

Board Fabrication Notes

1. BOARD SHALL BE MANUFACTURED AND TESTED PER IPC-6012, CLASS 2 SPECIFICATIONS.
2. ALL CHARACTERISTICS ARE SUBJECT TO INSPECTION UNDER THE MANUFACTURER'S INSPECTION OR QUALITY CONTROL SYSTEM AND IN ACCORDANCE TO IPC-A-600, CLASS 2 SPECIFICATIONS.
3. ELECTRICAL TESTING OF THE BARE BOARD IS NOT REQUIRED.
4. MATERIAL:
 - FR4 PER IPC 4101/21.
 - COPPER CLADDING FOR EXTERNAL LAYERS TO BE 2 OUNCE COPPER BEFORE PLATING.
 - OVERALL BOARD THICKNESS TO BE 0.062" +/- 0.003" AND IS INCLUSIVE OF ALL PLATING AND SOLDER MASK COATINGS.
5. GERBER FILE FORMAT IS RS-274-X, ABSOLUTE, ENGLISH, 2-5 LEADING ZERO SUPPRESSION. DRILL FILE FORMAT IS ASCII, ABSOLUTE, ENGLISH, 2-5 TRAILING ZERO SUPPRESSION.
6. PLATING:
 - ALL PLATED THROUGH HOLES SHALL BE COPPER PLATED TO A NOMINAL THICKNESS OF 0.0015" AND HAVE A MINIMUM THICKNESS OF 0.0012".
 - ALL EXPOSED COPPER SHALL BE TIN-LEAD PLATED AND FUSED OR SOLDER COATED TO A MINIMUM THICKNESS OF 0.0003" PER IAW QQ-S-571.
7. SOLDER MASK:
 - LIQUID PHOTO-IMAGEABLE BLACK SOLDER MASK SHALL BE APPLIED OVER BARE COPPER ON BOTH SIDES OF THE BOARD PER IPC-SM-840, CLASS H.
 - SOLDER MASK REGISTRATION SHALL BE WITHIN 0.005" AND HAVE A MINIMUM THICKNESS OF 0.001".
8. LEGEND:
 - WHITE NONCONDUCTIVE EPOXY INK CONFORMING TO A-A-56032 SPECIFICATIONS SHALL BE APPLIED TO THE COMPONENT SIDE OF THE BOARD.
 - LEGEND INK SHALL NOT BE PERMITTED ON EXPOSED PADS OR IN HOLES.
9. PROCESS ALLOWANCES:
 - CONDUCTOR WIDTH SHALL NOT VARY BY MORE THAN +/-0.002".
 - CONDUCTOR SPACING SHALL NOT BE LESS THAN 0.010".
 - PLATED THROUGH HOLES SHALL HAVE A MINIMUM ANNULAR RING OF 0.005".
 - DIMENSIONAL TOLERANCE FOR ALL HOLES IS +/-0.005".
 - POSITIONAL TOLERANCE FOR ALL HOLES IS +/-0.005".
 - FRONT TO BACK REGISTRATION SHALL NOT VARY BY MORE THAN +/-0.005".
 - MAXIMUM WARP AND TWIST ACROSS DIAGONAL CORNERS OF THE BOARD SHALL NOT EXCEED 0.0075" PER INCH.
10. ALL LAYERS INCLUDING THE DRILL AND TRIM VIEWS ARE SHOWN AS VIEWED THROUGH THE BOARD FROM THE COMPONENT SIDE.