

SPECIFICATIONS:

MATERIALS; ALL LAMINATES AND BONDING MATERIALS SHOULD BE SELECTED FROM
IPC-4101 OR IPC-4103, MINIMUM Tg>170degC, Td>300degC,
U.L. RATING OF 94 V-0

MATERIAL FAMILY: FR406

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CLADDING;          EXTERNAL LAYERS .5 OZ. COPPER, OVERPLATE TO 1.5 OZ.
                   INTERNAL SIGNAL LAYERS .5 OZ. COPPER.
                   INTERNAL PLANE LAYERS 1 OZ. COPPER.
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NOTE: IF THE LAYER STACKUP CONFLICTS WITH THE ABOVE
CLADDING SPECIFICATIONS THEN THE LAYER STACKUP SHALL
TAKE PRECEDENCE.

SOLDER MASK; SHALL BE LIQUID PHOTOIMAGEABLE (LPI) APPLIED ON BOTH SIDES
OVER BARE COPPER OR GOLD AND SHALL MEET IPC-SM-840
(LATEST REV.) CLASS 3. COLOR GREEN.

SILK SCREEN SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR: WHITE
SYNTHETIC INKJET PRINTING ALLOWED FOR DENSE BOARDS,
COLOR: WHITE

SURFACE FINISH; ENIG (Electroless Nickel/Immersion Gold)
PER IPC-4552 LATEST REVISION

FILLED VIAS: FILLED USING COPPER FILL PROCESS AND PLATED OVER.

INTENTIONAL SHORTS; IF SUPPLIED DATA INCLUDES A FILE "READ_ME.2", THEN
INTENTIONAL NET SHORTS EXIST. CUSTOMER REVIEW AND APPROVAL
IS REQUIRED IF SUPPLIED DATA REPORTS ANY CONDITION THAT
DOES NOT MATCH "READ ME.2" FILE PROVIDED.

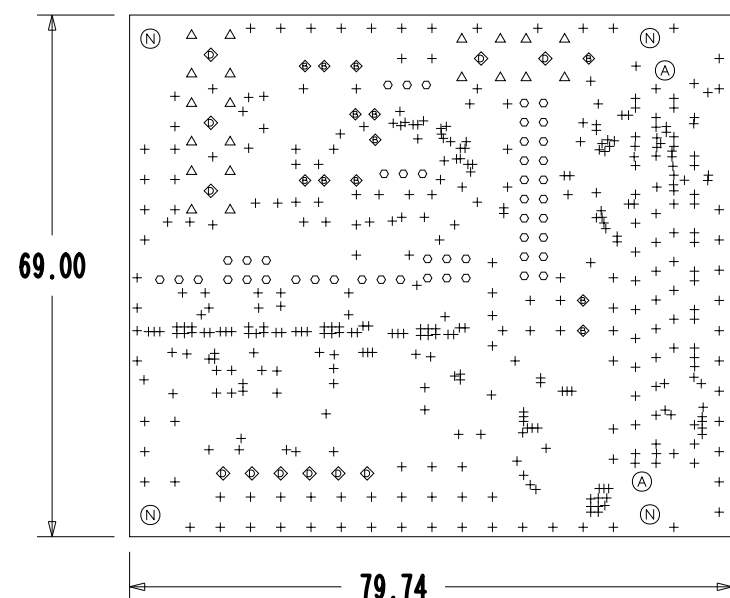
TEST REQUIREMENTS: 100% NETLIST ELECTRICAL VERIFICATION USING CUSTOMER SUPPLIED IPC-D-356 NETLIST FOR OPENS AND SHORTS WHEN "GERBER DATA" IS PROVIDED. THIS VERIFICATION ALSO REQUIRED FOR "ODB++" DATA PER EMBEDDED NETLIST.

REQUIREMENTS:

1. REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
2. ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00115, (LATEST REVISION.)
3. MODIFICATIONS TO THE ARTWORK ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
4. HOLE PATTERN TOLERANCES FOR UNDIMENSIONED HOLES SHALL BE A DIAMETER OF 0.005 INCHES FROM THEIR TRUE POSITION.
5. PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.001 INCH MINIMUM AVERAGE, WITH NO READING LESS THAN .0008 BY CROSS SECTION.
6. HOLE DIAMETERS APPLY AFTER PLATING.
7. FINISHED CONDUCTOR WIDTHS SHALL NOT BE REDUCED FROM THE NOMINAL INDICATED ON THE MASTER PATTERN, BY MORE THAN THE CONDUCTOR THICKNESS.
8. MINIMUM DESIGN LINE WIDTH IS .XXX INCH.
9. MINIMUM DESIGN SPACING IS .XXX INCH.
10. NON-FUNCTIONAL PAD REMOVAL FROM INNER SIGNAL LAYERS MAY BE PERFORMED AFTER CUSTOMER APPROVAL.
11. IF PAD SIZES PROVIDED ARE NOT LARGE ENOUGH TO MAINTAIN ANNULAR RING REQUIREMENT, MFR. MAY REQUEST APPROVAL TO TEAR DROP PADS TO MAINTAIN ANNULAR RING. (AT PAD TO TRACE INTERSECTION ONLY AND ELECTRICAL INTEGRITY MUST BE MAINTAINED.)
12. THIEVING MAY BE ADDED TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN ONLY AFTER REVIEW AND APPROVAL FROM THE CUSTOMER:
 - A. THIEVING TO CARD EDGE, FIDUCIALS, NON-PLATED THROUGH HOLES, ALL OTHER FEATURES TO BE 0.200 INCH MINIMUM.
 - B. THERE SHALL BE NO THIEVING IN ANY AREAS FREE OF SOLDER MASK OR INTERNAL COPPER PLANES.
13. MFR. TO LEGIBLY ETCH OR STAMP/SCREEN WITH PERMANENT NON-CONDUCTIVE INK ON SECONDARY SIDE IN A CLEAR AREA UNLESS OTHERWISE INDICATED;
 - A. U.L. CODE-FLAMMABILITY RATING
 - D. MFR LOGO
 - B. DATE CODE (STAMP).
 - E. SUCCESSFUL ELECTRICAL TEST.
 - C. LOT NUMBER
14. REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED. REPAIRS ARE NOT ALLOWED IN ANY AREA DEFINED ON GOLD_PRM AND/OR GOLDSEC ARTWORK LAYERS WHEN PROVIDED IN GERBER OR ODB++ DATA.

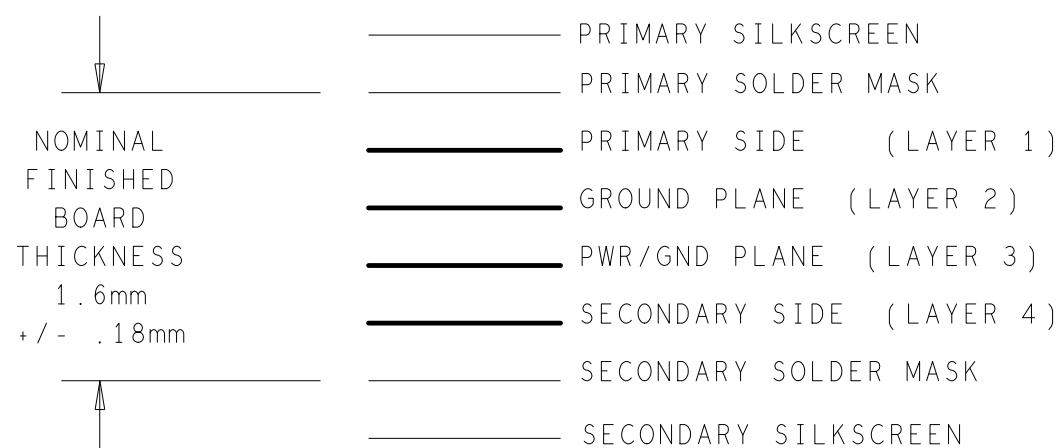
REVISION			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE		

DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILLIMETERS			
FIGURE	FINISHED SIZE	PLATED	QTY
+	0.2489	PLATED	405
◆	1.0211	PLATED	12
◦	1.1405	PLATED	47
⬢	1.27	PLATED	11
△	1.5189	PLATED	20
⊗	1.27	NON-PLATED	2
⊙	2.6695	NON-PLATED	4




HOLE TOLERANCE
UNLESS SPECIFIED
PLATED: $\pm 0.0762\text{mm}$
NON PLATED: $\pm 0.0254\text{mm}$

4 LAYER STACKUP



CHARACTERISTIC IMPEDANCE = 50 OHMS +/- 10%
ARTWORK LINE WIDTH FOR
IMPEDANCE CONTROLLED LINES = 0.012"

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM (INCHES) DECIMALS FRACTIONS ANGLES (mm) (inches) (deg min sec)		FABRICATION		 ANALOG DEVICES		ANALOG DEVICES INTERNATIONAL ERDC Building Robert Baker Park Raheny, LIMERICK, IRELAND	
MATERIAL		DRAWN BY	PAT SHEAHAN	DATE	2/NOV/91		
FINISH		DESIGNED BY	CHECKED BY			APPROVED BY	
PWA/ENKIMER		SIZE	FSCM NO		DRAWING NUMBER		REV
DO NOT SCALE DWG		A2	SCALE		09-050892		C
		SHEET	1/1		SHEET 1		OF 1