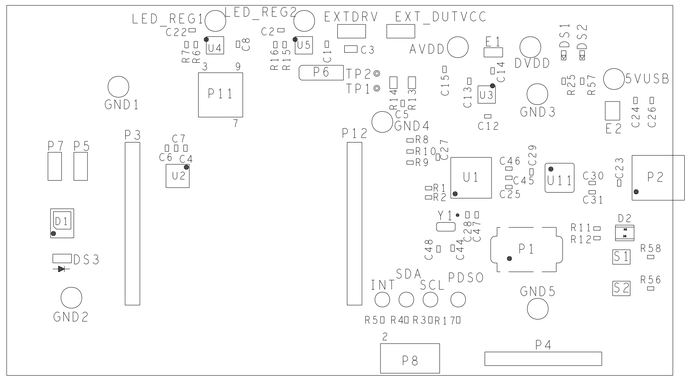
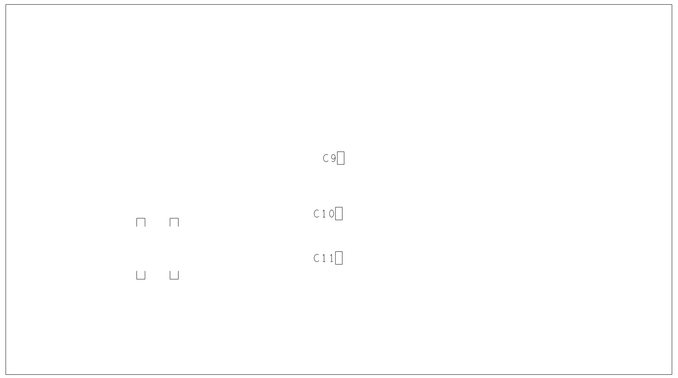
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	18SEP15	K.B.



PRIMARY SIDE



SECONDARY SIDE

ASSEMBLY NOTES:

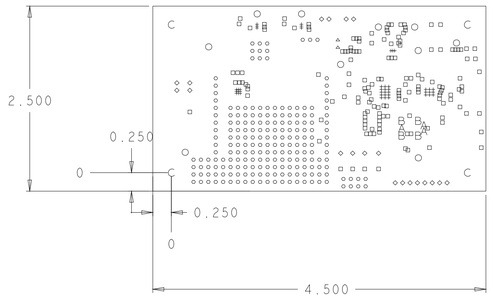
1. DEFAULT SHUNT PLACEMENT BELOW
   CONNECT P11 PINS 1 TO 4, 2 TO 5 AND 3 TO 6
   CONNECT P6 PINS 1 TO 2
2. CONNECT P5 AND P7 SHUNTS ACROSS PINS 1 AND 2

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX +-.010 +-1/32 +- 2 .XXX +-.005 .XXXX +-.0050	APPROVAL	DATE	ANALOG DEVICES ASC DIVISION 804 WOBURN STREET WILMINGTON, MA 01887
	TEMPLATE ENGINEER R. MARION	ddMMMyy	
	HARDWARE SERVICES X	ddMMMyy	TITLE ASSEMBLY
	HARDWARE SYSTEMS X	ddMMMyy	
MATERIAL	TEST ENGINEER X	ddMMMyy	ADPD103 EVALUATION BD Z
	COMPONENT ENGINEER X	ddMMMyy	
	TEST PROCESS X	ddMMMyy	
	HARDWARE RELEASE X	ddMMMyy	
FINISH	DESIGNER V. GUTBIER	25AUG15	SIZE D | FSCM NO 24355 | DRAWING NUMBER 01-041319 | REV A
	PTD ENGINEER K. BUCKLEY	18SEP15	
	CHECKER J. MORIN	10SEP15	
DO NOT SCALE DWG			SCALE 1/1 | SHEET 1 OF 1

ART FILM - Fab1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	18SEP15	K.B.



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; 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 BLUE.

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

SURFACE FINISH; ENIG. IMERSION GOLD PLATING, 2-8 MICRO INCHES GOLD OVER ELETROLESS NICKEL PLATING 100 MICRO INCHES MINIMUM PER QQ-N-290, CLASS I

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 .008 INCH.
9. MINIMUM DESIGN SPACING IS .006 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, MFGR. 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. MFGR. 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
    B. DATE CODE (STAMP).
    C. LOT NUMBER
    D. MFGR LOGO
    E. SUCCESSFUL ELECTRICAL TEST.
14. REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED.
15. THRU VIAS FILLED WITH NON-CONDUCTIVE EPOXY AND PLATED OVER. COPLANAR ON BOTH SIDES WITHIN .001 INCH PRIOR TO FINAL PLATING.
16. BOARDS TO BE PANELIZED BEST FIT.

4 LAYER STACKUP

NOMINAL FINISHED BOARD THICKNESS 0.063" +/- .010

- PRIMARY SILKSCREEN
- PRIMARY SOLDER MASK
- PRIMARY SIDE (LAYER 1) 90 OHM DIFFERENTIAL
- L2 PWR PLANE (LAYER 2)
- L3_GND PLANE (LAYER 3)
- SECONDARY SIDE (LAYER 4)
- SECONDARY SOLDER MASK
- SECONDARY SILKSCREEN

CHARACTERISTIC IMPEDANCE = 90 OHMS DIFF +/-10%
ARTWORK LINE WIDTH FOR
IMPEDANCE CONTROLLED LINES = 0.010" TRACE/0.009" GAP FOR LAYER 1.

HOLE TOLERANCE

UNLESS SPECIFIED
PLATED: +/- 3
NON PLATED: +/- 3

FINISHED HOLES IN MILS
ALL UNITS ARE IN MILS

FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	10.0	PLATED	42	MAX DIA
□	12.0	PLATED	157	MAX DIA
△	25.0	PLATED	2	
◇	40.0	PLATED	20	
○	45.0	PLATED	202	
O	63.0	PLATED	10	
A	39.0	NON-PLATED	3	
B	94.0	NON-PLATED	4	
C	180.0	NON-PLATED	4	

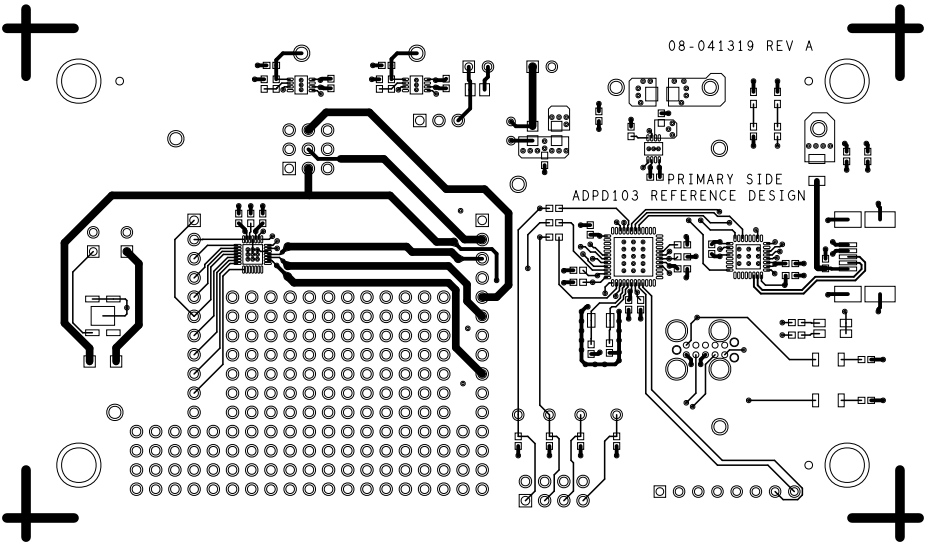
SEE NOTE 15

PRIMARY SIDE

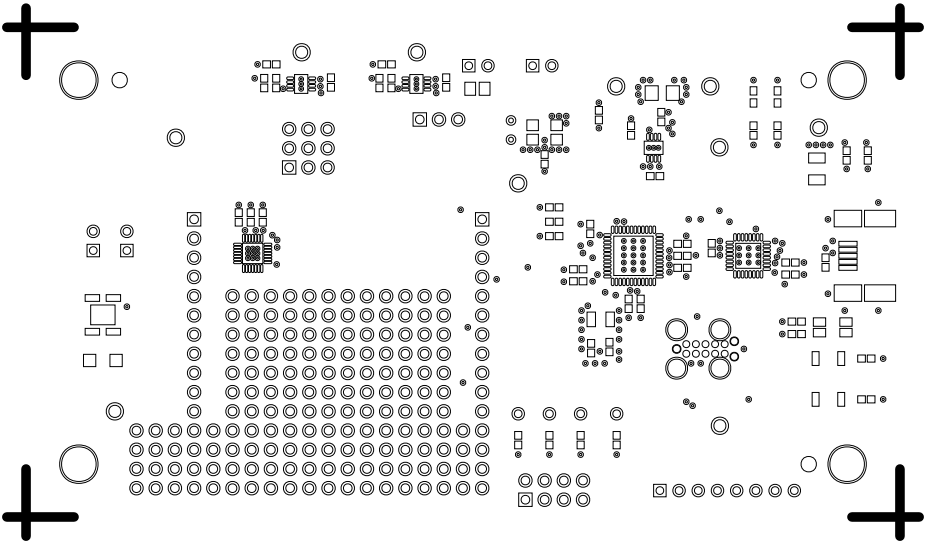
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX +-.010 +-1/32 +- 2 .XXX +-.005 .XXXX +-.0050	APPROVAL	DATE	ANALOG DEVICES ASC DIVISION 804 WOBURN STREET WILMINGTON, MA 01887
MATERIAL	TEMPLATE ENGINEER R. MARION	ddMMMyy	TITLE: FABRICATION
	HARDWARE SERVICES X	ddMMMyy	
	HARDWARE SYSTEMS X	ddMMMyy	ADPD103 EVALUATION BD Z
	TEST ENGINEER X	ddMMMyy	
	COMPONENT ENGINEER X	ddMMMyy	
	TEST PROCESS X	ddMMMyy	
	HARDWARE RELEASE X	ddMMMyy	
FINISH	DESIGNER V. GUTBIER	25AUG15	SIZE D / FSCM NO 24355 / DRAWING NUMBER 09-041319 / REV A
	PTD ENGINEER K. BUCKLEY	18SEP15	
	CHECKER J. MORIN	10SEP15	
DO NOT SCALE DWG			SCALE 1/1 / SHEET 1 OF 1

ART FILM - Fab1

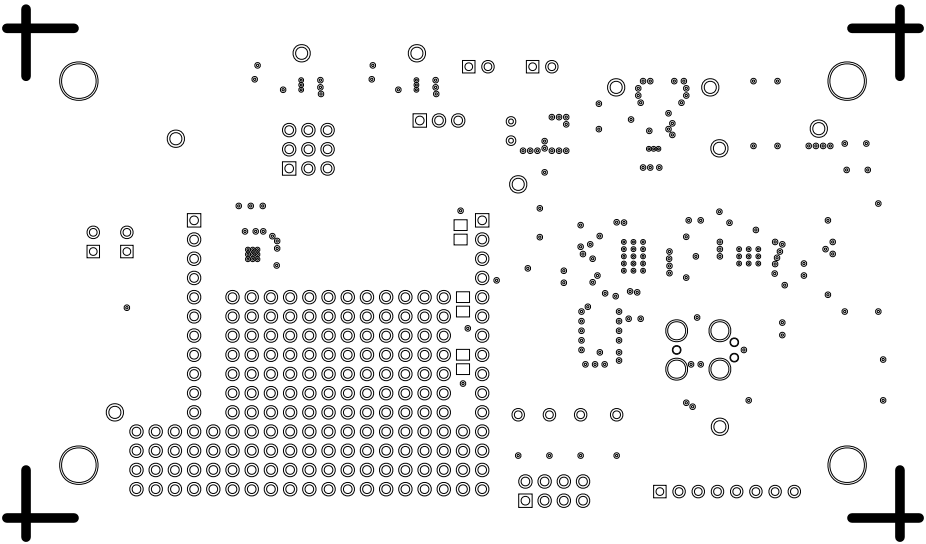
L1 PRIMARY
08-041319-01
REV A



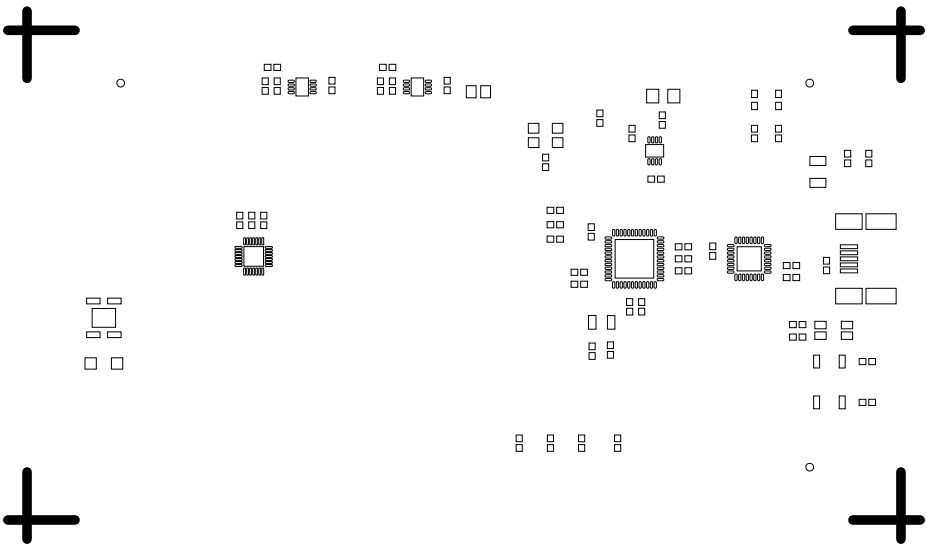
SOLDERMASK PRIMARY
08-041319-04
REV A



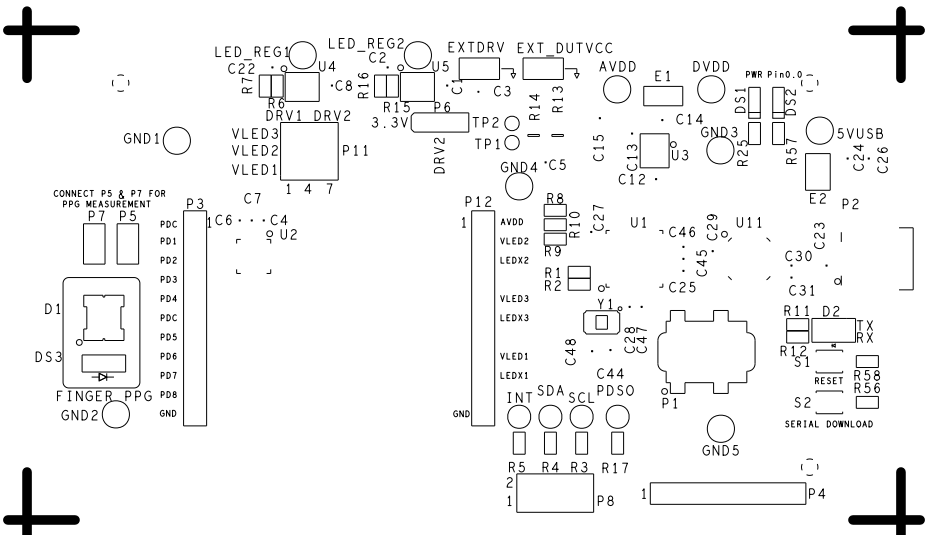
SOLDERMASK SECONDARY
08-041319-06
REV A



PASTEMASK PRIMARY
08-041319-07
REV A

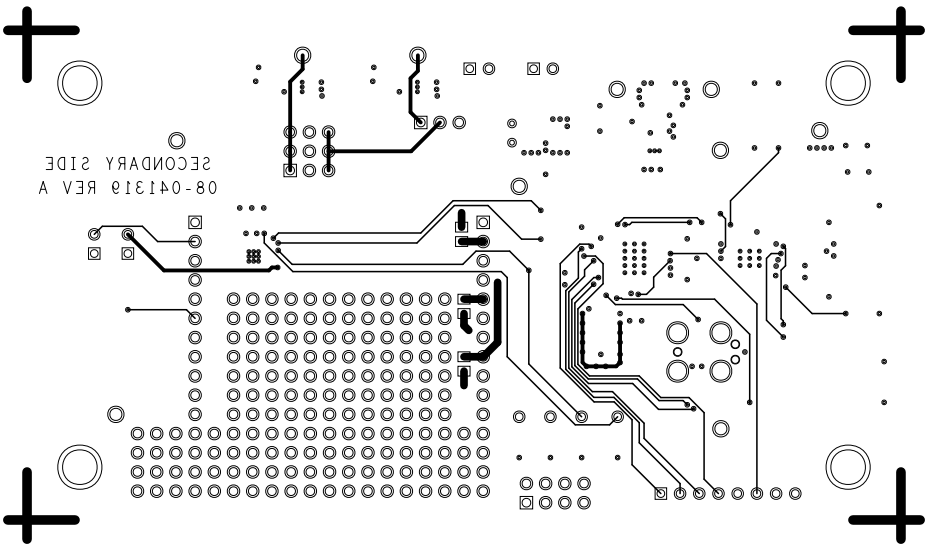


SILKSCREEN PRIMARY
08-041319-03
REV A

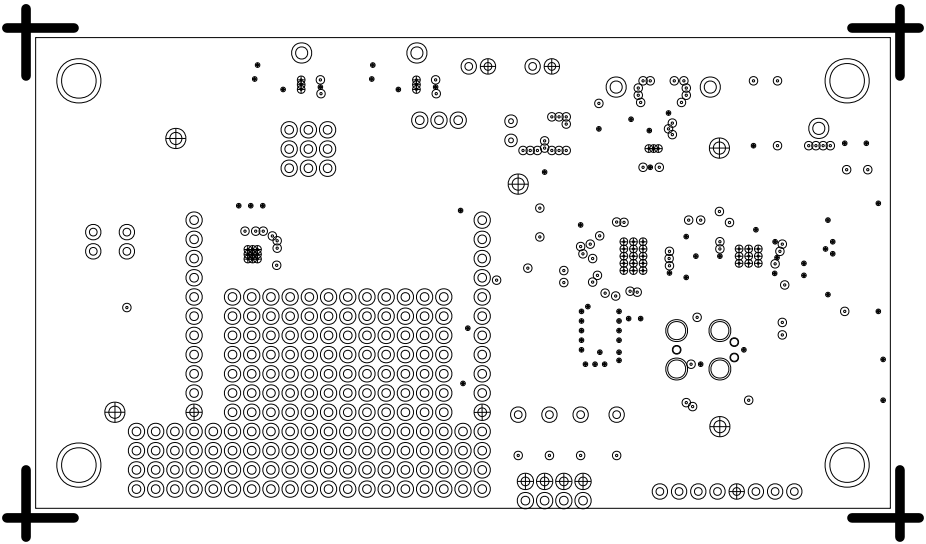


SILKSCREEN SECONDARY
08-041319-05
REV A

L4 SECONDARY
08-041319-02
REV A



L2_GND
08-041319-07
REV A



L3_PWR

08-041319-08

REV A