 MUX#1 U37	D	Integrated Circuit		316-3010-003
2A5A1 MUX#1 U38-U41	D	Integrated Circuit	50088	MK4802P-3
2A5A1 MUX#1 U42	D	Resistor Network	32997	4310R-102-181
2A5A1 MUX#1 U43	D	Integrated Circuit	34649	D8274

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A5A1 MUX#1 U44	D	Integrated Circuit	01295	SN74LS125AJ
2A5A1 MUX#1 U45	D	Integrated Circuit	01295	SN74LS126AJ
2A5A1 MUX#1 U46	D	Integrated Circuit	18324	N8X320N
2A5A1 MUX#1 U47-U50	D	Integrated Circuit	01295	SN74LS377J
2A5A1 MUX#1 U51-U52	D	Integrated Circuit	07263	93S16DC
2A5A1 MUX#1 U53	D	Integrated Circuit	01295	SN74LS279J
2A5A1 MUX#1 U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
2A5A1 MUX#1 U56	D	Integrated Circuit	01295	SN74LS00J
2A5A1 MUX#1 U57	D	Integrated Circuit	01295	SN74LS04J
2A5A1 MUX#1 U58	D	Integrated Circuit	01295	SN74S02J
2A5A1 MUX#1 U59	D	Integrated Circuit	01295	SN74LS125AJ
2A5A1 MUX#1 U60	D	Integrated Circuit	01295	SN74LS126AJ
2A5A1 MUX#1 U61	D	Integrated Circuit	01295	SN74S08J
2A5A1 MUX#1 U62	D	Integrated Circuit	07263	93S16DC
2A5A1 MUX#1 U63	D	Integrated Circuit	01295	SN74S251J
2A5A1 MUX#1 U64	D	Integrated Circuit	01295	SN74S86J
2A5A1 MUX#1 U65	D	Oscillator	04713	K1115A-9.12MHz
2A5A1 MUX#1 U66	D	Integrated Circuit	01295	SN74LS74AJ
2A5A1 MUX#1 U67	D	Integrated Circuit	01295	SN74LS125AJ
2A5A1 MUX#1 U68	D	Integrated Circuit	01295	SN74S74J
2A5A1 MUX#1 U69-U70	D	Resistor Network	32997	4308R-102-330
2A5A1 MUX#1 U71	D	Integrated Circuit		316-3007-001
2A5A1 MUX#1 U72	D	Integrated Circuit	34649	D8085A-2
2A5A1 MUX#1 U73-U74	D	Integrated Circuit	15476	19-14035-00
2A5A1 MUX#1 U75	D	Integrated Circuit		316-3003-001
2A5A1 MUX#1 U76	D	Integrated Circuit		316-3005-001
2A5A1 MUX#1 U77	D	Integrated Circuit		316-3006-001
2A5A1 MUX#1 U78	D	Integrated Circuit		316-3004-001
2A5A1 MUX#1 U79	D	Integrated Circuit		316-3002-001
2A5A1 MUX#1 U80	D	Integrated Circuit		316-3001-1
2A5A1 MUX#1 U81-U82	D	Integrated Circuit	01295	SN74S251J
2A5A1 MUX#1 U83	D	Integrated Circuit	04713	MC14557BCL
2A5A1 MUX#1 U84	D	Integrated Circuit	01295	SN74LS02J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A5A1 MUX#1 U85	D	Integrated Circuit	01295	SN74LS04J
2A5A1 MUX#1 U86	D	Integrated Circuit	01295	SN74LS08J
2A5A1 MUX#1 U87	D	Integrated Circuit	01295	SN74LS00J
2A5A1 MUX#1 U88	D	Integrated Circuit		316-3008-001
2A5A1 MUX#1 U89-U92	D	Integrated Circuit	15476	19-13040-00
2A5A1 MUX#1 U93	D	Integrated Circuit	97871	401-37124
2A5A1 MUX#1 U94-U96	D	Integrated Circuit	27014	DS8641J
2A5A1 MUX#1 U97	D	Option Plug	97871	401-37125-01
2A5A1 MUX#1 U98	D	Integrated Circuit	27014	DS8641J
2A5A1 MUX#1 U99	D	Integrated Circuit	01295	SN74LS377J
2A5A1 MUX#1 U100-U101	D	Integrated Circuit	01295	SN74LS378J
2A5A1 MUX#1 U102	D	Integrated Circuit	01295	SN74LS27J
2A5A1 MUX#1 U103	D	Integrated Circuit	01295	SN74276J
2A5A1 MUX#1 U104-U105	D	Integrated Circuit	27014	DS8641J
2A5A1 MUX#1 U106	D	Resistor Network	32997	4308R-104-181/391
2A5A1 MUX#1 U107	D	Integrated Circuit	34649	D3205
2A5A1 MUX#1 U108	D	Resistor Network	32997	4308R-102-181
2A5A1 MUX#1 U109	D	Integrated Circuit	01295	SN74LS373J
2A5A1 MUX#1 U110	D	Resistor Network	32997	4308R-102-181
2A5A1 MUX#1 VR1	D	Voltage Regulator	27014	LM120H-5.0
2A5A1 MUX#1 XU29	D	Socket	09922	DILB40P-108
2A5A1 MUX#1 XU30	D	Socket	09922	DILB24P-108
2A5A1 MUX#1 XU34-XU35	D	Socket	09922	DILB40P-108
2A5A1 MUX#1 XU36-XU41	D	Socket	09922	DILB28P-108
2A5A1 MUX#1 XU43	D	Socket	09922	DILB40P-108
2A5A1 MUX#1 XU46	D	Socket	09922	DILB40P-108
2A5A1 MUX#1 XU71	D	Socket	09922	DILB20P-108
2A5A1 MUX#1 XU72	D	Socket	09922	DILB40P-108
2A5A1 MUX#1 XU75-XU80	D	Socket	09922	DILB20P-108
2A5A1 MUX#1 XU88	D	Socket	09922	DILB20P-108
2A5A1 MUX#1 XU93	D	Socket	09922	DILB14P-108
2A5A1 MUX#1 XU97	D	Socket	09922	DILB14P-108
2A5A1 MUX#1 Y1	D	Crystal	00RCD	MP18-9.830400MHz

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A5A1 64KW RAM	C	64K Word RAM Circuit Card	15476	MSV11-LF
2A5A2 HEX/IPB-L11	C	Multiprocessor Linking System	D0008	HEX-L11,IPB-L11
2A5A2 MUX#2	C	Multiplexer Circuit Card	97871	401-36993-03
2A5A2 MUX#2 A1	D	Printed Wiring Board	97871	401-36991-05
2A5A2 MUX#2 C1-C4	D	Capacitor		CK05BX151K
2A5A2 MUX#2 C9-C65	D	Capacitor		CK05BX104K
2A5A2 MUX#2 C67-C77	D	Capacitor		CK05BX104K
2A5A2 MUX#2 C78	D	Capacitor	90201	TIM226M010P0X
2A5A2 MUX#2 C79-C92	D	Capacitor		CK05BX104K
2A5A2 MUX#2 C93-C95	D	Capacitor		M39006/09-8283
2A5A2 MUX#2 C96-C97	D	Capacitor		CK05BX103K
2A5A2 MUX#2 C98	D	Capacitor		M39006/09-8283
2A5A2 MUX#2 CR1-CR2	D	Diode		1N4148
2A5A2 MUX#2 DS1	D	Light Emitting Diode	72619	555-2303
2A5A2 MUX#2 DS2-DS3	D	Light Emitting Diode	72619	555-4007
2A5A2 MUX#2 E1-E10	D	Header	89497	65507-136
2A5A2 MUX#2 J1-J2	D	Connector	22526	65823-043
2A5A2 MUX#2 R1-R3	D	Resistor		RCR07G102JS
2A5A2 MUX#2 R4	D	Resistor		RCR07G330JS
2A5A2 MUX#2 R5	D	Resistor		RCR07G102JS
2A5A2 MUX#2 R6	D	Resistor		RCR07G470JS
2A5A2 MUX#2 R7	D	Resistor		RCR07G330JS
2A5A2 MUX#2 R8	D	Resistor		RCR07G822JS
2A5A2 MUX#2 R9	D	Resistor		RCR07G103JS
2A5A2 MUX#2 R10	D	Resistor		RCR07G330JS
2A5A2 MUX#2 R11	D	Resistor		RCR07G102JS
2A5A2 MUX#2 R12	D	Resistor		RCR07G331JS
2A5A2 MUX#2 R13-R14	D	Resistor		RCR07G102JS
2A5A2 MUX#2 R15	D	Resistor		RCR07G393JS
2A5A2 MUX#2 TP1	D	Terminal	83330	2029B
2A5A2 MUX#2 U1	D	Integrated Circuit	01295	SN74LS04J
2A5A2 MUX#2 U2	D	Integrated Circuit	27014	DS3691J
2A5A2 MUX#2 U3	D	Integrated Circuit	27014	DS26LS32CJ

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A5A2 MUX#2 U4	D	Integrated Circuit	27014	DS3691J
2A5A2 MUX#2 U5	D	Resistor Network	32997	4308-R-102-472
2A5A2 MUX#2 U6	D	Integrated Circuit	27014	DS26LS32CJ
2A5A2 MUX#2 U7	D	Resistor Network	32997	4308R-102-472
2A5A2 MUX#2 U8	D	Integrated Circuit	27014	DS3691J
2A5A2 MUX#2 U9	D	Resistor Network	32997	4308R-102-472
2A5A2 MUX#2 U10	D	Integrated Circuit	27014	DS26LS32CJ
2A5A2 MUX#2 U11-U12	D	Resistor Network	32997	4308R-102-472
2A5A2 MUX#2 U13	D	Integrated Circuit	27014	DS26LS32CJ
2A5A2 MUX#2 U14-U15	D	Resistor Network	32997	4308R-102-472
2A5A2 MUX#2 U16	D	Integrated Circuit	27014	DS26LS32CJ
2A5A2 MUX#2 U17-U18	D	Resistor Network	32997	4308R-102-472
2A5A2 MUX#2 U19	D	Integrated Circuit	27014	DS26LS32CJ
2A5A2 MUX#2 U20	D	Resistor Network	32997	4308R-102-472
2A5A2 MUX#2 U21	D	Integrated Circuit	27014	DS3691J
2A5A2 MUX#2 U22	D	Resistor Network	32997	4308R-102-472
2A5A2 MUX#2 U23	D	Integrated Circuit	27014	DS26LS32CJ
2A5A2 MUX#2 U24	D	Resistor Network	32997	4308R-102-472
2A5A2 MUX#2 U25	D	Integrated Circuit	27014	DS3691J
2A5A2 MUX#2 U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
2A5A2 MUX#2 U28	D	Integrated Circuit	01295	SN74LS04J
2A5A2 MUX#2 U29	D	Integrated Circuit	34649	D8274
2A5A2 MUX#2 U30	D	Integrated Circuit	34649	D8253-5
2A5A2 MUX#2 U31	D	Integrated Circuit	01295	SN74LS02J
2A5A2 MUX#2 U32	D	Integrated Circuit	01295	SN74LS377J
2A5A2 MUX#2 U33	D	Integrated Circuit	01295	SN74LS241J
2A5A2 MUX#2 U34-U35	D	Integrated Circuit	34649	D8155-2
2A5A2 MUX#2 U36	D	Integrated Circuit		316-3009-003
2A5A2 MUX#2 U37	D	Integrated Circuit		316-3010-003
2A5A2 MUX#2 U38-U41	D	Integrated Circuit	50088	MK4802P-3
2A5A2 MUX#2 U42	D	Resistor Network	32997	4310R-102-181
2A5A2 MUX#2 U43	D	Integrated Circuit	34649	D8274
2A5A2 MUX#2 U44	D	Integrated Circuit	01295	SN74LS125AJ

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A5A2 MUX#2 U45	D	Integrated Circuit	01295	SN74LS126AJ
2A5A2 MUX#2 U46	D	Integrated Circuit	18324	N8X320N
2A5A2 MUX#2 U47-U50	D	Integrated Circuit	01295	SN74LS377J
2A5A2 MUX#2 U51-U52	D	Integrated Circuit	07263	93S16DC
2A5A2 MUX#2 U53	D	Integrated Circuit	01295	SN74LS279J
2A5A2 MUX#2 U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
2A5A2 MUX#2 U56	D	Integrated Circuit	01295	SN74LS00J
2A5A2 MUX#2 U57	D	Integrated Circuit	01295	SN74LS04J
2A5A2 MUX#2 U58	D	Integrated Circuit	01295	SN74S02J
2A5A2 MUX#2 U59	D	Integrated Circuit	01295	SN74LS125AJ
2A5A2 MUX#2 U60	D	Integrated Circuit	01295	SN74LS126AJ
2A5A2 MUX#2 U61	D	Integrated Circuit	01295	SN74S08J
2A5A2 MUX#2 U62	D	Integrated Circuit	07263	93S16DC
2A5A2 MUX#2 U63	D	Integrated Circuit	01295	SN74S251J
2A5A2 MUX#2 U64	D	Integrated Circuit	01295	SN74S86J
2A5A2 MUX#2 U65	D	Oscillator	04713	K1115A-9.12MHz
2A5A2 MUX#2 U66	D	Integrated Circuit	01295	SN74LS74AJ
2A5A2 MUX#2 U67	D	Integrated Circuit	01295	SN74LS125AJ
2A5A2 MUX#2 U68	D	Integrated Circuit	01295	SN74S74J
2A5A2 MUX#2 U69-U70	D	Resistor Network	32997	4308R-102-330
2A5A2 MUX#2 U71	D	Integrated Circuit		316-3007-001
2A5A2 MUX#2 U72	D	Integrated Circuit	34649	D8085A-2
2A5A2 MUX#2 U73-U74	D	Integrated Circuit	15476	19-14035-00
2A5A2 MUX#2 U75	D	Integrated Circuit		316-3003-001
2A5A2 MUX#2 U76	D	Integrated Circuit		316-3005-001
2A5A2 MUX#2 U77	D	Integrated Circuit		316-3006-001
2A5A2 MUX#2 U78	D	Integrated Circuit		316-3004-001
2A5A2 MUX#2 U79	D	Integrated Circuit		316-3002-001
2A5A2 MUX#2 U80	D	Integrated Circuit		316-3001-1
2A5A2 MUX#2 U81-U82	D	Integrated Circuit	01295	SN74S251J
2A5A2 MUX#2 U83	D	Integrated Circuit	04713	MC14557BCL
2A5A2 MUX#2 U84	D	Integrated Circuit	01295	SN74LS02J
2A5A2 MUX#2 U85	D	Integrated Circuit	01295	SN74LS04

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A5A2 MUX#2 U86	D	Integrated Circuit	01295	SN74LS08J
2A5A2 MUX#2 U87	D	Integrated Circuit	01295	SN74LS00J
2A5A2 MUX#2 U88	D	Integrated Circuit		316-3008-001
2A5A2 MUX#2 U89-U92	D	Integrated Circuit	15476	19-13040-00
2A5A2 MUX#2 U93	D	Integrated Circuit	97871	401-37124
2A5A2 MUX#2 U94-U96	D	Integrated Circuit	27014	DS8641J
2A5A2 MUX#2 U97	D	Option Plug	97871	401-37125-01
2A5A2 MUX#2 U98	D	Integrated Circuit	27014	DS8641J
2A5A2 MUX#2 U99	D	Integrated Circuit	01295	SN74LS377J
2A5A2 MUX#2 U100-U101	D	Integrated Circuit	01295	SN74LS378J
2A5A2 MUX#2 U102	D	Integrated Circuit	01295	SN74LS27J
2A5A2 MUX#2 U103	D	Integrated Circuit	01295	SN74276J
2A5A2 MUX#2 U104-U105	D	Integrated Circuit	27014	DS8641J
2A5A2 MUX#2 U106	D	Resistor Network	32997	4308R-104-181/391
2A5A2 MUX#2 U107	D	Integrated Circuit	34649	D3205
2A5A2 MUX#2 U108	D	Resistor Network	32997	4308R-102-181
2A5A2 MUX#2 U109	D	Integrated Circuit	01295	SN74LS373J
2A5A2 MUX#2 U110	D	Resistor Network	32997	4308R-102-181
2A5A2 MUX#2 VR1	D	Voltage Regulator	27014	LM120H-5.0
2A5A2 MUX#2 XU29	D	Socket	09922	DILB40P-108
2A5A2 MUX#2 XU30	D	Socket	09922	DILB24P-108
2A5A2 MUX#2 XU34-XU35	D	Socket	09922	DILB40P-108
2A5A2 MUX#2 XU36-XU41	D	Socket	09922	DILB28P-108
2A5A2 MUX#2 XU43	D	Socket	09922	DILB40P-108
2A5A2 MUX#2 XU46	D	Socket	09922	DILB40P-108
2A5A2 MUX#2 XU71	D	Socket	09922	DILB20P-108
2A5A2 MUX#2 XU72	D	Socket	09922	DILB40P-108
2A5A2 MUX#2 XU75-XU80	D	Socket	09922	DILB20P-108
2A5A2 MUX#2 XU88	D	Socket	09922	DILB20P-108
2A5A2 MUX#2 XU93	D	Socket	09922	DILB14P-108
2A5A2 MUX#2 XU97	D	Socket	09922	DILB14P-108
2A5A2 MUX#2 Y1	D	Crystal	00RCD	MP18-9.830400MHz
2A5A2 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A5A2 QBUS DMA	C	DMA Controller Circuit Card	D0008	DMA-QB
2A5A3 DISC CONT	C	Disk Controller Circuit Card	15476	RLV12
2A5A3 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
2A5A3 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
2A6	B	Multiplexer Interface Assembly	97871	401-37170-04
2A7	B	Multiplexer Interface Assembly	97871	401-37170-01
2A8	B	Multiplexer Interface Assembly	97871	401-37170-04
2A9-2A10	B	Multiple Outlet Strip	22012	602
2A16	B	AC Junction Box	97871	401-37231-02
2A16F1-F4	C	Fuse	81349	F02A250V3A
2A16J10-J12	C	Duplex Receptacle	74545	5000M9
2A16S1-S2	C	DPST Switch	27193	7560K6
2A16TB1-TB2	C	Terminal Block	81349	38TB10
2A165XF1-XF4	C	Indicator Fuse Holders	81349	FHL17G1
2A17	B	Blower Assembly	97871	401-37145-02
2A18	B	Thermal Alarm Sensor	97871	401-37216-02
2A19	B	Thermal Alarm Sensor	97871	401-37204-01
2PS3	B	Power Supply Assembly	97871	401-36716-01
2PS3A1	C	Power Supply	53719	MM43-12Y2Y/115
2PS5	B	Power Supply Assembly	97871	401-36716-01
2PS5A1	C	Power Supply	53719	MM43-12Y2Y/115
2PS6	B	Power Supply Assembly	97871	401-36716-01
2PS6A1	C	Power Supply	53719	MM43-12Y2Y/115
2W1	B	Cable Assembly, +12V	97871	401-36715-01
2W2	B	Cable Assembly, -12V	97871	401-36715-03
2W3	B	Cable Assembly, +5V	97871	401-36715-05
2W4	B	Cable Assembly, PCM DC Pwr.	97871	401-36786-01
2W5	B	Cable Assembly, PCM AC Pwr.	97871	401-36785-01
2W6-2W7	B	Cable Assembly, Fan Power	97871	401-37241-01
2W8	B	Cable Assembly, PCM AC Pwr.	97871	401-36785-01
2W9	B	Cable Assembly, PCM DC Pwr.	97871	401-36786-01
2W10	B	Cable Assembly, +5V	97871	401-36715-06
2W11	B	Cable Assembly, -12V	97871	401-36715-04

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2W12	B	Cable Assembly, +12V	97871	401-36715-02
2W13	B	Cable, Interproc. Bus	97871	401-37958-01
2W14-2W17	B	Cable Assembly, Mux. Buildup	97871	401-38072-01
2W18-2W21	B	Cable Assembly, Mux. IF Power	97871	401-37172-01
2W22	B	Cable Assembly, PCM AC Pwr.	97871	401-36785-02
2W23-2W26	B	Cable Assembly, Mux. Buildup	97871	401-38072-02
2W27-2W28	B	Cable, Interproc. Bus	97871	401-37958-01
2W29-2W32	B	Cable Assembly, Mux. Buildup	97871	401-38072-03
2W33	B	Cable Assembly, -12V	97871	401-36715-03
2W34	B	Cable Assembly, +12V	97871	401-36715-01
2W35	B	Cable Assembly, +5V	97871	401-36715-05
2W36	B	Cable Assembly, PCM DC Pwr.	97871	401-36786-01
2W37	B	Cable Assembly, MSD	97871	401-39128-01
2W38	B	Cable Assembly, MSD	97871	401-39135-01
2W39	B	Cable Assembly, MSD	97871	401-39142-01
2W40	B	Cable Assembly, MSD	97871	401-39129-01
2W41	B	Cable Assembly, MSD	97871	401-39136-01
2W42	B	Cable Assembly, MSD	97871	401-39143-01
2W43	B	Cable Assembly, MSD	97871	401-39130-01
2W44	B	Cable Assembly, MSD	97871	401-39137-01
2W45	B	Cable Assembly, MSD	97871	401-39144-01
2W46	B	Cable Assembly, MSD	97871	401-39131-01
2W47	B	Cable Assembly, MSD	97871	401-39138-01
2W48	B	Cable Assembly, MSD	97871	401-39145-01
2W49	B	Cable Assembly, MSD	97871	401-39132-01
2W50	B	Cable Assembly, MSD	97871	401-39139-01
2W51	B	Cable Assembly, MSD	97871	401-39146-01
2W52	B	Cable Assembly, MSD	97871	401-39133-01
2W53	B	Cable Assembly, MSD	97871	401-39140-01
2W54	B	Cable Assembly, MSD	97871	401-39147-01
2W55	B	Cable Assembly, MSD	97871	401-39134-01
2W56	B	Cable Assembly, MSD	97871	401-39141-01
2W57	B	Cable Assembly, MSD	97871	401-39148-01

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2W58-2W64	B	Cable, MSD Power Cord	97871	401-39131-01
2W67-2W68	B	Cable, Line Ptr. Adaptor	97871	401-42624-01
2W71-2W72	B	Cable Assembly, Mux. IF Power	97871	401-37172-01
Unit 3*	A	Position Processor Rack	97871	401-37616-04
3A1	B	Position Processor Card Cage	97871	401-37999-01
3A1A1 64KW RAM	C	64K Word RAM/Parity Circuit Card	15476	MSV11-LF
3A1A1 LSI 11/23	C	LSI-11/23 Microprocessor Circuit Card	15476	KDF11-AA
3A1A1 OTF#1	C	A/N OTF Processor Circuit Card	97871	401-33676-01
3A1A1 OTF#1 C1-C58	D	Capacitor	81349	CK05BX104K
3A1A1 OTF#1 C59	D	Capacitor	81349	CK05BX221K
3A1A1 OTF#1 C60	D	Capacitor	81349	CK05BX101K
3A1A1 OTF#1 C61-C80	D	Capacitor	81349	CK05BX104K
3A1A1 OTF#1 C81	D	Capacitor	81349	CK05BX100K
3A1A1 OTF#1 C82-C118	D	Capacitor	81349	CK05BX104K
3A1A1 OTF#1 J1-J4	D	Connector	22526	65496-019
3A1A1 OTF#1 R1-R2	D	Resistor	81349	RCR07G562JS
3A1A1 OTF#1 R3	D	Resistor	81349	RCR07G222JS
3A1A1 OTF#1 R4-R6	D	Resistor	81349	RCR07G472JS
3A1A1 OTF#1 U1	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U2-U5	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U6	D	Resistor Network	73138	898-5-R180/390
3A1A1 OTF#1 U7-U10	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U11-U13	D	Resistor Network	73138	898-5-R180/390
3A1A1 OTF#1 U14-U20	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U21	D	Resistor Network	73138	898-5-R180/390
3A1A1 OTF#1 U22	D	Integrated Circuit	01295	SN74S174J

*A maximum number of three position processor racks can be used in the M1FC AFSS, depending on the number of positions desired. This parts parts list shows the equipment and parts within the 401-37616-04 rack. The 401-36711-01, -02, and -03 racks are identical except for a difference in quantity of some equipment in the racks. Refer to table 7-6 in the M1FC Flight Service Automation System Instruction Book, TI6490.36 for those differences. The correct reference designators for the different position processor racks are shown in figure 1-2 and table 1-2 of this manual.

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A1 OTF#1 U24-U32	D	Integrated Circuit	18324	N82S137F
3A1A1 OTF#1 U33	D	Integrated Circuit	18324	N82S131F
3A1A1 OTF#1 U34-U36	D	Integrated Circuit	01295	SN74173J
3A1A1 OTF#1 U37-U39	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U40-U42	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U43	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U44	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U45	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U47-U50	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U52-U53	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U54	D	Integrated Circuit	18324	N82S131F
3A1A1 OTF#1 U55-U57	D	Integrated Circuit	01295	SN74S283J
3A1A1 OTF#1 U58	D	Integrated Circuit	18324	N82S137F
3A1A1 OTF#1 U59	D	Integrated Circuit	01295	SN74S08J
3A1A1 OTF#1 U60	D	Integrated Circuit	18324	N82S131F
3A1A1 OTF#1 U61-U62	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U63	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U64	D	Integrated Circuit	01295	SN74221J
3A1A1 OTF#1 U65-U68	D	Integrated Circuit	18324	N82S131F
3A1A1 OTF#1 U69-U73	D	Integrated Circuit	18324	N82S129F
3A1A1 OTF#1 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A1A1 OTF#1 U75	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A1A1 OTF#1 U77	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A1A1 OTF#1 U79	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U80	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U81	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U82	D	Crystal Oscillator	01538	K1115A-32.76MHz
3A1A1 OTF#1 U83	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U84	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U85	D	Integrated Circuit	01295	SN74221J
3A1A1 OTF#1 U86-U87	D	Integrated Circuit	01295	SN74S74J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A1 OTF#1 U88	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U91	D	Integrated Circuit	01295	SN74S08J
3A1A1 OTF#1 U92	D	Integrated Circuit	01295	SN7408J
3A1A1 OTF#1 U93	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U94	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U95	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U96	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U97	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U98	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U99	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U77	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A1A1 OTF#1 U79	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U80	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U81	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U82	D	Crystal Oscillator	01538	K1115A-32.76MHz
3A1A1 OTF#1 U83	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U84	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U85	D	Integrated Circuit	01295	SN74221J
3A1A1 OTF#1 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U88	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U91	D	Integrated Circuit	01295	SN74S08J
3A1A1 OTF#1 U92	D	Integrated Circuit	01295	SN7408J
3A1A1 OTF#1 U93	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U94	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U95	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U96	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U97	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U98	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U99	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U100	D	Integrated Circuit	01295	SN74S04J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A1 OTF#1 U101	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U102	D	Resistor Network	73138	898-5-R180/390
3A1A1 OTF#1 U103	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U104	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U105-U106	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U107	D	Integrated Circuit	01295	SN74S10J
3A1A1 OTF#1 U108	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U109	D	Integrated Circuit	01295	SN74S30J
3A1A1 OTF#1 U110	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U111	D	Integrated Circuit	01295	SN74S10J
3A1A1 OTF#1 U112	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U113	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U114	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U115	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U116	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U117	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U118	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U119	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U120	D	Integrated Circuit	01295	SN74S86J
3A1A1 OTF#1 U121-U122	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 XU6	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU21	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU23	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU24-XU32	D	Socket	71279	703-4218-01-03-10
3A1A1 OTF#1 XU33	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU46	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU51	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU54	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU58	D	Socket	71279	703-4218-01-03-10
3A1A1 OTF#1 XU60	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU102	D	Socket	71279	703-4216-01-03-10

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A2 OTF#2	C	A/N OTF Processor Circuit Card	97871	401-33676-01
3A1A2 OTF#2 C1-C58	D	Capacitor	81349	CK05BX104K
3A1A2 OTF#2 C59	D	Capacitor	81349	CK05BX221K
3A1A2 OTF#2 C60	D	Capacitor	81349	CK05BX101K
3A1A2 OTF#2 C61-C80	D	Capacitor	81349	CK05BX104K
3A1A2 OTF#2 C81	D	Capacitor	81349	CK05BX100K
3A1A2 OTF#2 C82-C118	D	Capacitor	81349	CK05BX104K
3A1A2 OTF#2 J1-J4	D	Connector	22526	65496-019
3A1A2 OTF#2 R1-R2	D	Resistor	81349	RCR07G562JS
3A1A2 OTF#2 R3	D	Resistor	81349	RCR07G222JS
3A1A2 OTF#2 R4-R6	D	Resistor	81349	RCR07G472JS
3A1A2 OTF#2 U1	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U2-U5	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U6	D	Resistor Network	73138	898-5-R180/390
3A1A2 OTF#2 U7-U10	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U11-U13	D	Resistor Network	73138	898-5-R180/390
3A1A2 OTF#2 U14-U20	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U21	D	Resistor Network	73138	898-5-R180/390
3A1A2 OTF#2 U22	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U24-U32	D	Integrated Circuit	18324	N82S137F
3A1A2 OTF#2 U33	D	Integrated Circuit	18324	N82S131F
3A1A2 OTF#2 U34-U36	D	Integrated Circuit	01295	SN74173J
3A1A2 OTF#2 U37-U39	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U40-U42	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U43	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U44	D	Integrated Circuit	01295	SN74S175J
3A1A2 OTF#2 U45	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U47-U50	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U52-U53	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U54	D	Integrated Circuit	18324	N82S131F
3A1A2 OTF#2 U55-U57	D	Integrated Circuit	01295	SN74S283J
3A1A2 OTF#2 U58	D	Integrated Circuit	18324	N82S137F
3A1A2 OTF#2 U59	D	Integrated Circuit	01295	SN74S08J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A2 OTF#2 U60	D	Integrated Circuit	18324	N82S131F
3A1A2 OTF#2 U61-U62	D	Integrated Circuit	01295	SN74S175J
3A1A2 OTF#2 U63	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U64	D	Integrated Circuit	01295	SN74221J
3A1A2 OTF#2 U65-U68	D	Integrated Circuit	18324	N82S131F
3A1A2 OTF#2 U69-U73	D	Integrated Circuit	18324	N82S129F
3A1A2 OTF#2 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A1A2 OTF#2 U75	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A1A2 OTF#2 U77	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A1A2 OTF#2 U79	D	Integrated Circuit	01295	SN74S175J
3A1A2 OTF#2 U80	D	Integrated Circuit	01295	SN74S74J
3A1A2 OTF#2 U81	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U82	D	Crystal Oscillator	05138	K1115A-32.76MHz
3A1A2 OTF#2 U83	D	Integrated Circuit	01295	SN74S74J
3A1A2 OTF#2 U84	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U85	D	Integrated Circuit	01295	SN74221J
3A1A2 OTF#2 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A1A2 OTF#2 U88	D	Integrated Circuit	01295	SN74S175J
3A1A2 OTF#2 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U91	D	Integrated Circuit	01295	SN74S08J
3A1A2 OTF#2 U92	D	Integrated Circuit	01295	SN7408J
3A1A2 OTF#2 U93	D	Integrated Circuit	01295	SN74S157J
3A1A2 OTF#2 U94	D	Integrated Circuit	01295	SN74193J
3A1A2 OTF#2 U95	D	Integrated Circuit	01295	SN74S157J
3A1A2 OTF#2 U96	D	Integrated Circuit	01295	SN74193J
3A1A2 OTF#2 U97	D	Integrated Circuit	01295	SN74S157J
3A1A2 OTF#2 U98	D	Integrated Circuit	01295	SN74193J
3A1A2 OTF#2 U99	D	Integrated Circuit	01295	SN74S157J
3A1A2 OTF#2 U100	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U101	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U102	D	Resistor Network	73138	898-5-R180/390

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A2 OTF#2 U103	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U104	D	Integrated Circuit	01295	SN74S74J
3A1A2 OTF#2 U105-U106	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U107	D	Integrated Circuit	01295	SN74S10J
3A1A2 OTF#2 U108	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U109	D	Integrated Circuit	01295	SN74S30J
3A1A2 OTF#2 U110	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U111	D	Integrated Circuit	01295	SN74S10J
3A1A2 OTF#2 U112	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U113	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U114	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U115	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U116	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U117	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U118	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U119	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U120	D	Integrated Circuit	01295	SN74S86J
3A1A2 OTF#2 U121-U122	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 XU6	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU21	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU23	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU24-XU32	D	Socket	71279	703-4218-01-03-10
3A1A2 OTF#2 XU33	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU46	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU51	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU54	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU58	D	Socket	71279	703-4218-01-03-10
3A1A2 OTF#2 XU60	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU102	D	Socket	71279	703-4216-01-03-10
3A1A2 DMA#1	C	DMA Controller, Circuit Card	D0008	DMA-QB
3A1A2 DMA#2	C	DMA Controller, Circuit Card	D0008	DMA-QB

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A3 DMA#3	C	DMA Controller, Circuit Card	D0008	DMA-QB
3A1A3 KYBD#1	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A1A3 KYBD#2	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A1A3 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A1A3 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
3A1A3 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
3A2	B	Memory Card Cage "A"	97871	401-37999-02
3A2A6	C	Power Control Module	97871	401-36719-05
3A2A6A1	D	Circuit Board Assembly	97871	401-37153-01
3A2A6A1C1	D	Capacitor	81349	CK06BX105K
3A2A6A1C2	D	Capacitor	81349	CK05BX473K
3A2A6A1C3	D	Capacitor	81349	CK05BX103K
3A2A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
3A2A6A1J1	D	Connector	00779	205867-1
3A2A6A1R1	D	Resistor	81349	RCR07G272JS
3A2A6A1R2	D	Resistor	81349	RCR07G153JS
3A2A6A1R3	D	Resistor	81349	RCR07G272JS
3A2A6A1R4	D	Resistor	81349	RNC55H4991FM
3A2A6A1R5	D	Resistor	81349	RNC55H1002FM
3A2A6A1R6	D	Resistor	81349	RNC55H991FM
3A2A6A1R7	D	Resistor	81349	RJ24FW202
3A2A6A1R8	D	Resistor	81349	RNC55H1002FM
3A2A6A1R9	D	Resistor	81349	RCR07G2R7JS
3A2A6A1R10-R11	D	Resistor	54869	OH-ZT42
3A2A6A1S1	D	Switch	09353	7105R
3A2A6A1U1	D	Integrated Circuit	01295	LM311P
3A2A6A1U2	D	Integrated Circuit	01295	SN7438J
3A2A6A1U3	D	Integrated Circuit	01295	SN74LS123J
3A2A6DS1	D	Lamp	OCOML	C7A
3A2A6F1	D	Fuse	81349	F02A125V10A
3A2A6J2	D	Connector	00779	350780-1
3A2A6J3	D	Connector	00779	350767-1
3A2A6S1	D	Switch	27191	7560K6

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A6TB1	D	Terminal Block	81349	38TB10
3A2A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
3A2A6XF1	D	Fuse Holder	81349	FHL17G1
3A2A1 CACHE#1	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A2A1 CACHE#1 C1-C73	D	Capacitor	04222	CK05BX104K
3A2A1 CACHE#1 C74-C89	D	Capacitor	90201	TIM475M025POX
3A2A1 CACHE#1 J1-J4	D	Connector	22526	65496-019
3A2A1 CACHE#1 R1	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R2	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R3-R4	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R5	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R6-R7	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R8	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R9-R10	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R11	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R12-R13	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R14	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R15-R16	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R17	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R18-R19	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R20	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R21-R22	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R23	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R24-R25	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R26	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R27-R28	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R29	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R30-R31	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R32	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R33-R34	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R35	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R36-R37	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R38	D	Resistor	19647	MK120-100

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#1 R39-R40	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R41	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R42-R43	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R44	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R45-R46	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R47	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R48	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R49-R64	D	Resistor	81349	RW81U10R0F
3A2A1 CACHE#1 U1	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U2	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U3-U4	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U5	D	Integrated Circuit	01295	N82S129F
3A2A1 CACHE#1 U6-U7	D	Integrated Circuit	01295	N82S123F
3A2A1 CACHE#1 U8-U9	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U10-U11	D	Integrated Circuit	01295	SN74193J
3A2A1 CACHE#1 U12	D	Integrated Circuit	01295	N82S123F
3A2A1 CACHE#1 U13	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U14	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U15	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U16	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U17	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U18	D	Integrated Circuit	18324	N82S123F
3A2A1 CACHE#1 U19	D	Integrated Circuit	01295	SN74S157J
3A2A1 CACHE#1 U20	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U21	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U22	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U23	D	Resistor Network	32997	4310R-102-330
3A2A1 CACHE#1 U24	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U25	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U26	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U27-U28	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U29	D	Resistor Network	73138	899-3-R33
3A2A1 CACHE#1 U30	D	Integrated Circuit	01295	SN74S74J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#1 U31	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U32	D	Integrated Circuit	01295	SN74S32J
3A2A1 CACHE#1 U33-U48	D	Integrated Circuit	INMOS	IMS1400-55
3A2A1 CACHE#1 U49	D	Integrated Circuit	01295	SN74S08J
3A2A1 CACHE#1 U50	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#1 U51	D	Integrated Circuit	01295	SN74S10J
3A2A1 CACHE#1 U52	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U53	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U54-U57	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#1 U58-U61	D	Integrated Circuit	01295	SN74S299J
3A2A1 CACHE#1 U62	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#1 U63	D	Integrated Circuit	34649	D3636B-1
3A2A1 CACHE#1 U64	D	Integrated Circuit	01295	SN74S86J
3A2A1 CACHE#1 U65	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U66	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U67	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U68	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U69-U70	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#1 U71-U74	D	Integrated Circuit	01295	SN74S174J
3A2A1 CACHE#1 U75-U76	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#1 U77	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U78	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#1 U79	D	Integrated Circuit	01295	SN74S174J
3A2A1 CACHE#1 U80	D	Integrated Circuit	01295	SN74S175J
3A2A1 CACHE#1 U81	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U82	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#1 U83	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U84	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U85	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U86	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#1 U87	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U88-U89	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U90	D	Integrated Circuit	01295	SN74S38J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#1 U91	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#1 U92	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U93	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U94	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U95	D	Integrated Circuit	01295	MHQ2222
3A2A1 CACHE#1 U96	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#1 XU12	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#1 XU18	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#1 XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A2A1 CACHE#1 XU63	D	DIP Socket	71279	703-4224-01-03-10
3A2A1 CACHE#2	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A2A1 CACHE#2 C1-C73	D	Capacitor	04222	CK05BX104K
3A2A1 CACHE#2 C74-C89	D	Capacitor	90201	TIM475M025POX
3A2A1 CACHE#2 J1-J4	D	Connector	22526	65496-019
3A2A1 CACHE#2 R1	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R2	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R3-R4	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R5	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R6-R7	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R8	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R9-R10	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R11	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R12-R13	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R14	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R15-R16	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R17	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R18-R19	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R20	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R21-R22	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R23	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R24-R25	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R26	D	Resistor	19647	MK120-100

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#2 R27-R28	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R29	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R30-R31	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R32	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R33-R34	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R35	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R36-R37	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R38	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R39-R40	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R41	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R42-R43	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R44	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R45-R46	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R47	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R48	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R49-R64	D	Resistor	81349	RW81U10R0F
3A2A1 CACHE#2 U1	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U2	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U3-U4	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U5	D	Integrated Circuit	01295	N82S129F
3A2A1 CACHE#2 U6-U7	D	Integrated Circuit	01295	N82S123F
3A2A1 CACHE#2 U8-U9	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U10-U11	D	Integrated Circuit	01295	SN74193J
3A2A1 CACHE#2 U12	D	Integrated Circuit	01295	N82S123F
3A2A1 CACHE#2 U13	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U14	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U15	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U16	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U17	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U18	D	Integrated Circuit	18324	N82S123F
3A2A1 CACHE#2 U19	D	Integrated Circuit	01295	SN74S157J
3A2A1 CACHE#2 U20	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U21	D	Resistor Network	32997	4308R-102-330

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#2 U22	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U23	D	Resistor Network	32997	4310R-102-330
3A2A1 CACHE#2 U24	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U25	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U26	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U27-U28	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U29	D	Resistor Network	73138	899-3-R33
3A2A1 CACHE#2 U30	D	Integrated Circuit	01295	SN74S74J
3A2A1 CACHE#2 U31	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U32	D	Integrated Circuit	01295	SN74S32J
3A2A1 CACHE#2 U33-U48	D	Integrated Circuit	INMOS	IMS1400-55
3A2A1 CACHE#2 U49	D	Integrated Circuit	01295	SN74S08J
3A2A1 CACHE#2 U50	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#2 U51	D	Integrated Circuit	01295	SN74S10J
3A2A1 CACHE#2 U52	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U53	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U54-U57	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#2 U58-U61	D	Integrated Circuit	01295	SN74S299J
3A2A1 CACHE#2 U62	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#2 U63	D	Integrated Circuit	34649	D3636B-1
3A2A1 CACHE#2 U64	D	Integrated Circuit	01295	SN74S86J
3A2A1 CACHE#2 U65	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U66	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U67	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U68	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U69-U70	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#2 U71-U74	D	Integrated Circuit	01295	SN74S174J
3A2A1 CACHE#2 U75-U76	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#2 U77	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U78	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#2 U79	D	Integrated Circuit	01295	SN74S174J
3A2A1 CACHE#2 U80	D	Integrated Circuit	01295	SN74S175J
3A2A1 CACHE#2 U81	D	Integrated Circuit	01295	SN74S38J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#2 U82	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#2 U83	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U84	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U85	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U86	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#2 U87	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U88-U89	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U90	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U91	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#2 U92	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U93	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U94	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U95	D	Integrated Circuit	01295	MHQ2222
3A2A1 CACHE#2 U96	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#2 XU12	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#2 XU18	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#2 XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A2A1 CACHE#2 XU63	D	DIP Socket	71279	703-4224-01-03-10
3A3	B	Memory Card Cage "B"	97871	401-37999-06
3A3A1 CACHE#3	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A3A1 CACHE#3 C1-C73	D	Capacitor	04222	CK05BX104K
3A3A1 CACHE#3 C74-C89	D	Capacitor	90201	TIM475M025POX
3A3A1 CACHE#3 J1-J4	D	Connector	22526	65496-019
3A3A1 CACHE#3 R1	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R2	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R3-R4	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R5	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R6-R7	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R8	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R9-R10	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R11	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R12-R13	D	Resistor	19647	MK120-270

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#3 R14	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R15-R16	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R17	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R18-R19	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R20	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R21-R22	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R23	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R24-R25	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R26	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R27-R28	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R29	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R30-R31	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R32	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R33-R34	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R35	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R36-R37	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R38	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R39-R40	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R41	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R42-R43	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R44	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R45-R46	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R47	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R48	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R49-R64	D	Resistor	81349	RW81U10R0F
3A3A1 CACHE#3 U1	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U2	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U3-U4	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U5	D	Integrated Circuit	01295	N82S129F
3A3A1 CACHE#3 U6-U7	D	Integrated Circuit	01295	N82S123F
3A3A1 CACHE#3 U8-U9	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U10-U11	D	Integrated Circuit	01295	SN74193J
3A3A1 CACHE#3 U12	D	Integrated Circuit	01295	N82S123F

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#3 U13	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U14	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U15	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U16	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U17	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U18	D	Integrated Circuit	18324	N82S123F
3A3A1 CACHE#3 U19	D	Integrated Circuit	01295	SN74S157J
3A3A1 CACHE#3 U20	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U21	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U22	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U23	D	Resistor Network	32997	4310R-102-330
3A3A1 CACHE#3 U24	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U25	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U26	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U27-U28	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U29	D	Resistor Network	73138	899-3-R33
3A3A1 CACHE#3 U30	D	Integrated Circuit	01295	SN74S74J
3A3A1 CACHE#3 U31	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U32	D	Integrated Circuit	01295	SN74S32J
3A3A1 CACHE#3 U33-U48	D	Integrated Circuit	INMOS	IMS1400-55
3A3A1 CACHE#3 U49	D	Integrated Circuit	01295	SN74S08J
3A3A1 CACHE#3 U50	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#3 U51	D	Integrated Circuit	01295	SN74S10J
3A3A1 CACHE#3 U52	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U53	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U54-U57	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#3 U58-U61	D	Integrated Circuit	01295	SN74S299J
3A3A1 CACHE#3 U62	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#3 U63	D	Integrated Circuit	34649	D3636B-1
3A3A1 CACHE#3 U64	D	Integrated Circuit	01295	SN74S86J
3A3A1 CACHE#3 U65	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U66	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U67	D	Integrated Circuit	01295	SN74S04J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#3 U68	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U69-U70	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#3 U71-U74	D	Integrated Circuit	01295	SN74S174J
3A3A1 CACHE#3 U75-U76	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#3 U77	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U78	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#3 U79	D	Integrated Circuit	01295	SN74S174J
3A3A1 CACHE#3 U80	D	Integrated Circuit	01295	SN74S175J
3A3A1 CACHE#3 U81	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U82	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#3 U83	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U84	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U85	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U86	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#3 U87	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U88-U89	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U90	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U91	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#3 U92	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U93	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U94	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U95	D	Integrated Circuit	01295	MHQ2222
3A3A1 CACHE#3 U96	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#3 XU12	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#3 XU18	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#3 XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A3A1 CACHE#3 XU63	D	DIP Socket	71279	703-4224-01-03-10
3A3A1 CACHE#4	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A3A1 CACHE#4 C1-C73	D	Capacitor	04222	CK05BX104K
3A3A1 CACHE#4 C74-C89	D	Capacitor	90201	TIM475M025POX
3A3A1 CACHE#4 J1-J4	D	Connector	22526	65496-019
3A3A1 CACHE#4 R1	D	Resistor	19647	MK120-270

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#4 R2	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R3-R4	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R5	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R6-R7	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R8	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R9-R10	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R11	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R12-R13	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R14	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R15-R16	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R17	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R18-R19	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R20	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R21-R22	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R23	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R24-R25	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R26	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R27-R28	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R29	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R30-R31	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R32	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R33-R34	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R35	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R36-R37	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R38	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R39-R40	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R41	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R42-R43	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R44	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R45-R46	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R47	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R48	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R49-R64	D	Resistor	81349	RW81U10R0F

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#4 U1	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U2	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U3-U4	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U5	D	Integrated Circuit	01295	N82S129F
3A3A1 CACHE#4 U6-U7	D	Integrated Circuit	01295	N82S123F
3A3A1 CACHE#4 U8-U9	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U10-U11	D	Integrated Circuit	01295	SN74193J
3A3A1 CACHE#4 U12	D	Integrated Circuit	01295	N82S123F
3A3A1 CACHE#4 U13	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U14	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U15	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U16	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U17	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U18	D	Integrated Circuit	18324	N82S123F
3A3A1 CACHE#4 U19	D	Integrated Circuit	01295	SN74S157J
3A3A1 CACHE#4 U20	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U21	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U22	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U23	D	Resistor Network	32997	4310R-102-330
3A3A1 CACHE#4 U24	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U25	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U26	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U27-U28	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U29	D	Resistor Network	73138	899-3-R33
3A3A1 CACHE#4 U30	D	Integrated Circuit	01295	SN74S74J
3A3A1 CACHE#4 U31	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U32	D	Integrated Circuit	01295	SN74S32J
3A3A1 CACHE#4 U33-U48	D	Integrated Circuit	INMOS	IMS1400-55
3A3A1 CACHE#4 U49	D	Integrated Circuit	01295	SN74S08J
3A3A1 CACHE#4 U50	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#4 U51	D	Integrated Circuit	01295	SN74S10J
3A3A1 CACHE#4 U52	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U53	D	Integrated Circuit	01295	SN74S04J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#4 U54-U57	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#4 U58-U61	D	Integrated Circuit	01295	SN74S299J
3A3A1 CACHE#4 U62	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#4 U63	D	Integrated Circuit	34649	D3636B-1
3A3A1 CACHE#4 U64	D	Integrated Circuit	01295	SN74S86J
3A3A1 CACHE#4 U65	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U66	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U67	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U68	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U69-U70	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#4 U71-U74	D	Integrated Circuit	01295	SN74S174J
3A3A1 CACHE#4 U75-U76	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#4 U77	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U78	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#4 U79	D	Integrated Circuit	01295	SN74S174J
3A3A1 CACHE#4 U80	D	Integrated Circuit	01295	SN74S175J
3A3A1 CACHE#4 U81	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U82	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#4 U83	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U84	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U85	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U86	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#4 U87	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U88-U89	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U90	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U91	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#4 U92	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U93	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U94	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U95	D	Integrated Circuit	01295	MHQ2222
3A3A1 CACHE#4 U96	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#4 XU12	D	DIP Socket	71279	703-4216-01-03-10

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#4 XU18	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#4 XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A3A1 CACHE#4 XU63	D	DIP Socket	71279	703-4224-01-03-10
3A3A6	C	Power Control Module	97871	401-36719-05
3A3A6A1	D	Circuit Board Assembly	97871	401-37153-01
3A3A6A1C1	D	Capacitor	81349	CK06Bx105K
3A3A6A1C2	D	Capacitor	81349	CK05BX473K
3A3A6A1C3	D	Capacitor	81349	CK05BX103K
3A3A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
3A3A6A1J1	D	Connector	00779	205867-1
3A3A6A1R1	D	Resistor	81349	RCR07G272JS
3A3A6A1R2	D	Resistor	81349	RCR07G153JS
3A3A6A1R3	D	Resistor	81349	RCR07G272JS
3A3A6A1R4	D	Resistor	81349	RNC55H4991FM
3A3A6A1R5	D	Resistor	81349	RNC55H1002FM
3A3A6A1R6	D	Resistor	81349	RNC55H991FM
3A3A6A1R7	D	Resistor	81349	RJ24FW202
3A3A6A1R8	D	Resistor	81349	RNC55H1002FM
3A3A6A1R9	D	Resistor	81349	RCR07GR7JS
3A3A6A1R10-R11	D	Resistor	54869	OH-ZT42
3A3A6A1S1	D	Switch	09353	7105R
3A3A6A1U1	D	Integrated Circuit	01295	LM311P
3A3A6A2U2	D	Integrated Circuit	01295	SN7438J
3A3A6A1U3	D	Integrated Circuit	01295	SN74LS123J
3A3A6DS1	D	Lamp	OCOML	C7A
3A3A6F1	D	Fuse	81349	F02A125V10A
3A3A6J2	D	Connector	00779	350780-1
3A3A6J3	D	Connector	00779	350767-1
3A3A6S1	D	Switch	27191	7560K6
3A3A6TB1	D	Terminal Block	81349	38TB10
3A3A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
3A3A6XF1	D	Fuse Holder	81349	FHL17G1
3A4	B	Position Processor Card Cage	97871	401-37999-01

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A1 LSI 11/23	C	LSI-11/23 Microprocessor Circuit Card	15476	KDF11-AA
3A4A1 64KW RAM	C	64K Word RAM/Parity Circuit Card	15476	MSV11-LF
3A4A1 OTF#1	C	A/N OTF Processor Circuit Card	97871	401-33676-01
3A4A1 OTF#1 C1-C58	D	Capacitor	81349	CK05BX104K
3A4A1 OTF#1 C59	D	Capacitor	81349	CK05BX221K
3A4A1 OTF#1 C60	D	Capacitor	81349	CK05BX101K
3A4A1 OTF#1 C61-C80	D	Capacitor	81349	CK05BX104K
3A4A1 OTF#1 C81	D	Capacitor	81349	CK05BX100K
3A4A1 OTF#1 C82-C118	D	Capacitor	81349	CK05BX104K
3A4A1 OTF#1 J1-J4	D	Connector	22526	65496-019
3A4A1 OTF#1 R1-R2	D	Resistor	81349	RCR07G562JS
3A4A1 OTF#1 R3	D	Resistor	81349	RCR07G222JS
3A4A1 OTF#1 R4-R6	D	Resistor	81349	RCR07G472JS
3A4A1 OTF#1 U1	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U2-U5	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U6	D	Resistor Network	73138	898-5-R180/390
3A4A1 OTF#1 U7-U10	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U11-U13	D	Resistor Network	73138	898-5-R180/390
3A4A1 OTF#1 U14-U20	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U21	D	Resistor Network	73138	898-5-R180/390
3A4A1 OTF#1 U22	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U24-U32	D	Integrated Circuit	18324	N82S137F
3A4A1 OTF#1 U33	D	Integrated Circuit	18324	N82S131F
3A4A1 OTF#1 U34-U36	D	Integrated Circuit	01295	SN74173J
3A4A1 OTF#1 U37-U39	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U40-U42	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U43	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U44	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U45	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U47-U50	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U52-U53	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U54	D	Integrated Circuit	18324	N82S131F
3A4A1 OTF#1 U55-U57	D	Integrated Circuit	01295	SN74S283J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A1 OTF#1 U58	D	Integrated Circuit	18324	N82S137F
3A4A1 OTF#1 U59	D	Integrated Circuit	01295	SN74S08J
3A4A1 OTF#1 U60	D	Integrated Circuit	18324	N82S131F
3A4A1 OTF#1 U61-U62	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U63	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U64	D	Integrated Circuit	01295	SN74221J
3A4A1 OTF#1 U65-U68	D	Integrated Circuit	18324	N82S131F
3A4A1 OTF#1 U69-U73	D	Integrated Circuit	18324	N82S129F
3A4A1 OTF#1 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U75	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U77	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U79	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U80	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U81	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U82	D	Crystal Oscillator	01538	K1115A-32.76MHz
3A4A1 OTF#1 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U75	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U77	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U79	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U80	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U81	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U82	D	Crystal Oscillator	01538	K1115A-32.76MHz
3A4A1 OTF#1 U83	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U84	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U85	D	Integrated Circuit	01295	SN74221J
3A4A1 OTF#1 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U88	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U91	D	Integrated Circuit	01295	SN74S08J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A1 OTF#1 U92	D	Integrated Circuit	01295	SN7408J
3A4A1 OTF#1 U93	D	Integrated Circuit	01295	SN74S157J
3A4A1 OTF#1 U94	D	Integrated Circuit	01295	SN74193J
3A4A1 OTF#1 U95	D	Integrated Circuit	01295	SN74S157J
3A4A1 OTF#1 U96	D	Integrated Circuit	01295	SN74193J
3A4A1 OTF#1 U97	D	Integrated Circuit	01295	SN74S157J
3A4A1 OTF#1 U98	D	Integrated Circuit	01295	SN74193J
3A4A1 OTF#1 U99	D	Integrated Circuit	01295	SN74S157J
3A4A1 OTF#1 U100	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U101	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U102	D	Resistor Network	73138	898-5-R180/390
3A4A1 OTF#1 U103	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U104	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U105-U106	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U107	D	Integrated Circuit	01295	SN74S10J
3A4A1 OTF#1 U108	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U109	D	Integrated Circuit	01295	SN74S30J
3A4A1 OTF#1 U110	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U111	D	Integrated Circuit	01295	SN74S10J
3A4A1 OTF#1 U112	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U113	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U114	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U115	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U116	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U117	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U118	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U119	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U120	D	Integrated Circuit	01295	SN74S86J
3A4A1 OTF#1 U121-U122	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 XU6	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU21	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU23	D	Socket	71279	703-4216-01-03-10

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A1 OTF#1 XU24-XU32	D	Socket	71279	703-4218-01-03-10
3A4A1 OTF#1 XU33	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU46	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU51	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU54	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU58	D	Socket	71279	703-4218-01-03-10
3A4A1 OTF#1 XU60	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU102	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2	C	A/N OTF Processor Circuit Card	97871	401-33676-01
3A4A2 OTF#2 C1-C58	D	Capacitor	81349	CK05BX104K
3A4A2 OTF#2 C59	D	Capacitor	81349	CK05BX221K
3A4A2 OTF#2 C60	D	Capacitor	81349	CK05BX101K
3A4A2 OTF#2 C61-C80	D	Capacitor	81349	CK05BX104K
3A4A2 OTF#2 C81	D	Capacitor	81349	CK05BX100K
3A4A2 OTF#2 C82-C118	D	Capacitor	81349	CK05BX104K
3A4A2 OTF#2 J1-J4	D	Connector	22526	65496-019
3A4A2 OTF#2 R1-R2	D	Resistor	81349	RCR07G562JS
3A4A2 OTF#2 R3	D	Resistor	81349	RCR07G222JS
3A4A2 OTF#2 R4-R6	D	Resistor	81349	RCR07G472JS
3A4A2 OTF#2 U1	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U2-U5	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U6	D	Resistor Network	73138	898-5-R180/390
3A4A2 OTF#2 U7-U10	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U11-U13	D	Resistor Network	73138	898-5-R180/390
3A4A2 OTF#2 U14-U20	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U21	D	Resistor Network	73138	898-5-R180/390
3A4A2 OTF#2 U22	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U24-U32	D	Integrated Circuit	18324	N82S137F
3A4A2 OTF#2 U33	D	Integrated Circuit	18324	N82S131F
3A4A2 OTF#2 U34-U36	D	Integrated Circuit	01295	SN74173J
3A4A2 OTF#2 U37-U39	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U40-U42	D	Integrated Circuit	01295	SN74S04J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A2 OTF#2 U43	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U44	D	Integrated Circuit	01295	SN74S175J
3A4A2 OTF#2 U45	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U47-U50	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U54	D	Integrated Circuit	18324	N82S131F
3A4A2 OTF#2 U55-U57	D	Integrated Circuit	01295	SN74S283J
3A4A2 OTF#2 U58	D	Integrated Circuit	18324	N82S137F
3A4A2 OTF#2 U59	D	Integrated Circuit	01295	SN74S08J
3A4A2 OTF#2 U60	D	Integrated Circuit	18324	N82S131F
3A4A2 OTF#2 U61-U62	D	Integrated Circuit	01295	SN74S175J
3A4A2 OTF#2 U63	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U64	D	Integrated Circuit	01295	SN74221J
3A4A2 OTF#2 U65-U68	D	Integrated Circuit	18324	N82S131F
3A4A2 OTF#2 U69-U73	D	Integrated Circuit	18324	N82S129F
3A4A2 OTF#2 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A4A2 OTF#2 U75	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A4A2 OTF#2 U77	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A4A2 OTF#2 U79	D	Integrated Circuit	01295	SN74S175J
3A4A2 OTF#2 U80	D	Integrated Circuit	01295	SN74S74J
3A4A2 OTF#2 U81	D	Integrated Circuit	01295	AN74A04J
3A4A2 OTF#2 U82	D	Crystal Oscillator	01538	K1115A-32.76 MHz
3A4A2 OTF#2 U83	D	Integrated Circuit	01295	SN74A74J
3A4A2 OTF#2 U84	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U85	D	Integrated Circuit	01295	SN74221J
3A4A2 OTF#2 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A4A2 OTF#2 U88	D	Integrated Circuit	01295	SN74S175J
3A4A2 OTF#2 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U91	D	Integrated Circuit	01295	SN74S08J
3A4A2 OTF#2 U92	D	Integrated Circuit	01295	SN7408J
3A4A2 OTF#2 U93	D	Integrated Circuit	01295	SN74S157J
3A4A2 OTF#2 U94	D	Integrated Circuit	01295	SN74193J

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A2 OTF#2 U95	D	Integrated Circuit	01295	SN74S157J
3A4A2 OTF#2 U96	D	Integrated Circuit	01295	SN75193J
3A4A2 OTF#2 U97	D	Integrated Circuit	01295	SN74S157J
3A4A2 OTF#2 U98	D	Integrated Circuit	01295	SN74193J
3A4A2 OTF#2 U99	D	Integrated Circuit	01295	SN74S157J
3A4A2 OTF#2 U100	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U101	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U102	D	Integrated Circuit	73138	898-5-R180/390
3A4A2 OTF#2 U103	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U104	D	Integrated Circuit	01295	SN74S74J
3A4A2 OTF#2 U105-U106	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U107	D	Integrated Circuit	01295	SN74S10J
3A4A2 OTF#2 U108	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U109	D	Integrated Circuit	01295	SN74S39J
3A4A2 OTF#2 U110	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U111	D	Integrated Circuit	01295	SN74S10J
3A4A2 OTF#2 U112	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U113	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U114	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U115	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U116	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U117	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U118	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U119	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U120	D	Integrated Circuit	01295	SN74S86J
3A4A2 OTF#2 U121-U122	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 XU6	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU21	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU23	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU24-XU32	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU33	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU46	D	Socket	71279	703-4216-01-03-10

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A2 OTF#2 XU51	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU54	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU58	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU60	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU102	D	Socket	71279	703-4216-01-03-10
3A2 DMA#1	C	DMA Controller Circuit Card	D0008	DMA-QB
3A2 DMA#2	C	DMA Controller Circuit Card	D0008	DMA-QB
3A4A3 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A4A3 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
3A4A3 DMA#3	C	DMA Controller Circuit Card	D0008	DMA-QB
3A4A3 KYBD#1	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A4A3 KYBD#2	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A4A3 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
3A4A6	C	Power Control Module	97871	401-36719-01
3A4A6A1	D	Circuit Board Assembly	97871	401-37153-01
3A4A6A1C1	D	Capacitor	81349	CK06BX105K
3A4A6A1C2	D	Capacitor	81349	CK05BX473K
3A4A6A1C3	D	Capacitor	81349	CK05BX103K
3A4A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
3A4A6A1J1	D	Connector	00779	205867-1
3A4A6A1R1	D	Resistor	81349	RCR07G272JS
3A4A6A1R2	D	Resistor	81349	RCR07G153JS
3A4A6A1R3	D	Resistor	81349	RCR07G272JS
3A4A6A1R4	D	Resistor	81349	RNC55H4991FM
3A4A6A1R5	D	Resistor	81349	RNC55H1002FM
3A4A6A1R6	D	Resistor	81349	RNC55H991FM
3A4A6A1R7	D	Resistor	81349	RJ24FW202
3A4A6A1R8	D	Resistor	81349	RNC55H1002FM
3A4A6A1R9	D	Resistor	81349	RCR07G2R7JS
3A4A6A1R10-R11	D	Resistor	54869	OH-ZT42
3A4A6A1S1	D	Switch	09353	7105R
3A4A6A1U1	D	Integrated Circuit	01295	LM311P

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A6A1U2	D	Integrated Circuit	01295	SN7438J
3A4A6A1U3	D	Integrated Circuit	01295	SN74LS123J
3A4A6DS1	D	Lamp	OCOML	C7A
3A4A6F1	D	Fuse	81349	F02A125V10A
3A4A6J2	D	Connector	00779	350780-1
3A4A6J3	D	Connector	00779	350767-1
3A4A6S1	D	Switch	27191	7560K6
3A4A6TB1	D	Terminal Block	81349	38TB10
3A4A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
3A4A6XF1	D	Fuse Holder	81349	FHL17G1
3A8	B	Serial I/O Panel	97871	401-37274-02
3A9	B	Serial I/O Panel	97871	401-37274-02
3A10	B	Keyboard Junction Box	97871	401-37179-08
3A10A1	C	Circuit Card Assembly	97871	401-37901-01
3A10A1J1-A-J8-A	D	Connector	00779	552224-1
3A10A1J9	D	Header	22526	65626-172
3A10A2	C	Circuit Card Assembly	97871	401-37902-01
3A10A2J1-B-J2-B	D	Connector	00779	552224-1
3A10A2J3	D	Header	22526	65626-172
3A16	B	AC Junction Box	97871	401-37231-01
3A16F1-F4	C	Fuse	81349	F02A250V3A
3A16J10-J12	C	Duplex Receptacle	74545	5000M9
3A16S1-S2	C	DPST Switch	27193	7560K6
3A16XF1-XF4	C	Indicator Fuse Holder	81349	FJL17G1
3A17	B	Blower Assembly	97871	401-37145-02
3A18	B	Thermal Sensor	97871	401-37216-02
3PS1	B	Power Supply Assembly	97871	401-36716-01
3PS1A1	C	Power Supply	53719	MM43-12Y2Y/115
3PS3	B	Power Supply Assembly	97871	401-36716-01
3PS3A1	C	Power Supply	53719	MM43-12Y2Y/115
3PS5	B	Power Supply Assembly	97871	401-36716-01
3PS5A1	C	Power Supply	53719	MM43-12Y2Y/115
3PS7	B	Power Supply Assembly	97871	401-36716-01

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3PS7A1	C	Power Supply	53719	MM43-12Y2Y/115
3S1	B	DC Power Switch	97871	401-37916-01
3W1	B	Cable Assembly, +12V	97871	401-36715-01
3W2	B	Cable Assembly, -12V	97871	401-36715-03
3W3	B	Cable Assembly, +5V	97871	401-36715-05
3W4	B	Cable Assembly, A/C Supply	97871	401-36786-01
3W5	B	Cable Assembly, A/C Control	97871	401-36785-03
3W6	B	Cable Assembly, +12V	97871	401-36715-01
3W7	B	Cable Assembly, -12V	97871	401-36715-03
3W8	B	Cable Assembly, +5V	97871	401-36715-05
3W9	B	Cable Assembly, A/C Supply	97871	401-36786-01
3W10	B	Cable Assembly, A/C Control	97871	401-36785-03
3W11	B	Cable Assembly, +12V	97871	401-36715-01
3W12	B	Cable Assembly, -12V	97871	401-36715-03
3W13	B	Cable Assembly, +5V	97871	401-36715-05
3W14	B	Cable Assembly, A/C Supply	97871	401-36786-01
3W15	B	Cable Assembly, A/C Control	97871	401-36785-02
3W16	B	Cable Assembly, +12V	97871	401-36715-01
3W17	B	Cable Assembly, -12V	97871	401-36715-03
3W18	B	Cable Assembly, +5V	97871	401-36715-05
3W19	B	Cable Assembly, A/C Supply	97871	401-36786-01
3W20	B	Cable Assembly, A/C Control	97871	401-36785-01
3W21-3W22	B	Cable Assembly, Fan Power	97871	401-37241-01
W23, W25	B	Cable Assembly, DC Switch	97871	401-37927-01
3W27	B	Cable, Terminator Power	97871	401-37914-01
3W28-3W31	B	Cable Assy., Kybd. J-Box	97871	401-37927-01
3W32-3W35	B	Cable Assembly, OTF Bus	97871	401-37995-01
3W36-3W39	B	Cable Assembly, Video	97871	401-36797-01
3W40-3W43	B	Cable Assembly, OTF Bus	97871	401-37995-01
W901	B	Cable Assembly, Thermal Alarm	97871	401-37203-02
W902	B	Cable Assembly, Thermal Alarm	97871	401-37203-04
W903	B	Cable Assembly, Thermal Alarm	97871	401-37203-02
W904	B	Cable Assembly, Thermal Alarm	97871	401-37203-03

Table 8-2. AFSS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
W905	B	Cable Assembly, Thermal Alarm	97871	401-37203-04
W906-W909	B	Cable Assembly, Analog Patch	97871	401-37273-03
W910	B	Cable Assembly, Analog Patch	97871	401-37273-06
W911-W915	B	Cable Assembly, Digital Panel	97871	401-37273-02
W916-W920	B	Cable Assembly, Digital Panel	97871	401-37273-01
W921-W923	B	Cable Assembly, Digital Panel	97871	401-37126-01
W924-W925	B	Cable Assembly, Digital Panel	97871	401-37126-02
W926-W927	B	Cable Assembly, Digital Panel	97871	401-37126-03
W928-W929	B	Cable Assembly, Digital Panel	97871	401-37126-04
W930-W932	B	Cable Assembly, Disk Drive	15476	BC06R-06
W933	B	Cable Assembly, DMA	97871	401-37976-01
W934	B	Cable Assembly, DMA	97871	401-37979-01
W935	B	Cable Assembly, DMA	97871	401-37982-01
W936	B	Cable Assembly, DMA	97871	401-37985-01
W937	B	Cable Assembly, DMA	97871	401-37988-01
W938	B	Cable Assembly, DMA	97871	401-37991-01
W939	B	Cable Assembly, DMA	97871	401-37977-01
W940	B	Cable Assembly, DMA	97871	401-37980-01
W941	B	Cable Assembly, DMA	97871	401-37983-01
W942	B	Cable Assembly, DMA	97871	401-37986-01
W943	B	Cable Assembly, DMA	97871	401-37989-01
W944	B	Cable Assembly, DMA	97871	401-37992-01
W945	B	Cable Assembly, DMA	97871	401-37978-01
W946	B	Cable Assembly, DMA	97871	401-37981-01
W947	B	Cable Assembly, DMA	97871	401-37984-01
W948	B	Cable Assembly, DMA	97871	401-37987-01
W949	B	Cable Assembly, DMA	97871	401-37990-01
W950	B	Cable Assembly, DMA	97871	401-37993-01

Table 8-3. AWP Equipment Parts List

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
Unit 1	A	Communication Equipment Rack	97871	401-12301-01
1A1	B	Coded Time Source	56738	60DC
1A2	B	CTS Interface	97871	401-37207-01
1A2A1	C	Circuit Card Assy	97871	401-36972-01
1A2A1A1	D	Printed Wiring Board	97871	401-36973-04
1A12A1C1-C40	D	Capacitor	81349	CK06BX104K
1A2A1C41	D	Capacitor	81349	CK06BX103K
1A2A1C42-C50	D	Capacitor	81349	CK06BX104K
1A2A1C51-C52	D	Capacitor	81349	CK05BX560K
1A2A1C53-C54	D	Capacitor	81349	CK06BX104K
1A2A1J1	D	Connector	71468	DBC-25PAA
1A2A1J2	D	Connector	71468	DBC-37PAA
1A2A1J3	D	Connector	71468	DBC-37PAA
1A2A1J4	D	Connector	71468	DBC-25PAA
1A2A1K1	D	Relay	11532	732D-12
1A2A1R1-R23	D	Resistor	81349	RCR20G101JS
1A2A1R24-R31	D	Resistor	81349	RCR07G202JS
1A2A1R32	D	Resistor	81349	RCR07G106JS
1A2A1R33-R39	D	Resistor	81349	RCR07G202JS
1A2A1S1	D	Switch	00779	435640-5
1A2A1S2	D	Switch	00779	435640-5
1A2A1U1	D	Integrated Circuit	01295	SN74LS11J
1A2A1U2	D	Integrated Circuit	01295	SN74LS158J
1A2A1U3-U12	D	Integrated Circuit	01295	SN74LS157J
1A2A1U13	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U14	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U15	D	Integrated Circuit	01295	SN74LS32J
1A2A1U16	D	Integrated Circuit	01295	SN74LS04J
1A2A1U17	D	Integrated Circuit	01295	SN74LS151J
1A2A1U18	D	Integrated Circuit	01295	SN74LS151J
1A2A1U19	D	Integrated Circuit	01295	SN74LS157J
1A2A1U20-U28	D	Integrated Circuit	01295	SN74LS85J
1A2A1U29	D	Integrated Circuit	01295	SN74LS11J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A2A1U30	D	Integrated Circuit	01295	SN74LS11J
1A2A1U31	D	Integrated Circuit	18324	316-3042-1
1A2A1U32	D	Integrated Circuit	01295	SN74LS08J
1A2A1U33	D	Integrated Circuit	01295	SN74LS151J
1A2A1U34	D	Integrated Circuit	01295	SN74LS151J
1A2A1U35	D	Integrated Circuit	01295	SN74LS157J
1A2A1U36-U44	D	Integrated Circuit	01295	SN74LS85J
1A2A1U45	D	Integrated Circuit	01295	SN74LS21J
1A2A1U46	D	Integrated Circuit	01295	SN74LS32J
1A2A1U47	D	Integrated Circuit	01295	SN74LS151J
1A2A1U48	D	Integrated Circuit	01295	SN74LS151J
1A2A1U49	D	Integrated Circuit	01295	SN74LS32J
1A2A1U50-U57	D	Integrated Circuit	01295	SN74LS85J
1A2A1U58	D	Integrated Circuit	01295	SN74LS04J
1A2A1U59	D	Integrated Circuit	01295	SN74LS86J
1A2A1U60	D	Integrated Circuit	01295	SN74LS08J
1A2A1U61	D	Resistor Network	32997	4308R-101-202
1A2A1U62	D	Integrated Circuit	01295	SN74LS151J
1A2A1U63	D	Integrated Circuit	01295	SN74LS151J
1A2A1U64	D	Integrated Circuit	01295	SN74LS138J
1A2A1U65-U68	D	Integrated Circuit	01295	SN74LS162AJ
1A2A1U69	D	Integrated Circuit	01295	SN74LS85J
1A2A1U70-U73	D	Integrated Circuit	01295	SN74LS162AJ
1A2A1U74	D	Integrated Circuit	01295	SN74LS11J
1A2A1U75	D	Integrated Circuit	01295	SN74LS174AJ
1A2A1U76	D	Integrated Circuit	01295	SN74LS157J
1A2A1U77	D	Integrated Circuit	34371	HD3-4702-9
1A2A1U78	D	Integrated Circuit	01295	SN74LS161AJ
1A2A1U79	D	Integrated Circuit	01295	SN74LS161AJ
1A2A1U80	D	Integrated Circuit	01295	SN74LS32J
1A2A1U81	D	Integrated Circuit	01295	SN74LS00J
1A2A1U82	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U83	D	Integrated Circuit	01295	SN74LS161AJ

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A2A1U84	D	Integrated Circuit	01295	SN74LS161AJ
1A2A1U85	D	Integrated Circuit	01295	SN74LS162AJ
1A2A1U86	D	Integrated Circuit	01295	SN74LS260J
1A2A1U87	D	Integrated Circuit	86684	CDP1823CD
1A2A1U88	D	Integrated Circuit	18324	316-3043-001
1A2A1U89	D	Integrated Circuit	34371	HD3-6402C-9
1A2A1U90	D	Resistor Network	32997	4308R-101-202
1A2A1U91	D	Integrated Circuit	01295	SN74LS157J
1A2A1U92-U94	D	Integrated Circuit	01295	SN74LS74AJ
1A2A1U95	D	Integrated Circuit	01295	SN74LS04J
1A2A1U96	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U97	D	Integrated Circuit	01295	SN74LS08J
1A2A1U98	D	Integrated Circuit	01295	SN74L109AJ
1A2A1U99	D	Integrated Circuit	01295	SN74LS11J
1A2A1U100	D	Integrated Circuit	01295	SN74LS00J
1A2A1U101	D	Integrated Circuit	01295	SN75451BJG
1A2A1U102	D	Integrated Circuit	07263	9616EPC
1A2A1U103	D	Integrated Circuit	07263	9617DC
1A2A1Y1	D	Crystal	23875	MP-2-2.457600MHZ
1A2K1	C	Relay	77342	R10-E1-YZ-V185
1A2F1	C	Fuse	81349	FO2B250V2A
1A2F2	C	Fuse	81349	FO2B250V2A
1A2PS1	C	Power Supply	54407	401-37123-01
1A2XF1	C	Fuse Holder	81349	FHL17G1
1A2XF2	C	Fuse Holder	81349	FHL17G1
1A3	B	Coded Time Source	56738	60-DC
1A4	B	Thermal Alarm Unit	97871	401-37155-01
1A4A1	C	Circuit Card Assembly	97871	401-37208-01
1A4A1A1	D	Printed Wiring Board	97871	401-37212-02
1A4A1DS1-DS8	D	Light Emitting Diode	28480	HLMP-3105
1A4A1J1	D	Connector	00779	102333-6
1A4A1J2	D	Connector	00779	87571-2
1A4A1SW1-SW10	D	Switch	95146	TT11AG-PC-9T1/4-ES

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A4A2	C	Circuit Card Assembly	97871	401-37209-01
1A4A2A1	D	Printed Wiring Board	97871	401-37215-03
1A4A2C1-C14	D	Capacitor	81349	M39014/02-1407
1A4A2CR1	D	Diode	07688	1N3611
1A4A2J1	D	Connector	00779	102333-6
1A4A2P1-P9	D	Connector	00779	350428-1
1A4A2Q1	D	Transistor	07688	2N2222
1A4A2R1-R8	D	Variable Resistor	81349	MS9015/2-003-W-M
1A4A2R9-R16	D	Resistor	81349	RNC50H7500FS
1A4A2R17	D	Resistor	81349	RNC50H1001FS
1A4A2R18	D	Resistor	81349	RNC50H1001FS
1A4A2R19	D	Resistor	81349	RNC50H103JS
1A4A2R20	D	Resistor	81349	RNC50H103JS
1A4A2R21	D	Resistor	81349	RCR07G202JS
1A4A2R22	D	Resistor	81349	RNC50H103JS
1A4A2R23	D	Resistor	81349	RNC50H103JS
1A4A2R24	D	Resistor	81349	RCR07G202JS
1A4A2R25	D	Resistor	81349	RNC50H103JS
1A4A2R26	D	Resistor	81349	RNC50H103JS
1A4A2R27	D	Resistor	81349	RCR07G202JS
1A4A2R28	D	Resistor	81349	RNC50H103JS
1A4A2R29	D	Resistor	81349	RNC50H103JS
1A4A2R30-R31	D	Resistor	81349	RCR07G202JS
1A4A2R32-R35	D	Resistor	81349	RNC50H103JS
1A4A2R36-R37	D	Resistor	81349	RCR07G202JS
1A4A2R38-R41	D	Resistor	81349	RNC50H103JS
1A4A2R42	D	Resistor	81349	RCR07G202JS
1A4A2R43	D	Resistor	81349	RCR07G561JS
1A4A2R44	D	Resistor	81349	RNC50H1001FS
1A4A2R46	D	Resistor	81349	RCR07G202JS
1A4A2S1	D	Switch	95146	TT11AG-PC-1-ES
1A4A2U1-U2	D	Integrated Circuit	07263	UA339DC
1A4A2U3-U4	D	Integrated Circuit	01295	SN74S04J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
1A4A2U5	D	Integrated Circuit	01295	SN74LS30J
1A4A2U6	D	Integrated Circuit	01295	SN75451BJG
1A4DS1	C	Light Emitting Diode	28480	HLMP-3105
1A4LS1	C	Sonalarm	90201	SC628A
1A4PS1	C	Power Supply	54407	HAA512
1A4S1	C	Switch	27191	7560K6
1A5	B	Digital Patch Panel	25064	157-002C-00
1A6	B	Digital Patch Panel	25064	157-002C-00
1A7	B	Digital Patch Panel	25064	157-002C-00
1A8-1A9	B	Disk Drive	15476	RL01-AK/RL02-AK
1A10	B	Multiple Outlet Strip	22012	602
1A16	B	AC Junction Box	97871	401-37231-01
1W1-1W2	B	Cable, CTS	97871	401-36743-01
1W3	B	Cable, Comm	97871	401-37273-12
Unit 2	A	Communications Processor Rack	97871	401-12302-01
2A1-2A2	B	Analog Patch Panel	56657	153-020-12VF-M1
2A3	B	RM-8E Modem Enclosure	57112	2005060
2A3A1-2A3A8	C	RM-9600E FP	57112	2092842
2A4	B	RM-8E Modem Enclosure	57112	2005060
2A4A1-2A4A8	C	RM-9600 Modem	57112	2092284
2A5	B	RM-8E Modem Enclosure	57112	2005060
2A5A7	C	RM-9600E FP	57112	2092842
2A5A8	C	RM-9600 Modem	57112	2092284
2A6	B	Dual Comm. Processor Card Cage	97871	401-37999-04
2A6A1 CP1 LSI 11/23	C	LSI-11/23 Microprocessor Circuit Card	15476	KDF11-AA
2A6A1 CP1 MUX#1	C	Multiplexer Circuit Card	97871	401-36993-03
2A6A1 CP1 MUX#1 A1	D	Printed Wiring Board	97871	401-36991-05
2A6A1 CP1 MUX#1 C1-C4	D	Capacitor		CK05BX151K
2A6A1 CP1 MUX#1 C9-C65	D	Capacitor		CK05BX104K
2A6A1 CP1 MUX#1 C67-C77	D	Capacitor		CK05BX104K
2A6A1 CP1 MUX#1 C78	D	Capacitor	90201	T1M226M010POX
2A6A1 CP1 MUX#1 C79-C92	D	Capacitor		CK05BX104K
2A6A1 CP1 MUX#1 C93-C95	D	Capacitor		M39006/09-8283

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A1 CP1 MUX#1 C96-C97	D	Capacitor		CK05BX103K
2A6A1 CP1 MUX#1 C98	D	Capacitor		M39006/09-8283
2A6A1 CP1 MUX#1 CR1-CR2	D	Diode		1N4148
2A6A1 CP1 MUX#1 DS1	D	Light Emitting Diode	72619	555-2303
2A6A1 CP1 MUX#1 DS2-DS3	D	Light Emitting Diode	72619	555-4007
2A6A1 CP1 MUX#1 E1-E10	D	Header	89497	65507-136
2A6A1 CP1 MUX#1 J1-J2	D	Connector	22526	65823-043
2A6A1 CP1 MUX#1 R1-R3	D	Resistor		RCR07G102JS
2A6A1 CP1 MUX#1 R4	D	Resistor		RCR07G330JS
2A6A1 CP1 MUX#1 R5	D	Resistor		RCR07G102JS
2A6A1 CP1 MUX#1 R6	D	Resistor		RCR07G470JS
2A6A1 CP1 MUX#1 R7	D	Resistor		RCR07G330JS
2A6A1 CP1 MUX#1 R8	D	Resistor		RCR07G822JS
2A6A1 CP1 MUX#1 R9	D	Resistor		RCR07G103JS
2A6A1 CP1 MUX#1 R10	D	Resistor		RCR07G330JS
2A6A1 CP1 MUX#1 R11	D	Resistor		RCR07G102JS
2A6A1 CP1 MUX#1 R12	D	Resistor		RCR07G331JS
2A6A1 CP1 MUX#1 R13-R14	D	Resistor		RCR07G102JS
2A6A1 CP1 MUX#1 R15	D	Resistor		RCR07G393JS
2A6A1 CP1 MUX#1 TP1	D	Terminal	83330	2029B
2A6A1 CP1 MUX#1 U1	D	Integrated Circuit	01295	SN74LS04J
2A6A1 CP1 MUX#1 U2	D	Integrated Circuit	27014	DS3691J
2A6A1 CP1 MUX#1 U3	D	Integrated Circuit	27014	DS26LS32CJ
2A6A1 CP1 MUX#1 U4	D	Integrated Circuit	27014	DS3691J
2A6A1 CP1 MUX#1 U5	D	Resistor Network	32997	4308-R-102-472
2A6A1 CP1 MUX#1 U6	D	Integrated Circuit	27014	DS26LS32CJ
2A6A1 CP1 MUX#1 U7	D	Resistor Network	32997	4308R-102-472
2A6A1 CP1 MUX#1 U8	D	Integrated Circuit	27014	DS3691J
2A6A1 CP1 MUX#1 U9	D	Resistor Network	32997	4308R-102-472
2A6A1 CP1 MUX#1 U10	D	Integrated Circuit	27014	DS26LS32CJ
2A6A1 CP1 MUX#1 U11-U12	D	Resistor Network	32997	4308R-102-472
2A6A1 CP1 MUX#1 U13	D	Integrated Circuit	27014	DS26LS32CJ
2A6A1 CP1 MUX#1 U14-U15	D	Resistor Network	32997	4308R-102-472

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A1 CP1 MUX#1 U16	D	Integrated Circuit	27014	DS26LS32CJ
2A6A1 CP1 MUX#1 U17-U18	D	Resistor Network	32997	4308R-102-472
2A6A1 CP1 MUX#1 U19	D	Integrated Circuit	27014	DS26LS32CJ
2A6A1 CP1 MUX#1 U20	D	Resistor Network	32997	4308R-102-472
2A6A1 CP1 MUX#1 U21	D	Integrated Circuit	27014	DS3691J
2A6A1 CP1 MUX#1 U22	D	Resistor Network	32997	4308R-102-472
2A6A1 CP1 MUX#1 U23	D	Integrated Circuit	27014	DS26LS32CJ
2A6A1 CP1 MUX#1 U24	D	Resistor Network	32997	4308R-120-472
2A6A1 CP1 MUX#1 U25	D	Integrated Circuit	27014	DS3691J
2A6A1 CP1 MUX#1 U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
2A6A1 CP1 MUX#1 U28	D	Integrated Circuit	01295	SN74LS04J
2A6A1 CP1 MUX#1 U29	D	Integrated Circuit	34649	D8274
2A6A1 CP1 MUX#1 U30	D	Integrated Circuit	34649	D8253-5
2A6A1 CP1 MUX#1 U31	D	Integrated Circuit	01295	SN74LS02J
2A6A1 CP1 MUX#1 U32	D	Integrated Circuit	01295	SN74LS377J
2A6A1 CP1 MUX#1 U33	D	Integrated Circuit	01295	SN74LS241J
2A6A1 CP1 MUX#1 U34-U35	D	Integrated Circuit	34649	D8155-2
2A6A1 CP1 MUX#1 U36	D	Integrated Circuit		316-3009-003
2A6A1 CP1 MUX#1 U37	D	Integrated Circuit		316-3010-003
2A6A1 CP1 MUX#1 U38-U41	D	Integrated Circuit	50088	MK4802P-3
2A6A1 CP1 MUX#1 U42	D	Resistor Network	32997	4310R-102-181
2A6A1 CP1 MUX#1 U43	D	Integrated Circuit	34649	D8274
2A6A1 CP1 MUX#1 U44	D	Integrated Circuit	01295	SN74LS125AJ
2A6A1 CP1 MUX#1 U45	D	Integrated Circuit	01295	SN74LS126AJ
2A6A1 CP1 MUX#1 U46	D	Integrated Circuit	18324	N8X320N
2A6A1 CP1 MUX#1 U47-U50	D	Integrated Circuit	01295	SN74LS377J
2A6A1 CP1 MUX#1 U51-U52	D	Integrated Circuit	07263	93S16DC
2A6A1 CP1 MUX#1 U53	D	Integrated Circuit	01295	SN74LS279J
2A6A1 CP1 MUX#1 U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
2A6A1 CP1 MUX#1 U56	D	Integrated Circuit	01295	SN74LS00J
2A6A1 CP1 MUX#1 U57	D	Integrated Circuit	01295	SN74LS04J
2A6A1 CP1 MUX#1 U58	D	Integrated Circuit	01295	SN74S02J
2A6A1 CP1 MUX#1 U59	D	Integrated Circuit	01295	SN74LS125AJ

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A1 CP1 MUX#1 U60	D	Integrated Circuit	01295	SN74LS126AJ
2A6A1 CP1 MUX#1 U61	D	Integrated Circuit	01295	SN74S08J
2A6A1 CP1 MUX#1 U62	D	Integrated Circuit	07263	93S16DC
2A6A1 CP1 MUX#1 U63	D	Integrated Circuit	01295	SN74S251J
2A6A1 CP1 MUX#1 U64	D	Integrated Circuit	01295	SN74S86J
2A6A1 CP1 MUX#1 U65	D	Oscillator	04713	K1115A-9.12MHz
2A6A1 CP1 MUX#1 U66	D	Integrated Circuit	01295	SN74LS74AJ
2A6A1 CP1 MUX#1 U67	D	Integrated Circuit	01295	SN74LS125AJ
2A6A1 CP1 MUX#1 U68	D	Integrated Circuit	01295	SN74S74J
2A6A1 CP1 MUX#1 U69-U70	D	Resistor Network	32997	4308R-102-330
2A6A1 CP1 MUX#1 U71	D	Integrated Circuit		316-3007-001
2A6A1 CP1 MUX#1 U72	D	Integrated Circuit	34649	D8085A-2
2A6A1 CP1 MUX#1 U73-U74	D	Integrated Circuit	15476	19-14035-00
2A6A1 CP1 MUX#1 U75	D	Integrated Circuit		316-3003-001
2A6A1 CP1 MUX#1 U76	D	Integrated Circuit		316-3005-001
2A6A1 CP1 MUX#1 U77	D	Integrated Circuit		316-3006-001
2A6A1 CP1 MUX#1 U78	D	Integrated Circuit		316-3004-001
2A6A1 CP1 MUX#1 U79	D	Integrated Circuit		316-3002-001
2A6A1 CP1 MUX#1 U80	D	Integrated Circuit		316-3001-1
2A6A1 CP1 MUX#1 U81-U82	D	Integrated Circuit	01295	SN74S251J
2A6A1 CP1 MUX#1 U83	D	Integrated Circuit	04713	MC14557BCL
2A6A1 CP1 MUX#1 U84	D	Integrated Circuit	01295	SN74LS02J
2A6A1 CP1 MUX#1 U85	D	Integrated Circuit	01295	SN74LS04J
2A6A1 CP1 MUX#1 U86	D	Integrated Circuit	01295	SN74LS08J
2A6A1 CP1 MUX#1 U87	D	Integrated Circuit	01295	SN74LS00J
2A6A1 CP1 MUX#1 U88	D	Integrated Circuit		316-3008-001
2A6A1 CP1 MUX#1 U89-U92	D	Integrated Circuit	15476	19-13040-00
2A6A1 CP1 MUX#1 U93	D	Integrated Circuit	97871	401-37124
2A6A1 CP1 MUX#1 U94-U96	D	Integrated Circuit	27014	DS8641J
2A6A1 CP1 MUX#1 U97	D	Option Plug	97871	401-37125-01
2A6A1 CP1 MUX#1 U98	D	Integrated Circuit	27014	DS8641J
2A6A1 CP1 MUX#1 U99	D	Integrated Circuit	01295	SN74LS377J
2A6A1 CP1 MUX#1 U100-U101	D	Integrated Circuit	01295	SN74LS378J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A1 CP1 MUX#1 U102	D	Integrated Circuit	01295	SN74LS27J
2A6A1 CP1 MUX#1 U103	D	Integrated Circuit	01295	SN74276J
2A6A1 CP1 MUX#1 U104-U105	D	Integrated Circuit	27014	DS8641J
2A6A1 CP1 MUX#1 U106	D	Resistor Network	32997	4308R-104-181/391
2A6A1 CP1 MUX#1 U107	D	Integrated Circuit	34649	D3205
2A6A1 CP1 MUX#1 U108	D	Resistor Network	32997	4308R-102-181
2A6A1 CP1 MUX#1 U109	D	Integrated Circuit	01295	SN74LS373J
2A6A1 CP1 MUX#1 U110	D	Resistor Network	32997	4308R-102-181
2A6A1 CP1 MUX#1 VR1	D	Voltage Regulator	27014	LM120H-5.0
2A6A1 CP1 MUX#1 XU29	D	Socket	09922	DILB40P-108
2A6A1 CP1 MUX#1 XU30	D	Socket	09922	DILB24P-108
2A6A1 CP1 MUX#1 XU34-XU35	D	Socket	09922	DILB40P-108
2A6A1 CP1 MUX#1 XU36-XU41	D	Socket	09922	DILB28P-108
2A6A1 CP1 MUX#1 XU43	D	Socket	09922	DILB40P-108
2A6A1 CP1 MUX#1 XU46	D	Socket	09922	DILB40P-108
2A6A1 CP1 MUX#1 XU71	D	Socket	09922	DILB20P-108
2A6A1 CP1 MUX#1 XU72	D	Socket	09922	DILB40P-108
2A6A1 CP1 MUX#1 XU75-XU80	D	Socket	09922	DILB20P-108
2A6A1 CP1 MUX#1 XU88	D	Socket	09922	DILB20P-108
2A6A1 CP1 MUX#1 XU93	D	Socket	09922	DILB14P-108
2A6A1 CP1 MUX#1 XU97	D	Socket	09922	DILB14P-108
2A6A1 CP1 MUX#1 Y1	D	Crystal	00RCD	MP18-9.830400MHz
2A6A1 CP1 64KW RAM	C	64K Word RAM Circuit Card	15476	MSV11-LF
2A6A2 CP1 HEX/IPB-L11	C	Multiprocessor Linking System	D0008	HEX-L11,IPB-L11
2A6A2 CP1 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
2A6A2 CP1 QBUS DMA	C	DMA Controller Circuit Card	D0008	DMA-QB
2A6A3 CP1 DISC CONT	C	Disk Controller Circuit Card	15476	RLV12
2A6A3 CP1 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
2A6A3 CP1 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
2A6A3 CP2 LSI 11/23	C	LSI 11/23 Microprocessor Circuit Card	15476	KDF11-AA
2A6A3 CP2 64KW RAM	C	64K Word RAM/Parity Circuit Card	15476	MSV11-LF
2A6A4 CP2 HEX/IPB-L11	C	Multiprocessor Linking System	D0008	HEX-L11,IPB-L11
2A6A4 CP2 MUX#1	C	Multiplexer Circuit Card	97871	401-36993-03

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A4 CP2 MUX#1 A1	D	Printed Wiring Board	97871	401-36991-05
2A6A4 CP2 MUX#1 C1-C4	D	Capacitor		CK05BX151K
2A6A4 CP2 MUX#1 C9-C47	D	Capacitor		CK05BX104K
2A6A4 CP2 MUX#1 C49-C50	D	Capacitor		CK05BX104K
2A6A4 CP2 MUX#1 C54-C65	D	Capacitor		CK05BX104K
2A6A4 CP2 MUX#1 C66	D	Capacitor		M39006/09-8283
2A6A4 CP2 MUX#1 C67-C76	D	Capacitor		CK05BX104K
2A6A4 CP2 MUX#1 C78	D	Capacitor	90201	TIM226M010P0X
2A6A4 CP2 MUX#1 C79-C92	D	Capacitor		CK05BX104K
2A6A4 CP2 MUX#1 C93-C95	D	Capacitor		M39006/09-8283
2A6A4 CP2 MUX#1 C96-C97	D	Capacitor		CK05BX103K
2A6A4 CP2 MUX#1 C98	D	Capacitor		M39006/09-8283
2A6A4 CP2 MUX#1 CR1-CR2	D	Diode		1N4148
2A6A4 CP2 MUX#1 DS1	D	Light Emitting Diode	72619	555-2303
2A6A4 CP2 MUX#1 DS2-DS3	D	Light Emitting Diode	72619	555-4007
2A6A4 CP2 MUX#1 E1-E10	D	Header	89497	65507-136
2A6A4 CP2 MUX#1 J1-J2	D	Connector	22526	65823-043
2A6A4 CP2 MUX#1 R1-R3	D	Resistor		RCR07G102JS
2A6A4 CP2 MUX#1 R4	D	Resistor		RCR07G330JS
2A6A4 CP2 MUX#1 R5	D	Resistor		RCR07G102JS
2A6A4 CP2 MUX#1 R6	D	Resistor		RCR07G470JS
2A6A4 CP2 MUX#1 R7	D	Resistor		RCR07G330JS
2A6A4 CP2 MUX#1 R8	D	Resistor		RCR07G822JS
2A6A4 CP2 MUX#1 R9	D	Resistor		RCR07G103JS
2A6A4 CP2 MUX#1 R10	D	Resistor		RCR07G330JS
2A6A4 CP2 MUX#1 R11	D	Resistor		RCR07G102JS
2A6A4 CP2 MUX#1 R12	D	Resistor		RCR07G331JS
2A6A4 CP2 MUX#1 R13-R14	D	Resistor		RCR07G102JS
2A6A4 CP2 MUX#1 R15	D	Resistor		RCR07G393JS
2A6A4 CP2 MUX#1 TP1	D	Terminal	83330	2029B
2A6A4 CP2 MUX#1 U1	D	Integrated Circuit	01295	SN74LS04J
2A6A4 CP2 MUX#1 U2	D	Integrated Circuit	27014	DS3691J
2A6A4 CP2 MUX#1 U3	D	Integrated Circuit	27014	DS26LS32CJ

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A4 CP2 MUX#1 U4	D	Integrated Circuit	27014	DS3691J
2A6A4 CP2 MUX#1 U5	D	Resistor Network	32997	4308-R-102-472
2A6A4 CP2 MUX#1 U6	D	Integrated Circuit	27014	DS26LS32CJ
2A6A4 CP2 MUX#1 U7	D	Resistor Network	32997	4308R-102-472
2A6A4 CP2 MUX#1 U8	D	integrated Circuit	27014	DS3691J
2A6A4 CP2 MUX#1 U9	D	Resistor Network	32997	4308R-102-472
2A6A4 CP2 MUX#1 U10	D	Integrated Circuit	27014	DS26LS32CJ
2A6A4 CP2 MUX#1 U11-U12	D	Resistor Network	32997	4308R-102-472
2A6A4 CP2 MUX#1 U13	D	Integrated Circuit	27014	DS26LS32CJ
2A6A4 CP2 MUX#1 U14-U15	D	Resistor Network	32997	4308R-102-472
2A6A4 CP2 MUX#1 U16	D	Integrated Circuit	27014	DS26LS32CJ
2A6A4 CP2 MUX#1 U17-U18	D	Resistor Network	32997	4308R-102-472
2A6A4 CP2 MUX#1 U19	D	Integrated Circuit	27014	DS26LS32CJ
2A6A4 CP2 MUX#1 U20	D	Resistor Network	32997	4308R-102-472
2A6A4 CP2 MUX#1 U21	D	Integrated Circuit	27014	DS3691J
2A6A4 CP2 MUX#1 U22	D	Resistor Network	32997	4308R-102-472
2A6A4 CP2 MUX#1 U23	D	Integrated Circuit	27014	DS26LS32CJ
2A6A4 CP2 MUX#1 U24	D	Resistor Network	32997	4308R-102-472
2A6A4 CP2 MUX#1 U25	D	Integrated Circuit	27014	DS3691J
2A6A4 CP2 MUX#1 U26-U27	D	Integrated Circuit	27014	DS26LS32CJ
2A6A4 CP2 MUX#1 U28	D	Integrated Circuit	01295	SN74LS04J
2A6A4 CP2 MUX#1 U29	D	Integrated Circuit	34649	D8274
2A6A4 CP2 MUX#1 U30	D	Integrated Circuit	34649	D8253-5
2A6A4 CP2 MUX#1 U31	D	Integrated Circuit	01295	SN74LS02J
2A6A4 CP2 MUX#1 U32	D	Integrated Circuit	01295	SN74LS377J
2A6A4 CP2 MUX#1 U33	D	Integrated Circuit	01295	SN74LS241J
2A6A4 CP2 MUX#1 U34-U35	D	Integrated Circuit	34649	D8155-2
2A6A4 CP2 MUX#1 U36	D	Integrated Circuit		316-3009-001
2A6A4 CP2 MUX#1 U37	D	Integrated Circuit		316-3010-001
2A6A4 CP2 MUX#1 U38-U41	D	Integrated Circuit	50088	MK4802P-3
2A6A4 CP2 MUX#1 U42	D	Resistor Network	32997	4310R-102-181
2A6A4 CP2 MUX#1 U43	D	Integrated Circuit	34649	D8274
2A6A4 CP2 MUX#1 U44	D	Integrated Circuit	01295	SN74LS125AJ

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A4 CP2 MUX#1 U45	D	Integrated Circuit	01295	SN74LS126AJ
2A6A4 CP2 MUX#1 U46	D	Integrated Circuit	18324	N8X320N
2A6A4 CP2 MUX#1 U47-U50	D	Integrated Circuit	01295	SN74LS377J
2A6A4 CP2 MUX#1 U51-U52	D	Integrated Circuit	07263	93S16DC
2A6A4 CP2 MUX#1 U53	D	Integrated Circuit	01295	SN74LS279J
2A6A4 CP2 MUX#1 U54-U55	D	Integrated Circuit	01295	SN74LS74AJ
2A6A4 CP2 MUX#1 U56	D	Integrated Circuit	01295	SN74LS00J
2A6A4 CP2 MUX#1 U57	D	Integrated Circuit	01295	SN74LS04J
2A6A4 CP2 MUX#1 U58	D	Integrated Circuit	01295	SN74S02J
2A6A4 CP2 MUX#1 U59	D	Integrated Circuit	01295	SN74LS125AJ
2A6A4 CP2 MUX#1 U60	D	Integrated Circuit	01295	SN74LS126AJ
2A6A4 CP2 MUX#1 U61	D	Integrated Circuit	01295	SN74S08J
2A6A4 CP2 MUX#1 U62	D	Integrated Circuit	07263	93S16DC
2A6A4 CP2 MUX#1 U63	D	Integrated Circuit	01295	SN74S251J
2A6A4 CP2 MUX#1 U64	D	Integrated Circuit	01295	SN74S86J
2A6A4 CP2 MUX#1 U65	D	Oscillator	04713	K1115A-9.12MHz
2A6A4 CP2 MUX#1 U66	D	Integrated Circuit	01295	SN74LS74AJ
2A6A4 CP2 MUX#1 U67	D	Integrated Circuit	01295	SN74LS125AJ
2A6A4 CP2 MUX#1 U68	D	Integrated Circuit	01295	SN74S74J
2A6A4 CP2 MUX#1 U69-U70	D	Resistor Network	32997	4308R-102-330
2A6A4 CP2 MUX#1 U71	D	Integrated Circuit		316-3007-001
2A6A4 CP2 MUX#1 U72	D	Integrated Circuit	34649	D8085A-2
2A6A4 CP2 MUX#1 U73-U74	D	Integrated Circuit	15476	19-14035-00
2A6A4 CP2 MUX#1 U75	D	Integrated Circuit		316-3003-001
2A6A4 CP2 MUX#1 U76	D	Integrated Circuit		316-3005-001
2A6A4 CP2 MUX#1 U77	D	Integrated Circuit		316-3006-001
2A6A4 CP2 MUX#1 U78	D	Integrated Circuit		316-3004-001
2A6A4 CP2 MUX#1 U78	D	Integrated Circuit		316-3004-001
2A6A4 CP2 MUX#1 U79	D	Integrated Circuit		316-3002-001
2A6A4 CP2 MUX#1 U80	D	Integrated Circuit		316-3001-001
2A6A4 CP2 MUX#1 U81-U82	D	Integrated Circuit	01295	SN74S251J
2A6A4 CP2 MUX#1 U83	D	Integrated Circuit	04713	MC14557BCL
2A6A4 CP2 MUX#1 U84	D	Integrated Circuit	01295	SN74LS02J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A4 CP2 MUX#1 U85	D	Integrated Circuit	01295	SN74LS04J
2A6A4 CP2 MUX#1 U86	D	Integrated Circuit	01295	SN74LS08J
2A6A4 CP2 MUX#1 U87	D	Integrated Circuit	01295	SN74LS00J
2A6A4 CP2 MUX#1 U88	D	Integrated Circuit		316-3008-001
2A6A4 CP2 MUX#1 U89-U92	D	Integrated Circuit	15476	19-13040-00
2A6A4 CP2 MUX#1 U93	D	Option Plug	97871	401-37124
2A6A4 CP2 MUX#1 U94-U96	D	Integrated Circuit	27014	DS8641J
2A6A4 CP2 MUX#1 U97	D	Option Plug	97871	401-37125-01
2A6A4 CP2 MUX#1 U98	D	Integrated Circuit	27014	DS8641J
2A6A4 CP2 MUX#1 U99	D	Integrated Circuit	01295	SN74LS377J
2A6A4 CP2 MUX#1 U100-U101	D	Integrated Circuit	01295	SN74LS378J
2A6A4 CP2 MUX#1 U102	D	Integrated Circuit	01295	SN74LS27J
2A6A4 CP2 MUX#1 U103	D	Integrated Circuit	01295	SN74276J
2A6A4 CP2 MUX#1 U104-U105	D	Integrated Circuit	27014	DS8641J
2A6A4 CP2 MUX#1 U106	D	Resistor Network	32997	4308R-104-181/391
2A6A4 CP2 MUX#1 U107	D	Integrated Circuit	34649	D3205
2A6A4 CP2 MUX#1 U108	D	Resistor Network	32997	4308R-102-181
2A6A4 CP2 MUX#1 U109	D	Integrated Circuit	01295	SN74LS373J
2A6A4 CP2 MUX#1 U110	D	Resistor Network	32997	4308R-102-181
2A6A4 CP2 MUX#1 VR1	D	Voltage Regulator	27014	LM120H-5.0
2A6A4 CP2 MUX#1 XU29	D	Socket	09922	DILB40P-108
2A6A4 CP2 MUX#1 XU30	D	Socket	09922	DILB24P-108
2A6A4 CP2 MUX#1 XU34-XU35	D	Socket	09922	DILB40P-108
2A6A4 CP2 MUX#1 XU36-XU41	D	Socket	09922	DILB28P-108
2A6A4 CP2 MUX#1 XU43	D	Socket	09922	DILB40P-108
2A6A4 CP2 MUX#1 XU46	D	Socket	09922	DILB40P-108
2A6A4 CP2 MUX#1 XU71	D	Socket	09922	DILB20P-108
2A6A4 CP2 MUX#1 XU72	D	Socket	09922	DILB40P-108
2A6A4 CP2 MUX#1 XU75-XU80	D	Socket	09922	DILB20P-108
2A6A4 CP2 MUX#1 XU88	D	Socket	09922	DILB20P-108
2A6A4 CP2 MUX#1 XU93	D	Socket	09922	DILB14P-108
2A6A4 CP2 MUX#1 XU97	D	Socket	09922	DILB14P-108
2A6A4 CP2 MUX#1 Y1	D	Crystal	00RCD	MP18-9.830400MHz

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A4 CP2 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
2A6A4 CP2 QBUS DMA	C	DMA Controller Circuit Card	D0008	DMA-QB
2A6A5 CP2 DISC CONT	C	Disk Controller Circuit Card	15476	RLV12
2A6A5 CP2 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
2A6A5 CP2 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
2A6A6	C	Power Control Module	97871	401-36719-01
2A6A6A1	D	Circuit Board Assembly	97871	401-37153-01
2A6A6A1C1	D	Capacitor	81349	CK06BX105K
2A6A6A1C2	D	Capacitor	81349	CK05BX473K
2A6A6A1C3	D	Capacitor	81349	CK05BX103K
2A6A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
2A6A6A1J1	D	Connector	00779	205867-1
2A6A6A1R1	D	Resistor	81349	RCR07G272JS
2A6A6A1R2	D	Resistor	81349	RCR07G153JS
2A6A6A1R3	D	Resistor	81349	RCR07G272JS
2A6A6A1R4	D	Resistor	81349	RNC55H4991FM
2A6A6A1R5	D	Resistor	81349	RNC55H1002FM
2A6A6A1R6	D	Resistor	81349	RNC55H4991FM
2A6A6A1R7	D	Resistor	81349	RJ24FW202
2A6A6A1R8	D	Resistor	81349	RNC55H1002FM
2A6A6A1R9	D	Resistor	81349	RCR07G2R7JS
2A6A6A1R10-R11	D	Resistor	54869	0H-ZT42
2A6A6A1S1	D	Switch	09353	7105R
2A6A6A1U1	D	Integrated Circuit	01295	LM311P
2A6A6A1U2	D	Integrated Circuit	01295	SN7438J
2A6A6A1U3	D	Integrated Circuit	01295	SN74LS123J
2A6A6DS1	D	Lamp	OCOML	C7A
2A6A6F1	D	Fuse	81349	F02A125V10A
2A6A6J2	D	Connector	00779	350780-1
2A6A6J3	D	Connector	00779	350767-1
2A6A6RT1-RT2	D	Current Limiter	97871	CCL175.09
2A6A6S1	D	Switch	27191	7560K6
2A6A6TB1	D	Terminal Block	81349	38TB10

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A6T1	D	Transformer	97871	241-4-24
2A6A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
2A6A6XF1	D	Fuse Holder	81349	FHL17G1
2A6A7	C	Power Control Module	97871	401-36719-02
2A6A7A1	D	Circuit Board Assembly	97871	401-37153-01
2A6A7A1C1	D	Capacitor	81349	CK06BX105K
2A6A7A1C2	D	Capacitor	81349	CK05BX473K
2A6A7A1C3	D	Capacitor	81349	CK05BX103K
2A6A7A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
2A6A7A1J1	D	Connector	00779	205867-1
2A6A7A1R1	D	Resistor	81349	RCR07G272JS
2A6A7A1R2	D	Resistor	81349	RCR07G153JS
2A6A7A1R3	D	Resistor	81349	RCR07G272JS
2A6A7A1R4	D	Resistor	81349	RNC55H4991FM
2A6A7A1R5	D	Resistor	81349	RNC55H1002FM
2A6A7A1R6	D	Resistor	81349	RNC55H4991FM
2A6A7A1R7	D	Resistor	81349	RJ24FW202
2A6A7A1R8	D	Resistor	81349	RNC55H1002FM
2A6A7A1R9	D	Resistor	81349	RCR07G2R7JS
2A6A7A1R10-R11	D	Resistor	54869	OH-ZT42
2A6A7A1S1	D	Switch	09353	7105R
2A6A7A1U1	D	Integrated Circuit	01295	LM311P
2A6A7A1U2	D	Integrated Circuit	01295	SN7438J
2A6A7A1U3	D	Integrated Circuit	01295	SN74LS123J
2A6A7DS1	D	Lamp	0C0ML	C7A
2A6A7F1	D	Fuse	81349	F02A125V10A
2A6A7J2	D	Connector	00779	350780-1
2A6A7J3	D	Connector	00779	350767-1
2A6A7RT1-RT2	D	Current Limiter	97871	CCL175.09
2A6A7S1	D	Switch	27191	7560K6
2A6A7TB1	D	Terminal Block	81349	38TB10
2A6A7T1	D	Transformer	97871	241-4-24
2A6A7XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2A6A7XF1	D	Fuse Holder	81349	FHL17G1
2A7	B	Multiplexer Interface Assembly	97871	401-37170-04
2A8	B	Multiplexer Interface Assembly	97871	401-37170-01
2A9-2A10	B	Multiple Outlet Strip	22012	602
2A16	B	AC Junction Box	97871	401-37231-02
2A16F1-F4	C	Fuse	81349	F02A250V3A
2A16J10-J12	C	Duplex Receptacle	74545	5000M9
2A16S1-S2	C	DPST Switch	27193	7560K6
2A16TB1-TB2	C	Terminal Block	81349	38TB10
2A165XF1-XF4	C	Indicator Fuse Holders	81349	FHL17G1
2A17	B	Blower Assembly	97871	401-37145-02
2A18	B	Thermal Alarm Sensor	97871	401-37216-02
2A19	B	Thermal Alarm Sensor	97871	401-37204-01
2PS5	B	Power Supply Assembly	97871	401-36716-01
2PS5A1	C	Power Supply	53719	MM43-12Y2Y/115
2PS6	B	Power Supply Assembly	97871	401-36716-01
2PS6A1	C	Power Supply	53719	MM43-12Y2Y/115
2W1	B	Cable Assembly, +12V	97871	401-36715-01
2W2	B	Cable Assembly, -12V	97871	401-36715-03
2W3	B	Cable Assembly, +5V	97871	401-36715-05
2W4	B	Cable Assembly, AC Supply	97871	401-36786-01
2W5	B	Cable Assembly, AC Control	97871	401-36785-01
2W6-2W7	B	Cable Assembly, Blower	97871	401-37241-01
2W8	B	Cable Assembly, AC Control	97871	401-36785-01
2W9	B	Cable Assembly, AC Supply	97871	401-36786-01
2W10	B	Cable Assembly, +5V	97871	401-36715-06
2W11	B	Cable Assembly, -12V	97871	401-36715-04

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
2W12	B	Cable Assembly, +12V	97871	401-36715-02
2W14-2W15	B	Cable Assembly	97871	401-37142-01
2W18-2W21	B	Cable Assembly, Mux. Int. Power	97871	401-37172-01
2W24	B	Cable Assembly	97871	401-37142-01
2W26	B	Cable Assembly	97871	401-37142-01
2W27-2W28	B	Cable, Interproc. Bus	97871	401-37958-01
2W30-2W33	B	Cable Assembly, APP Jumper	97871	401-37594-08
Unit 3	A	Position Processor Rack	97871	401-12303-01
3A1	B	Position Processor Card Cage	97871	401-37999-01
3A1A1 64KW RAM	C	64K Word RAM/Parity Circuit Card	15476	MSV11-LF
3A1A1 LSI 11/23	C	LSI-11/23 Microprocessor Circuit Card	15476	KDF11-AA
3A1A1 OTF#1	C	A/N OTF Processor Circuit Card	97871	401-33676-01
3A1A1 OTF#1 C1-C58	D	Capacitor	81349	CK05BX104K
3A1A1 OTF#1 C59	D	Capacitor	81349	CK05BX221K
3A1A1 OTF#1 C60	D	Capacitor	81349	CK05BX101K
3A1A1 OTF#1 C61-C80	D	Capacitor	81349	CK05BX104K
3A1A1 OTF#1 C81	D	Capacitor	81349	CK05BX100K
3A1A1 OTF#1 C82-C118	D	Capacitor	81349	CK05BX104K
3A1A1 OTF#1 J1-J4	D	Connector	22526	65496-019
3A1A1 OTF#1 R1-R2	D	Resistor	81349	RCR07G562JS
3A1A1 OTF#1 R3	D	Resistor	81349	RCR07G222JS
3A1A1 OTF#1 R4-R6	D	Resistor	81349	RCR07G472JS
3A1A1 OTF#1 U1	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U2-U5	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U6	D	Resistor Network	73138	898-5-R180/390
3A1A1 OTF#1 U7-U10	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U11-U13	D	Resistor Network	73138	898-5-R180/390
3A1A1 OTF#1 U14-U20	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U21	D	Resistor Network	73138	898-5-R180/390
3A1A1 OTF#1 U22	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U24-U32	D	Integrated Circuit	18324	N82S137F
3A1A1 OTF#1 U33	D	Integrated Circuit	18324	N82S131F
3A1A1 OTF#1 U34-U36	D	Integrated Circuit	01295	SN74173J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A1 OTF#1 U37-U39	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U40-U42	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U43	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U44	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U45	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U47-U50	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U52-U53	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U54	D	Integrated Circuit	18324	N82S131F
3A1A1 OTF#1 U55-U57	D	Integrated Circuit	01295	SN74S283J
3A1A1 OTF#1 U58	D	Integrated Circuit	18324	N82S137F
3A1A1 OTF#1 U59	D	Integrated Circuit	01295	SN74S08J
3A1A1 OTF#1 U60	D	Integrated Circuit	18324	N82S131F
3A1A1 OTF#1 U61-U62	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U63	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U64	D	Integrated Circuit	01295	SN74221J
3A1A1 OTF#1 U65-U68	D	Integrated Circuit	18324	N82S131F
3A1A1 OTF#1 U69-U73	D	Integrated Circuit	18324	N82S129F
3A1A1 OTF#1 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A1A1 OTF#1 U75	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A1A1 OTF#1 U77	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A1A1 OTF#1 U79	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U80	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U81	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U82	D	Crystal Oscillator	01538	K1115A-32.76MHz
3A1A1 OTF#1 U83	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U84	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U85	D	Integrated Circuit	01295	SN74221J
3A1A1 OTF#1 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U88	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U91	D	Integrated Circuit	01295	SN74S08J

Table 8-3. AWPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A1 OTF#1 U92	D	Integrated Circuit	01295	SN7408J
3A1A1 OTF#1 U93	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U94	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U95	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U96	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U97	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U98	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U99	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U77	D	Integrated Circuit	01295	SN74S174J
3A1A1 OTF#1 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A1A1 OTF#1 U79	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U80	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U81	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U82	D	Crystal Oscillator	01538	K1115A-32.76MHz
3A1A1 OTF#1 U83	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U84	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U85	D	Integrated Circuit	01295	SN74221J
3A1A1 OTF#1 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U88	D	Integrated Circuit	01295	SN74S175J
3A1A1 OTF#1 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U91	D	Integrated Circuit	01295	SN74S08J
3A1A1 OTF#1 U92	D	Integrated Circuit	01295	SN7408J
3A1A1 OTF#1 U93	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U94	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U95	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U96	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U97	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U98	D	Integrated Circuit	01295	SN74193J
3A1A1 OTF#1 U99	D	Integrated Circuit	01295	SN74S157J
3A1A1 OTF#1 U100	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U101	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U102	D	Resistor Network	73138	898-5-R180/390
3A1A1 OTF#1 U103	D	Integrated Circuit	01295	SN74S00J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A1 OTF#1 U104	D	Integrated Circuit	01295	SN74S74J
3A1A1 OTF#1 U105-U106	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U107	D	Integrated Circuit	01295	SN74S10J
3A1A1 OTF#1 U108	D	Integrated Circuit	01295	SN74S00J
3A1A1 OTF#1 U109	D	Integrated Circuit	01295	SN74S30J
3A1A1 OTF#1 U110	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U111	D	Integrated Circuit	01295	SN74S10J
3A1A1 OTF#1 U112	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U113	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U114	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U115	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U116	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U117	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U118	D	Integrated Circuit	01295	SN74S04J
3A1A1 OTF#1 U119	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 U120	D	Integrated Circuit	01295	SN74S86J
3A1A1 OTF#1 U121-U122	D	Integrated Circuit	01295	SN74S38J
3A1A1 OTF#1 XU6	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU21	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU23	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU24-XU32	D	Socket	71279	703-4218-01-03-10
3A1A1 OTF#1 XU33	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU46	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU51	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU54	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU58	D	Socket	71279	703-4218-01-03-10
3A1A1 OTF#1 XU60	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A1A1 OTF#1 XU102	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2	C	A/N OTF Processor Circuit Card	97871	401-33676-01
3A1A2 OTF#2 C1-C58	D	Capacitor	81349	CK05BX104K
3A1A2 OTF#2 C59	D	Capacitor	81349	CK05BX221K

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A2 OTF#2 C60	D	Capacitor	81349	CK05BX101K
3A1A2 OTF#2 C61-C80	D	Capacitor	81349	CK05BX104K
3A1A2 OTF#2 C81	D	Capacitor	81349	CK05BX100K
3A1A2 OTF#2 C82-C118	D	Capacitor	81349	CK05BX104K
3A1A2 OTF#2 J1-J4	D	Connector	22526	65496-019
3A1A2 OTF#2 R1-R2	D	Resistor	81349	RCR07G562JS
3A1A2 OTF#2 R3	D	Resistor	81349	RCR07G222JS
3A1A2 OTF#2 R4-R6	D	Resistor	81349	RCR07G472JS
3A1A2 OTF#2 U1	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U2-U5	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U6	D	Resistor Network	73138	898-5-R180/390
3A1A2 OTF#2 U7-U10	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U11-U13	D	Resistor Network	73138	898-5-R180/390
3A1A2 OTF#2 U14-U20	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U21	D	Resistor Network	73138	898-5-R180/390
3A1A2 OTF#2 U22	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U24-U32	D	Integrated Circuit	18324	N82S137F
3A1A2 OTF#2 U33	D	Integrated Circuit	18324	N82S131F
3A1A2 OTF#2 U34-U36	D	Integrated Circuit	01295	SN74173J
3A1A2 OTF#2 U37-U39	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U40-U42	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U43	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U44	D	Integrated Circuit	01295	SN74S175J
3A1A2 OTF#2 U45	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U47-U50	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U52-U53	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U54	D	Integrated Circuit	18324	N82S131F
3A1A2 OTF#2 U55-U57	D	Integrated Circuit	01295	SN74S283J
3A1A2 OTF#2 U58	D	Integrated Circuit	18324	N82S137F
3A1A2 OTF#2 U59	D	Integrated Circuit	01295	SN74S08J
3A1A2 OTF#2 U60	D	Integrated Circuit	18324	N82S131F
3A1A2 OTF#2 U61-U62	D	Integrated Circuit	01295	SN74S175J
3A1A2 OTF#2 U63	D	Integrated Circuit	01295	SN74S04J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A2 OTF#2 U64	D	Integrated Circuit	01295	SN74221J
3A1A2 OTF#2 U65-U68	D	Integrated Circuit	18324	N82S131F
3A1A2 OTF#2 U69-U73	D	Integrated Circuit	18324	N82S129F
3A1A2 OTF#2 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A1A2 OTF#2 U75	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A1A2 OTF#2 U77	D	Integrated Circuit	01295	SN74S174J
3A1A2 OTF#2 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A1A2 OTF#2 U79	D	Integrated Circuit	01295	SN74S175J
3A1A2 OTF#2 U80	D	Integrated Circuit	01295	SN74S74J
3A1A2 OTF#2 U81	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U82	D	Crystal Oscillator	05138	K1115A-32.76MHz
3A1A2 OTF#2 U83	D	Integrated Circuit	01295	SN74S74J
3A1A2 OTF#2 U84	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U85	D	Integrated Circuit	01295	SN74221J
3A1A2 OTF#2 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A1A2 OTF#2 U88	D	Integrated Circuit	01295	SN74S175J
3A1A2 OTF#2 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U91	D	Integrated Circuit	01295	SN74S08J
3A1A2 OTF#2 U92	D	Integrated Circuit	01295	SN7408J
3A1A2 OTF#2 U93	D	Integrated Circuit	01295	SN74S157J
3A1A2 OTF#2 U94	D	Integrated Circuit	01295	SN74193J
3A1A2 OTF#2 U95	D	Integrated Circuit	01295	SN74S157J
3A1A2 OTF#2 U96	D	Integrated Circuit	01295	SN74193J
3A1A2 OTF#2 U97	D	Integrated Circuit	01295	SN74S157J
3A1A2 OTF#2 U98	D	Integrated Circuit	01295	SN74193J
3A1A2 OTF#2 U99	D	Integrated Circuit	01295	SN74S157J
3A1A2 OTF#2 U100	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U101	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U102	D	Resistor Network	73138	898-5-R180/390
3A1A2 OTF#2 U103	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U104	D	Integrated Circuit	01295	SN74S74J
3A1A2 OTF#2 U105-U106	D	Integrated Circuit	01295	SN74S00J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A2 OTF#2 U107	D	Integrated Circuit	01295	SN74S10J
3A1A2 OTF#2 U108	D	Integrated Circuit	01295	SN74S00J
3A1A2 OTF#2 U109	D	Integrated Circuit	01295	SN74S30J
3A1A2 OTF#2 U110	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U111	D	Integrated Circuit	01295	SN74S10J
3A1A2 OTF#2 U112	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U113	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U114	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U115	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U116	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U117	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U118	D	Integrated Circuit	01295	SN74S04J
3A1A2 OTF#2 U119	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 U120	D	Integrated Circuit	01295	SN74S86J
3A1A2 OTF#2 U121-U122	D	Integrated Circuit	01295	SN74S38J
3A1A2 OTF#2 XU6	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU21	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU23	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU24-XU32	D	Socket	71279	703-4218-01-03-10
3A1A2 OTF#2 XU33	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU46	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU51	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU54	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU58	D	Socket	71279	703-4218-01-03-10
3A1A2 OTF#2 XU60	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A1A2 OTF#2 XU102	D	Socket	71279	703-4216-01-03-10
3A1A2 DMA#1	C	DMA Controller, Circuit Card	D0008	DMA-QB
3A1A2 DMA#2	C	DMA Controller, Circuit Card	D0008	DMA-QB
3A1A3 KYBD#1	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A1A3 KYBD#2	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A1A3 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A1A3 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
3A1A3 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
3A2	B	Memory Card Cage "A"	97871	401-37999-02
3A2A6	C	Power Control Module	97871	401-36719-05
3A2A6A1	D	Circuit Board Assembly	97871	401-37153-01
3A2A6A1C1	D	Capacitor	81349	CK06BX105K
3A2A6A1C2	D	Capacitor	81349	CK05BX473K
3A2A6A1C3	D	Capacitor	81349	CK05BX103K
3A2A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
3A2A6A1J1	D	Connector	00779	205867-1
3A2A6A1R1	D	Resistor	81349	RCR07G272JS
3A2A6A1R2	D	Resistor	81349	RCR07G153JS
3A2A6A1R3	D	Resistor	81349	RCR07G272JS
3A2A6A1R4	D	Resistor	81349	RNC55H4991FM
3A2A6A1R5	D	Resistor	81349	RNC55H1002FM
3A2A6A1R6	D	Resistor	81349	RNC55H991FM
3A2A6A1R7	D	Resistor	81349	RJ24FW202
3A2A6A1R8	D	Resistor	81349	RNC55H1002FM
3A2A6A1R9	D	Resistor	81349	RCR07G2R7JS
3A2A6A1R10-R11	D	Resistor	54869	OH-ZT42
3A2A6A1S1	D	Switch	09353	7105R
3A2A6A1U1	D	Integrated Circuit	01295	LM311P
3A2A6A1U2	D	Integrated Circuit	01295	SN7438J
3A2A6A1U3	D	Integrated Circuit	01295	SN74LS123J
3A2A6DS1	D	Lamp	OCOML	C7A
3A2A6F1	D	Fuse	81349	F02A125V10A
3A2A6J2	D	Connector	00779	350780-1
3A2A6J3	D	Connector	00779	350767-1
3A2A6S1	D	Switch	27191	7560K6
3A2A6TB1	D	Terminal Block	81349	38TB10
3A2A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
3A2A6XF1	D	Fuse Holder	81349	FHL17G1

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#1	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A2A1 CACHE#1 C1-C73	D	Capacitor	04222	CK05BX104K
3A2A1 CACHE#1 C74-C89	D	Capacitor	90201	TIM475M025POX
3A2A1 CACHE#1 J1-J4	D	Connector	22526	65496-019
3A2A1 CACHE#1 R1	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R2	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R3-R4	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R5	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R6-R7	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R8	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R9-R10	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R11	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R12-R13	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R14	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R15-R16	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R17	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R18-R19	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R20	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R21-R22	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R23	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R24-R25	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R26	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R27-R28	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R29	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R30-R31	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R32	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R33-R34	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R35	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R36-R37	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R38	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R39-R40	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R41	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R42-R43	D	Resistor	19647	MK120-270

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#1 R44	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R45-R46	D	Resistor	19647	MK120-50
3A2A1 CACHE#1 R47	D	Resistor	19647	MK120-100
3A2A1 CACHE#1 R48	D	Resistor	19647	MK120-270
3A2A1 CACHE#1 R49-R64	D	Resistor	81349	RW81U10R0F
3A2A1 CACHE#1 U1	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U2	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U3-U4	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U5	D	Integrated Circuit	01295	N82S129F
3A2A1 CACHE#1 U6-U7	D	Integrated Circuit	01295	N82S123F
3A2A1 CACHE#1 U8-U9	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U10-U11	D	Integrated Circuit	01295	SN74193J
3A2A1 CACHE#1 U12	D	Integrated Circuit	01295	N82S123F
3A2A1 CACHE#1 U13	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U14	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U15	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U16	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U17	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U18	D	Integrated Circuit	18324	N82S123F
3A2A1 CACHE#1 U19	D	Integrated Circuit	01295	SN74S157J
3A2A1 CACHE#1 U20	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U21	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U22	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U23	D	Resistor Network	32997	4310R-102-330
3A2A1 CACHE#1 U24	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U25	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#1 U26	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#1 U27-U28	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U29	D	Resistor Network	73138	899-3-R33
3A2A1 CACHE#1 U30	D	Integrated Circuit	01295	SN74S74J
3A2A1 CACHE#1 U31	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U32	D	Integrated Circuit	01295	SN74S32J
3A2A1 CACHE#1 U33-U48	D	Integrated Circuit	INMOS	IMS1400-55

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#1 U49	D	Integrated Circuit	01295	SN74S08J
3A2A1 CACHE#1 U50	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#1 U51	D	Integrated Circuit	01295	SN74S10J
3A2A1 CACHE#1 U52	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U53	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U54-U57	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#1 U58-U61	D	Integrated Circuit	01295	SN74S299J
3A2A1 CACHE#1 U62	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#1 U63	D	Integrated Circuit	34649	D3636B-1
3A2A1 CACHE#1 U64	D	Integrated Circuit	01295	SN74S86J
3A2A1 CACHE#1 U65	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U66	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U67	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U68	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U69-U70	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#1 U71-U74	D	Integrated Circuit	01295	SN74S174J
3A2A1 CACHE#1 U75-U76	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#1 U77	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#1 U78	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#1 U79	D	Integrated Circuit	01295	SN74S174J
3A2A1 CACHE#1 U80	D	Integrated Circuit	01295	SN74S175J
3A2A1 CACHE#1 U81	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U82	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#1 U83	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U84	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U85	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U86	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#1 U87	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U88-U89	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#1 U90	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U91	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#1 U92	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U93	D	Integrated Circuit	01295	SN74S00J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#1 U94	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 U95	D	Integrated Circuit	01295	MHQ2222
3A2A1 CACHE#1 U96	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#1 XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#1 XU12	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#1 XU18	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#1 XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A2A1 CACHE#1 XU63	D	DIP Socket	71279	703-4224-01-03-10
3A2A1 CACHE#2	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A2A1 CACHE#2 C1-C73	D	Capacitor	04222	CK05BX104K
3A2A1 CACHE#2 C74-C89	D	Capacitor	90201	TIM475M025POX
3A2A1 CACHE#2 J1-J4	D	Connector	22526	65496-019
3A2A1 CACHE#2 R1	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R2	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R3-R4	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R5	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R6-R7	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R8	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R9-R10	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R11	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R12-R13	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R14	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R15-R16	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R17	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R18-R19	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R20	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R21-R22	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R23	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R24-R25	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R26	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R27-R28	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R29	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R30-R31	D	Resistor	19647	MK120-270

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#2 R32	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R33-R34	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R35	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R36-R37	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R38	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R39-R40	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R41	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R42-R43	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R44	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R45-R46	D	Resistor	19647	MK120-50
3A2A1 CACHE#2 R47	D	Resistor	19647	MK120-100
3A2A1 CACHE#2 R48	D	Resistor	19647	MK120-270
3A2A1 CACHE#2 R49-R64	D	Resistor	81349	RW81U10R0F
3A2A1 CACHE#2 U1	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U2	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U3-U4	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U5	D	Integrated Circuit	01295	N82S129F
3A2A1 CACHE#2 U6-U7	D	Integrated Circuit	01295	N82S123F
3A2A1 CACHE#2 U8-U9	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U10-U11	D	Integrated Circuit	01295	SN74193J
3A2A1 CACHE#2 U12	D	Integrated Circuit	01295	N82S123F
3A2A1 CACHE#2 U13	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U14	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U15	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U16	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U17	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U18	D	Integrated Circuit	18324	N82S123F
3A2A1 CACHE#2 U19	D	Integrated Circuit	01295	SN74S157J
3A2A1 CACHE#2 U20	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U21	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U22	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U23	D	Resistor Network	32997	4310R-102-330
3A2A1 CACHE#2 U24	D	Integrated Circuit	01295	SN74S240J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#2 U25	D	Resistor Network	32997	4308R-102-330
3A2A1 CACHE#2 U26	D	Integrated Circuit	01295	SN74S240J
3A2A1 CACHE#2 U27-U28	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U29	D	Resistor Network	73138	899-3-R33
3A2A1 CACHE#2 U30	D	Integrated Circuit	01295	SN74S74J
3A2A1 CACHE#2 U31	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U32	D	Integrated Circuit	01295	SN74S32J
3A2A1 CACHE#2 U33-U48	D	Integrated Circuit	INMOS	IMS1400-55
3A2A1 CACHE#2 U49	D	Integrated Circuit	01295	SN74S08J
3A2A1 CACHE#2 U50	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#2 U51	D	Integrated Circuit	01295	SN74S10J
3A2A1 CACHE#2 U52	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U53	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U54-U57	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#2 U58-U61	D	Integrated Circuit	01295	SN74S299J
3A2A1 CACHE#2 U62	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#2 U63	D	Integrated Circuit	34649	D3636B-1
3A2A1 CACHE#2 U64	D	Integrated Circuit	01295	SN74S86J
3A2A1 CACHE#2 U65	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U66	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U67	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U68	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U69-U70	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#2 U71-U74	D	Integrated Circuit	01295	SN74S174J
3A2A1 CACHE#2 U75-U76	D	Integrated Circuit	01295	SN74S20J
3A2A1 CACHE#2 U77	D	Integrated Circuit	01295	SN74S04J
3A2A1 CACHE#2 U78	D	Integrated Circuit	01295	SN74S374J
3A2A1 CACHE#2 U79	D	Integrated Circuit	01295	SN74S174J
3A2A1 CACHE#2 U80	D	Integrated Circuit	01295	SN74S175J
3A2A1 CACHE#2 U81	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U82	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#2 U83	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U84	D	Integrated Circuit	01295	SN74S00J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A2A1 CACHE#2 U85	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U86	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#2 U87	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U88-U89	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U90	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U91	D	Integrated Circuit	04713	MHQ2222
3A2A1 CACHE#2 U92	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U93	D	Integrated Circuit	01295	SN74S00J
3A2A1 CACHE#2 U94	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 U95	D	Integrated Circuit	01295	MHQ2222
3A2A1 CACHE#2 U96	D	Integrated Circuit	01295	SN74S38J
3A2A1 CACHE#2 XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#2 XU12	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#2 XU18	D	DIP Socket	71279	703-4216-01-03-10
3A2A1 CACHE#2 XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A2A1 CACHE#2 XU63	D	DIP Socket	71279	703-4224-01-03-10
3A3	B	Memory Card Cage "B"	97871	401-37999-06
3A3A1 CACHE#3	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A3A1 CACHE#3 C1-C73	D	Capacitor	04222	CK05BX104K
3A3A1 CACHE#3 C74-C89	D	Capacitor	90201	TIM475M025POX
3A3A1 CACHE#3 J1-J4	D	Connector	22526	65496-019
3A3A1 CACHE#3 R1	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R2	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R3-R4	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R5	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R6-R7	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R8	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R9-R10	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R11	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R12-R13	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R14	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R15-R16	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R17	D	Resistor	19647	MK120-100

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#3 R18-R19	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R20	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R21-R22	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R23	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R24-R25	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R26	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R27-R28	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R29	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R30-R31	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R32	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R33-R34	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R35	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R36-R37	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R38	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R39-R40	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R41	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R42-R43	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R44	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R45-R46	D	Resistor	19647	MK120-50
3A3A1 CACHE#3 R47	D	Resistor	19647	MK120-100
3A3A1 CACHE#3 R48	D	Resistor	19647	MK120-270
3A3A1 CACHE#3 R49-R64	D	Resistor	81349	RW81U10R0F
3A3A1 CACHE#3 U1	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U2	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U3-U4	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U5	D	Integrated Circuit	01295	N82S129F
3A3A1 CACHE#3 U6-U7	D	Integrated Circuit	01295	N82S123F
3A3A1 CACHE#3 U8-U9	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U10-U11	D	Integrated Circuit	01295	SN74193J
3A3A1 CACHE#3 U12	D	Integrated Circuit	01295	N82S123F
3A3A1 CACHE#3 U13	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U14	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U15	D	Resistor Network	32997	4308R-102-330

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#3 U16	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U17	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U18	D	Integrated Circuit	18324	N82S123F
3A3A1 CACHE#3 U19	D	Integrated Circuit	01295	SN74S157J
3A3A1 CACHE#3 U20	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U21	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U22	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U23	D	Resistor Network	32997	4310R-102-330
3A3A1 CACHE#3 U24	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U25	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#3 U26	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#3 U27-U28	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U29	D	Resistor Network	73138	899-3-R33
3A3A1 CACHE#3 U30	D	Integrated Circuit	01295	SN74S74J
3A3A1 CACHE#3 U31	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U32	D	Integrated Circuit	01295	SN74S32J
3A3A1 CACHE#3 U33-U48	D	Integrated Circuit	INMOS	IMS1400-55
3A3A1 CACHE#3 U49	D	Integrated Circuit	01295	SN74S08J
3A3A1 CACHE#3 U50	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#3 U51	D	Integrated Circuit	01295	SN74S10J
3A3A1 CACHE#3 U52	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U53	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U54-U57	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#3 U58-U61	D	Integrated Circuit	01295	SN74S299J
3A3A1 CACHE#3 U62	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#3 U63	D	Integrated Circuit	34649	D3636B-1
3A3A1 CACHE#3 U64	D	Integrated Circuit	01295	SN74S86J
3A3A1 CACHE#3 U65	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U66	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U67	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U68	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U69-U70	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#3 U71-U74	D	Integrated Circuit	01295	SN74S174J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#3 U75-U76	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#3 U77	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#3 U78	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#3 U79	D	Integrated Circuit	01295	SN74S174J
3A3A1 CACHE#3 U80	D	Integrated Circuit	01295	SN74S175J
3A3A1 CACHE#3 U81	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U82	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#3 U83	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U84	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U85	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U86	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#3 U87	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U88-U89	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U90	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U91	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#3 U92	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U93	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#3 U94	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 U95	D	Integrated Circuit	01295	MHQ2222
3A3A1 CACHE#3 U96	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#3 XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#3 XU12	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#3 XU18	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#3 XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A3A1 CACHE#3 XU63	D	DIP Socket	71279	703-4224-01-03-10
3A3A1 CACHE#4	C	A/N Quad Cache Memory Circuit Card	97871	401-33692-01
3A3A1 CACHE#4 C1-C73	D	Capacitor	04222	CK05BX104K
3A3A1 CACHE#4 C74-C89	D	Capacitor	90201	TIM475M025POX
3A3A1 CACHE#4 J1-J4	D	Connector	22526	65496-019
3A3A1 CACHE#4 R1	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R2	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R3-R4	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R5	D	Resistor	19647	MK120-100

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#4 R6-R7	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R8	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R9-R10	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R11	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R12-R13	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R14	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R15-R16	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R17	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R18-R19	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R20	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R21-R22	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R23	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R24-R25	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R26	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R27-R28	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R29	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R30-R31	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R32	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R33-R34	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R35	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R36-R37	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R38	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R39-R40	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R41	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R42-R43	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R44	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R45-R46	D	Resistor	19647	MK120-50
3A3A1 CACHE#4 R47	D	Resistor	19647	MK120-100
3A3A1 CACHE#4 R48	D	Resistor	19647	MK120-270
3A3A1 CACHE#4 R49-R64	D	Resistor	81349	RW81U10R0F
3A3A1 CACHE#4 U1	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U2	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U3-U4	D	Integrated Circuit	01295	SN74S240J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#4 U5	D	Integrated Circuit	01295	N82S129F
3A3A1 CACHE#4 U6-U7	D	Integrated Circuit	01295	N82S123F
3A3A1 CACHE#4 U8-U9	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U10-U11	D	Integrated Circuit	01295	SN74193J
3A3A1 CACHE#4 U12	D	Integrated Circuit	01295	N82S123F
3A3A1 CACHE#4 U13	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U14	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U15	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U16	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U17	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U18	D	Integrated Circuit	18324	N82S123F
3A3A1 CACHE#4 U19	D	Integrated Circuit	01295	SN74S157J
3A3A1 CACHE#4 U20	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U21	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U22	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U23	D	Resistor Network	32997	4310R-102-330
3A3A1 CACHE#4 U24	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U25	D	Resistor Network	32997	4308R-102-330
3A3A1 CACHE#4 U26	D	Integrated Circuit	01295	SN74S240J
3A3A1 CACHE#4 U27-U28	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U29	D	Resistor Network	73138	899-3-R33
3A3A1 CACHE#4 U30	D	Integrated Circuit	01295	SN74S74J
3A3A1 CACHE#4 U31	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U32	D	Integrated Circuit	01295	SN74S32J
3A3A1 CACHE#4 U33-U48	D	Integrated Circuit	INMOS	IMS1400-55
3A3A1 CACHE#4 U49	D	Integrated Circuit	01295	SN74S08J
3A3A1 CACHE#4 U50	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#4 U51	D	Integrated Circuit	01295	SN74S10J
3A3A1 CACHE#4 U52	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U53	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U54-U57	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#4 U58-U61	D	Integrated Circuit	01295	SN74S299J
3A3A1 CACHE#4 U62	D	Integrated Circuit	01295	SN74S374J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A1 CACHE#4 U63	D	Integrated Circuit	34649	D3636B-1
3A3A1 CACHE#4 U64	D	Integrated Circuit	01295	SN74S86J
3A3A1 CACHE#4 U65	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U66	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U67	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U68	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U69-U70	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#4 U71-U74	D	Integrated Circuit	01295	SN74S174J
3A3A1 CACHE#4 U75-U76	D	Integrated Circuit	01295	SN74S20J
3A3A1 CACHE#4 U77	D	Integrated Circuit	01295	SN74S04J
3A3A1 CACHE#4 U78	D	Integrated Circuit	01295	SN74S374J
3A3A1 CACHE#4 U79	D	Integrated Circuit	01295	SN74S174J
3A3A1 CACHE#4 U80	D	Integrated Circuit	01295	SN74S175J
3A3A1 CACHE#4 U81	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U82	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#4 U83	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U84	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U85	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U86	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#4 U87	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U88-U89	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U90	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U91	D	Integrated Circuit	04713	MHQ2222
3A3A1 CACHE#4 U92	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U93	D	Integrated Circuit	01295	SN74S00J
3A3A1 CACHE#4 U94	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 U95	D	Integrated Circuit	01295	MHQ2222
3A3A1 CACHE#4 U96	D	Integrated Circuit	01295	SN74S38J
3A3A1 CACHE#4 XU5-XU7	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#4 XU12	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#4 XU18	D	DIP Socket	71279	703-4216-01-03-10
3A3A1 CACHE#4 XU33-XU48	D	DIP Socket	71279	703-4220-01-03-10
3A3A1 CACHE#4 XU63	D	DIP Socket	71279	703-4224-01-03-10

Table 8-3. AWPS Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A3A6	C	Power Control Module	97871	401-36719-05
3A3A6A1	D	Circuit Board Assembly	97871	401-37153-01
3A3A6A1C1	D	Capacitor	81349	CK06Bx105K
3A3A6A1C2	D	Capacitor	81349	CK05BX473K
3A3A6A1C3	D	Capacitor	81349	CK05BX103K
3A3A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
3A3A6A1J1	D	Connector	00779	205867-1
3A3A6A1R1	D	Resistor	81349	RCR07G272JS
3A3A6A1R2	D	Resistor	81349	RCR07G153JS
3A3A6A1R3	D	Resistor	81349	RCR07G272JS
3A3A6A1R4	D	Resistor	81349	RNC55H4991FM
3A3A6A1R5	D	Resistor	81349	RNC55H1002FM
3A3A6A1R6	D	Resistor	81349	RNC55H991FM
3A3A6A1R7	D	Resistor	81349	RJ24FW202
3A3A6A1R8	D	Resistor	81349	RNC55H1002FM
3A3A6A1R9	D	Resistor	81349	RCR07GR7JS
3A3A6A1R10-R11	D	Resistor	54869	OH-ZT42
3A3A6A1S1	D	Switch	09353	7105R
3A3A6A1U1	D	Integrated Circuit	01295	LM311P
3A3A6A2U2	D	Integrated Circuit	01295	SN7438J
3A3A6A1U3	D	Integrated Circuit	01295	SN74LS123J
3A3A6DS1	D	Lamp	OCOML	C7A
3A3A6F1	D	Fuse	81349	F02A125V10A
3A3A6J2	D	Connector	00779	350780-1
3A3A6J3	D	Connector	00779	350767-1
3A3A6S1	D	Switch	27191	7560K6
3A3A6TB1	D	Terminal Block	81349	38TB10
3A3A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
3A3A6XF1	D	Fuse Holder	81349	FHL17G1
3A4	B	Position Processor Card Cage	97871	401-37999-01
3A4A1 LSI 11/23	C	LSI-11/23 Microprocessor Circuit Card	15476	KDF11-AA
3A4A1 64KW RAM	C	64K Word RAM/Parity Circuit Card	15476	MSV11-LF
3A4A1 OTF#1	C	A/N OTF Processor Circuit Card	97871	401-33676-01

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A1 OTF#1 C1-C58	D	Capacitor	81349	CK05BX104K
3A4A1 OTF#1 C59	D	Capacitor	81349	CK05BX221K
3A4A1 OTF#1 C60	D	Capacitor	81349	CK05BX101K
3A4A1 OTF#1 C61-C80	D	Capacitor	81349	CK05BX104K
3A4A1 OTF#1 C81	D	Capacitor	81349	CK05BX100K
3A4A1 OTF#1 C82-C118	D	Capacitor	81349	CK05BX104K
3A4A1 OTF#1 J1-J4	D	Connector	22526	65496-019
3A4A1 OTF#1 R1-R2	D	Resistor	81349	RCR07G562JS
3A4A1 OTF#1 R3	D	Resistor	81349	RCR07G222JS
3A4A1 OTF#1 R4-R6	D	Resistor	81349	RCR07G472JS
3A4A1 OTF#1 U1	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U2-U5	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U6	D	Resistor Network	73138	898-5-R180/390
3A4A1 OTF#1 U7-U10	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U11-U13	D	Resistor Network	73138	898-5-R180/390
3A4A1 OTF#1 U14-U20	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U21	D	Resistor Network	73138	898-5-R180/390
3A4A1 OTF#1 U22	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U24-U32	D	Integrated Circuit	18324	N82S137F
3A4A1 OTF#1 U33	D	Integrated Circuit	18324	N82S131F
3A4A1 OTF#1 U34-U36	D	Integrated Circuit	01295	SN74173J
3A4A1 OTF#1 U37-U39	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U40-U42	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U43	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U44	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U45	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U47-U50	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U52-U53	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U54	D	Integrated Circuit	18324	N82S131F
3A4A1 OTF#1 U55-U57	D	Integrated Circuit	01295	SN74S283J
3A4A1 OTF#1 U58	D	Integrated Circuit	18324	N82S137F
3A4A1 OTF#1 U59	D	Integrated Circuit	01295	SN74S08J
3A4A1 OTF#1 U60	D	Integrated Circuit	18324	N82S131F

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A1 OTF#1 U61-U62	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U63	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U64	D	Integrated Circuit	01295	SN74221J
3A4A1 OTF#1 U65-U68	D	Integrated Circuit	18324	N82S131F
3A4A1 OTF#1 U69-U73	D	Integrated Circuit	18324	N82S129F
3A4A1 OTF#1 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U75	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U77	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U79	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U80	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U81	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U82	D	Crystal Oscillator	01538	K1115A-32.76MHz
3A4A1 OTF#1 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U75	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U77	D	Integrated Circuit	01295	SN74S174J
3A4A1 OTF#1 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A4A1 OTF#1 U79	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U80	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U81	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U82	D	Crystal Oscillator	01538	K1115A-32.76MHz
3A4A1 OTF#1 U83	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U84	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U85	D	Integrated Circuit	01295	SN74221J
3A4A1 OTF#1 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U88	D	Integrated Circuit	01295	SN74S175J
3A4A1 OTF#1 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U91	D	Integrated Circuit	01295	SN74S08J
3A4A1 OTF#1 U92	D	Integrated Circuit	01295	SN7408J
3A4A1 OTF#1 U93	D	Integrated Circuit	01295	SN74S157J
3A4A1 OTF#1 U94	D	Integrated Circuit	01295	SN74193J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A1 OTF#1 U95	D	Integrated Circuit	01295	SN74S157J
3A4A1 OTF#1 U96	D	Integrated Circuit	01295	SN74193J
3A4A1 OTF#1 U97	D	Integrated Circuit	01295	SN74S157J
3A4A1 OTF#1 U98	D	Integrated Circuit	01295	SN74193J
3A4A1 OTF#1 U99	D	Integrated Circuit	01295	SN74S157J
3A4A1 OTF#1 U100	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U101	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U102	D	Resistor Network	73138	898-5-R180/390
3A4A1 OTF#1 U103	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U104	D	Integrated Circuit	01295	SN74S74J
3A4A1 OTF#1 U105-U106	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U107	D	Integrated Circuit	01295	SN74S10J
3A4A1 OTF#1 U108	D	Integrated Circuit	01295	SN74S00J
3A4A1 OTF#1 U109	D	Integrated Circuit	01295	SN74S30J
3A4A1 OTF#1 U110	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U111	D	Integrated Circuit	01295	SN74S10J
3A4A1 OTF#1 U112	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U113	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U114	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U115	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U116	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U117	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U118	D	Integrated Circuit	01295	SN74S04J
3A4A1 OTF#1 U119	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 U120	D	Integrated Circuit	01295	SN74S86J
3A4A1 OTF#1 U121-U122	D	Integrated Circuit	01295	SN74S38J
3A4A1 OTF#1 XU6	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU21	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU23	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU24-XU32	D	Socket	71279	703-4218-01-03-10
3A4A1 OTF#1 XU33	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU46	D	Socket	71279	703-4216-01-03-10

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A1 OTF#1 XU51	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU54	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU58	D	Socket	71279	703-4218-01-03-10
3A4A1 OTF#1 XU60	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A4A1 OTF#1 XU102	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2	C	A/N OTF Processor Circuit Card	97871	401-33676-01
3A4A2 OTF#2 C1-C58	D	Capacitor	81349	CK05BX104K
3A4A2 OTF#2 C59	D	Capacitor	81349	CK05BX221K
3A4A2 OTF#2 C60	D	Capacitor	81349	CK05BX101K
3A4A2 OTF#2 C61-C80	D	Capacitor	81349	CK05BX104K
3A4A2 OTF#2 C81	D	Capacitor	81349	CK05BX100K
3A4A2 OTF#2 C82-C118	D	Capacitor	81349	CK05BX104K
3A4A2 OTF#2 J1-J4	D	Connector	22526	65496-019
3A4A2 OTF#2 R1-R2	D	Resistor	81349	RCR07G562JS
3A4A2 OTF#2 R3	D	Resistor	81349	RCR07G222JS
3A4A2 OTF#2 R4-R6	D	Resistor	81349	RCR07G472JS
3A4A2 OTF#2 U1	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U2-U5	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U6	D	Resistor Network	73138	898-5-R180/390
3A4A2 OTF#2 U7-U10	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U11-U13	D	Resistor Network	73138	898-5-R180/390
3A4A2 OTF#2 U14-U20	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U21	D	Resistor Network	73138	898-5-R180/390
3A4A2 OTF#2 U22	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U24-U32	D	Integrated Circuit	18324	N82S137F
3A4A2 OTF#2 U33	D	Integrated Circuit	18324	N82S131F
3A4A2 OTF#2 U34-U36	D	Integrated Circuit	01295	SN74173J
3A4A2 OTF#2 U37-U39	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U40-U42	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U43	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U44	D	Integrated Circuit	01295	SN74S175J
3A4A2 OTF#2 U45	D	Integrated Circuit	01295	SN74S174J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A2 OTF#2 U47-U50	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U54	D	Integrated Circuit	18324	N82S131F
3A4A2 OTF#2 U55-U57	D	Integrated Circuit	01295	SN74S283J
3A4A2 OTF#2 U58	D	Integrated Circuit	18324	N82S137F
3A4A2 OTF#2 U59	D	Integrated Circuit	01295	SN74S08J
3A4A2 OTF#2 U60	D	Integrated Circuit	18324	N82S131F
3A4A2 OTF#2 U61-U62	D	Integrated Circuit	01295	SN74S175J
3A4A2 OTF#2 U63	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U64	D	Integrated Circuit	01295	SN74221J
3A4A2 OTF#2 U65-U68	D	Integrated Circuit	18324	N82S131F
3A4A2 OTF#2 U69-U73	D	Integrated Circuit	18324	N82S129F
3A4A2 OTF#2 U74	D	Integrated Circuit	01295	SN74LS125AJ
3A4A2 OTF#2 U75	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U76	D	Integrated Circuit	01295	SN74LS125AJ
3A4A2 OTF#2 U77	D	Integrated Circuit	01295	SN74S174J
3A4A2 OTF#2 U78	D	Integrated Circuit	01295	SN74LS125AJ
3A4A2 OTF#2 U79	D	Integrated Circuit	01295	SN74S175J
3A4A2 OTF#2 U80	D	Integrated Circuit	01295	SN74S74J
3A4A2 OTF#2 U81	D	Integrated Circuit	01295	AN74A04J
3A4A2 OTF#2 U82	D	Crystal Oscillator	01538	K1115A-32.76 MHz
3A4A2 OTF#2 U83	D	Integrated Circuit	01295	SN74A74J
3A4A2 OTF#2 U84	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U85	D	Integrated Circuit	01295	SN74221J
3A4A2 OTF#2 U86-U87	D	Integrated Circuit	01295	SN74S74J
3A4A2 OTF#2 U88	D	Integrated Circuit	01295	SN74S175J
3A4A2 OTF#2 U89-U90	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U91	D	Integrated Circuit	01295	SN74S08J
3A4A2 OTF#2 U92	D	Integrated Circuit	01295	SN7408J
3A4A2 OTF#2 U93	D	Integrated Circuit	01295	SN74S157J
3A4A2 OTF#2 U94	D	Integrated Circuit	01295	SN74193J
3A4A2 OTF#2 U95	D	Integrated Circuit	01295	SN74S157J
3A4A2 OTF#2 U96	D	Integrated Circuit	01295	SN75193J
3A4A2 OTF#2 U97	D	Integrated Circuit	01295	SN74S157J

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A2 OTF#2 U98	D	Integrated Circuit	01295	SN74193J
3A4A2 OTF#2 U99	D	Integrated Circuit	01295	SN74S157J
3A4A2 OTF#2 U100	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U101	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U102	D	Integrated Circuit	73138	898-5-R180/390
3A4A2 OTF#2 U103	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U104	D	Integrated Circuit	01295	SN74S74J
3A4A2 OTF#2 U105-U106	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U107	D	Integrated Circuit	01295	SN74S10J
3A4A2 OTF#2 U108	D	Integrated Circuit	01295	SN74S00J
3A4A2 OTF#2 U109	D	Integrated Circuit	01295	SN74S39J
3A4A2 OTF#2 U110	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U111	D	Integrated Circuit	01295	SN74S10J
3A4A2 OTF#2 U112	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U113	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U114	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U115	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U116	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U117	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U118	D	Integrated Circuit	01295	SN74S04J
3A4A2 OTF#2 U119	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 U120	D	Integrated Circuit	01295	SN74S86J
3A4A2 OTF#2 U121-U122	D	Integrated Circuit	01295	SN74S38J
3A4A2 OTF#2 XU6	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU11-XU13	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU21	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU23	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU24-XU32	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU33	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU46	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU51	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU54	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU58	D	Socket	71279	703-4216-01-03-10

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A2 OTF#2 XU60	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU65-XU73	D	Socket	71279	703-4216-01-03-10
3A4A2 OTF#2 XU102	D	Socket	71279	703-4216-01-03-10
3A4A2 DMA#1	C	DMA Controller Circuit Card	D0008	DMA-QB
3A4A2 DMA#2	C	DMA Controller Circuit Card	D0008	DMA-QB
3A4A3 SER I/O	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A4A3 SYS MOD	C	System Module Circuit Card	15476	KPV11-B
3A4A3 KYBD#1	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A4A3 KYBD#2	C	Eight-Channel Serial I/O Circuit Card	D0007	8S
3A4A3 32KW PROM	C	32K Word PROM Circuit Card	15476	MRV11-C
3A4A6	C	Power Control Module	97871	401-36719-01
3A4A6A1	D	Circuit Board Assembly	97871	401-37153-01
3A4A6A1C1	D	Capacitor	81349	CK06BX105K
3A4A6A1C2	D	Capacitor	81349	CK05BX473K
3A4A6A1C3	D	Capacitor	81349	CK05BX103K
3A4A6A1DS1-DS2	D	Light Emitting Diode	28480	HLMP-3105
3A4A6A1J1	D	Connector	00779	205867-1
3A4A6A1R1	D	Resistor	81349	RCR07G272JS
3A4A6A1R2	D	Resistor	81349	RCR07G153JS
3A4A6A1R3	D	Resistor	81349	RCR07G272JS
3A4A6A1R4	D	Resistor	81349	RNC55H4991FM
3A4A6A1R5	D	Resistor	81349	RNC55H1002FM
3A4A6A1R6	D	Resistor	81349	RNC55H991FM
3A4A6A1R7	D	Resistor	81349	RJ24FW202
3A4A6A1R8	D	Resistor	81349	RNC55H1002FM
3A4A6A1R9	D	Resistor	81349	RCR07G2R7JS
3A4A6A1R10-R11	D	Resistor	54869	OH-ZT42
3A4A6A1S1	D	Switch	09353	7105R
3A4A6A1U1	D	Integrated Circuit	01295	LM311P
3A4A6A1U2	D	Integrated Circuit	01295	SN7438J
3A4A6A1U3	D	Integrated Circuit	01295	SN74LS123J
3A4A6DS1	D	Lamp	OCOML	C7A

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3A4A6F1	D	Fuse	81349	F02A125V10A
3A4A6J2	D	Connector	00779	350780-1
3A4A6J3	D	Connector	00779	350767-1
3A4A6S1	D	Switch	27191	7560K6
3A4A6TB1	D	Terminal Block	81349	38TB10
3A4A6XDS1	D	Lampholder and Lens	81349	LH74/1-LC13RN2
3A4A6XF1	D	Fuse Holder	81349	FHL17G1
3A8	B	Serial I/O Panel	97871	401-37274-02
3A9	B	Serial I/O Panel	97871	401-37274-02
3A10	B	Keyboard Junction Box	97871	401-37179-08
3A10A1	C	Circuit Card Assembly	97871	401-37901-01
3A10A1J1-A-J8-A	D	Connector	00779	552224-1
3A10A1J9	D	Header	22526	65626-172
3A10A2	C	Circuit Card Assembly	97871	401-37902-01
3A10A2J1-B-J2-B	D	Connector	00779	552224-1
3A10A2J3	D	Header	22526	65626-172
3A16	B	AC Junction Box	97871	401-37231-01
3A16F1-F4	C	Fuse	81349	F02A250V3A
3A16J10-J12	C	Duplex Receptacle	74545	5000M9
3A16S1-S2	C	DPST Switch	27193	7560K6
3A16XF1-XF4	C	Indicator Fuse Holder	81349	FJL17G1
3A17	B	Blower Assembly	97871	401-37145-02
3A18	B	Thermal Sensor	97871	401-37216-02
3PS1	B	Power Supply Assembly	97871	401-36716-01
3PS1A1	C	Power Supply	53719	MM43-12Y2Y/115
3PS3	B	Power Supply Assembly	97871	401-36716-01
3PS3A1	C	Power Supply	53719	MM43-12Y2Y/115
3PS5	B	Power Supply Assembly	97871	401-36716-01
3PS5A1	C	Power Supply	53719	MM43-12Y2Y/115
3PS7	B	Power Supply Assembly	97871	401-36716-01
3PS7A1	C	Power Supply	53719	MM43-12Y2Y/115
3S1	B	DC Power Switch	97871	401-37916-01
3W1	B	Cable Assembly, +12V	97871	401-36715-01

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
3W2	B	Cable Assembly, -12V	97871	401-36715-03
3W3	B	Cable Assembly, +5V	97871	401-36715-05
3W4	B	Cable Assembly, A/C Supply	97871	401-36786-01
3W5	B	Cable Assembly, A/C Control	97871	401-36785-03
3W6	B	Cable Assembly, +12V	97871	401-36715-01
3W7	B	Cable Assembly, -12V	97871	401-36715-03
3W8	B	Cable Assembly, +5V	97871	401-36715-05
3W9	B	Cable Assembly, A/C Supply	97871	401-36786-01
3W10	B	Cable Assembly, A/C Control	97871	401-36785-03
3W11	B	Cable Assembly, +12V	97871	401-36715-01
3W12	B	Cable Assembly, -12V	97871	401-36715-03
3W13	B	Cable Assembly, +5V	97871	401-36715-05
3W14	B	Cable Assembly, A/C Supply	97871	401-36786-01
3W15	B	Cable Assembly, A/C Control	97871	401-36785-02
3W16	B	Cable Assembly, +12V	97871	401-36715-01
3W17	B	Cable Assembly, -12V	97871	401-36715-03
3W18	B	Cable Assembly, +5V	97871	401-36715-05
3W19	B	Cable Assembly, A/C Supply	97871	401-36786-01
3W20	B	Cable Assembly, A/C Control	97871	401-36785-01
3W21-3W22	B	Cable Assembly, Fan Power	97871	401-37241-01
W23, W25	B	Cable Assembly, DC Switch	97871	401-37927-01
3W27	B	Cable, Terminator Power	97871	401-37914-01
3W28-3W31	B	Cable Assy., Kybd. J-Box	97871	401-37927-01
3W32-3W35	B	Cable Assembly, OTF Bus	97871	401-37995-01
3W36-3W39	B	Cable Assembly, Video	97871	401-36797-01
3W40-3W43	B	Cable Assembly, OTF Bus	97871	401-37995-01
W901	B	Cable Assembly, Thermal Alarm	97871	401-37203-02
W902	B	Cable Assembly, Thermal Alarm	97871	401-37203-04
W903	B	Cable Assembly, Thermal Alarm	97871	401-37203-02
W904-W917	B	Cable Assembly, Digital Patch Panel	97871	401-37273-09
W921-W922, W924-W925	B	Cable Assembly, Digital Patch Panel	97871	401-37126-02
W930-W931	B	Cable Assembly, Disk Drive	15476	BC06R-06

Table 8-3. AWP Equipment Parts List
(Continued)

Reference Designator	Indent	Name of Part/Description	Mfrs. Code Number	Jan/Mil Mfrs. Part No.
W933	B	Cable Assembly, DMA	97871	401-37976-01
W934	B	Cable Assembly, DMA	97871	401-37979-01
W939	B	Cable Assembly, DMA	97871	401-37977-01
W940	B	Cable Assembly, DMA	97871	401-37980-01

SECTION 9

INSTALLATION, INTEGRATION, AND CHECKOUT

9.1 INTRODUCTION. - Refer to Section 7 of the Systems Instruction Book for the Model 1 Full Capacity Flight Service Automation System, 416-30172, for installation, integration, and checkout procedures for the M1FC FSAS System.

Section 7 of this manual provides removal and replacement procedures for all rack-mounted equipment used in the M1FC FSAS System. Refer to related equipment manuals (table 1-4) for removal and replacement procedures for equipment not rack-mounted in M1FC FSAS System.

SECTION 10

TROUBLESHOOTING SUPPORT DATA

10.1 MAINTENANCE DIAGRAMS. - This section contains cabling diagrams, power distribution diagrams, wire lists, schematic drawings, and printed circuit card illustrations for use as maintenance aids for the M1FC FSAS system. Table 10-1 provides an index for all illustrations provided in this section.

10.2 WIRING LISTS. - Wiring lists are provided in tables 10-2 through 10-5 for Type A and B Motherboards and Interconnect boards used on the backplane of the Position Processor, Communication Processor, and Memory Card Cage. Figure 10-1 shows the relationship between the wire lists and the motherboards and interconnect boards. An interconnect board connects motherboards and consists of only one block rather than four blocks as shown in Figure 10-1.

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Table 10-2. Motherboard Type "A" Wiring List, 401-36977

SIGNAL NAME	FROM	TO
/BIRQ5	1A-A1	1C-A1
/BIRQ6	1A-B1	1C-B1
/BDAL16	1A-C1	1C-C1
/BDAL17	1A-D1	1C-D1
/BDMR	1A-N1	1C-N1
/BHALT	1A-P1	1C-P1
/BREF	1A-R1	1C-R1
BDCOK	1B-A1	1D-A1
BPOK	1B-B1	1D-B1
/BSACK	1B-N1	1D-N1
/BIRQ7	1B-P1	1D-P1
/BEVNT	1B-R1	1D-R1
/BDOUT	1A-E2	1C-E2
/BRPLY	1A-F2	1C-F2
/BDIN	1A-H2	1C-H2
/BSYNC	1A-J2	1C-J2
/BWTBT	1A-K2	1C-K2
/BIRQ4	1A-L2	1C-L2
/BBS7	1A-P2	1C-P2
/BINIT	1A-T2	1C-T2
/BDAL0	1A-U2	1C-U2
/BDAL1	1A-V2	1C-V2
/BDAL2	1B-E2	1D-E2
/BDAL3	1B-F2	1D-F2
/BDAL4	1B-H2	1D-H2
/BDAL5	1B-J2	1D-J2
/BDA6	1B-K2	1D-K2
/BDAL7	1B-L2	1D-L2
/BDAL8	1B-M2	1D-M2
/BDAL9	1B-N2	1D-N2
/BDAL10	1B-P2	1D-P2
/BDAL11	1B-R2	1D-R2
/DAL12	1B-S2	1D-S2
/BDAL13	1B-T2	1D-T2
/BDAL14	1B-U2	1D-U2
/BDAL15	1B-V2	1D-V2
MSPAREA	1A-K1	1A-L1
MSPAREB	1B-K1	1B-L1
BIAKO/I	1A-N2	1C-M2
BDMGO/I	1A-S2	1C-R2
GND	1A-J1	1C-J1
GND	1A-M1	1C-M1
GND	1A-T1	1C-T1
+5B	1A-V1	1C-V1
GND	1B-J1	1D-J1
GND	1B-M1	1D-M1
GND	1B-T1	1D-T1

SIGNAL NAME	FROM	TO
+5	1B-V1	1D-V1
+5	1A-A2	1C-A2
-12	1A-B2	1C-B2
GND	1A-C2	1C-C2
+12	1A-D2	1C-D2
+5	1B-A2	1D-A2
-12	1B-B2	1D-B2
GND	1B-C2	1D-C2
+12	1B-D2	1D-D2
/BIRQ5	1C-A1	2C-A1
/BIRQ6	1C-B1	2C-B1
/BDAL16	1C-C1	2C-C1
/BDAL17	1C-D1	2C-D1
/BDMR	1C-N1	2C-N1
/BHALT	1C-P1	2C-P1
/BREF	1C-R1	2C-R1
BDCOK	1D-A1	2D-A1
BPOK	1D-B1	2D-B1
/BSACK	1D-N1	2D-N1
/BIRQ7	1D-P1	2D-P1
/BEVNT	1D-R1	2D-R1
/BDOUT	1C-E2	2C-E2
/BRPLY	1C-F2	2C-F2
/BDIN	1C-H2	2C-H2
/BSYNC	1C-J2	2C-J2
/BWTBT	1C-K2	2C-K2
/BIRQ4	1C-L2	2C-L2
/BBS7	1C-P2	2C-P2
/BINIT	1C-T2	2C-T2
/BDAL0	1C-U2	2C-U2
/BDAL1	IC-V2	2C-V2
/BDAL2	1D-E2	2D-E2
/BDAL3	1D-F2	2D-F2
/BDAL4	1D-H2	2D-H2
/BDAL5	1D-J2	2D-J2
/BDAL6	1D-K2	2D-K2
/BDAL7	1D-L2	2D-L2
/BDAL8	1D-M2	2D-M2
/BDAL9	1D-N2	2D-N2
/BDAL10	1D-P2	2D-P2
/BDAL11	1D-R2	2D-R2
/BDAL12	1D-S2	2D-S2
/BDAL13	1D-T2	2D-T2
/BDAL14	1D-U2	2D-U2
/BDAL15	1D-V2	2D-V2
MSPAREA	1C-K1	1C-L1
MSPAREB	1D-K1	1D-L1

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Table 10-2. Motherboard Type "A" Wiring List, 401-36977 (Continued)

SIGNAL NAME	FROM	TO
BIAKO/I	1C-N2	2C-M2
BDMGO/I	1C-S2	2C-R2
GND	1C-J1	2C-J1
GND	1C-M1	2C-M1
GND	1C-T1	2C-T1
+5B	1C-V1	2C-V1
GND	1D-J1	2D-J1
GND	1D-M1	2D-M1
GND	1D-T1	2D-T1
+5	1D-V1	2D-V1
+5	1C-A2	2C-A2
-12	1C-B2	2C-B2
GND	1C-C2	2C-C2
+12	1C-D2	2C-D2
+5	1D-A2	2D-A2
-12	1D-B2	2D-B2
GND	1D-C2	2D-C2
+12	1D-D2	2D-D2
/BIRQ5	2C-A1	2A-A1
/BIRQ6	2C-B1	2A-B1
/BDAL16	2C-C1	2A-C1
/BDAL17	2C-D1	2A-D1
/BDMR	2C-N1	2A-N1
/BHALT	2C-P1	2A-P1
/BREF	2C-R1	2A-R1
BDCOK	2D-A1	2B-A1
BPOK	2D-B1	2B-B1
/BSACK	2D-N1	2B-N1
BIRQ7	2D-P1	2B-P1
/BEVNT	2D-R1	2B-R1
/BDOUT	2C-E2	2A-E2
/BRPLY	2C-F2	2A-F2
/BDIN	2C-H2	2A-H2
/BSYNC	2C-J2	2A-J2
/BWTBT	2C-K2	2A-K2
/BIRQ4	2C-L2	2A-L2
/BBS7	2C-P2	2A-P2
/BINIT	2C-T2	2A-T2
/BDAL0	2C-U2	2A-U2
/BDAL1	2C-V2	2A-V2
/BDAL2	2D-E2	2B-E2
/BDAL3	2D-F2	2B-F2
/BDAL4	2D-H2	2B-H2
/BDAL5	2D-J2	2B-J2
/BDAL6	2D-K2	2B-K2
/BDAL7	2D-L2	2B-L2
/BDAL8	2D-M2	2B-M2
/BDAL9	2D-N2	2B-N2

SIGNAL NAME	FROM	TO
/BDAL10	2D-P2	2B-P2
/BDAL11	2D-R2	2B-R2
/BDAL12	2D-S2	2B-S2
/BDAL13	2D-T2	2B-T2
/BDAL14	2D-U2	2B-U2
/BDAL15	2D-V2	2B-V2
MSPAREA	2C-K1	2C-L1
MSPAREB	2D-K1	2D-L1
BIAKO/I	2C-N2	2A-M2
BDMGO/I	2C-S2	2A-R2
MSPAREA	2A-K1	2A-L1
MSPAREB	2B-K1	2B-L1
GND	2C-J1	2A-J1
GND	2C-M1	2A-M1
GND	2C-T1	2A-T1
+5B	2C-V1	2A-V1
GND	2D-J1	2B-J1
GND	2D-M1	2B-M1
GND	2D-T1	2B-T1
+5	2D-V1	2B-V1
+5	2C-A2	2A-A2
-12	2C-B2	2A-B2
GND	2C-C2	2A-C2
+12	2C-D2	2A-D2
+5	2D-A2	2B-A2
-12	2D-B2	2B-B2
GND	2D-C2	2B-C2
+12	2D-D2	2B-D2
/BIRQ5	3A-A1	3C-A1
/BIRQ6	3A-B1	3C-B1
/BDAL16	3A-C1	3C-C1
/BDAL17	3A-D1	3C-D1
/BDMR	3A-N1	3C-N1
/BHALT	3A-P1	3C-P1
/BREF	3A-R1	3C-R1
BDCOK	3B-A1	3D-A1
BPOK	3B-B1	3D-B1
/BSACK	3B-N1	3D-N1
/BIRQ7	3B-P1	3D-P1
/BEVNT	3B-R1	3D-R1
/BDOUT	3A-E2	3C-E2
/BRPLY	3A-F2	3C-F2
/BDIN	3A-H2	3C-H2
/BSYNC	3A-J2	3C-J2
/BWTBT	3A-K2	3C-K2
/BIRQ4	3A-L2	3C-L2
/BBS7	3A-P2	3C-P2
/BINIT	3A-T2	3C-T2

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Table 10-2. Motherboard Type "A" Wiring List, 401-36977 (Continued)

SIGNAL NAME	FROM	TO
/BDAL0	3A-U2	3C-U2
/BDAL1	3A-V2	3C-V2
/BDAL2	3B-E2	3D-E2
/BDAL3	3B-F2	3D-F2
/BDAL4	3B-H2	3D-H2
/BDAL5	3B-J2	3D-J2
/BDAL6	3B-K2	3D-K2
/BDAL7	3B-L2	3D-L2
/BDAL8	3B-M2	3D-M2
/BDAL9	3B-N2	3D-N2
/BDAL10	3B-P2	3D-P2
/BDAL11	3B-R2	3D-R2
/BDAL12	3B-S2	3D-S2
/BDAL13	3B-T2	3D-T2
/BDAL14	3B-U2	3D-U2
/BDAL15	3B-V2	3D-V2
MSPAREA	3A-K1	3A-L1
MSPAREB	3B-K1	3B-L1
BIAGO/I	3A-N2	3C-M2
BDMGO/I	3A-S2	3C-R2
GND	3A-J1	3C-J1
GND	3A-M1	3C-M1
GND	3A-T1	3C-T1
+5B	3A-V1	3C-V1
GND	3B-J1	3D-J1
GND	3B-M1	3D-M1
GND	3B-T1	3D-T1
+5	3B-V1	3D-V1
+5	3A-A2	3C-A2
-12	3A-B2	3C-B2
GND	3A-C2	3C-C2
+12	3A-D2	3C-D2
+5	3B-A2	3D-A2
-12	3B-B2	3D-B2
GND	3B-C2	3D-C2
+12	3B-D2	3D-D2
/BIRQ5	3C-A1	4C-A1
/BIRQ6	3C-B1	4C-B1
/BDAL16	3C-C1	4C-C1
/BDAL17	3C-D1	4C-D1
/BDMR	3C-N1	4C-N1
/BHALT	3C-P1	4C-P1
/BREF	3C-R1	4C-R1
BDCOK	3D-A1	4D-A1
BPOK	3D-B1	4D-B1
/BSACK	3D-N1	4D-N1
BIRQ7	3D-P1	4D-P1
/BEVNT	3D-R1	4D-R1

SIGNAL NAME	FROM	TO
/BDOUT	3C-E2	4C-E2
/BRPLY	3C-F2	4C-F2
/BDIN	3C-H2	4C-H2
/BSYNC	3C-J2	4C-J2
/BWTBT	3C-K2	4C-K2
/BIRQ4	3C-L2	4C-L2
/BBS7	3C-P2	4C-P2
/BINIT	3C-T2	4C-T2
/BDAL0	3C-U2	4C-U2
/BDAL1	3C-V2	4C-V2
/BDAL2	3D-E2	4D-E2
/BDAL3	3D-F2	4D-F2
/BDAL4	3D-H2	4D-H2
/BDAL5	3D-J2	4D-J2
/BDAL6	3D-K2	4D-K2
/BDAL7	3D-L2	4D-L2
/BDAL8	3D-M2	4D-M2
/BDAL9	3D-N2	4D-N2
/BDAL10	3D-P2	4D-P2
/BDAL11	3D-R2	4D-R2
/BDAL12	3D-S2	4D-S2
/BDAL13	3D-T2	4D-T2
/BDAL14	3D-U2	4D-U2
/BDAL15	3D-V2	4D-V2
MSPAREA	3C-K1	3C-L1
MSPAREB	3D-K1	3D-L1
BIAKO/I	3C-N2	4C-M2
BIAKO/I	3C-N2	4C-M2
BDMGO/I	3C-S2	4C-R2
GND	3C-J1	4C-J1
GND	3C-M1	4C-M1
GND	3C-T1	4C-TI
+5B	3C-V1	4C-V1
GND	3D-J1	4D-J1
GND	3D-MI	4D-M1
GND	3D-T1	4D-T1
+5	3D-V1	4D-V1
+5	3C-A2	4C-A2
-12	3C-B2	4C-B2
GND	3C-C2	4C-C2
+12	3C-D2	4C-D2
+5	3D-A2	4D-A2
-12	3D-B2	4D-B2
GND	3D-C2	4D-C2
+12	3D-D2	4D-D2
/BIRQ5	4C-A1	4A-A1
/BIRQ6	4C-B1	4A-B1
/BDAL16	4C-C1	4A-C1

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Table 10-2. Motherboard Type "A" Wiring List, 401-36977 (Continued)

SIGNAL NAME	FROM	TO
/BDAL17	4C-D1	4A-D1
/BDMR	4C-N1	4A-N1
/BHALT	4C-P1	4A-P1
/BREF	4C-R1	4A-R1
BDCOK	4D-A1	4B-A1
BPOK	4D-B1	4B-B1
/BSACK	4D-N1	4B-N1
/BIRQ7	4D-P1	4B-P1
/BEVNT	4D-R1	4B-R1
/BDOUT	4C-E2	4A-E2
/BRPLY	4C-F2	4A-F2
/BDIN	4C-H2	4A-H2
/BSYNC	4C-J2	4A-J2
/BWTBT	4C-K2	4A-K2
/BIRQ4	4C-L2	4A-L2
/BBS7	4C-P2	4A-P2
/BINIT	4C-T2	4A-T2
/BDAL0	4C-U2	4A-U2
/BDAL1	4C-V2	4A-V2
/BDAL2	4D-E2	4B-E2
/BDAL3	4D-F2	4B-F2
/BDAL4	4D-H2	4B-H2
/BDAL5	4D-J2	4B-J2
/BDAL6	4D-K2	4B-K2
/BDAL7	4D-L2	4B-L2
/BDAL8	4D-M2	4B-M2
/BDAL9	4D-N2	4B-N2
/BDAL10	4D-P2	4B-P2
/BDAL11	4D-R2	4B-R2
/BDAL12	4D-S2	4B-S2
/BDAL13	4D-T2	4B-T2
/BDAL14	4D-U2	4B-U2
/BDAL15	4D-V2	4B-V2
MSPAREA	4C-K1	4C-L1
MSPAREB	4D-K1	4D-L1
BIAKO/I	4C-N2	4A-M2
BDMGO/I	4C-S2	4A-R2
MSPAREA	4A-K1	4A-L1
MSPAREB	4B-K1	4B-L1
GND	4C-J1	4A-J1
GND	4C-M1	4A-M1
GND	4C-T1	4A-T1
+5B	4C-V1	4A-V1
GND	4D-J1	4B-J1
GND	4D-M1	4B-M1
GND	4D-T1	4B-T1
+5	4D-V1	4B-V1
+5	4C-A2	4A-A2
-12	4C-B2	4A-B2
GND	4C-C2	4A-C2
+12	4C-D2	4A-D2
+5	4D-A2	4B-A2
-12	4D-B2	4B-B2
GND	4D-C2	4B-C2
+12	4D-D2	4B-D2

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Table 10-3. Motherboard Type "B" Wiring List, 401-36978

SIGNAL NAME	FROM	TO
GND	1A-J1	1C-J1
GND	1A-M1	1C-M1
GND	1A-T1	1C-T1
+5B	1A-V1	1C-V1
GND	1B-J1	1D-J1
GND	1B-M1	1D-M1
GND	1B-T1	1D-T1
+5	1B-V1	1D-V1
+5	1A-A2	1C-A2
-12	1A-B2	1C-B2
GND	1A-C2	1C-C2
+12	1A-D2	1C-D2
+5	1B-A2	1D-A2
-12	1B-B2	1D-B2
GND	1B-C2	1D-C2
+12	1B-D2	1D-D2
GND	1C-J1	2C-J1
GND	1C-M1	2C-M1
GND	1C-T1	2C-T1
+5B	1C-V1	2C-V1
GND	1D-J1	2D-J1
GND	1D-M1	2D-M1
GND	1D-T1	2D-T1
+5	1D-V1	2D-V1
+5	1C-A2	2C-A2
-12	1C-B2	2C-B2
GND	1C-C2	2C-C2
+12	1C-D2	2C-D2
+5	1D-A2	2D-A2
-12	1D-B2	2D-B2
GND	1D-C2	2D-C2
+12	1D-D2	2D-D2
GND	2C-J1	2A-J1
GND	2C-M1	2A-M1
GND	2C-T1	2A-T1
+5B	2C-V1	2A-V1
GND	2D-J1	2B-J1
GND	2D-MI	2B-M1
GND	2D-T1	2B-T1
+5	2D-V1	2B-V1
+5	2C-A2	2A-A2
-12	2C-B2	2A-B2
GND	2C-C2	2A-C2
+12	2C-D2	2A-D2
+5	2D-A2	2B-A2
-12	2D-B2	2B-B2
GND	2D-C2	2B-C2
+12	2D-D2	2B-D2

SIGNAL NAME	FROM	TO
GND	3C-J1	4C-J1
GND	3C-M1	4C-M1
GND	3C-T1	4C-T1
+5B	3C-V1	4C-V1
GND	3D-J1	4D-J1
GND	3D-M1	4D-M1
GND	3D-T1	4D-T1
+5	3D-V1	4D-V1
+5	3C-A2	4C-A2
-12	3C-B2	4C-B2
GND	3C-C2	4C-C2
+12	3C-D2	4C-D2
+5	3D-A2	4D-A2
-12	3D-B2	4D-B2
GND	3D-C2	4D-C2
+12	3D-C2	4D-D2
GND	3A-J1	3C-J1
GND	3A-M1	3C-M1
GND	3A-T1	3C-T1
+5B	3A-V1	3C-V1
GND	3B-J1	3D-J1
GND	3B-M1	3D-M1
GND	3B-T1	3D-T1
+5	3B-V1	3D-V1
+5	3A-A2	3C-A2
-12	3A-B2	3C-B2
GND	3A-C2	3C-C2
+12	3A-D2	3C-D2
+5	3B-A2	3D-A2
-12	3B-B2	3D-B2
GND	3B-C2	3D-C2
+12	3B-D2	3D-D2
GND	4C-J1	4A-J1
GND	4C-M1	4A-M1
GND	4C-T1	4A-T1
+5B	4C-V1	4A-V1
GND	4D-J1	4B-J1
GND	4D-M1	4B-M1
GND	4D-T1	4B-T1
+5	4D-V1	4B-V1
+5	4C-A2	4A-A2
-12	4C-B2	4A-B2
GND	4C-C2	4A-C2
+12	4C-D2	4A-D2
+5	4D-A2	4B-A2
-12	4D-B2	4B-B2
GND	4D-C2	4B-C2
+12	4D-D2	4B-D2

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Table 10-4. Interconnect Type "A" Wire List, 401-36954

SIGNAL NAME	FROM	TO
/BIRQ5	4A-A1	IC-A1
/BIRQ6	4A-B1	IC-B1
/BDAL16	4A-C1	IC-C1
/BDAL17	4A-D1	IC-D1
/BDMR	4A-N1	IC-N1
/BHALT	4A-P1	IC-P1
/BREF	4A-R1	IC-R1
BDCOK	4B-A1	ID-A1
BPOK	4B-B1	ID-B1
/BSACK	4B-N1	ID-N1
/BIRQ7	4B-P1	ID-P1
/BEVNT	4B-R1	ID-R1
/BDOUT	4A-E2	IC-E2
/BRPLY	4A-F2	IC-F2
/BDIN	4A-H2	IC-H2
/BSYNC	4A-J2	IC-J2
/BWTBT	4A-K2	IC-K2
/BIRQ4	4A-L2	IC-L2
/BBS7	4A-P2	IC-P2
/BINIT	4A-T2	IC-T2
/BDAL0	4A-U2	IC-U2
/BDAL1	4A-V2	IC-V2
/BDAL2	4B-E2	ID-E2
/BDAL3	4B-F2	ID-F2
/BDAL4	4B-H2	ID-H2
/BDAL5	4B-J2	ID-J2
/BDAL6	4B-K2	ID-K2
/BDAL7	4B-L2	ID-L2
/BDAL8	4B-M2	ID-M2
/BDAL9	4B-N2	ID-N2
/BDAL10	4B-P2	ID-P2
/BDAL11	4B-R2	ID-R2
/BDAL12	4B-S2	ID-S2
/BDAL13	4B-T2	ID-T2
/BDAL14	4B-U2	ID-U2
/BDAL15	4B-V2	ID-V2
BIAKO/I	4A-N2	IC-M2
BDMGO/I	4A-S2	IC-R2
GND	4A-J1	IC-J1
GND	4A-M1	IC-M1
GND	4A-T1	IC-T1
+5B	4A-V1	IC-V1
GND	4B-J1	ID-J1
GND	4B-M1	ID-M1

SIGNAL NAME	FROM	TO
GND	4B-T1	ID-T1
+5	4B-V1	ID-V1
+5	4A-A2	IC-A2
-12	4A-B2	IC-B2
GND	4A-C2	IC-C2
+12	4A-D2	IC-D2
+5	4B-A2	ID-A2
-12	4B-B2	ID-B2
GND	4B-C2	ID-C2
+12	4B-D2	ID-D2

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Table 10-5. Interconnect Type "B" Wire List, 401-36959

SIGNAL NAME	FROM	TO
GND	4A-J1	IC-J1
GND	4A-M1	IC-M1
GND	4A-T1	IC-T1
+5B	4A-V1	IC-V1
GND	4B-J1	ID-J1
GND	4B-M1	ID-M1
GND	4B-T1	ID-T1
+5	4B-V1	ID-V1
+5	4A-A2	IC-A2
-12	4A-B2	IC-B2
GND	4A-C2	IC-C2
+12	4A-D2	IC-D2
+5	4B-A2	ID-A2
-12	4B-B2	ID-B2
GND	4B-C2	ID-C2
+12	4B-D2	ID-D2

SIGNAL NAME	FROM	TO

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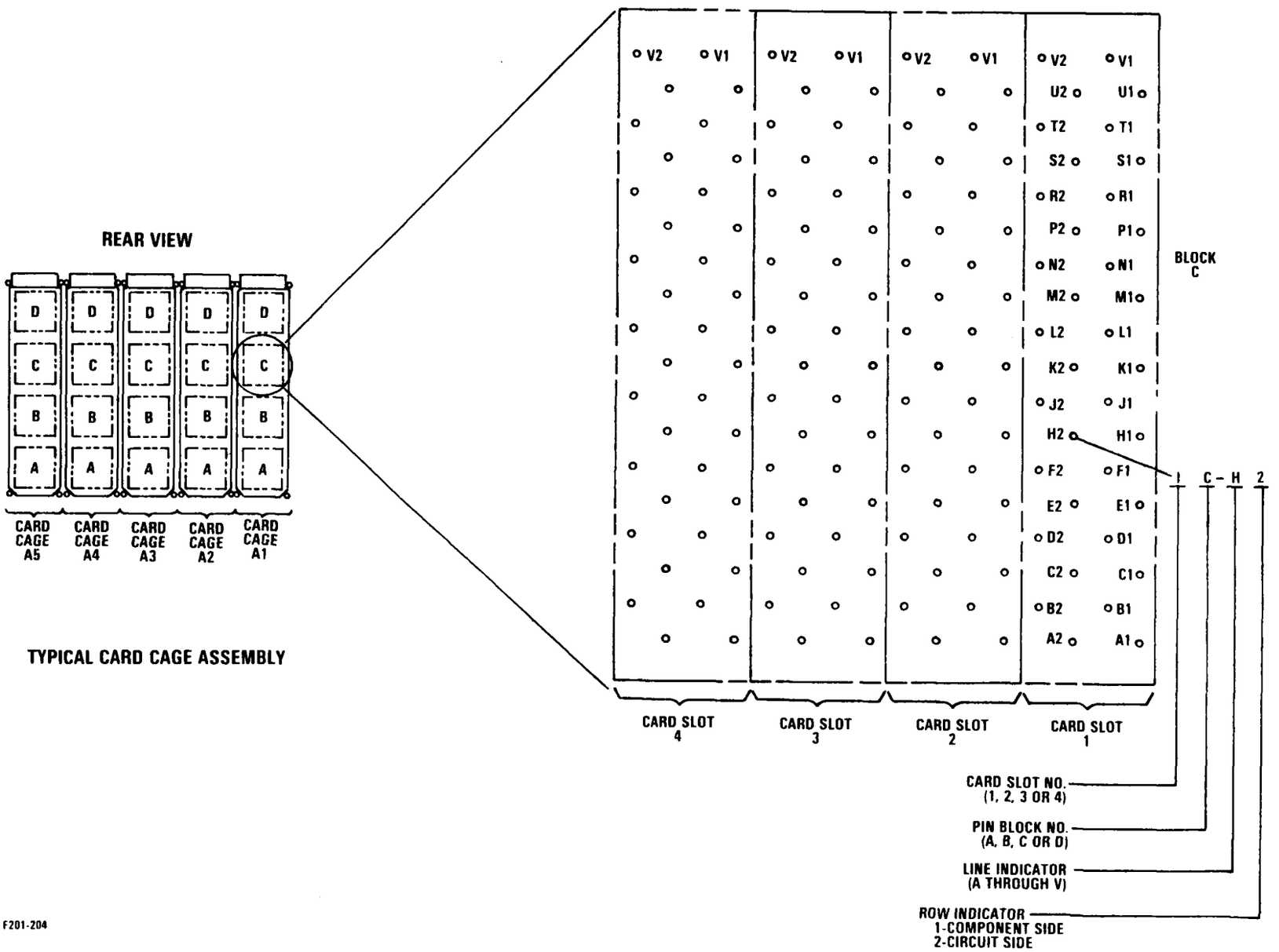
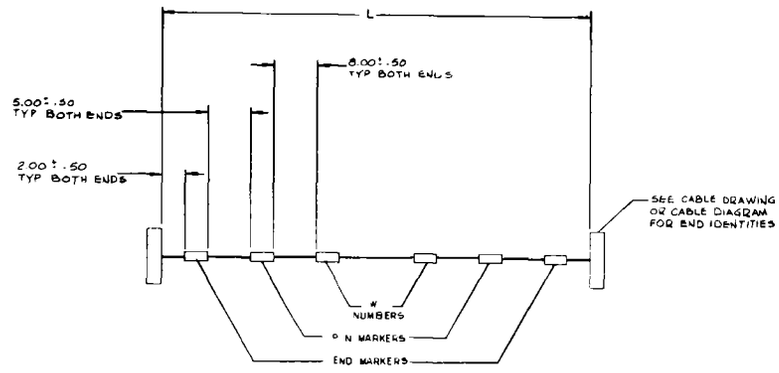


Figure 10-1. Motherboard A and B/ Interconnect A and B Pin Location Diagram

NOTES:

1. W1 THROUGH W99 REFERENCE DESIGNATORS ARE ABBREVIATED. PREFIX REF DES WITH APPLICABLE UNIT NUMBER.
2. ASSEMBLE PER SPEC 408-0016. WORKMANSHIP PER APPLICABLE PORTIONS OF SPEC 416-29030.
3. REFER TO DRAWING NUMBER SHOWN FOR FURTHER HOOK UP INFORMATION.



TYPICAL CABLE MARKING

Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 1 of 13)

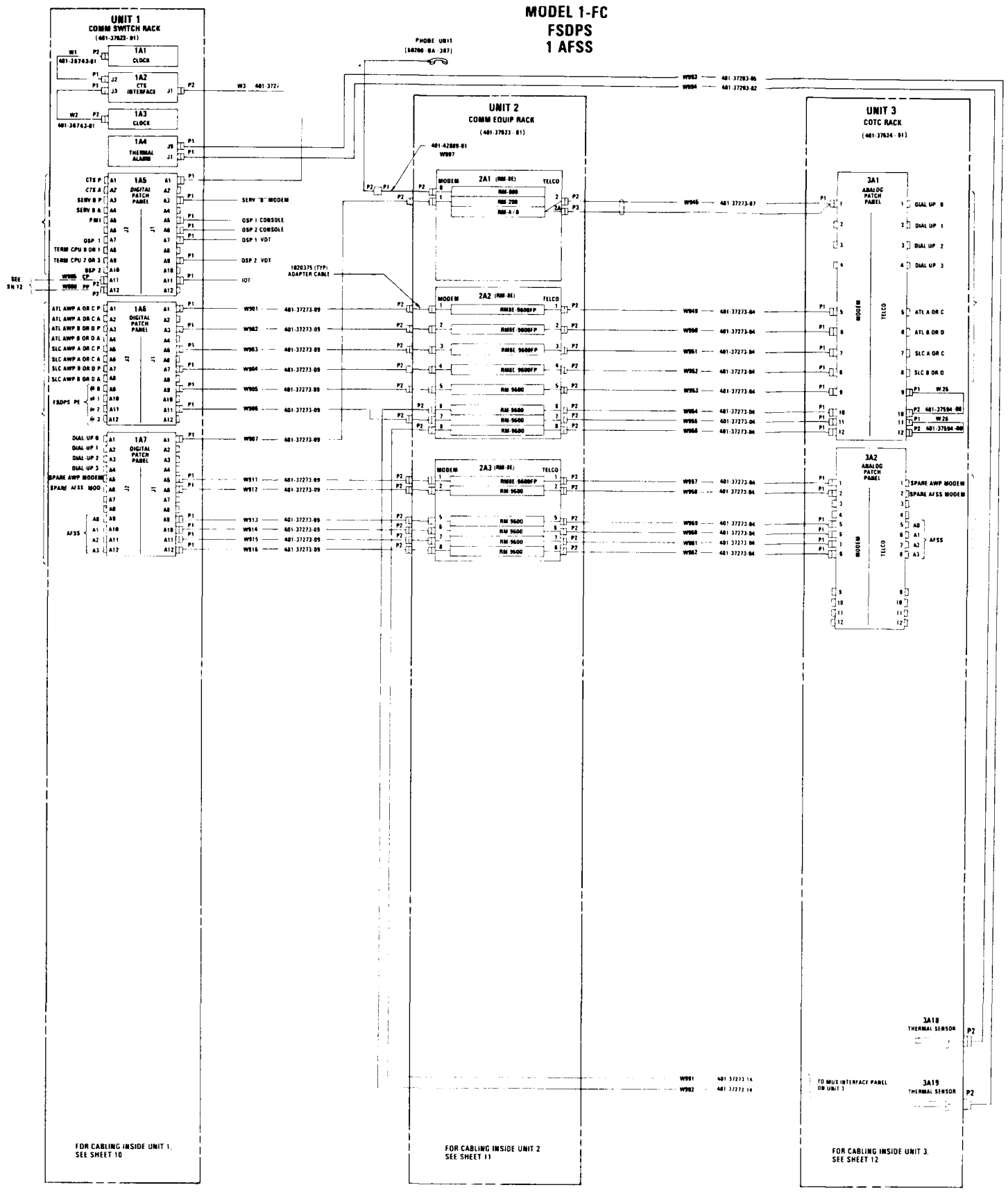


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 2 of 13)

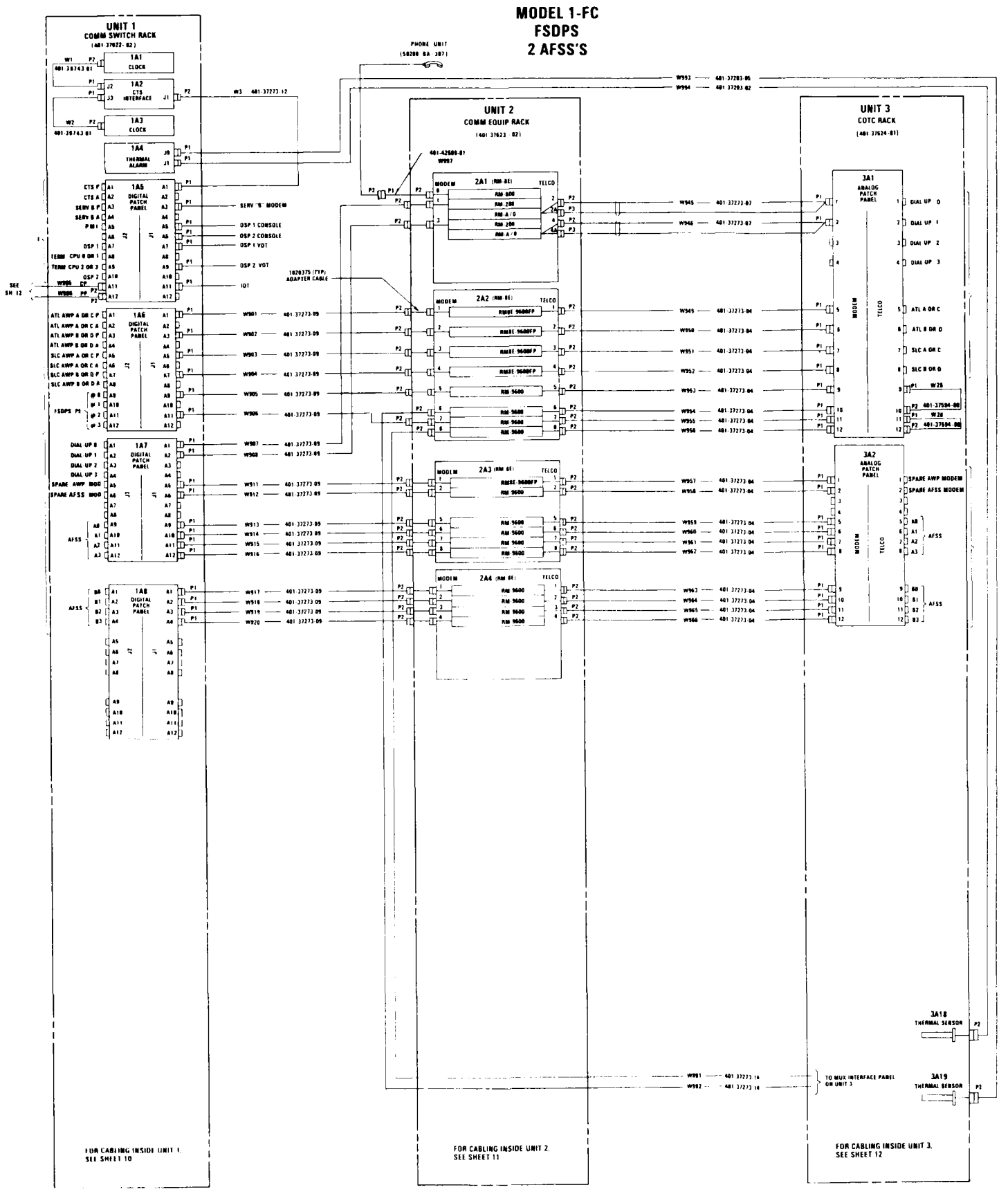


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 3 of 13)

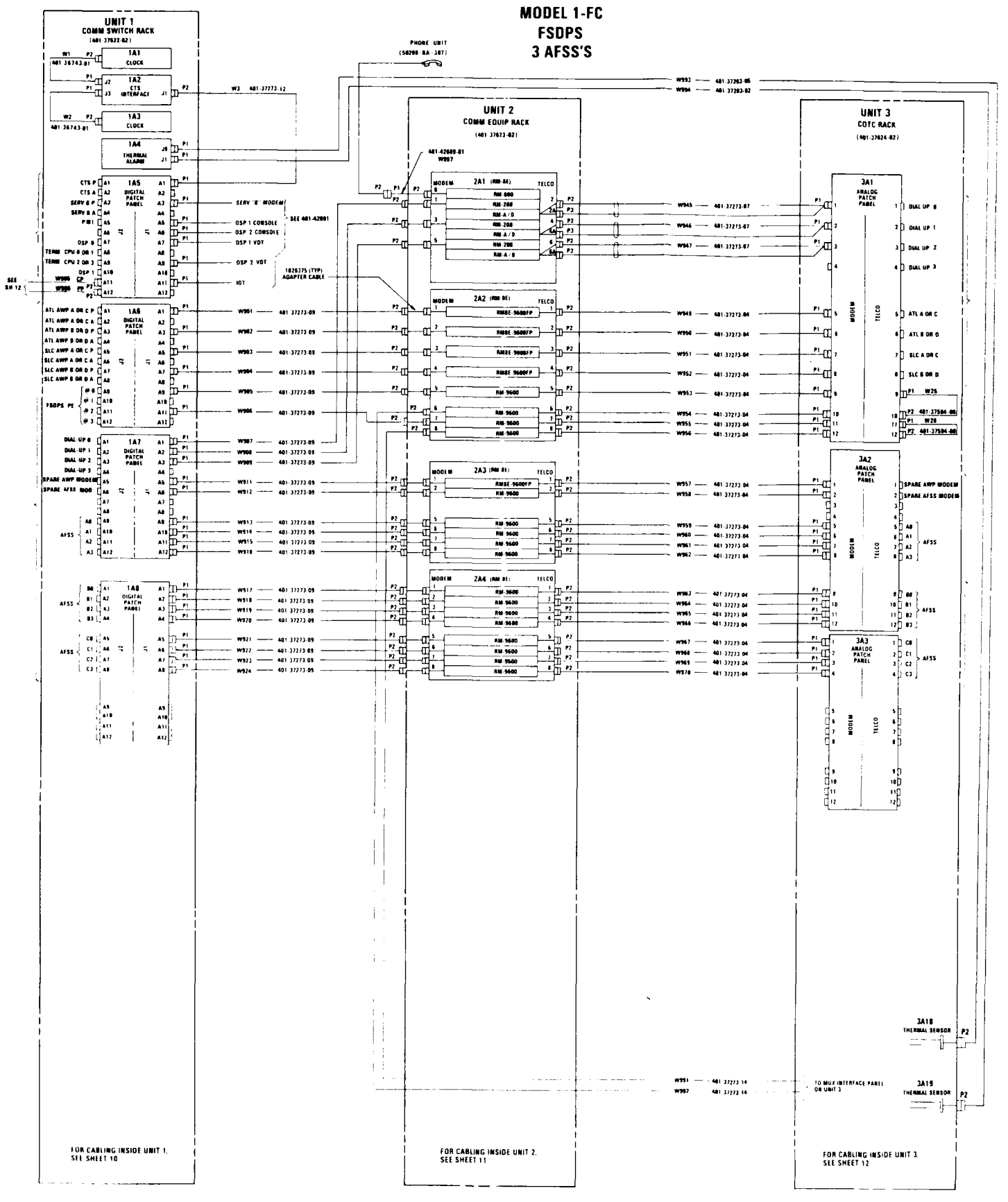


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 4 of 13)

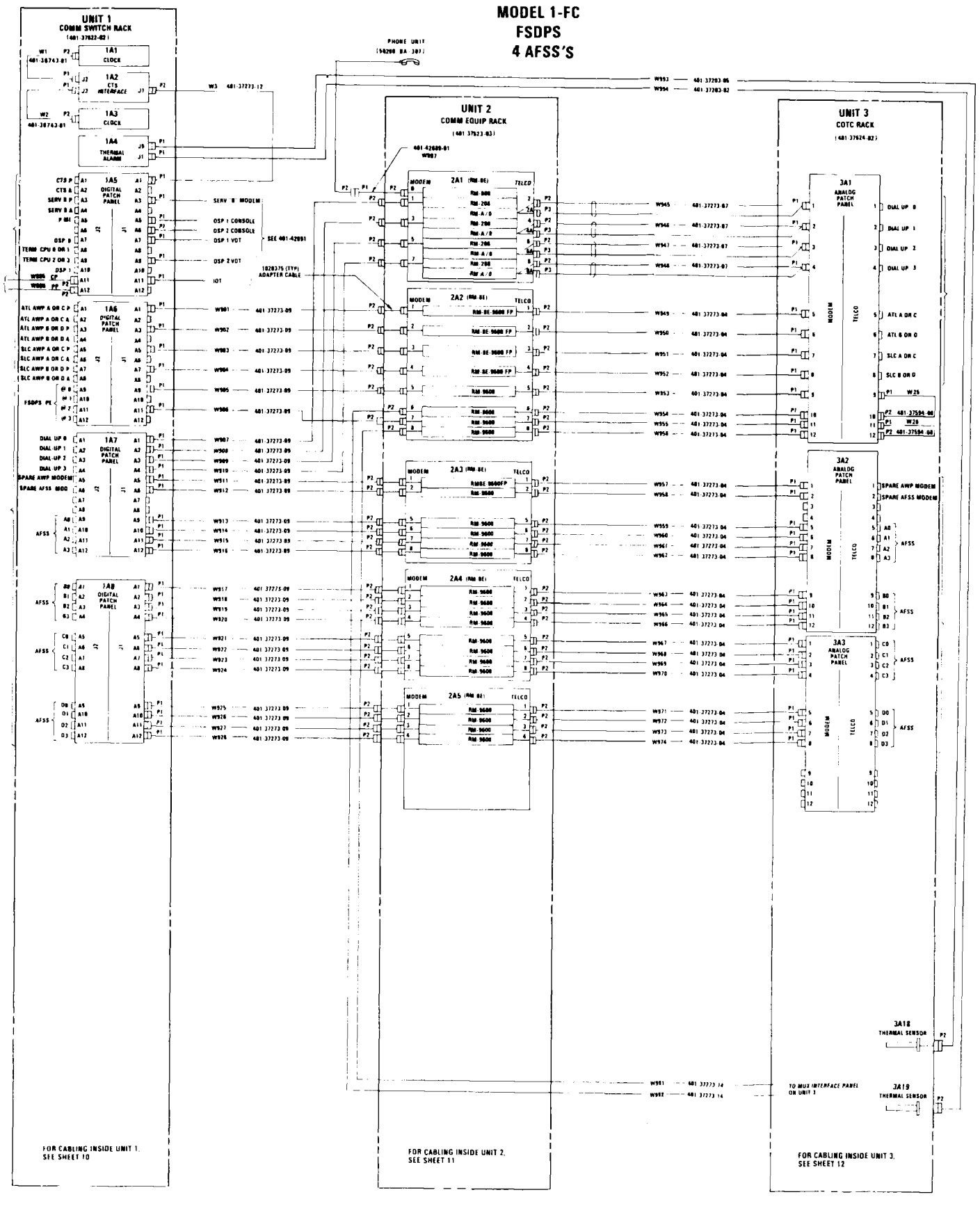


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 5 of 13)

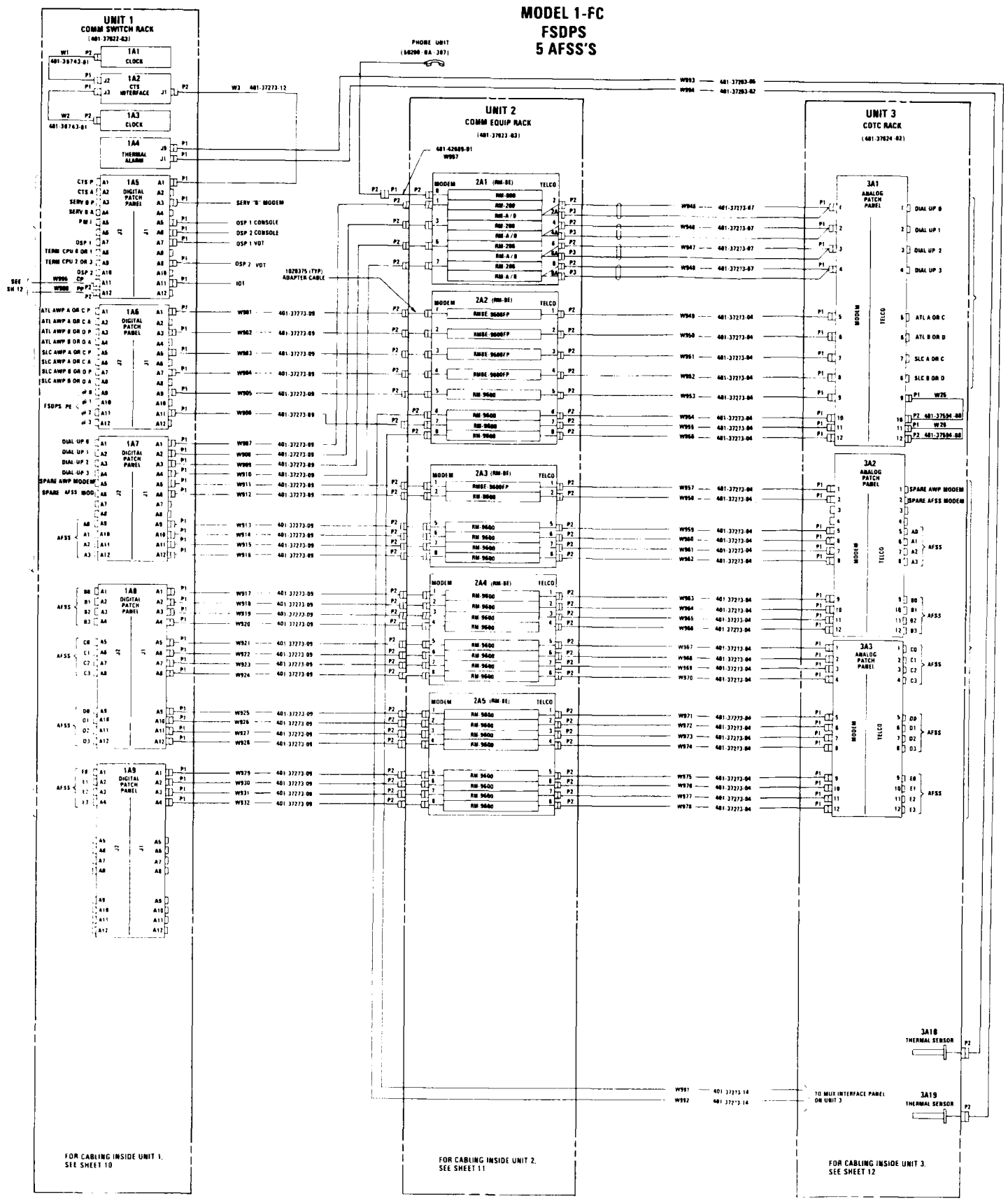


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 6 of 13)

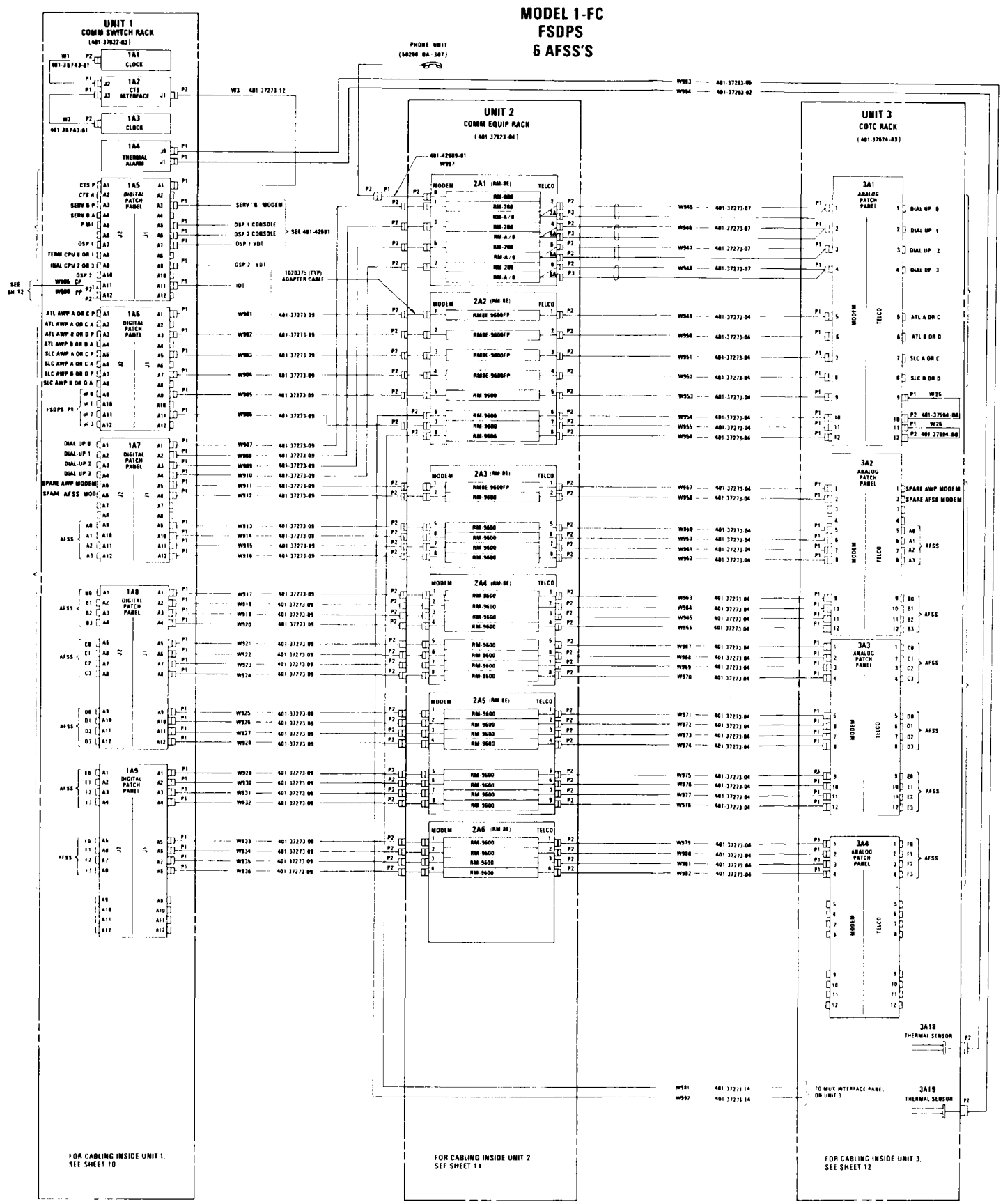


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 7 of 13)

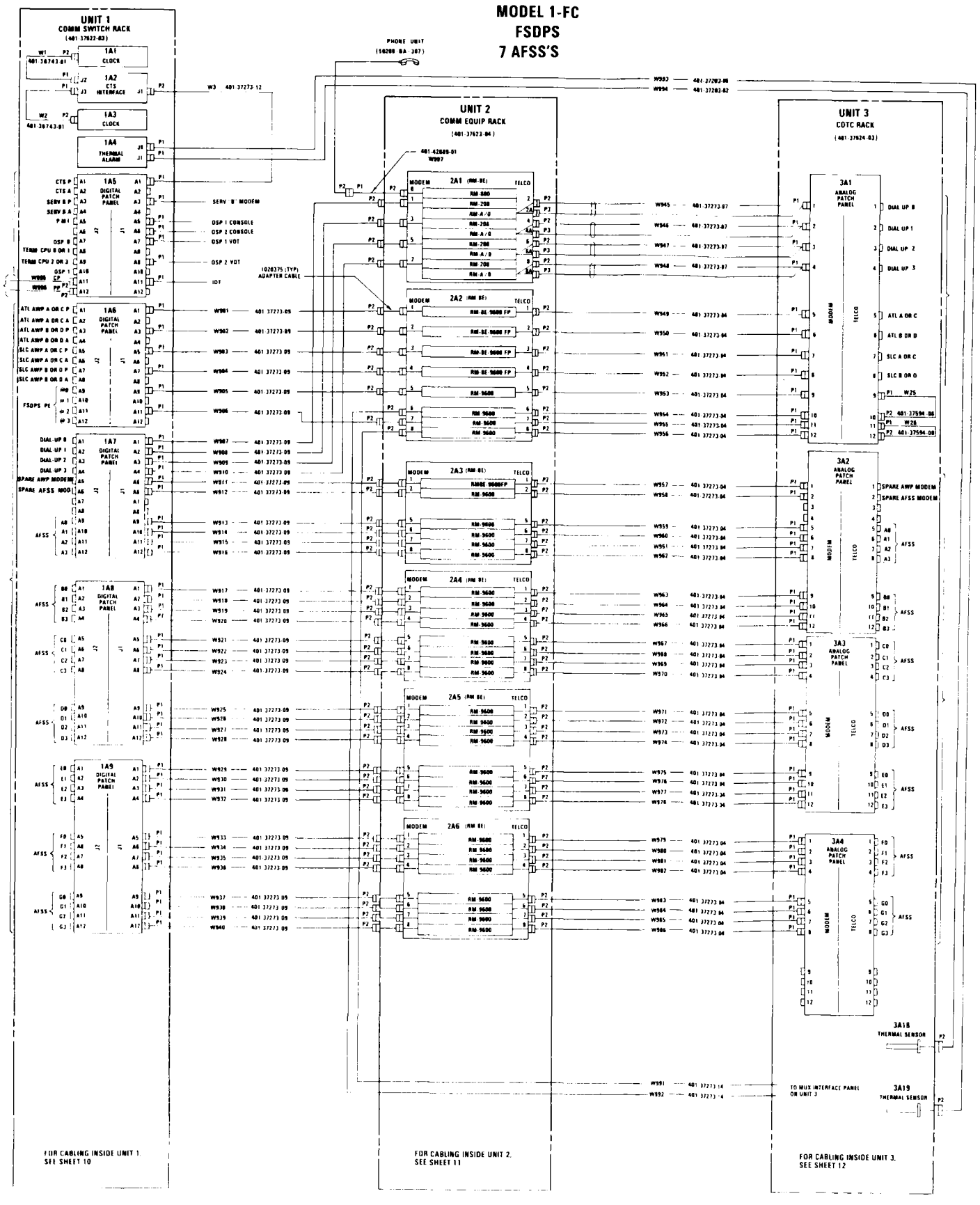


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 8 of 13)

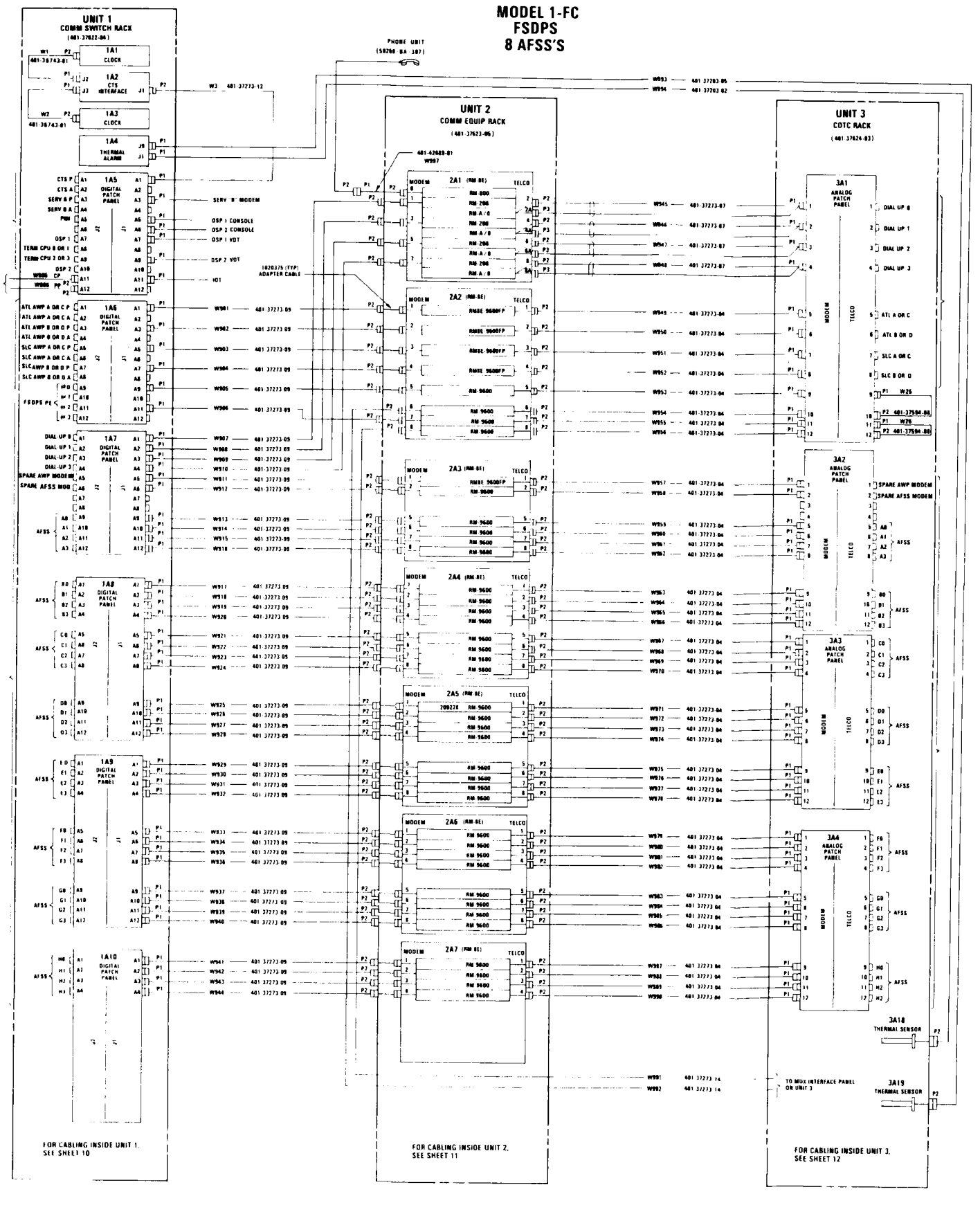


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 9 of 13)

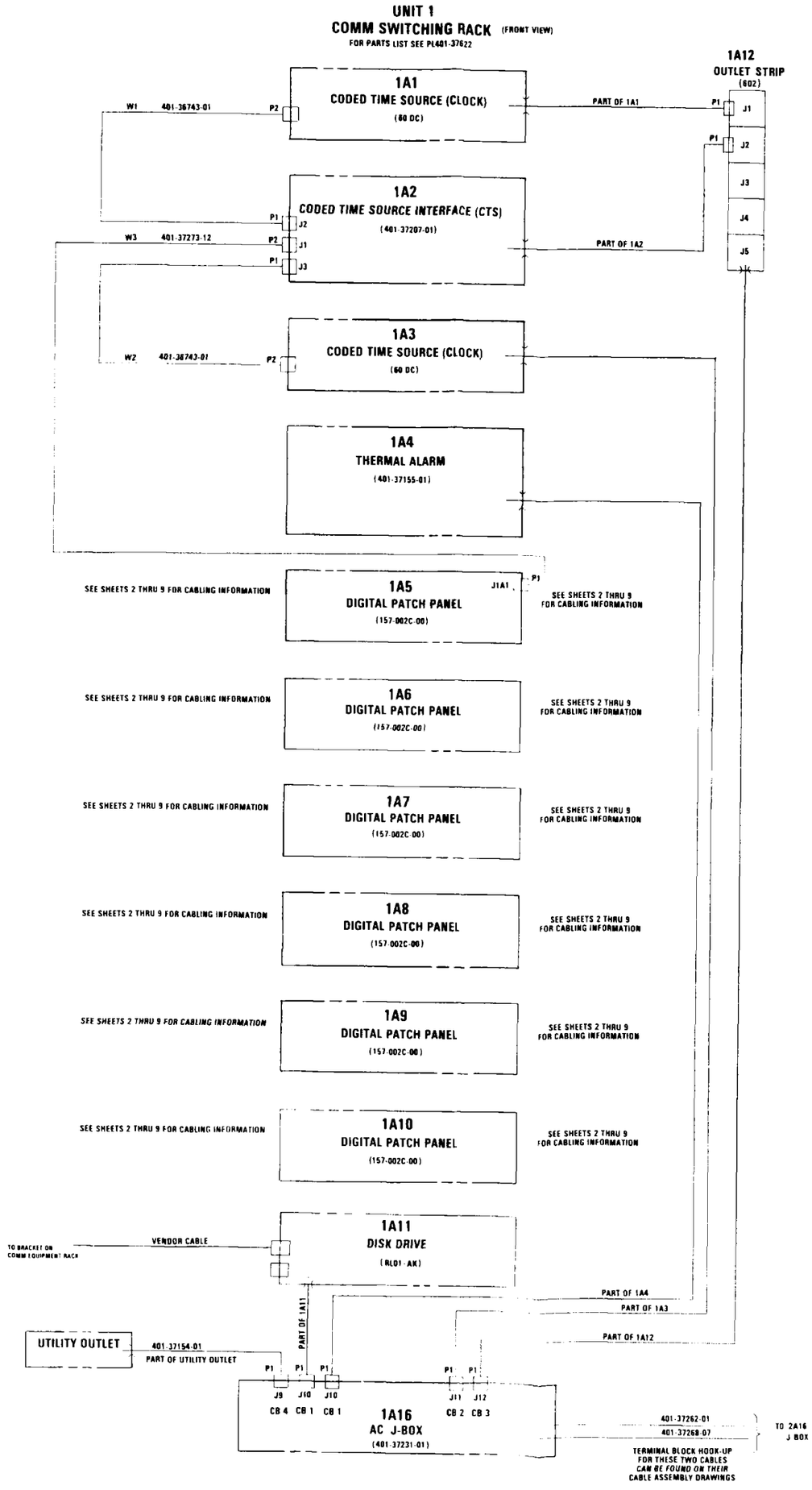


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 10 of 13)

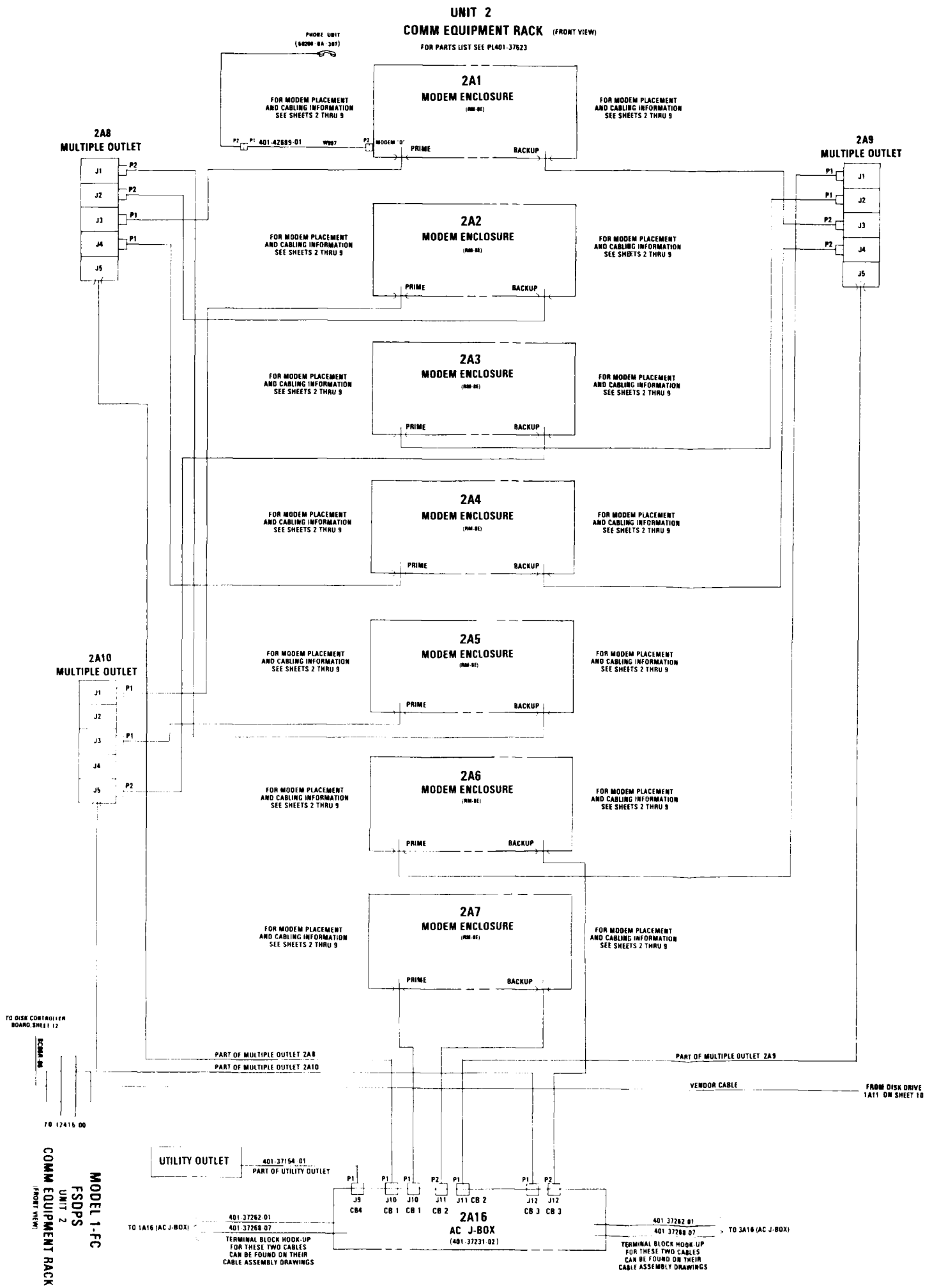


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 11 of 13)

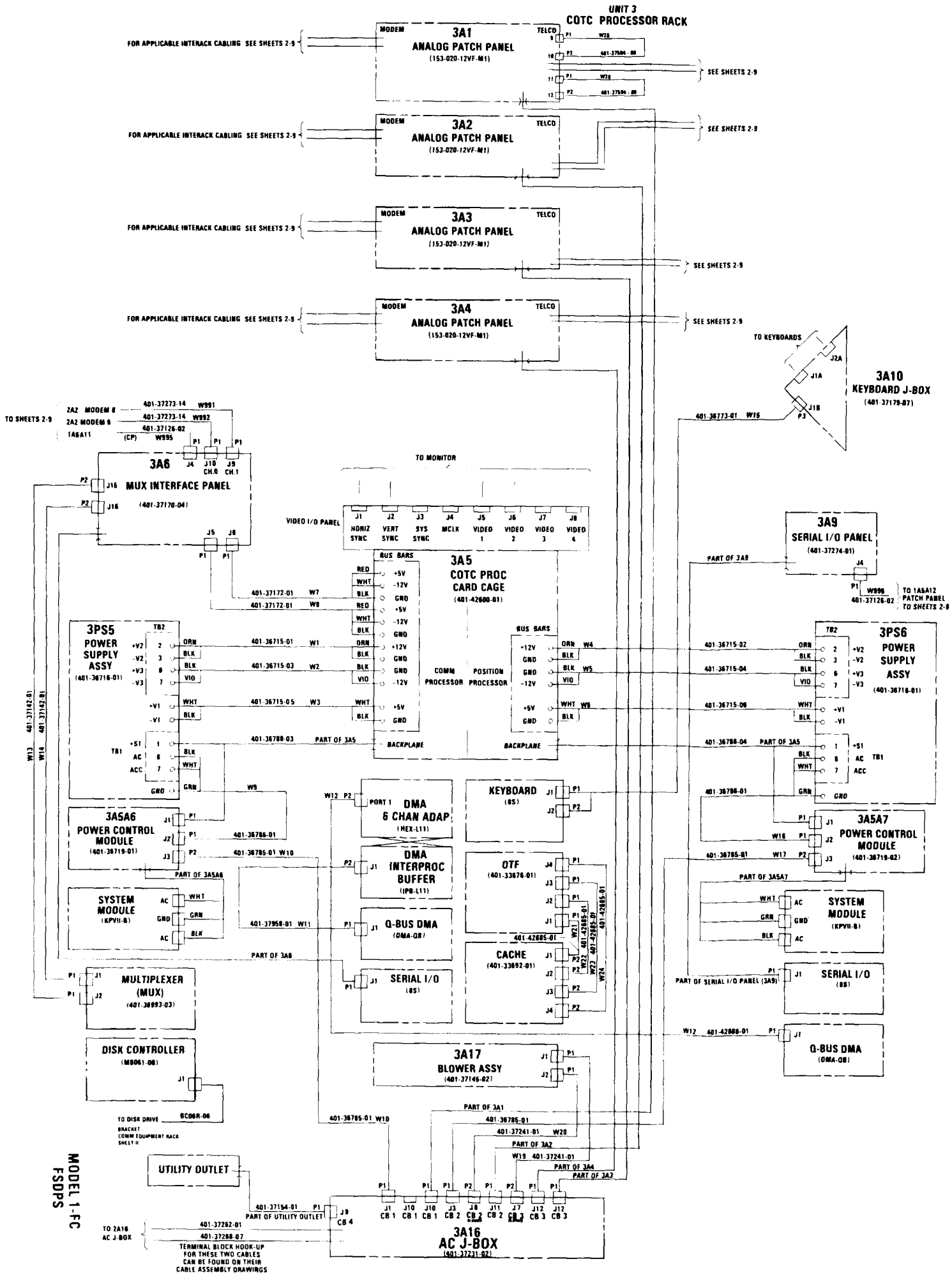


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 12 of 13)

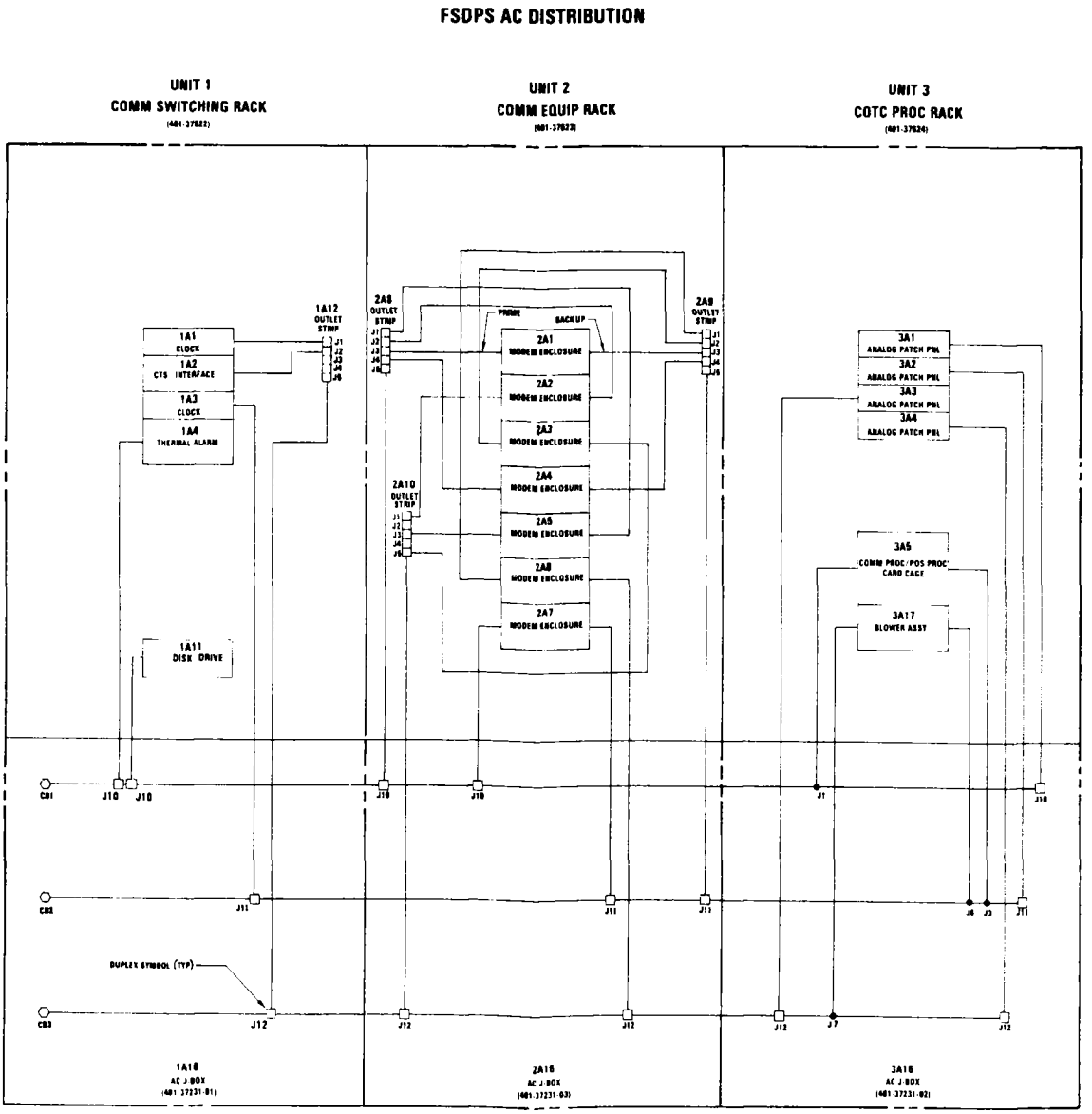
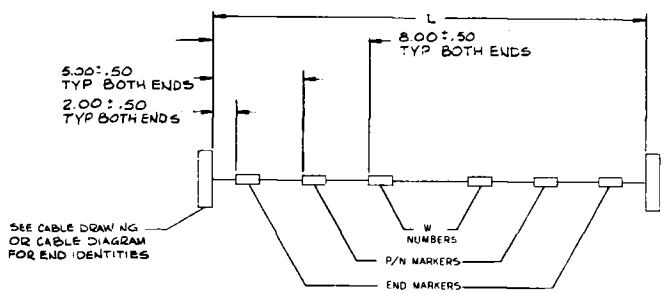


Figure 10-2. M1FC FSDPS Cabling Diagram (Sheet 13 of 13)

NOTES:

1. W1 THROUGH W99 CABLE REFERENCE DESIGNATORS ARE ABBREVIATED. PREFIX WITH APPLICABLE UNIT NUMBER.
2. ASSEMBLE PER SPEC 408-00146. WORKMANSHIP PER APPLICABLE PORTIONS OF SPEC 416-29030
3. REFERENCE DEC SUBSYSTEM USERS GUIDE EK-RL012-UG-004 FOR FURTHER HOOK UP INFORMATION.
4. REFER TO DRAWING NUMBER SHOWN FOR MORE COMPLETE HOOK UP INFORMATION.



TYPICAL CABLE MARKING
UNLESS OTHERWISE SPECIFIED

Figure 10-3. M1FC AWP Cabling Diagram (Sheet 1 of 5)

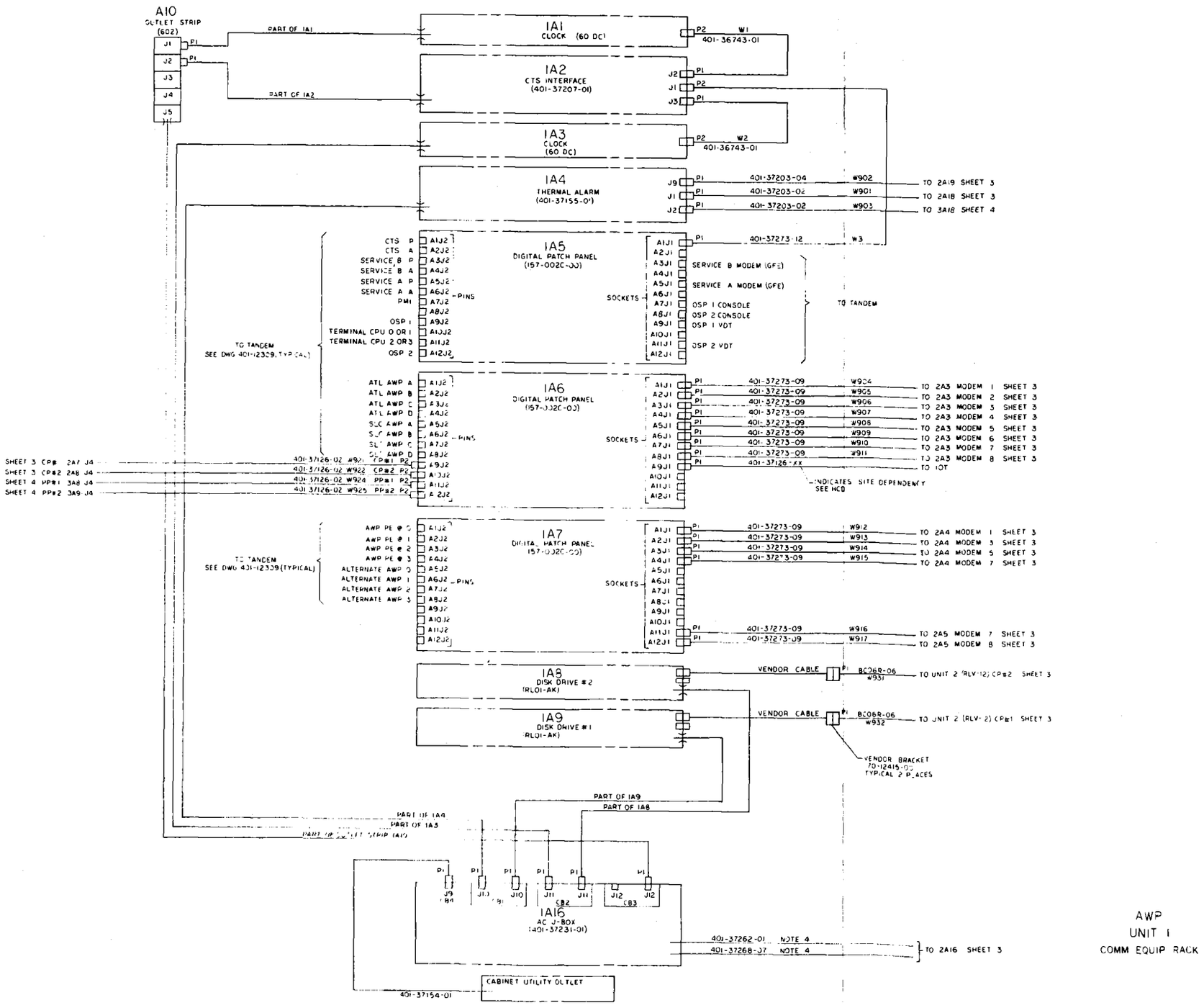


Figure 10-3. M1FC AWP Cabling Diagram (Sheet 2 of 5)

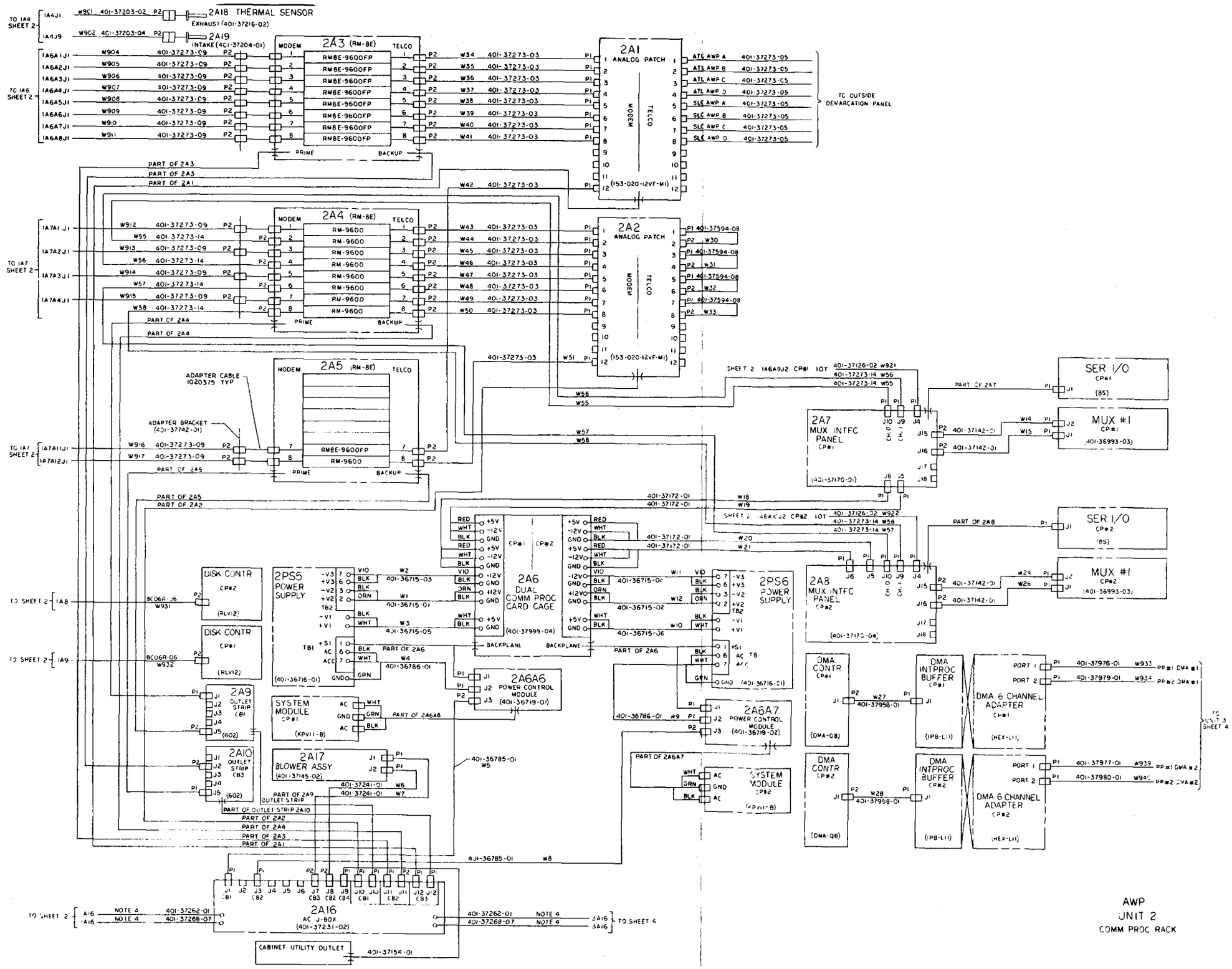


Figure 10-3. M1FC AWP Cabling Diagram (Sheet 3 of 5)

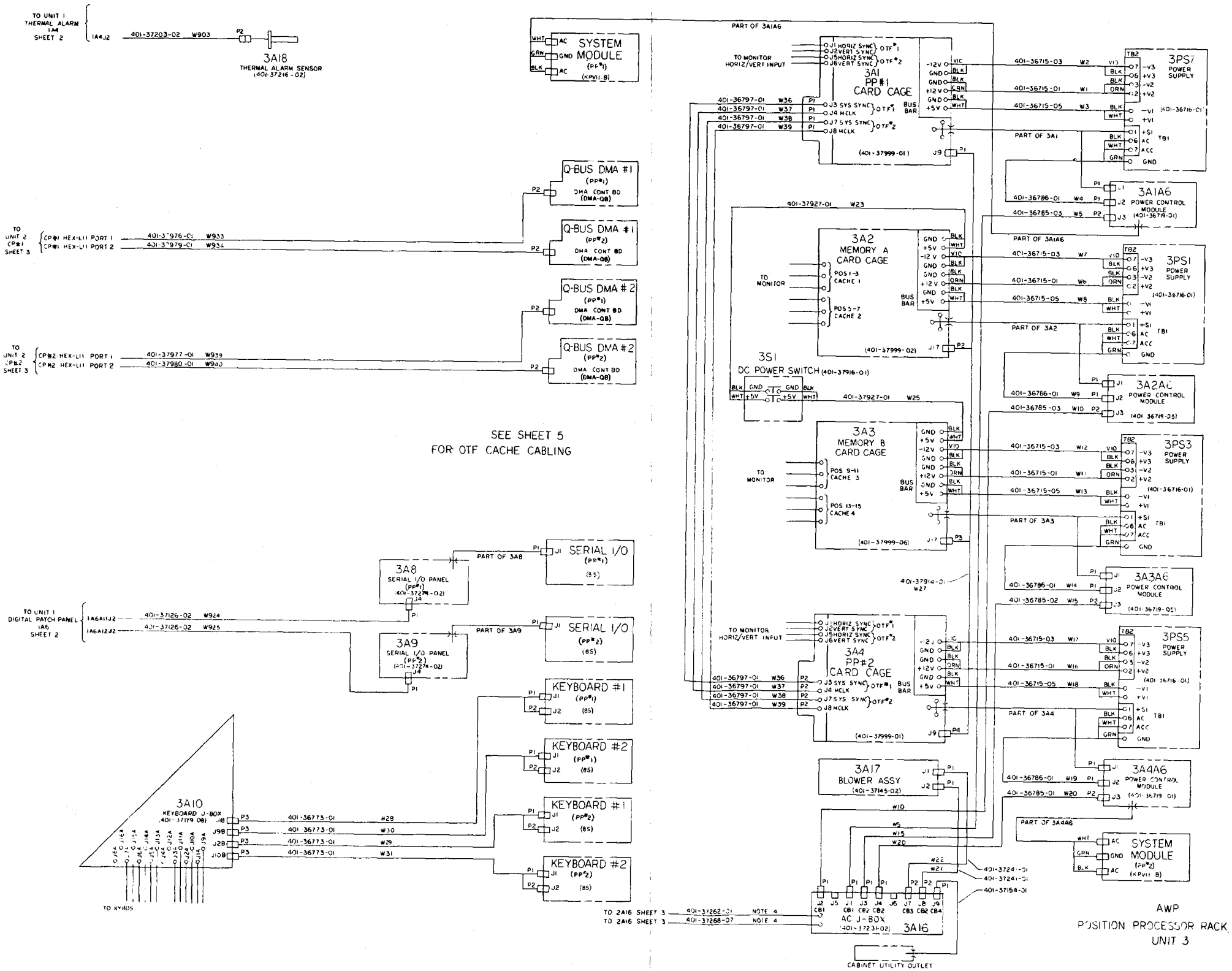


Figure 10-3. M1FC AWP Cabling Diagram (Sheet 4 of 5)

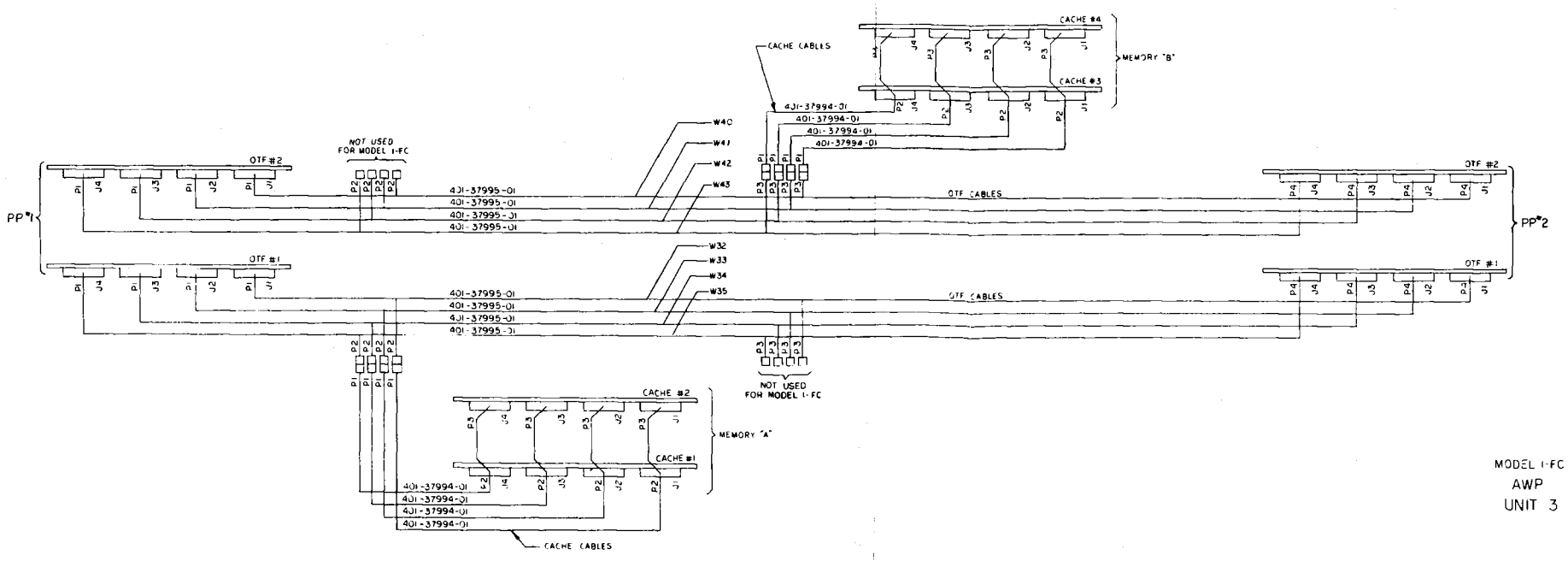
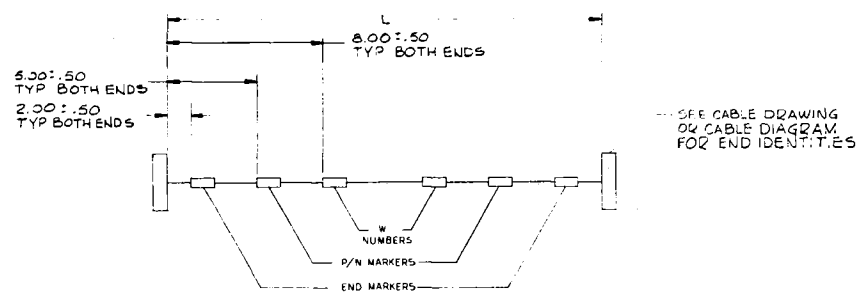


Figure 10-3. M1FC AWP Cabling Diagram
(Sheet 5 of 5)

NOTES:

1. CABLES W1 THROUGH W99 REF DES ARE ABBREVIATED. PREFIX REF DES WITH APPLICABLE UNIT NUMBER.
2. ASSEMBLE PER SPEC 408-00146. WORKMANSHIP PER APPLICABLE PORTIONS OF SPEC 416-29030
3. REFERENCE DEC SUBSYSTEM USERS GUIDE EK-RL012-UG-004 FOR FURTHER HOOK UP INFORMATION.
4. REFER TO DRAWING NUMBER SHOWN FOR MORE COMPLETE HOOK UP INFORMATION.



TYPICAL CABLE MARKING
UNLESS OTHERWISE SPECIFIED

Figure 10-4. M1FC AFSS Cabling Diagram (Sheet 1 of 7)

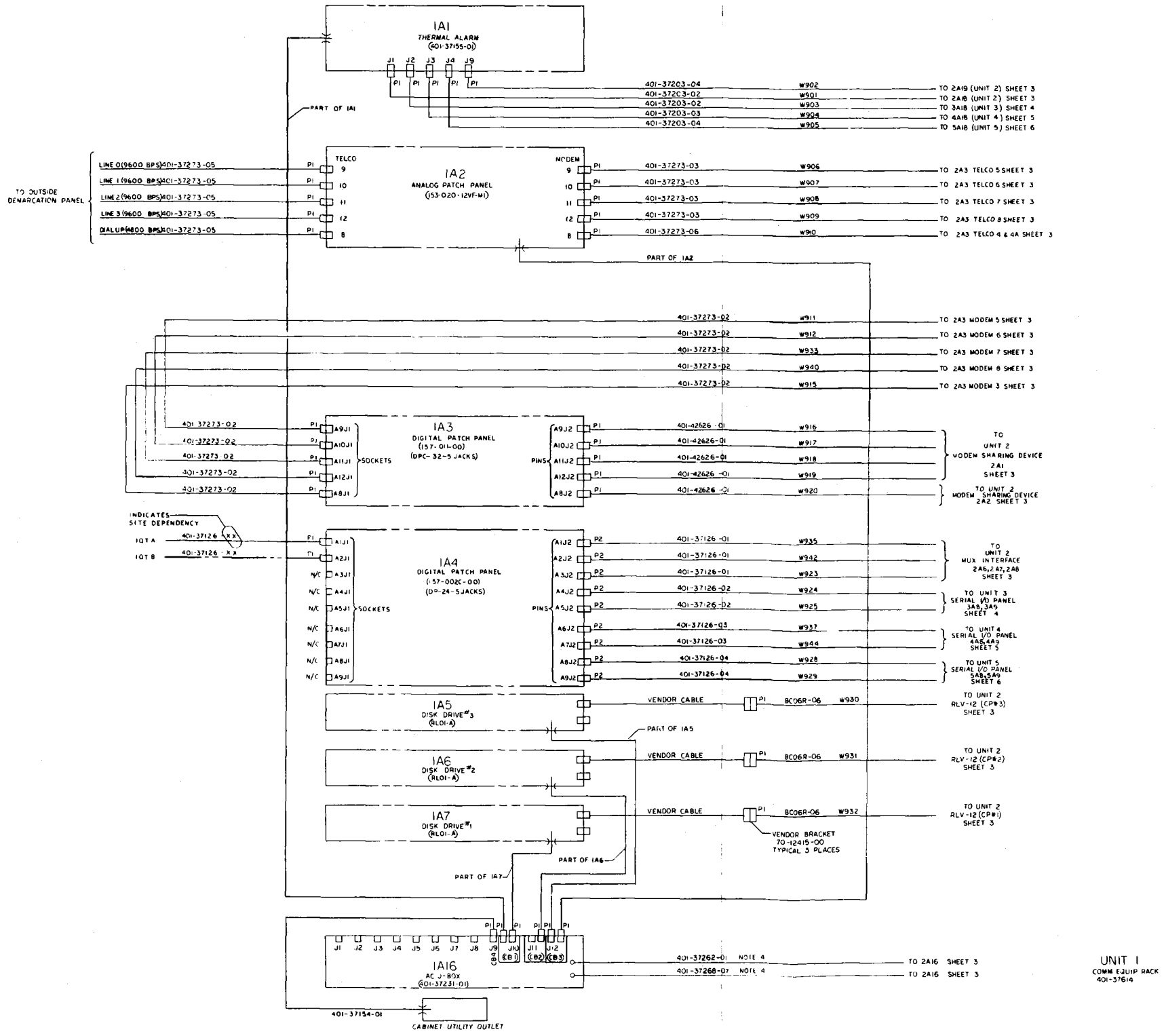


Figure 10-4. M1FC AFSS Cabling Diagram (Sheet 2 of 7)

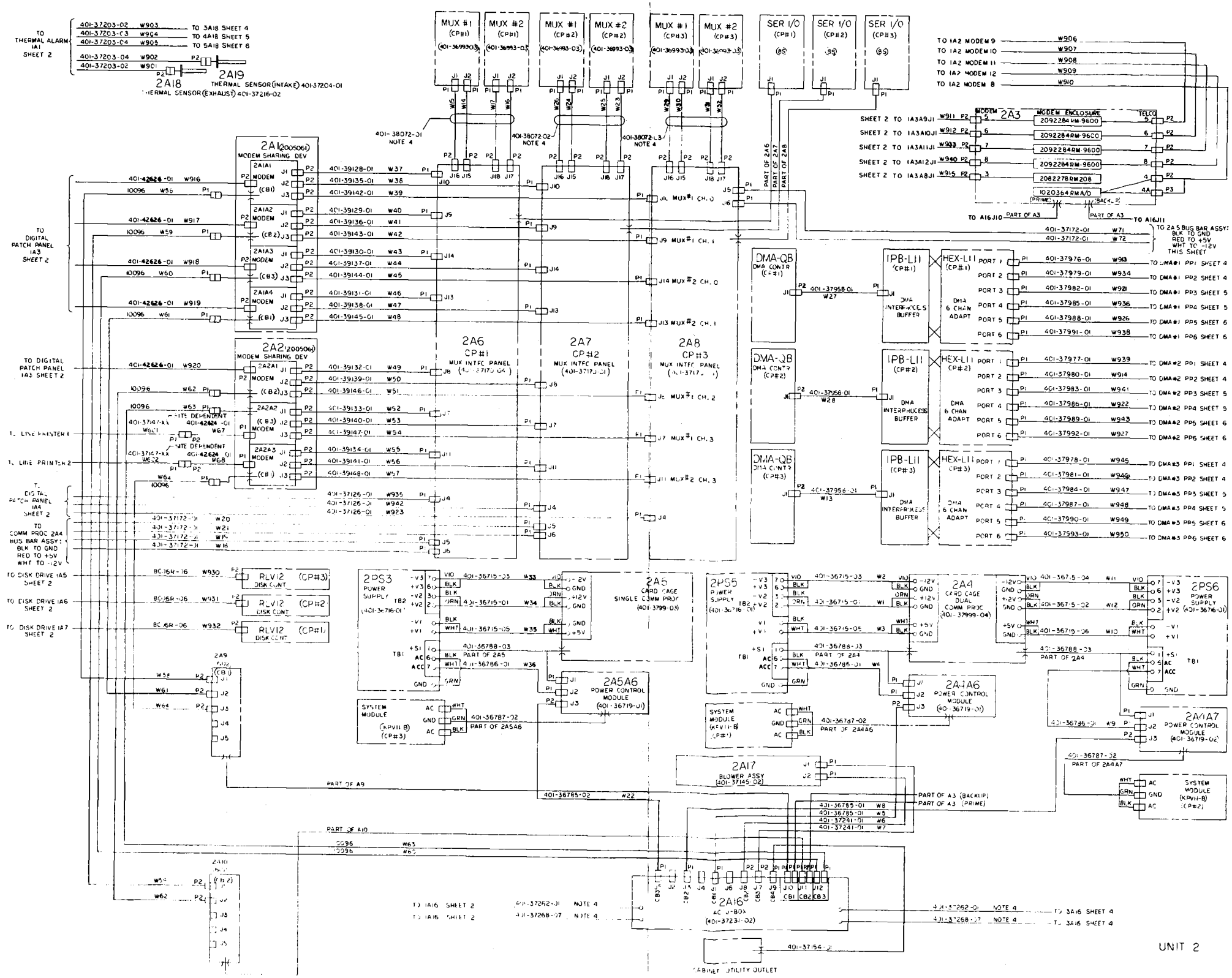


Figure 10-4. M1FC AFSS Cabling Diagram (Sheet 3 of 7)

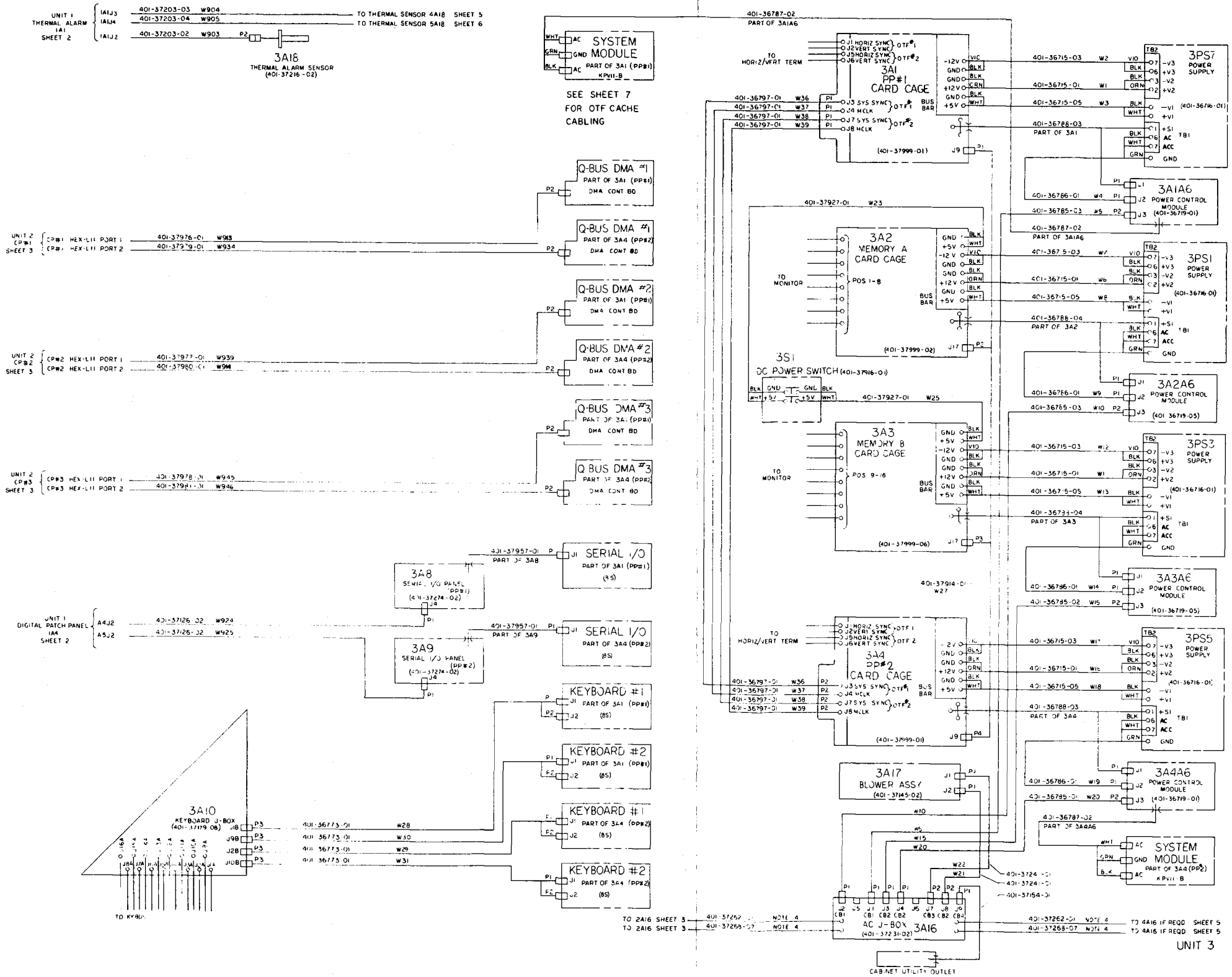


Figure 10-4. M1FC AFSS Cabling Diagram (Sheet 4 of 7)

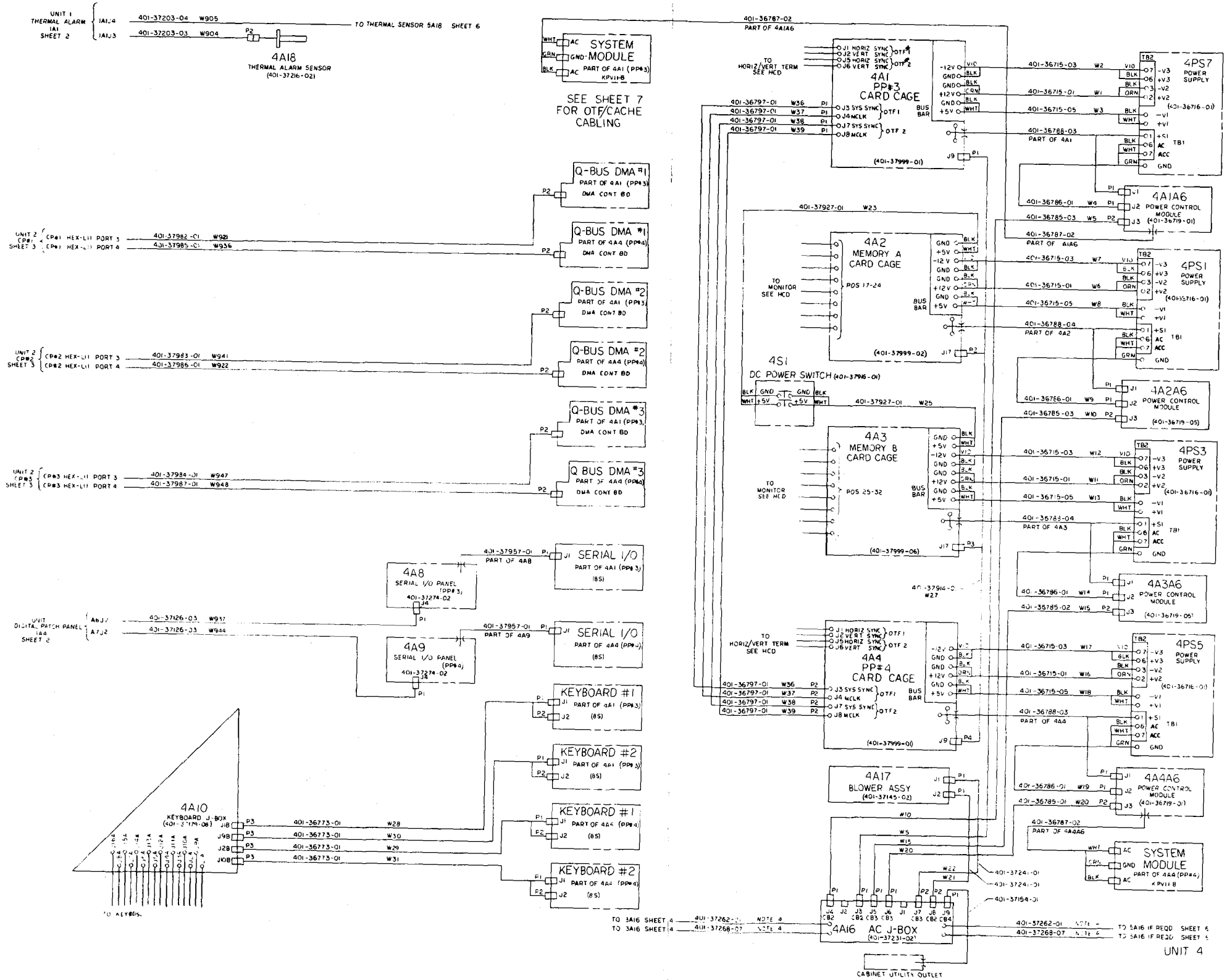


Figure 10-4. M1FC AFSS Cabling Diagram (Sheet 5 of 7)

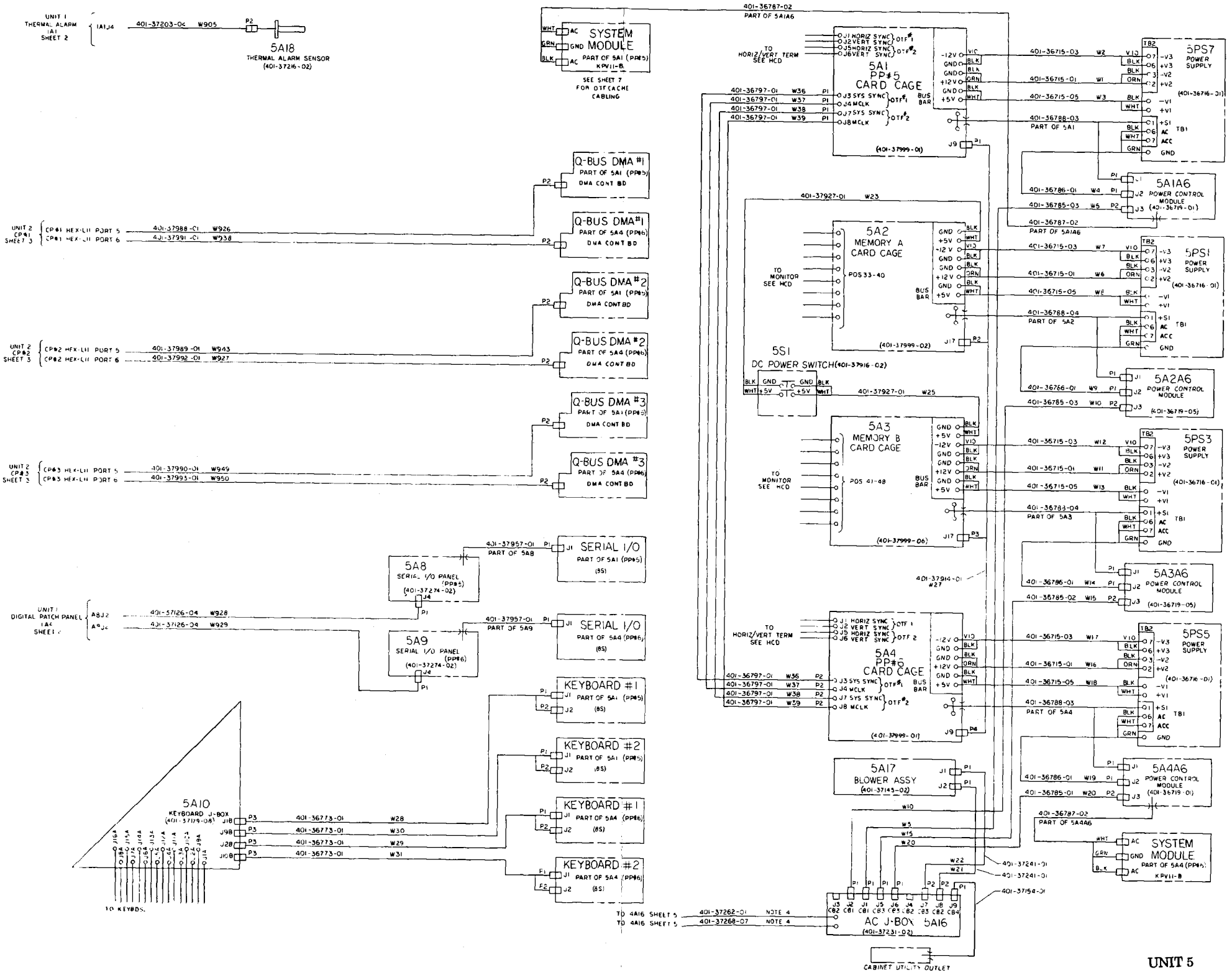


Figure 10-4. M1FC AFSS Cabling Diagram (Sheet 6 of 7)

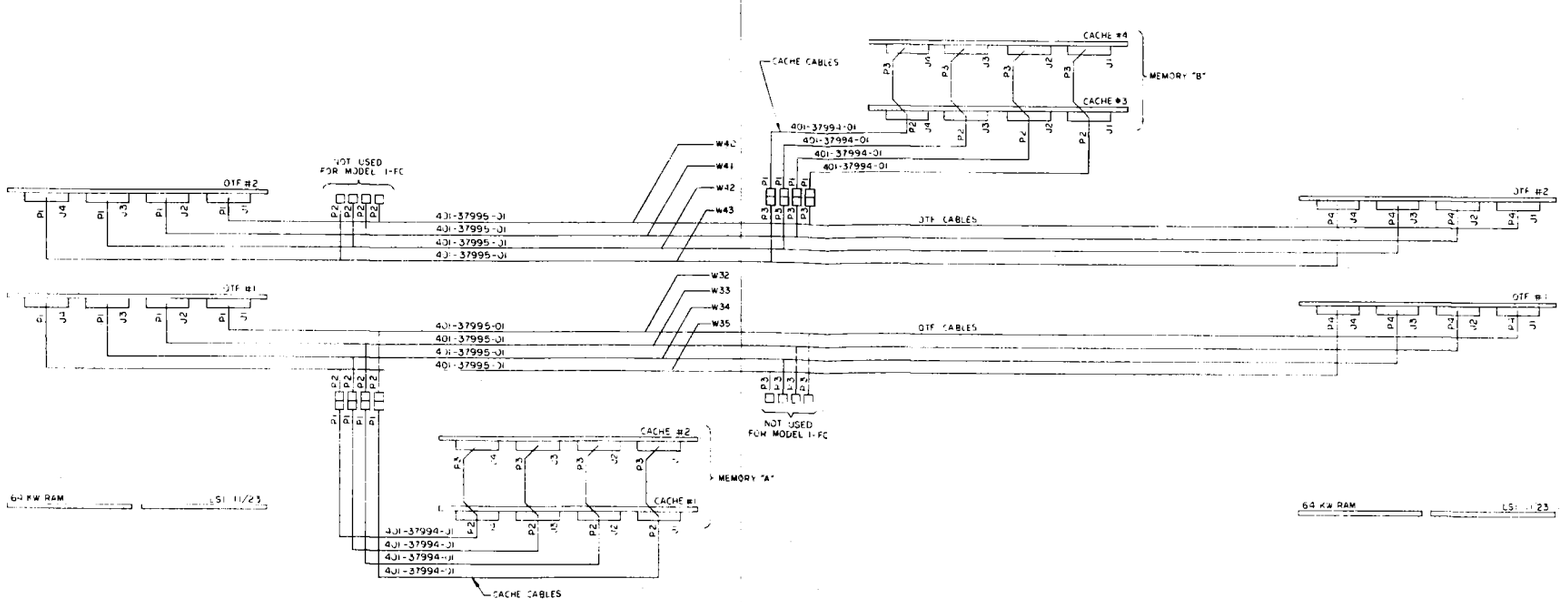


Figure 10-4. M1FC AFSS Cabling Diagram (Sheet 7 of 7)