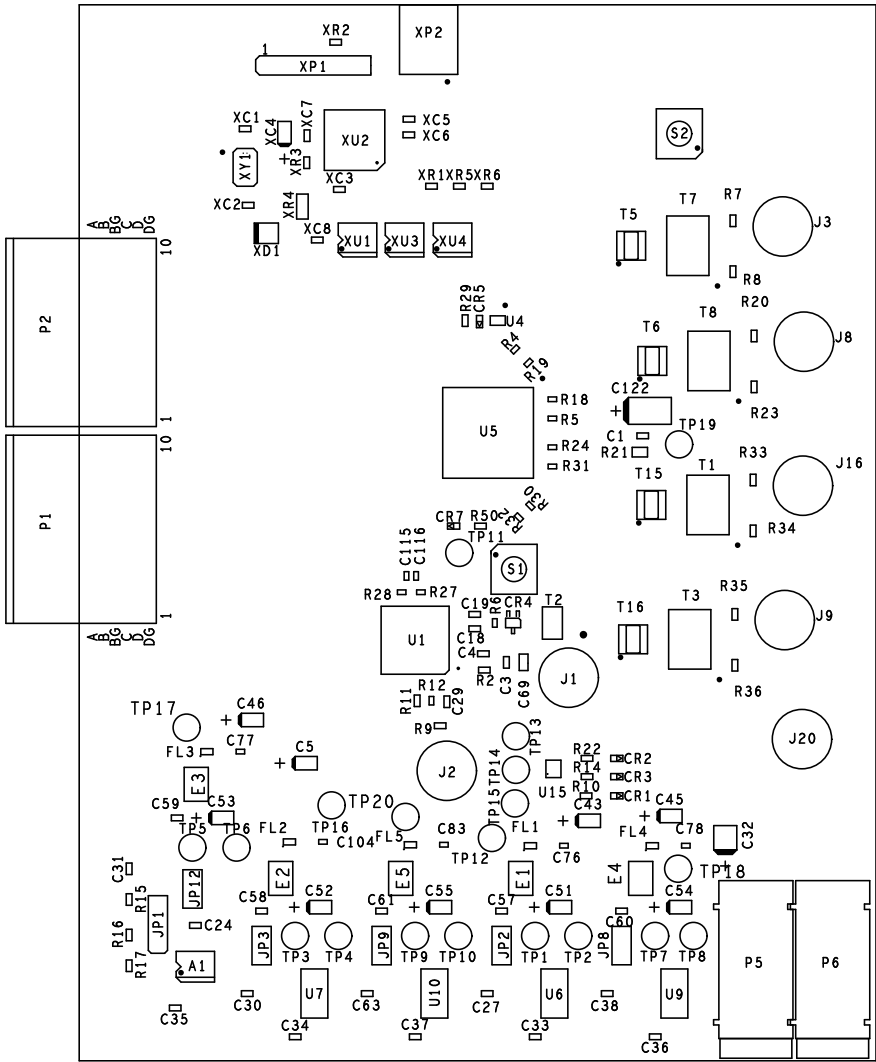
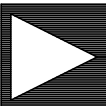


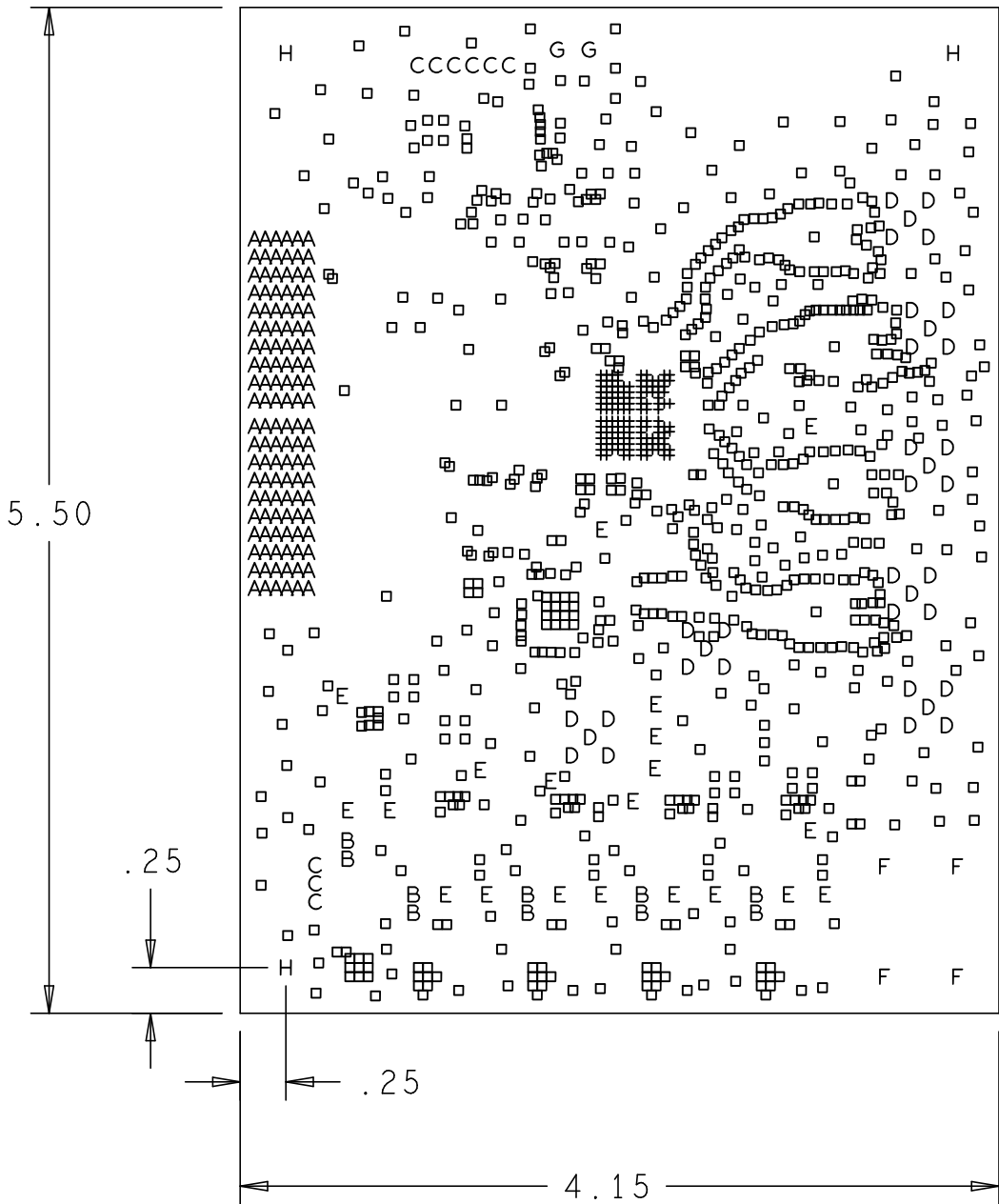
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	ENGINEERING CHANGES	28APR10	K. J.



PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX +/- .010 +/- 1/32 +/- 2 .XXX +/- .005			<div></div> <div>ANALOG DEVICES</div> <div>HSC DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>		TITLE AD9148_DAC-EBZ BOARD	
	APPROVAL	DATE				
	DRAWN BY P.M.A.	28APR10				
	DESIGNED					
MATERIAL	CHECKED					
	APPROVED		SIZE	FSCM NO	DRAWING NUMBER	REV
	MFG ENGINEER		C		HSC 09028	B
DO NOT SCALE DWG			SCALE	1 / 1	SHEET 1 OF 1	

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	ENGINEERING CHANGES	28APR10	K. J.



PRIMARY SIDE

- NOTES:
- MATERIALS; FR-4, IN ACCORDANCE WITH IPC-L-130 (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.
- 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 .008 INCH.
 - MINIMUM DESIGN SPACING IS .008 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 D. MFGR. LOGO
B. DATE CODE (STAMP) E. SUCCESSFUL ELECTRICAL BOARD TEST.
 - FLAMMABILITY RATING
 - 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.

8 LAYER STACKUP

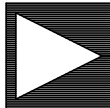
HOLE TOLERANCE

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

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	6.0	PLATED	140	
□	12.0	PLATED	773	
A	25.0	PLATED	120	
B	40.0	PLATED	10	
C	45.0	PLATED	9	
D	60.0	PLATED	35	
E	63.0	PLATED	20	
F	75.0	PLATED	4	
G	40.0	NON-PLATED	2	
H	155.0	NON-PLATED	3	

	PRIMARY SILKSCREEN
	PRIMARY SOLDER MASK
	PRIMARY SIDE (LAYER 1)
0.0045"	GROUND PLANE (LAYER 2)
0.010"	POWER PLANE (LAYER 3)
0.016"	GROUND PLANE (LAYER 4)
0.008"	INTERNAL SIGNAL (LAYER 5)
0.016"	POWER PLANE (LAYER 6)
0.010"	GROUND PLANE (LAYER 7)
0.0045"	SECONDARY SIDE (LAYER 8)
	SECONDARY SOLDER MASK
	SECONDARY SILKSCREEN

CHARACTERISTIC IMPEDANCE = 50 OHMS +/- 10%
ARTWORK LINE WIDTH FOR
IMPEDANCE CONTROLLED LINES = 0.008"
DIFFERENTIAL IMPEDANCE = 100 OHMS +/- 10%
ARTWORK LINE WIDTH FOR
IMPEDANCE CONTROLLED LINES = 0.005"

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			NCDRILL		 ANALOG DEVICES		HSC DIVISION					
TOLERANCES							804 WOBURN STREET WILMINGTON, MA 01887					
DECIMALS FRACTIONS ANGLES .XX +/- .010 +/- 2 .XXX +/- .005			APPROVAL		DATE		TITLE AD9148_DAC-EBZ BOARD					
MATERIAL			DRAWN BY P.M.A.		28APR10							
			DESIGNED									
			CHECKED									
FINISH			APPROVED		SIZE		FSCM NO		DRAWING NUMBER		REV	
			MFG ENGINEER		C				HSC 09028		B	
DO NOT SCALE DWG							SCALE 1/1				SHEET 1 OF 1	

+

+

10
DC
DC
BC
BA

59

110

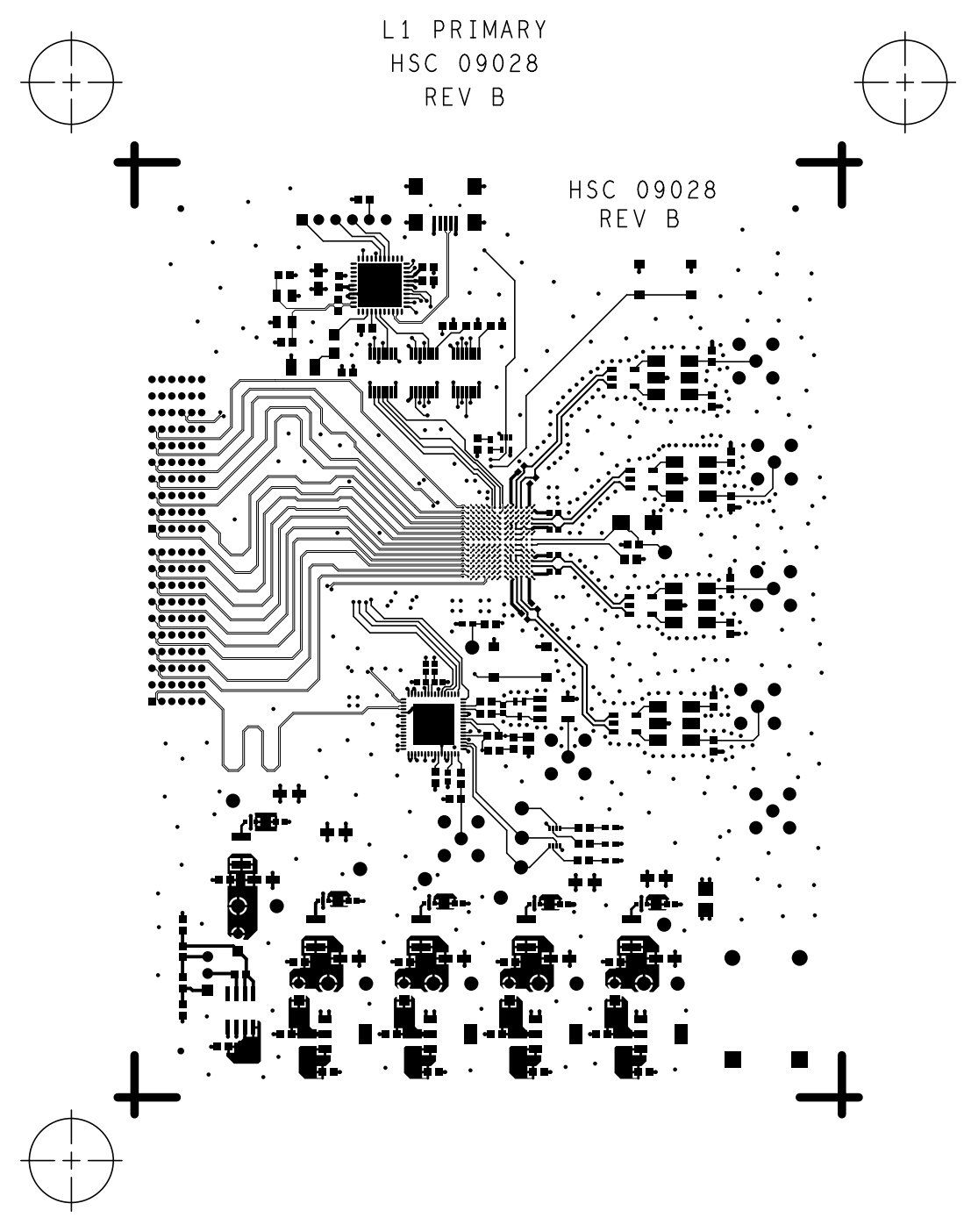
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Dc
Dc
Bc
Bc
A

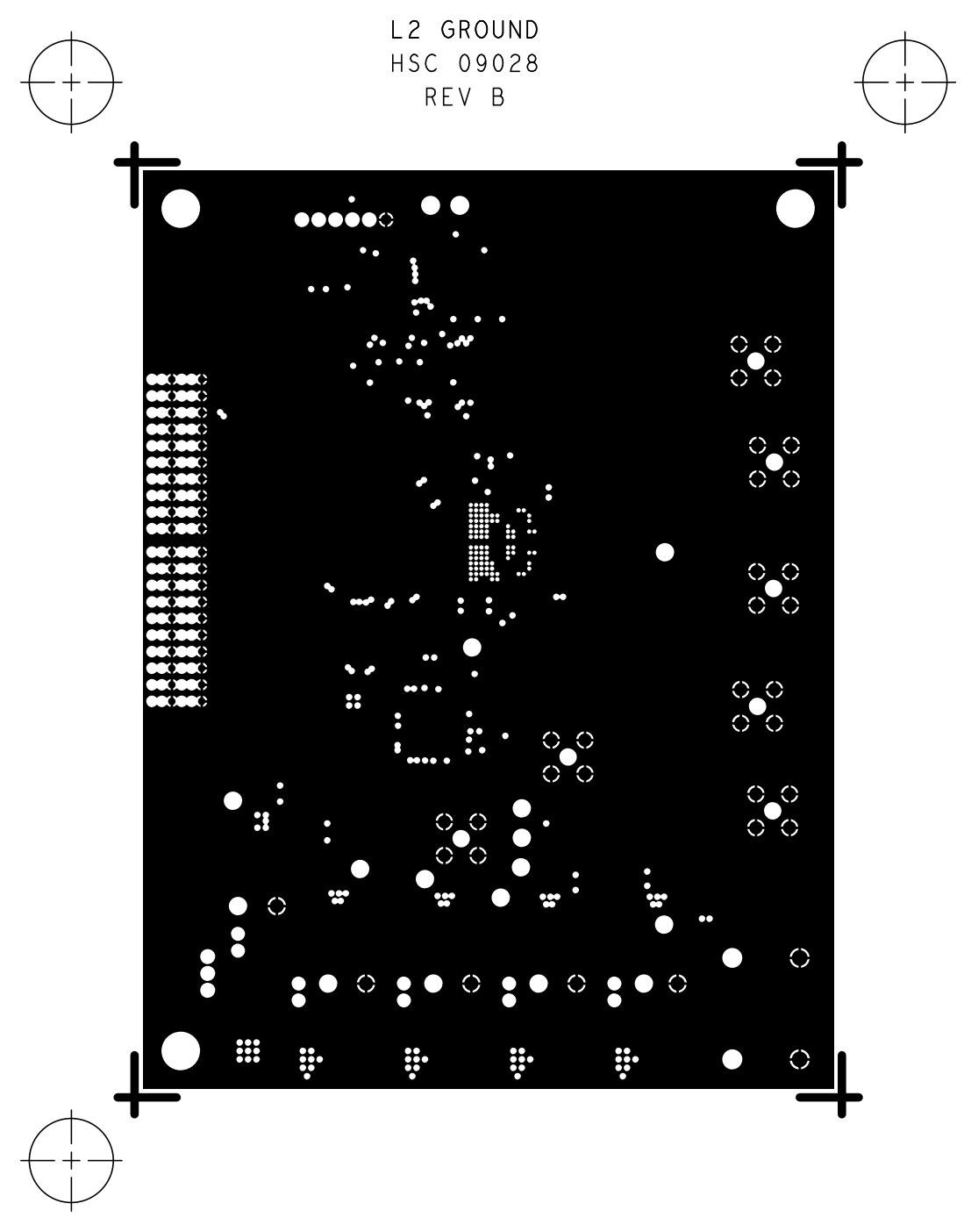
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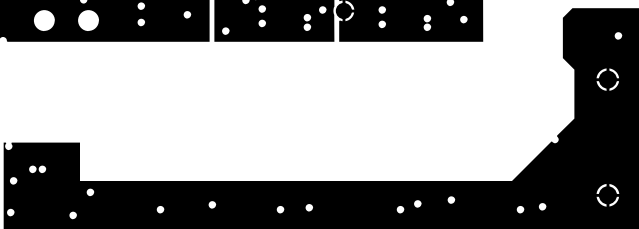
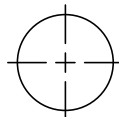
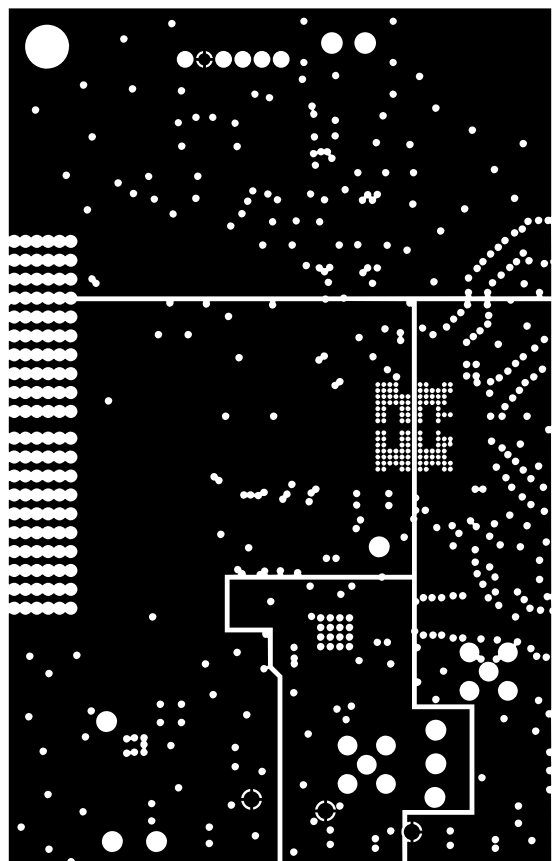
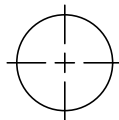
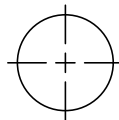
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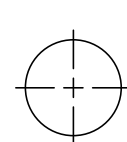
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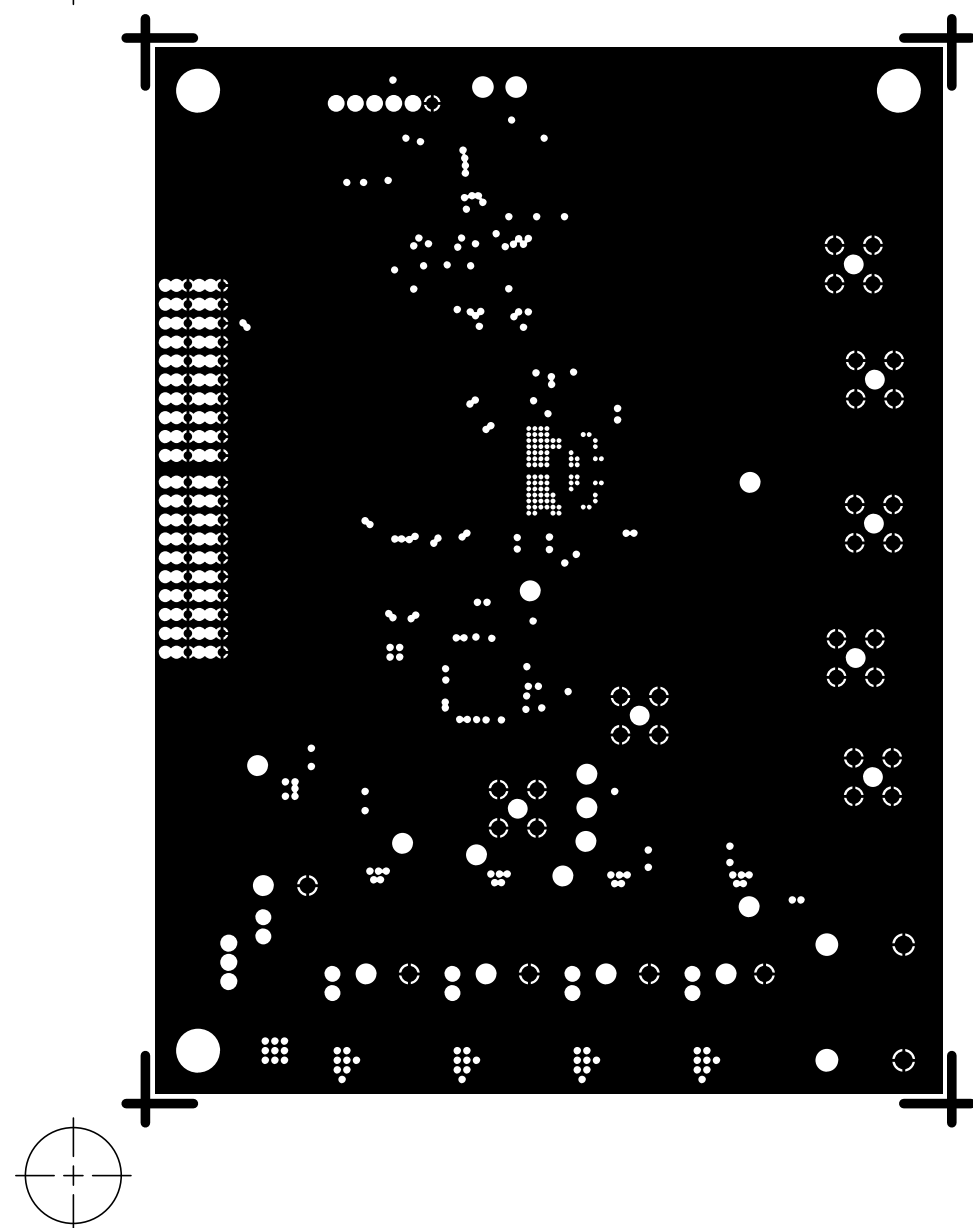
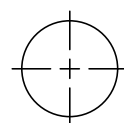


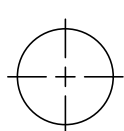
L3 POWER
HSC 09028
REV B



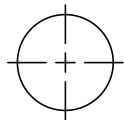
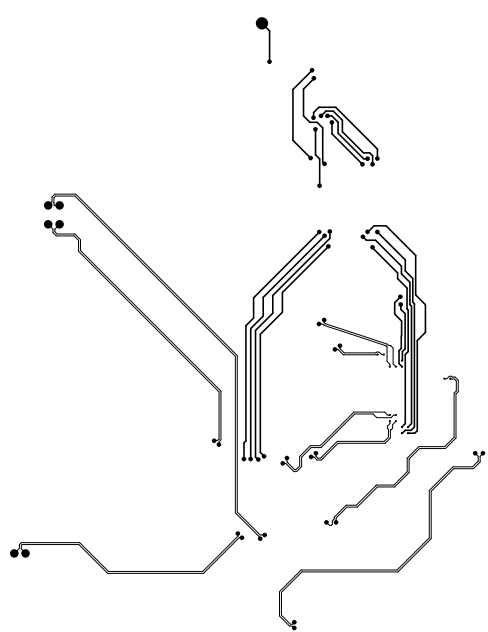
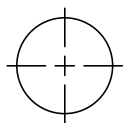


L4 GROUND
HSC 09028
REV B

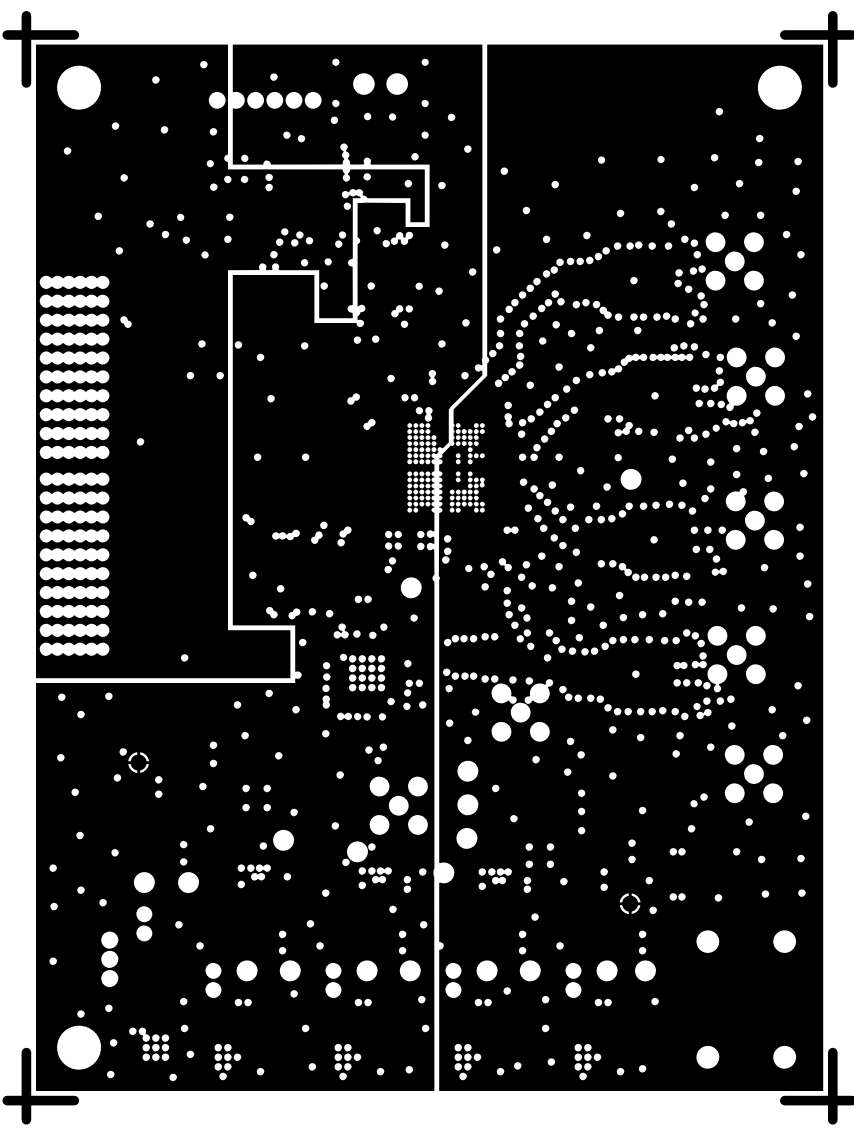
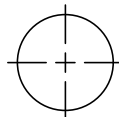
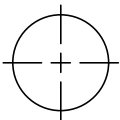
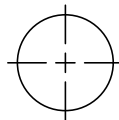


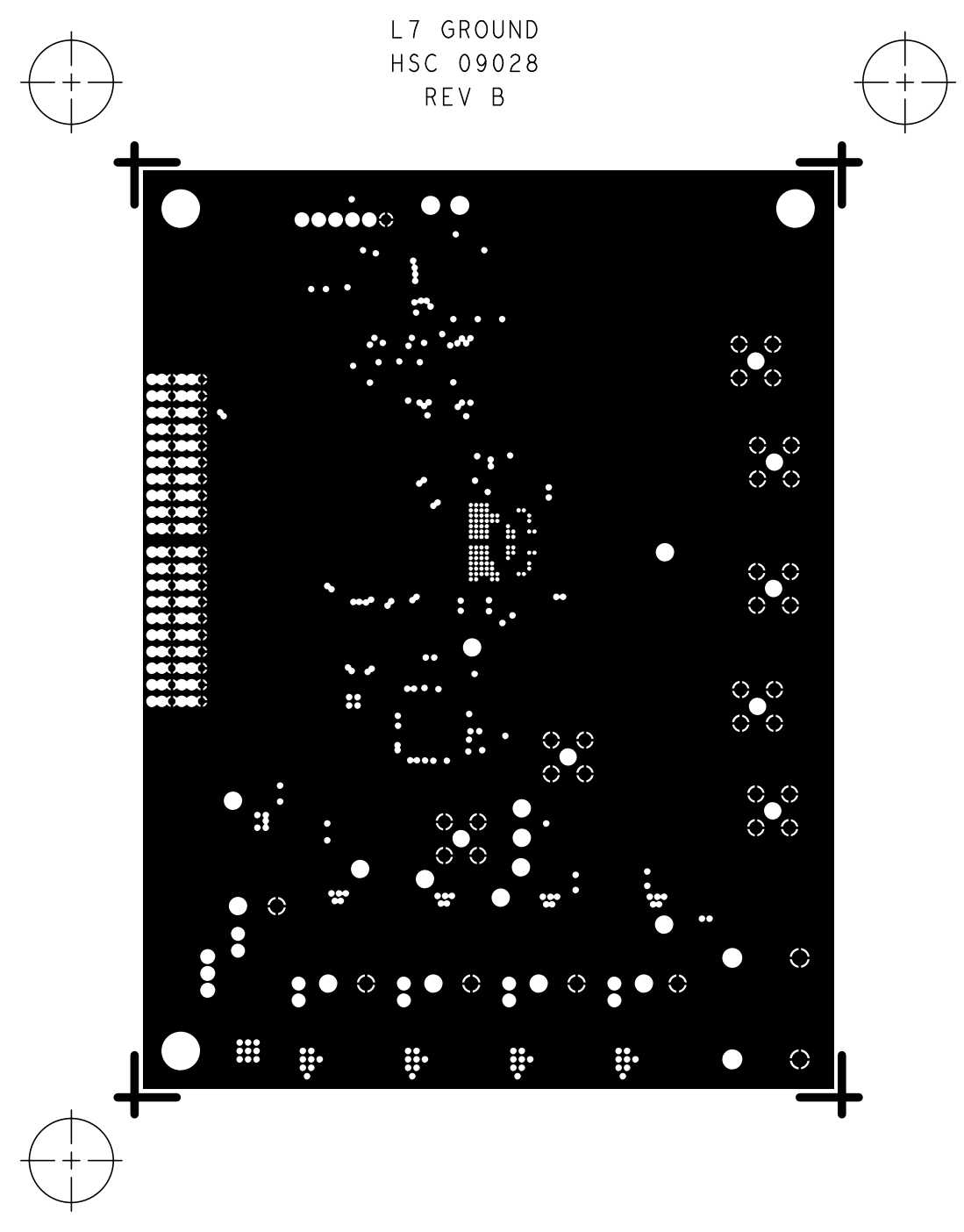


L5 SIGNAL
HSC 09028
REV B

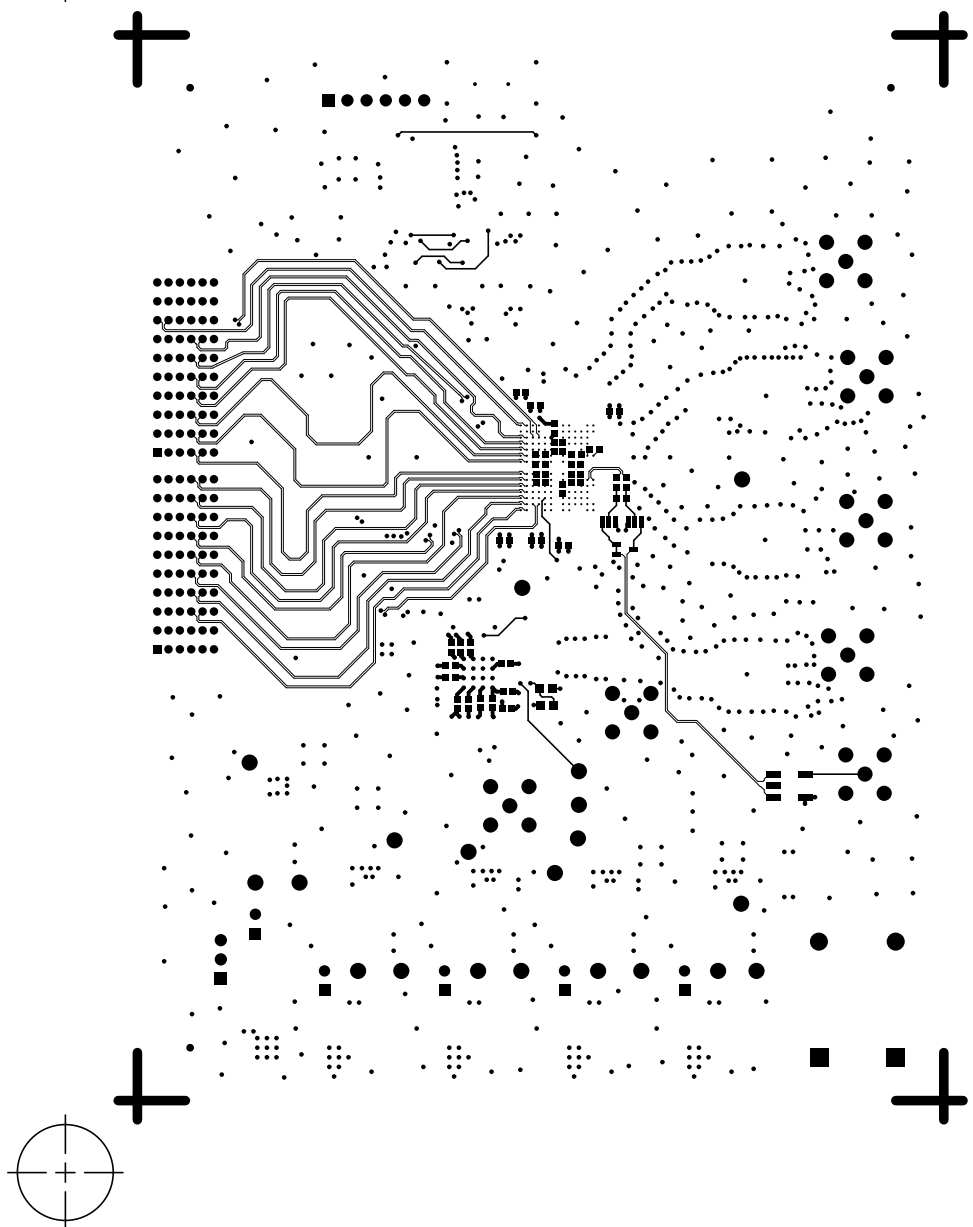
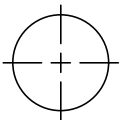
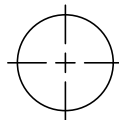


L6 POWER
HSC 09028
REV B

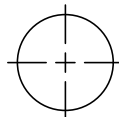
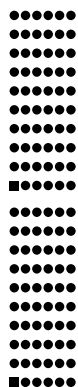
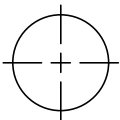
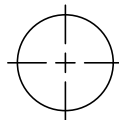


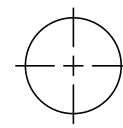


L8 SECONDARY
HSC 09028
REV B

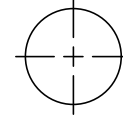
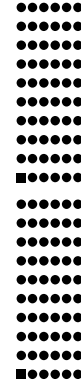
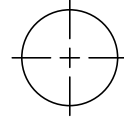


SOLDERMASK PRIMARY
HSC 09028
REV B

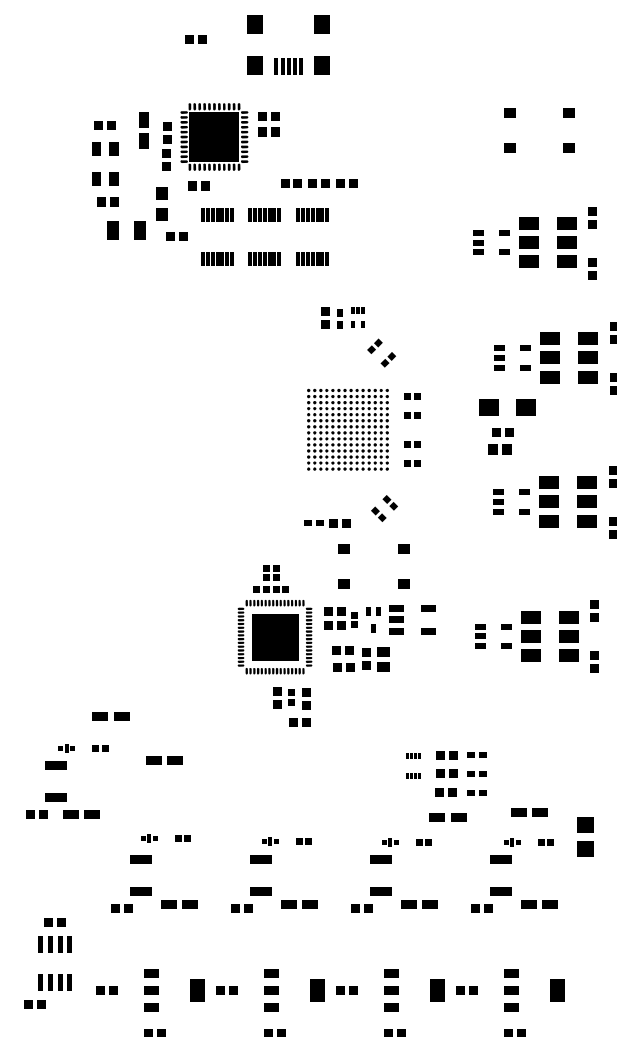
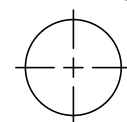
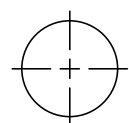
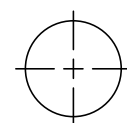


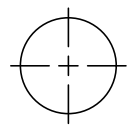


SOLDERMASK SECONDARY
HSC 09028
REV B



PASTEMASK PRIMARY
HSC 09028
REV B





PASTEMASK SECONDARY
HSC 09028
REV B

