


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	16SEP20	A. POP
B	CHANGES AS PER ECR-101417	30JUN21	A. POP
B1	CHANGES AS PER ECR-103834	21JUL21	M. ABALA

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

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	10.0	PLATED	259	DIAMAX
□	30.0	PLATED	11	
○	40.0	PLATED	30	
◊	45.0	PLATED	39	
◊	50.0	PLATED	5	
B	125.0	NON-PLATED	4	
◊	47.0x24.0	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 .XX -.010 --1/32 -- 2 .XXX -.005 .XXXX -.0050			HARDWARE SERVICES M. VALE		16SEP20				
MATERIAL			HARDWARE SYSTEMS				TITLE FABRICATION AD-M2KBNC-EBZ CUSTOMER EVALUATION Z		
			TEST ENGINEER						
			COMPONENT ENGINEER M. YAN		16SEP20				
			TEST PROCESS						
FINISH			HARDWARE RELEASE K. JABATAN		16SEP20		SIZE FSCM NO DRAWING NUMBER REV C 24355 09-065173 B1		
			DESIGNER M. VICEDO		16SEP20				
			PTD ENGINEER A. POP		16SEP20				
			CHECKER A. POP		16SEP20				
DO NOT SCALE DWG							SCALE 1 / 1 SHEET 1 OF 2		

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 370 HR

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 BLUE.

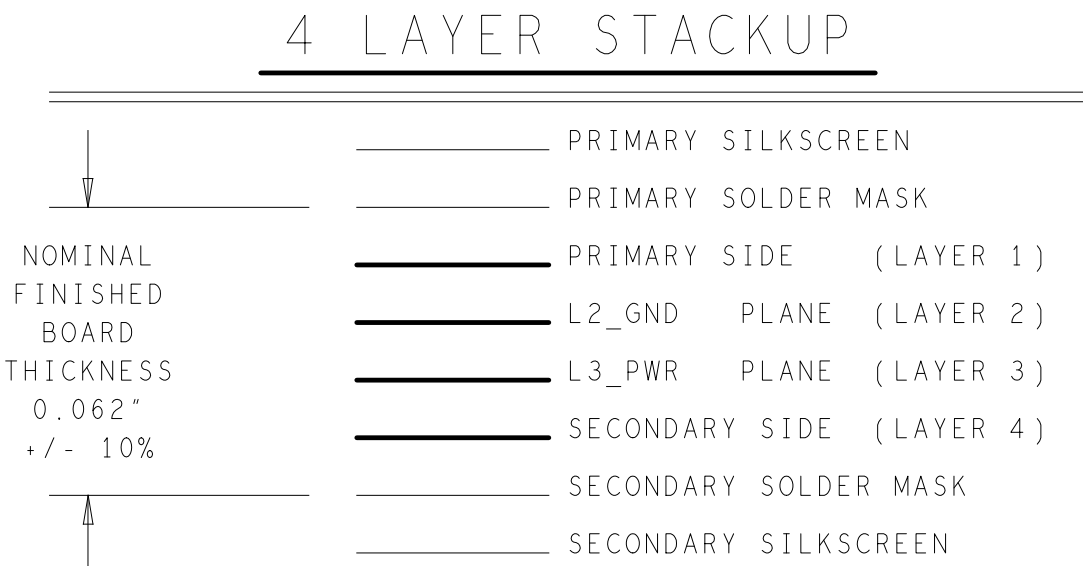
SILK SCREEN; SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR: WHITE SYNTHETIC INKJET PRINTING ALLOWED FOR DENSE BOARDS, COLOR: WHITE

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:
- REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR 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 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 0.005 INCH.
 - MINIMUM DESIGN SPACING IS 0.006 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.



IMPEDANCE TABLE

NOTE: ALL IMPEDANCE TOLERANCE +/-10%

SE = SINGLE ENDED, DP = DIFFERENTIAL PAIR

LAYER	IMPEDANCE	REFERENCE	LINE WIDTH	SPACE
L1	50 OHMS SE	L2	9MILS	N/A
L1	100 OHMS DP	L2	5MILS	6MILS
L4	50 OHMS SE	L3	9MILS	N/A
L4	100 OHMS DP	L3	5MILS	6MILS

PRIMARY SIDE

ANALOG DEVICES

WWM DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-065173	B1
SCALE	1 / 1	SHEET 2 OF 2	