



#4

#3

(CHECK DATASHEET)

#1

#2

DETAIL A

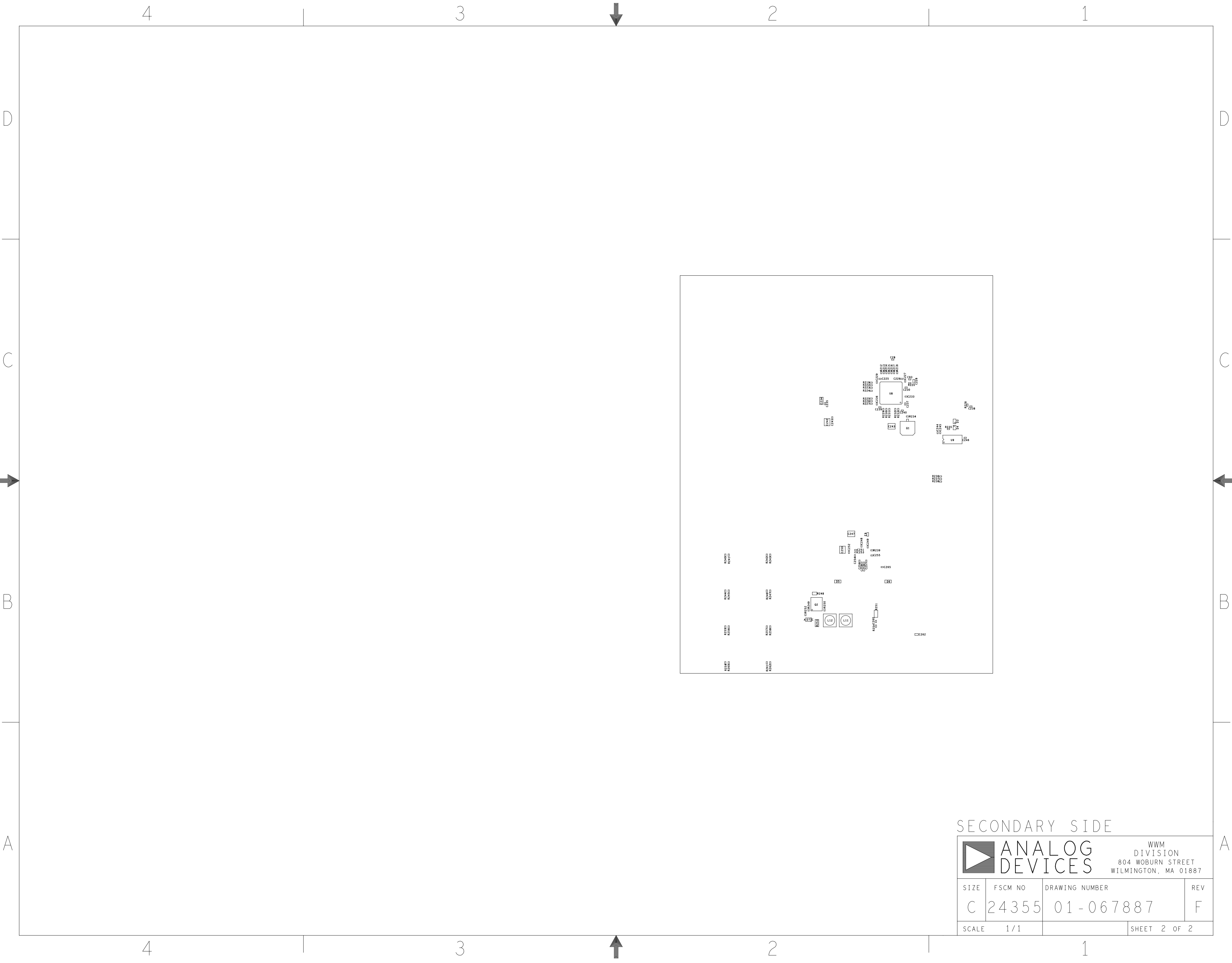
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	07JUL21	K. GAGNE
B	CHANGES PER ECR-106612	24FEB22	R. WHITNEY
C	CHANGES PER ECR-110021	01DEC22	R. WHITNEY
D	CHANGES PER ECR-113567	03APR23	R. WHITNEY
E	CHANGES PER ECR-114324	09MAY23	R. WHITNEY
F	CHANGES PER ECR-116013	10AUG23	R. WHITNEY

ASSEMBLY NOTES:

1. BOARD ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00119 (LATEST REVISION).
2. REPAIRS PER IPC-7711/21(LATEST REVISION) ARE ALLOWED.
3. REPAIRS ARE NOT ALLOWED IN SOLDERMASK FREE AREAS ON EITHER SIDE OF THE BOARD.
4. SEE DETAIL A FOR Y1 AND Y2 INSTALLATION.
5. RoHS COMPLIANCE: ASSEMBLY VENDOR SHOULD ASSURE COMPLIANCE WITH LEAD-FREE AND RoHS PCB ASSEMBLY STANDARDS (EU RoHS DIRECTIVE 2002/95/EC).
6. BOARDS TO BE SHIPPED SINGULATED AFTER ASSEMBLY PROCESS. SMOOTHEN EDGES AND FREE FROM BURRS AFTER DEPANELIZATION PROCESS.
7. COMPONENT TO BE INSTALLED USING PICK AND PLACE MACHINE TO ENSURE POSITIONAL TOLERANCE OF +2/ -0 MIL.

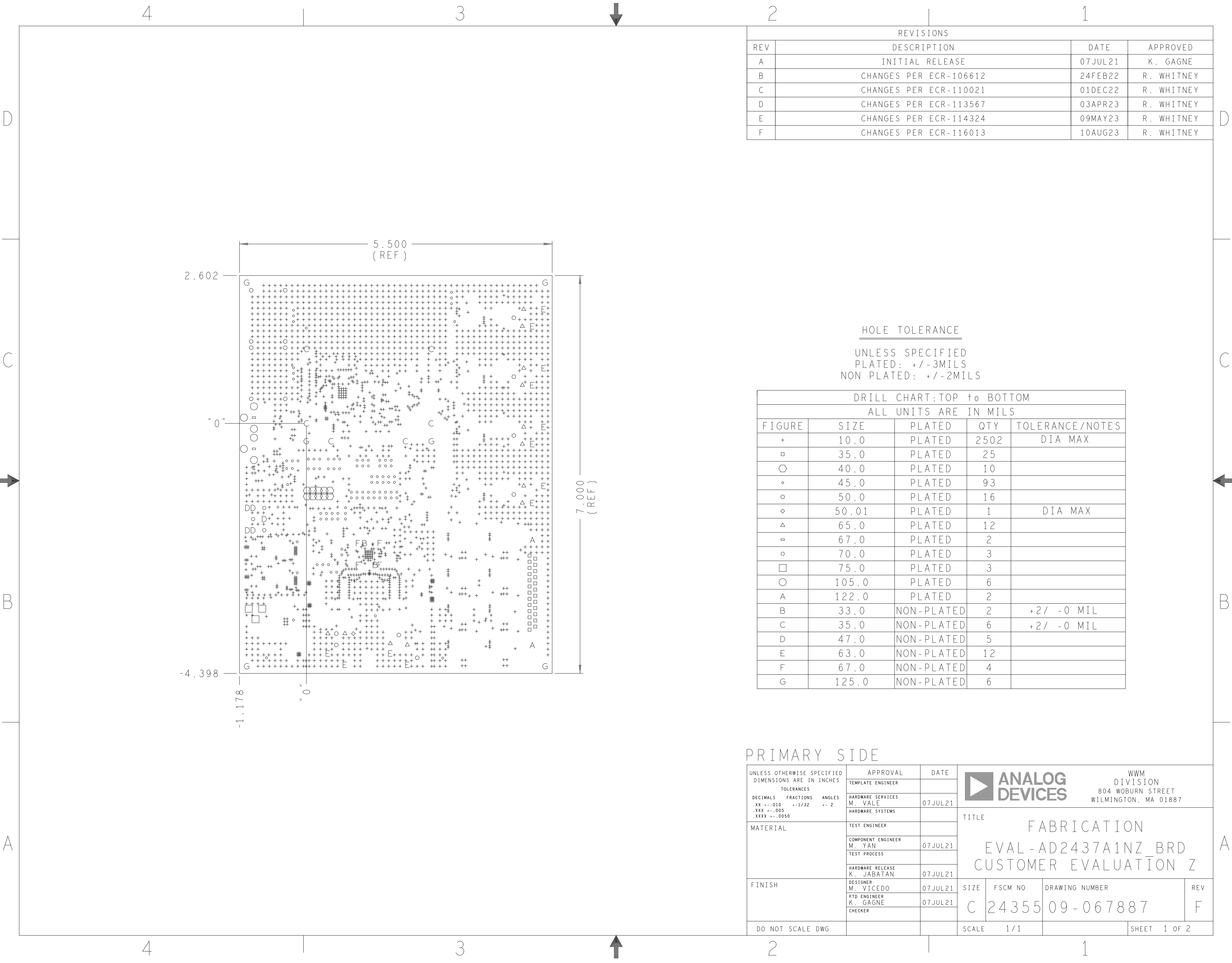
## PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			APPROVAL		DATE		<div><div></div><div>ANALOG DEVICES</div></div> <div>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>			
			TEMPLATE ENGINEER							
TOLERANCES  DECIMALS    FRACTIONS    ANGLES .XX --.010    --1/32    -- 2 .XXX --.005 .XXXX --.0050			HARDWARE SERVICES M. VALE		07JUL21		TITLE  ASSEMBLY  EVAL-AD2437A1NZ_BRD CUSTOMER EVALUATION Z			
			HARDWARE SYSTEMS							
MATERIAL			TEST ENGINEER							
			COMPONENT ENGINEER M. YAN		07JUL21					
			TEST PROCESS							
			HARDWARE RELEASE K. JABATAN		07JUL21					
FINISH			DESIGNER M. VICEDO		07JUL21		SIZE    FSCM NO    DRAWING NUMBER    REV  C    24355    01-067887    F			
			PTD ENGINEER K. GAGNE		07JUL21					
			CHECKER							
DO NOT SCALE DWG							SCALE    1/1    SHEET    1 OF 2			



SECONDARY SIDE

<div><div><div></div></div><div>ANALOG DEVICES</div></div> <div>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>			
SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	01-067887	F
SCALE	1 / 1	SHEET 2 OF 2	




REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	07JUL21	K. GAGNE
B	CHANGES PER ECR-106612	24FEB22	R. WHITNEY
C	CHANGES PER ECR-110021	01DEC22	R. WHITNEY
D	CHANGES PER ECR-113567	03APR23	R. WHITNEY
E	CHANGES PER ECR-114324	09MAY23	R. WHITNEY
F	CHANGES PER ECR-116013	10AUG23	R. WHITNEY

HOLE TOLERANCE

UNLESS SPECIFIED  
PLATED: +/-3MILS  
NON PLATED: +/-2MILS

DRILL CHART:TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	10.0	PLATED	2502	DIA MAX
□	35.0	PLATED	25	
⬡	40.0	PLATED	10	
◦	45.0	PLATED	93	
○	50.0	PLATED	16	
◇	50.01	PLATED	1	DIA MAX
△	65.0	PLATED	12	
▢	67.0	PLATED	2	
◌	70.0	PLATED	3	
□	75.0	PLATED	3	
○	105.0	PLATED	6	
A	122.0	PLATED	2	
B	33.0	NON-PLATED	2	+2/ -0 MIL
C	35.0	NON-PLATED	6	+2/ -0 MIL
D	47.0	NON-PLATED	5	
E	63.0	NON-PLATED	12	
F	67.0	NON-PLATED	4	
G	125.0	NON-PLATED	6	

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			APPROVAL		DATE		<div><div></div><div>ANALOG DEVICES</div></div> <div>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>											
TOLERANCES			TEMPLATE ENGINEER															
DECIMALS	FRACTIONS	ANGLES	HARDWARE SERVICES M. VALE		07JUL21		TITLE  FABRICATION  EVAL-AD2437A1NZ_BRD CUSTOMER EVALUATION Z											
.XX -.010	--1/32	-- 2	HARDWARE SYSTEMS															
.XXX -.005																		
.XXXX -.0050																		
MATERIAL			TEST ENGINEER				SIZE			FSCM NO			DRAWING NUMBER			REV		
			COMPONENT ENGINEER M. YAN		07JUL21													
			TEST PROCESS															
			HARDWARE RELEASE K. JABATAN		07JUL21													
FINISH			DESIGNER M. VICEDO		07JUL21		C			24355			09-067887			F		
			PTD ENGINEER K. GAGNE		07JUL21													
			CHECKER															
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: ISOLA 370HR

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

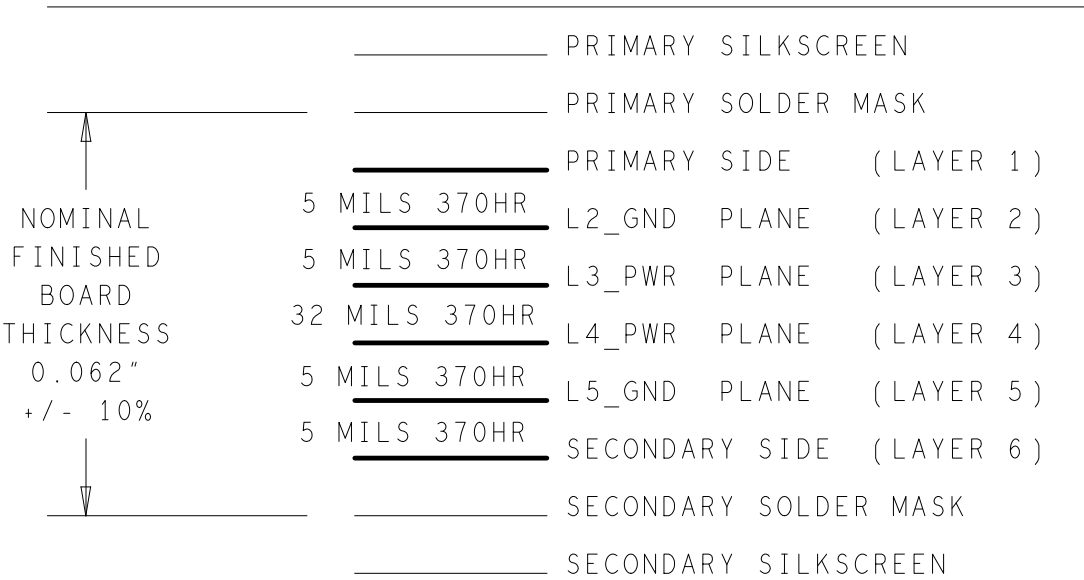
INTENTIONAL SHORTS: IF SUPPLIED DATA INCLUDES A FILE "READ\_ME.2", THEN INTENTIONAL NET SHORTS EXIST. CUSTOMER REVIEW AND APPROVAL IS REQUIRED IF SUPPLIED DATA REPORTS ANY CONDITION THAT DOES NOT MATCH "READ\_ME.2" FILE PROVIDED.

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 0.005 INCHES FROM THEIR TRUE POSITION.
- PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.001 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.
- ~~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, MFR. 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 0.200 INCH MINIMUM.
  - THERE SHALL BE NO THIEVING IN ANY AREAS FREE OF SOLDER MASK OR INTERNAL COPPER PLANES.
- MFR. 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
  - MFR LOGO
  - SUCCESSFUL ELECTRICAL TEST.
- REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED.

6 LAYER STACKUP




IMPEDANCE TABLE

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

LAYER	IMPEDANCE	REFERENCE	LINE WIDTH	SPACE
L1	100 OHMS DP	L3	9.5 MILS	6.5 MILS
L1	50 OHMS SE	L2	7 MILS	N/A
L3	50 OHMS SE	L2	7 MILS	N/A
L6	50 OHMS SE	L5	7 MILS	N/A
L6	100 OHMS DP	L5	5 MILS	6 MILS

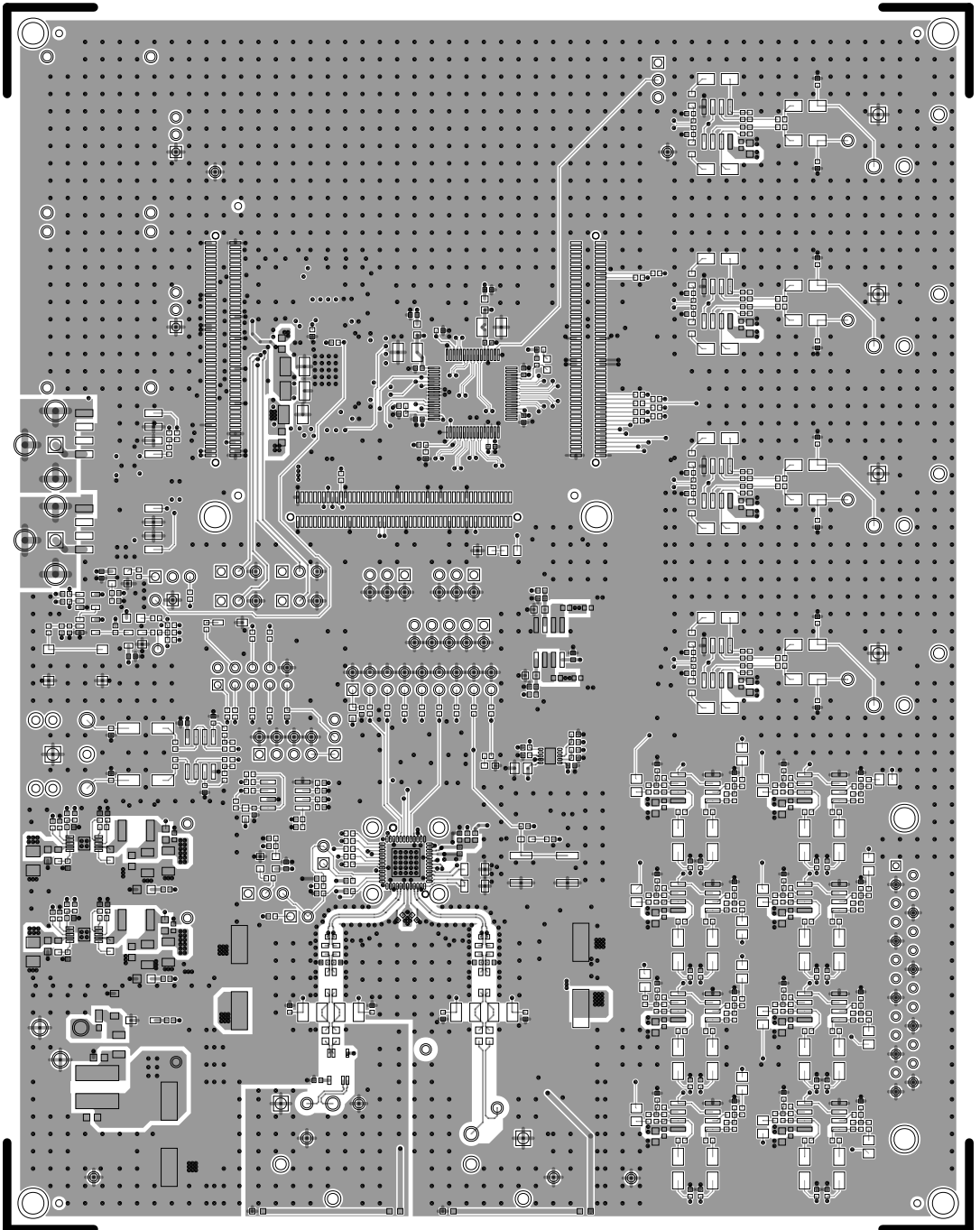
PRIMARY SIDE



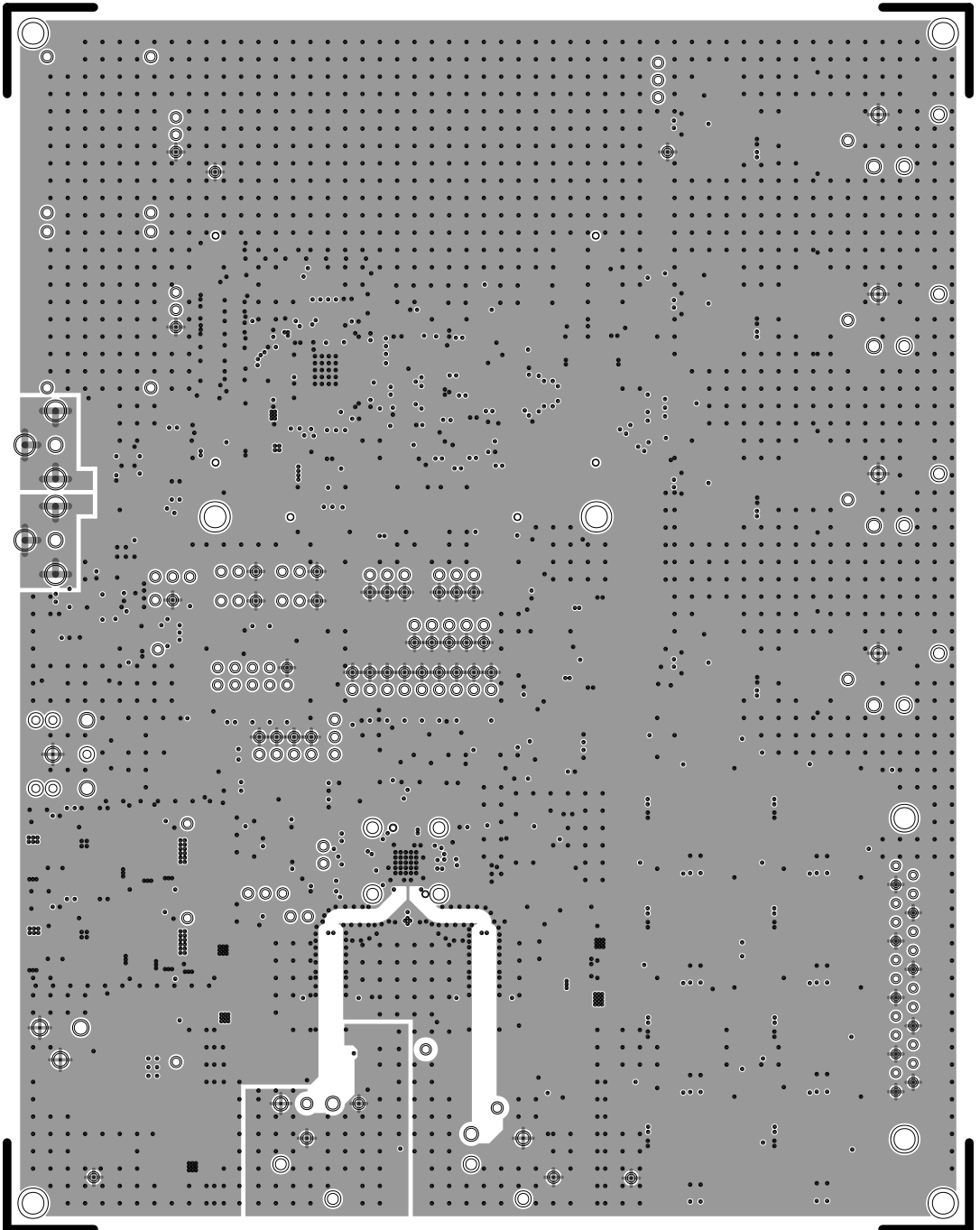
WWM  
DIVISION  
804 WOBURN STREET  
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-067887	F
SCALE	1/1	SHEET	2 OF 2

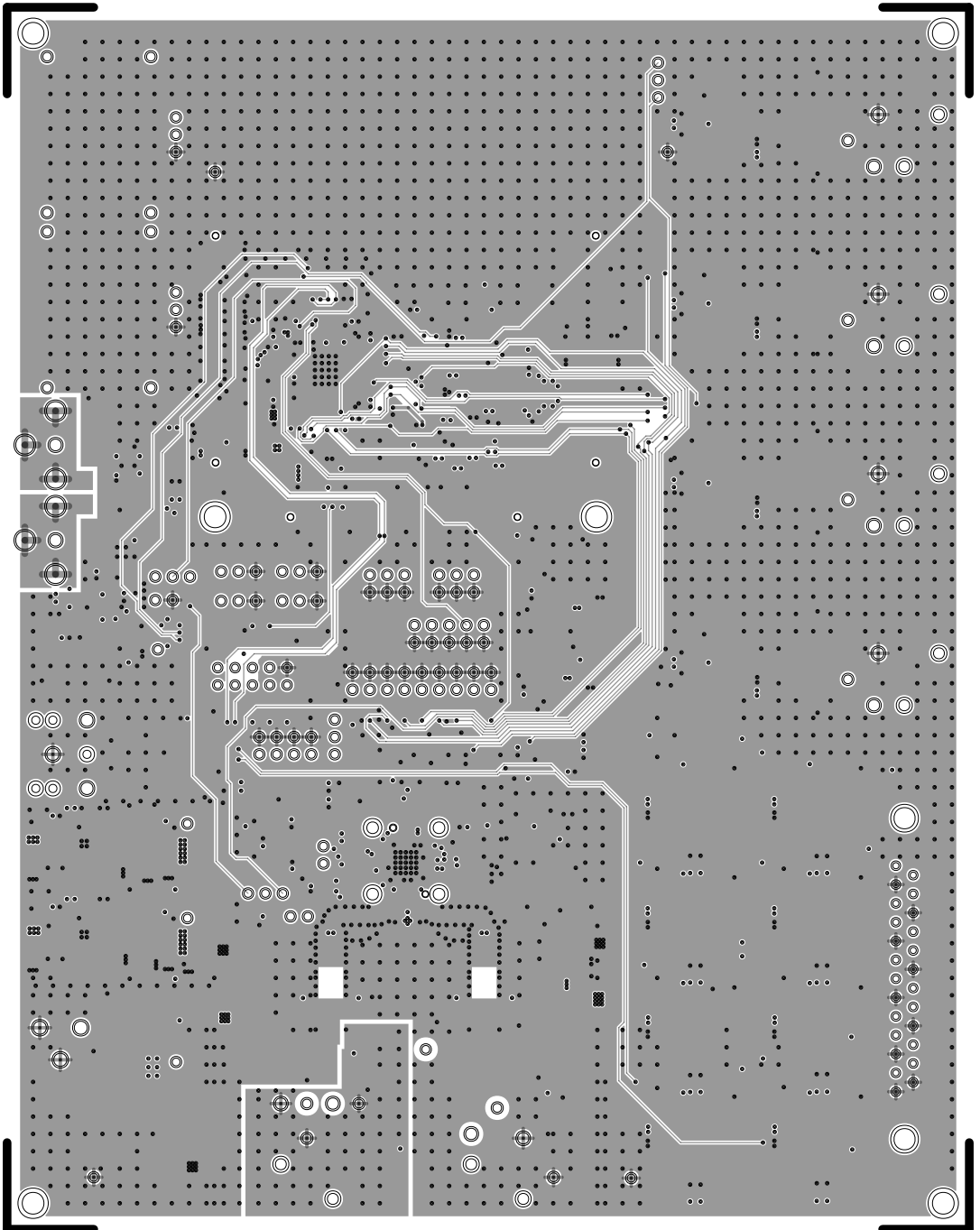
L1 PRIMARY  
08-067887-01  
REV F



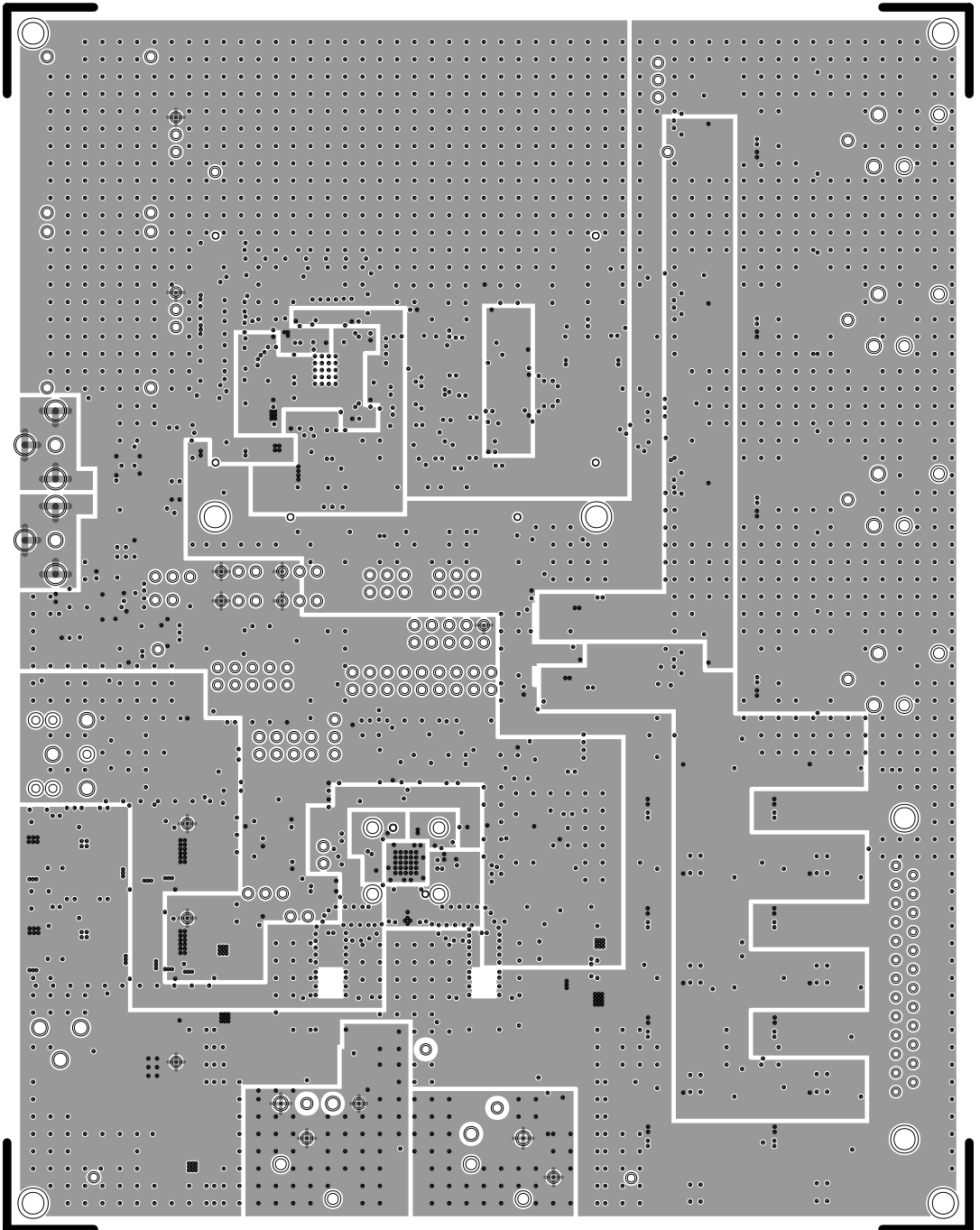
L2 GND  
08-067887-07  
REV F



L3 PWR  
08-067887-08  
REV F

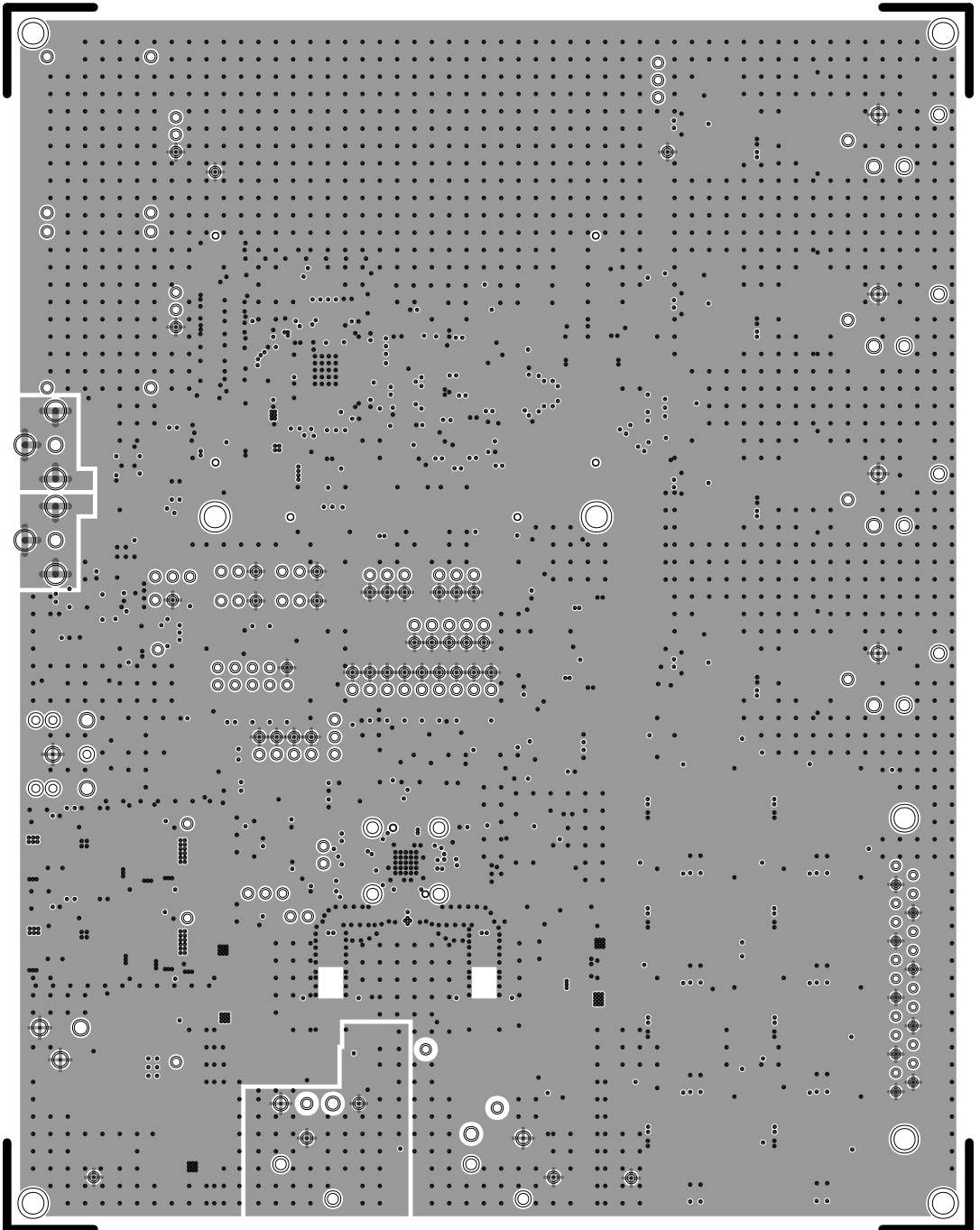


L4 PWR  
08-067887-09  
REV F





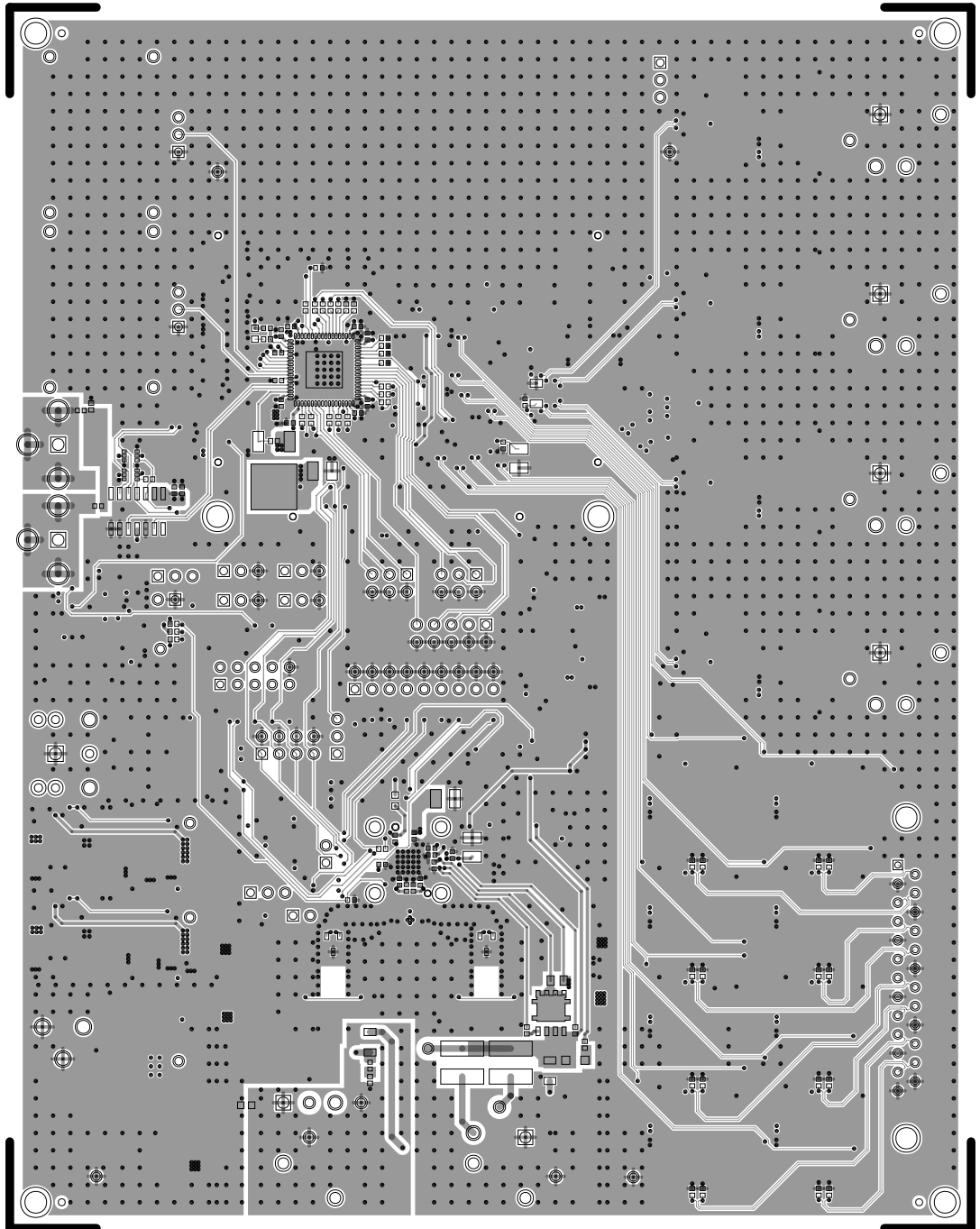
L5 GND  
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REV F



L6 SECONDARY

08-067887-02

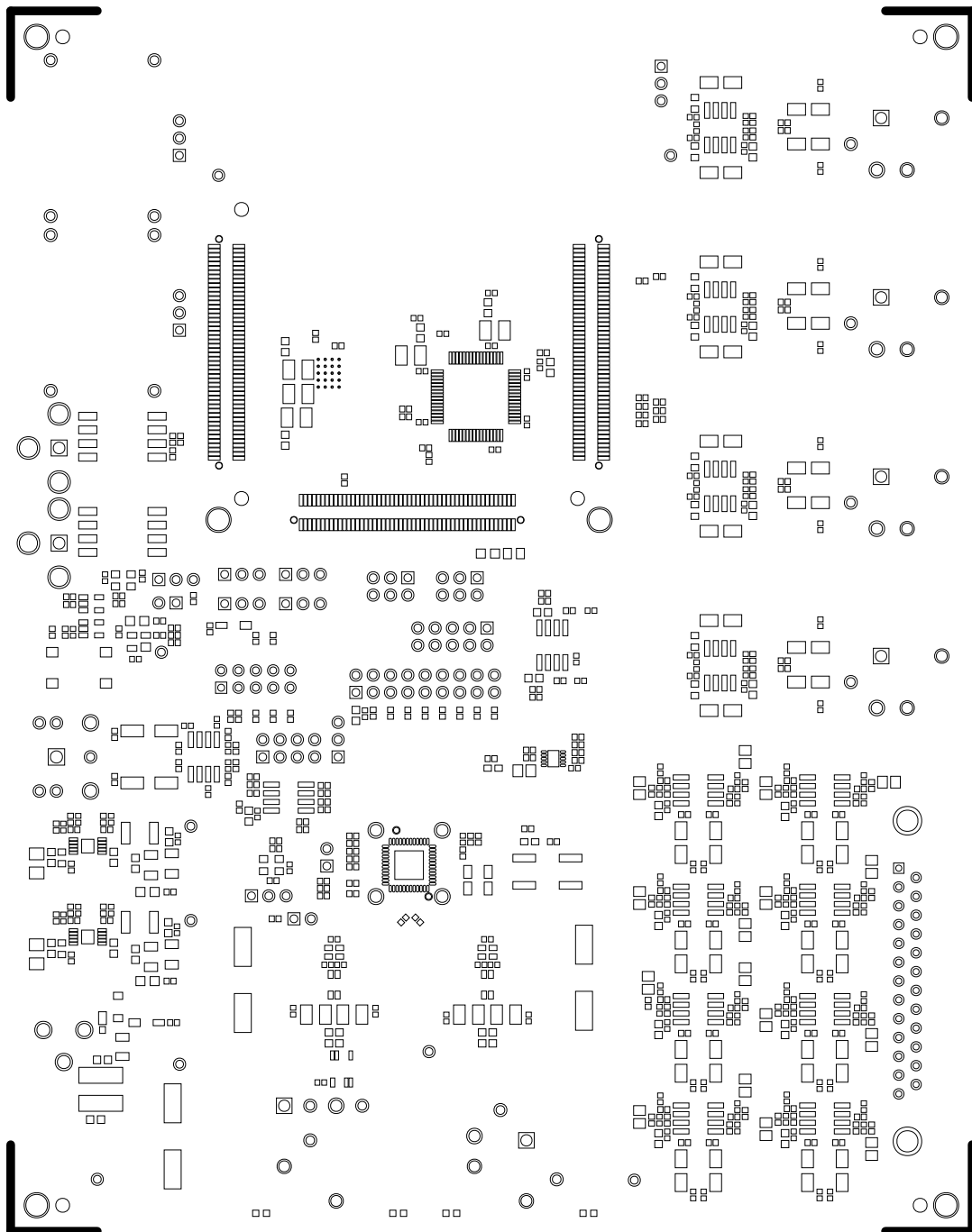
REV F



SOLDERMASK PRIMARY

08-067887-04

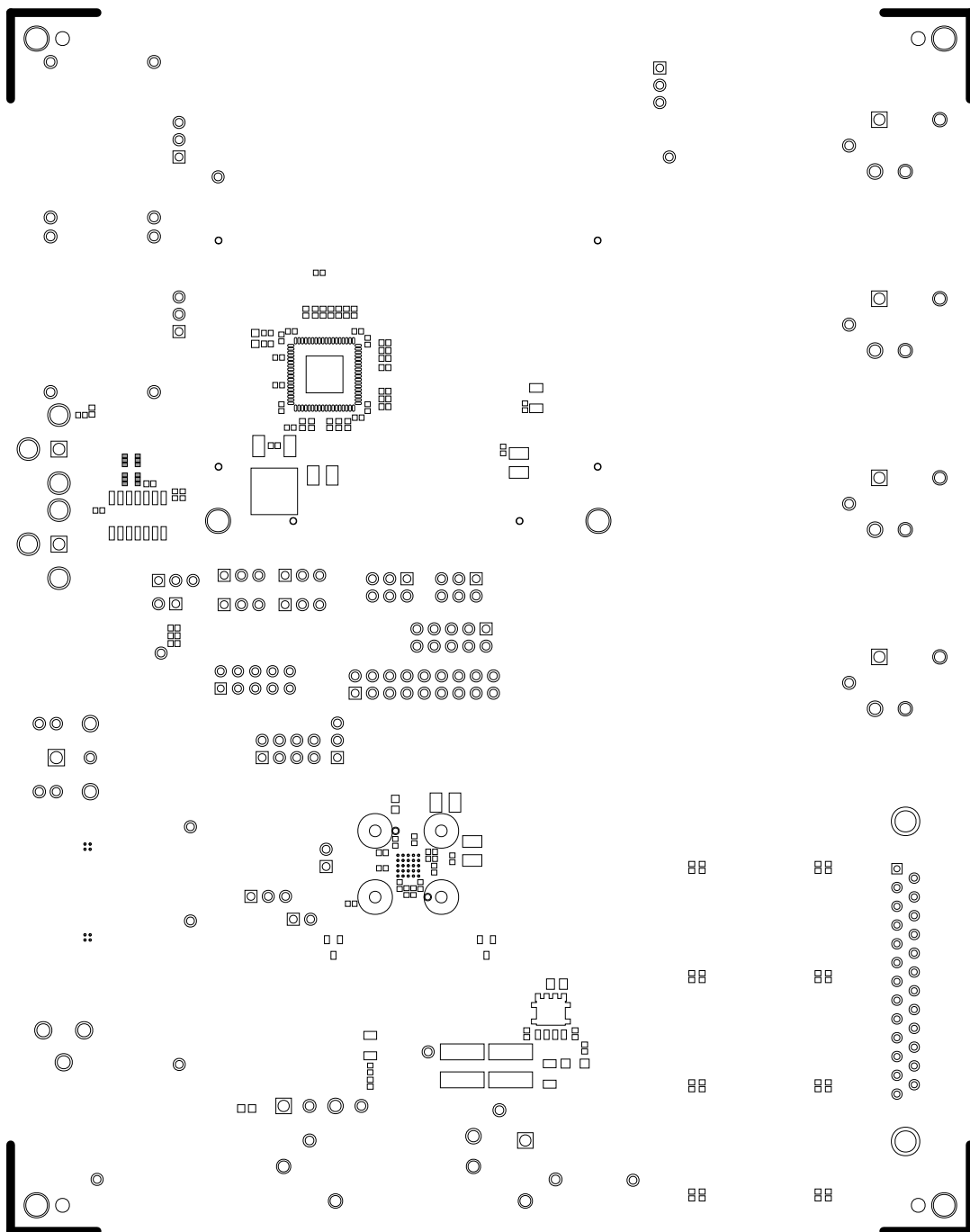
REV F



# SOLDERMASK SECONDARY

08-067887-06

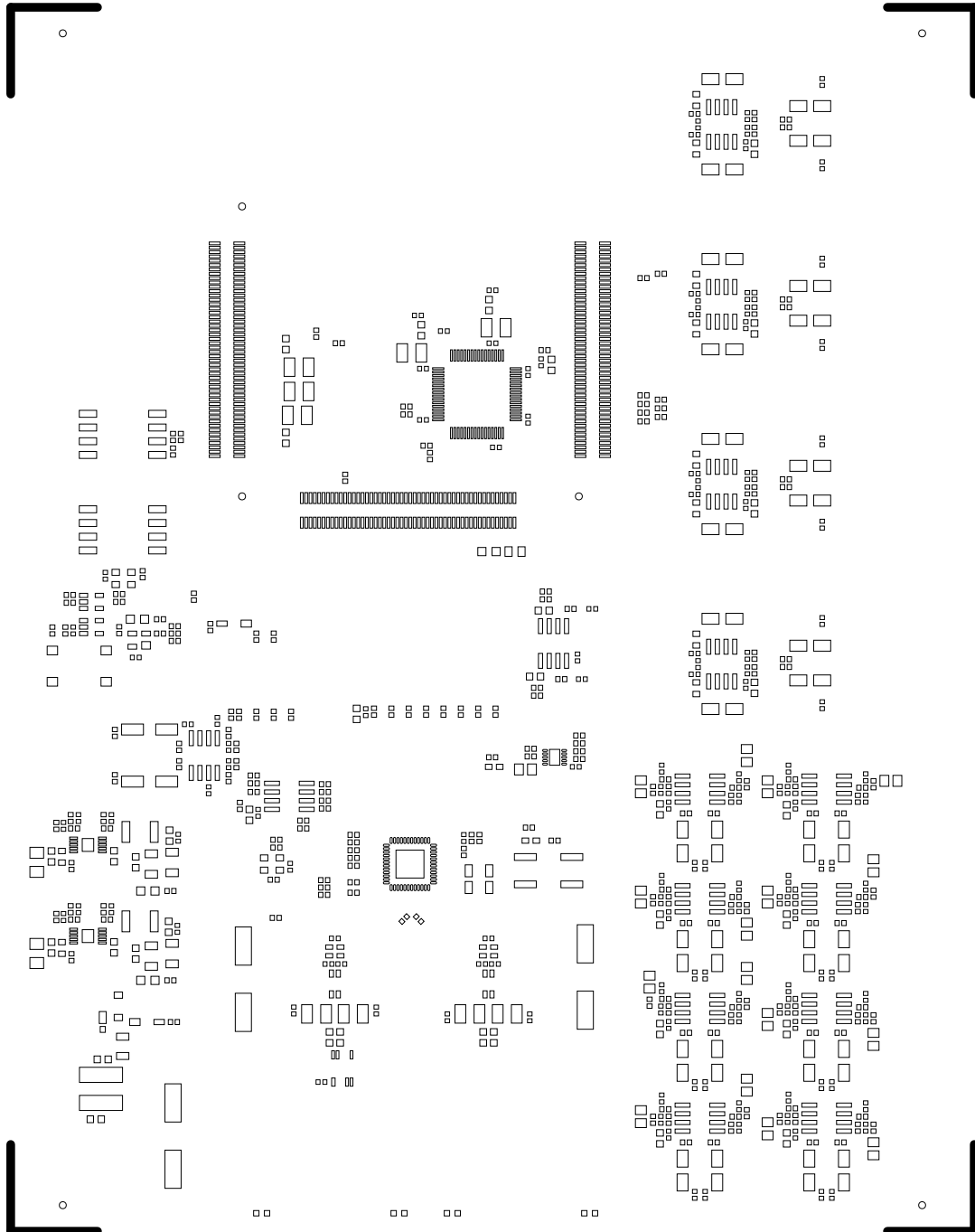
REV F



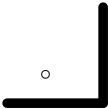
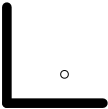
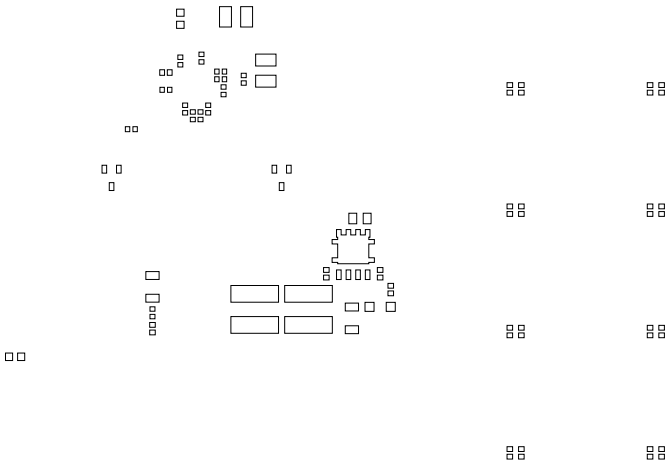
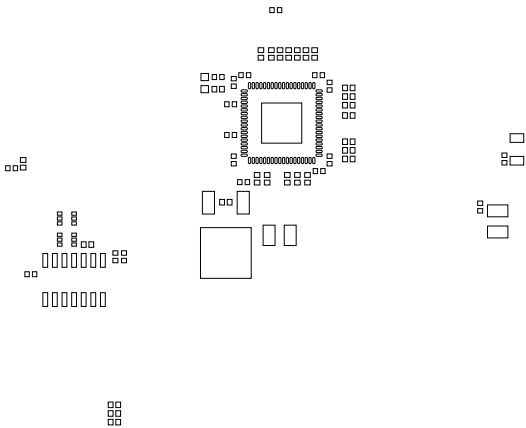
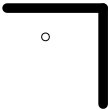
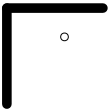
# PASTEMASK PRIMARY

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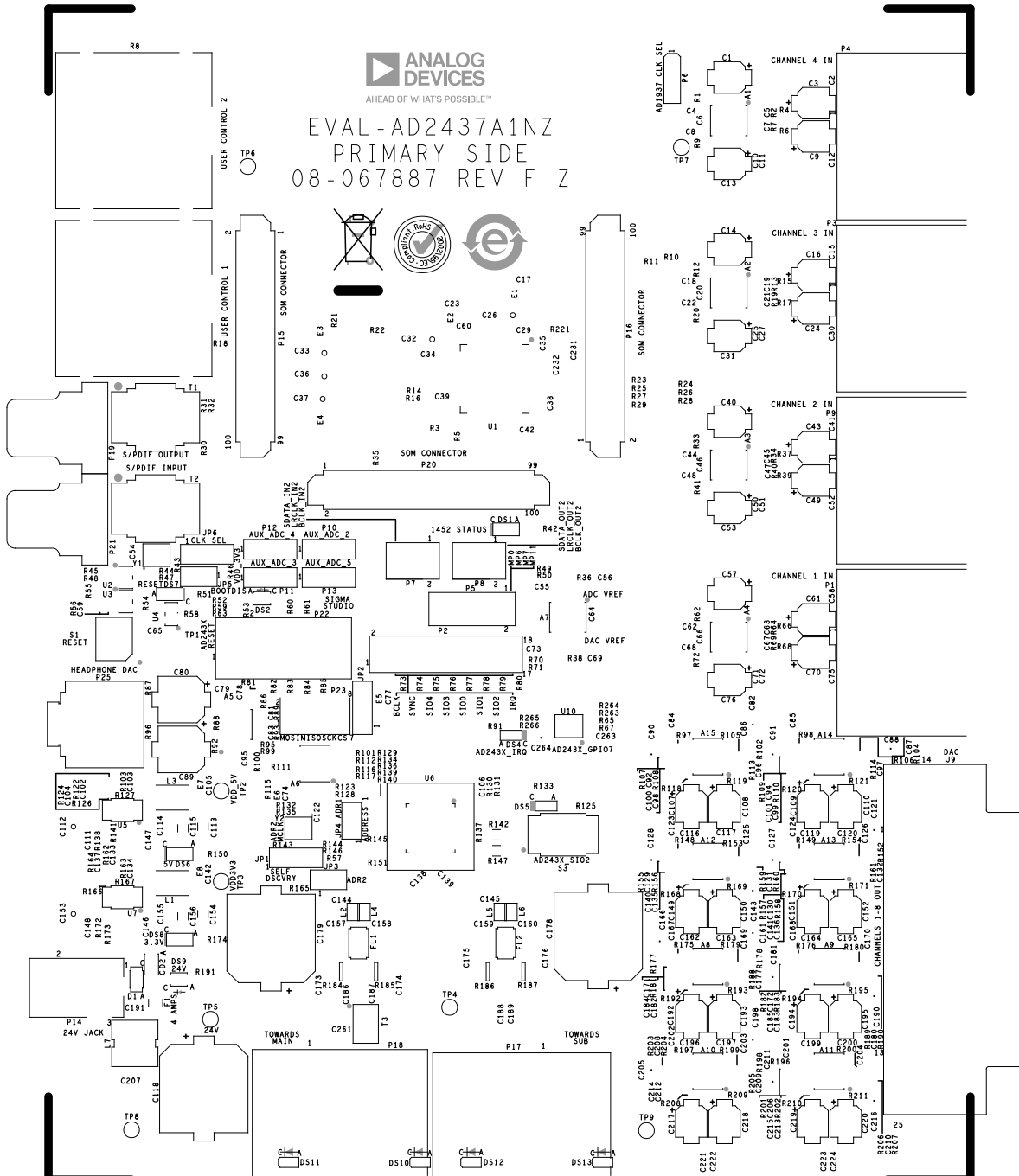
REV F



PASTEMASK SECONDARY  
08-067887-12  
REV F



## REV F

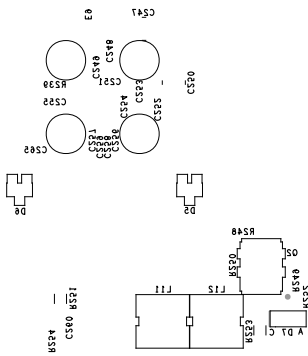
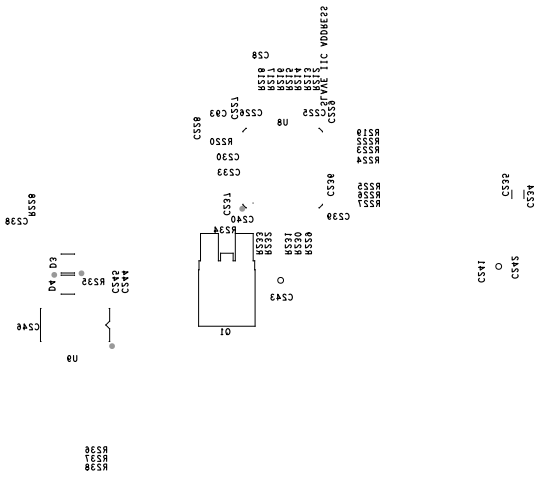


SILKSCREEN SECONDARY

08-067887-05

REV F

08-067887 REV F 2  
SECONDARY SIDE



045R	045R	045R	045R	045R
145R	145R	145R	145R	145R
245R	245R	245R	245R	245R
345R	345R	345R	345R	345R
445R	445R	445R	445R	445R
545R	545R	545R	545R	545R
645R	645R	645R	645R	645R
745R	745R	745R	745R	745R
845R	845R	845R	845R	845R
945R	945R	945R	945R	945R

CS05