

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 OR EQUIVALENT

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.

4 LAYER STACKUP

PRIMARY SILKSCREEN
PRIMARY SOLDER MASK

NOMINAL
FINISHED
BOARD
THICKNESS
1.600 MM
+/-10%
PRIMARY SIDE (LAYER 1)
L2_GND PLANE (LAYER 2)
L3_PWR PLANE (LAYER 3)
SECONDARY SIDE (LAYER 4)
SECONDARY SOLDER MASK
SECONDARY SILKSCREEN

REQUIREMENTS:

10.

- 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.
- PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.0254MM MINIMUM AVERAGE, WITH NO READING LESS THAN .02032MM 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 .200 MM.
- 9. MINIMUM DESIGN SPACING IS .100 MM.

-NON-FUNCTIONAL PAD REMOVAL FROM INNER SIGNAL LAYERS MAY BE

- 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 5.080 MM 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. BOARDS TO BE SHIPPED IN ARRAYS.
- 16. PANEL TO BE SUBJECTED TO CUSTOMER'S APPROVAL.
- 17. PANELED SOLDER PASTE STENCIL SHOULD BE SENT TO THE CUSTOMER.

PRIMARY SIDE

1 / 1

SCALE



DIVISION 804 WOBURN STREET WILMINGTON, MA 01887

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SHEET 2 OF 2

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