LAYER STACKING DETAIL REVISIONS Copper | Copper Dielectric REV DESCRIPTION DATE APPROVED Weight | Thickness | Material Layer Thickness Layer # Туре  $(Oz^{\overline{}})$  | (Mils)Type - Ply (Mils) Plate NOTES: 1.35 SIG 0.5 0.65 1. Specifications. A. Fabricate IAW IPC600, latest revision. Prepreg 58.00 B. Producibility study - It is the respondsibility of the supplier 0.5 0.65 SIG to conduct a thorough review of the artwork and media for Plate 1.35 manufacturability in the supplier's process compliance to all Total Overal Thickness: 62.00+/-10% Mils applicable specifications. Customer must be advised in Material Ordering Info (used in lieu of Fasttrak data) writing (in advance of manufacturing) of any changes, revisions, or Panel Size corrections made or recommendations to ensure conformance to Number Up standards, and of any specifications that cannot be met. Number of Parts Due D. This drawing is to be used in conjunction with the provided gerber and drill data when applicable. Prepregs Construction Added? Material Ply Specified E. All notes are "Unless Otherwise Specified." Material Type (ie Nelco-29, 370 HR, ...) FR4 2. Material A. FR4. B. Color to be opaque. 3. Soldermask Solder mask both sides with (green color) liquid photoimageable soldermask, 003 max. thickness. Soldermask over bare copper. (6X)45°X.025 Soldermask is allowed in via holes. 4. Drillina A. All hole diameters are finished sizes. B. All hole to be +/- .003 from true position unless otherwise specified. C. All hole diameters to be +/- .003 unless otherwise specified. D. An NC drill file has been supplied - see drill table. 00 0 000 0 (U) 5. Finish A. Plate thru with copper .0010 min to .002 max. thickness drill size dimension apply after plating. B. Use gold immersion over nickel. C. Finished boards shall not have nicks, scratches, voids, exposed copper, poor plating, all misdrilled holes. 6. Silkscreen A. Silkscreen using white non-conductive epoxy or equivalent (both sides). FAB NOTE B. No silkscreen allowed on exposed lands. C. Silkscreen must be a minimum of 3mm away form fiducial marks. D. Minimum clearance between silkscreen legend and vias, pads, or holes to be .005. E. Silkscreen is allowed in via holes. DRILL CHART: TOP to BOTTOM 7. Electrical Test ALL UNITS ARE IN MILS A. All boards shall be 100% electrically tested for opens/short at 10 volts. MIL-SPEC boards to be tested at 40 volts. FIGURE SIZE TOLERANCE PLATED QTY B. Apply test stamp in non-legend area on solder side of PCB. 12.0 PLATED 292 + 3 . 0 / - 10 . 0 C. Test is required on both sides of the board. + 3 . 0 / - 3 . 0 40.0 PLATED 96 **6** 8. Cleanliness 125.0 A. Boards shall be free of fiber glass dust or any other foreign material.  $\langle U \rangle$ + 3 . 0 / - 3 . 0 PLATED 4 B. Finished boards must conform to 0.01 MG/IN max NAcL ionic contamination  $\langle \dagger \rangle$ PLATED 150.0 + 3 . 0 / - 3 . 0 as meaxured by the omega meter 600SMD. 9. Packaging There shall be a max of 25 units per package, individually wrapped, and shipped in cardboard cratons with sufficient surrounding material to prevend shipping damage. 10. Bow and Twist Bow and twist to be .007 IN/IN or .090 max according to IPC-A-600D. 11. Inspection A. Automatic optical inspection of all layers required. B. The impedance should be controlled by stackup layer. 12. Inside corners should be rounded-off 13. Changes to board geometries and apertures are not allowed unless they are approved by customer. 14. Rounding is allowed on 90 degree corners with the size of standard routing bit. COMPANY NAME: FAB DRAWING ECIFIED DIMENSIO ARE IN INCHES ROHM SEMICONDUCTOR USA ROHM PROJECT NAME: DESIGNER: PTHVDC TOLERANCES SENSOR PLATFORM\_MULTISENSOR SHIELD BOARD CHECKER: INITIAL
DATE: 2015-09-25 FAB NUMBER NUMBER 4

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