

87

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REV

DESCRIPTION

DATE

APPROVED

A

INITIAL RELEASE

08NOV19

B Somers

2 LAYER STACKUP

NOMINAL FINISHED THICKNESS

0.031" +/-10%

PRIMARY SILKSCREEN

PRIMARY SOLDER MASK

PRIMARY SIDE (LAYER 1)

SECONDARY SIDE (LAYER 2)

SECONDARY SOLDER MASK

SECONDARY SILKSCREEN

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

FR406

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.

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.

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

3) ENIG (Electroless Nickel/Immersion Gold)  
100 MICRO INCHES NICKEL/  
3-5 MICRO INCHES GOLD

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.

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 .012 INCH.

9. MINIMUM DESIGN SPACING IS .008 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, MFR. 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. MFR. 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. MFR LOGO

B. DATE CODE (STAMP).

E. SUCCESSFUL ELECTRICAL TEST.

C. LOT NUMBER

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

HOLE TOLERANCE

UNLESS SPECIFIED  
PLATED: +/- 3 MILS

All VIA's to be plugged and plated

0.429

VIA's to be plugged and plated

0.157

0.016

0.307

1.142

DRILL CHART: TOP to BOTTOM

ALL UNITS ARE IN MILLIMETERS

FIGURE	FINISHED_SIZE	PLATED	QTY
*	0.254	PLATED	28
o	1.143	PLATED	1
o	1.143	PLATED	3

ADT7422 Customer Evaluation

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES

TOLERANCES

DECIMALS FRACTIONS ANGLES

.XX .-. .010 .-./32 .- 2

.XXX .-. .005

.XXXX .-. .0050

APPROVAL

DATE

Feb2019

TEMPLATE ENGINEER

Feb2019

MATERIAL

TEST ENGINEER

Feb2019

FINISH

Feb2019

DO NOT SCALE DWG

N/A

ANALOG DEVICES

WWM DIVISION

804 WOBURN STREET

WILMINGTON, MA 01887

TITLE

FABRICATION

ADT7422 EVAL BOARD

SIZE

FSCM NO

DRAWING NUMBER

REV

D

24355

09-060185

B

SCALE

1/1

SHEET

1 OF 1