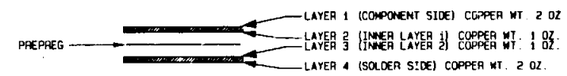


LAYER STACKING
SCALE = NONE

17. ALL MILITARY SPECIFICATION USED ON THIS DRAWING WILL BE INTERPRETED PER THE LATEST REVISION LETTER.
16. LAYER TO LAYER MISREGISTRATION NOT TO EXCEED .005.
15. MIL-P-55110 QUALITY ASSURANCE PROVISIONS APPLY.
14. UNDIMENSIONED HOLES ARE LOCATED ON A .005 GRID.
13. UNLESS OTHERWISE SPECIFIED IN HOLE LEGEND, ALL HOLES ARE PLATED THRU AND SHALL BE THE SPECIFIED DIAMETER AFTER PLATING.
12. THIS DRAWING USED IN CONJUNCTION WITH SCHEMATIC SIG3811494.
11. VENDOR SHALL PROVIDE PRINTED WIRING BOARD COUPONS AS INDICATED.
10. ARTWORK DEPICTED ON THIS DRAWING IS FOR DOCUMENTATION ONLY.
9. ARTWORKS DEPICTED ON THIS DRAWING ARE PHOTO POSITIVES UNLESS OTHERWISE SPECIFIED, AND ARE VIEWED FROM COMPONENT SIDE.
8. SOLDER MASK (GREEN) BOTH SIDES.
7. SILKSCREEN WITH WHITE EPOXY INK IN ACCORDANCE WITH MIL-I-43553, TYPE II (NON CONDUCTIVE).
6. TIN/LEAD PLATE EXTERNAL CONDUCTIVE PATTERNS IN ACCORDANCE WITH MIL-P-81728.
5. BOARD MATERIAL TO BE EPOXY FIBERGLASS IN ACCORDANCE WITH MIL-P-13949/4 TYPE GF, WITH EPOXY PREPREG, IN ACCORDANCE WITH MIL-P-13949/12, TYPE GF. COPPER WEIGHT SHALL BE 2 OZ FOR LAYERS 1 AND 4, AND 1 OZ. FOR LAYERS 2 AND 3. FINISHED LAMINATE MATERIAL THICKNESS SHALL BE .062 + .008 THK.
4. FABRICATE PRINTED WIRING BOARD IN ACCORDANCE WITH MIL-P-55111 WITH ETCHBACK.
3. THIS ITEM CONTAINS NO FRACTURE CRITICAL ELEMENTS.
2. ALL DIMENSIONS ARE IN INCHES.
1. INTERPRET PER JSCM 8500.

NOTES: UNLESS OTHERWISE SPECIFIED

1. MARK AREA INDICATED WITH THE DATE CODE, TRACEBILITY CODE AND MANUFACTURERS CODE (FEDERAL SUPPLY CODE FOR MANUFACTURERS) WITH PERMANENT INK (NON CONDUCTIVE) OR IN COPPER E.CH.

-NOTES-

QTY	PART NUMBER	DESCRIPTION	MTRL/REF DES	SPECIFICATION	ITEM
-	SDG38114935-001	PWB.			-

DIMENSIONAL TOLERANCE UNLESS NOTED OTHERWISE: .0 ± .1, .000 ± .010, .00 ± .03, ANGULAR ± .5 DEG.

SURFACE FINISH IN MICROINCHES: 100 UNLESS NOTED OTHERWISE

NEXT ASSY: SEG38114936

SIGNATURES		DATE
DR	Z. PALMER	02/03/97
ENG	R. Bruce	4/1/97
CH	J. Mancuso	4/16/97
APP	J. Baker	7-1-97
SEC	R. Bussey	7/17/97
MATL		
STRESS		7/12/97
AUTH		7/1/97

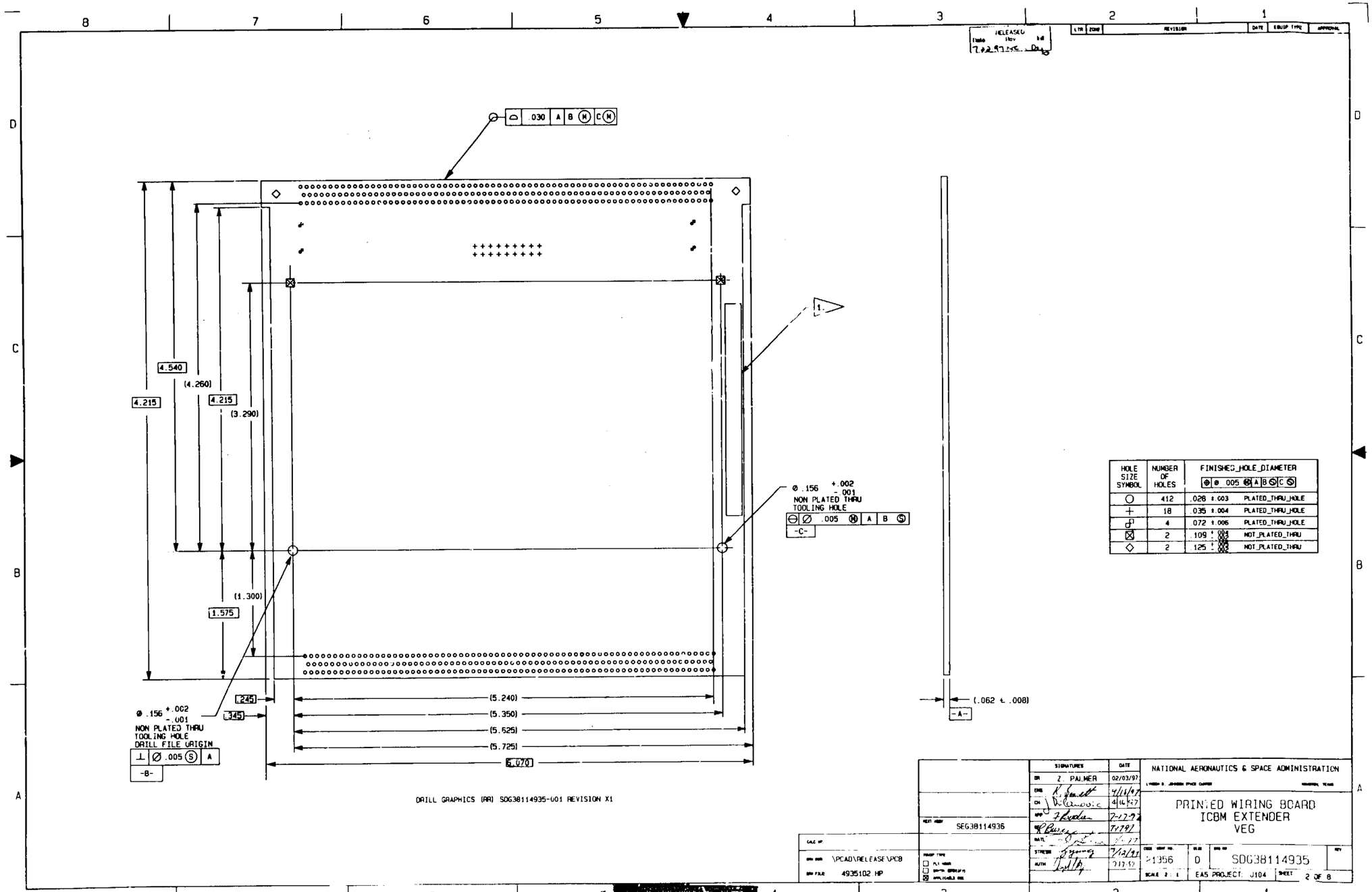
NATIONAL AERONAUTICS & SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER — HOUSTON, TEXAS

PRINTED WIRING BOARD
ICBM EXTENDER
VEG

CODE IDENT NO: 21356 | SIZE: D | DWG NO: SDG38114935 | REV:
SCALE: 2 : 1 | EAS PROJECT: J104 | SHEET: 1 OF 8

CALC WT:
DWG SIZE: \PCAD\RELEASE\PCB
DRW FILE: 4935101.HP

395



HOLE SIZE SYMBOL	NUMBER OF HOLES	FINISHED_HOLE_DIAMETER ⊕ Ø .005 M A B S C S	
○	412	.028 ±.003	PLATED_THRU_HOLE
+	18	.035 ±.004	PLATED_THRU_HOLE
⌐	4	.072 ±.006	PLATED_THRU_HOLE
⊠	2	.109 +.004 -.002	NOT_PLATED_THRU
◇	2	.125 +.005 -.002	NOT_PLATED_THRU

DRILL GRAPHICS (RR) SDG38114935-001 REVISION X1

SIGNATURES		DATE
DR	Z. PALMER	02/03/97
ENG	R. Jewett	4/16/97
CH	J. Dilanovic	4/16/97
APP	F. Rydan	7-17-97
MATL		7-17-97
STRESS		7/12/97
AUTH		7-17-97

NEXT ASSY: SEG38114936

CALC WT:

DRN DIR: \PCAD\RELEASE\PCB

DRN FILE: 4935102.HP

PROOF TYPE: ☐ PLT HOLE ☐ DRAFTS (SPECIFY) ☒ APPLICABLE SIZE

NATIONAL AERONAUTICS & SPACE ADMINISTRATION

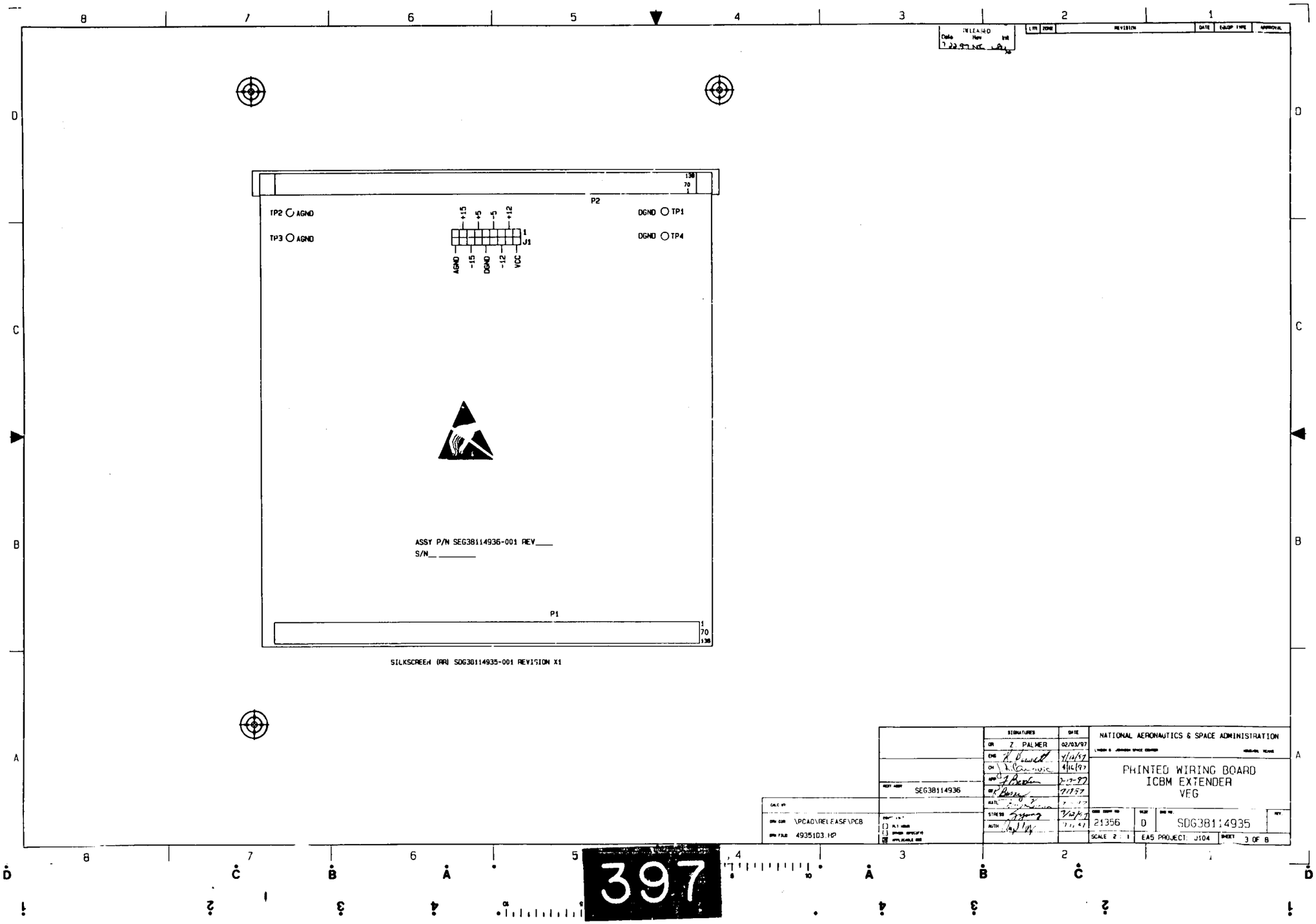
LYNDON B. JOHNSON SPACE CENTER — HOUSTON, TEXAS

PRINTED WIRING BOARD
ICBM EXTENDER
VEG

CODE IDENT NO. 21356 | SIZE D | DWG NO. SDG38114935 | REV

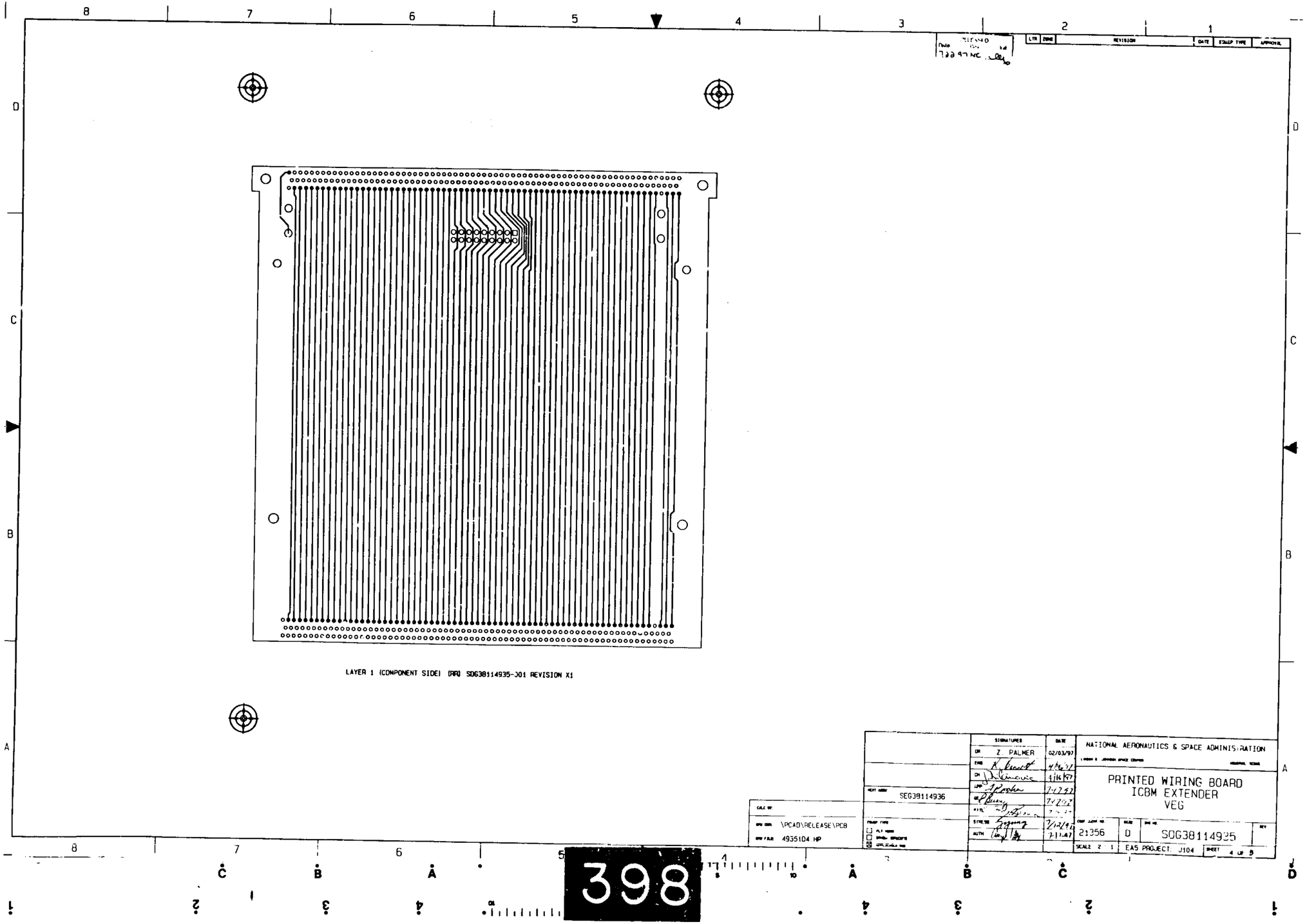
SCALE 2 : 1 | EA5 PROJECT: J104 | SHEET 2 OF 8

396



P2
TP2 AGND
TP3 AGND
DGND TP1
DGND TP4
+15
+5
-5
+12
J1
AGND
-15
DGND
-12
VCC
ASSY P/N SEG38114936-001 REV____
S/N_ _____
P1
SILKSCREEN (RR) SDG38114935-001 REVISION X1
NATIONAL AERONAUTICS & SPACE ADMINISTRATION
PRINTED WIRING BOARD
ICBM EXTENDER
VEG
SEG38114936
\PCAD\RELEASE\PCB
4935103.HP
21356
D
SDG38114935
SCALE 2 : 1
EA5 PROJECT: J104
3 OF 8

397


LAYER 1 (COMPONENT SIDE) (RR) SDG38114935-J01 REVISION X1
SIGNATURES
DATE
DR Z. PALMER 02/03/97
ENG
CH
LAB
QE
MFG
STRESS
AUTH
NEXT ASSY SEG38114936
CALC WT
\PCAD\RELEASE\PCB
4935104.HP
NATIONAL AERONAUTICS & SPACE ADMINISTRATION
PRINTED WIRING BOARD
ICBM EXTENDER
VEG
21356
D
SDG38114935
SCALE 2 : 1
EA5 PROJECT: J104
SHEET 4 OF 5
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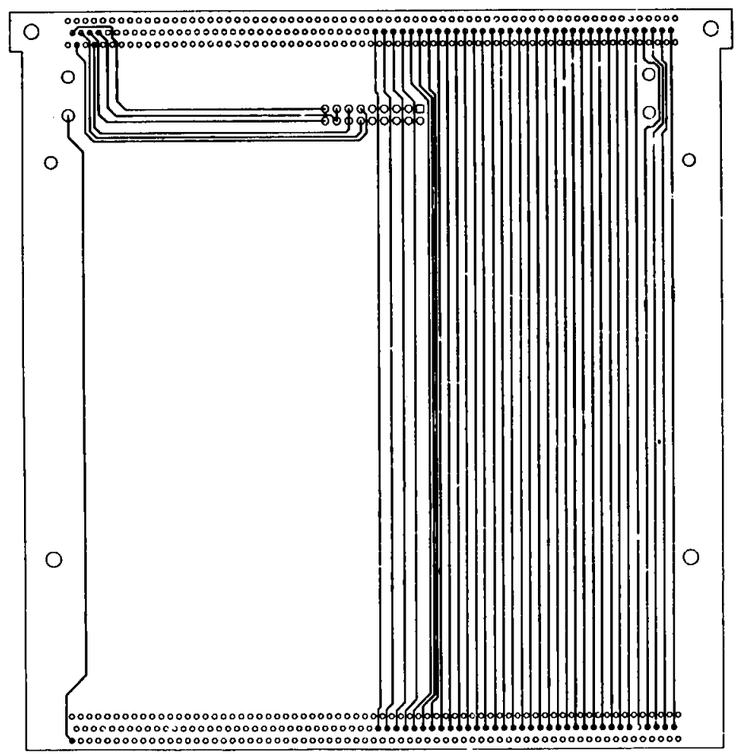


LAYER 2 (INNER LAYER 1) (RR) SDG38114935-001 REVISION X1

SIGNATURES		DATE	NATIONAL AERONAUTICS & SPACE ADMINISTRATION
DR	Z. PALMER	02/03/97	LYNDON B. JOHNSON SPACE CENTER HOUSTON, TEXAS
ENG	[signature]	4/16/97	PRINTED WIRING BOARD
CK	[signature]	4/16/97	ICBM EXTENDER
APP	[signature]	7-17-97	VEG
DES	[signature]	7-17-97	
MATL	[signature]	[illegible]	
STRESS	[signature]	7/12/97	
AUTH	[signature]	[illegible]	

NEXT ASSY: SEG38114936

CALC WT:

DRW DIR: \PCAD\RELEASE\PCB

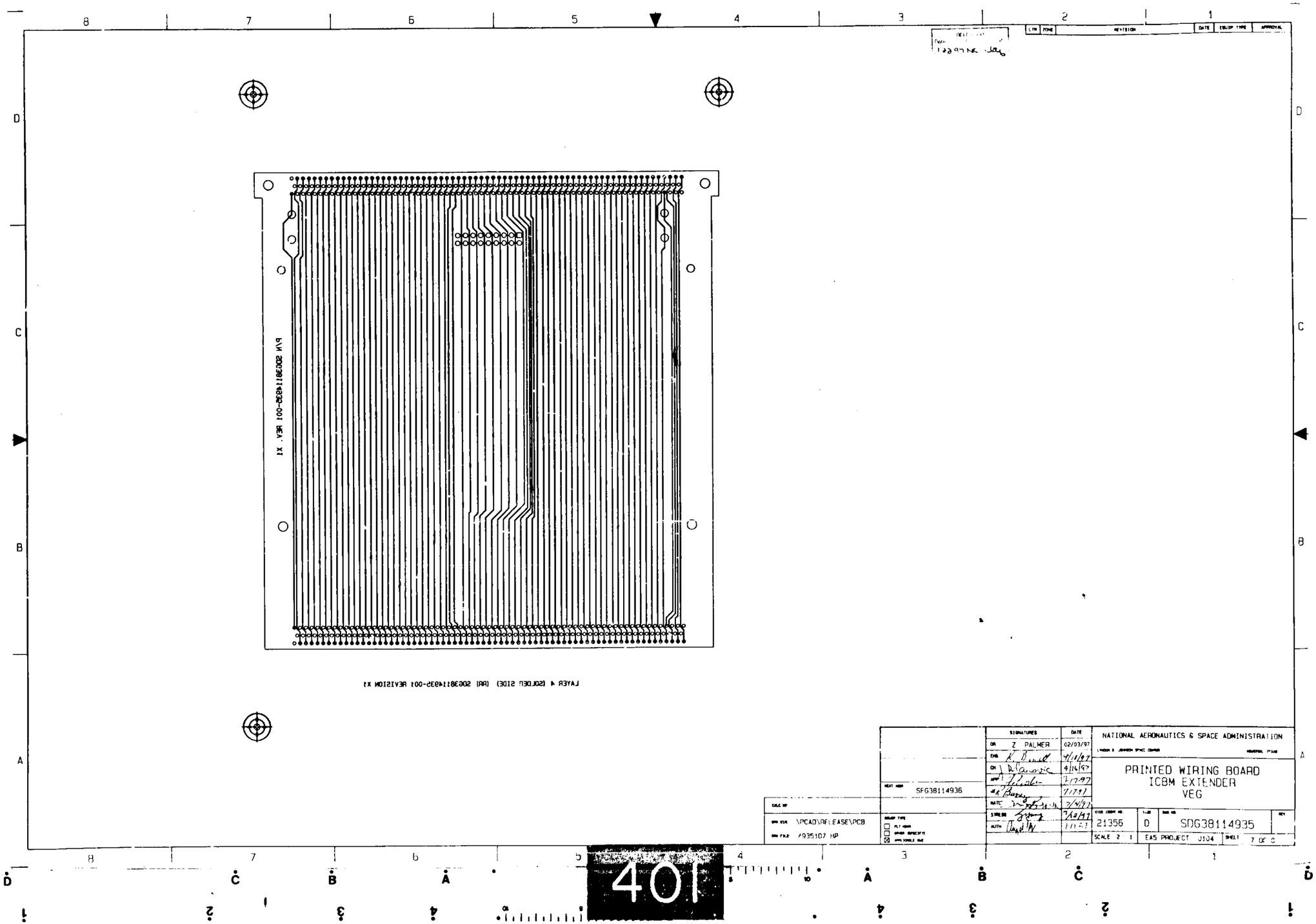
DRW FILE: 4935105.HP

DRILL TYPE: ☐ PLT NUMB ☐ OTHER DEFINITIONS ☒ APPLICABLE SIZE

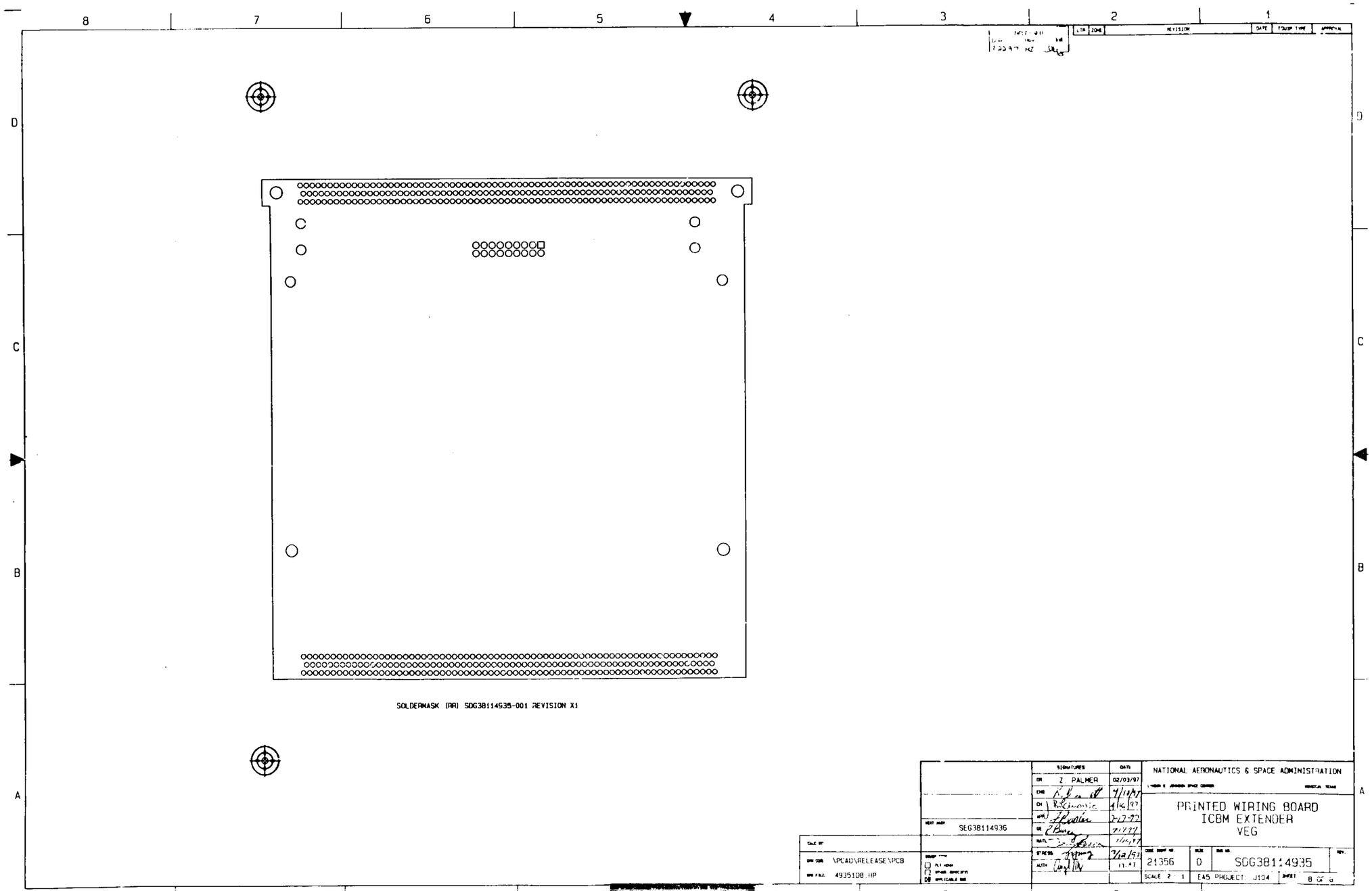
CODE IDENT NO	SIZE	DWG NO	REV
21356	D	SDG38114935	

SCALE 2 : 1 | EAS PROJECT: J104 | SHEET 5 OF 8

399



LAYER 4 (SOLDER SIDE) (RR) SDG38114935-001 REVISION X1
SFG38114936
\PCAD\RELEASE\PCB
/935107 HP
SIGNATURES
DATE
DR Z PALMER 02/03/97
NATIONAL AERONAUTICS & SPACE ADMINISTRATION
PRINTED WIRING BOARD
ICBM EXTENDER
VEG
21356
D
SDG38114935
SCALE 2 : 1
EAS PROJECT J104
SHEET 7 OF 0
401


SOLDERMASK (RA) SDG38114935-001 REVISION X1
SEG38114936
\PCAD\RELEASE\PCB
4935108.HP
SIGNATURES
DATE
DR Z. PALMER 02/03/97
NATIONAL AERONAUTICS & SPACE ADMINISTRATION
PRINTED WIRING BOARD
ICBM EXTENDER
VEG
21356
0
SDG38114935
SCALE 2 : 1
EAS PROJECT: J104
SHEET 8 OF 8

NUMBER	DATE	DRAWING CHANGE NOTICE	SHEET 1 OF 1
122063	7-28-97		

DRAWING NO.	REV
38114935	NC

TITLE: PWB, ICBM EXTENDER - VEG

PROJECT	DRAWING TO BE CHANGED
J104	YES ☐ NO ☑

REASON FOR CHANGE: TO ~~CHANGE~~ DIM. IN ZONE C-8 FROM 4.215 TO 6.115.

		DATE		DATE
ORIGINATOR	Z. PALMER	7-28-97	QE	7/28/97
ENG	R. Bennett	7-28-97	MATL	7/28/97
CN	R. A. Beckel	7/29/97	STRESS	7/28/97
APP	J Beckel	7/28/97	RELEASE STAMP	RELEASED Date Rev Init 7-30-97 NC
AUTH		7/29/97		

EXISTING MATL/PARTS

USE AS IS	☑
RETURN TO STOCK	☐
REWORK	☐
CONDEMN	☐

EFFECTIVITY: MODEL / SERIAL NO.

☐ FLT HDWR ☑ APPLICABLE GSE ☐ OTHER (SPECIFY)

DESCRIPTION OF CHANGE

1. ZONE C-8, SHEET 2, CHANGE DIM 4.215 TO 6.115.

	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	CHANGE

JSC Form 1848A (Rev Jan 94)

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