RELEASED
Date 1.8.95 Rev A

LTR	ZONE	REVISION	DATE	EQUIP TYPE	APPROVAL
A		REVISED NOTES ADDED NOTES 9 & 10 ADDED FLAG NOTE 25 FLAG NOTE 15 WAS:INSTALL ALL COMPONENTS TO NON COMPONENT SIDE OF PCB. SOLDER SURFACE MOUNT COMPONENTS PER NHB 5300.4 (3M) USING SOLDER PASTE KE1500-ND. (ITEM-25) FLAG NOTE 17 WAS:AFTER THE BOARD HAS PASSED ELECTRICAL TEST. APPLY CONFORMAL COATING (ITEM-5) TO BOTH SIDES OF BOARD PER NHB 5300.4 (3J) PARA 3J502. NEXT ASSY WAS N/A			

25. DALCRCW1206000Z IS EQUAL AND SUBSTITUTE TO DALCRCW1206000ZP
24. CHANGE PART NUMBER ON COMPONENT SIDE FROM (SDG46114186-001) TO (SEG46113976-301) FOR -301 ONLY.
23. INSTALL U54 AS SHOWN ON DRAWING. THE SILKSCREEN IS WRONG ON BOARD. FOR -301 ONLY.
22. CALMARK, SAN GABRIEL, CA.
21. MAX252BCHL MAY BE SUBSTITUTED FOR MAX252ACHL ITEM NO. (16)
20. FOR 301 INSTALL REF. DESIGNATORS RN10,RN13
19. FOR 301 INSTALL REF. DESIGNATORS U3,U4,U7,U10,U48
18. FOR 301 INSTALL REF. DESIGNATORS U5
17. DO NOT INSTALL R3.
16. MASK OFF AREA AS SHOWN USING (ITEM-26) AND DO NOT APPLY COAT TO THIS AREA.
15. THE FOLLOWING COMPONENTS LISTED IN ITEM 19 ARE NOT INSTALLED.
C13, C14, C16, C17, C22, C36, C38, C39, C40, C41, C43, C44, C46
C47, C50, C51, C52, C53, C55, C56, C57, C59, C60, C64, C72, C73, C81
14. INSTALL CONNECTOR J6 (ITEM 22) ON COMPONENT SIDE AS SHOWN AND SOLDER BEING CAREFUL NOT TO PRESS BETWEEN CONNECTOR MOUNTING HARD POINTS.
13. PERMANENT INK MARKING AND REV. IN .12 HIGH CHARACTERS WITH 73X WHITE INK PER NASA/JSC PRC-9002. SERIAL NUMBERS SHALL BE ASSIGNED BY EDCC IN ACCORDANCE WITH EDS MANUAL JPG 8500.4, PARA 3.7.8
12. DALE, COLUMBUS, NE.
11. KESTER, DES PLAINS, IL.
10. BOURNS, MELBORN, FL.
9. HARRIS SEMICONDUCTOR, MELBORN, FL.
8. AIRBORN, GEORGETOWN, TX.
7. MAXIM, SUNNYVALE, CA.
6. MOTOROLA, PHOENIX, AZ.
5. LINEAR TECHNOLOGY CORP., MILPITAS, CA.
4. DOW CORNING, MIDLAND, MI
3. TEXAS INSTRUMENTS, ATTLEBORO, MA.
2. 3M CO., ST. PAUL, MN.
1. INDEPENDENT INK INC., GARDENA, CA.

FLAG NOTES:

10 INSTALL ALL COMPONENTS TO COMPONENT SIDE OF BOARD FIRST. THEN INSTALL ALL COMPONENTS TO NON COMPONENT SIDE OF PCB. SOLDER SURFACE MOUNT COMPONENTS PER PRC-7001 USING SOLDER PASTE KE1500-ND. (ITEM 25)
9 ALL REFERENCED SPECIFICATIONS AND STANDARDS SHALL BE OF THE LATEST REVISION LEVEL OR AS SPECIFIED IN THE PROCUREMENT DOCUMENT. IN THE CASE OF CONFLICT, THE PROCUREMENT DOCUMENT SHALL TAKE PRECEDENCE.
8. ASSEMBLE PER NHB 5300.4 (3K).
7. THIS ASSEMBLY CONTAINS ESD-SENSITIVE COMPONENTS. HANDLE COMPONENTS AND ASSEMBLY PER NASA-STD-8739.7
6. THIS ASSEMBLY DOES NOT CONTAIN FRACTURE CRITICAL PARTS.
5. UPON SUCCESSFUL COMPLETION OF FUNCTIONAL TESTING AND BEFORE CONFORMAL COATING, CLEAN PC BOARD TO LEVEL VC PER NHB 5300.4. APPLY 3140 CONFORMAL COATING TO BOTH SIDES OF PRINTED WIRING BOARD .003 - .009 THICK PER PRC-7002. CONNECTOR PINS AND .2 MINIMUM FROM EDGE OF MOUNTING HOLES SHALL BE FREE OF CONFORMAL COATING.
4. TORQUE NO. 6 FASTENERS TO 3-5 IN. LBS. ABOVE RUNNING TORQUE.
3 TORQUE NO. 2 FASTENERS TO 2-3 IN. LBS. ABOVE RUNNING TORQUE.
2. SOLDER COMPONENTS PER PRC-7001.
INTERPRET PER EDS MANUAL JPG 8500.4.
UNLESS OTHERWISE SPECIFIED.

302	-301	PART NUMBER	DESCRIPTION	REF DESIGNATOR	SPECIFICATION	ITEM
1	1	IN4006	1 AMP DIODE	CR1	6	21
17 9	9	DALCRCW1206000ZP	ZERO ohms JUMPER SIZE 1206	R2,R8,R9,R10 R11,R12,R13,R14,R15	12 25	20
15 55	55	CDR33BX104AKWS	CAPACITOR	C1-82	MIL-C-55681	19
2	2	LTC1334CS	IC. 232 TO 422 CONVERTER	U1,U2	5	18
3	3	MAX705CSA	IC WATCH DOG TIMER	U51,U52,U53	7	17
4	4	MAX252ACHL	IC. ISOLATED 232 INTERFACE	U8,U57 U58,U59	7 21	16
17	5	MC34050D	IC.RS-422 TRANSCEIVER	U3,U4,U7,U10,U14,U18 U19 U21,U24,U28,U29 U31,U34,U38,U39,U41,U48	6 19	15
2	1	CD74HC04M	IC. HEX INVERTER	U5,U55	9 18	14
2		CD74HCT541M	IC. OCTAL BUS DRIVER	U12,U17	9	13
5		TIL193	IC. OPTICAL ISSOLATOR	U13,U15,U16,U20,U25	3	
2	2	CD74HCT153M	IC. 4 TO 1 MUX	U43, U44	9	11
2	2	CD74HCT125M	IC. QUAD TRISTATE BUFFER	U42, U56	9	10
3	3	SN75176AD	IC. RS422 DRIVER	U45, U46 U47	9	9
2	2	CD74HC00M	IC. QUAD NAND GATE	U50, U49	"	8
1	1	TLE2426CLP	IC. VIRTUAL GROUND		3	7
AR	AR	3145	ADHESIVE. RTV		4	6
AR	AR	3140	SEALANT		5	5
AR	AR	73X	INK. MARKING. WHITE		1	4
AR	AR	63/37.025P3REL15	SOLDER		QQ-S-571	3
1		SDG46114186-002	PWB. DIGITAL			2
	1	SDG46114186-001	PWB. DIGITAL			1
REF		SIG46115670	SCHEMATIC. DIGITAL			
	REF	SIG46114185	SCHEMATIC. DIGITAL			
-		-302	PWBA. DIGITAL			
	-	-301	PWBA. DIGITAL			

2	2	107-50-3-BLK	EXTRACTORS		22	27
AR	AR	5419	TAPE. SILICONE	POLIMIDE. SILICONE	2 16	26
AR	AR	KE1500-ND	SOLDER PASTE		11	25
4	2	4816P-1-682-ND	RESISTOR NETWORK 6.8K .30 WATTS	RN2,RN3,RN10,RN13	10 20	24
3		4816P-1-471-ND	RESISTOR NETWORK 470 ohms .30 WATTS	RN1,RN4,RN5	10	23
1	1	RM372-206-341-5500	CONNECTOR. 206 PIN RIGHT ANGLE	J6	8 14	22

DIMENSIONAL TOLERANCE UNLESS NOTED OTHERWISE
0 P.L. .000 ±.010
.00 ±.03 ANGLES ± 0 DEG.
DO NOT SCALE DRAWING
SEG46114189
NEXT ASSY
DRAW DIR: \PCAD\RELEASE\ASSY
DRW FILE: 39761A1.HP
FORMAT TYPE
☒ PLT HPGL
☐ HPGRAL HEWLETT-PACKARD
☐ APPL SCALE ONE

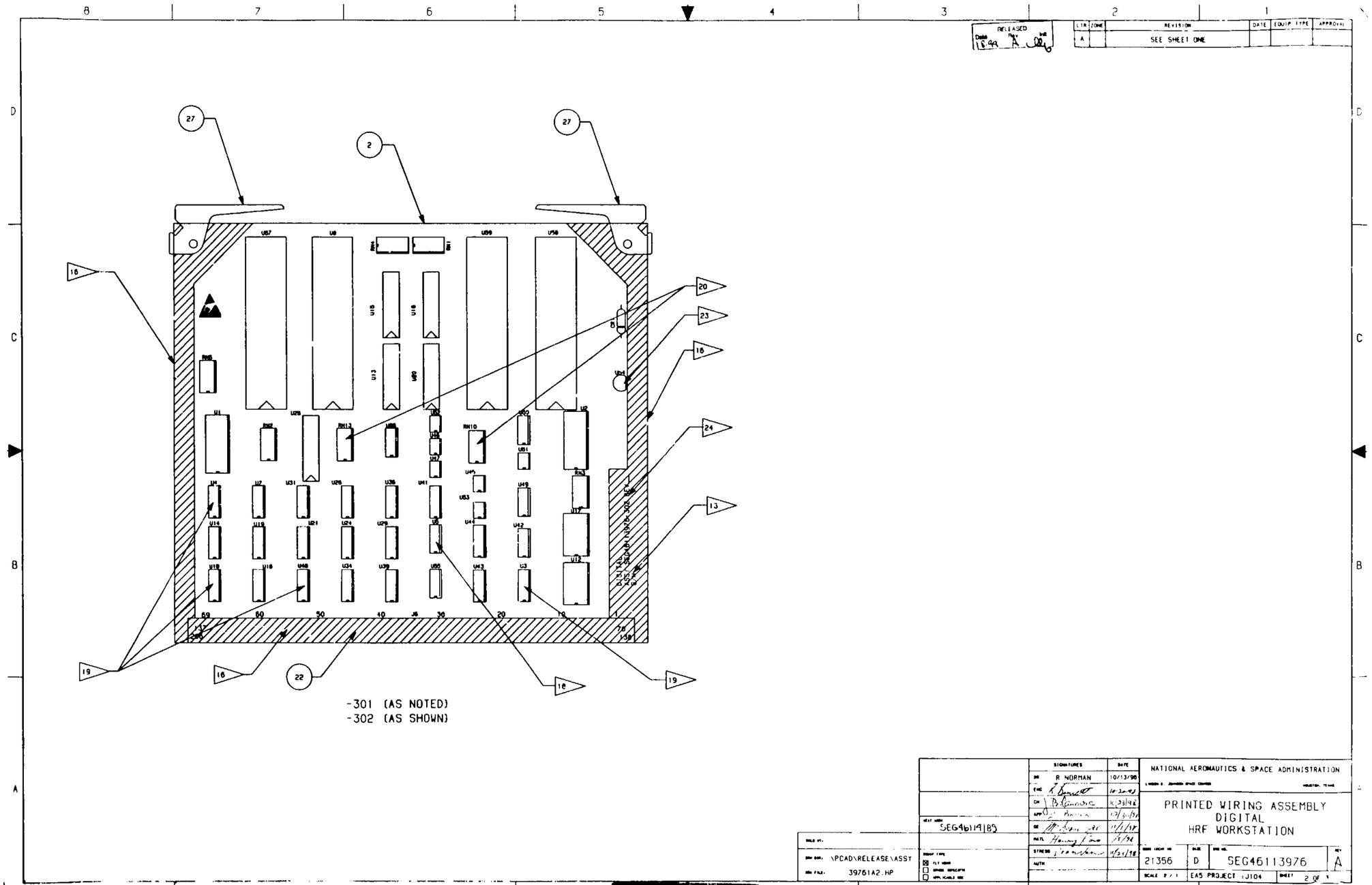
SIGNATURES		DATE
DR	R NORMAN	10/19/95
ENG	[illegible]	10/21/95
CH	[illegible]	10/23/95
APP	[illegible]	11/6/95
QE	[illegible]	11/7/95
PART	[illegible]	11/7/95
STRESS	[illegible]	11/21/95
AUTH		

NATIONAL AERONAUTICS & SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE CENTER, HUNTSVILLE, ALABAMA

PRINTED WIRING ASSEMBLY
DIGITAL
HRF WORKSTATION

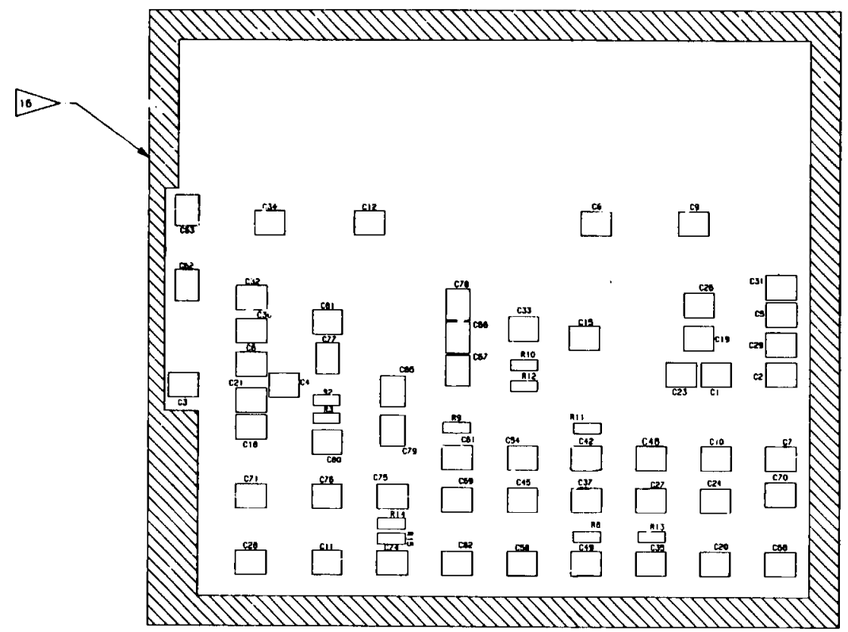
DWG IDENT NO 21356 | SIZE D | DWG NO. SEG46113976 | REV A
SCALE 2/1 | EAS PROJECT 1104 | SHEET 1 OF 3

499



27
2
27
16
20
23
16
24
13
19
16
22
18
19
-301 (AS NOTED)
-302 (AS SHOWN)
LTR
ZONE
REVISION
DATE
EQUIP TYPE
APPROVAL
A
SEE SHEET ONE
SIGNATURES
DATE
DR R NORMAN 10/13/98
NATIONAL AERONAUTICS & SPACE ADMINISTRATION
PRINTED WIRING ASSEMBLY
DIGITAL
HRF WORKSTATION
SEG46114|B5
\PCAD\RELEASE\ASSY
39761A2.HP
21356
D
SEG46113976
A
SCALE 2/1
EA5 PROJECT :J104
SHEET 2 OF 3

500



-301 (AS NOTED)
-302 (AS SHOWN)

LTR	ZONE	REVISION	DATE	EQUIP TYPE	APPROVAL
A		SEE SHEET ONE			

RELEASED
Date 12.9.99 Rev A Init

SIGNATURES		DATE
DR	R NORMAN	10/13/98
ENG	R. Bennett	10-20-98
CH	[illegible]	10/23/98
APP	[illegible]	12/2/98
QE	[illegible]	12/1/98
MATL	[illegible]	1/1/99
STRESS	[illegible]	4/21/98
AUTH		

NATIONAL AERONAUTICS & SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER — HOUSTON, TEXAS

PRINTED WIRING BOARD
DIGITAL
VEG

CODE IDENT NO	SIZE	DWG NO	REV
21356	D	SEG46113976	A

SCALE 2/1 — EA5 PROJECT : J104 — SHEET 3 of 3

NEXT ASSY: SEG 10119189

CALC WT.

MOD FILE: \PCAD\RELEASE/ASSY
DRN FILE: 39761A3.HP

DRAWING TYPE
☒ PLT HDWR
☐ DRAWN (SPECIFY)
☐ APPLICABLE SIZE

501