

PRIMARY SIDE

10 LAYER STACKUP

PRIMARY SILKSCREEN
PRIMARY SOLDER MASK
PRIMARY SIDE (LAYER 1)
0.0078" GROUND PLANE (LAYER 2)
0.0035" POWER PLANE (LAYER 3)
0.0057" GROUND PLANE (LAYER 4)
0.0043" POWER PLANE (LAYER 5)
0.0052" POWER PLANE (LAYER 6)
0.0043" GROUND PLANE (LAYER 7)
0.0057" POWER PLANE (LAYER 8)
0.0035" GROUND PLANE (LAYER 9)
0.0078" SECONDARY SIDE (LAYER 10)
SECONDARY SOLDER MASK
SECONDARY SILKSCREEN

CHARACTERISTIC IMPEDANCE = 50 OHMS +/- 10%  
 ARTWORK LINE WIDTH FOR IMPEDANCE CONTROLLED LINES = 0.0155" FOR LAYER 1 AND 10.  
 DIFFERENTIAL IMPEDANCE = 100 OHMS +/- 10%  
 ARTWORK LINE WIDTH FOR IMPEDANCE CONTROLLED LINES = 0.0100" FOR LAYER 1 AND 10.

HOLE TOLERANCE

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

FINISHED HOLES IN MILS			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
•	6.0	PLATED	48
◊	10.0	PLATED	197
▲	15.0	PLATED	695
■	16.0	PLATED	159
■	25.0	PLATED	150
■	35.0	PLATED	6
■	42.0	PLATED	15
■	45.0	PLATED	11
■	60.0	PLATED	5
■	63.0	PLATED	10
■	75.0	PLATED	4
■	40.0	NON-PLATED	2
■	155.0	NON-PLATED	4

- NOTES:
- MATERIALS: FR-408HR, IN ACCORDANCE WITH 15410 (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 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: 94V0 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. VIAS TO BE NON-CONDUCTIVE EPOXY FILLED AND GROUND FLUSH PRIOR TO OVER PLATING.

REVISIONS		
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	29MAR13
B	REMOVE FERRITE BEADS	14MAY13
C	UPDATE TO REGULATORS	11MAR14
		T.G.
		T.G.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES  
 DECIMALS FRACTIONS ANGLES  
 .XX .XXX .000 .1/32 .1

**ANALOG DEVICES** HSC DIVISION  
 804 WILMINGTON BLVD  
 WILMINGTON, MA 01887

**NCDRILL** TITLE: AD9144 ADRF6790 EVALUATION BOARD

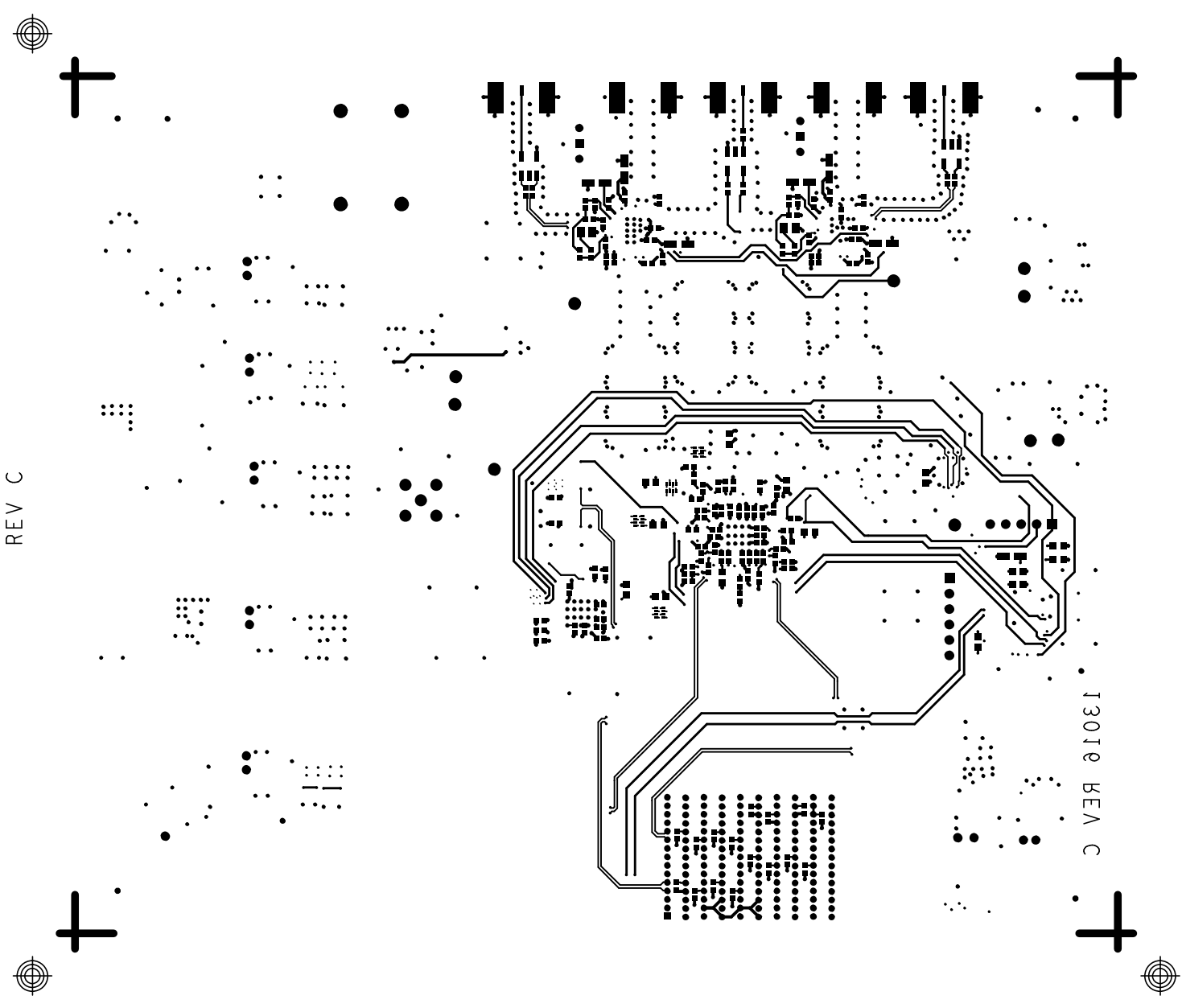
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 APPROVED: [ ]  
 MFG ENGINEER: [ ]

SCALE: 1/1

SIZE: D FSCM NO: HSC 13016 REV: C

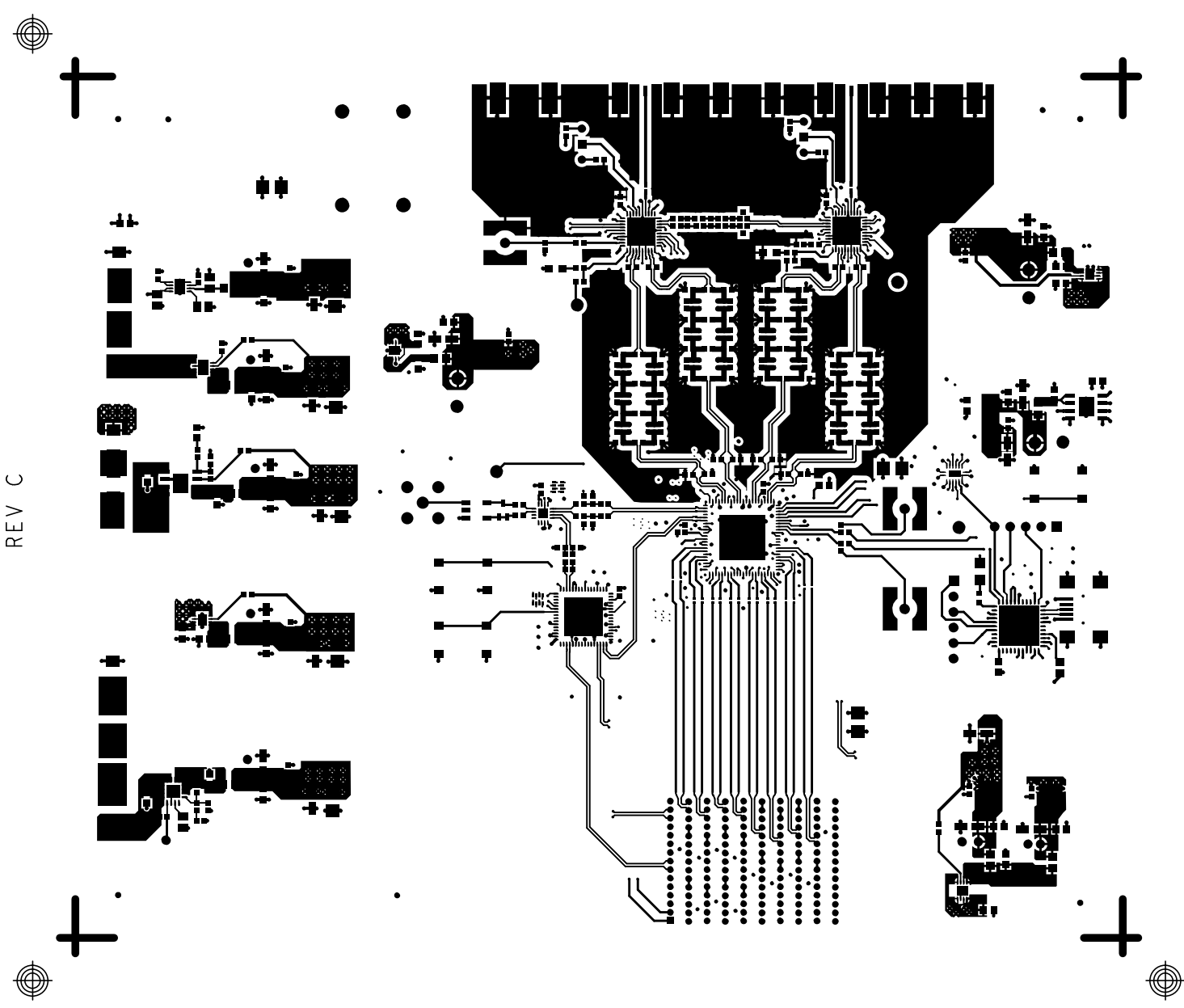
DO NOT SCALE DWG SHEET 1 OF 1

L10 SECONDARY  
PSC 13016  
REV C

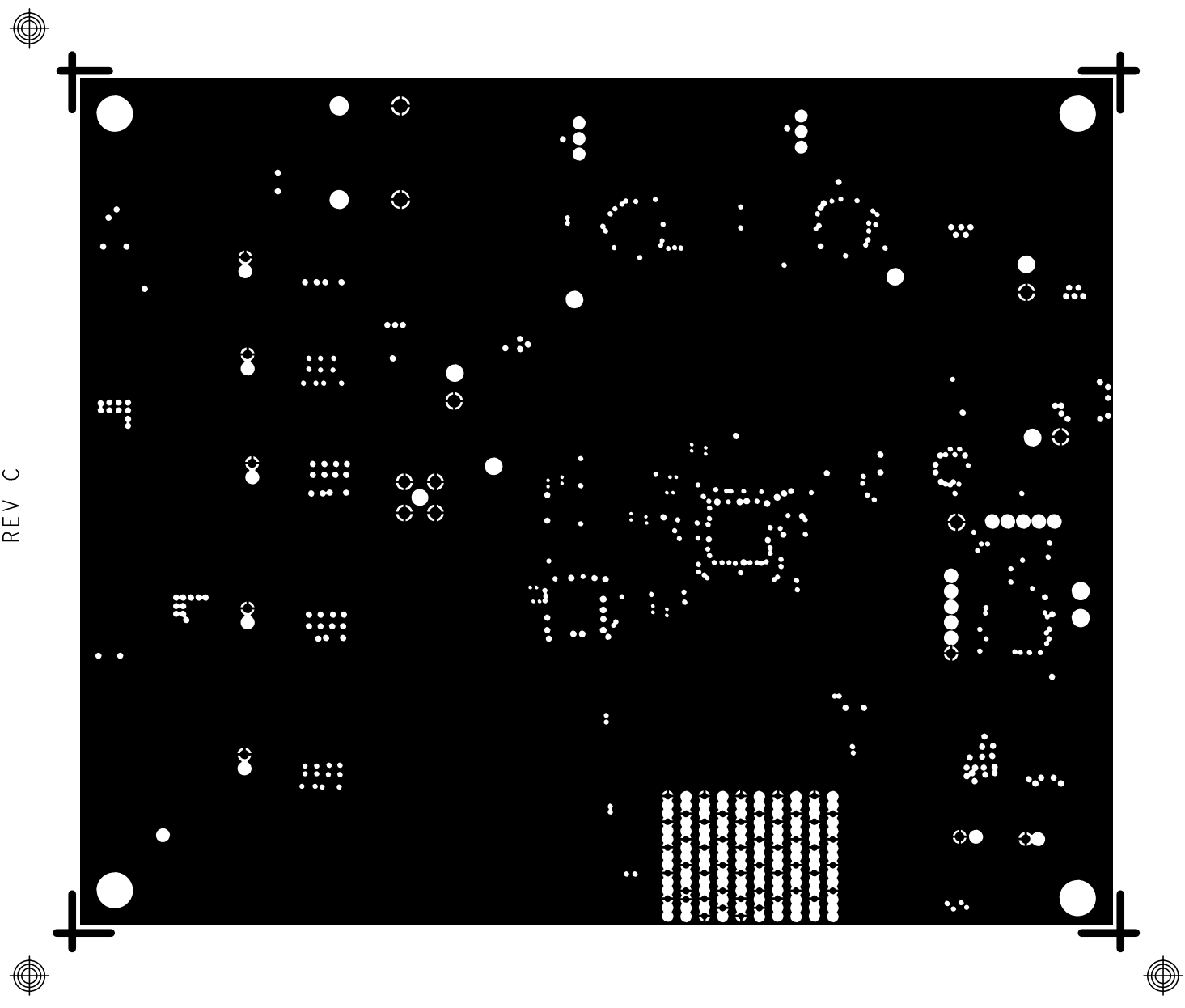


13016 REV C

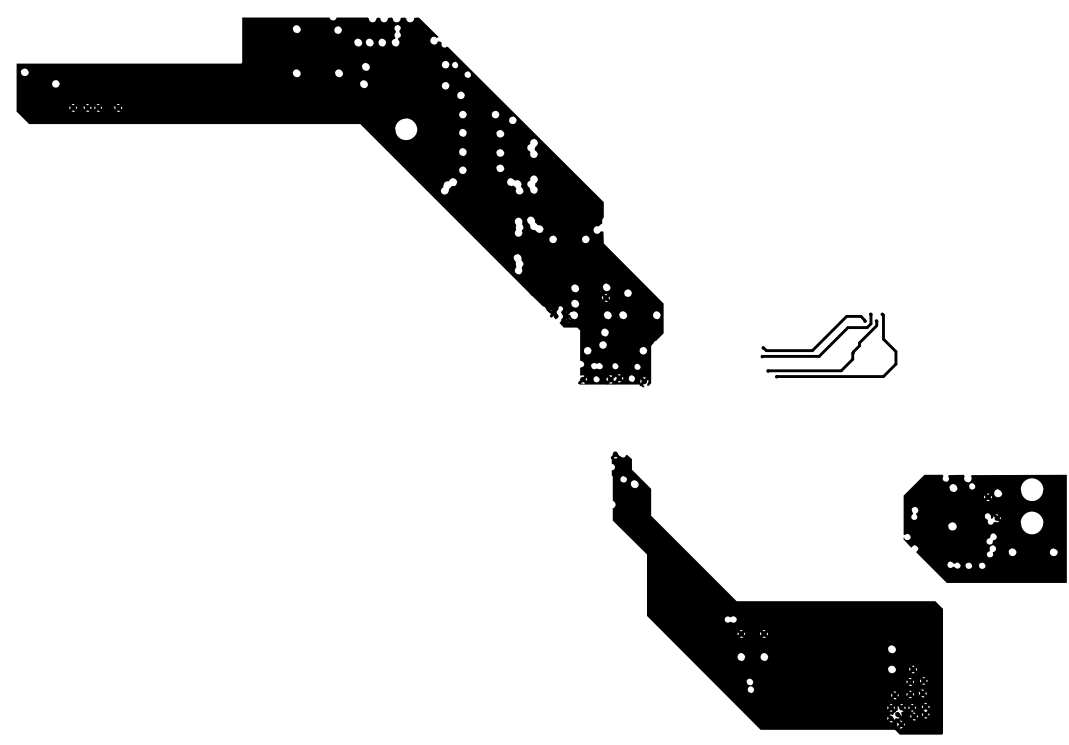
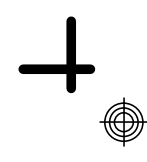
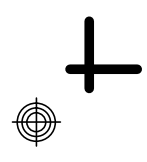
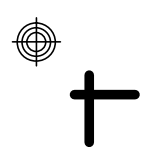
L1\_PRIMARY  
HSC 13016  
REV C



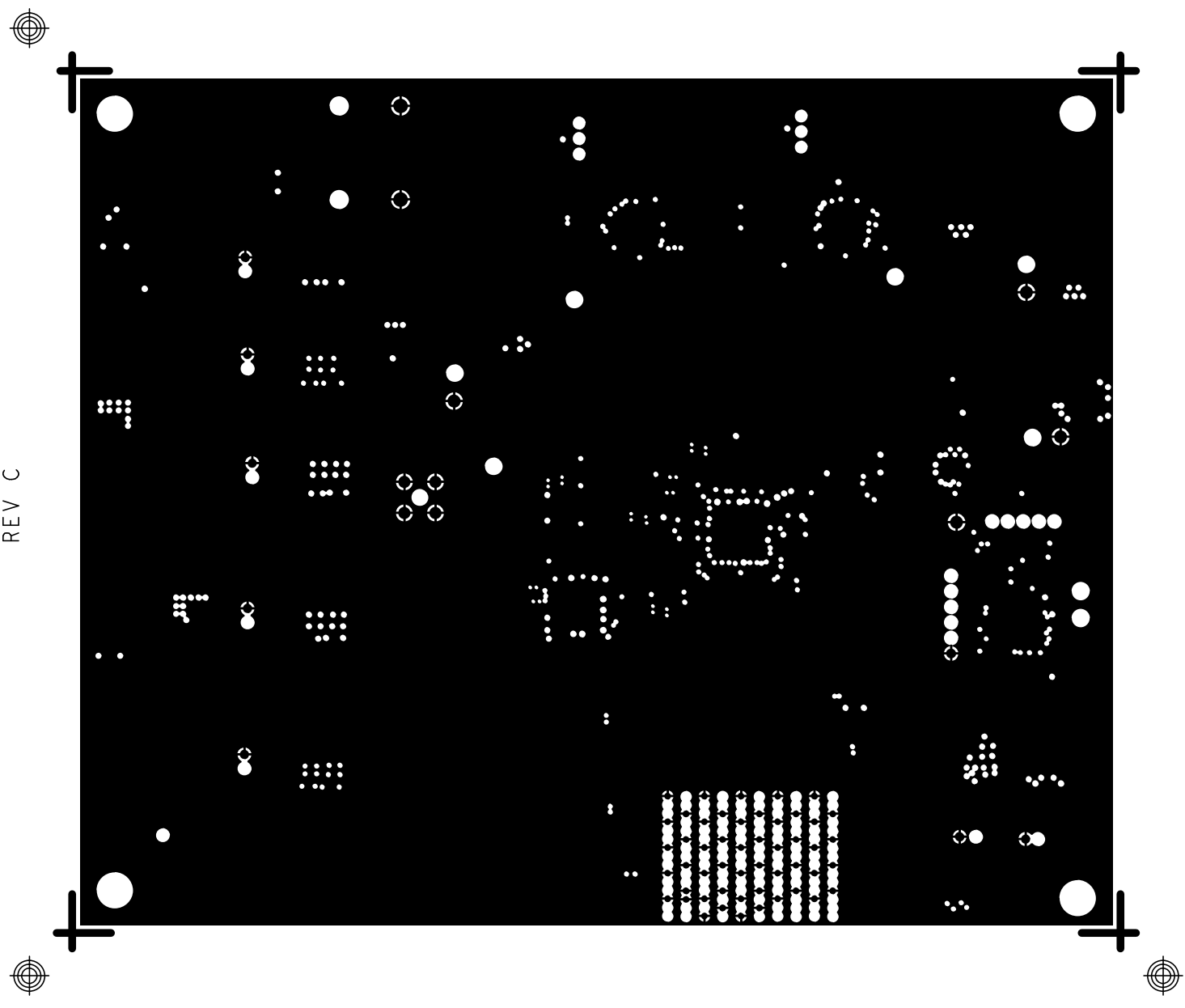
L2\_GROUND  
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REV C



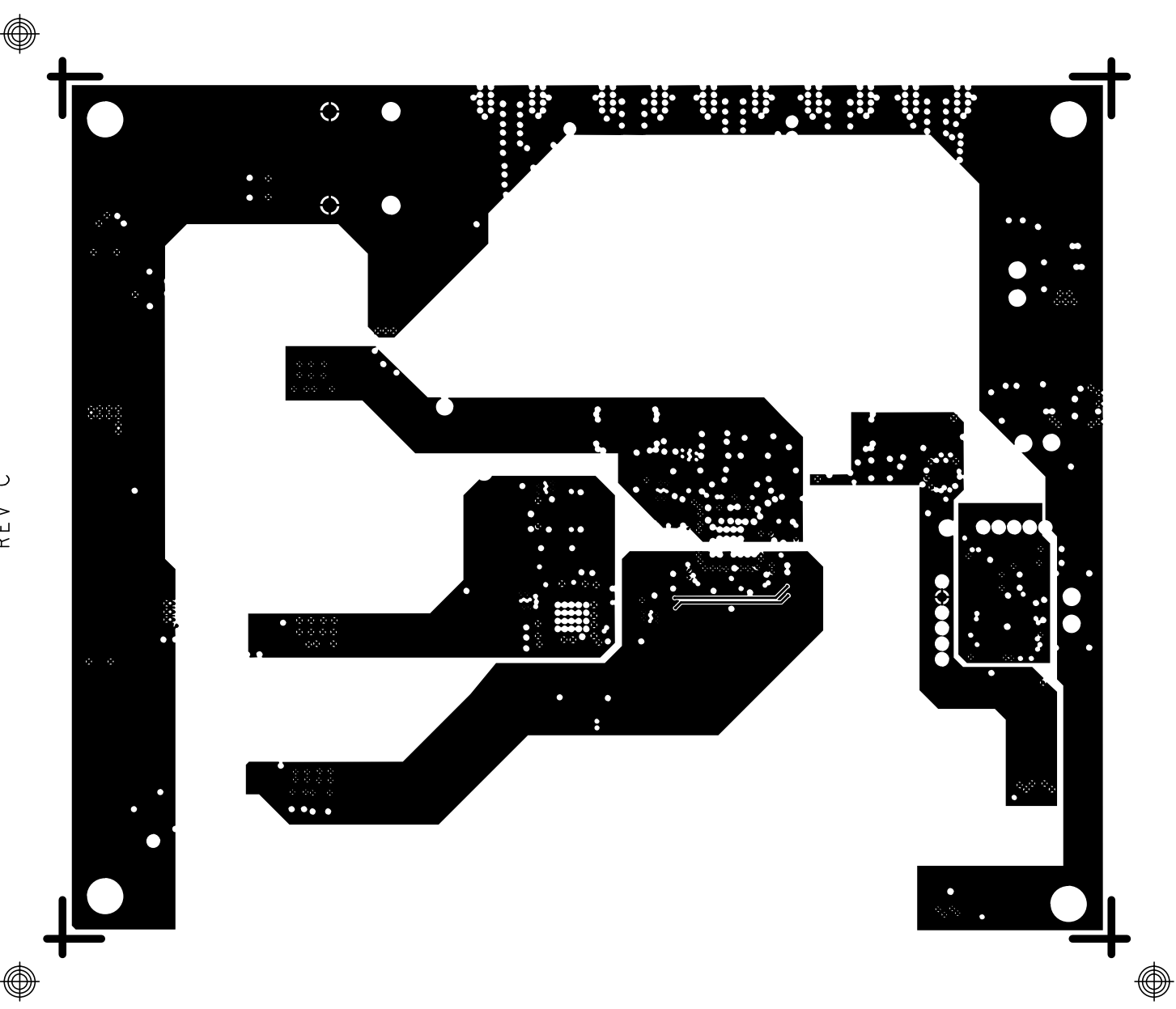
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REV C



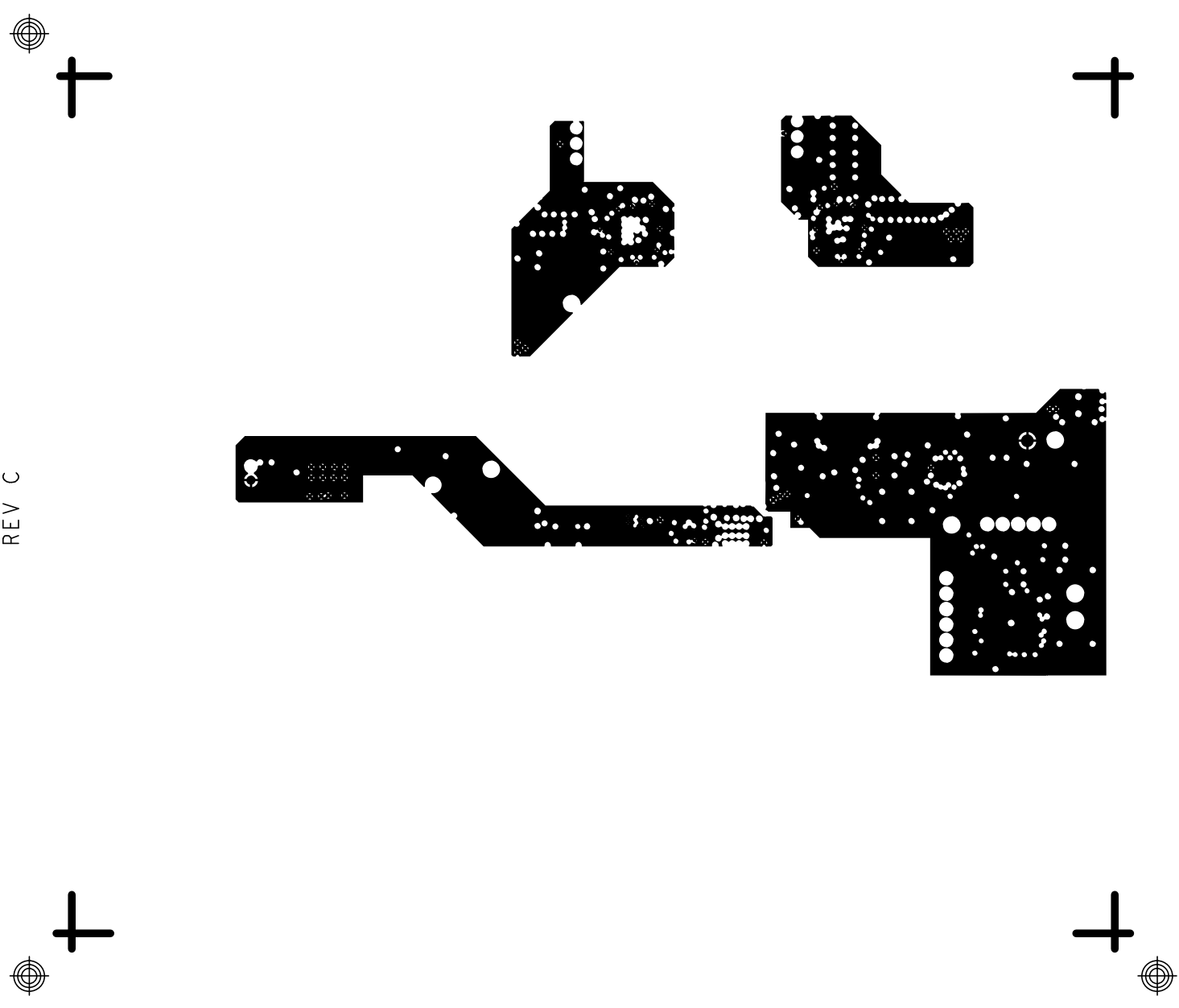
L4\_GROUND  
HSC\_13016  
REV C



L5 POWER  
HSC 13016  
REV C

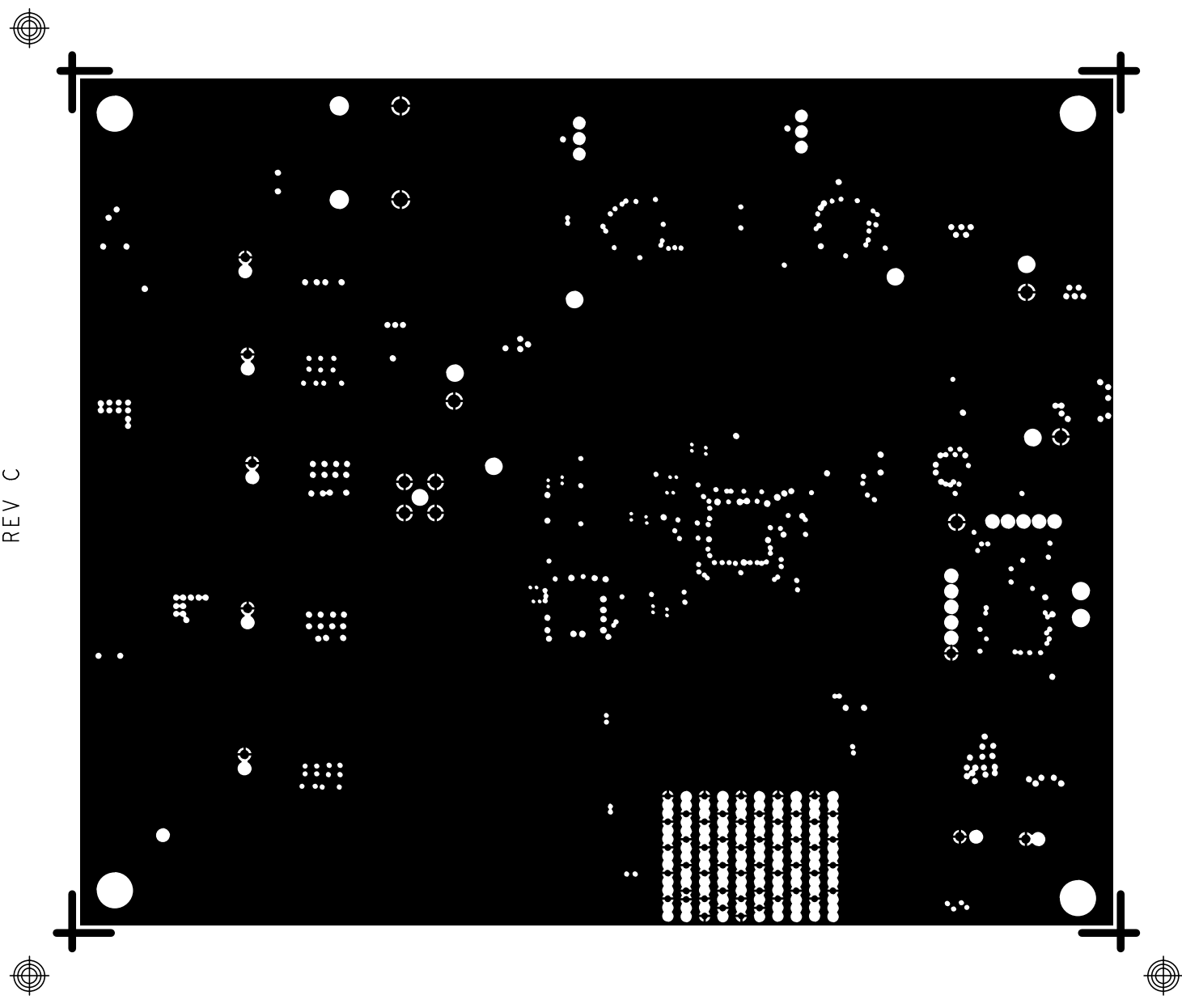


L6 POWER  
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REV C

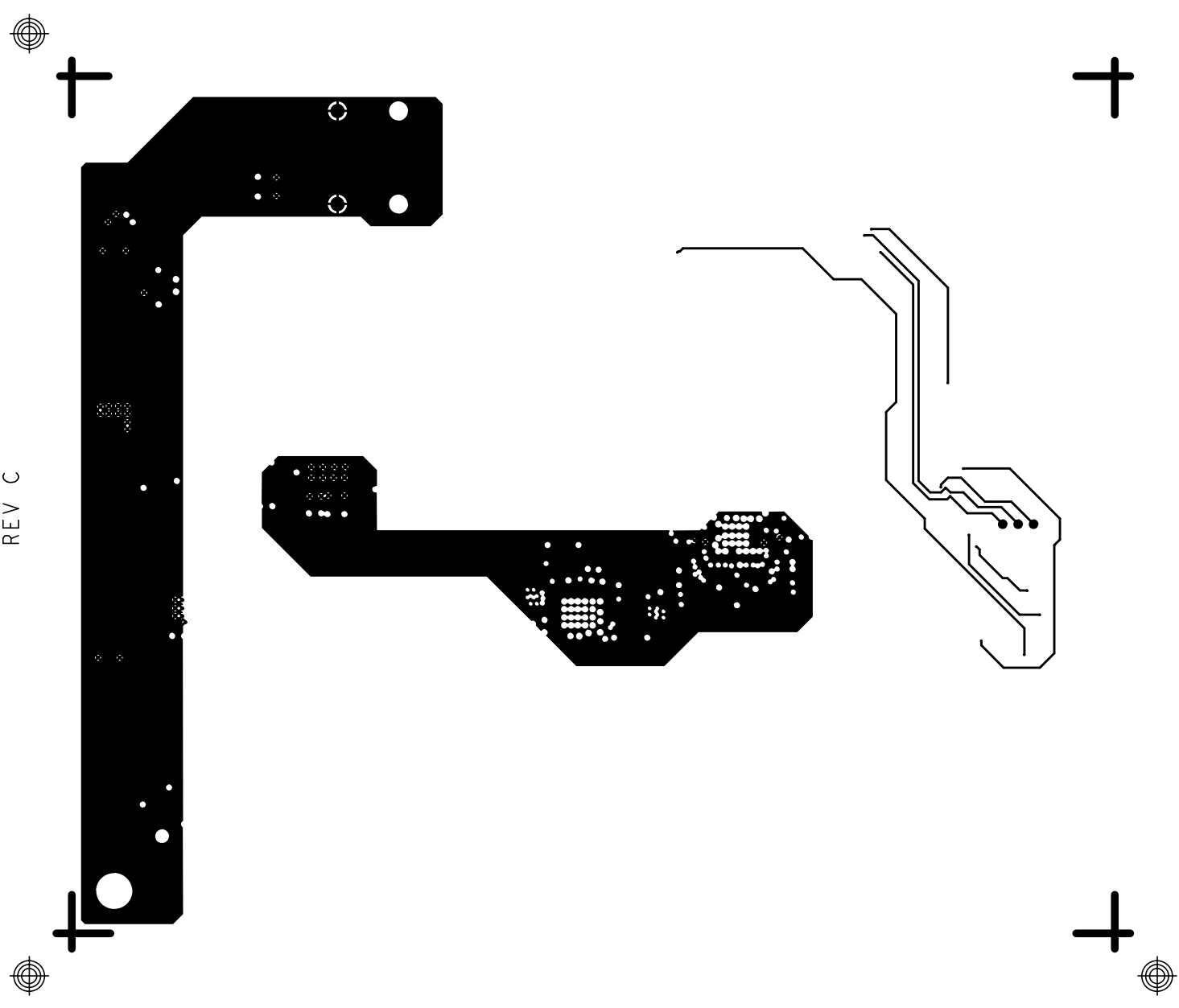




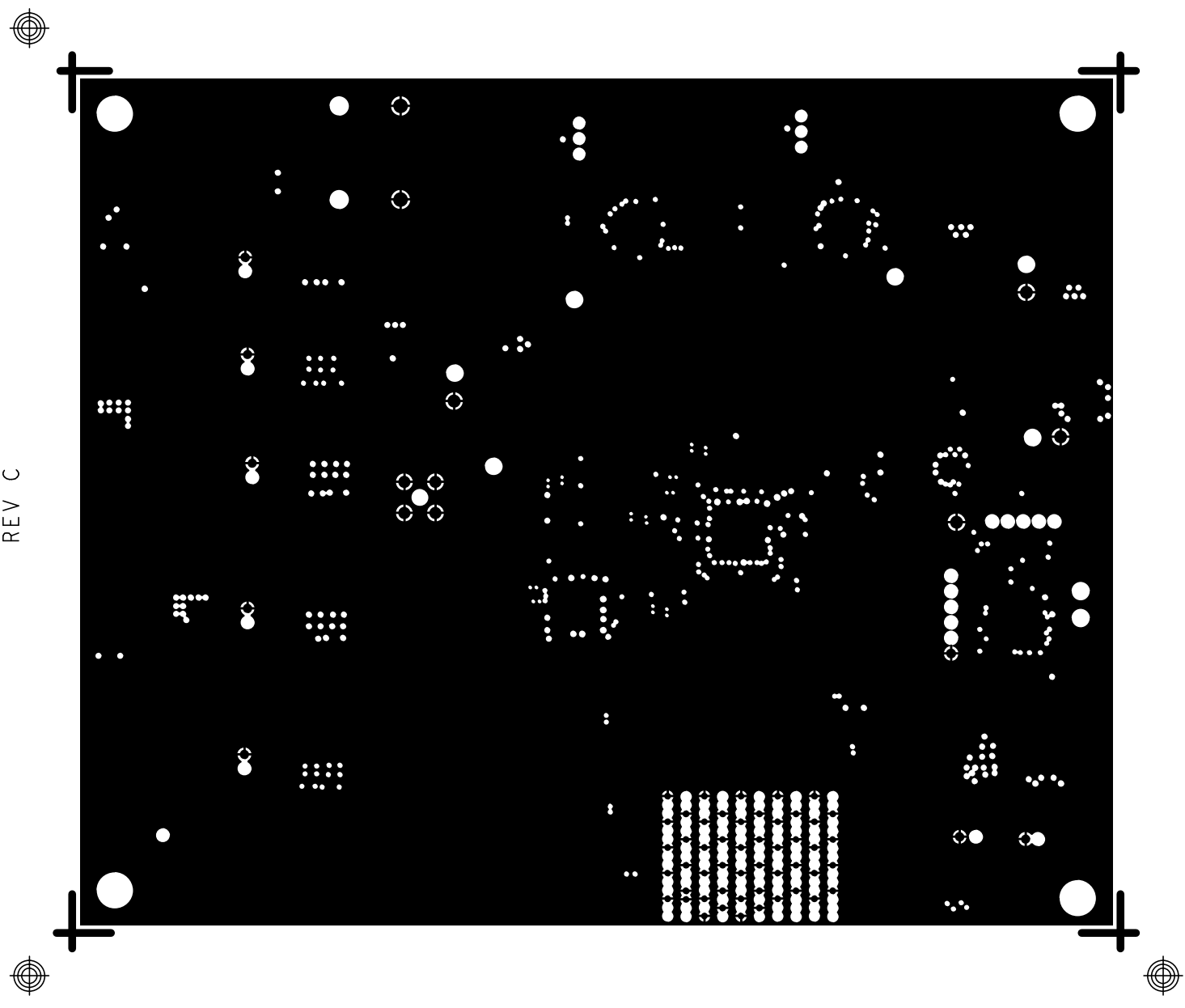
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REV C



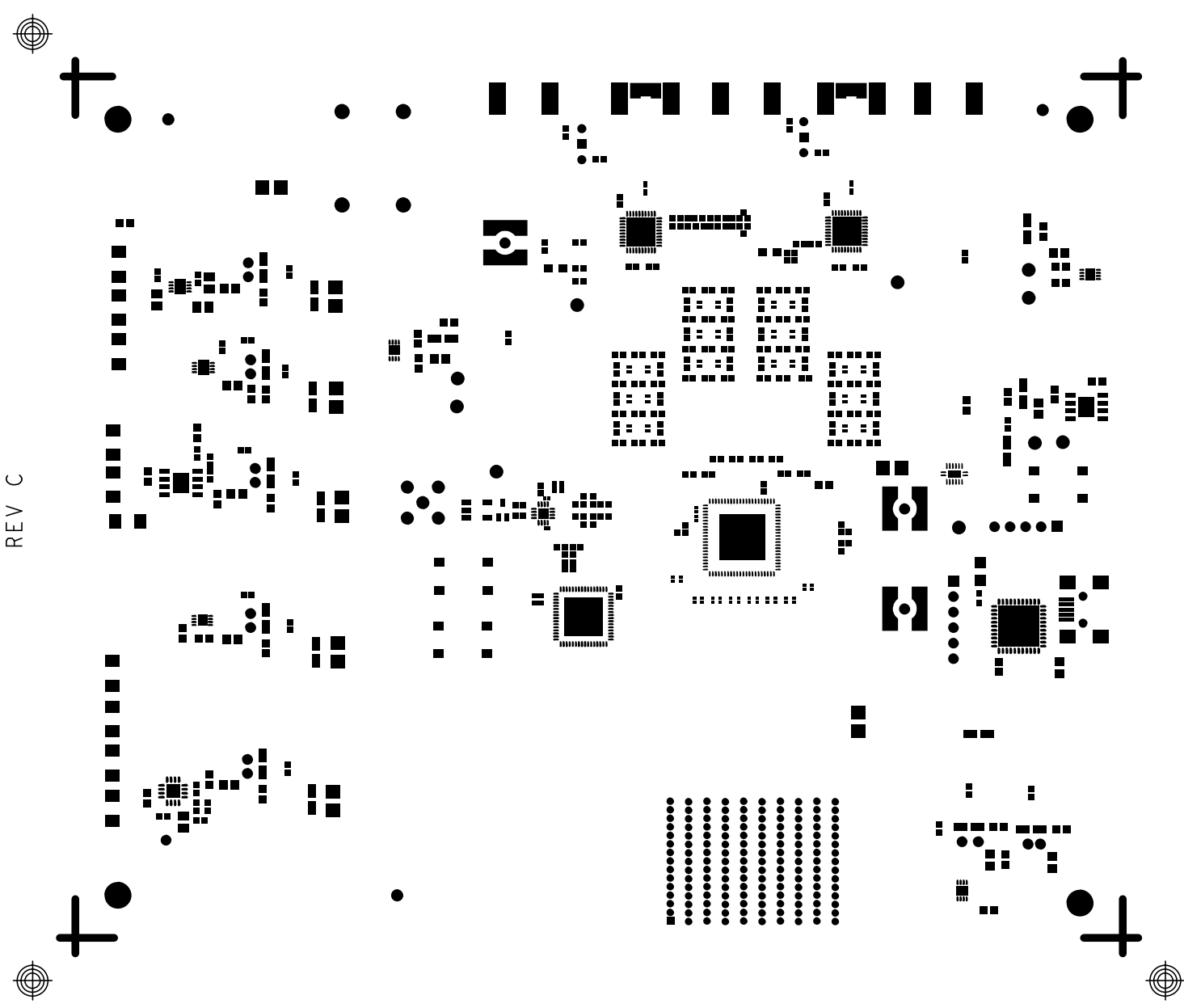
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REV C



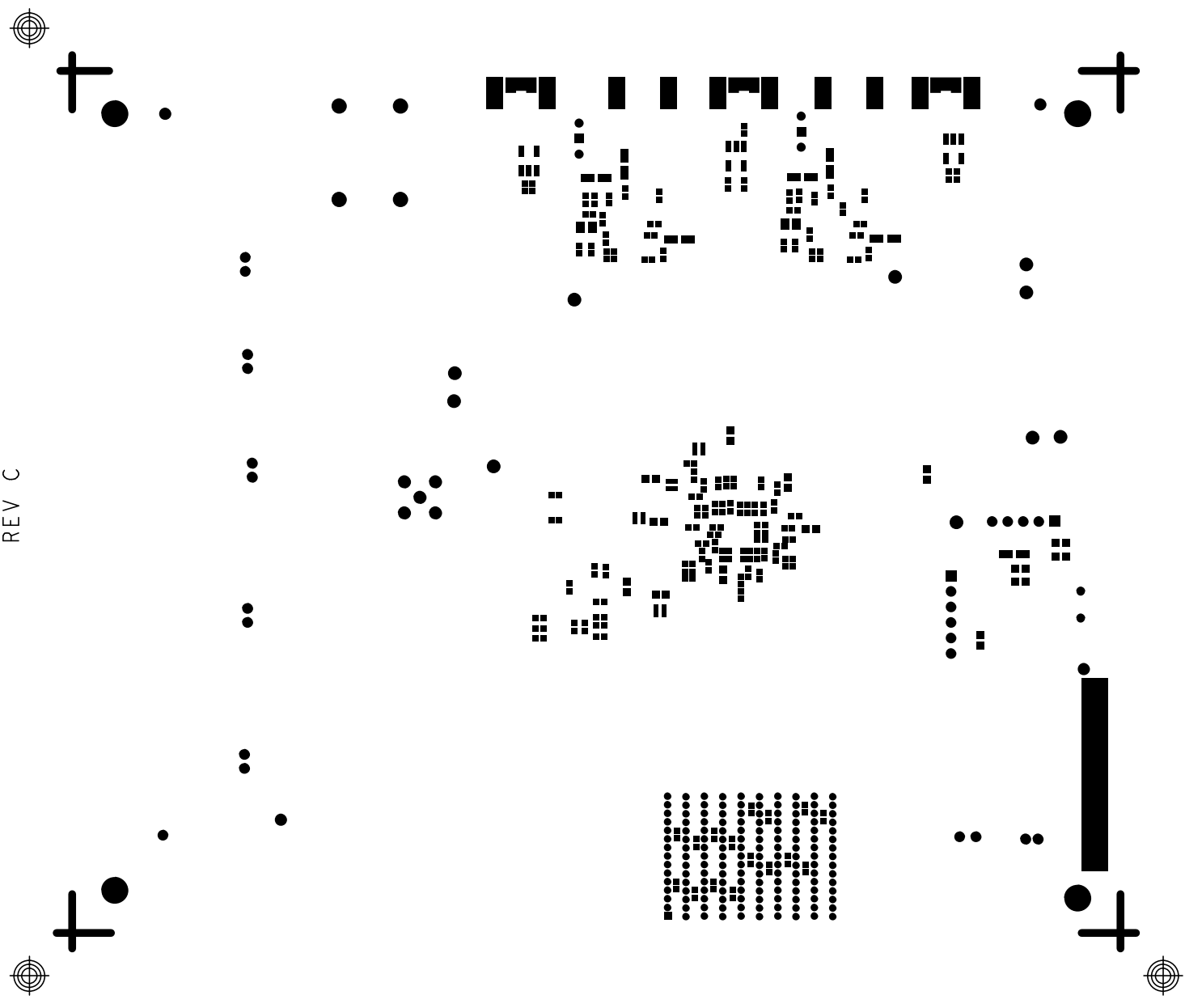
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REV C



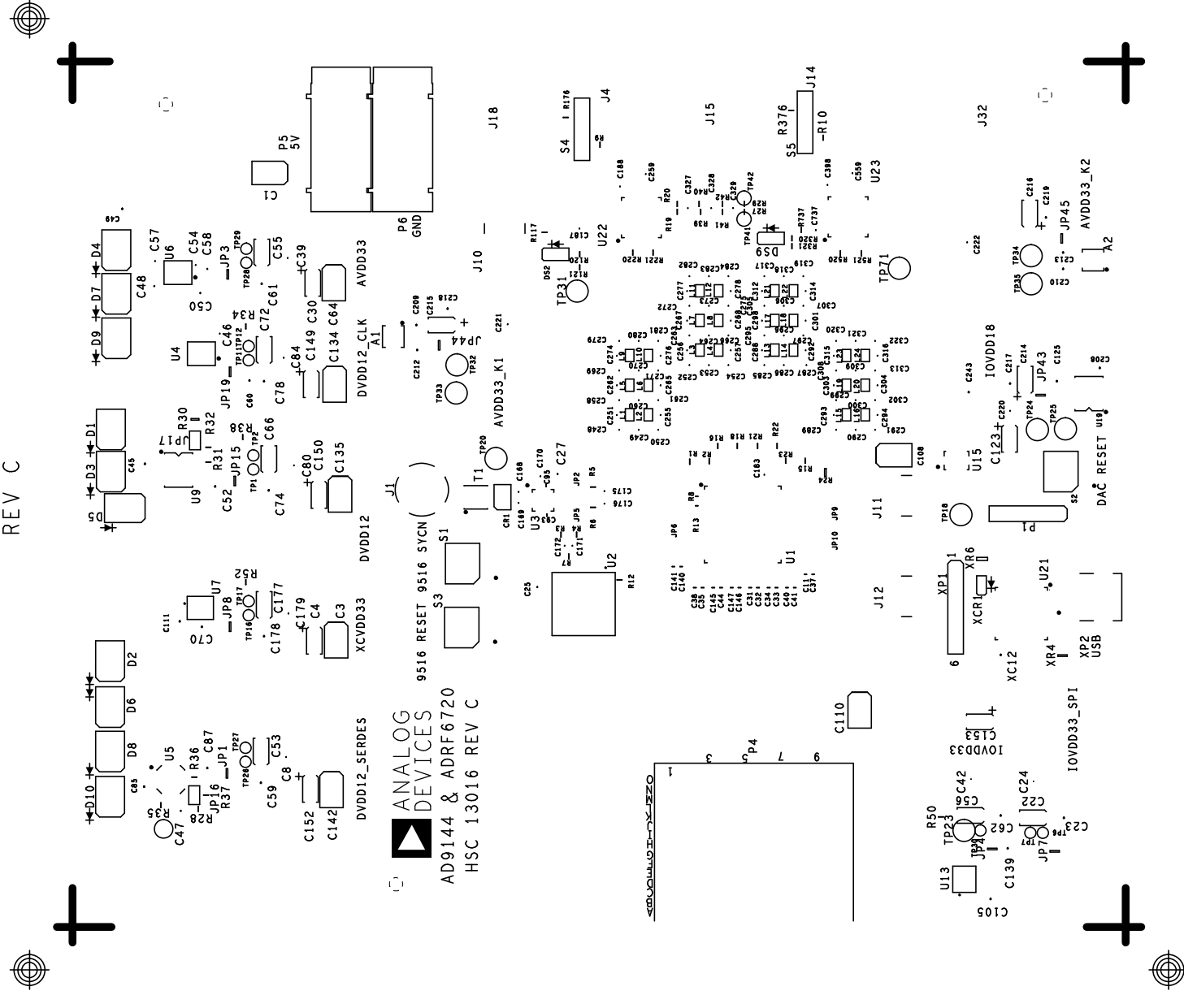
SOLDERMASK\_PRIMARY  
HSC\_13016  
REV\_C



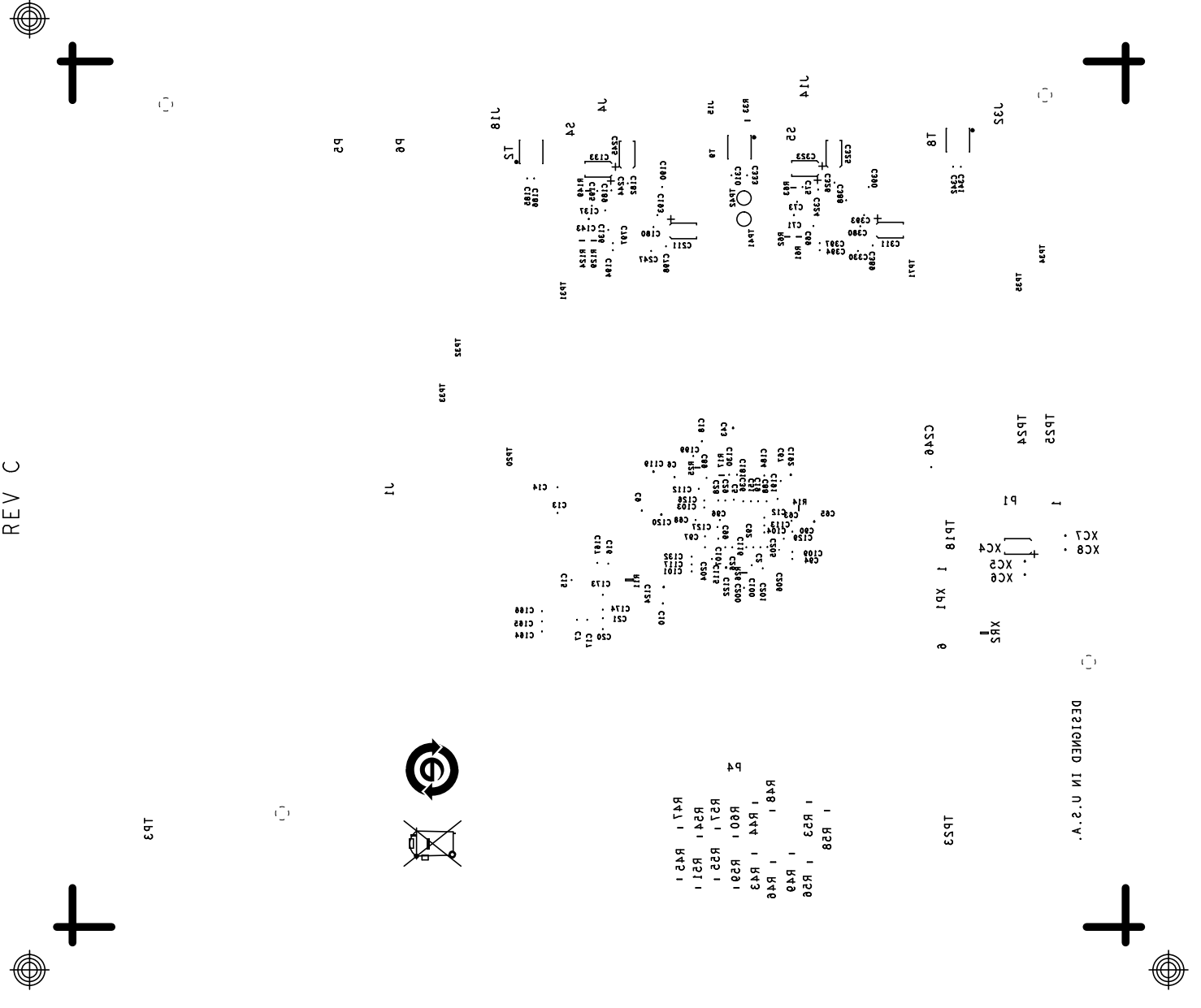
SOLDERMASK\_SECONDARY  
HSC\_1.5016  
REV\_C



SILKSCREEN PRIMARY  
HSC 13016  
REV C



SILKSCREEN SECONDARY  
HSC 13016  
REV C



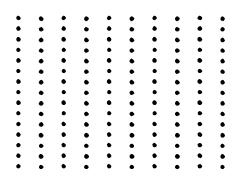
















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