

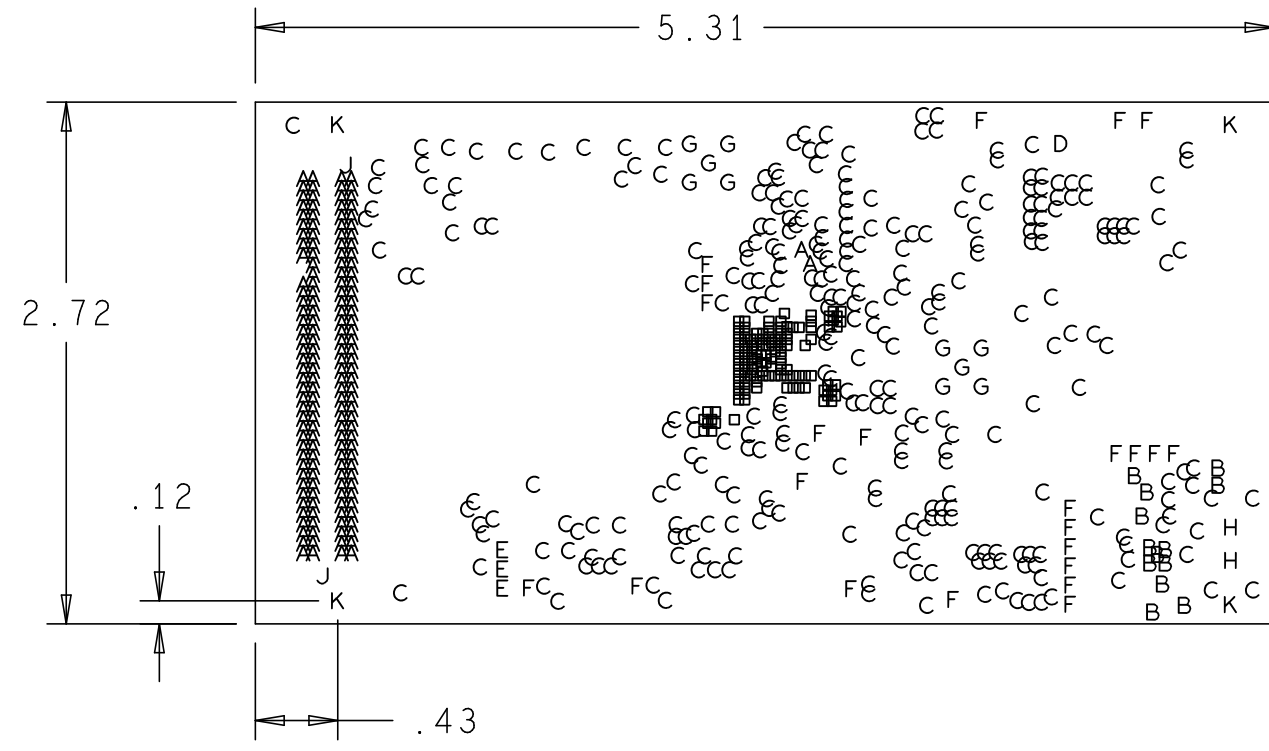
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	27JUN11	J.C.
B	ADDED 5 RESISTORS	7NOV11	J.C.

NOTES:

- MATERIALS; FR-4, IN ACCORDANCE WITH IS410 (LATEST REV.). GLASS FABRIC BASE, EPOXY RESIN, FIRE RESISTANT.
- BONDING AGENT; PREIMPREGNATED B STAGE EPOXY GLASS CLOTH IN ACCORDANCE WITH IPC-L-109 (LATEST REV.).
- CLADDING; EXTERNAL LAYERS 1/2 OZ. COPPER, OVERPLATE TO 1 1/2 OZ. INTERNAL SIGNAL LAYERS 1 OZ. COPPER. INTERNAL PLANE LAYERS 1 OZ. COPPER.
- SOLDER MASK; SHALL BE BLUE LIQUID PHOTOIMAGABLE (LPI) APPLIED ON BOTH SIDES OVER BARE COPPER AND SHALL MEET IPC-SM-840 (LATEST REV.) CLASS 3.
- SILK SCREEN; SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR WHITE.
- U.L. RATING; 94VO MINIMUM.

FABRICATION:

- REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
- UNDIMENSIONED HOLES TO BE LOCATED WITHIN +/- .005 OF THEIR TRUE POSITION WITH RESPECT TO ARTWORK.
- PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN .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 .005 INCH.
- MINIMUM DESIGN SPACING IS .005 INCH.
- BOARD/PANEL MUST MEET IPC-A-600 (LATEST REV.) CLASS 2 FOR FLATNESS.
- 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
  - B. DATE CODE (STAMP)
  - C. FLAMMABILITY RATING
  - D. MFGR. LOGO
  - E. SUCCESSFUL ELECTRICAL BOARD TEST.
- NON-FUNCTIONAL PADS MAY BE REMOVED FROM INNER SIGNAL LAYERS AT MFGR. DISCRETION.
- IF PAD SIZES PROVIDED ARE NOT LARGE ENOUGH TO MAINTAIN ANNULAR RING REQUIREMENT, MFGR. MAY TEAR DROP PADS TO MAINTAIN ANNULAR RING AT PAD TO CIRCUIT INTERFACE ONLY AND MUST INSURE ELECTRICAL INTEGRITY.
- REPAIRS PER IPC-R-700 ARE ALLOWED.
- MODIFICATIONS TO THE ARTWORK, OTHER THAN THOSE DESCRIBED ON THE FABRICATION DRAWING, ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
- FINISH: SURFACES SHALL HAVE ENIG FINISH PLATED WITH 2-6 MICROINCHES OF IMMERSION GOLD OVER 100-200 MICROINCHES OF ELECTROLESS NICKEL.



PRIMARY SIDE

8 LAYER STACKUP

PRIMARY SILKSCREEN	
PRIMARY SOLDER MASK	
PRIMARY SIDE PLANE (LAYER 1)	0.008"
INTERNAL SIGNAL (LAYER 2)	0.008"
GROUND PLANE (LAYER 3)	0.005"
POWER PLANE (LAYER 4)	0.008"
POWER PLANE (LAYER 5)	0.005"
GROUND PLANE (LAYER 6)	0.008"
INTERNAL SIGNAL (LAYER 7)	0.008"
SECONDARY SIDE PLANE (LAYER 8)	
SECONDARY SOLDER MASK	
SECONDARY SILKSCREEN	

NOMINAL FINISHED BOARD THICKNESS 0.065" +/- .007

DIFFERENTIAL IMPEDANCE = 100 OHMS +/- 10%  
ARTWORK LINE WIDTH FOR IMPEDANCE CONTROLLED LINES = 0.005" ON LAYER 2 & 7.

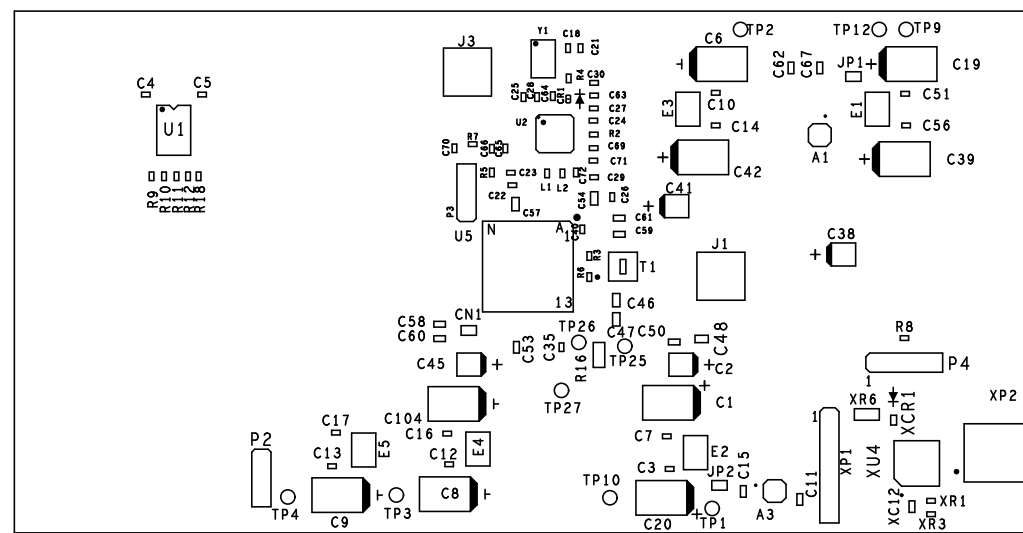
HOLE TOLERANCE

UNLESS SPECIFIED  
PLATED: +/- .003  
NON PLATED: +/- .001

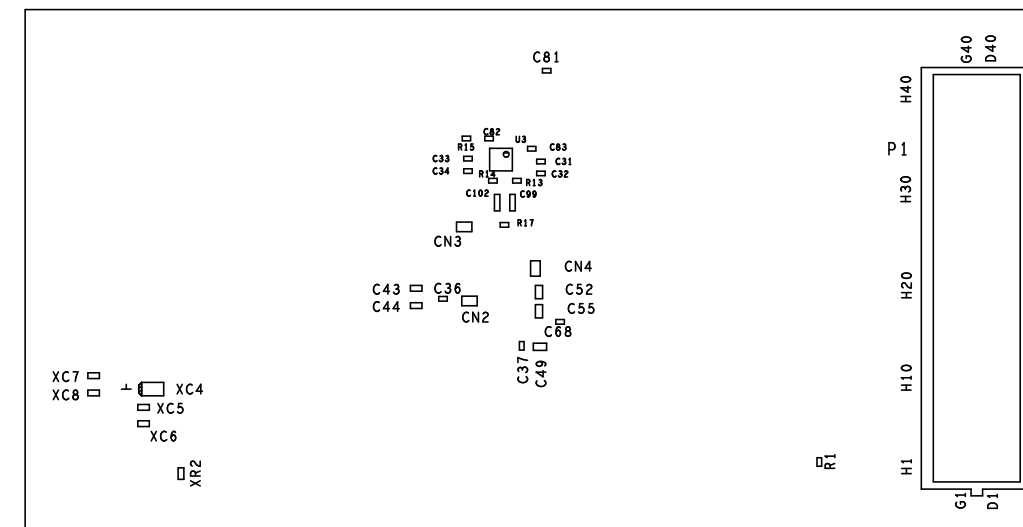
FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
□	8.0	PLATED	123	
A	10.0	PLATED	160	
B	15.0	PLATED	13	
C	16.0	PLATED	299	
D	20.0	PLATED	1	
E	40.0	PLATED	3	
F	45.0	PLATED	23	
G	55.0	PLATED	10	
H	40.0	NON-PLATED	2	
J	50.0	NON-PLATED	2	
K	105.0	NON-PLATED	4	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX +/- .010 +/- 1/32 +/- 2 .XXX +/- .005	NCDRILL		ANALOG DEVICES HSC DIVISION 804 WOBURN STREET WILMINGTON, MA 01887
	APPROVAL	DATE	
MATERIAL	DRAWN BY	29OCT08	TITLE AD9739A EVALUATION BOARD
	DESIGNED		
	CHECKED		
FINISH	APPROVED		SIZE C
	MFG ENGINEER		
DO NOT SCALE DWG		SCALE 1/1	DRAWING NUMBER HSC 11011
			REV B
			SHEET 1 OF 2


REVISIONS			
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PRIMARY SIDE



SECONDARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX +/- .010 +/- 1/32 +/- .2 .XXX +/- .005	ASSEMBLY		 HSC DIVISION 804 WOBURN STREET WILMINGTON, MA 01887	
	APPROVAL	DATE	TITLE	
MATERIAL	DRAWN BY W.D.B.	29OCT08	AD9739A EVALUATION BOARD	
FINISH	DESIGNED		SIZE	FSCM NO
	CHECKED		DRAWING NUMBER	REV
DO NOT SCALE DWG	APPROVED		C	HSC 11011 B
	MFG ENGINEER		SCALE 1/1	SHEET 1 OF 1

4

3

2

1



D

D

C

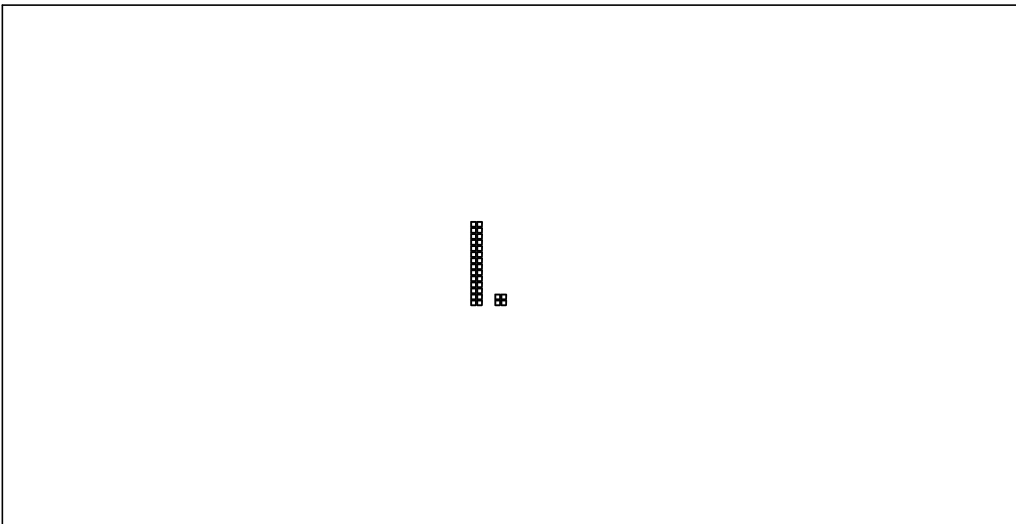
C

B

B

A

A



PRIMARY SIDE

DRILLED HOLES LAYER 1 TO LAYER 2

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
•	6.0	PLATED	32	

		HSC DIVISION 804 WOBURN STREET WILMINGTON, MA 01887	
SIZE	FSCM NO	DRAWING NUMBER	REV
C		HSC 11011	A
SCALE	1/1		SHEET 2 OF 2

4

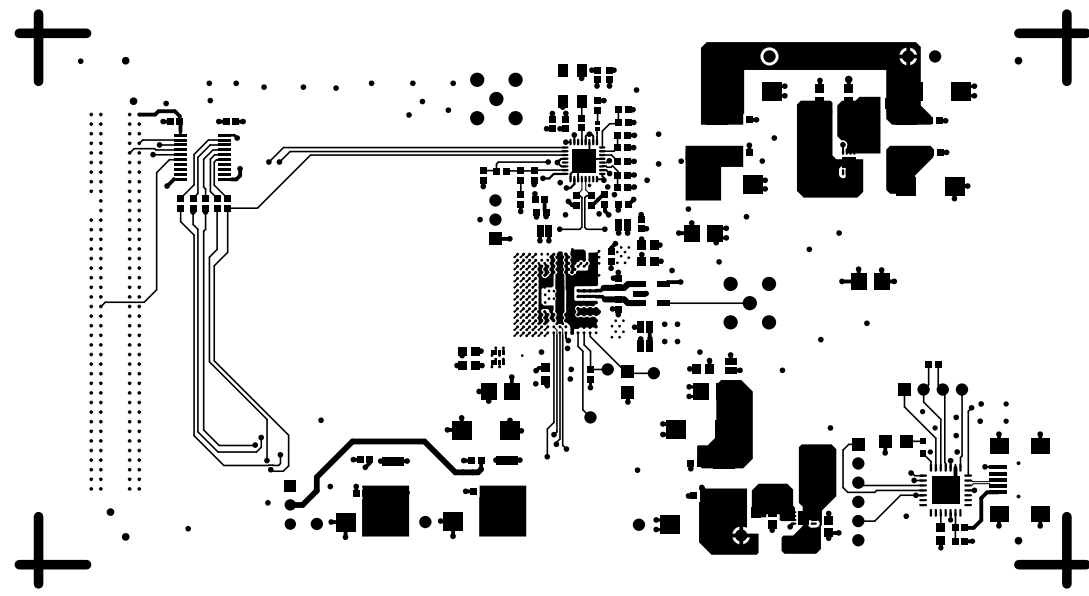
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2

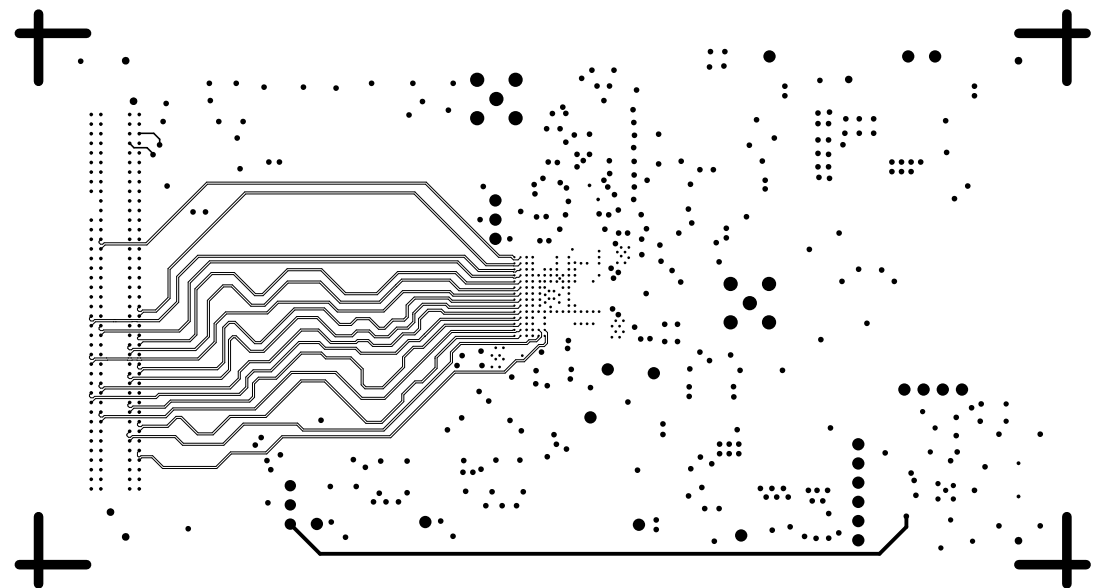
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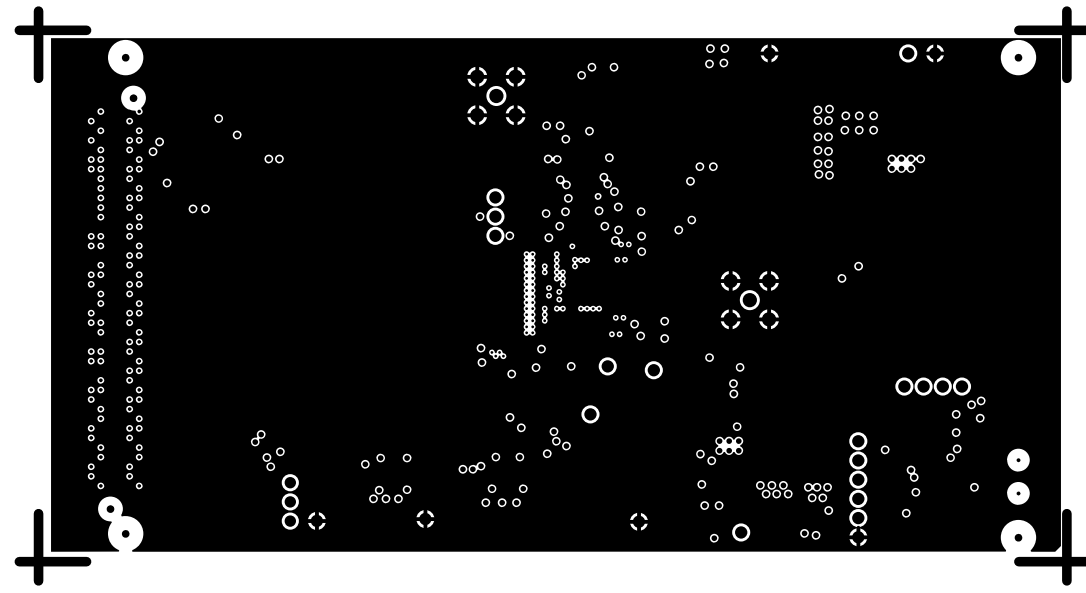
L1 PRIMARY  
HSC 11011  
REV B



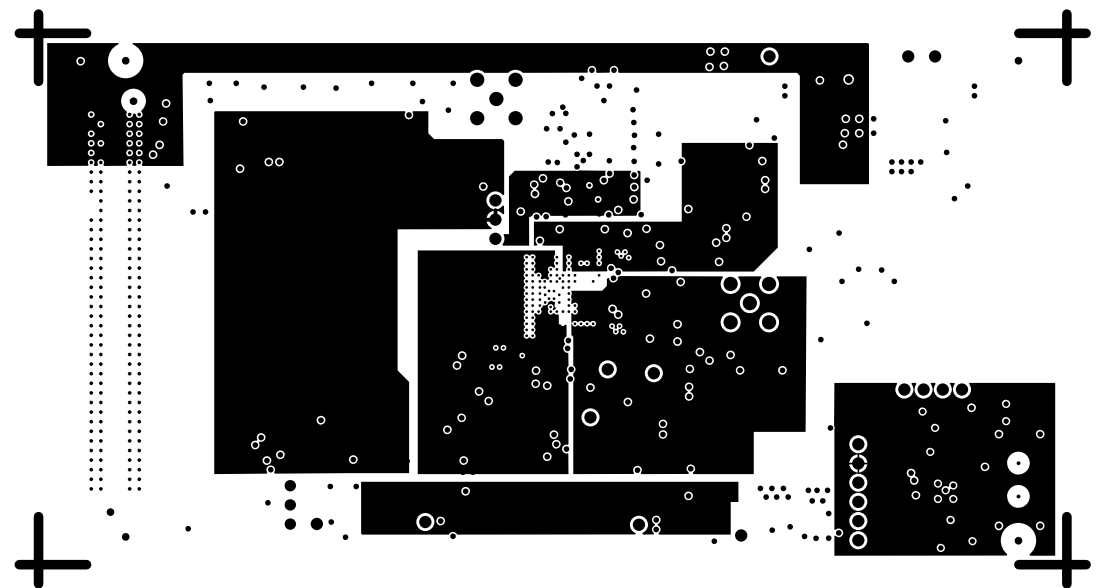
L2 SIG  
HSC 11011  
REV B



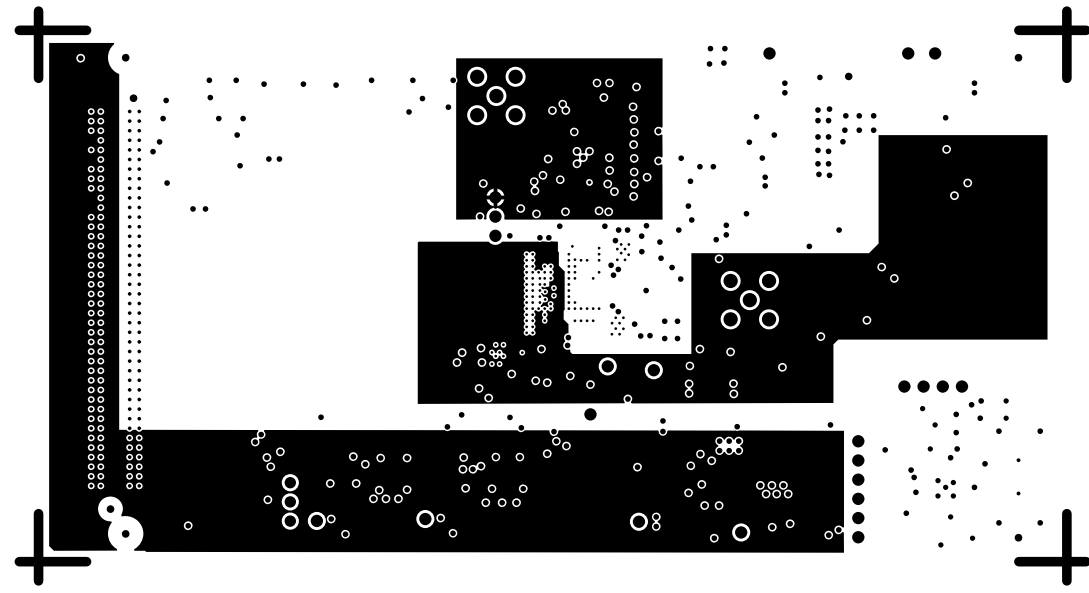
L3 GND  
HSC 11011  
REV B



L4 PWR  
HSC 11011  
REV B

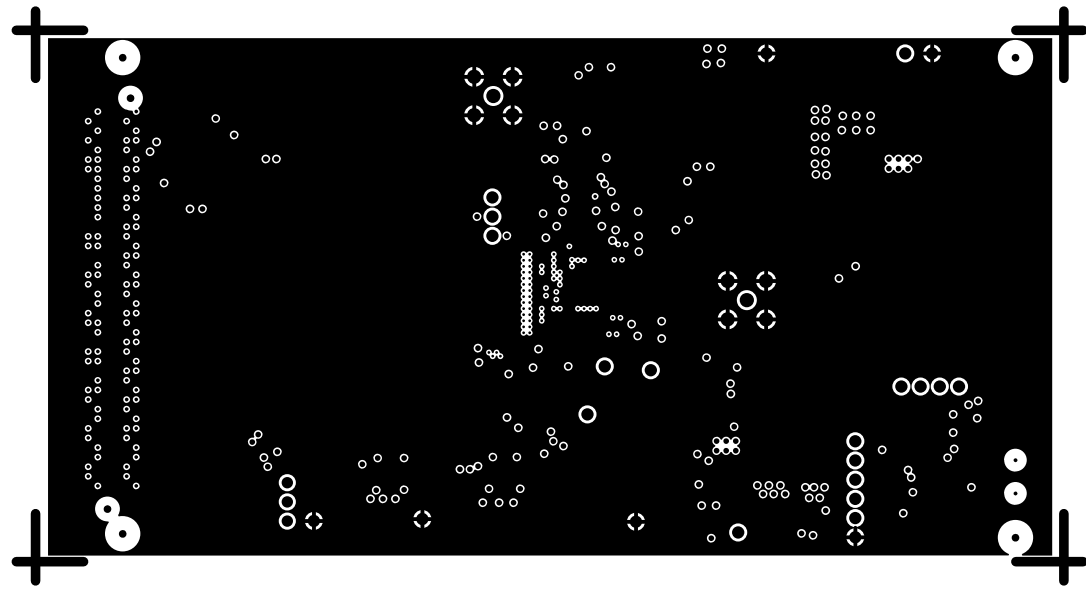


L5 PWR  
HSC 11011  
REV B

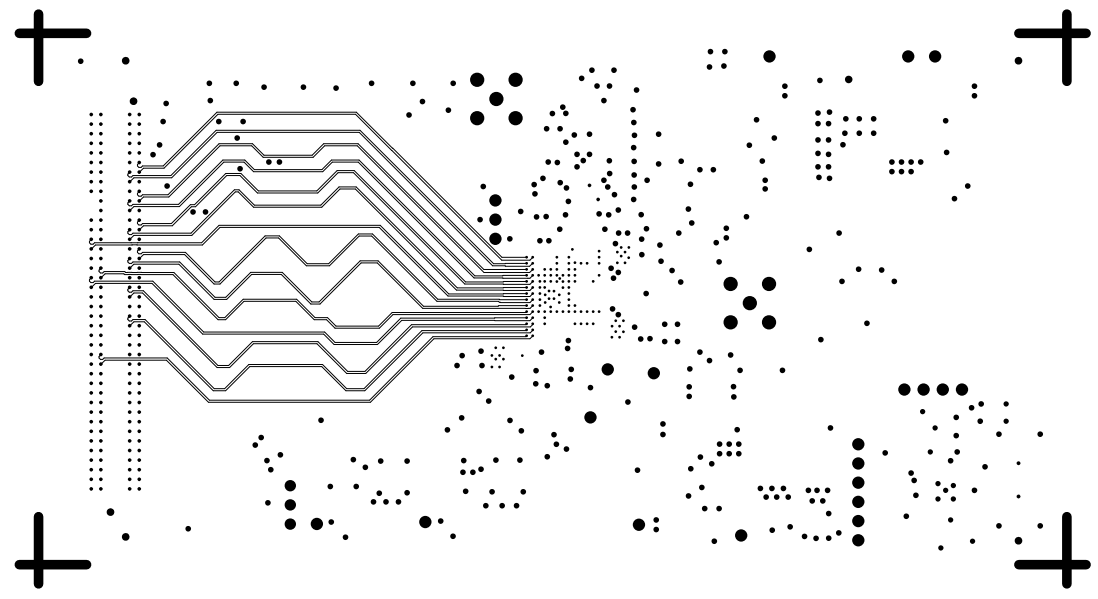




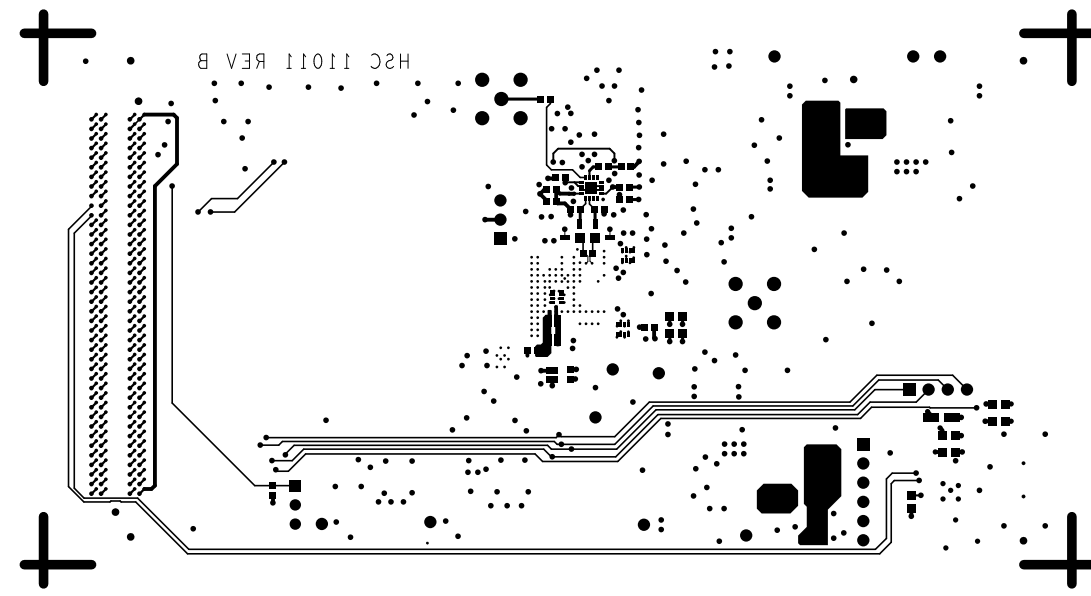
L6 GND  
HSC 11011  
REV B



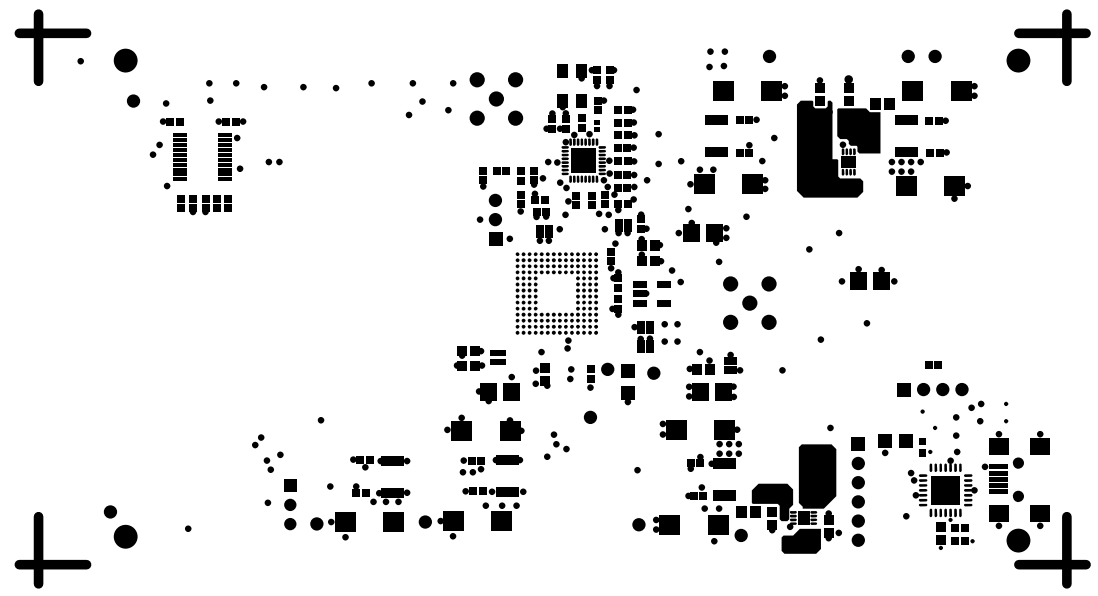
L7 SIG  
HSC 11011  
REV B



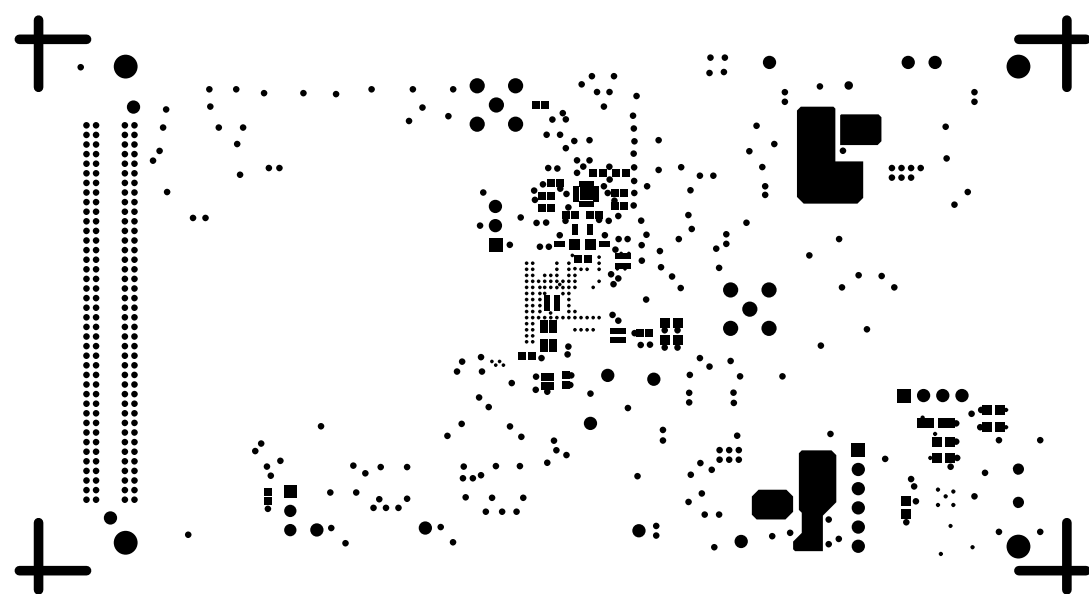
L8 SECONDARY  
HSC 11011  
REV B



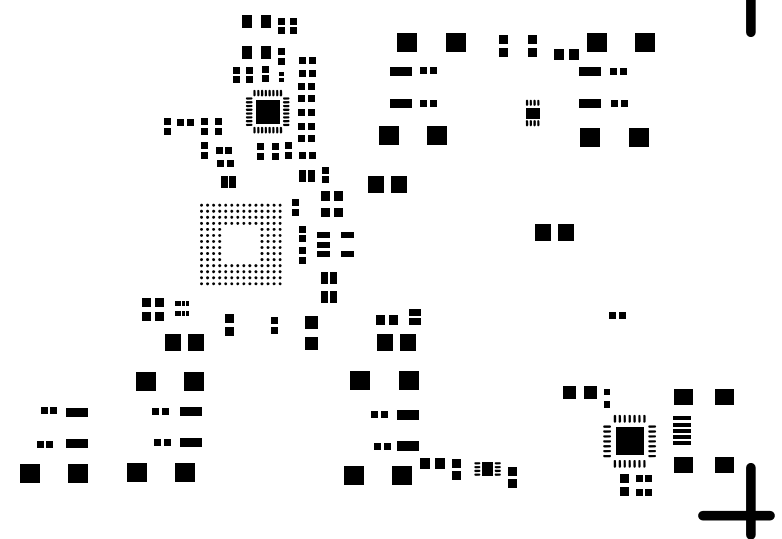
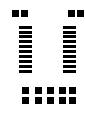
SOLDERMASK PRIMARY  
HSC 11011  
REV B



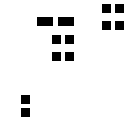
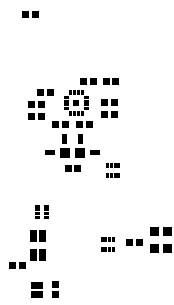
SOLDERMASK SECONDARY  
HSC 11011  
REV B



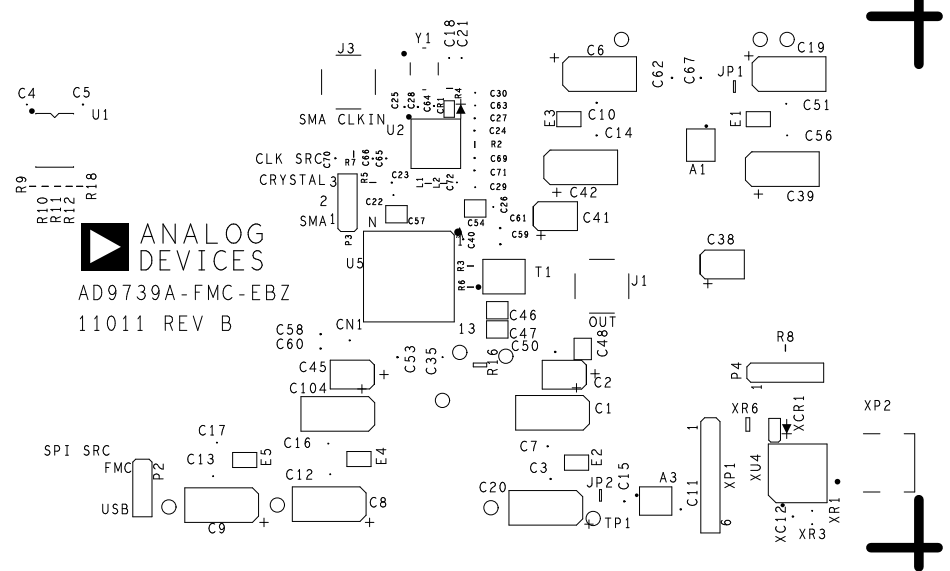
PASTEMASK PRIMARY  
HSC 11011  
REV B



PASTEMASK SECONDARY  
HSC 11011  
REV B

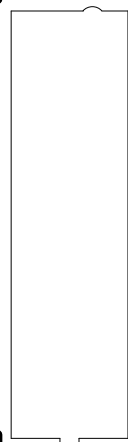


SILKSCREEN PRIMARY  
HSC 11011  
REV B





SILKSCREEN SECONDARY  
HSC 11011  
REV B



P1



S4

L1



C81

73

C85

R12

U3

C83

C84

C105

R17

C89

C90

C91

C92

C93

C94

C95

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