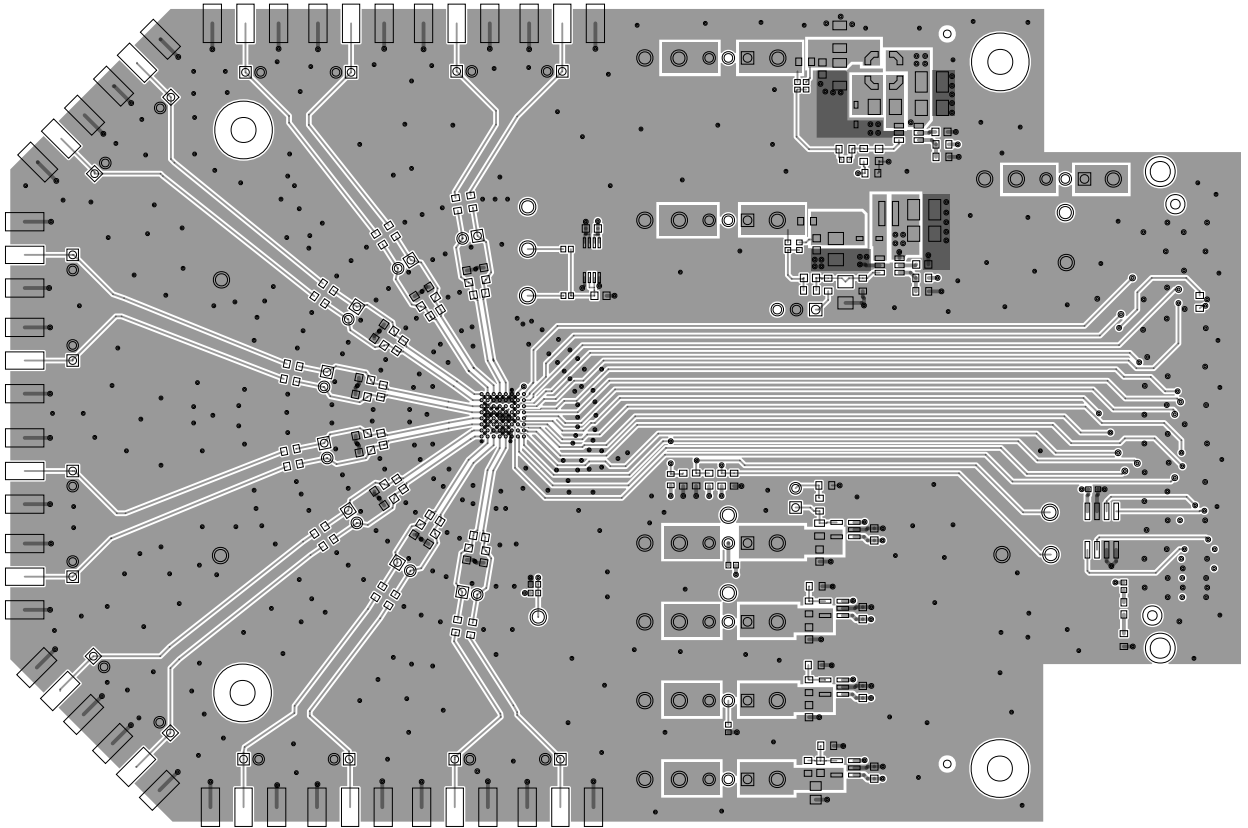
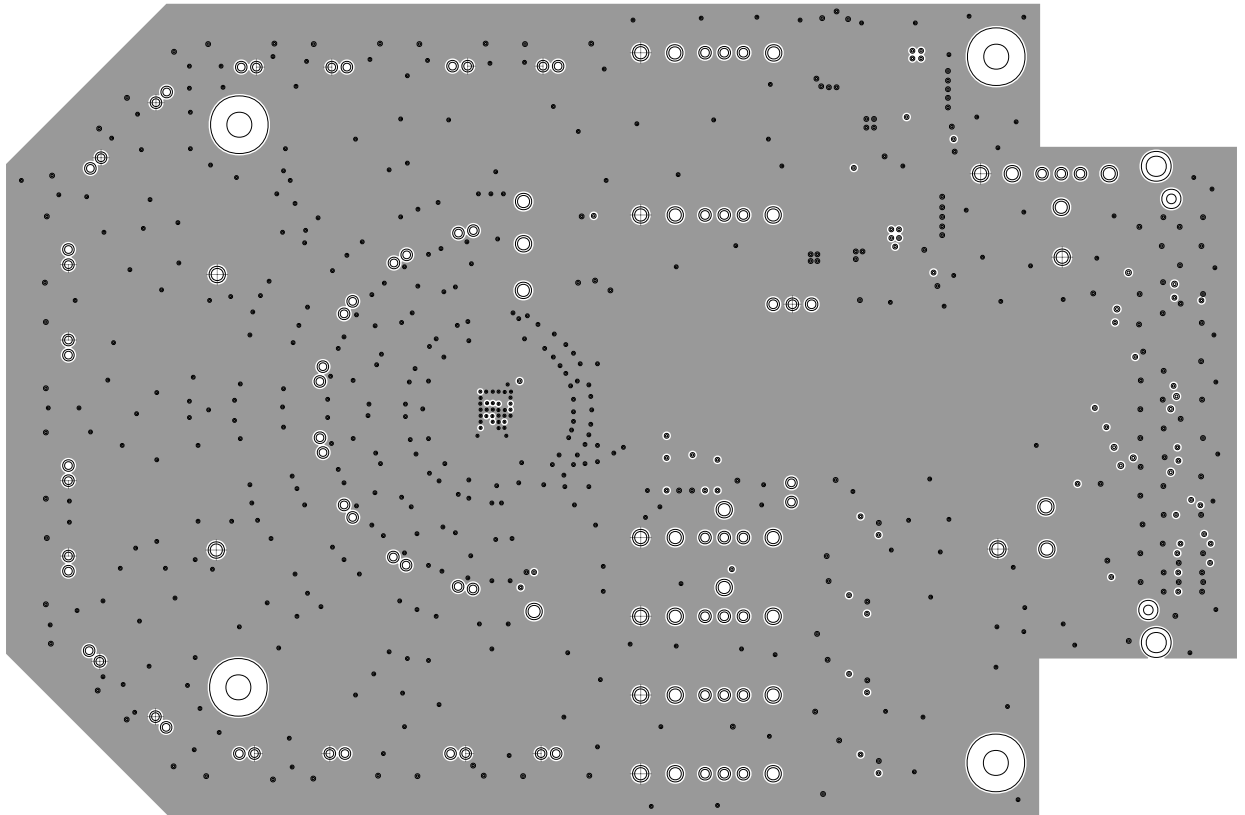




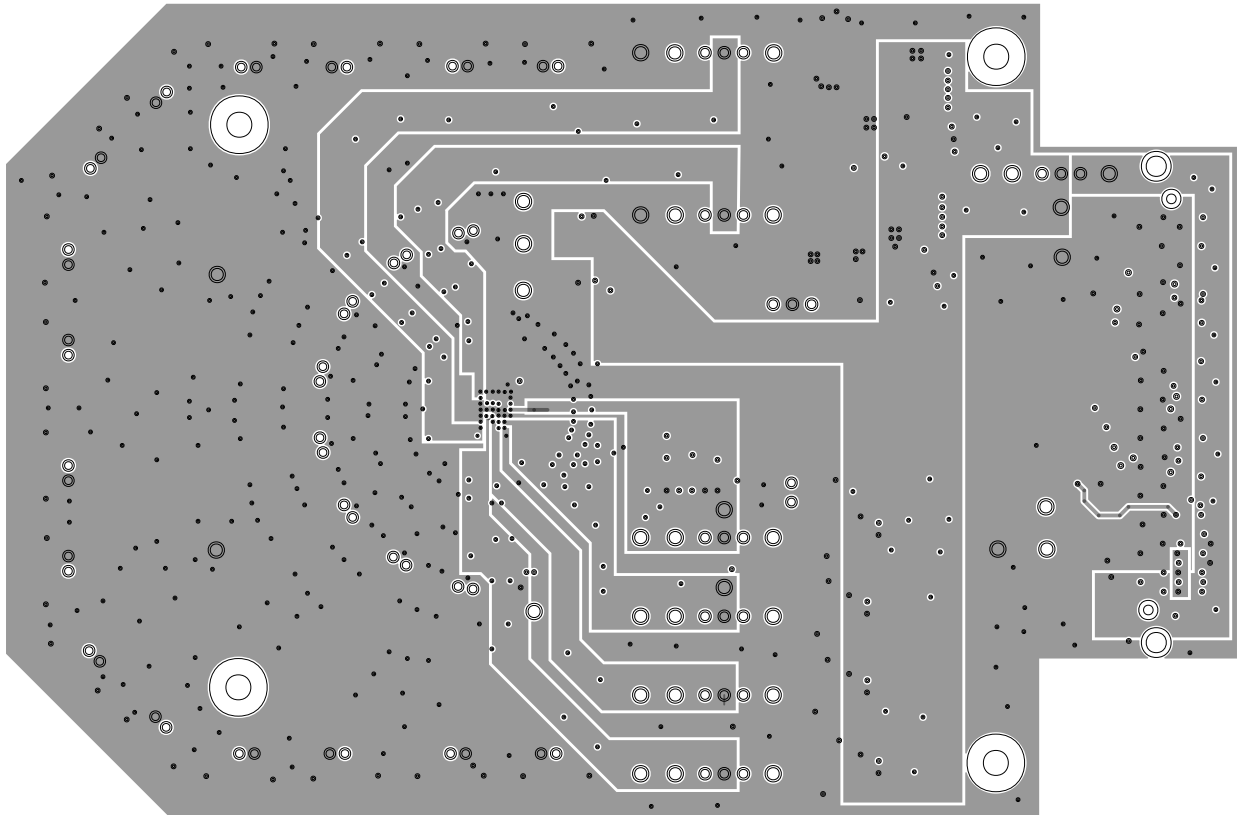
L1 PRIMARY  
08-070370-01  
REV C



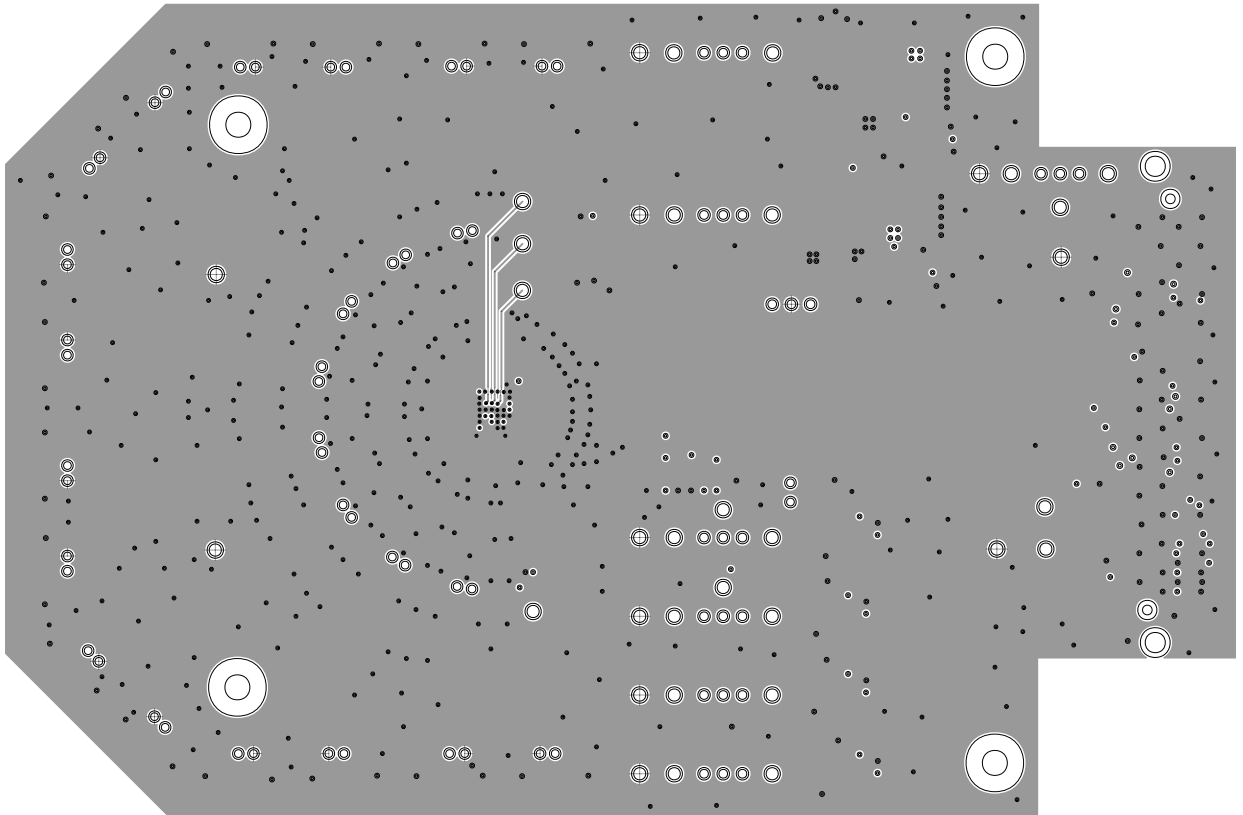
L2 GROUND  
08-070370-07  
REV C



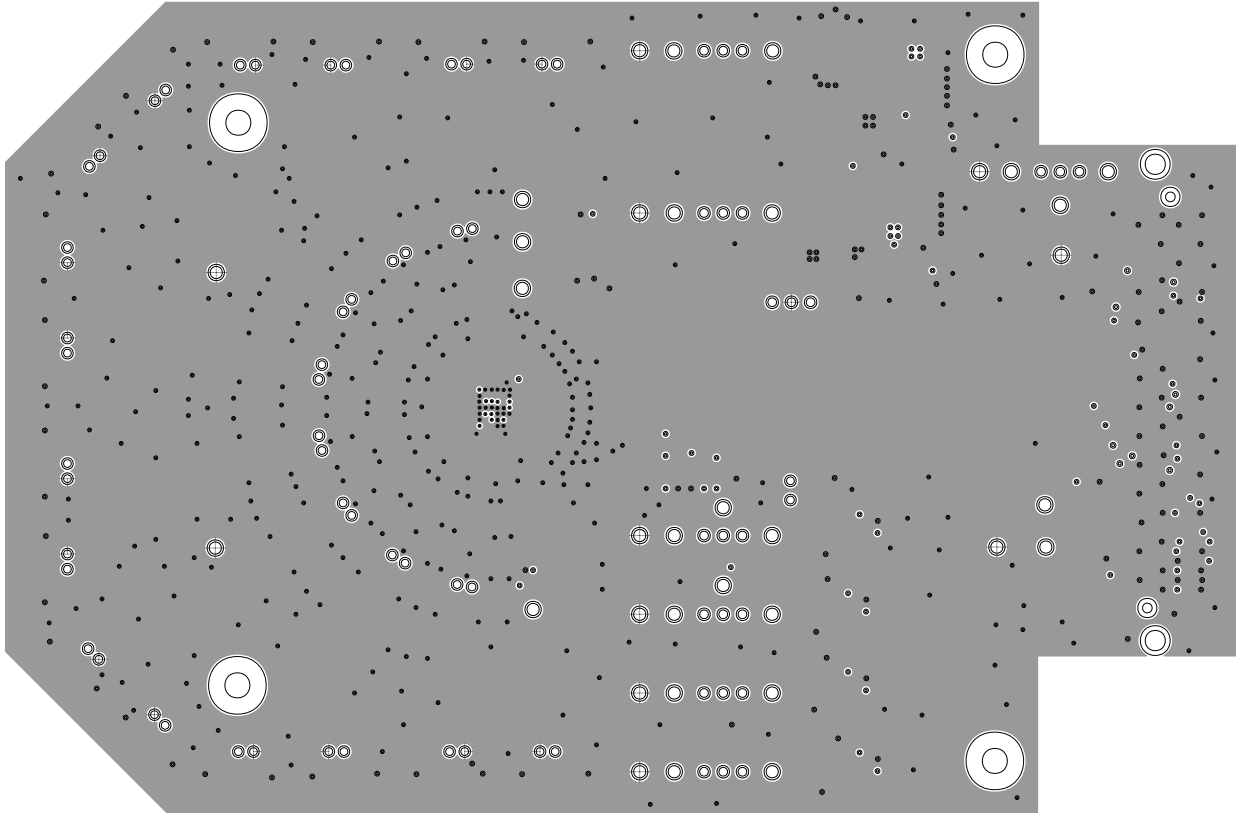
L3 SIG  
08-070370-08  
REV C



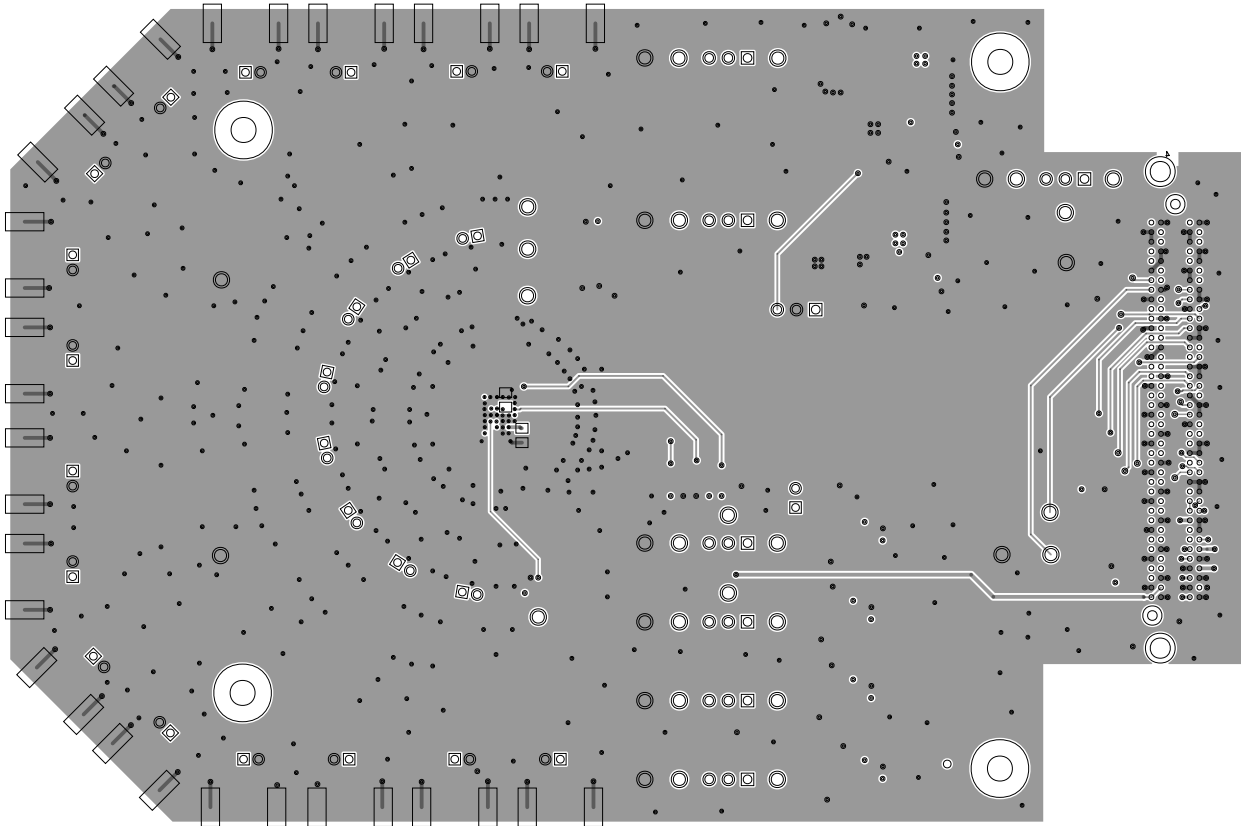
L4 SIG  
08-070370-09  
REV C



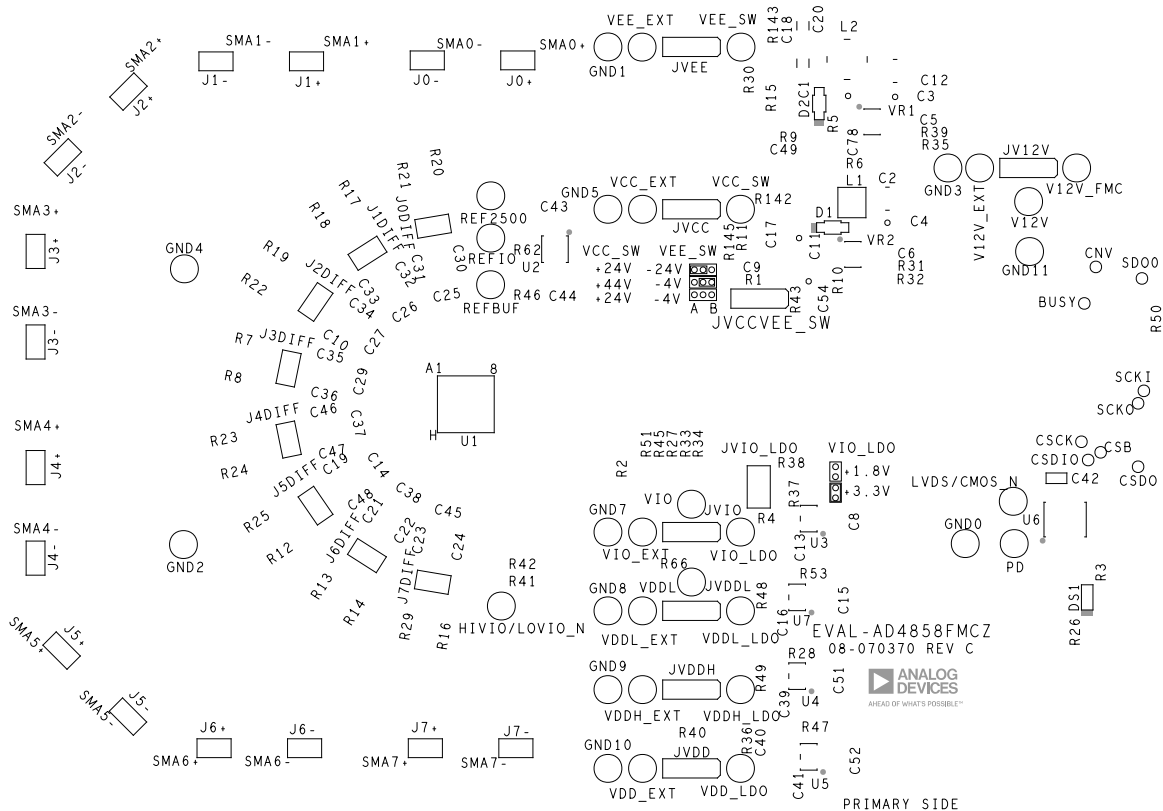
L5 GROUND  
08-070370-10  
REV C



L6 SECONDARY  
08-070370-02  
REV C

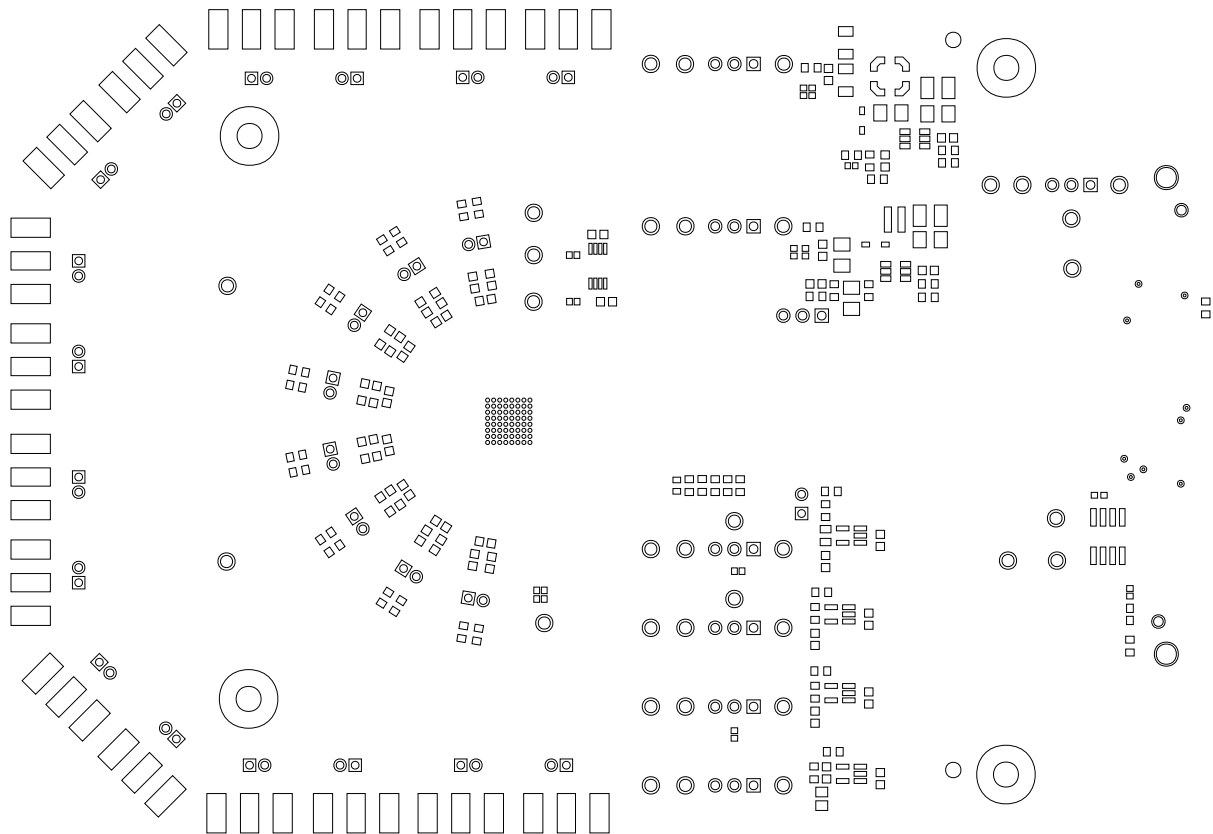


## REV C



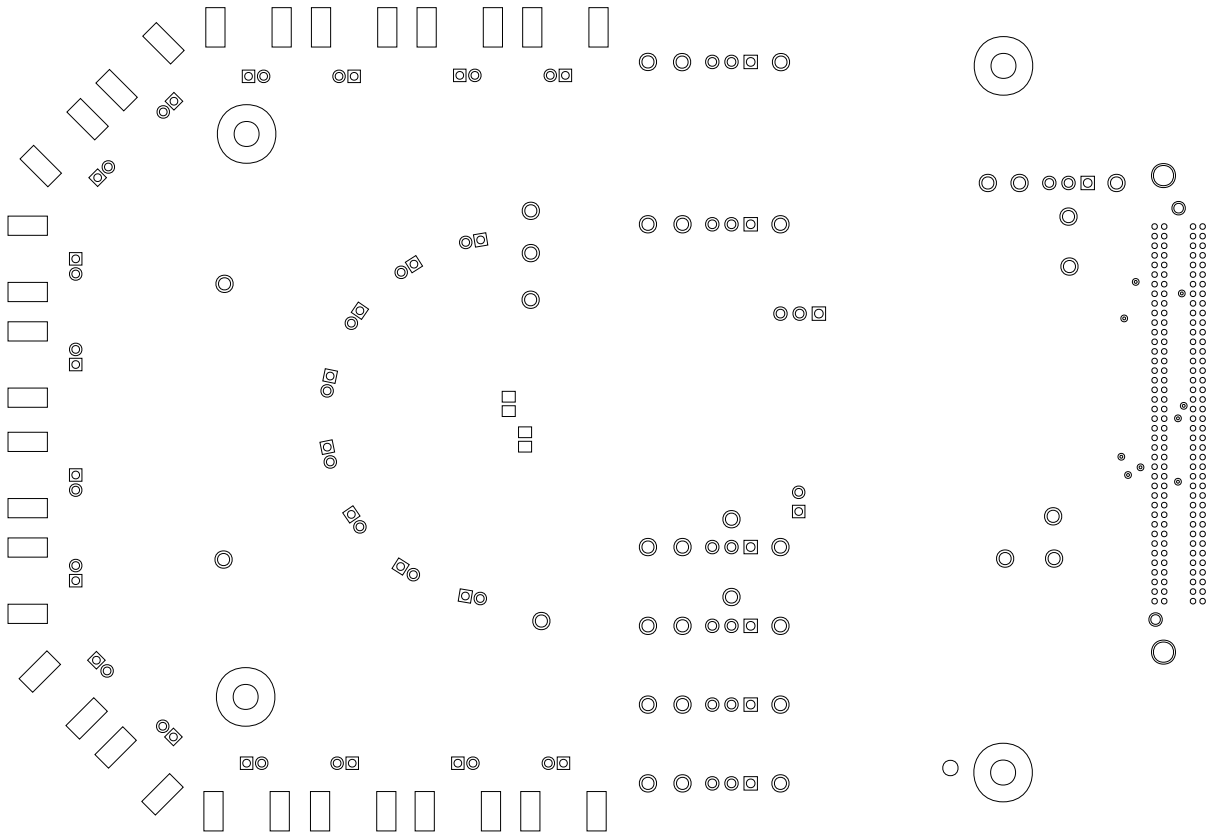


SOLDERMASK PRIMARY  
08-070370-04  
REV C

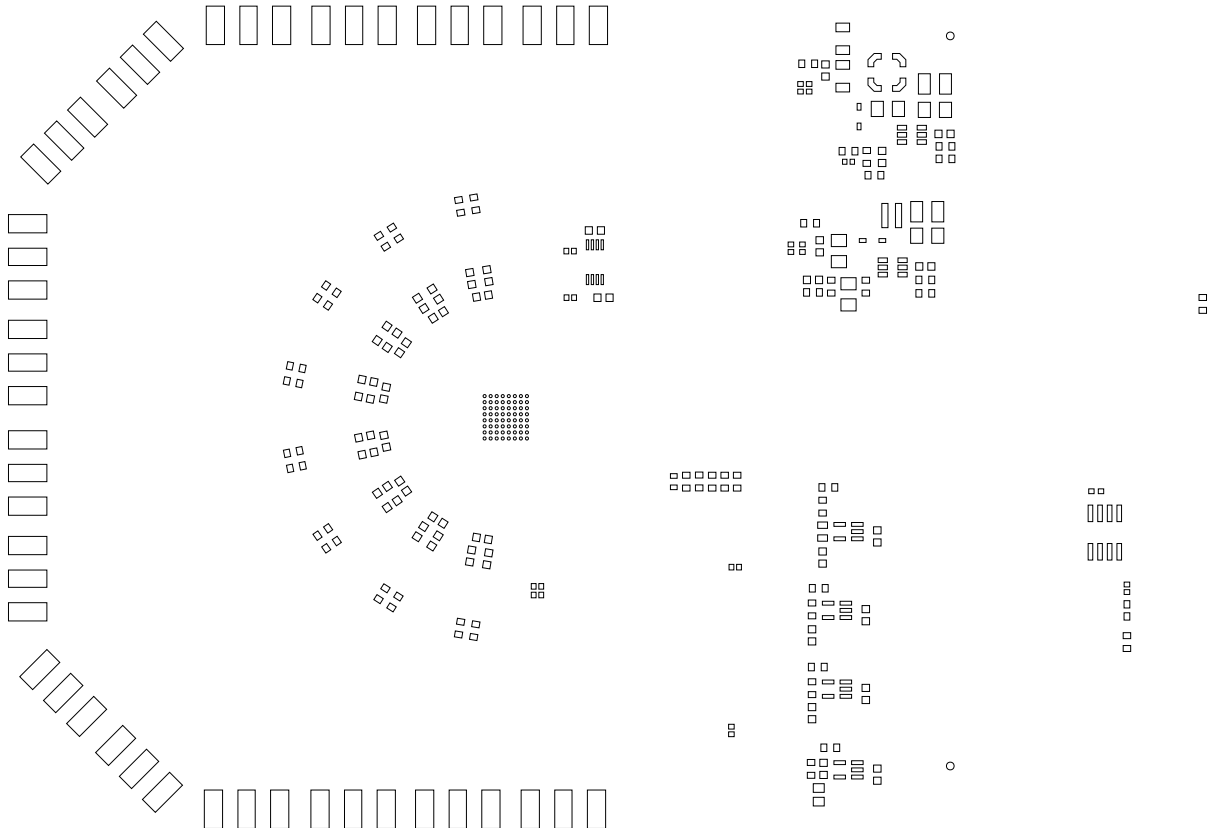




SOLDERMASK SECONDARY  
08-070370-06  
REV C



PASTEMASK PRIMARY  
08-070370-11  
REV C



[illegible]

Q

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03NOV22	J.COX
B	PER ECR 113682	27APR23	J.COX
C	UPDATE PER LPR-071521	12JULY23	J.COX

SPECIFICATIONS:

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 FR-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

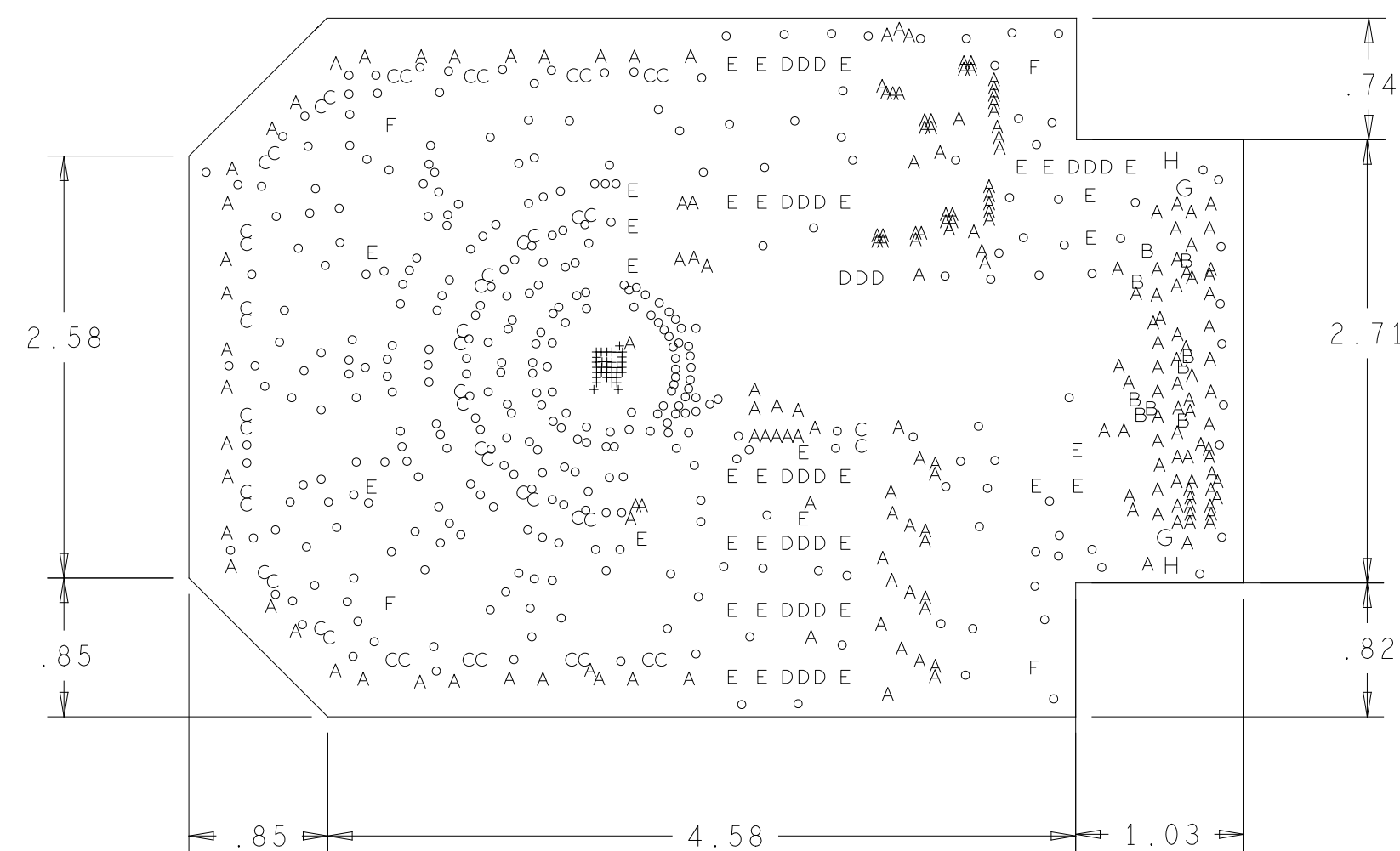
SURFACE FINISH; ENIG (ELECTROLESS NICKEL/ IMMERSION GOLD)  
PER IPC-4552 LATEST REVISION

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.

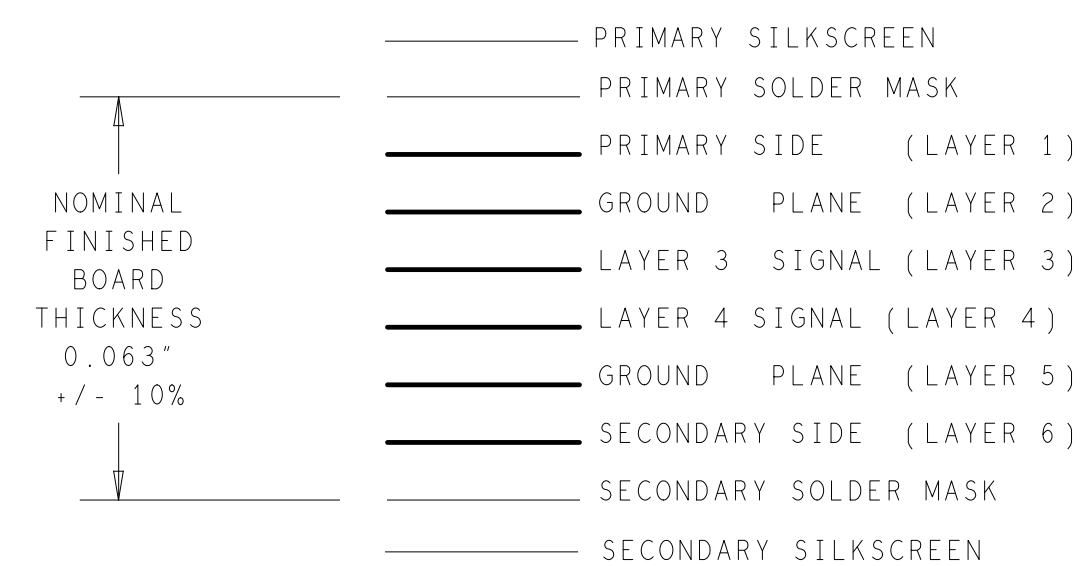
TEST REQUIREMENTS; 100% NETLIST ELECTRICAL VERIFICATION USING CUSTOMER  
SUPPLIED IPC-D-356 NETLIST FOR OPENS AND SHORTS WHEN  
"GERBER DATA" IS PROVIDED. THIS VERIFICATION ALSO  
REQUIRED FOR "ODB++" DATA PER EMBEDDED NETLIST.

REQUIREMENTS:

1. REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
2. ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00115. (LATEST REVISION.)
3. MODIFICATIONS TO THE ARTWORK ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
4. HOLE PATTERN TOLERANCES FOR UNDIMENSIONED HOLES SHALL BE A DIAMETER OF 0.005 INCHES FROM THEIR TRUE POSITION.
5. PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.001 INCH MINIMUM AVERAGE, WITH NO READING LESS THAN .0008 BY CROSS SECTION.
6. HOLE DIAMETERS APPLY AFTER PLATING.
7. FINISHED CONDUCTOR WIDTHS SHALL NOT BE REDUCED FROM THE NOMINAL INDICATED ON THE MASTER PATTERN, BY MORE THAN THE CONDUCTOR THICKNESS.
8. MINIMUM DESIGN LINE WIDTH IS .004 INCH.
9. MINIMUM DESIGN SPACING IS .007 INCH.
10. NON-FUNCTIONAL PAD REMOVAL FROM INNER SIGNAL LAYERS MAY BE PERFORMED AFTER CUSTOMER APPROVAL.
11. IF PAD SIZES PROVIDED ARE NOT LARGE ENOUGH TO MAINTAIN ANNULAR RING REQUIREMENT, MFRG. MAY REQUEST APPROVAL TO TEAR DROP PADS TO MAINTAIN ANNULAR RING. (AT PAD TO TRACE INTERSECTION ONLY AND ELECTRICAL INTEGRITY MUST BE MAINTAINED.)
12. THEIVING MAY BE ADDED TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN ONLY AFTER REVIEW AND APPROVAL FROM THE CUSTOMER:
  - A. THEIVING TO CARD EDGE, FIDUCIALS, NON-PLATED THROUGH HOLES, ALL OTHER FEATURES TO BE 0.200 INCH MINIMUM.
  - B. THERE SHALL BE NO THEIVING IN ANY AREAS FREE OF SOLDER MASK OR INTERNAL COPPER PLANES.
13. MFRG. 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-FLAMMABILITY RATING
  - D. MFRG LOGO
  - B. DATE CODE (STAMP).
  - E. SUCCESSFUL ELECTRICAL TEST.
  - C. LOT NUMBER
14. 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.
15. INDICATED VIAS TO BE NON-CONDUCTIVE EPOXY FILLED. AND GROUND FLUSH PRIOR TO OVER PLATING.



## 6 LAYER STACKUP



CHARACTERISTIC IMPEDANCE = 50 OHMS +/- 10%  
ARTWORK LINE WIDTH FOR  
IMPEDANCE CONTROLLED LINES = 0.010"

## HOLE TOLERANCE

UNLESS SPECIFIED  
PLATED:  $\pm .003$   
NON PLATED:  $\pm .002$

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTE
+	6.0	PLATED	35	SEE NOTE 15
o	10.0	PLATED	345	SEE NOTE 15
A	12.0	PLATED	191	SEE NOTE 15
B	15.0	PLATED	9	
C	40.0	PLATED	50	
D	45.0	PLATED	24	
E	63.0	PLATED	34	
F	130.0	PLATED	4	
G	50.0	NON-PLATED	2	
H	105.0	NON-PLATED	2	

## PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVAL	DATE	<div><div><div></div></div><div>ANALOG DEVICES</div></div> <div>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>			
	TEMPLATE ENGINEER	dd/mm/yy				
	TOLERANCES	dd/mm/yy				
	HARDWARE SERVICES	dd/mm/yy				
DECIMALS FRACTIONS ANGLES	HARDWARE SYSTEMS	dd/mm/yy	TITLE FABRICATION  AD4858 EVALUATION BOARD			
.XX --.010 --.3/32 --.2	X	dd/mm/yy				
.XXX --.005	X	dd/mm/yy				
.XXXX --.0050	X	dd/mm/yy				
MATERIAL	TEST ENGINEER	dd/mm/yy				
	X	dd/mm/yy				
	COMPONENT ENGINEER	dd/mm/yy				
	X	dd/mm/yy				
FINISH	TEST PROCESS	dd/mm/yy	SIZE FSCM NO DRAWING NUMBER REV			
	X	dd/mm/yy				
	HARDWARE RELEASE	dd/mm/yy				
	X	dd/mm/yy				
DO NOT SCALE DWG	DESIGNER	22-NOV-22	D 24355		09-070370	C
	P. ALONGI	22-NOV-22				
	PTD ENGINEER					
	J. COX					
	CHECKER	dd/mm/yy	SCALE	1/1		SHEET 1 OF 1