

4

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D

D

C

C

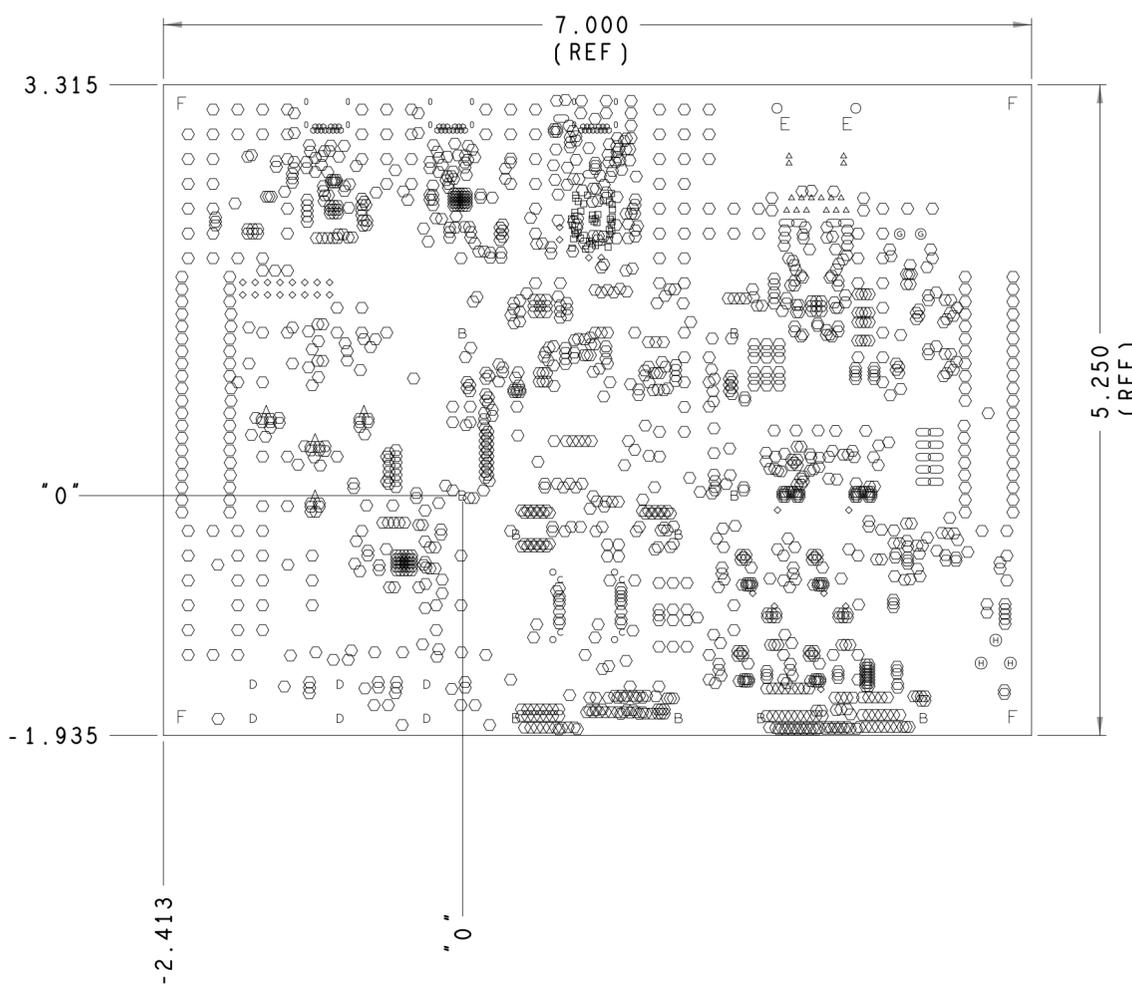
B

B

A

A

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	28MAR22	D. HARRINGTON
B	CHANGES AS PER ECR-110216	10NOV22	D. HARRINGTON
C	CHANGES AS PER ECR-113297	08MAR23	D. HARRINGTON
D	CHANGES AS PER ECR-114185	11MAY23	D. HARRINGTON



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
□	8.0	PLATED	41	DIA MAX
○	10.0	PLATED	1576	DIA MAX
◦	16.0	PLATED	42	
◊	33.0	PLATED	4	
△	35.0	PLATED	16	
◌	40.0	PLATED	16	
◇	45.0	PLATED	27	
○	60.0	PLATED	2	
⊙	63.0	PLATED	2	
⊕	75.0	PLATED	3	
A	16.0	NON-PLATED	4	
B	45.0	NON-PLATED	10	+2/-0 MILS
c	57.0	NON-PLATED	4	
d	67.0	NON-PLATED	6	
E	110.0	NON-PLATED	2	
F	125.0	NON-PLATED	4	
°	48.0x24.0	PLATED	12	

SEE NOTE 15
 SEE NOTE 15

PRIMARY SIDE

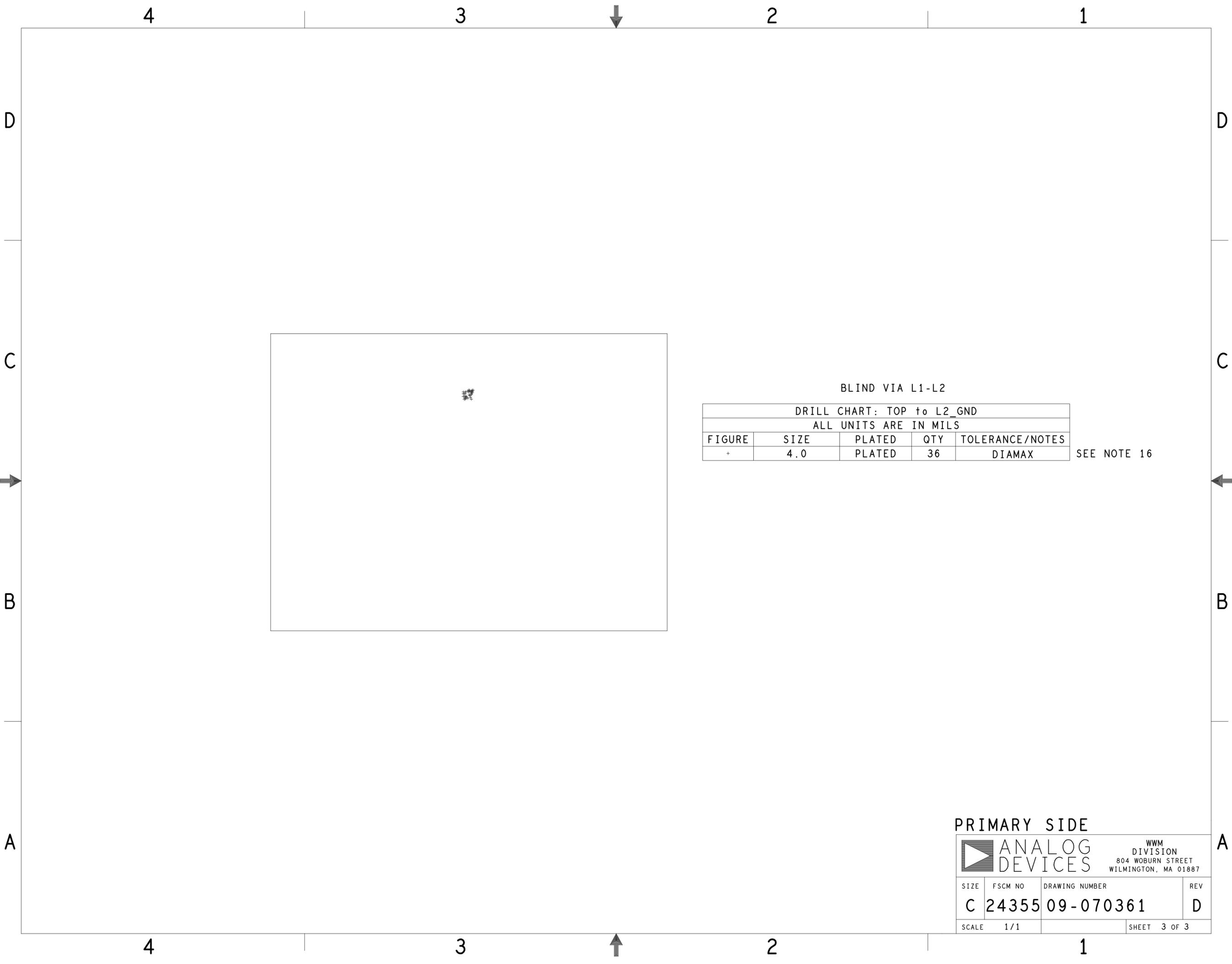
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX -.010 --1/32 -- 2 .XXX -.005 .XXXX -.0050	APPROVAL TEMPLATE ENGINEER	DATE		WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887		
	HARDWARE SERVICES M. VICEDO	28MAR22				
MATERIAL	TEST ENGINEER		TITLE FABRICATION EV-SOMCRR-EZLITE CUSTOMER EVAL BOARD Z			
	COMPONENT ENGINEER A. GIRON	28MAR22				
	TEST PROCESS					
FINISH	HARDWARE RELEASE K. JABATAN	28MAR22	SIZE C	FSCM NO 24355		
	DESIGNER M. VICEDO	28MAR22			DRAWING NUMBER 09-070361	REV D
	PTD ENGINEER D. HARRINGTON	28MAR22				
CHECKER		SCALE 1/1	SHEET 1 OF 3			

4

3

2

1



BLIND VIA L1-L2

DRILL CHART: TOP to L2_GND				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	4.0	PLATED	36	DIAMAX

SEE NOTE 16

PRIMARY SIDE

 ANALOG DEVICES		<small>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</small>	
		<small>SIZE</small> C	<small>FSCM NO</small> 24355
<small>SCALE</small> 1/1		<small>SHEET</small> 3 OF 3	

4

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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 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.

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

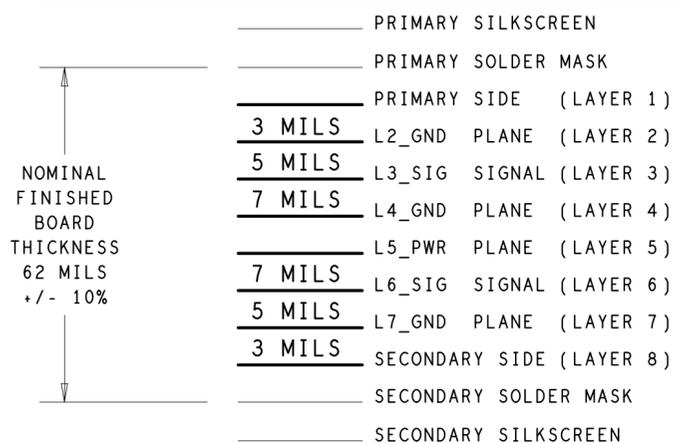
INTENTIONAL SHORTS; IF SUPPLIED DATA INCLUDES A FILE "READ_ME.2", THEN INTENTIONAL NET SHORTS EXIST. CUSTOMER REVIEW AND APPROVAL IS REQUIRED IF SUPPLIED DATA REPORTS ANY CONDITION THAT DOES NOT MATCH "READ_ME.2" FILE PROVIDED.

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:

- 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 INCH 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 0.0035 INCH.
 - MINIMUM DESIGN SPACING IS 0.005 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, MFGR. 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.
 - MFGR. 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
 - MFGR LOGO
 - SUCCESSFUL ELECTRICAL TEST.
 - REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED.
 - THRU VIAS FILLED WITH NON-CONDUCTIVE EPOXY AND PLATED OVER.
 - LASER VIAS TO BE COPPER FILLED (PLATED SHUT) AND PLANARIZED.

8 LAYER STACKUP



IMPEDANCE TABLE

NOTE: ALL IMPEDANCE TOLERANCE +/-5%
SE = SINGLE ENDED, DP = DIFFERENTIAL PAIR

LAYER	IMPEDANCE	REFERENCE	LINE WIDTH	SPACE
L1	50 OHMS SE	L2	5 MILS	N/A
L3	50 OHMS SE	L2 & L4	5.5 MILS	N/A
L1	100 OHMS DP	L2	3.5 MILS	10 MILS
L1	90 OHMS DP	L2	4 MILS	10 MILS
L8	100 OHMS DP	L7	3.5 MILS	10 MILS
L8	90 OHMS DP	L7	4 MILS	10 MILS
L8	50 OHMS SE	L7	5 MILS	N/A

PRIMARY SIDE

ANALOG DEVICES
WWM DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-070361	D
SCALE	1/1		SHEET 2 OF 3