

PRIMARY SIDE

10 LAYER STACKUP

PRIMARY SILKSCREEN
PRIMARY SOLDER MASK
PRIMARY SIDE (LAYER 1)
0.008" GROUND PLANE (LAYER 2)
0.003" POWER PLANE (LAYER 3)
GROUND PLANE (LAYER 4)
POWER LAYER (LAYER 5)
POWER PLANE (LAYER 6)
GROUND PLANE (LAYER 7)
POWER PLANE (LAYER 8)
0.003" GROUND PLANE (LAYER 9)
0.008" SECONDARY SIDE (LAYER 10)
SECONDARY SOLDER MASK
SECONDARY SILKSCREEN

CHARACTERISTIC IMPEDANCE = 50 OHMS +/- 10%  
 ARTWORK LINE WIDTH FOR  
 IMPEDANCE CONTROLLED LINES = 0.0135" 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
A	6.0	PLATED	72
B	10.0	PLATED	160
C	15.0	PLATED	663
D	16.0	PLATED	44
E	25.0	PLATED	150
F	42.0	PLATED	20
G	45.0	PLATED	35
H	60.0	PLATED	15
I	63.0	PLATED	13
J	75.0	PLATED	4
K	40.0	NON-PLATED	2
L	155.0	NON-PLATED	4

REVISIONS		
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	25FEB13
B	CHANGES PER ENGINEER	08 JUL13
C	CHANGES PER ENGINEER	06MARI14
D	CHANGES PER ENGINEER	20MAY14

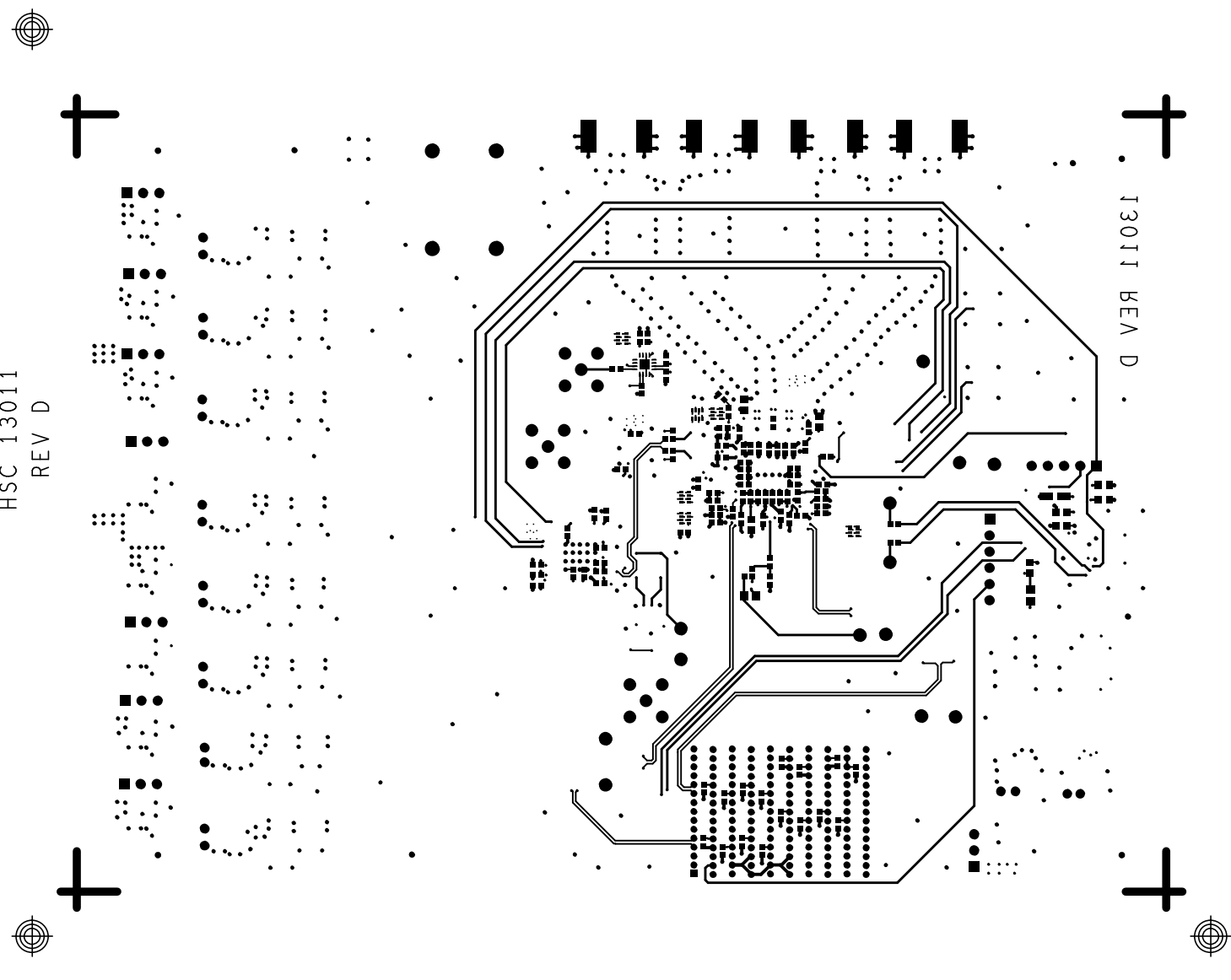
- NOTES:
- MATERIALS: FR-408HR, IN ACCORDANCE WITH IS410 (LATEST REV.), GLASS FABRIC BASE, EPOXY RESIN, FIRE RESISTANT.  
 BONDING AGENT: PREIMPREGNATED B STAGE EPOXY GLASS CLOTH IN ACCORDANCE WITH IPC-L-109 (LATEST REV.).  
 CLADDING: INTERNAL PLANE LAYERS 1/2 OZ., COPPER, OVERPLATE TO 1 1/2 OZ. SHALL 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                      D. MFGR. LOGO  
 B. DATE CODE (STAMP)            E. SUCCESSFUL ELECTRICAL BOARD TEST.  
 C. 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. VIAS TO BE NON-CONDUCTIVE EPOXY FILLED, AND GROUND FLUSH PRIOR TO OVER PLATING.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS FRACTIONS ANGLES .XX .XXX .000 .11/32 .1		HSC DIVISION 804 WILMINGTON, MA 01887
NCDRILL		
TITLE AD9154 SOLDER EVALUATION BOARD		
DRAWN BY W.D.B. 25FEB13		
DESIGNED	CHECKED	APPROVED
MATERIAL		
FINISH		
DO NOT SCALE DWG		
SIZE D	FSCM NO HSC 13011	REV D
SCALE 1/1	DRAWING NUMBER HSC 13011	SHEET 1 OF 1

GOLDMASK\_PRIMARY  
HSC\_13011  
REV D

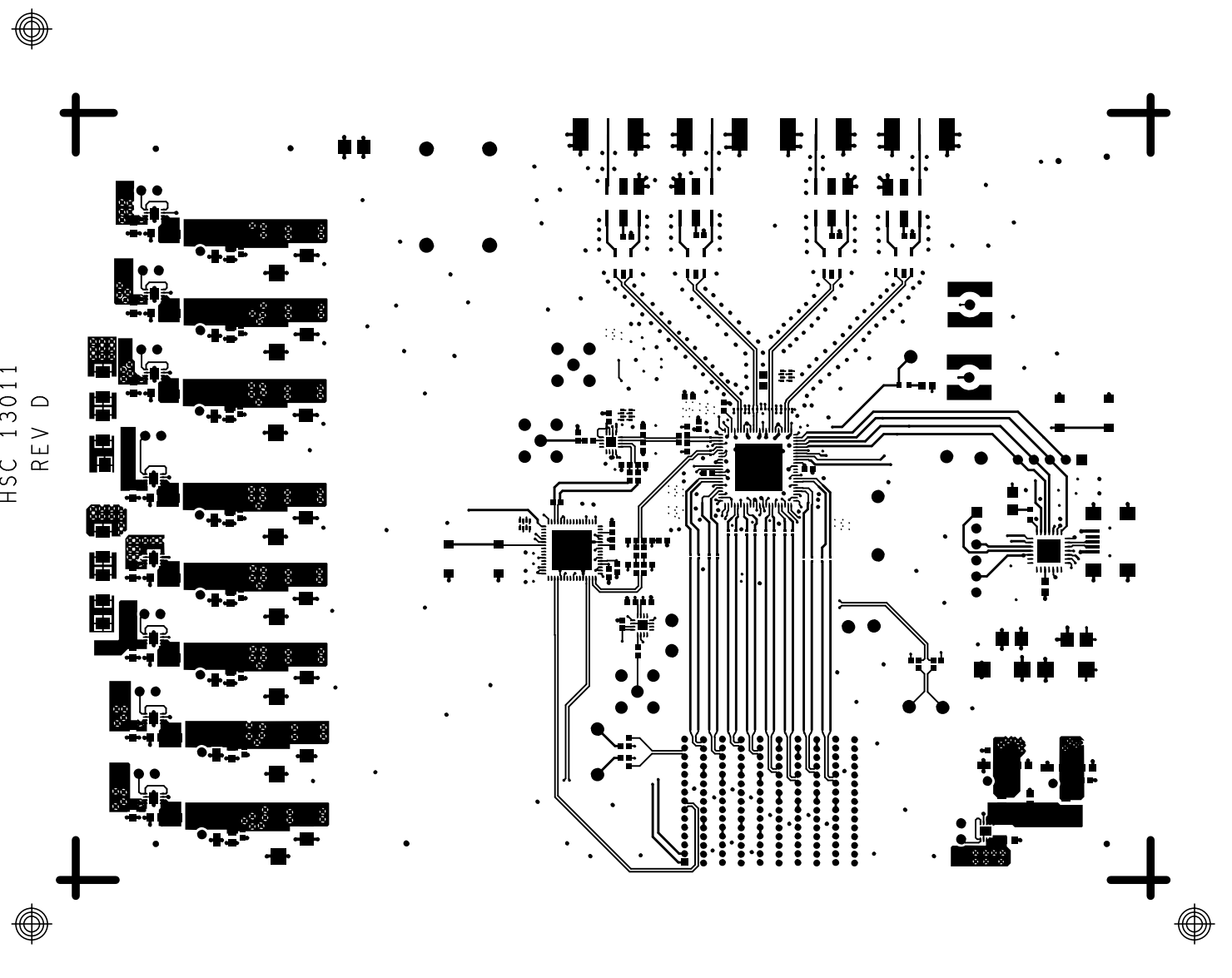


L10 SECONDARY  
HSC 13011  
REV D



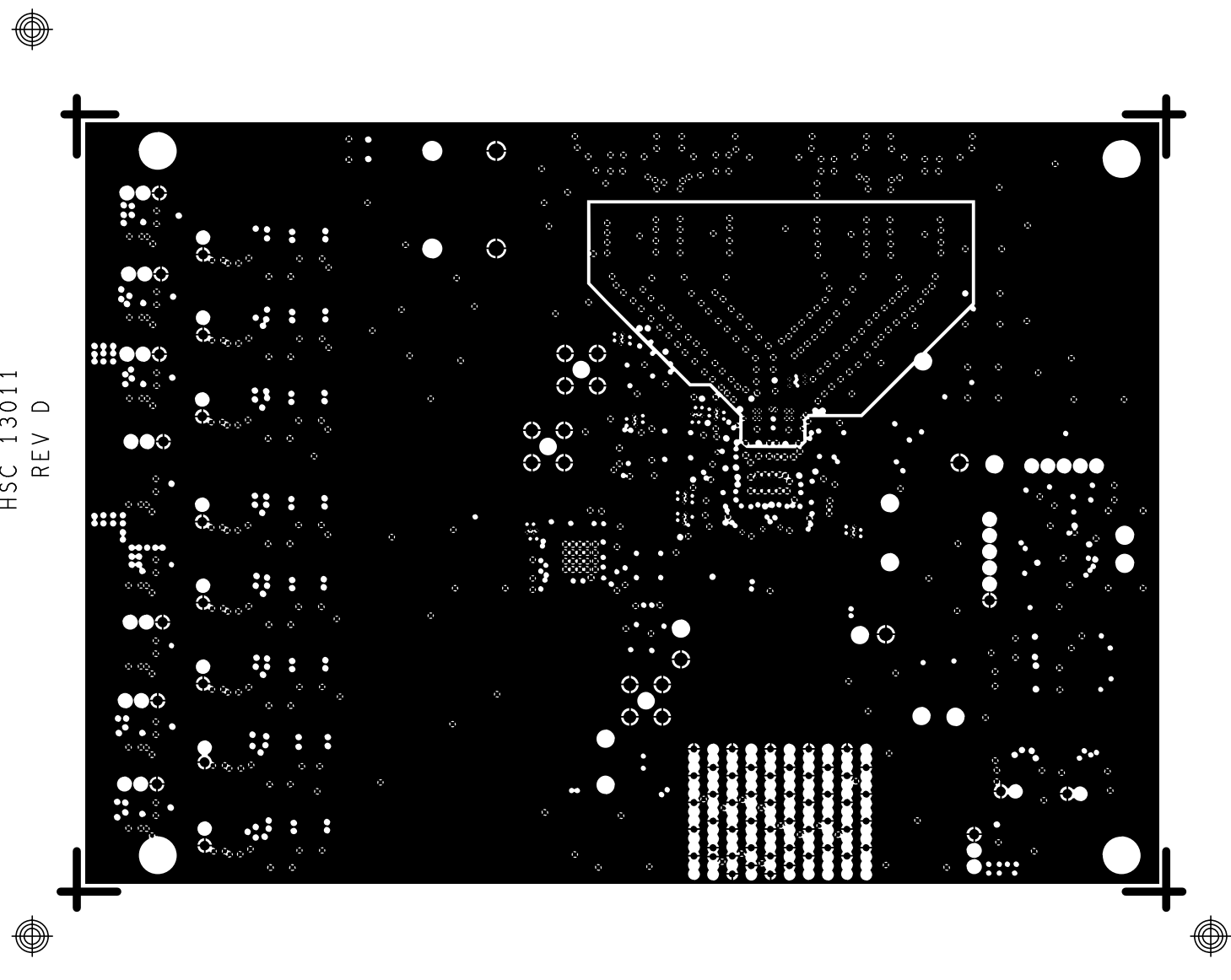
13011 REV D

L1 PRIMARY  
HSC 13011  
REV D



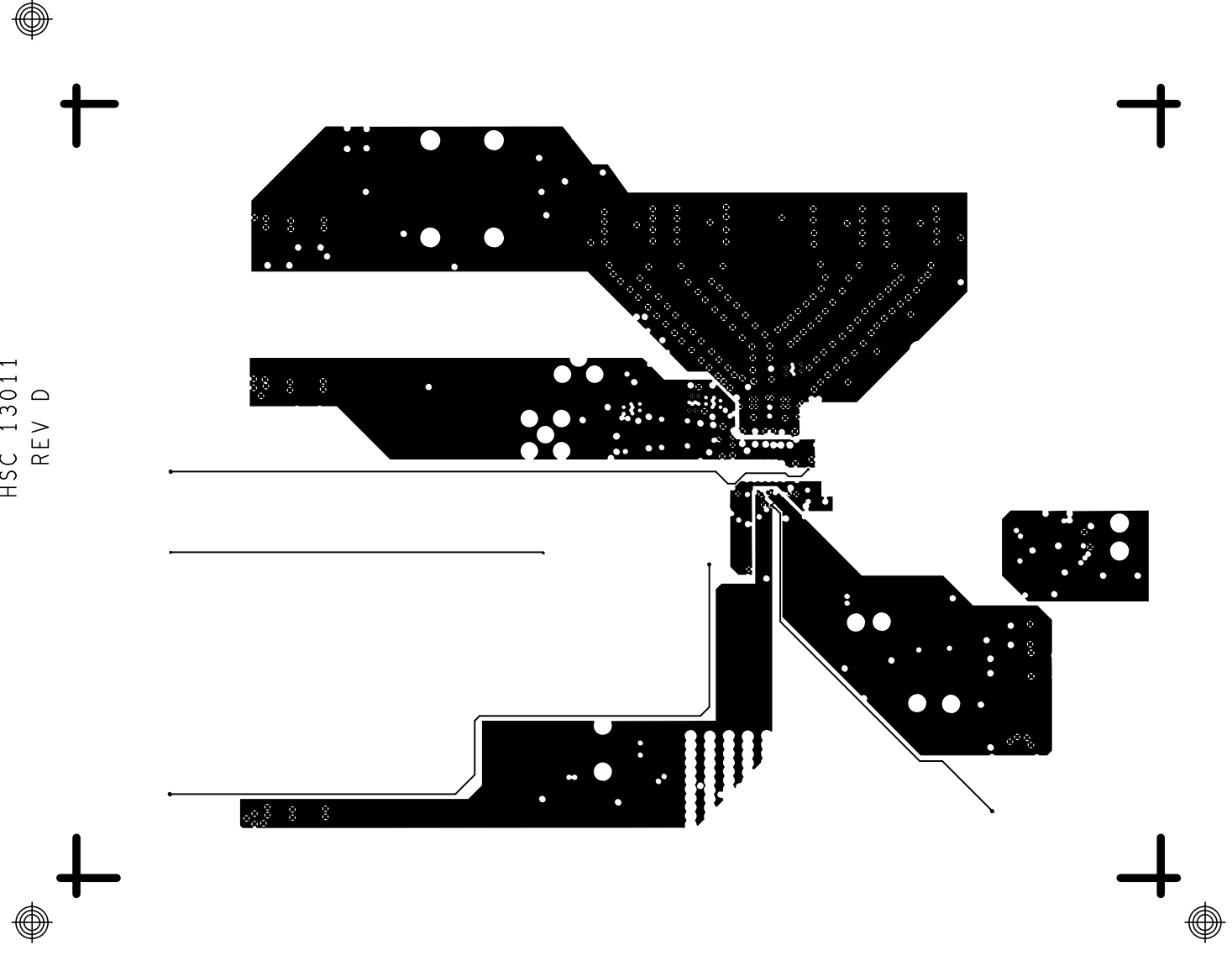
L2\_GND  
08 -07

L2\_GROUND  
HSC.13011  
REV D



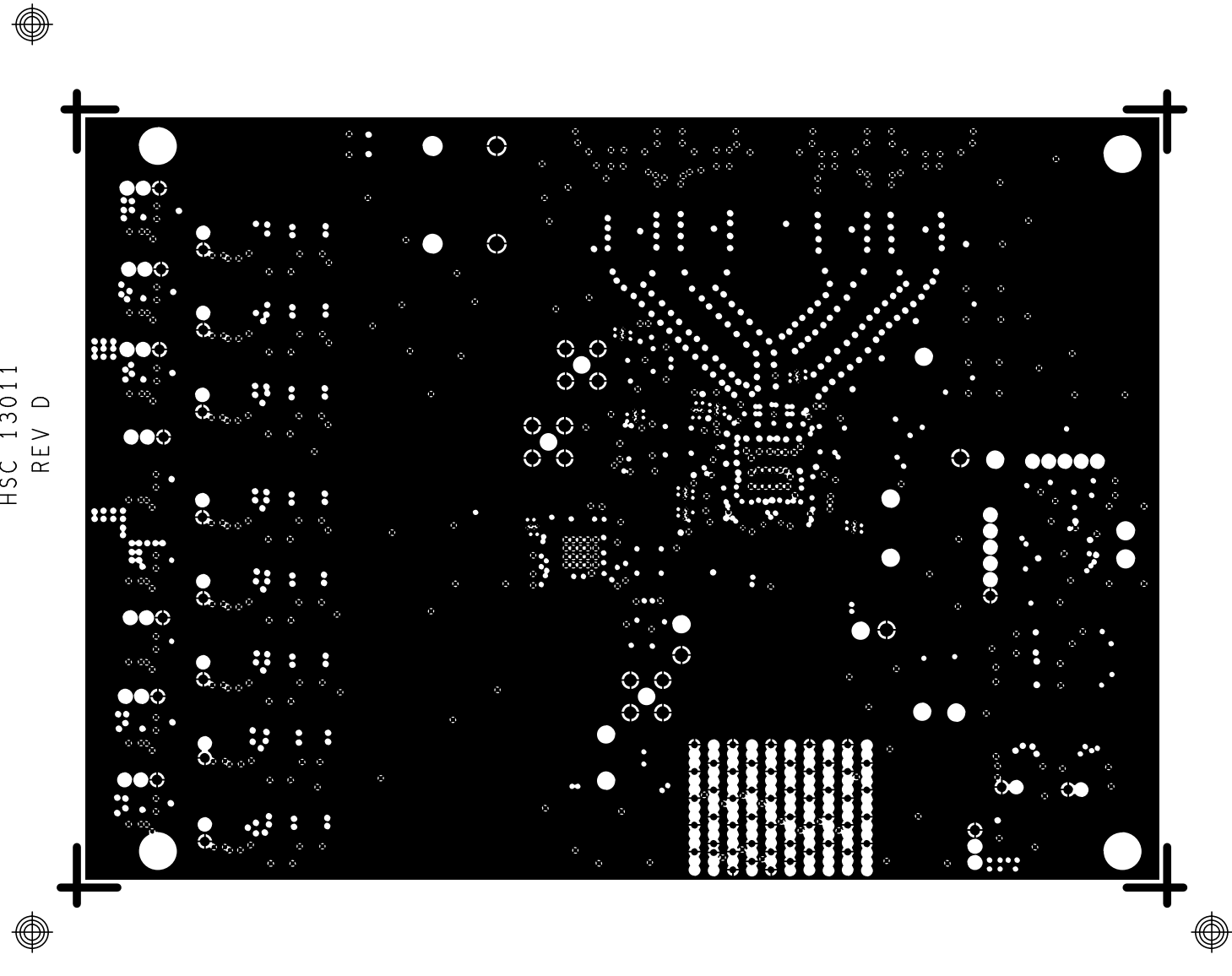
L3\_PWR  
08-

L3\_POWER  
HSC.13011  
REV D



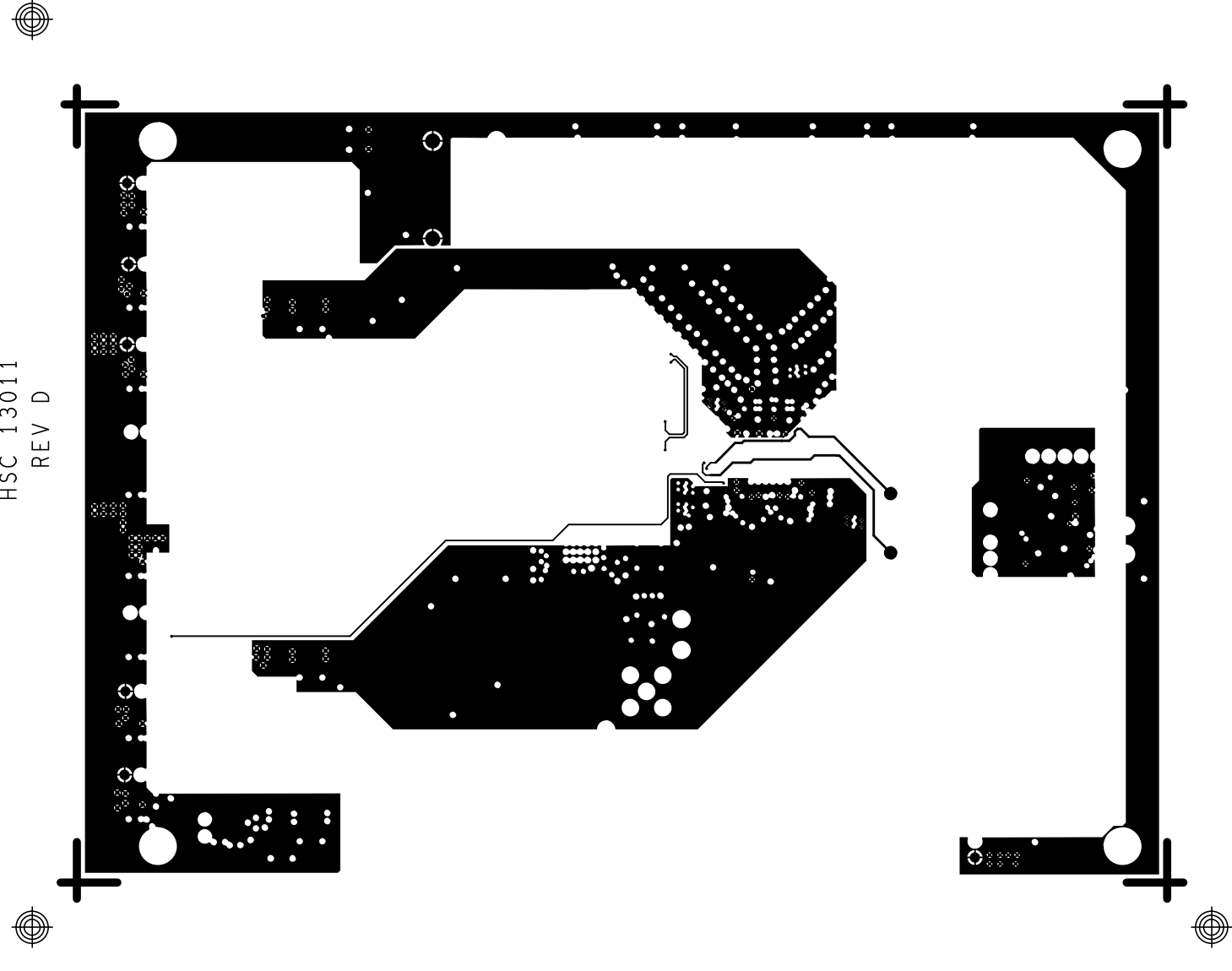
L4\_GND  
08 - 09

L4\_GROUND  
HSC.13011  
REV D



L5\_PWR  
08 -10

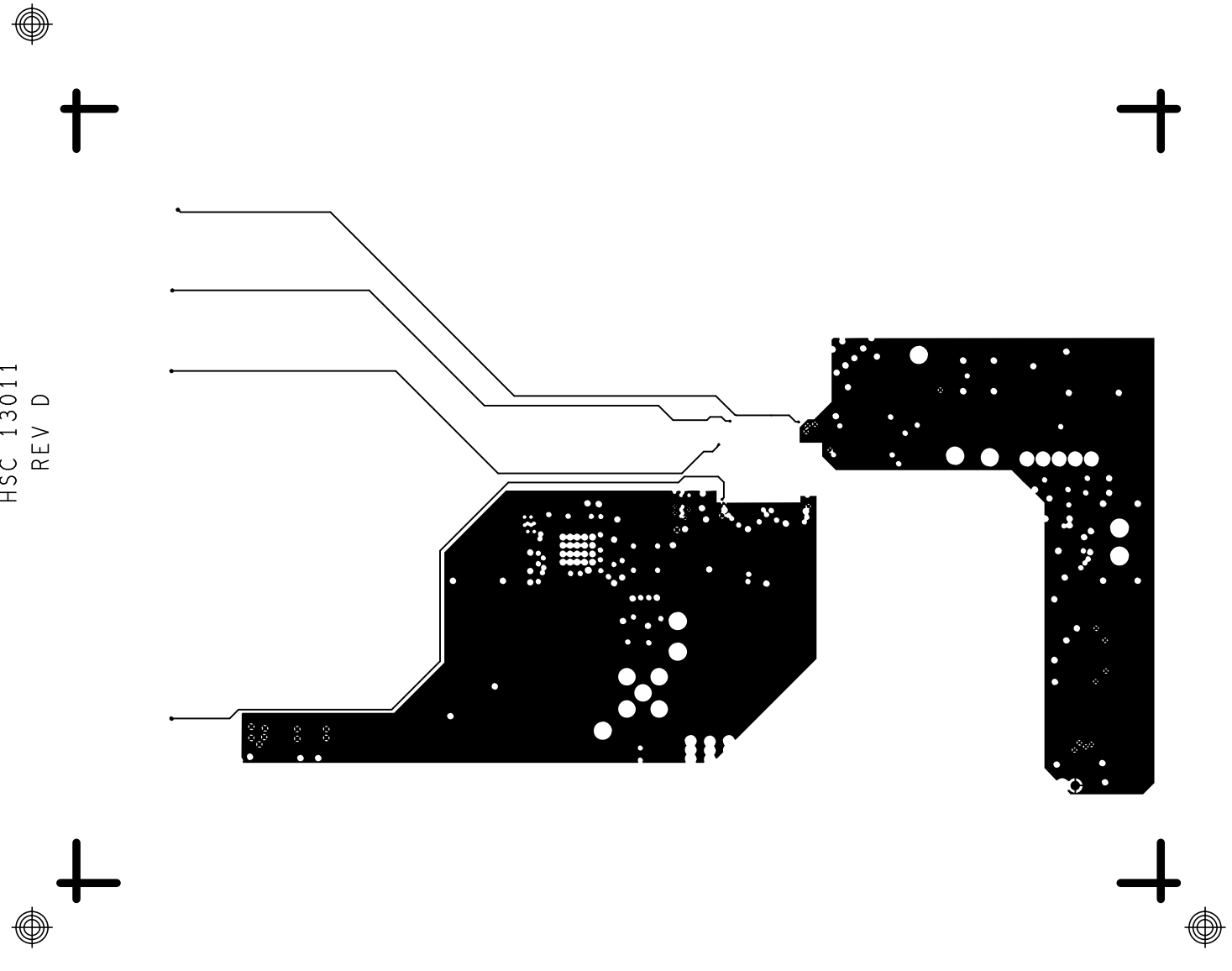
L5\_POWER  
HSC\_13011  
REV D





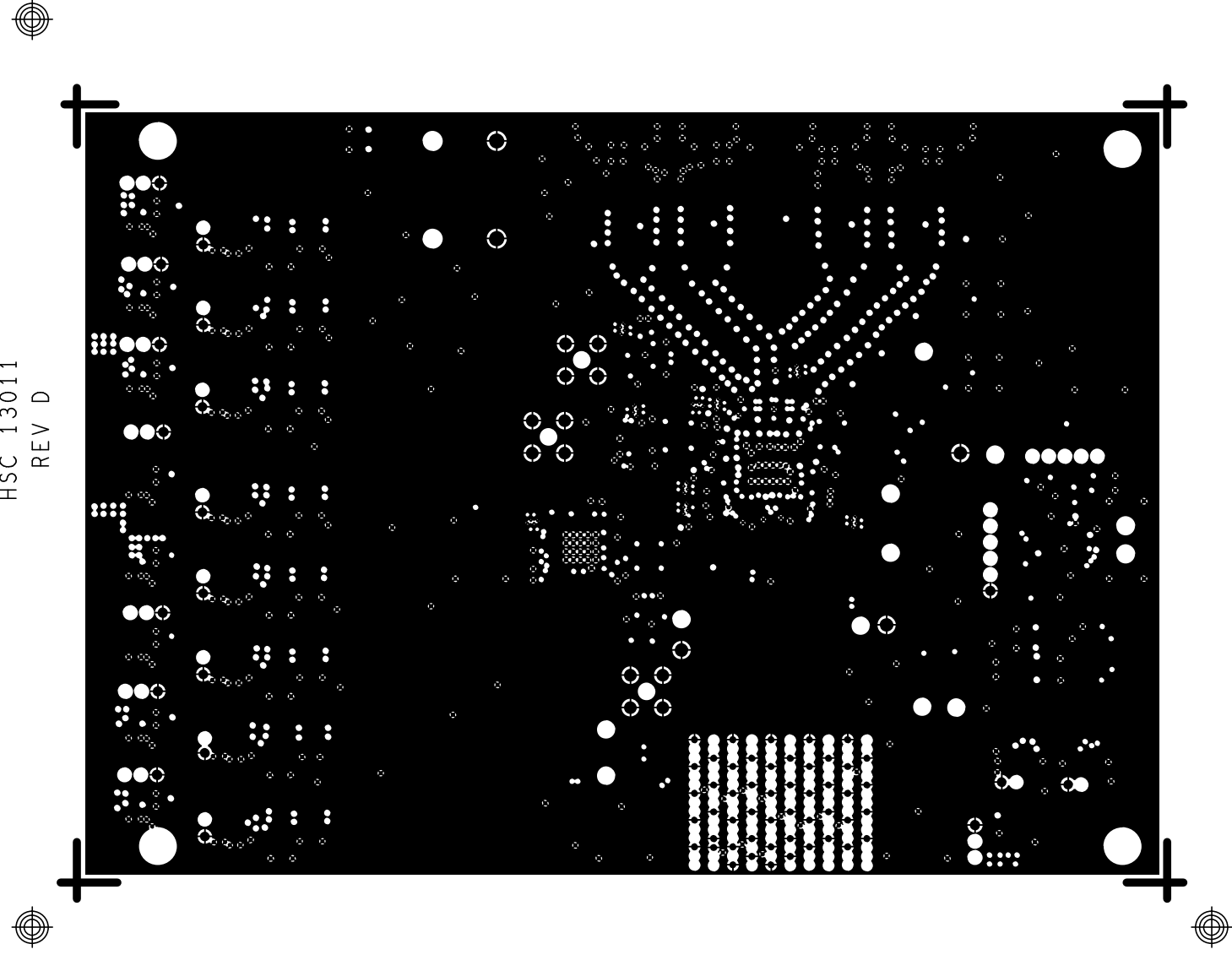
L6 PWR  
08-

L6 POWER  
HSC.13011  
REV D



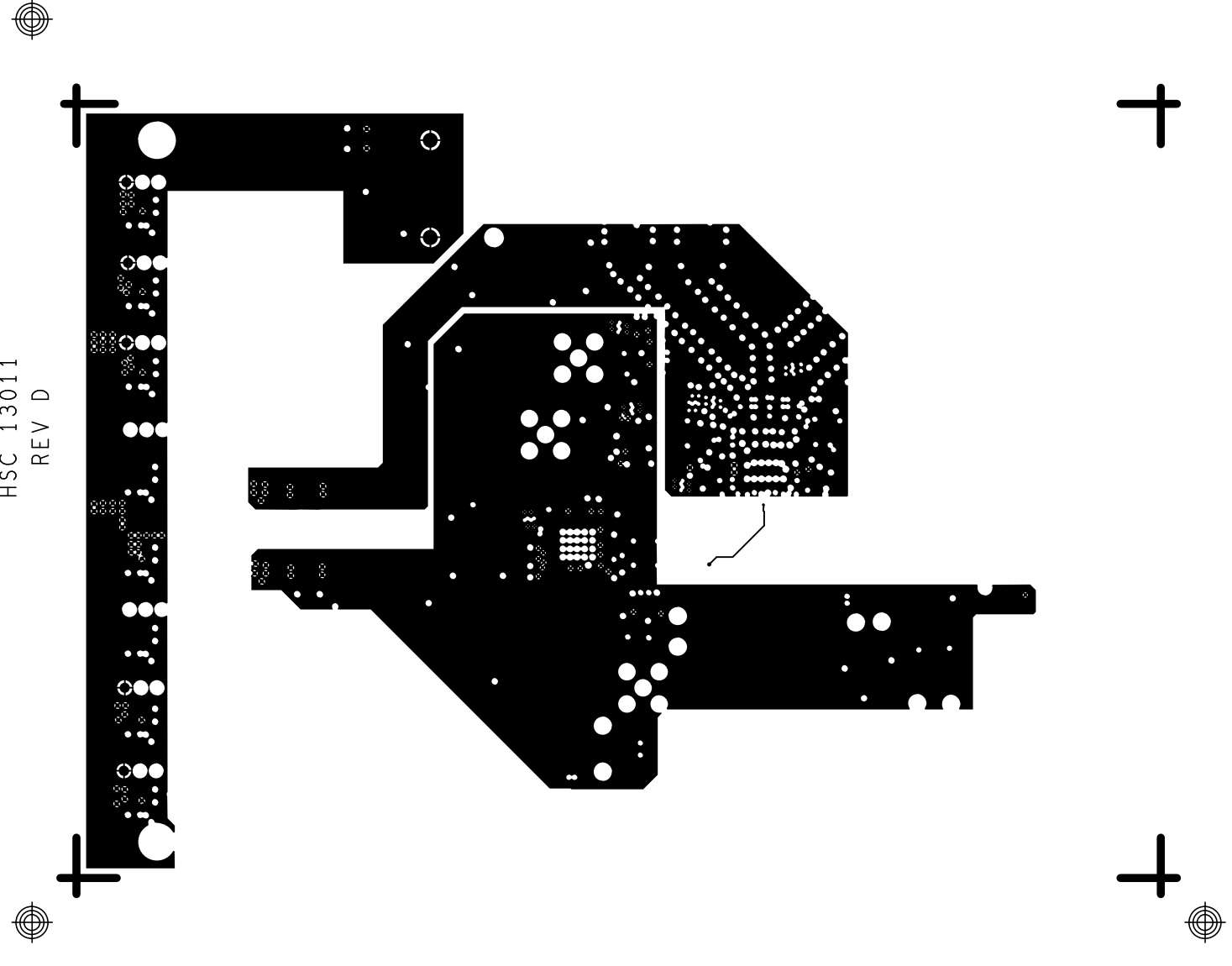
L7\_GND  
08 -12

L7\_GROUND  
HSC.13011  
REV D



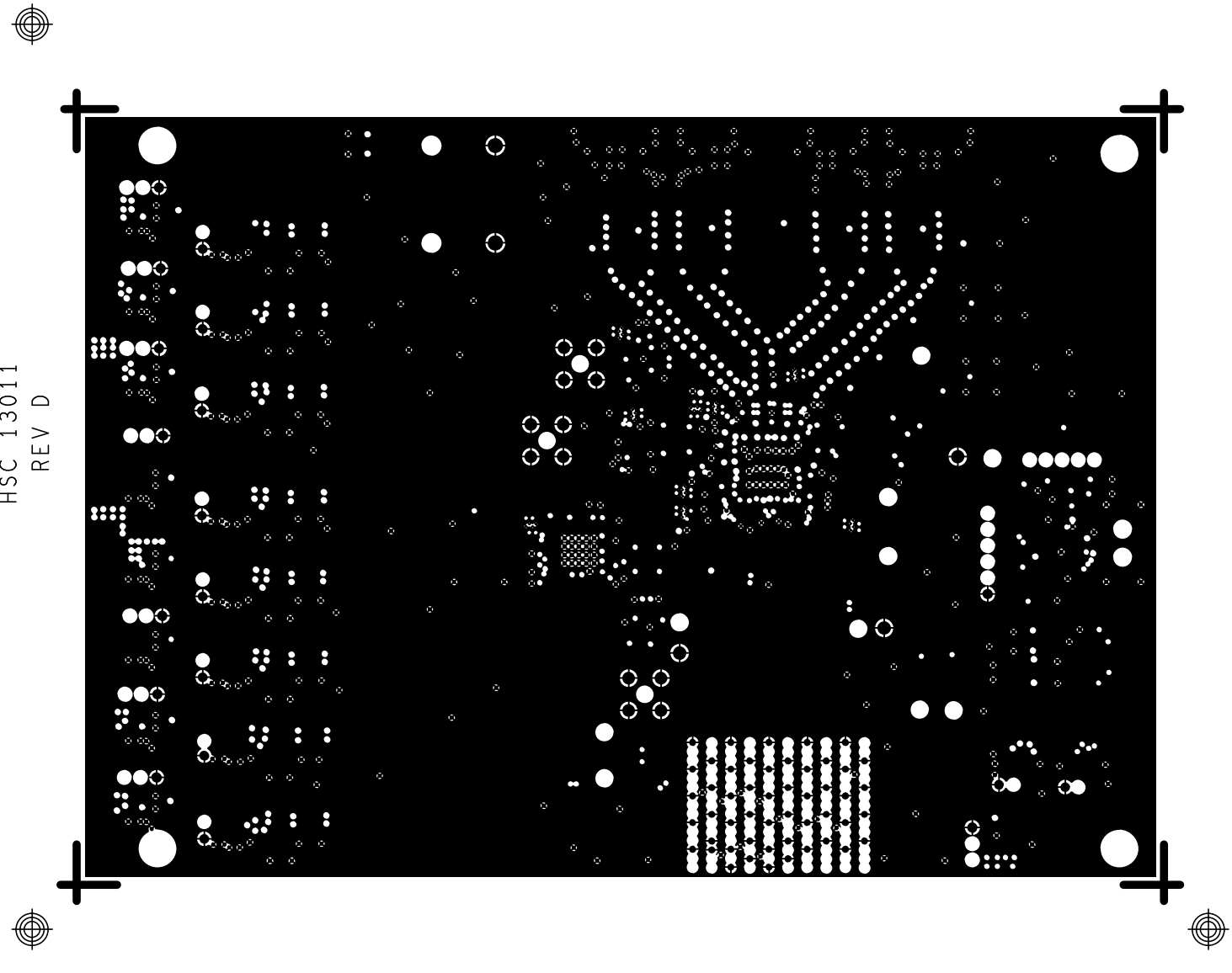
L8\_PWR  
08 -13

L8\_POWER  
HSC.13011  
REV D

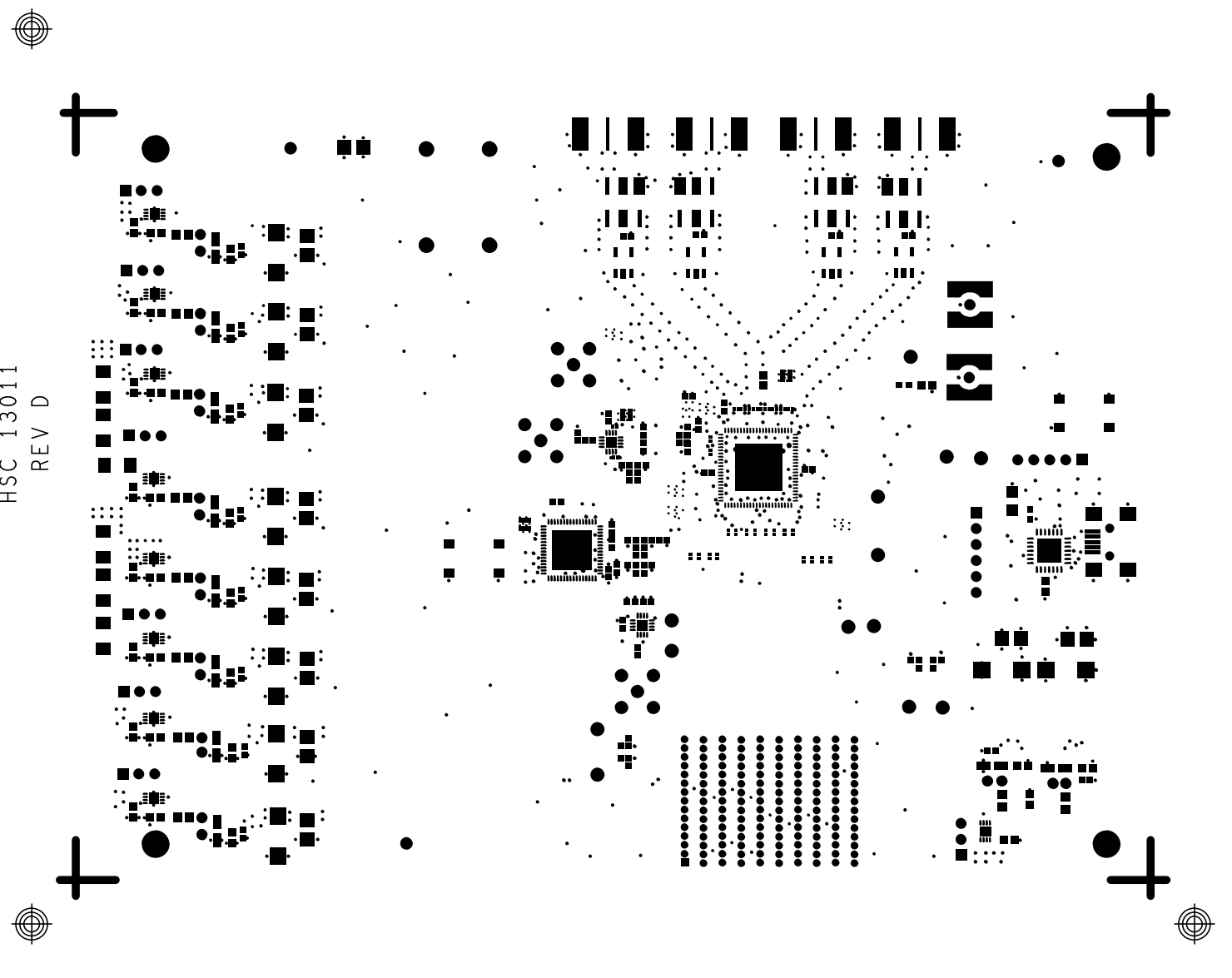


L9\_GND  
08 -14

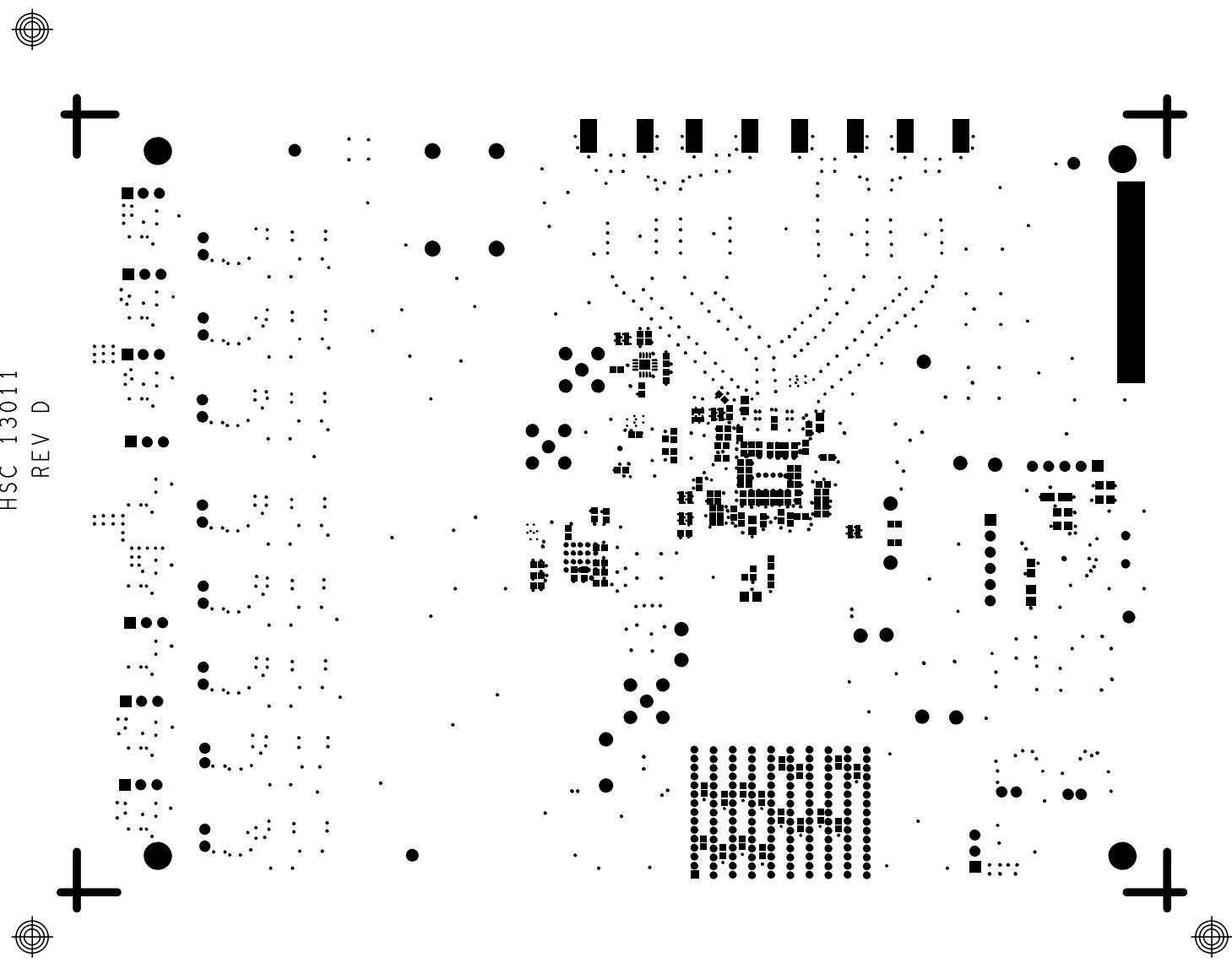
L9\_GROUND  
HSC.13011  
REV D



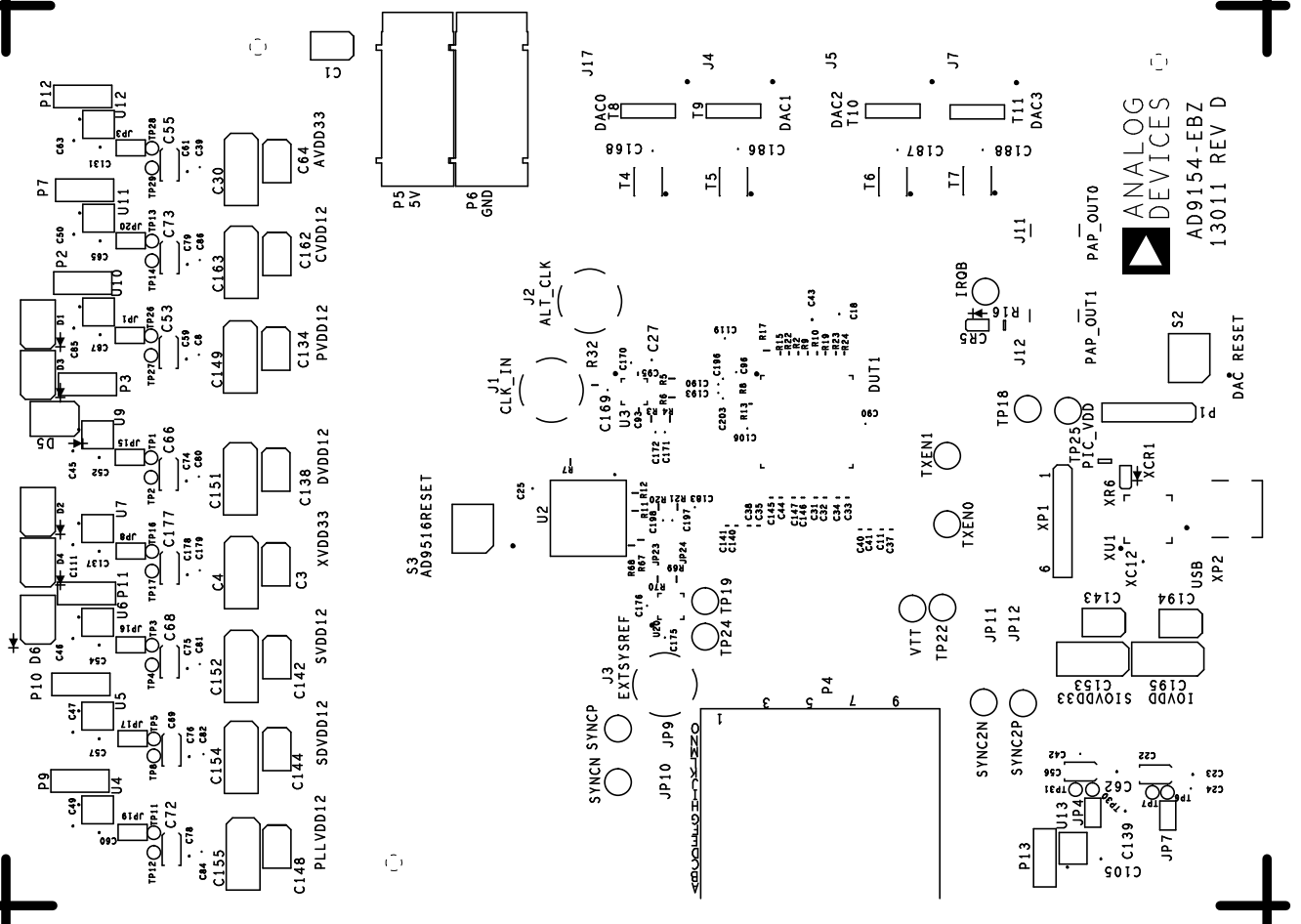
SOLDERMASK\_PRIMARY  
HSC\_13011  
REV D



SOLDERMASK SECONDARY  
HSC 13011  
REV D

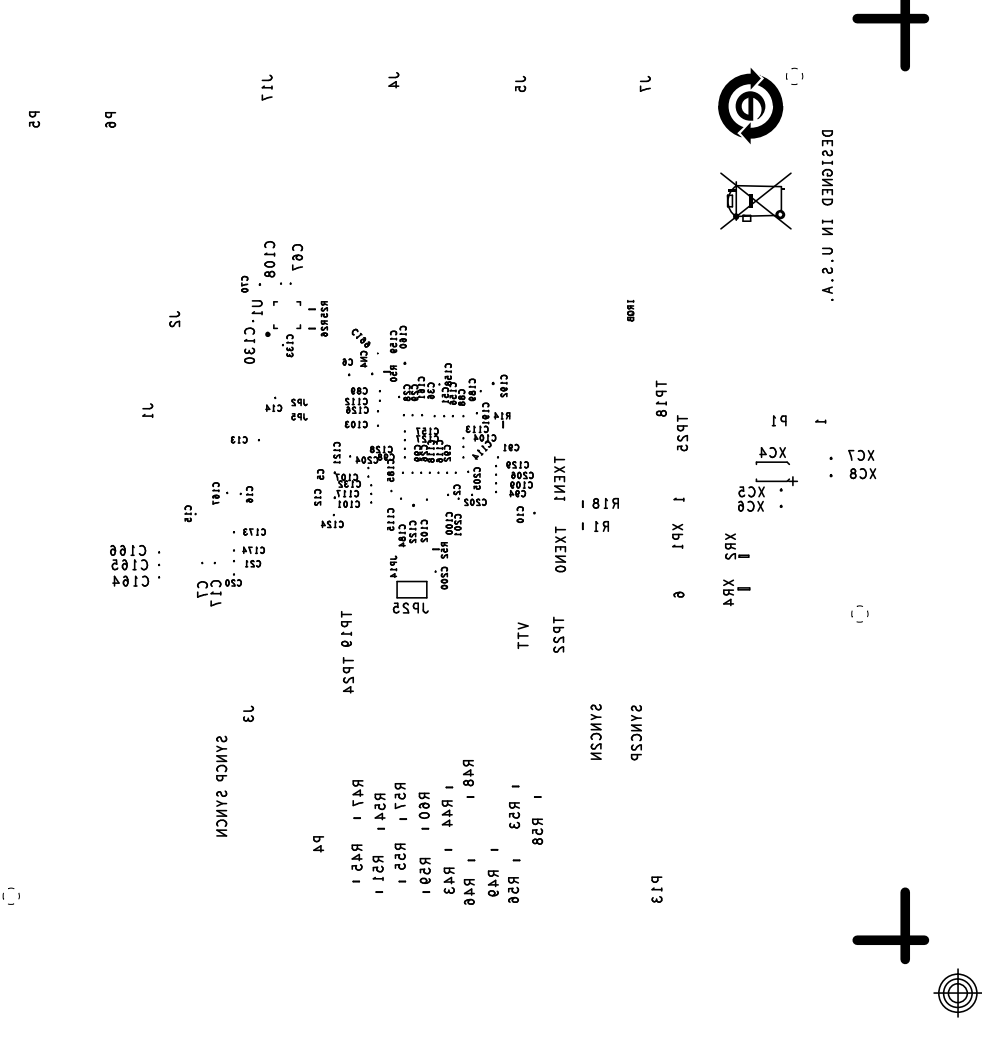


SILKSCREEN PRIMARY  
HSC 13011  
REV D



ANALOG DEVICES  
AD8154-EBZ  
13011 REV D

SILKSCREEN SECONDARY  
HSC 13011  
REV D



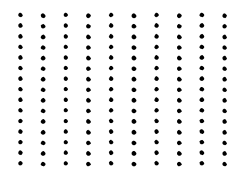








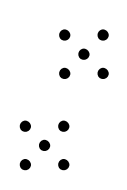






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