



SPECIFICATIONS:

ROHS COMPLIANCE NOTE: HOMOGENOUS MATERIALS IN THIS BOARD SHALL BE COMPLIANT THE EU RoHS DIRECTIVE 2002/95/EC

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: ISOLA 370HR

CLADDING: EXTERNAL LAYERS .5 OZ. COPPER, OVERPLATE TO 1.5 OZ. INTERNAL PLANE LAYERS 1 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 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

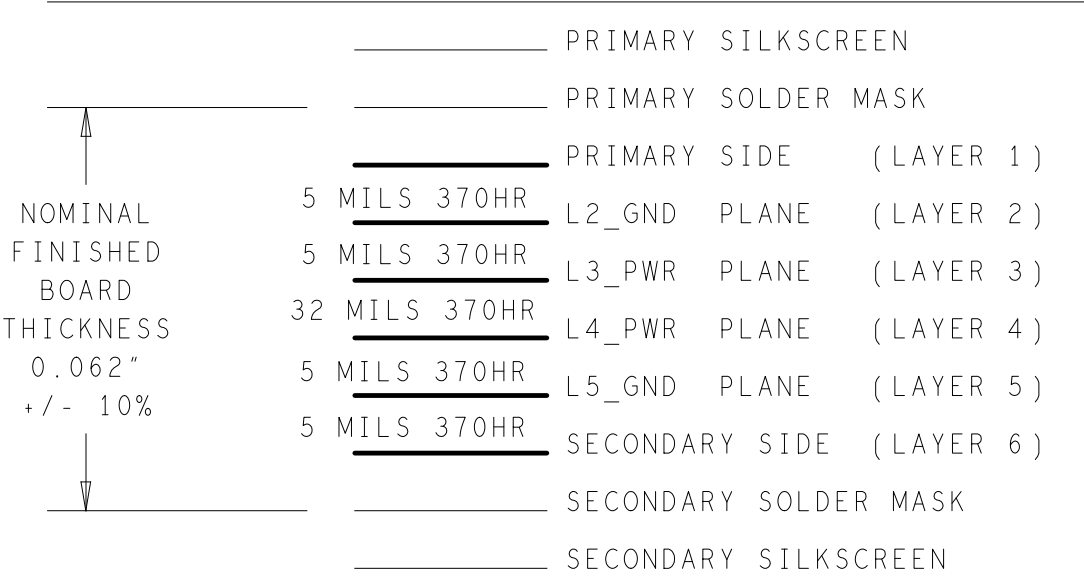
INTENTIONAL SHORTS: IF SUPPLIED DATA INCLUDES A FILE "READ_ME.2", THEN INTENTIONAL NET SHORTS EXIST. CUSTOMER REVIEW AND APPROVAL IS REQUIRED IF SUPPLIED DATA REPORTS ANY CONDITION THAT DOES NOT MATCH "READ_ME.2" FILE PROVIDED.

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 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 .007 INCH.
- MINIMUM DESIGN SPACING IS .005 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, MFGR. 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.
- MFGR. 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
 - MFGR 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.~~
- BOARDS TO BE SHIPPED IN ARRAY AND KEEP INTACT. PANEL TO BE SUBJECTED TO CUSTOMER'S APPROVAL. PANELED SOLDER PASTE STENCIL SHOULD BE SENT TO THE CUSTOMER.

6 LAYER STACKUP




IMPEDANCE TABLE

NOTE: ALL IMPEDANCE TOLERANCE +/-10%
SE = SINGLE ENDED
DP = DIFFERENTIAL PAIR

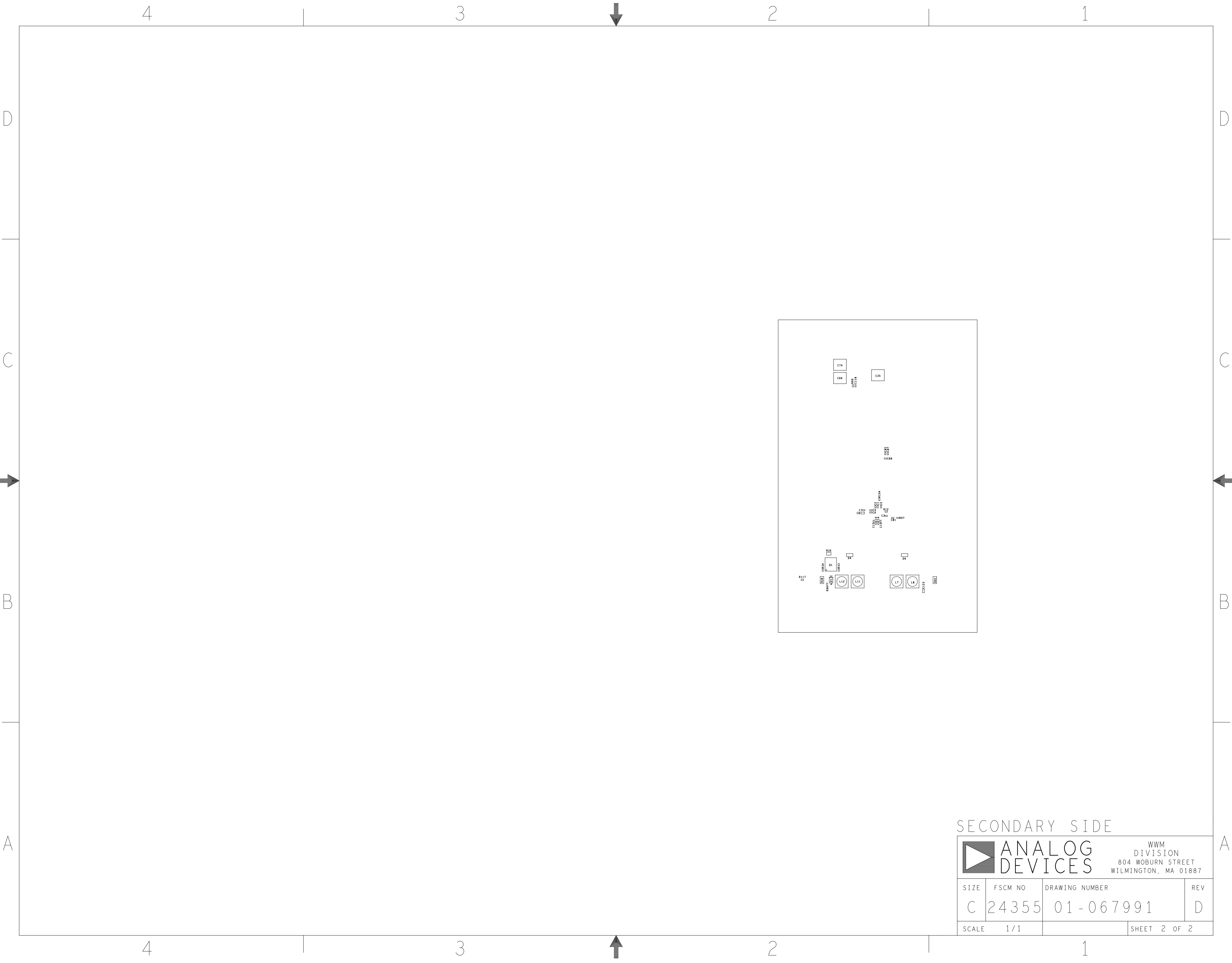
LAYER	IMPEDANCE	REFERENCE	LINE WIDTH	SPACE
L1	100 OHMS DP	L3	9.5 MILS	6.5 MILS
L1	50 OHMS SE	L2	7 MILS	N/A
L3	50 OHMS SE	L2	7 MILS	N/A
L6	50 OHMS SE	L5	7 MILS	N/A

PRIMARY SIDE



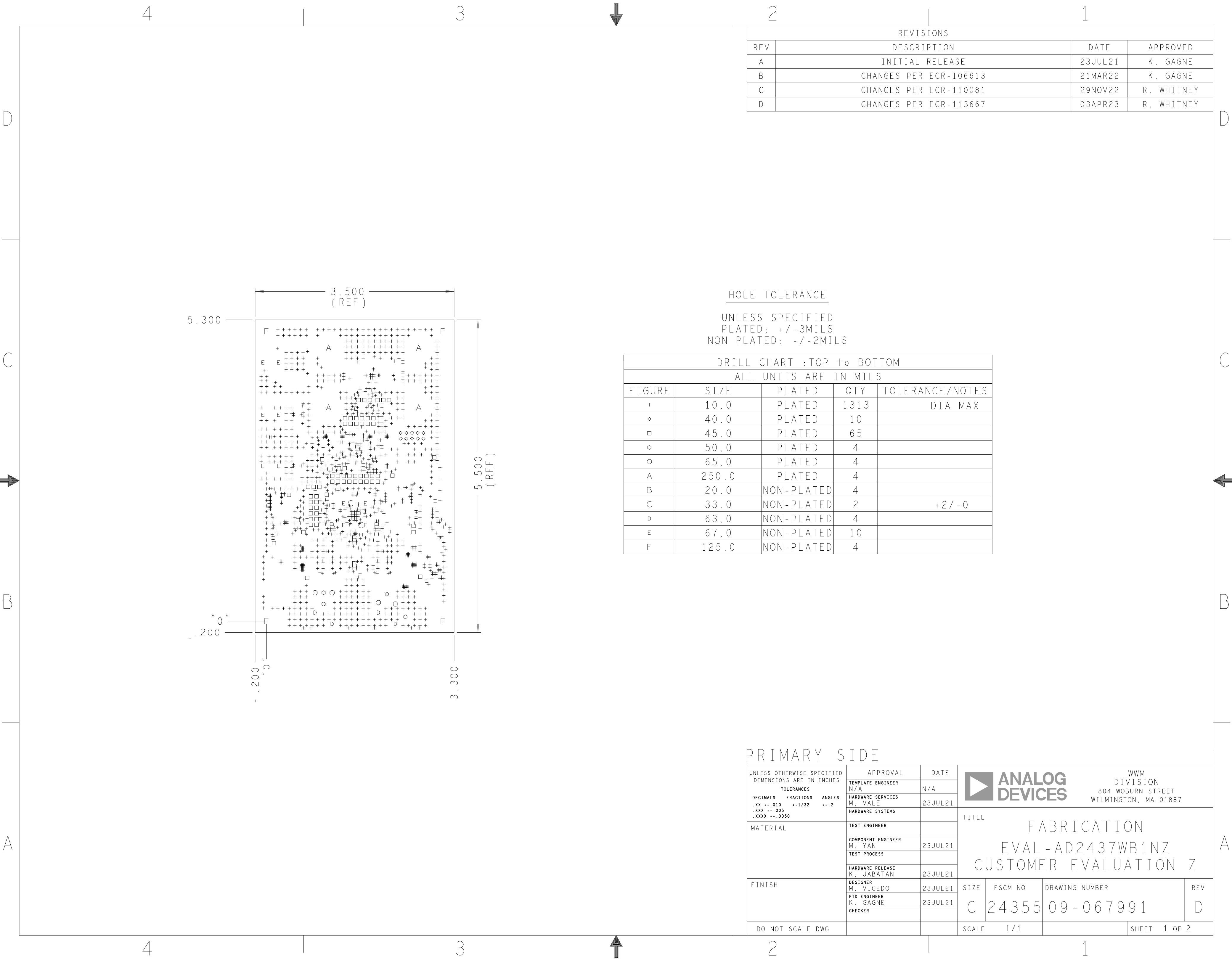
WWM
DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-067991	D
SCALE	1 / 1	SHEET 2 OF 2	



SECONDARY SIDE

<div><div></div><div>ANALOG DEVICES</div></div> <div>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>			
SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	01-067991	D
SCALE	1 / 1	SHEET 2 OF 2	




REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	23JUL21	K. GAGNE
B	CHANGES PER ECR-106613	21MAR22	K. GAGNE
C	CHANGES PER ECR-110081	29NOV22	R. WHITNEY
D	CHANGES PER ECR-113667	03APR23	R. WHITNEY

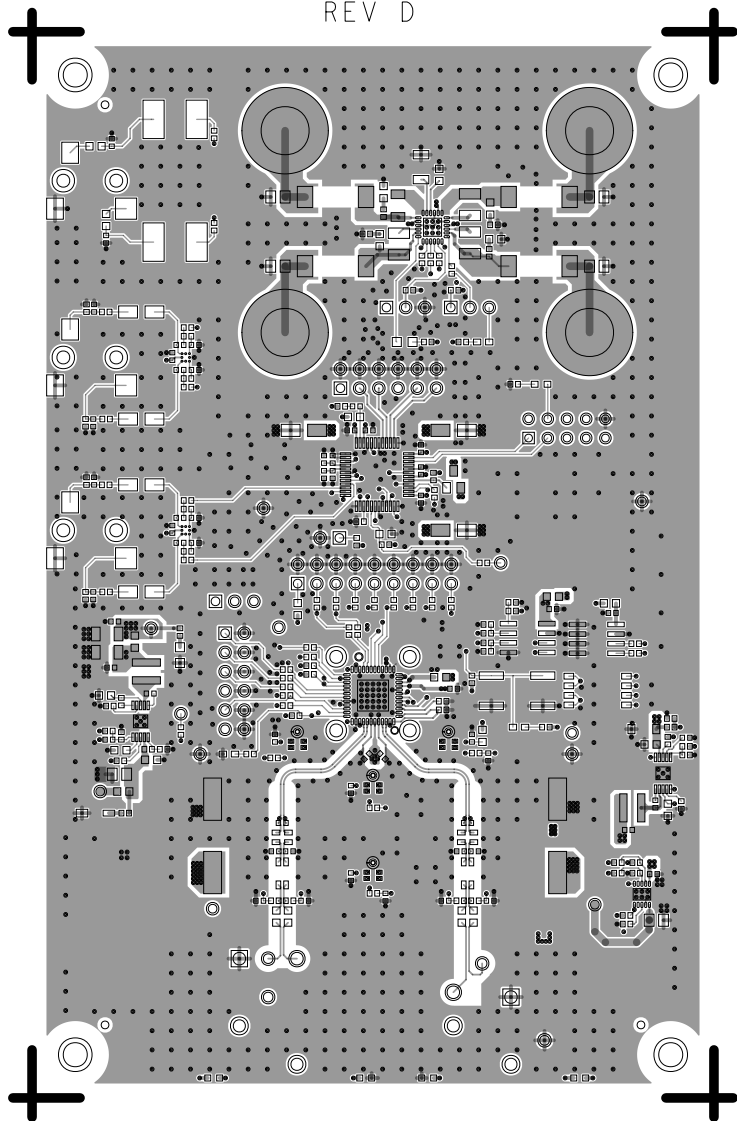
HOLE TOLERANCE
UNLESS SPECIFIED
PLATED: +/-3MILS
NON PLATED: +/-2MILS

DRILL CHART :TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	10.0	PLATED	1313	DIA MAX
◊	40.0	PLATED	10	
◻	45.0	PLATED	65	
◊	50.0	PLATED	4	
○	65.0	PLATED	4	
A	250.0	PLATED	4	
B	20.0	NON-PLATED	4	
C	33.0	NON-PLATED	2	+2 / -0
D	63.0	NON-PLATED	4	
E	67.0	NON-PLATED	10	
F	125.0	NON-PLATED	4	

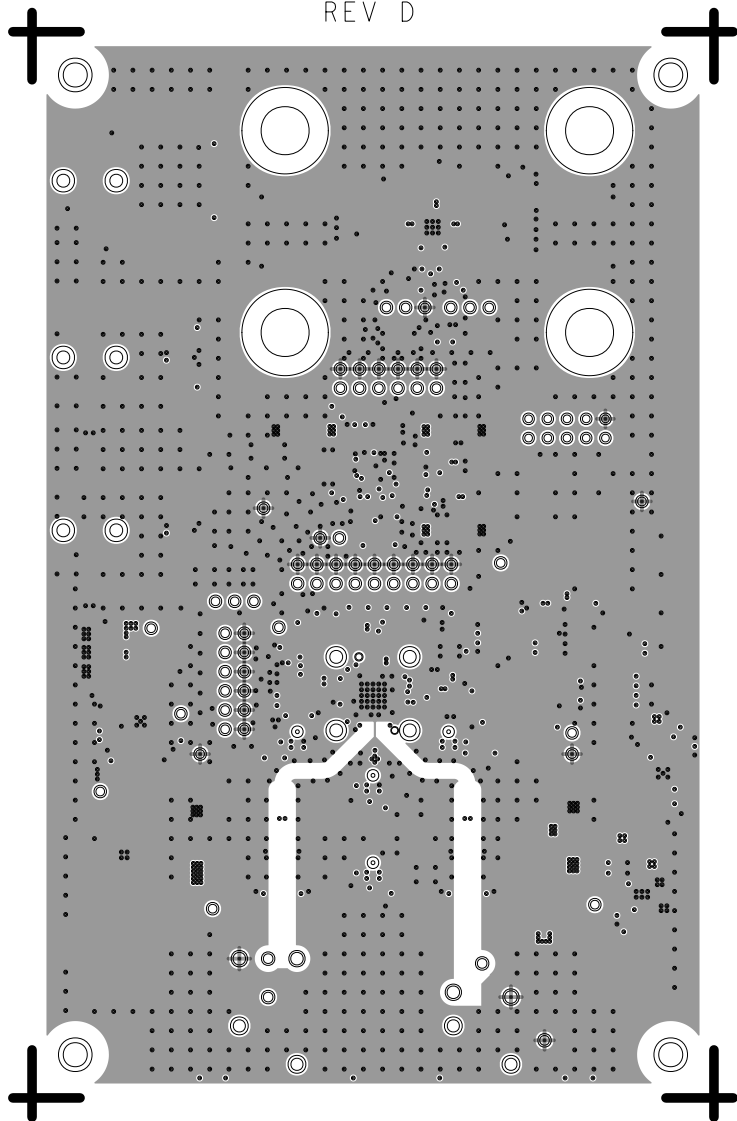
PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			APPROVAL		DATE		<div> ANALOG DEVICES</div> <div>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>			
TOLERANCES			TEMPLATE ENGINEER N/A		N/A					
DECIMALS FRACTIONS ANGLES			HARDWARE SERVICES M. VALE		23JUL21		TITLE FABRICATION EVAL - AD2437WB1NZ CUSTOMER EVALUATION Z			
.XX --.010 --1/32 -- 2			HARDWARE SYSTEMS							
.XXX --.005			TEST ENGINEER							
.XXXX --.0050			COMPONENT ENGINEER M. YAN		23JUL21					
MATERIAL			TEST PROCESS							
			HARDWARE RELEASE K. JABATAN		23JUL21					
FINISH			DESIGNER M. VICEDO		23JUL21		SIZE	FSCM NO	DRAWING NUMBER	REV
			PTD ENGINEER K. GAGNE		23JUL21		C	24355	09-067991	D
			CHECKER							
DO NOT SCALE DWG							SCALE 1 / 1		SHEET 1 OF 2	

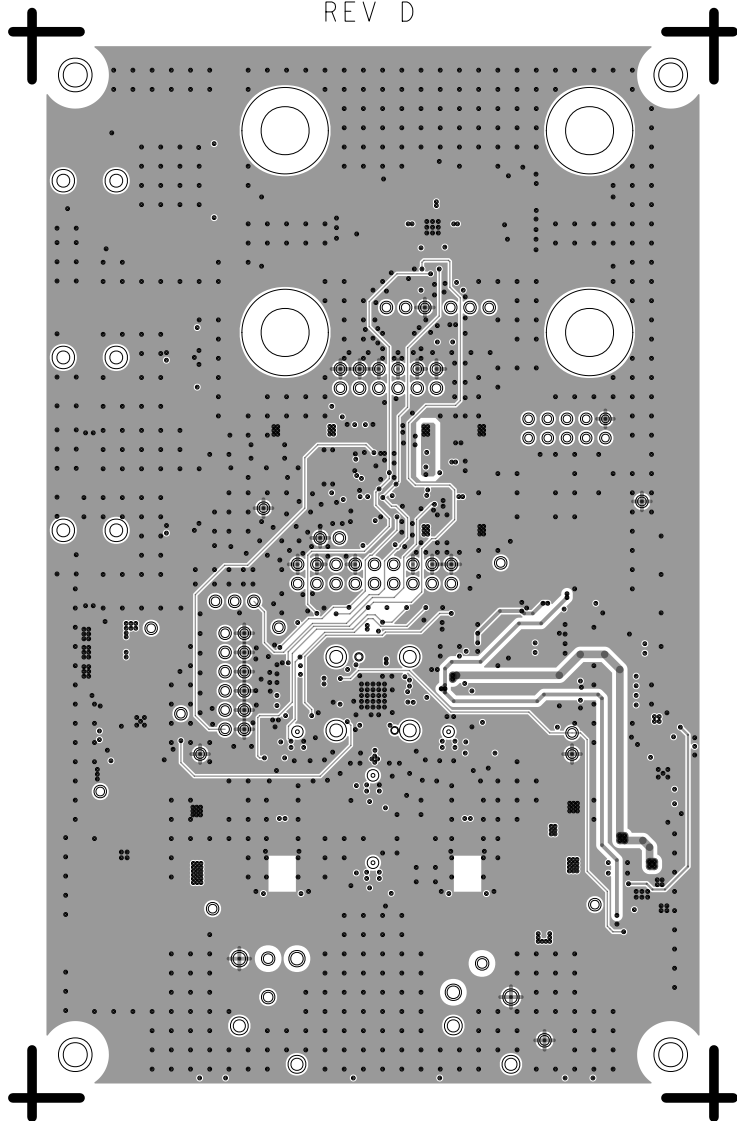
L1 PRIMARY
08-067991-01
REV D



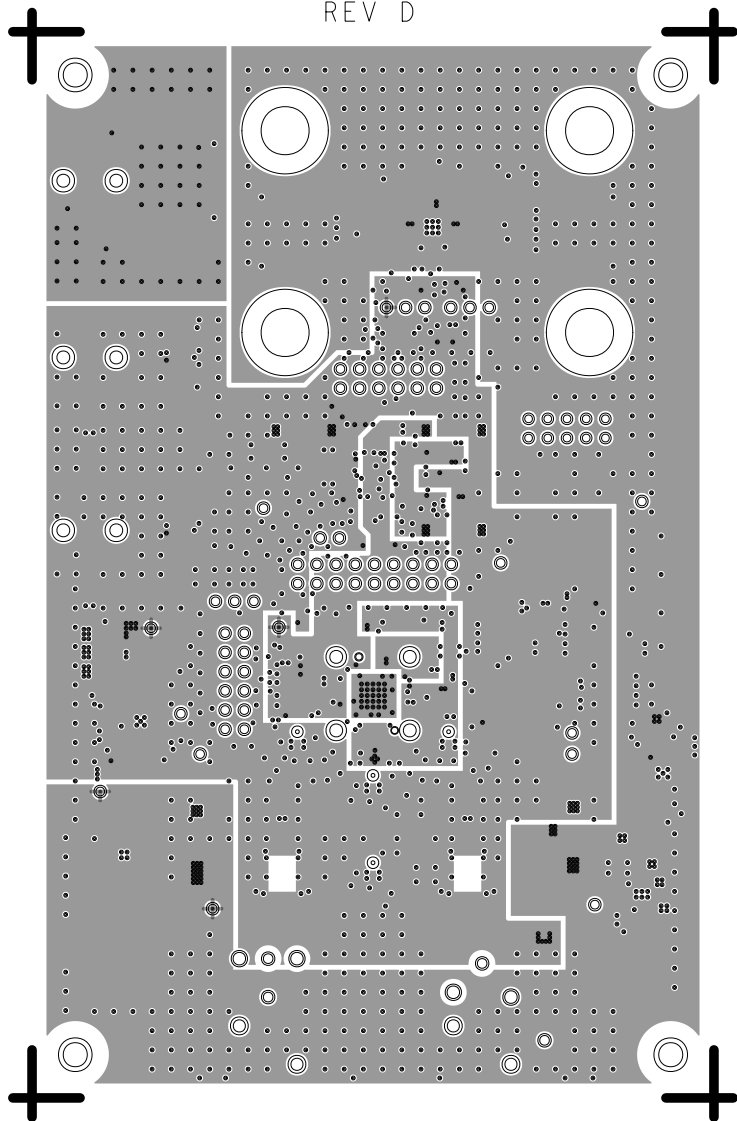
L2 GND
08-067991-07
REV D



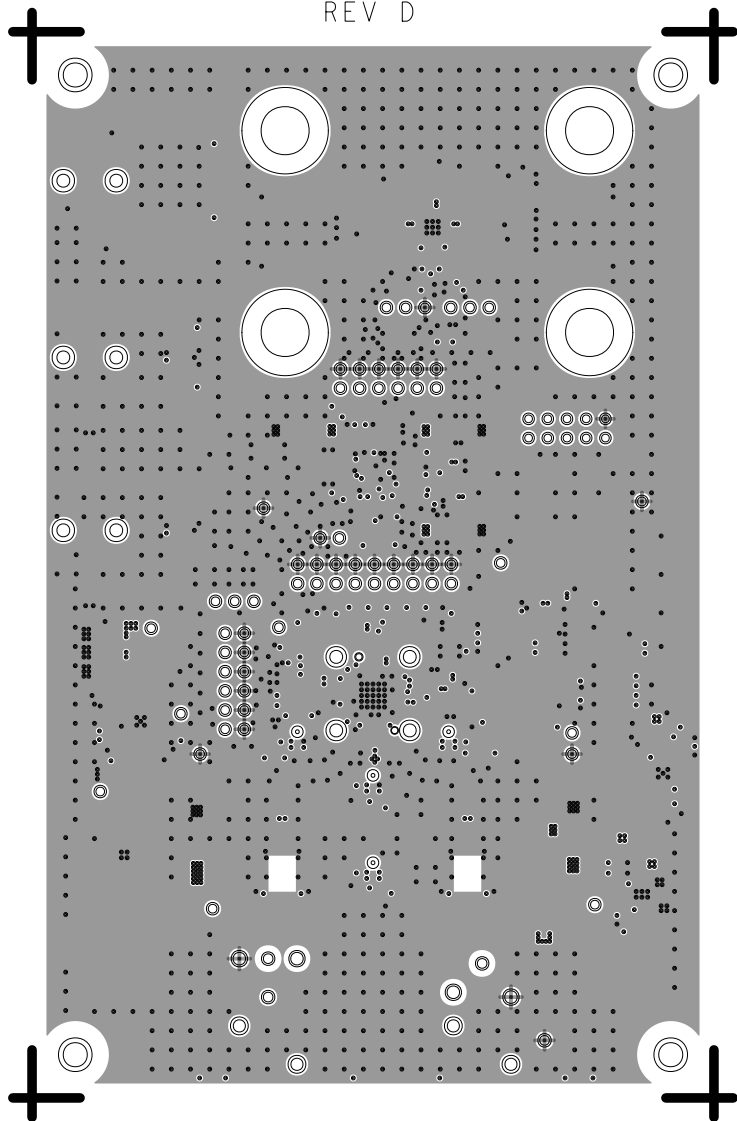
L3 PWR
08-067991-08
REV D



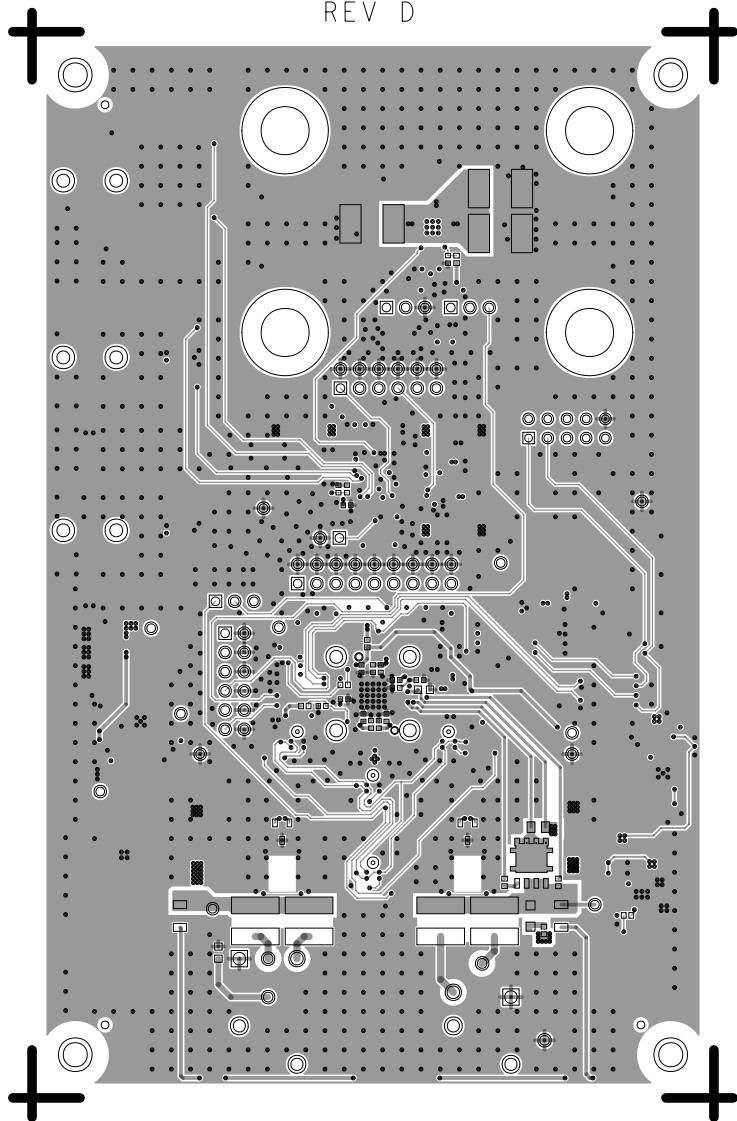
L4 PWR
08-067991-09
REV D



L5 GND
08-067991-10
REV D



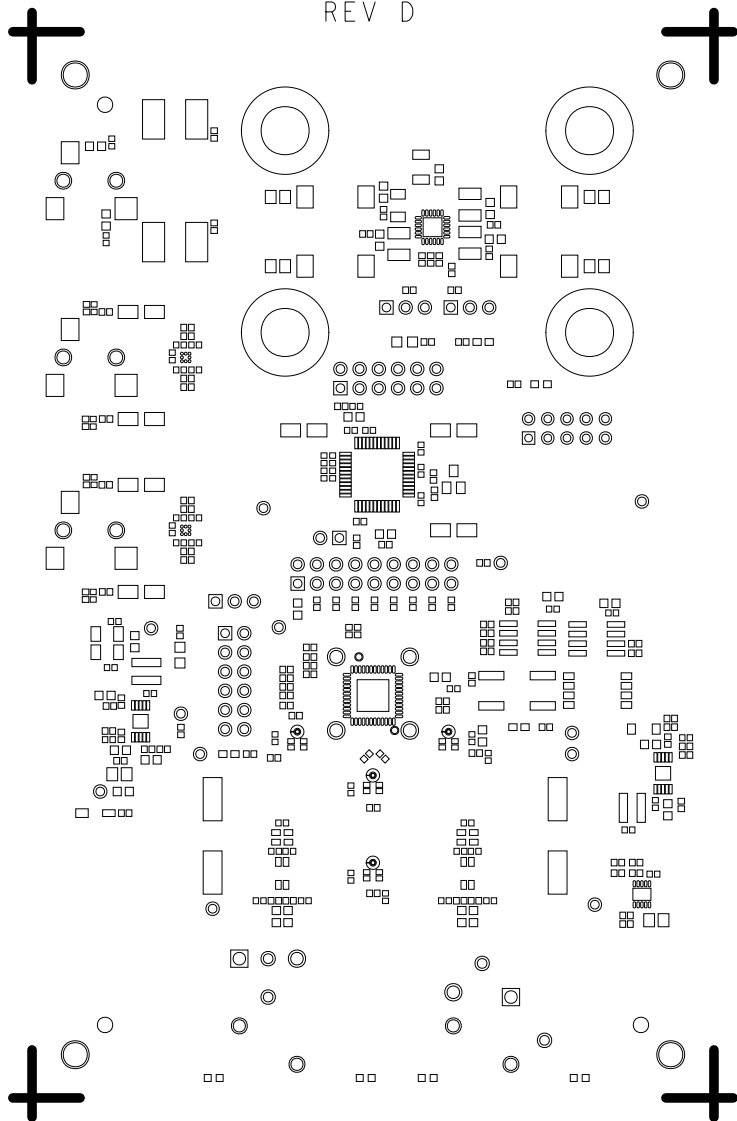
L6 SECONDARY
08-067991-02
REV D



SOLDERMASK PRIMARY

08-067991-04

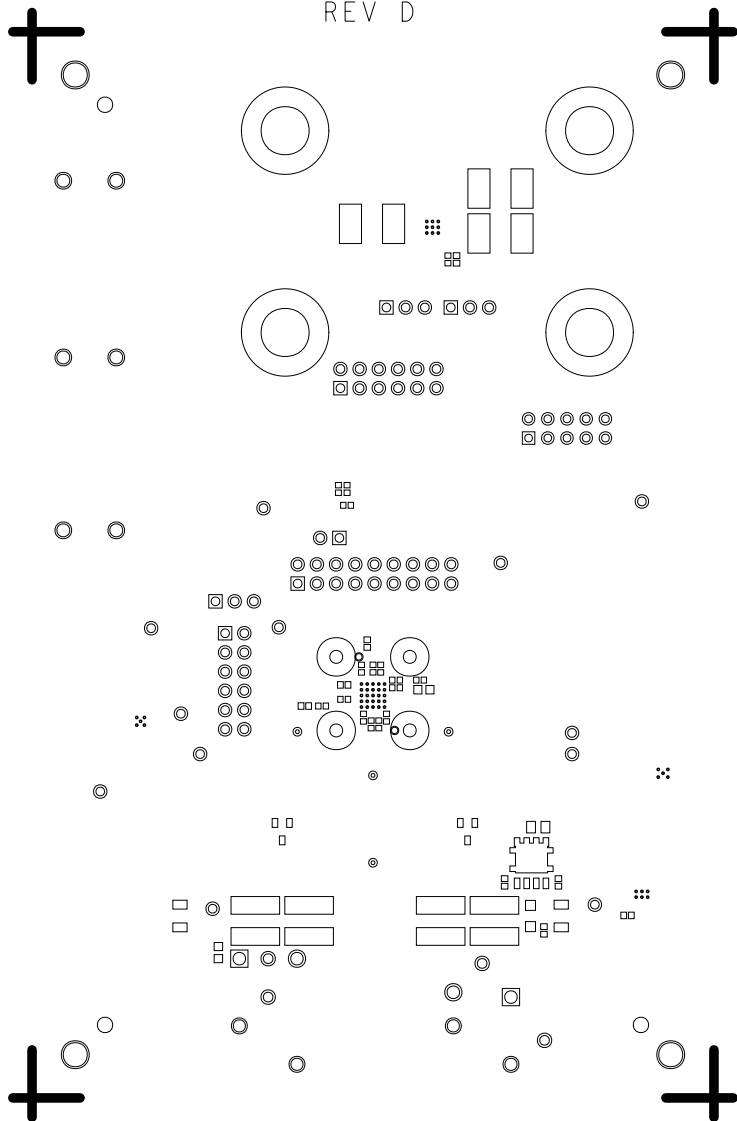
REV D



SOLDERMASK SECONDARY

08-067991-06

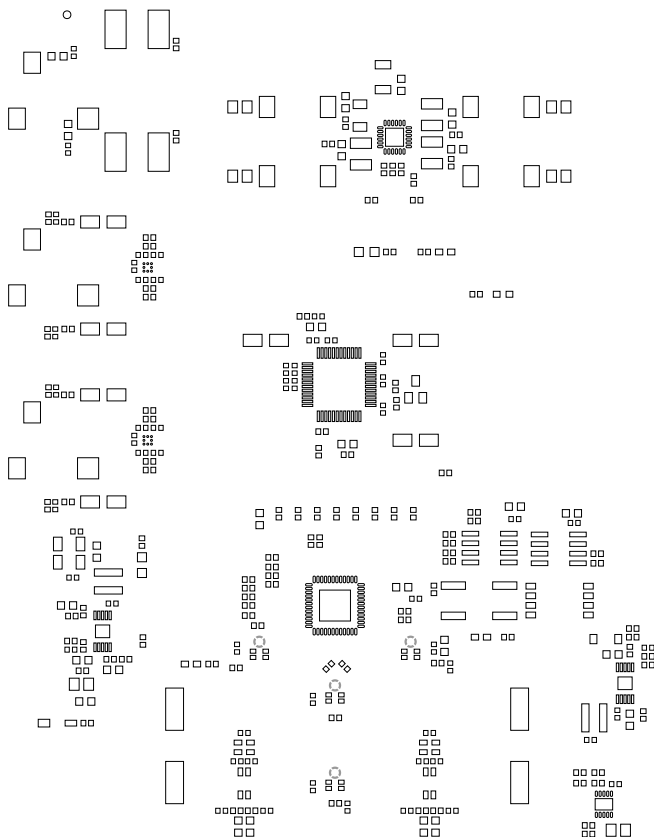
REV D



PASTEMASK PRIMARY

08-067991-11

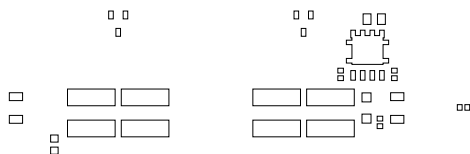
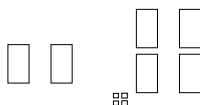
REV D



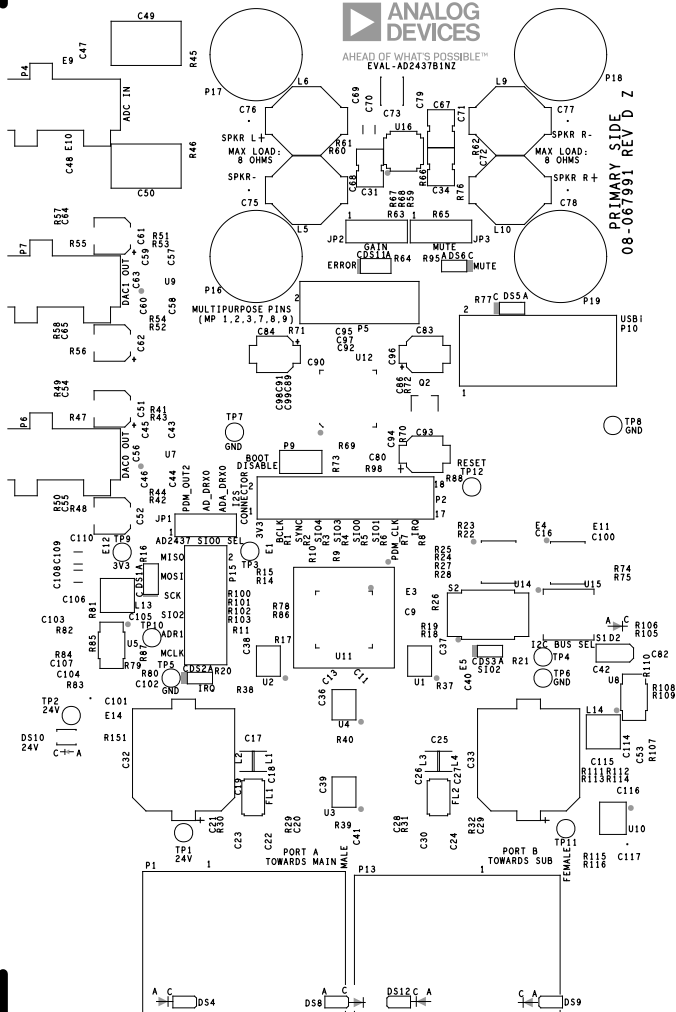
PASTEMASK SECONDARY

08-067991-12

REV D

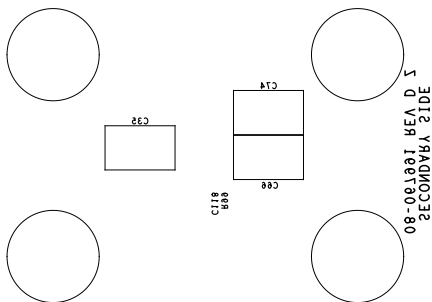


REV D



SILKSCREEN SECONDARY

08-067991-05
REV D



C88
R32

1B15

