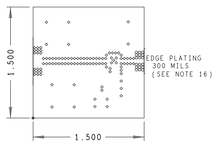
ART FILM - fab1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	9OCT20	D. ACEVAL

2 LAYER STACKUP

CRITICAL LINE WIDTH = .016 +/- .001 ADJUST PROCESS TO ACHIEVE WIDTH



HOLE TOLERANCE

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

DRILL CHART: TOP to BOTTOM				
FINISHED HOLES IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
◦	14.0	PLATED	18	DIA MAX SEE NOTE 15
◦	14.0	PLATED	106	

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:	ROGERS 4350B
CLADDING:	EXTERNAL LAYERS .5 OZ. COPPER, OVERPLATE TO 1.5 OZ.
	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 TOP SIDE ONLY 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 TOP SIDE ONLY 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 .010 INCH.
9. MINIMUM DESIGN SPACING IS .006 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, 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. MFGR LOGO
    B. DATE CODE (STAMP).
    C. LOT NUMBER
    D. SUCCESSFUL ELECTRICAL TEST.
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. THRU VIAS FILLED WITH NON-CONDUCTIVE EXPOXY AND PLATED OVER.
16. EDGE PLATING MUST CONNECT TOP AND BOTTOM LAYERS TOGETHER CENTER CONDUCTOR MAY SHORT TO EDGE PLATING, REMOVE SHORT

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX +-.010 +-1/32 +- 2 .XXX +-.005 .XXXX +-.0050	APPROVAL	DATE
	TEMPLATE ENGINEER R MARION	07JUL20
	HARDWARE SERVICES E ESCALANTE	07JUL20
	HARDWARE SYSTEMS D WILLIAMS	07JUL20
MATERIAL	TEST ENGINEER B ASUNCION	07JUL20
	COMPONENT ENGINEER M YAN	07JUL20
	TEST PROCESS	
	HARDWARE RELEASE K JABATAN	07JUL20
FINISH	DESIGNER J SANES	07JUL20
	PTD ENGINEER B ASUNCION	07JUL20
	CHECKER	
DO NOT SCALE DWG		

ANALOG DEVICES
WWM DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

TITLE
FABRICATION
ADF5709 SINGLE-BOARD EVAL KIT

SIZE	FSCM NO	DRAWING NUMBER	REV
D	24355	09-065423	A

SCALE 1/1 SHEET 1 OF 1

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