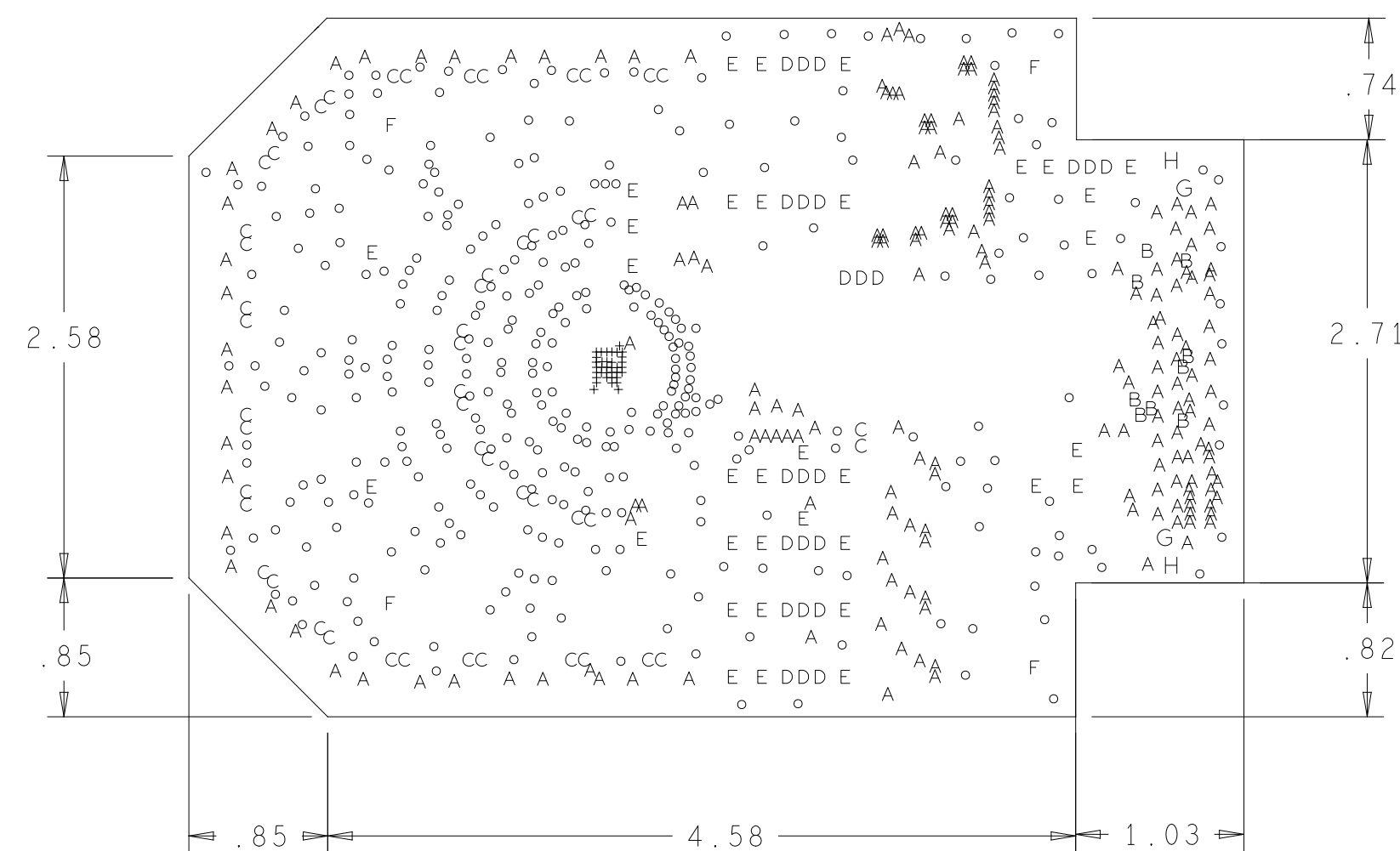
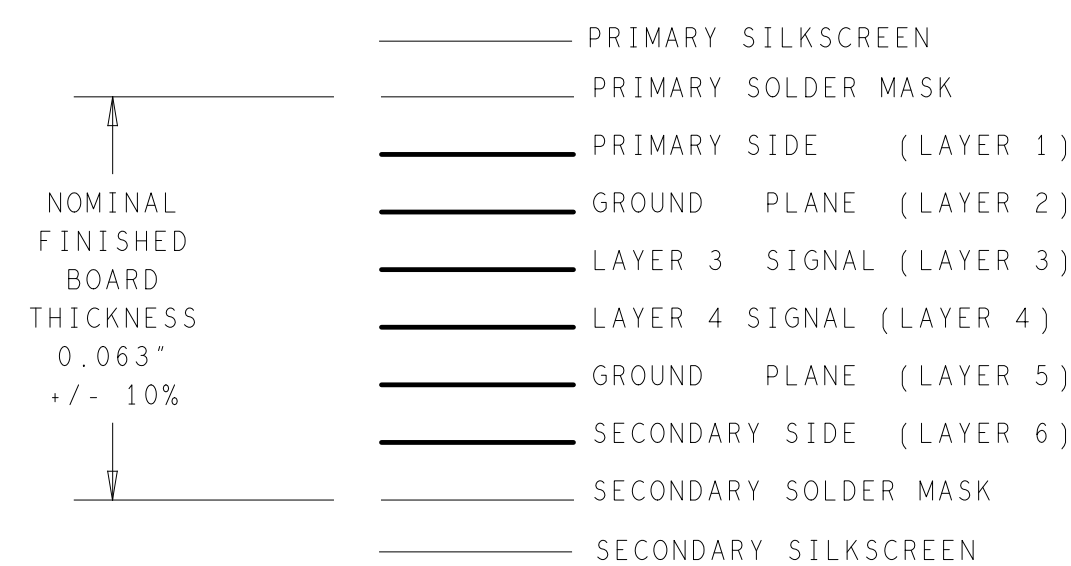


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03NOV22	J.COX
B	PER ECR 113682	27APR23	J.COX
C	UPDATE PER LPR-071521	12JULY23	J.COX



6 LAYER STACKUP



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

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:

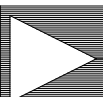
1. REFER TO I-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
2. ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00115, (LATEST REVISION.)
3. MODIFICATIONS TO THE ARTWORK ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
4. HOLE PATTERN TOLERANCES FOR UNDIMENSIONED 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. THIEVING MAY BE ADDED TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN ONLY AFTER REVIEW AND APPROVAL FROM THE CUSTOMER:
 - A. THIEVING TO CARD EDGE, FIDUCIALS, NON-PLATED THROUGH HOLES, ALL OTHER FEATURES TO BE 0.200 INCH MINIMUM.
 - B. THERE SHALL BE NO THIEVING 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.

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/NOTES
+	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		 ANALOG DEVICES		WMM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887	
DECIMALS TOLERANCES ANGLES		TEMPLATE ENGINEER		d dMMMyy		TITLE FABRICATION AD4858 EVALUATION BOARD			
.XX -.010 +/-1/32 ° ± 2		HARDWARE SERVICES		d dMMMyy					
.XXX -.005		HARDWARE SYSTEMS		d dMMMyy					
.XXX -.000		X		d dMMMyy					
		TEST ENGINEER		d dMMMyy					
MATERIAL		X		COMPONENT ENGINEER		d dMMMyy		SIZE FSCM NO DRAWING NUMBER REV D 24355 09-070370 C	
		X		TEST PROCESS		d dMMMyy			
		X		HARDWARE RELEASE		d dMMMyy			
		X							
FINISH		DESIGNER		22-NOV-22					
		P. ALONGI							
		P/TB ENGINEER		22-NOV-22					
		J. COX							
DO NOT SCALE DWG		CHECKER		d dMMMyy					
		X							