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REV

DESCRIPTION

DATE

APPROVED

01

PROTOTYPE

07/06/15

NOTES: (UNLESS OTHERWISE SPECIFIED)
THIS FAB SHOULD BE "ROHS COMPLIANT".

1. FABRICATE TO IPC-A-600, CURRENT REVISION

2. BOARD SHALL MEET THE INSPECTION CRITERIA OF
a- ACCEPTABILITY AS PER IPC-A-600 (LATEST REVISION) CLASS II
b- QUALIFICATION AND PERFORMANCE AS PER IPC-6012 (LATEST REVISION) CLASS II.

3. MATERIAL: MEGTRON 6 (ROHS COMPLIANT MATERIAL) OR EQUIVALENT. GLASS
TRANSITION TEMPERATURE MUST MEET OR EXCEED THE TEMPERATURE EXHIBITED
WITH HIGH TEMPERATURE PROCESSES ASSOCIATED WITH LEAD FREE ASSEMBLY.

4. APPLY SOLDER MASK OVER BARE COPPER (SMOBC) IAW
IPC-SM-840, BOTH SIDES, USING LPI, COLOR GREEN.

5. LPI SOLDER MASK TAIYO FSR4000 (ROHS COMPLIANT MATERIAL) OR EQUIVALENT WILL BE USED ON BOTH
SIDES.

6. SOLDER MASK REQUIREMENTS FOR VIAS:
a) ALL VIAS SHOWN IN DATA WITH SOLDER MASK RELIEF OF 6 MILS OVER VIA DRILL SIZE, SHALL HAVE
SOLDER MASK ENCRoACHED (DRILL PLUS 6 MILS).
b) VIA DRILLS LYING INSIDE BGA AREA AND U115,U159,U160,U161,U162 AND U163 ARE COVERED WITH SOLDER MASK FROM COMPONENT MOUNTING SIDE
AND ENCRoACHED (DRILL PLUS 6 MILS) FROM OTHER SIDE.

7. SOLDER MASK REGISTRATION TO BE WITHIN DIAMETRICAL TRUE POSITION OF + / - 0.002"WITH APPLICABLE
HOLE / PAD.

8. FINISH: GOLD IMMERSION.

9. SILKSCREEN USING WHITE - HAVEN PC421 (NON-CONDUCTIVE OR EQUIVALENT ROHS COMPLIANT MATERIAL)
BOTH SIDES DISTORTION OF SILKSCREEN IS ACCEPTABLE OVER TRACKS. EPOXY INK ON SOLDER LANDS IS
NOT ACCEPTABLE.

10. VENDOR LOGO AND DATE CODE TO BE MARKED SOLDER SIDE IN SILKSCREEN. MAXIMUM HEIGHT 0.12 INCHES.

11. 100% ELECTRICAL TEST REQUIRED FOR CONTINUITY. BOARD SHALL HAVE A
UL-RATING OF 94V-0. UL SYMBOL AND RATING SHALL BE MARKED SOLDER SIDE IN SILKSCREEN.

12. REMOVE ALL UNUSED PADS FROM INTERNAL LAYERS. EXCEPT GOLD FINGERS ON LAYER 13 AND BOTTOM LAYERS.

13. 274X GERBER/ODB++ USED FOR FAB MUST BE VERIFIED AGAINST THE PROVIDED IPC356 NETLIST. COPPER
SLIVERS THAT ARE LESS THAN 0.003" IN WIDTH BETWEEN ANTI-PAD TO PLANE EDGE, ANTI-PAD TO SPLIT
PLANE AND ANTI-PAD TO ANTI-PAD MUST BE REMOVED FROM THE MANUFACTURING ARTWORK. A NETLIST
COMPARISON MUST BE PASSED WITH NO VIOLATION AFTER THE REMOVAL OF SLIVERS. ANY REQUIREMENT
FOR SLIVER REMOVAL ABOVE OR EQUAL TO THE 0.003" COPPER WIDTH MUST BE ADDRESSED AND APPROVED
IN WRITING BY SUPPLIER.

14. VIAS ARE SUPPOSED TO BE DIRECTLY CONNECTED TO RESPECTIVE PLANE.

15. FOR IMPEDANCE CONTROL DETAILS REFER TO THE FILE "1280754_HW_U1_VCU108_REV_A_STACK_UP.PDF" PROVIDED WITH GERBER DATA.

16. INTENTIONAL SHORTS: REFER TO FILE 1280798_HW_U1_VCU108_REV_B_SHORTLIST.docx; ADVISE IF ANY DIFFERENCES.

17. HARD GOLD ON FINGERS AND IN MARKED AREA, 30-50 MICRO INCHES OF GOLD OVER 150-200 MICRO INCHES OF NICKLE MINIMUM.

18. BAKE BOARDS AT 250 DEGRESS f FOR 4 HOURS PRIOR TO SHIPMENT.

19. ALL VIA-IN-PADS (10.X AND 12.0 DRILLS) TO BE COMPLETELY FILLED.
PLANARIZED SMOOTH AND PLATED OVER ON SURFACE. USE SANBI NON-CONDUCTIVE EPOXY OR
EQUIVALENT FILL MATERIALS MINIMUM OF .0007 TO E PLATED ON SURFACE.
VIA-IN-PAD MUST INCLUDE WRAP REQUIREMENTS PER IPC 6012B.

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3x.325

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2x0

2x.177

3x.295

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