

NOTES: UNLESS OTHERWISE SPECIFIED

- 01. EXTERNAL TOOLING HOLE DIMENSIONS.
- 02. MINIMUM ANNULAR RING .001 EXCEPT BREAK OUT PERMITTED ON TRIMMED OR OVAL PADS
- 03. MAX. INTERNAL RADII: .062. MAX. EXTERNAL RADIUS .063.
- 04. NO DEBURR REQUIRED.
- 05. CRAZING AND DELAMINATION WITHIN A MAX. OF .030 BOARD PERIMETER SHALL BE ACCEPTABLE.
- 06. HOLE LOCATION:  $\phi$  A-B-014  $\phi$  HREST, OR  $\phi$  A-B-010  $\phi$  /MMON.
- 07. ALL HOLES NOT DIMENSIONED ARE ON .025 INCH GRID INCREMENTS IN RELATION TO DATUM O.
- 08. DECIMAL HOLE DIAMETERS AND HOLE TOLERANCES GOVERN HOLE SIZE NUMBERS. IN PARENTHESES ARE FOR REFERENCE ONLY.
- 09. FINISHED ARTWORK CONDUCTOR WIDTH AND SPACING TO BE .011  $\pm$  .004.
- 10. BOARD WARP OR TWIST SHALL NOT EXCEED .020 INCH PER INCH LENGTHWISE AND SHALL NOT EXCEED .018 INCH PER INCH CROSSWISE.
- 11. NO CLEARANCE REQUIRED FROM CONDUCTOR TO EDGE OF BOARD AND SLOTS.
- 12. MATERIAL SHALL BE .062 THK NEMA GRADE FR-4 OR G-10 WITH ONE OZ. COPPER BOTH SIDES.
- 13. PROCESSES: TIN LEAD 60/40 PLATE, .0003 THK MIN, PER QQ-5-571 "REFLOWED" BEFORE SOLDER MASK IS APPLIED.
- 14. SOLDER MASK SHALL BE SCREENED ON BOTH SIDES USING PC 401 OR APPROVED EQUIVALENT. COLOR TO BE GREEN.
- 15. SOLDER MASK IS PERMITTED TO BLEED ON PADS OF CONDUCTOR SIDE WHERE PADS ARE TRIMMED AND ON COMPONENT SIDE OF BOARD.
- 16. MARK PER ANSI Y32. 16-1968, METHOD SILK SCREEN, HEIGHT PER ARTWORK PROVIDED, COLOR CONTRASTING (F100, METHOD 1, CLASS 1).
- 17. REGISTRATION MARKS TO BE USED FOR POSITIONING MARKING AT HOLES SHOWN.
- 18. THIS PWB IS AN UL RECOGNIZED COMPONENT AND, SUCH AS, MUST DISPLAY THE VENDORS MARK RECOGNIZED BY UL IN THE AREA OF THE PWB INDICATED.
- 19. SOLDER MASK ALLOWED TO BLEED A MAX. OF .005 ONTO THE PADS.
- 20. NO ANNULAR RING REQUIREMENTS ON OVAL PADS.
- 21. SOLDER MASK PERMITTED TO COVER TIN-LEAD-PLATED COPPER AREAS GREATER THAN .250 INCH.
- 22. ALL HOLES TO BE WITHIN .0014 INCH TRUE POSITION OF DATUM O WHEN PINNED TO PLANE A.
- 23. SOLDER MASK ALLOWED TO COVER FEED THRU'S.
- 24. HOLES ALLOWED TO BE BURIED IN GROUND PLANE.
- 25. LETTER WIDTH ON SILKSCREEN ALLOWED TO BE .010.
- 26. NOT REQUIRED ARE ASSY NO. AND BOARD REF. DESIG.

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
<b>FORMAL RELEASE</b>				
		ECN 107488 (REVISED) 7/5/83 1) UPDATED A PCB FROM COMPUTER CHANGE TO A "4" PCB. PAGE 2. SUPERCEDED.	7/7/83 7/12/83	A. [Signature] [Signature]

SEE SHT. 2

LTR	FINISHED HOLE DIA	REMARKS
G	.035 $\pm$ .006	
F	.125 $\pm$ .003	
E	.046 $\pm$ .003	
D	.039 $\pm$ .003	
C	.031	UNLETTERED
B	.127 $\pm$ .003	INTL TOOLING
A	SHOP OPTION	EXTL TOOLING
	UNSUPPORTED PLATED THRU	

HOLE SCHEDULE

INVENTORY CONTROL NUMBER	THIS DRAWING	HOLE CONFIGURATION	DRILL DECK	LAYER 1 (COMP. SIDE)	LAYER 2 (COND. SIDE)	MARKING	CONDUCTOR SIDE SOLDER MASK	COMPONENT SIDE SOLDER MASK
2-1-1								

REVISION LEVEL CONTROL

DIMENSION IDENTIFIERS	
LAST USED	NOT USED

UNLESS OTHERWISE SPECIFIED  
 • DIMENSIONS ARE IN INCHES  
 • TOLERANCES  
 ANGLES  $\pm$  .5°  
 3 PLACE DECIMALS  $\pm$  .010  
 2 PLACE DECIMALS  $\pm$  .02  
 • DIMENSIONING IN ACCORDANCE WITH ANSI Y14.5

OWN: W. BOBERMIN 2 DATE: 2/25/82  
 CHK: B 2/1/82  
 ELECT ENG: [Signature] 2/1/82  
 PCB LAY ENG: [Signature] 2/1/82  
 PROD ENG: [Signature] 2/1/82  
 DESIGNED BY: [Signature] 2/1/82  
 CHECKED BY: [Signature] 2/1/82

TYPE II

**TEXAS INSTRUMENTS**  
 INCORPORATED  
 CALCULATOR PRODUCTS DIVISION

**PRINTED WIRING BOARD,  
 PRODUCT 477**

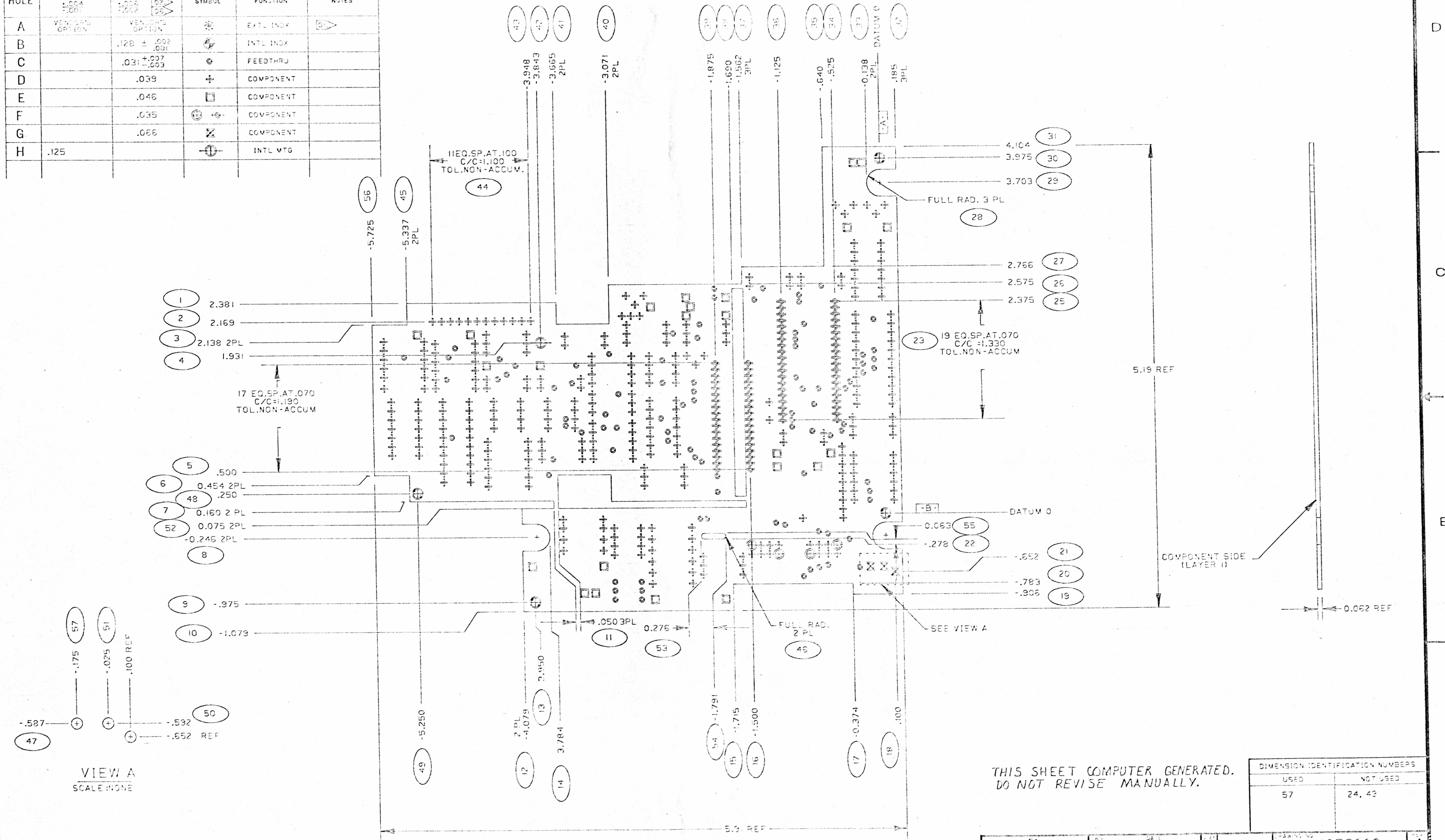
SUPPONG: MP    SIZE: D    DRAWING NO: 1052922

SHEET 1 OF 2

D 1052922

# HOLE SCHEDULE

HOLE	UNSUPPORTED C/O TOL	PLATED-THRU C/O TOL	SYMBOL	FUNCTION	NOTES
A	VENO CURS OPTION	VENO CURS OPTION		EXTL INDX	
B		.128 ± .002 .001		INTL INDX	
C		.031 ± .007 .003		FEEDTHRU	
D		.039		COMPONENT	
E		.046		COMPONENT	
F		.035		COMPONENT	
G		.066		COMPONENT	
H	.125			INTL MTG	



VIEW A  
SCALE: NONE

THIS SHEET COMPUTER GENERATED.  
DO NOT REVISE MANUALLY.

DIMENSION IDENTIFICATION NUMBERS	
USED	NOT USED
57	24, 43