


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04MAY22	S. PAI
B	AS PER ECR-122069	06AUG24	D. DALISAY

HOLE TOLERANCE

UNLESS SPECIFIED  
PLATED: +/- .0762MM  
NON PLATED: +/- .0508MM

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILLIMETERS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	0.152	PLATED	29	DIA MAX/NOTE15
□	0.254	PLATED	594	DIA MAX/NOTE15
▣	1.016	PLATED	13	
○	1.143	PLATED	100	
◇	1.168	PLATED	20	
△	1.27	PLATED	4	
○	1.702	PLATED	80	
A	3.175	NON-PLATED	4	

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		04MAY22				
.XX -.010	--1/32	-- 2	HARDWARE SYSTEMS				TITLE  FABRICATION EVAL - AD5766ARDZ CUSTOMER EVAL Z		
.XXX -.005									
.XXXX -.0050									
MATERIAL			TEST ENGINEER						
			COMPONENT ENGINEER A. GIRON		04MAY22				
			TEST PROCESS						
			HARDWARE RELEASE K. JABATAN		04MAY22				
FINISH			DESIGNER E. DELOS REYES		04MAY22				
			PTD ENGINEER S. PAI		04MAY22		SIZE		
			CHECKER				FSCM NO		
DO NOT SCALE DWG							DRAWING NUMBER		
							REV		
							C 24355 09-070959 B		
							SCALE 1/1		
							SHEET 1 OF 2		

4

3

2

1

SPECIFICATIONS:

MATERIALS;

MATERIAL FAMILY;

CLADDING;

SOLDER MASK;

SILK SCREEN;

SURFACE FINISH;

INTENTIONAL SHORTS;

TEST REQUIREMENTS;

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

ISOLA370HR OR S1000-2 OR IT180 OR EQUIVALENT

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.

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.

SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR: WHITE  
SYNTHETIC INKJET PRINTING ALLOWED FOR DENSE BOARDS, COLOR: WHITE

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

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.

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.

4 LAYER STACKUP

NOMINAL  
FINISHED  
BOARD  
THICKNESS  
1.6 MM  
+/- 10%

PRIMARY SILKSCREEN

PRIMARY SOLDER MASK

PRIMARY SIDE (LAYER 1)

L2\_GND PLANE (LAYER 2)

L3\_PWR PLANE (LAYER 3)

SECONDARY SIDE (LAYER 4)

SECONDARY SOLDER MASK

SECONDARY SILKSCREEN

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 0.127 MM FROM THEIR TRUE POSITION.

5. PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.0254 MM MINIMUM AVERAGE, WITH NO READING LESS THAN .02032 MM 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 .150 MM.

9. MINIMUM DESIGN SPACING IS .120 MM.

~~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, MFGR. 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. 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-FLAMMABILITY RATING

D. MFGR LOGO

B. DATE CODE (STAMP).

E. SUCCESSFUL ELECTRICAL TEST.

C. LOT NUMBER

14. REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED.

15. THRU VIAS TO BE FILLED BY NON-CONDUCTIVE EPOXY AND PLATED OVER.

16. BOARDS TO BE SHIPPED IN ARRAYS AND KEEP INTACT.  
PANEL TO BE SUBJECTED TO CUSTOMER'S APPROVAL.  
PANELED SOLDER PASTE STENCIL SHOULD BE SENT TO THE CUSTOMER.

PRIMARY SIDE

ANALOG  
DEVICES

WWM  
DIVISION  
804 WOBURN STREET  
WILMINGTON, MA 01887

SIZE

FSCM NO

DRAWING NUMBER

REV

C

24355

09-070959

B

SCALE

1/1

SHEET 2 OF 2