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DATE 08/95 RESPONSIBLE ENGINEER ECO NUMBER REV INIT A

PRINTED WIRE BOARD LAYER CONSTRUCTION

LAYER DIELECTRIC SPACING LAYER TYPE COPPER WEIGHT LINE WIDTHS

1 0.006" +/- 0.0019" 0.5 OZ + PLATING 0.005" (0,13mm)

2 0.005" +/- 0.0010" 1.0 OZ 0.005" (0,13mm)

3 0.006" +/- 0.0019" 1.0 OZ 0.005" (0,13mm)

4 0.014" REFERENCE 1.0 OZ 0.005" (0,13mm)

5 0.006" +/- 0.0019" 1.0 OZ 0.005" (0,13mm)

6 0.005" +/- 0.0010" 1.0 OZ 0.005" (0,13mm)

7 0.006" +/- 0.0019" 1.0 OZ 0.005" (0,13mm)

8 0.006" +/- 0.0019" 1.0 OZ 0.005" (0,13mm)

OVERALL THICKNESS (PLATING-TO-PLATING): 0.062" ± 0.006" 1.57mm ± 0.15mm

OUTER LAYERS ARE STARTED WITH 0.5 OZ COPPER PLATED TO 0.0014" (0.035mm) MINIMUM COPPER THICKNESS.

1.0 OZ COPPER THICKNESS IS 0.0014" (0.035mm) NOMINAL 0.0010" (0.025mm) MINIMUM AFTER PROCESSING.

THE TOLERANCE FOR THE LINEWIDTHS ABOVE IS +/- 0.0015" (0.038mm). FOR ALL OTHERS, REFER TO DIGITAL STANDARD 176.

FOR REFERENCE PURPOSES, GIVEN THE LAYOUT/LINEWIDTHS ABOVE, THE TARGETED NOMINAL IMPEDANCE IS: 88.0 OHMS.

THE PWB FABRICATOR SHALL REVIEW AND MODIFY ANY REQUIRED LINE WIDTH OR DIELECTRICS, WITHIN STATED TOLERANCES, TO CENTER THE MANUFACTURING PROCESS TO THE IMPEDANCE TARGET VALUE AND NOTIFY DIGITAL OF THE CHANGES.

THE PWB FABRICATOR MAY MODIFY ANY DIELECTRIC DESIGNATED AS "REFERENCE" IN ORDER TO ACCOMMODATE THE OVERALL THICKNESS REQUIREMENT.

SECTION B-B

SEE NOTE 6

NO SCALE

SECTION A-A

NO SCALE

VIEWED FROM SIDE 1

NOTES:

1) IF A CONFLICT BETWEEN THIS DOCUMENTATION/DESIGN PACKAGE AND ANY OTHER REFERENCED DOCUMENT EXISTS, THIS DOCUMENT/DESIGN PACKAGE WILL TAKE PRECEDENCE.

2) ALL ARTWORK FEATURES (IN ALL FORMATS) ARE SUPPLIED AT NOMINAL DIMENSIONS. UNLESS OTHERWISE SPECIFIED, THE FINISHED CIRCUIT SHOULD REFLECT THESE DIMENSIONS INCLUDING ALLOWABLE FABRICATION TOLERANCES PER DIGITAL STANDARD 176. ALL ARTWORK AND DRILL FEATURES MAY BE MODIFIED TO ACCOMMODATE SPECIFIC FABRICATION PROCESSES.

3) ALL COPPER FOIL SHALL MEET OR EXCEED ANSI/JPC OF-150 TYPE ED (ELECTRO-DEPOSITED) CLASS III REQUIREMENTS.

4) DIELECTRIC MATERIAL TO BE FR4 WITH A MINIMUM GLASS TRANSITION TEMPERATURE OF 135°C.

5) LIQUID PHOTOIMAGABLE SOLDERMASK (LPI) IS REQUIRED ON BOTH SIDES OF THE PWB. NO SOLDERMASK WILL BE PERMITTED ON THE TOP (SOLDERABLE SURFACE) OF ANY SURFACE MOUNT DEVICE PAD (OTHER THAN GASKETING).

6) EACH CIRCUIT IS TO BE SUPPLIED WITH V-GROOVED TOOLING STRIPS AS INDICATED BY DASHED LINES. SEE SECTION B-B FOR ADDITIONAL DETAIL. AREAS INDICATED BY CROSSHATCH ARE FOR THE MANUFACTURING ASSEMBLY PROCESS. THE PWB FABRICATOR SHALL COVER ALL CROSSHATCHED AREAS WITH SOLDERMASK ON BOTH SIDES OF THE PWB. THE PWB FABRICATOR MAY UTILIZE ALL CROSSHATCHED AREAS AS PART OF THEIR PWB PROCESS PANEL TOOLING AREA. PWB PROCESS FABRICATION FEATURES (IE: TOOLING HOLES, TEST/DRILL COUPONS, ETC.) ARE ACCEPTABLE IN CROSSHATCHED AREAS.

7) PWB FABRICATION VENDOR TO ADD 0.0157" +/- 0.002" DIAMETER NPTH (FOUR (4) PLACES) AS INDICATED ON THE ASSEMBLY PANEL.

8) PWB FABRICATION VENDOR TO ADD BREAK TABS, FOUR (4) PLACES MARKED 'B', SEE DETAIL B FOR ADDITIONAL INFORMATION.

9) NICKEL AND GOLD PLATE FINGER SET AREA PER DIGITAL STANDARD 176.

10) THE SOLDERMASK DATA LAYERS FOR THIS PRODUCT ARE SPECIFICALLY DESIGNED TO PLACE SOLDERMASK ON SURFACE MOUNT DEVICE FOOTPRINT PADS. THE DIMENSIONS OF THE SOLDERMASK OPENING ARE SUPPLIED AT DESIGN NOMINAL REFLECTING THE DESIRED OPENING SIZE ON THE FINISHED PRODUCT. FOR THESE FOOTPRINTS, THE PWB FABRICATOR MAY ALTER THE DATA LAYER DIMENSIONS TO ACCOMMODATE THE SOLDERMASK PROCESS WITHIN THE LIMITS OF FINISHED PRODUCT ACCEPTABILITY AS DEFINED IN DEC STD 176.

SYMBOL FINISHED HOLE SIZE (INCHES) POSITIVE TOLERANCE (INCHES) NEGATIVE TOLERANCE (INCHES) FINISHED HOLE SIZE (mm) POSITIVE TOLERANCE (mm) NEGATIVE TOLERANCE (mm) PLATED? QUANTITY

1687 336 204 23 2 2 2 2

FROM LAYER L1 TO LAYER L8

FABRICATION INFORMATION MATERIAL AND WORKMANSHIP FOR ALL FABRICATED PRINTED WIRING BOARDS MUST MEET THE REQUIREMENTS OF DEC STD 176

FABRICATE BOARD PER: AS SHOWN STEP AND REPEAT CODE: NONE PRESS-FIT COMPONENTS: YES NO

8 7 6 5 4 3 2 1

1 WO# EBSA285