

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09FEB22	A. UY
B	ECR-113179	05APR23	A. UY
C	ECR-115063	09AUG23	A. UY
D	ECR-117270	29SEP23	A. UY

HOLE TOLERANCE
UNLESS SPECIFIED
PLATED: +/-0.076MM
NON PLATED: +/-0.050MM

DRILL CHART: TOP to BOTTOM				
FINISHED HOLES IN MILLIMETERS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	0.254	PLATED	452	DIA MAX
o	0.711	PLATED	10	
□	0.889	PLATED	41	
△	1.143	PLATED	11	
◇	1.27	PLATED	2	
A	1.448	NON-PLATED	4	
B	1.981	NON-PLATED	1	
C	2.032	NON-PLATED	2	
D	3.175	NON-PLATED	4	
E	5.08	NON-PLATED	2	

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM			APPROVAL		DATE		<div><div></div><div>ANALOG DEVICES</div></div> <div>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>			
			TEMPLATE ENGINEER N/A		N/A					
TOLERANCES			HARDWARE SERVICES M. VALE		09FEB22		TITLE FABRICATION ADPD188BI CUSTOMER EVAL Z			
DECIMALS FRACTIONS ANGLES			HARDWARE SYSTEMS N/A		N/A					
.XX -.254 --1/32 -- 2			TEST ENGINEER N/A		N/A					
.XXX -.127			COMPONENT ENGINEER N. CATALAN		13JUL23					
.XXXX -.127			TEST PROCESS N/A		N/A					
MATERIAL			HARDWARE RELEASE K. JABATAN		09FEB22					
FINISH			DESIGNER G. ARON		09FEB22		SIZE C	FSCM NO 24355	DRAWING NUMBER 09-069010	REV D
			PTD ENGINEER A. UY		09FEB22					
			CHECKER N/A		N/A					
DO NOT SCALE DWG							SCALE 1/1		SHEET 1 OF 2	

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: ISOLA370HR OR S1000-2 OR IT180 OR EQUIVALENT.

CLADDING: EXTERNAL LAYERS .5 OZ. COPPER, OVERPLATE TO 1.5 OZ.
~~INTERNAL SIGNAL LAYERS .5 OZ. COPPER.~~
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

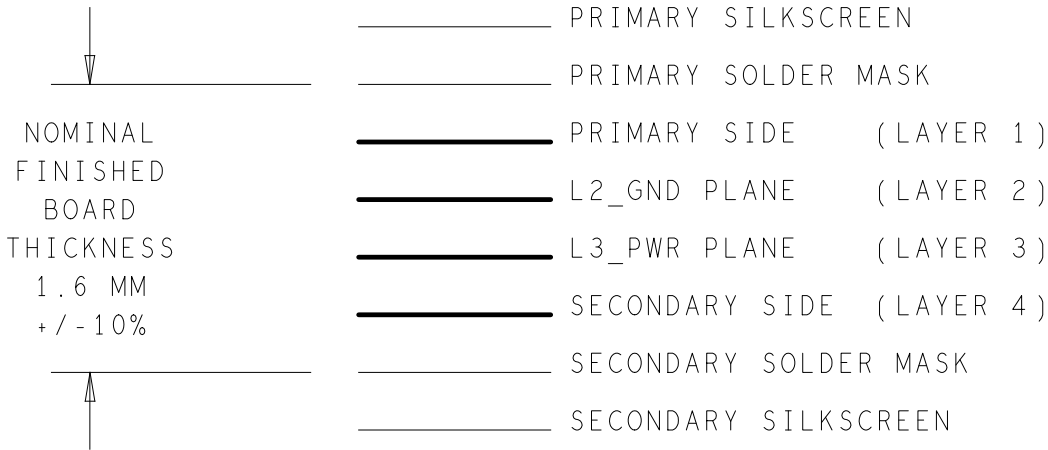
INTENTIONAL SHORTS: IF SUPPLIED DATA INCLUDES A FILE "READ_ME.2", THEN INTENTIONAL NET SHORTS EXIST. CUSTOMER REVIEW AND APPROVAL IS REQUIRED IF SUPPLIED DATA REPORTS ANY CONDITION THAT DOES NOT MATCH "READ_ME.2" FILE PROVIDED.

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:

- REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
- ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00115, (LATEST REVISION.)
- MODIFICATIONS TO THE ARTWORK ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
- HOLE PATTERN TOLERANCES FOR UNDIMENSIONED HOLES SHALL BE A DIAMETER OF 0.127 MM FROM THEIR TRUE POSITION.
- PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.0254MM MINIMUM AVERAGE, WITH NO READING LESS THAN .02032MM 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 .200 MM.
- MINIMUM DESIGN SPACING IS .150 MM.
- ~~NON FUNCTIONAL PAD REMOVAL FROM INNER SIGNAL LAYERS MAY BE PERFORMED AFTER CUSTOMER APPROVAL.~~
- 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.)
- THIEVING MAY BE ADDED TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN ONLY AFTER REVIEW AND APPROVAL FROM THE CUSTOMER:
 - THIEVING TO CARD EDGE, FIDUCIALS, NON-PLATED THROUGH HOLES, ALL OTHER FEATURES TO BE 5.080 MM MINIMUM.
 - THERE SHALL BE NO THIEVING IN ANY AREAS FREE OF SOLDER MASK OR INTERNAL COPPER PLANES.
- MFGR. TO LEGIBLY ETCH OR STAMP/SCREEN WITH PERMANENT NON-CONDUCTIVE INK ON SECONDARY SIDE IN A CLEAR AREA UNLESS OTHERWISE INDICATED;
 - U.L. CODE-FLAMMABILITY RATING
 - DATE CODE (STAMP).
 - LOT NUMBER
 - MFGR LOGO
 - SUCCESSFUL ELECTRICAL TEST.
- 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.~~
- BOARDS TO BE SHIPPED IN ARRAY AND KEEP INTACT. PANEL TO BE SUBJECTED TO CUSTOMER'S APPROVAL. PANELED SOLDER PASTE STENCIL SHOULD BE SENT TO THE CUSTOMER.

4 LAYER STACKUP



IMPEDANCE TABLE

NOTE: ALL IMPEDANCE TOLERANCE +/- 10%
DP = DIFFERENTIAL PAIR

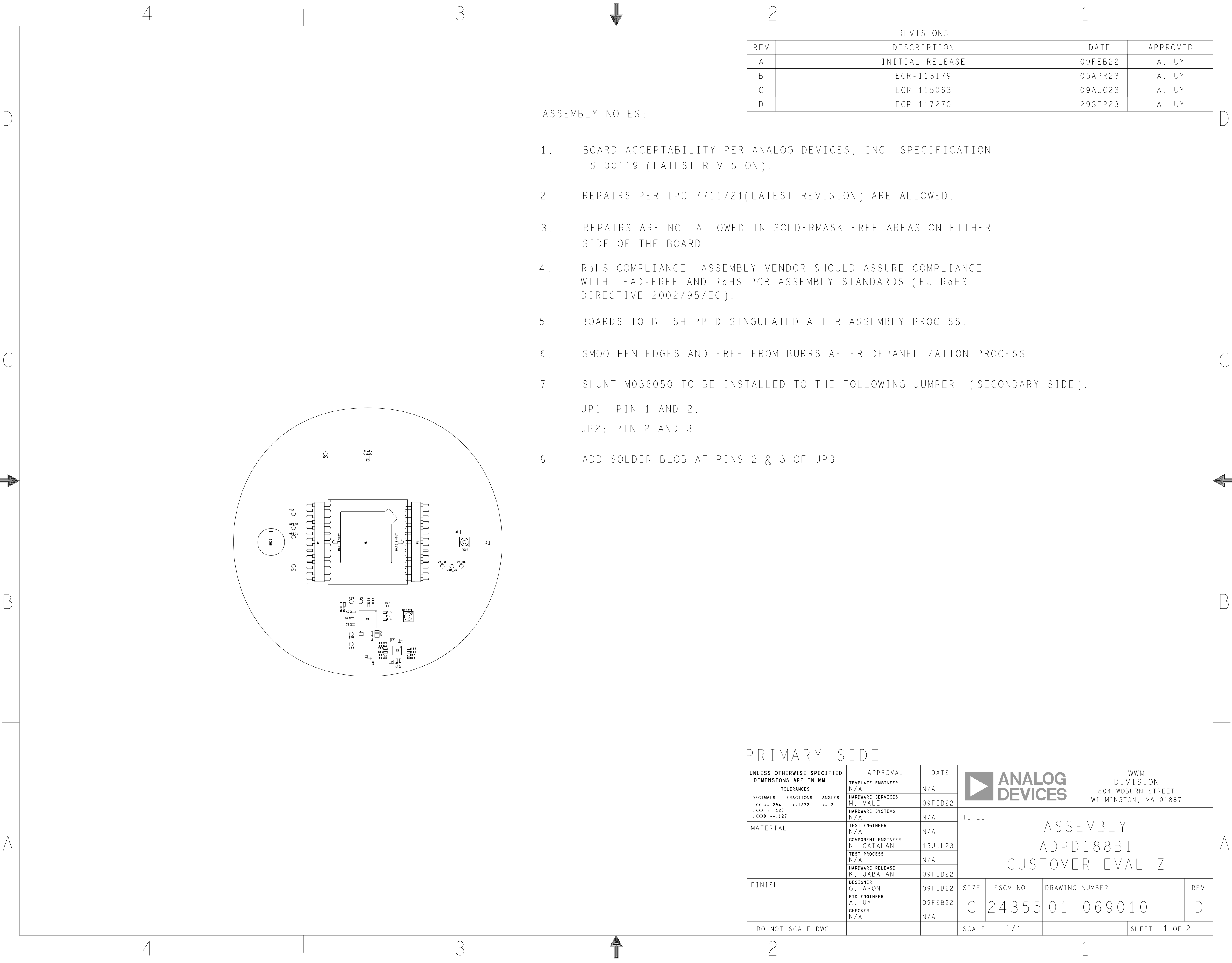
LAYER	IMPEDANCE	REFERENCE	LINE WIDTH	SPACE
L1	90 OHMS DP	L2	0.254MM	0.184MM
L4	90 OHMS DP	L3	0.254MM	0.184MM

PRIMARY SIDE

ANALOG DEVICES

WWM DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-069010	D
SCALE	1 / 1	SHEET	2 OF 2



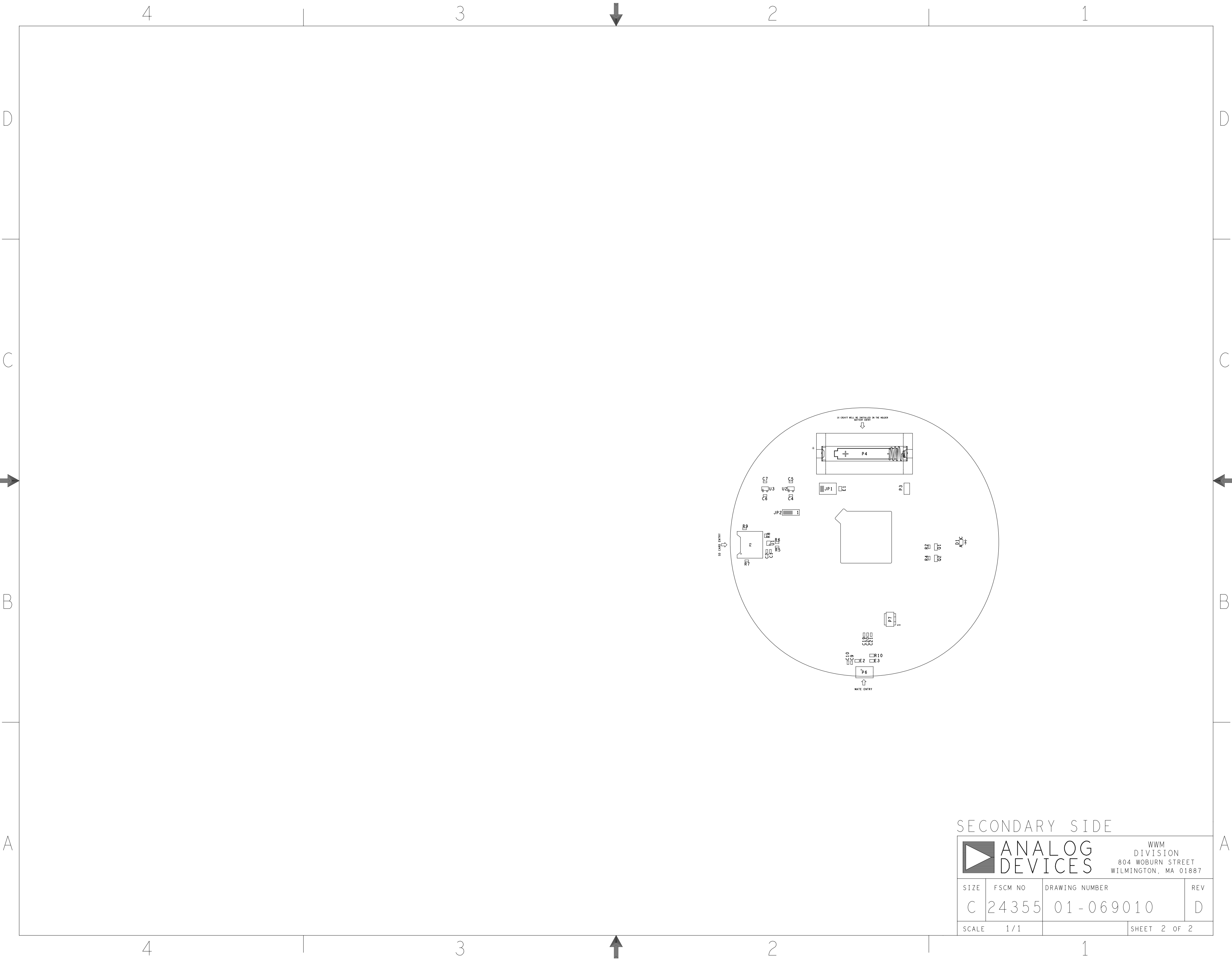
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ASSEMBLY NOTES:

- BOARD ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00119 (LATEST REVISION).
- REPAIRS PER IPC-7711/21(LATEST REVISION) ARE ALLOWED.
- REPAIRS ARE NOT ALLOWED IN SOLDERMASK FREE AREAS ON EITHER SIDE OF THE BOARD.
- RoHS COMPLIANCE: ASSEMBLY VENDOR SHOULD ASSURE COMPLIANCE WITH LEAD-FREE AND RoHS PCB ASSEMBLY STANDARDS (EU RoHS DIRECTIVE 2002/95/EC).
- BOARDS TO BE SHIPPED SINGULATED AFTER ASSEMBLY PROCESS.
- SMOOTHEN EDGES AND FREE FROM BURRS AFTER DEPANELIZATION PROCESS.
- SHUNT M036050 TO BE INSTALLED TO THE FOLLOWING JUMPER (SECONDARY SIDE).
JP1: PIN 1 AND 2.
JP2: PIN 2 AND 3.
- ADD SOLDER BLOB AT PINS 2 & 3 OF JP3.

PRIMARY SIDE

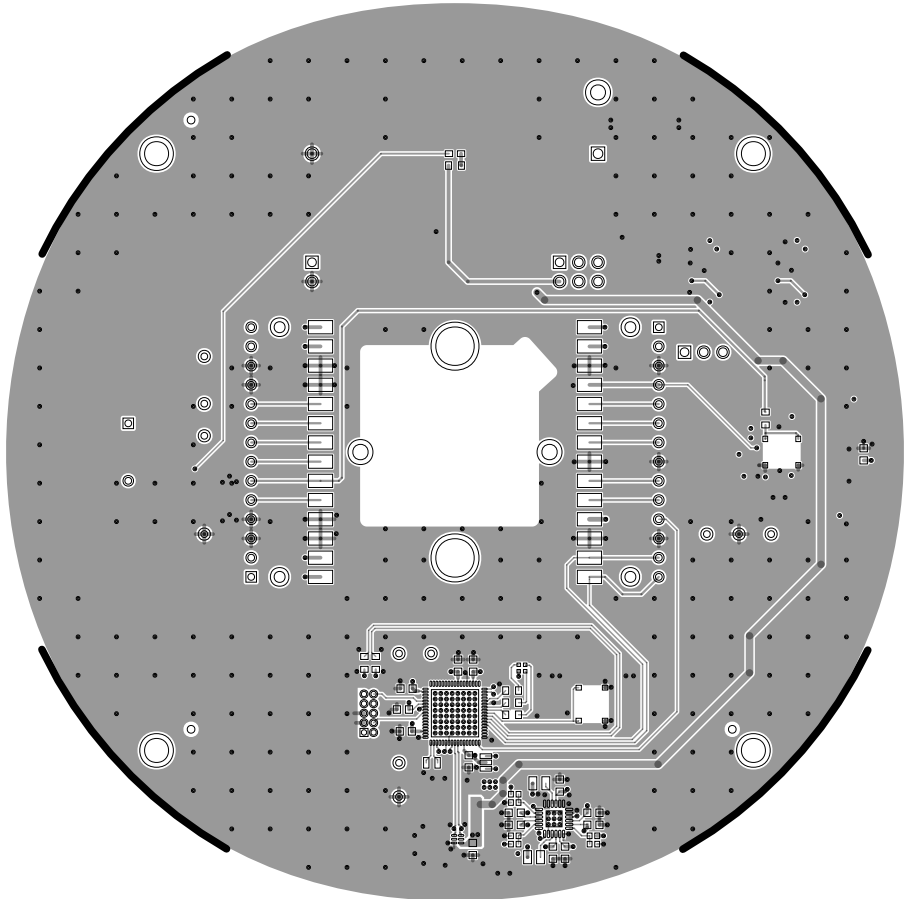
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				SCALE		1 / 1		SHEET 1 OF 2	



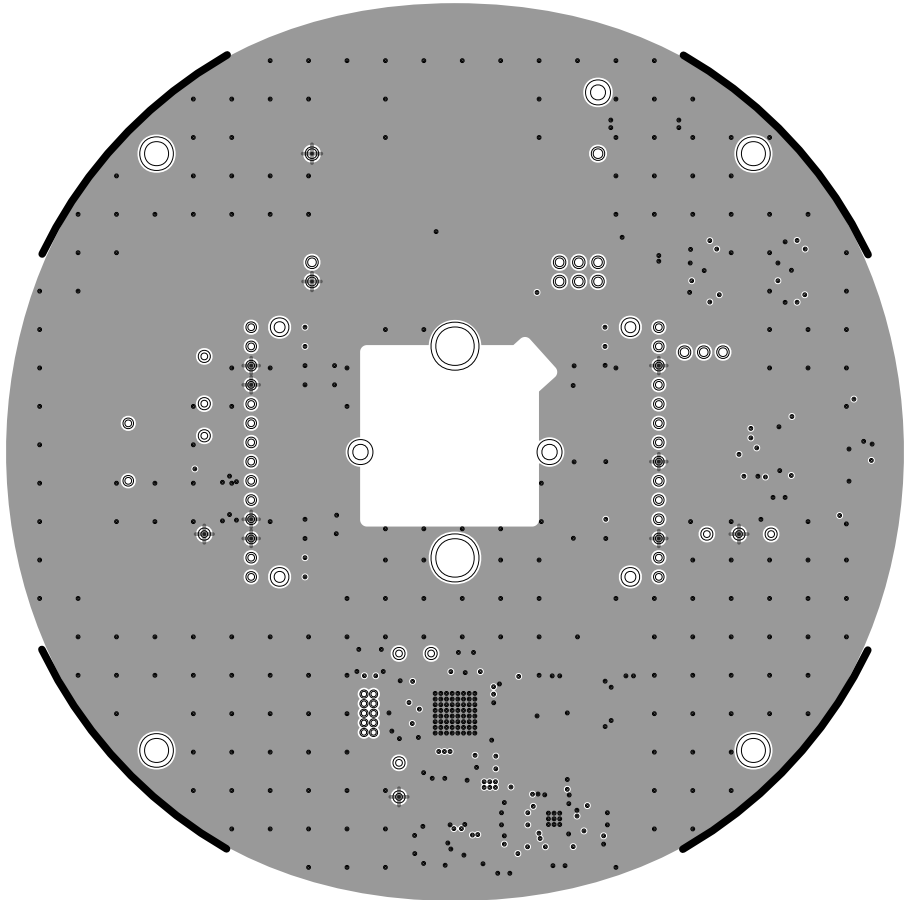
SECONDARY SIDE

<div><div><div></div></div><div><div>ANALOG</div><div>DEVICES</div></div></div> <div><div>WWM</div><div>DIVISION</div><div>804 WOBURN STREET</div><div>WILMINGTON, MA 01887</div></div>			
SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	01-069010	D
SCALE	1 / 1	SHEET 2 OF 2	

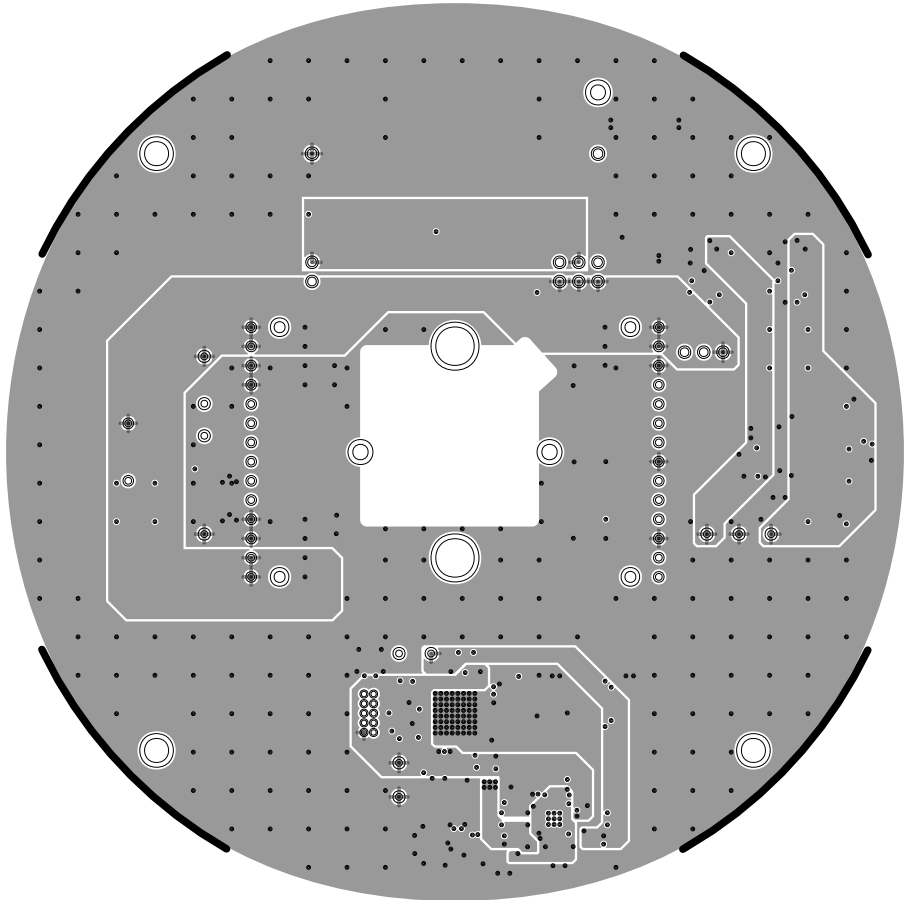
L1 PRIMARY
08-069010-01
REV D



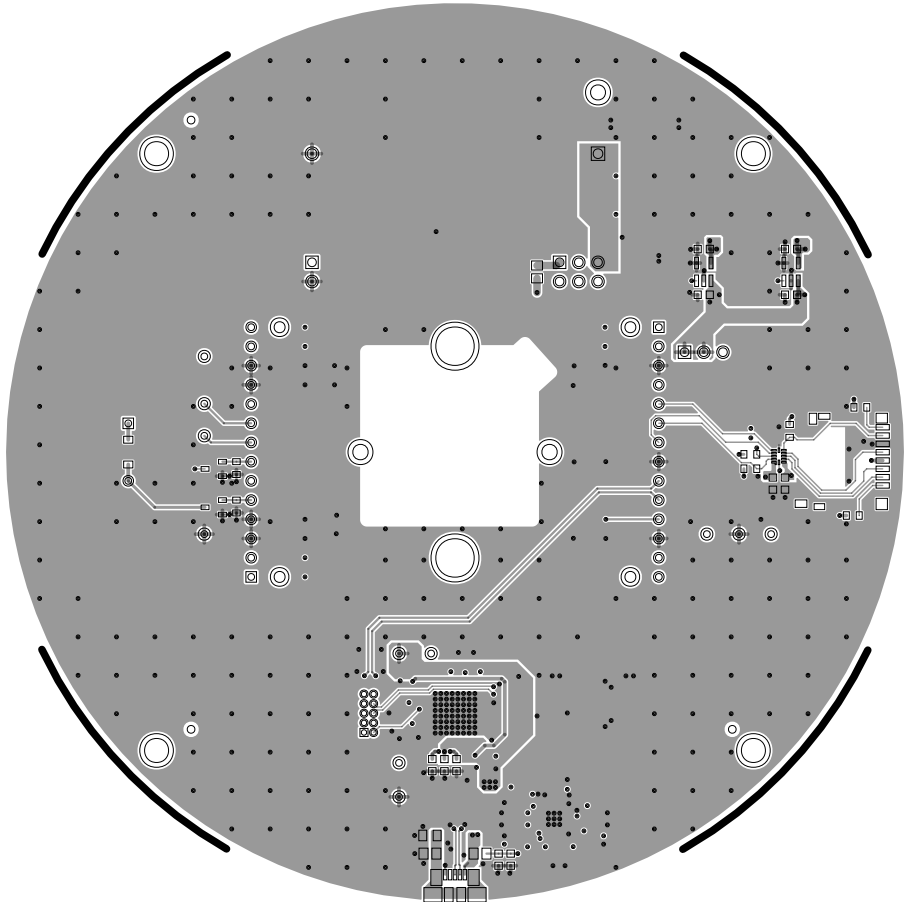
L2 GND
08-069010-07
REV D

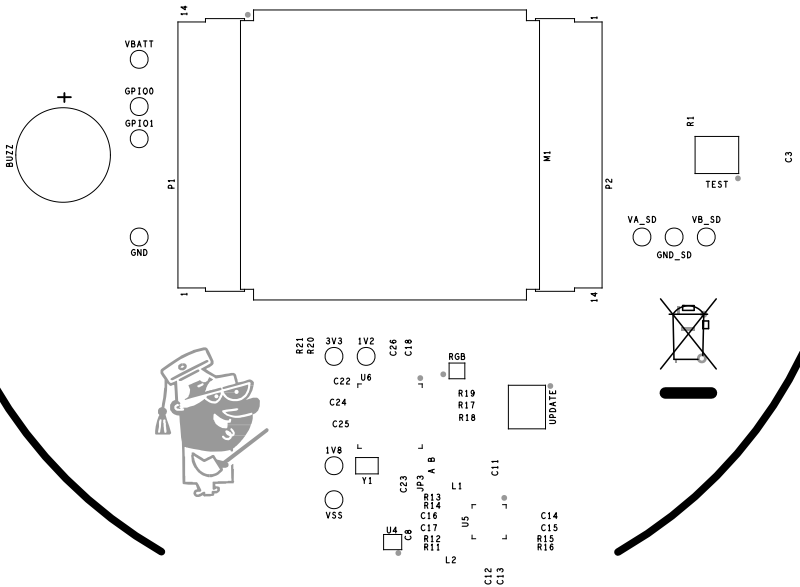


L3 PWR
08-069010-08
REV D

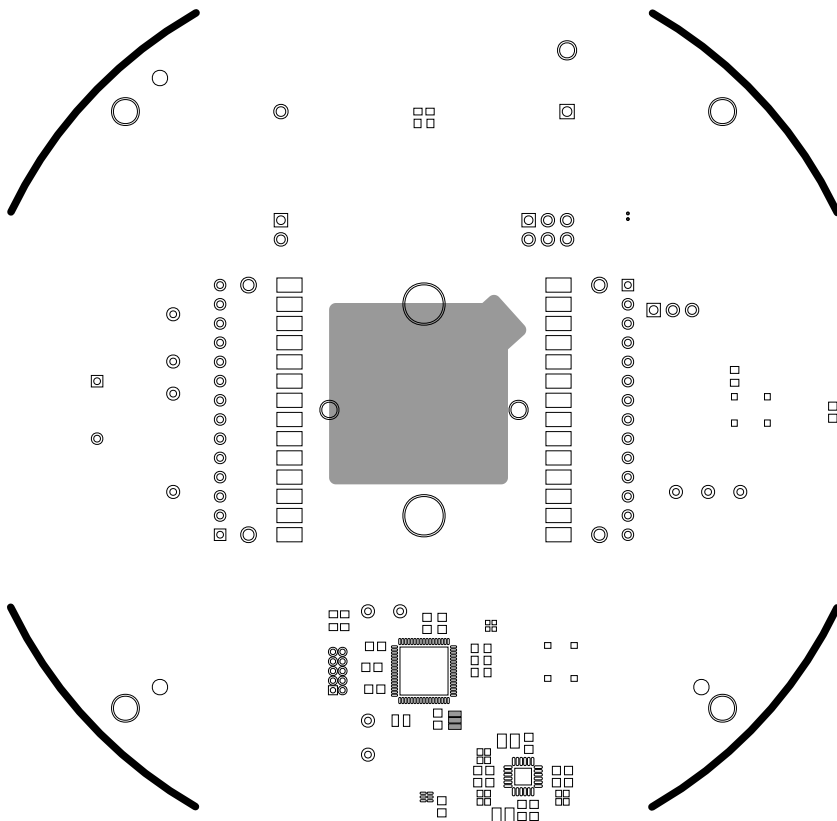


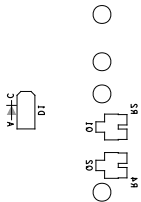
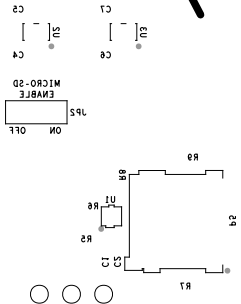
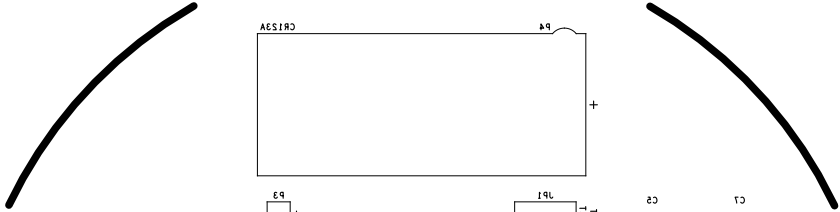
L4 SECONDARY
08-069010-02
REV D



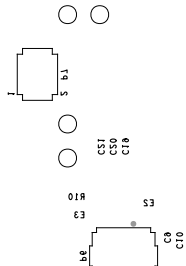


SOLDERMASK PRIMARY
08-069010-04
REV D

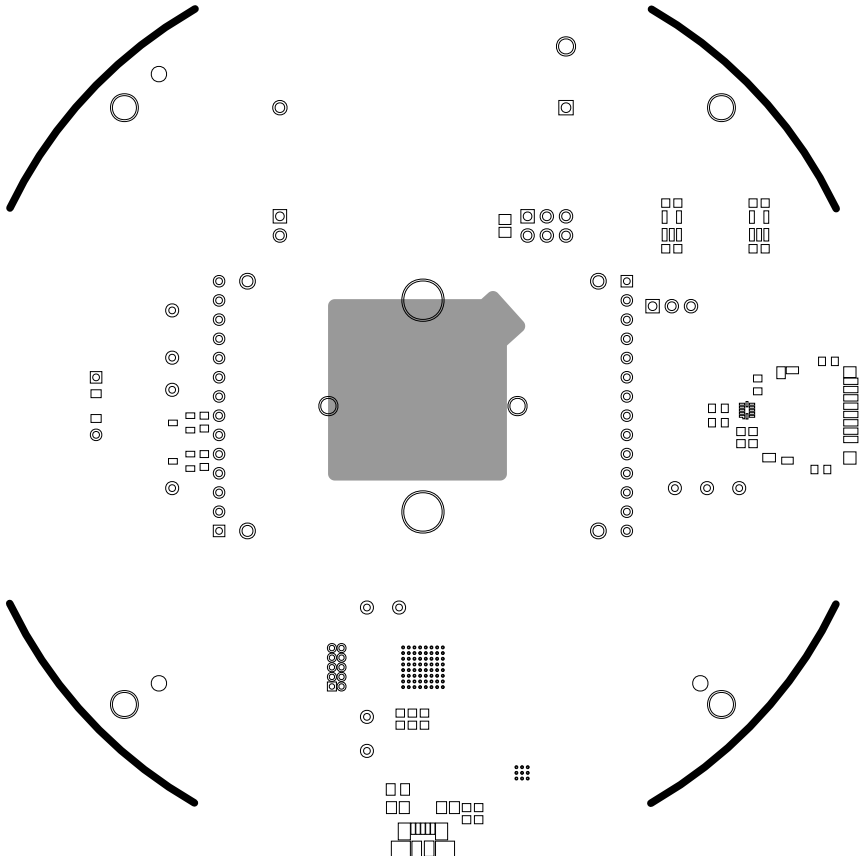




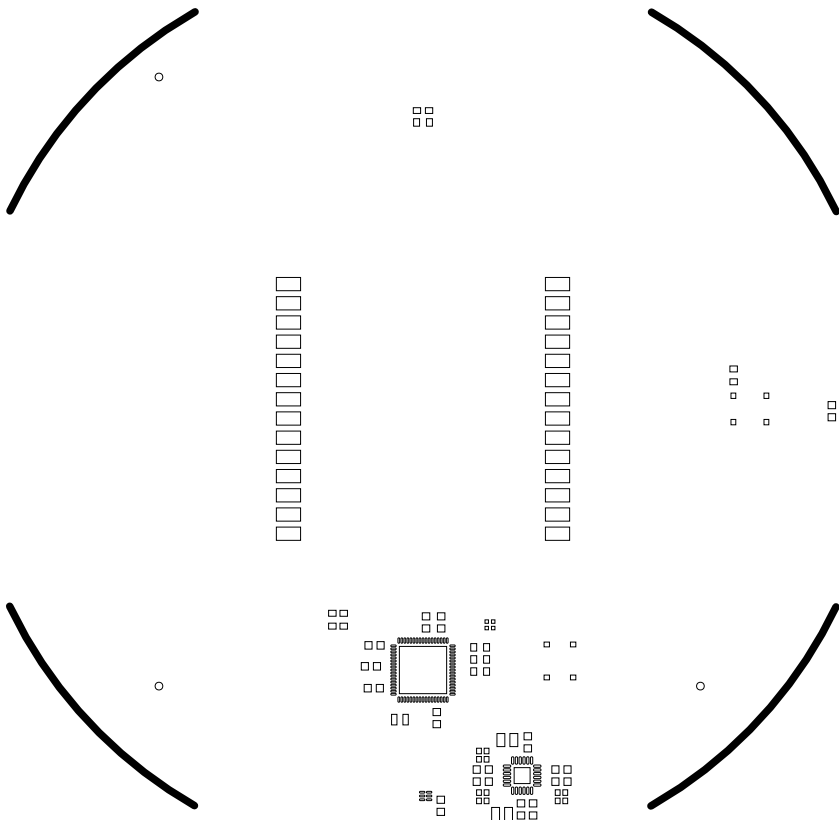
08-069010 REV D 2
SECONDARY SIDE
EVAL-CN0283-CRRI



SOLDERMASK SECONDARY
08-069010-06
REV D



PASTEMASK PRIMARY
08-069010-09
REV D



PASTEMASK SECONDARY
08-069010-10
REV D

