

ASSEMBLY NOTES:

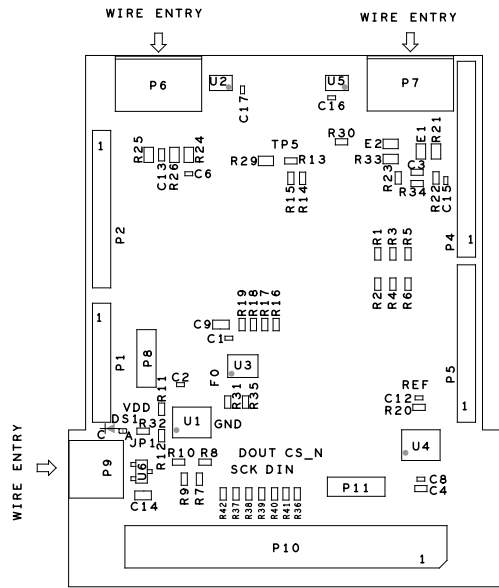
1. BOARD ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00119 (LATEST REVISION).
2. REPAIRS PER IPC-7711/21(LATEST REVISION) ARE ALLOWED.
3. REPAIRS ARE NOT ALLOWED IN SOLDERMASK FREE AREAS ON EITHER SIDE OF THE BOARD.
4. RoHS COMPLIANCE: ASSEMBLY VENDOR SHOULD ASSURE COMPLIANCE WITH LEAD-FREE AND RoHS PCB ASSEMBLY STANDARDS (EU RoHS DIRECTIVE 2002/95/EC).
5. BOARDS TO BE SHIPPED SINGULATED AFTER ASSEMBLY PROCESSES SMOOTHEN EDGES AND FREE FROM BURS AFTER DEPANELIZATION PROCESS
6. DON NOT TRIM EXCESS PINS ON THE FOLLOWING LOCATIONS:

- P1

- P2

- P4

- P5



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	30JAN21	K. NUEVA
B	AS PER ECR-103780	21JUL21	K. NUEVA
B1	AS PER ECR-105514	08NOV21	K. NUEVA

PRIMARY SIDE			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM TOLERANCES DECIMALS FRACTIONS ANGLES .XX -.254 --1/32 -- 2 .XXX -.127 .XXX -.127	APPROVAL		DATE
	TEMPLATE ENGINEER N/A		N/A
	HARDWARE SERVICES M. VALE		30JAN21
	HARDWARE SYSTEMS N/A		N/A
MATERIAL	TEST ENGINEER N/A		N/A
	COMPONENT ENGINEER M. YAN		30JAN21
	TEST PROCESS N/A		N/A
	HARDWARE RELEASE K. JABATAN		30JAN21
FINISH	DESIGNER M. VALE		30JAN21
	PTD ENGINEER K. NUEVA		30JAN21
	CHECKER N/A		N/A
	DO NOT SCALE DWG		
SCALE		1/1	
SHEET		1 OF 2	

ANALOG  
DEVICES

WWM  
DIVISION  
804 WOBURN STREET  
WILMINGTON, MA 01887

TITLE

ASSEMBLY  
EVAL-AD590-ARDZ  
CUSTOMER EVAL BOARD Z

SIZE

FSCM NO

DRAWING NUMBER

REV

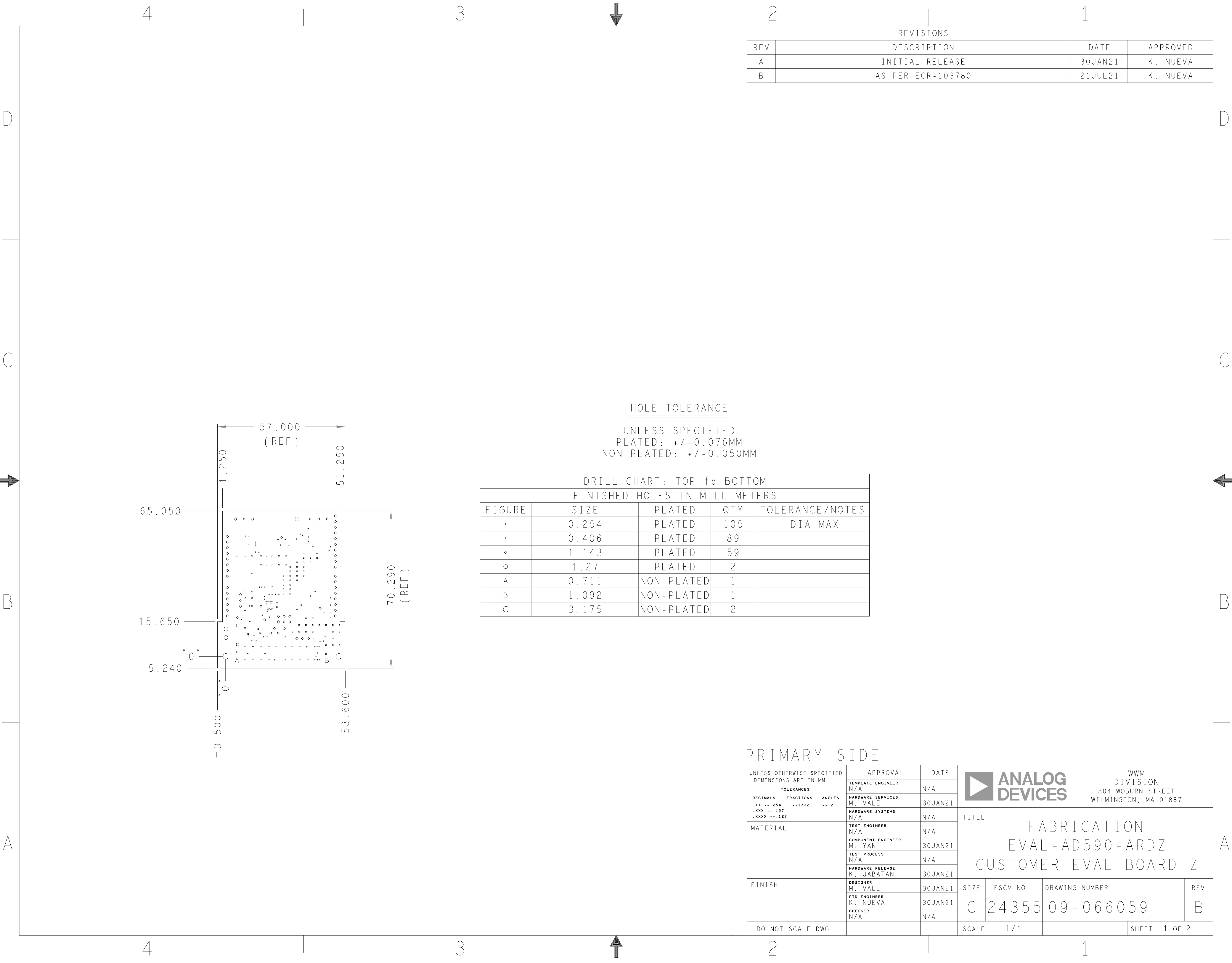
C

24355

01-066059

B





4

3

2

1

D

C

B

A

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:

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 0.127 MM FROM THEIR TRUE POSITION.

5. PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.0254MM MINIMUM AVERAGE, WITH NO READING LESS THAN .02032MM 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 .2 MM.

9. MINIMUM DESIGN SPACING IS .15 MM.

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 5.080 MM 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. ~~REPAIRS ARE NOT ALLOWED IN ANY AREA DEFINED ON GOLD\_PRM AND/OR GOLD\_SEC ARTWORK LAYERS WHEN PROVIDED IN GERBER OR ODB++ DATA.~~

15. BOARDS TO BE SHIPPED IN ARRAYS.

PANEL TO BE SUBJECTED TO CUSTOMER'S APPROVAL

PANELED SOLDER PASTE STENCIL SHOULD BE SENT TO THE CUSTOMER.

4 LAYER STACKUP

NOMINAL FINISHED BOARD THICKNESS 1.6 MM +/- 10%

PRIMARY SILKSCREEN

PRIMARY SOLDER MASK

PRIMARY SIDE (LAYER 1)

L2\_GND PLANE (LAYER 2)

L3\_VCC PLANE (LAYER 3)

SECONDARY SIDE (LAYER 4)

SECONDARY SOLDER MASK

SECONDARY SILKSCREEN

PRIMARY SIDE

ANALOG DEVICES

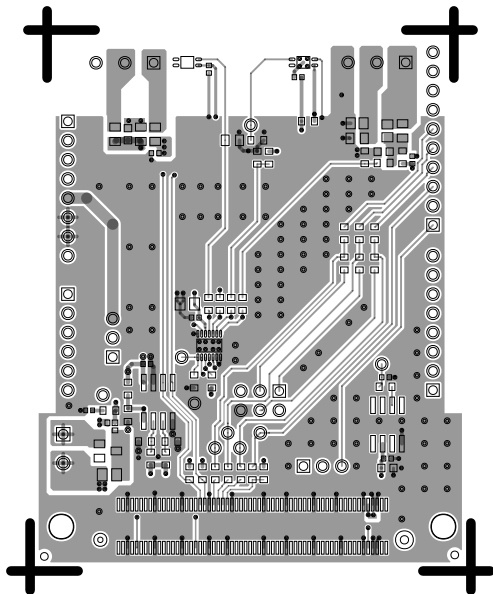
WWM DIVISION

804 WOBURN STREET

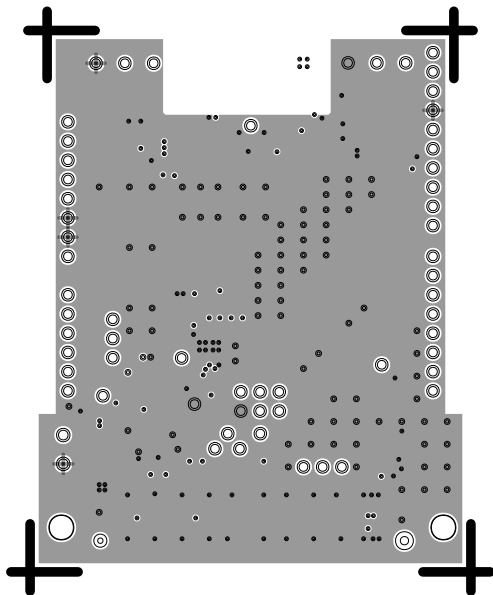
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-066059	B
SCALE	1 / 1		SHEET 2 OF 2

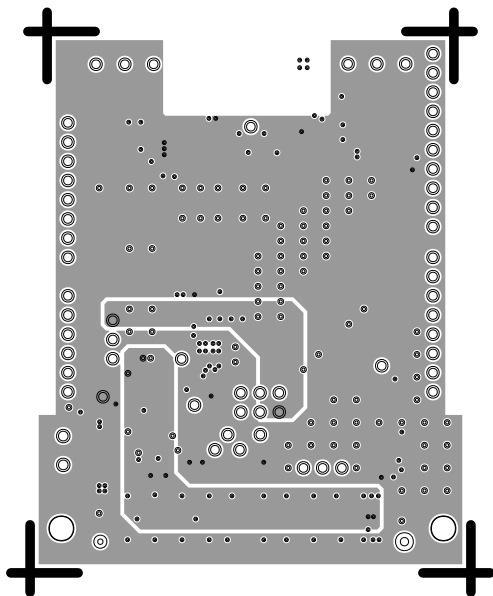
L1 PRIMARY  
08-066059-01  
REV B



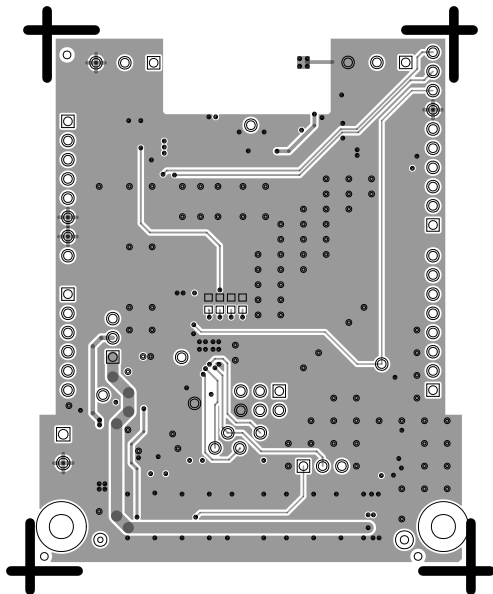
L2 GND  
08-066059-07  
REV B



L3 VCC  
08-066059-08  
REV B



L4 SECONDARY  
08-066059-02  
REV B

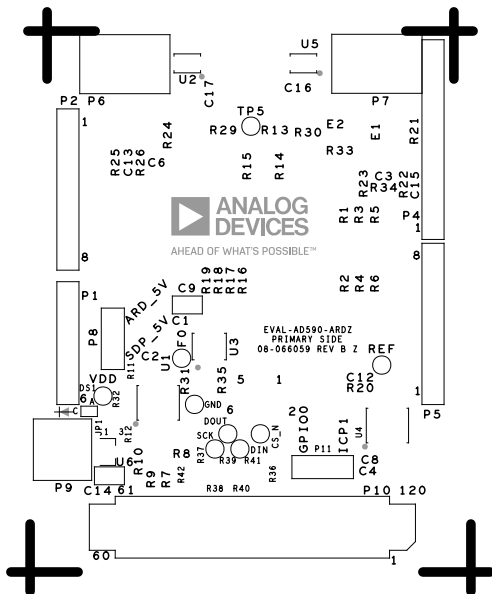




# SILKSCREEN PRIMARY

08-066059-03

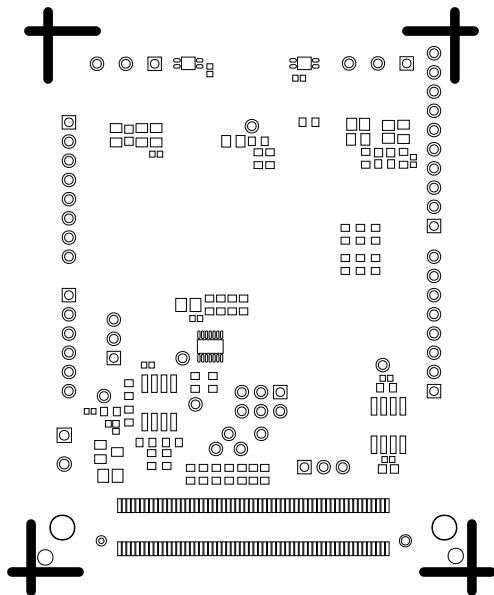
REV B



SOLDERMASK PRIMARY

08-066059-04

REV B



## REV B



08-088029 REV B 2  
SECONDARY SIDE



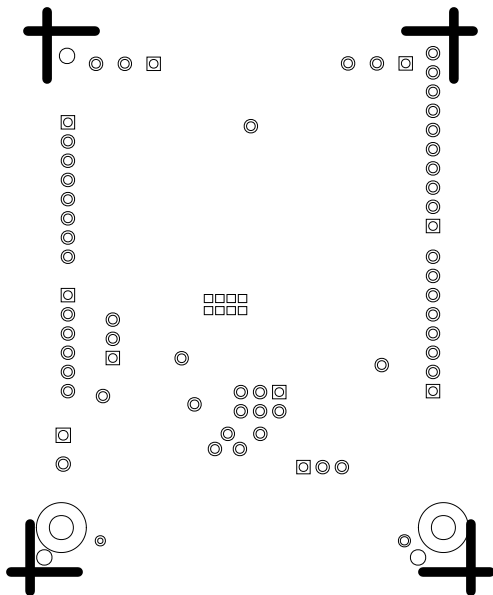
10  
112  
CCCC



SOLDERMASK SECONDARY

08-066059-06

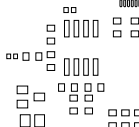
REV B



PASTEMASK PRIMARY

08-066059-09

REV B



PASTEMASK SECONDARY

08-066059-10

REV B

