

FABRICATION NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: PER IPC-4101/24
 - A. LAMINATE: TYPE GFN, GRADE A, CLASS 2, AND TYPE FR-4
 - B. ONE OUNCE FINISHED: HALF OUNCE BASE COPPER PLATED UP TO 1 OUNCE, OUTSIDE LAYERS.
 - C. BOARD THICKNESS IS MEASURED INCLUDING TOP AND BOTTOM SIDES FINISHED COPPER. ANY TIN, OR GOLD PLATING. SOLDERMASK AND SILKSCREEN LEGEND MUST NOT BE INCLUDED IN FINISHED BOARD THICKNESS.
2. ETCH TOLERANCES:
 - A. ALL EXTERNAL LAYERS CONDUCTOR WIDTH MUST BE WITHIN +/- .0015 INCH OR +/- 15% OF GERBER DATA, WHICHEVER IS SMALLER.
 - B. ALL INTERNAL LAYERS CONDUCTOR WIDTH MUST BE WITHIN +/- .0010 INCH OR +/- 15% OF GERBER DATA, WHICHEVER IS SMALLER.
3. BOARD MUST BE NC DRILLED USING DRILL DATA SUPPLIED.
4. DRILL TOLERANCES AND HOLE SIZES ARE FOR FINISHED BOARD:
ALL PLATED THROUGH HOLES TO .080 INCH ARE +/- .003 INCH.
ALL PLATED THROUGH HOLES OVER .081 INCH ARE +/- .005 INCH.
ALL NON-PLATED THROUGH HOLES ARE +/- .005 INCH.
5. ALL HOLES MUST BE REGISTERED WITHIN +/- .003 INCH FROM TRUE POSITION.
6. MINIMUM ANNULAR RING MUST BE .002 INCH.
7. PLATING:
 - A. PER MIL-C-14550, PLATED THROUGH HOLES MUST BE PLATED WITH .0008 MIN. TO .0012 INCH MAX. THICK COPPER.
 - B. FINISH: IMMERSION GOLD: 2 TO 8 MICROINCHES GOLD OVER 120-240 MICROINCHES OF ELECTROLESS NICKEL.
8. WARP AND TWIST OF FINISHED BOARDS MUST NOT EXCEED .007 INCH PER INCH.
9. SOLDERMASK: PER IPC-SM-840
 - A. SOLDERMASK BOTH TOP AND BOTTOM SIDES.
 - B. SOLDERMASK MUST CLEAR ALL LANDS SHOWN ON GERBER SOLDERMASK LAYERS.
 - C. COLOR GREEN AND SOLVENT FREE.
 - D. LIQUID PHOTO-IMAGEABLE MUST BE .0002 MIN. TO .0008 MAX. INCH THICK MEASURED OVER COPPER PLATING.
10. SILKSCREEN TOP SIDE USING A GLOSSY WHITE, NONCONDUCTIVE, EPOXY BASED INK. NO SILKSCREEN ALLOWED ON TIN-LEAD OR GOLD AREAS, ON PADS OR IN HOLES.
11. ROUTE BOARD OUTLINE, PER DRAWING DIMENSIONS.
12. VENDOR MUST ENTER VENDOR'S IDENTITY, DATE CODE AND ANY OTHER IDENTIFICATION MARKS ON ARRAY RAILS.
13. OTHER VENDOR NOMENCLATURE OR MARKINGS SHOULD NOT BE ETCHED OR SILKSCREENED ON BOARD WITHOUT PRIOR PERMISSION.
14. ALL VENDOR IN-PROCESS MARKINGS, QA STAMPS, ETC. MUST BE PLACED ON THE BOTTOM SIDE OF BOARD.
15. FINISHED BOARD MUST MEET UL94V-0 RATING AND RoHS COMPLIANCE.
16. DOCUMENTATION THAT MUST BE DELIVERED WITH BOARDS:
 - A. RoHS CERTIFICATE OF COMPLIANCE.
17. TRACE WIDTH AND LAYER SPACING MAY BE CHANGED TO ACCOMMODATE FABRICATION PROCESS BUT PRIOR APPROVAL IS REQUIRED BEFORE TRACE WIDTH OR LAYER SPACING CHANGES ARE MADE.