
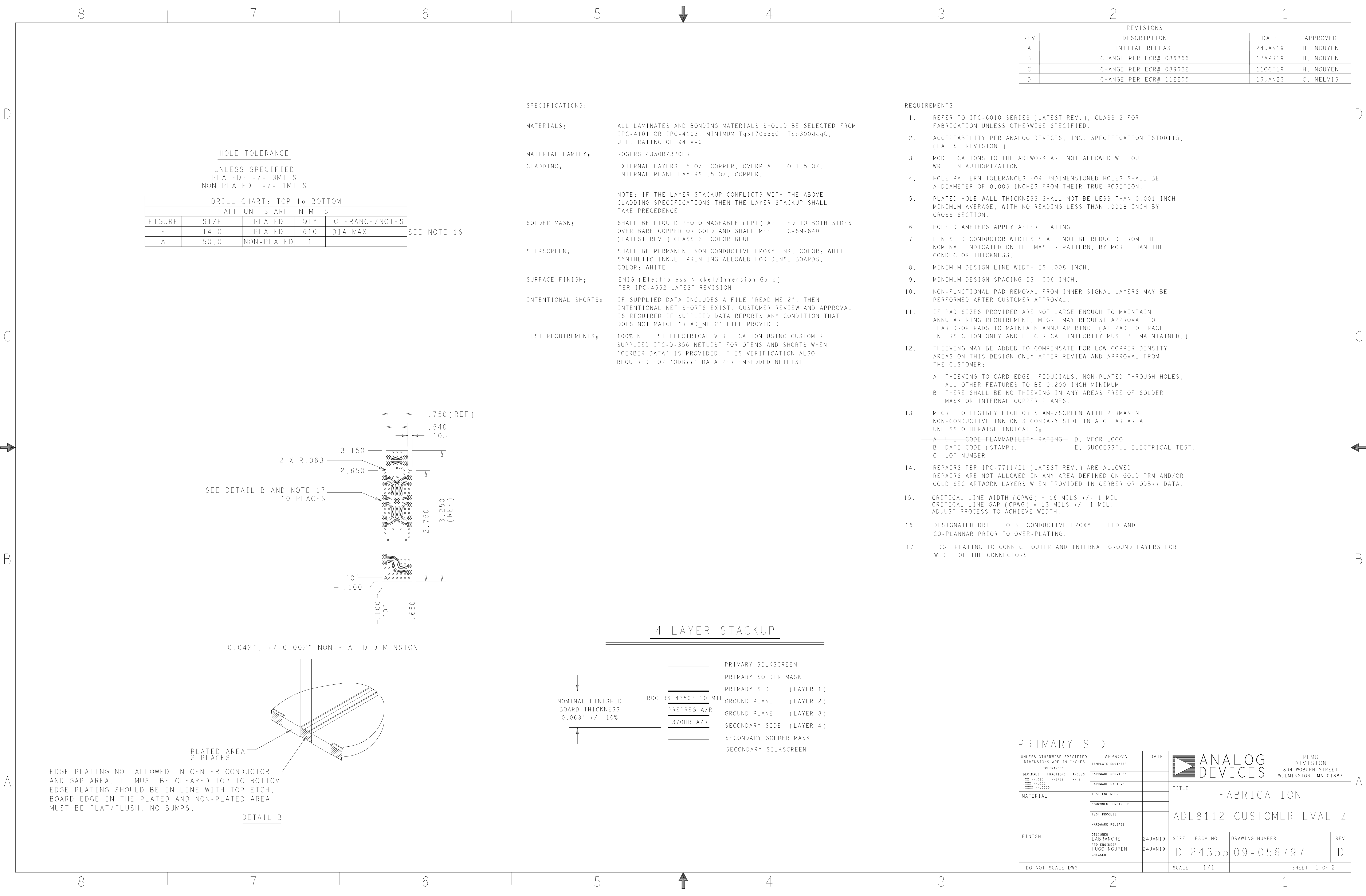


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	24 JAN19	H. NGUYEN
B	CHANGE PER ECR# 086866	17 APR19	H. NGUYEN
C	CHANGE PER ECR# 089632	11 OCT19	H. NGUYEN
D	CHANGE PER ECR# 112205	16 JAN23	C. NELVIS

ASSEMBLY NOTES:

- BOARD ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00119 (LATEST REVISION).
- REPAIRS PER IPC-7711/21(LATEST REVISION) ARE ALLOWED.
- REPAIRS ARE NOT ALLOWED IN SOLDERMASK FREE AREAS ON EITHER SIDE OF THE BOARD.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX +/- .010 +/-1/32 .2 .XXX +/- .005	ASSEMBLY		 ANALOG DEVICES		RFMG DIVISION 804 WOBURN STREET WILMINGTON, MA 01867	
	APPROVAL	DATE	TITLE			
	DRAWN BY LABRANCHE	24JAN19	ASSEMBLY ADL8112 CUSTOMER EVAL Z			
	DESIGNED HUGO NGUYEN	24JAN19				
MATERIAL	CHECKED		SIZE	FSCM NO	DRAWING NUMBER	REV
FINISH	APPROVED		D		01-056797	D
	MPG ENGINEER					
DO NOT SCALE DWG			SCALE	1/1	SHEET 1 OF 1	



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	24JAN19	H. NGUYEN
B	CHANGE PER ECR# 086866	17APR19	H. NGUYEN
C	CHANGE PER ECR# 089632	11OCT19	H. NGUYEN
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SPECIFICATIONS:

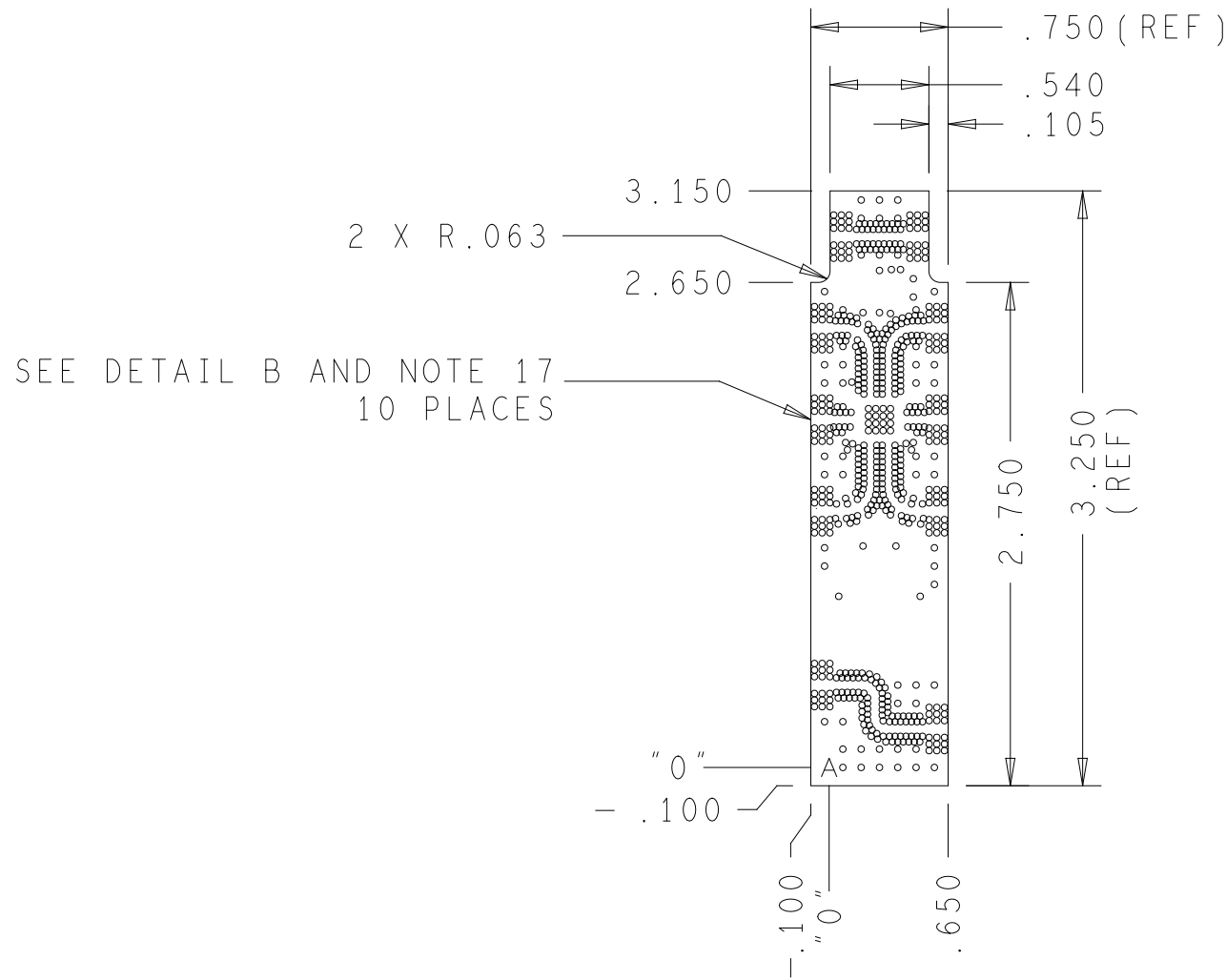
- MATERIALS; ALL LAMINATES AND BONDING MATERIALS SHOULD BE SELECTED FROM IPC-4101 OR IPC-4103, MINIMUM Tg>170degC, Td>300degC, U.L. RATING OF 94 V-0
- MATERIAL FAMILY; ROGERS 4350B/370HR
- CLADDING; EXTERNAL LAYERS .5 OZ. COPPER, OVERPLATE TO 1.5 OZ. INTERNAL PLANE LAYERS .5 OZ. COPPER.
- NOTE: IF THE LAYER STACKUP CONFLICTS WITH THE ABOVE CLADDING SPECIFICATIONS THEN THE LAYER STACKUP SHALL TAKE PRECEDENCE.
- SOLDER MASK; SHALL BE LIQUID PHOTOIMAGEABLE (LPI) APPLIED TO BOTH SIDES OVER BARE COPPER OR GOLD AND SHALL MEET IPC-SM-840 (LATEST REV.) CLASS 3, COLOR BLUE.
- SILKSCREEN; 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
- 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:

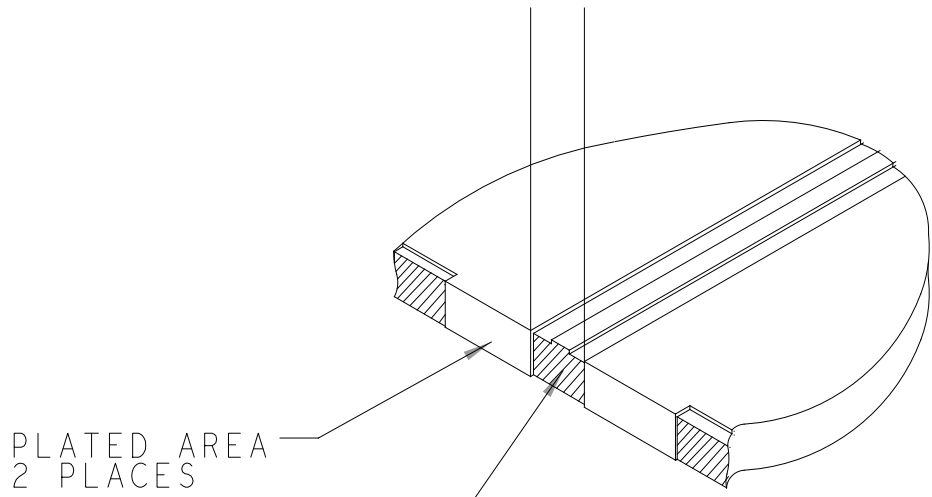
- REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
- ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00115, (LATEST REVISION.)
- MODIFICATIONS TO THE ARTWORK ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
- HOLE PATTERN TOLERANCES FOR UNDIMENSIONED HOLES SHALL BE A DIAMETER OF 0.005 INCHES FROM THEIR TRUE POSITION.
- PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.001 INCH MINIMUM AVERAGE, WITH NO READING LESS THAN .0008 INCH BY CROSS SECTION.
- HOLE DIAMETERS APPLY AFTER PLATING.
- FINISHED CONDUCTOR WIDTHS SHALL NOT BE REDUCED FROM THE NOMINAL INDICATED ON THE MASTER PATTERN, BY MORE THAN THE CONDUCTOR THICKNESS.
- MINIMUM DESIGN LINE WIDTH IS .008 INCH.
- MINIMUM DESIGN SPACING IS .006 INCH.
- NON-FUNCTIONAL PAD REMOVAL FROM INNER SIGNAL LAYERS MAY BE PERFORMED AFTER CUSTOMER APPROVAL.
- 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.)
- THIEVING MAY BE ADDED TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN ONLY AFTER REVIEW AND APPROVAL FROM THE CUSTOMER:
 - THIEVING TO CARD EDGE, FIDUCIALS, NON-PLATED THROUGH HOLES, ALL OTHER FEATURES TO BE 0.200 INCH MINIMUM.
 - THERE SHALL BE NO THIEVING IN ANY AREAS FREE OF SOLDER MASK OR INTERNAL COPPER PLANES.
- MFR. TO LEGIBLY ETCH OR STAMP/SCREEN WITH PERMANENT NON-CONDUCTIVE INK ON SECONDARY SIDE IN A CLEAR AREA UNLESS OTHERWISE INDICATED;
 - U.L. CODE FLAMMABILITY RATING
 - DATE CODE (STAMP).
 - LOT NUMBER
 - MFR LOGO
 - SUCCESSFUL ELECTRICAL TEST.
- REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED. REPAIRS ARE NOT ALLOWED IN ANY AREA DEFINED ON GOLD_PRM AND/OR GOLD_SEC ARTWORK LAYERS WHEN PROVIDED IN GERBER OR ODB++ DATA.
- CRITICAL LINE WIDTH (CPWG) = 16 MILS +/- 1 MIL. CRITICAL LINE GAP (CPWG) = 13 MILS +/- 1 MIL. ADJUST PROCESS TO ACHIEVE WIDTH.
- DESIGNATED DRILL TO BE CONDUCTIVE EPOXY FILLED AND CO-PLANNAR PRIOR TO OVER-PLATING.
- EDGE PLATING TO CONNECT OUTER AND INTERNAL GROUND LAYERS FOR THE WIDTH OF THE CONNECTORS.

HOLE TOLERANCE				
UNLESS SPECIFIED				
PLATED: +/- 3MILS				
NON PLATED: +/- 1MILS				
DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
0	14.0	PLATED	610	DIA MAX
A	50.0	NON-PLATED	1	

SEE NOTE 16



0.042", +/-0.002" NON-PLATED DIMENSION



PLATED AREA
2 PLACES


EDGE PLATING NOT ALLOWED IN CENTER CONDUCTOR AND GAP AREA. IT MUST BE CLEARED TOP TO BOTTOM EDGE PLATING SHOULD BE IN LINE WITH TOP ETCH. BOARD EDGE IN THE PLATED AND NON-PLATED AREA MUST BE FLAT/FLUSH. NO BUMPS.

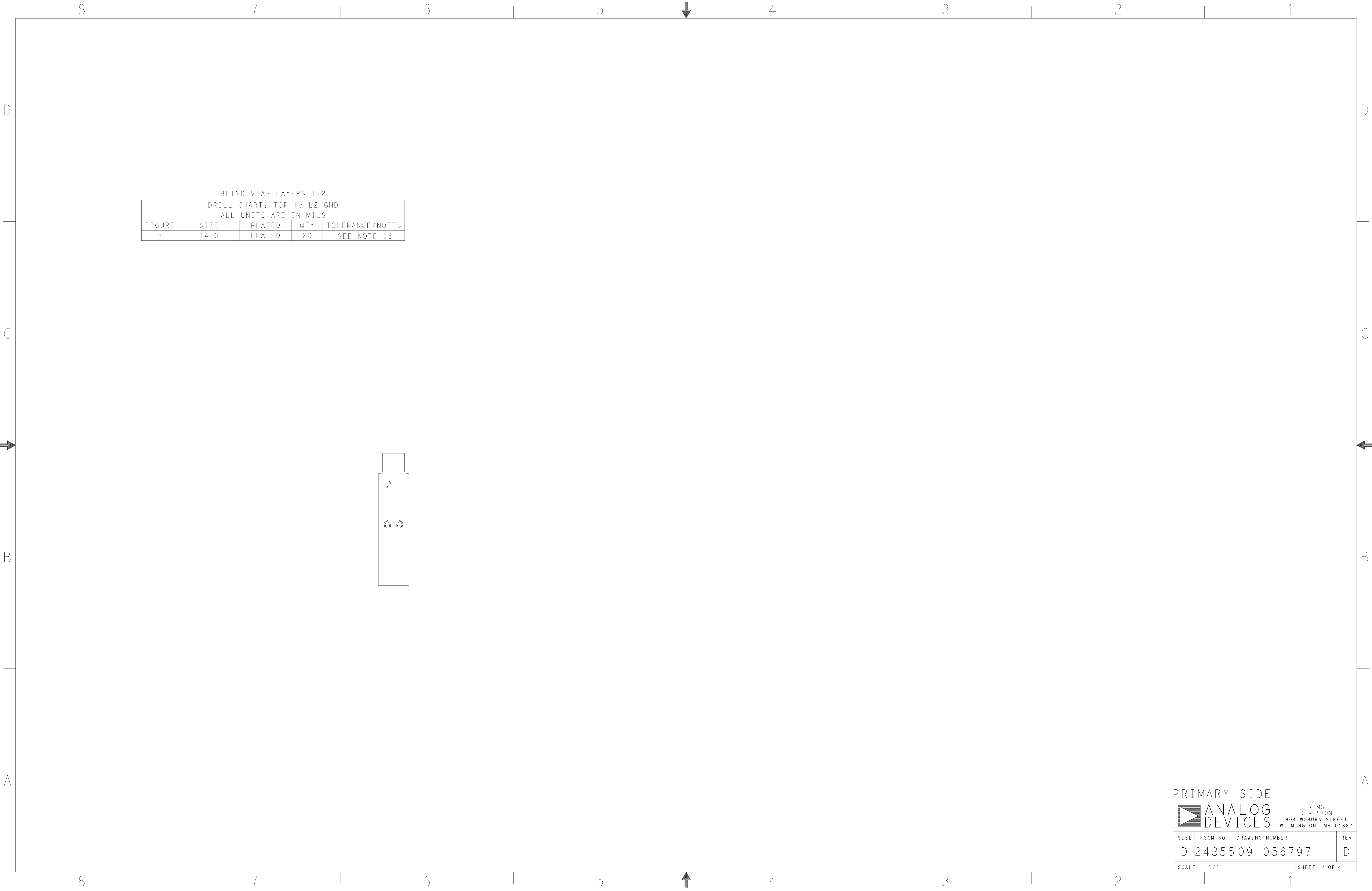
DETAIL B

4 LAYER STACKUP

	PRIMARY SILKSCREEN
	PRIMARY SOLDER MASK
	PRIMARY SIDE (LAYER 1)
ROGERS 4350B 10 MIL	GROUND PLANE (LAYER 2)
PREPREG A/R	GROUND PLANE (LAYER 3)
370HR A/R	SECONDARY SIDE (LAYER 4)
	SECONDARY SOLDER MASK
	SECONDARY SILKSCREEN

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVAL	DATE	 RFMG DIVISION 804 WOBURN STREET WILMINGTON, MA 01887	
TOLERANCES		TEMPLATE ENGINEER			
DECIMALS	FRACTIONS	HARDWARE SERVICES		TITLE FABRICATION ADL8112 CUSTOMER EVAL Z	
.XX +/- .010	+/- 1/32	HARDWARE SYSTEMS			
.XXX +/- .005	.. 2	TEST ENGINEER			
.XXXX +/- .0050		COMPONENT ENGINEER			
MATERIAL		TEST PROCESS		SIZE D 24355 09-056797	
		HARDWARE RELEASE			
FINISH		DESIGNER LABRANCHE	24JAN19	FSCM NO	DRAWING NUMBER
		PID ENGINEER HUGO NGUYEN	24JAN19		REV D
DO NOT SCALE DWG				SCALE 1/1	SHEET 1 OF 2



BLIND VIAS LAYERS 1-2				
DRILL CHART: TOP to L2_GND				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
°	14.0	PLATED	20	SEE NOTE 16

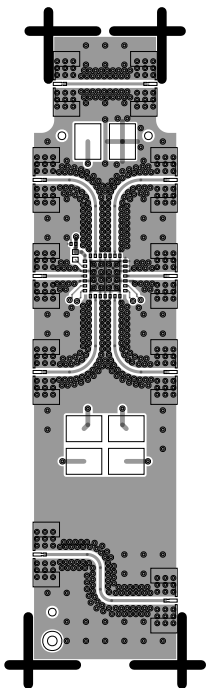
PRIMARY SIDE

ANALOG
DEVICES

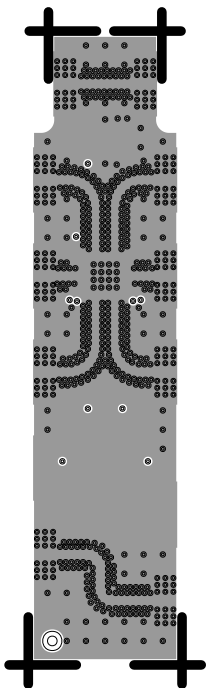
RFMG
DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
D	24355	09-056797	D
SCALE 1/1		SHEET 2 OF 2	

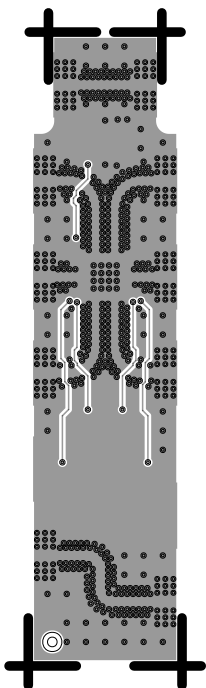
L1 PRIMARY
08-056797-01
REV D



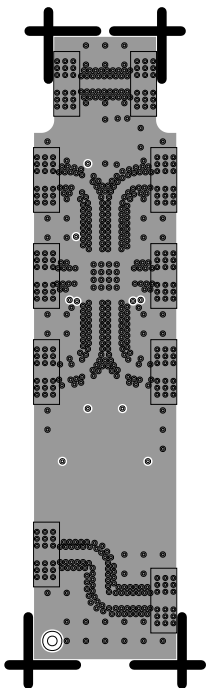
L2 GROUND
08-056797-07
REV D



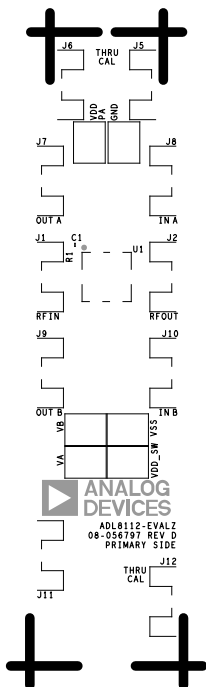
L3 GROUND
08-056797-08
REV D



L4 SECONDARY
08-056797-02
REV D



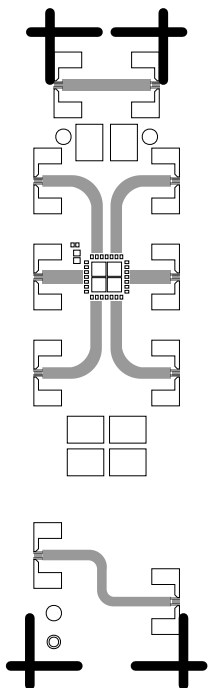
SILKSCREEN PRIMARY
08-056797-03
REV D



SOLDERMASK PRIMARY

08-056797-04

REV D



SILKSCREEN SECONDARY

08-056797-05

REV D



12

13

14

15

16

17

18

19



SECONDARY SIDE
08-028187 REV D

20

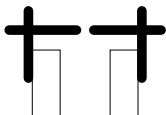
21



SOLDERMASK SECONDARY

08-056797-06

REV D



PASTEMASK PRIMARY

08-056797-09

REV D

