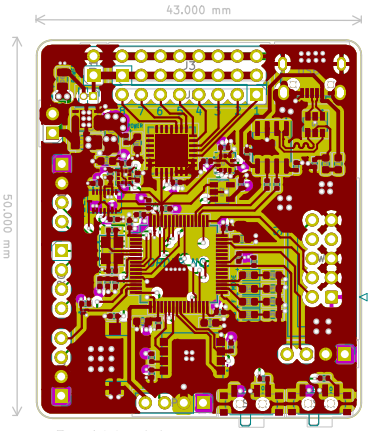
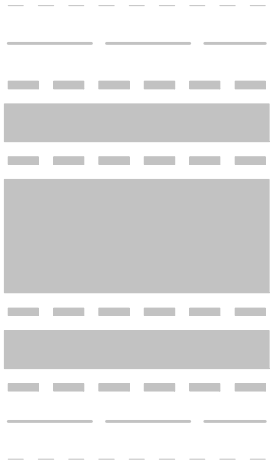
1. FABRICATE PER ANSI/IPC-A-600,IPC-QE-605, IPC-4101,IPC-4552 AND IPC-SM-840 SPECIFICATIONS.
2. MATERIAL: BASE MATERIAL LAMINATED EPOXY GLASS NEMA GRADE FR-4, NOM .062", COLOR NATURAL.
   NOM 1 OZ COPPER WEIGHT.  THICKNESS .070" MAX AFTER PLATING AND FINISHING.
   PREFER ROHS COMPLIANT PER IPC-4101 SLASH SHEETS #26 OR #83 OR #98 WITH
   MINIMUM TG 135 DEGREE C OR HIGHER, TD 300 DEGREE C OR HIGHER AND FLAME RATED UL 94V-0.
3. ALL DIMENTIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED
4. DIMENSIONAL TOLERANCES ARE: .XX=+/- .01; .XXX=+/-.005;
5. TOTAL THICHNESS OF PCB AFTER PLATING SHALL BE 0.0618" +/- 0.005"
6. SOLDERMASK BOTH SIDES OF BOARD OVER BARE COPPER WITH MATERIAL PER ANSI/IPC-SM-840,
   COLOR SHALL BE GREEN AND SOLVENT FREE
7. APPLY SOLDER PLATING WITH HOT-AIR LEVELING TO EXPOSED COPPER BOTH SIDES.
   LEAD-FREE SOLDER PREFERRED; LEADED SOLDER ACCEPTABLE.
8. APPLY SILKSCREEN TO TOP SIDE OF BOARD USING NON-CONDUCTIVE WHITE EPOXY INK. NO INK SHALL BE ON EXPOSED PADS
9. SEE SEPARATE DRILL FILE FOR HOLE LOCATIONS.
10. HOLE LOCATIONS SPECIFIED IN SEPARATE DRILL FILE TAKE PRECEDENCE OVER THIS DWG AND ARTWORK.
    CONTACT IIT BHUBANESWAR TO RESOLVE DIMENSION CONFLICTS BETWEEN DWG AND ARTWORK.
    NO ALTERATIONS TO GERBER FLES WITHOUT PRIOR CONSENT FROM IIT BHUBANESWAR
11. HOLE SIZES ARE SPECIFIED AS FINAL DIMENSIONS AFTER PLATING AND FINISHING.
    UNLESS OTHERWISE SPECIFIED ALL HOLES TO BE PLATED.
12. VENDOR TO PLATE HOLES AND EXPOSED PADS.
    VENDOR TO SPECIFY TYPE OF PLATING MATERIAL TO BE USED WHEN ACCEPTING ORDER.
13. IT IS VENDOR'S RESPONSIBILITY TO SELECT THE BASE MATERIAL TO YIELD THE SPECIFIED IMPEDENCE CHARACTERISTICS TO WITHIN +/-10%
14. ALL HOLES SHALL BE LOCATED WITHIN 0.003" DIAMETER OF TRUE POSITION OR OTHER TRUE POSITION
15. WARP OR TWIST OF BOARD SHALL NOT EXCEED 0.01 INCH PER INCH
16. REMOVE ALL BURRS AND BREAK SHARP EDGES 0.015" MAX
17. PLATED THRU HOLES & EXPOSED PADS SHALL BE TIN/LEAD PLATED 0.0003" TO 0.0005" THICK
18. ONLY VENDOR IDENTIFICATION MARK & ORDER NUMBER CAN BE ADDED ONLY AT THE SPECIFIED LOCATION (UNDER THE IC). AFTER ASSEMBLY IT SHOULD NOT APPEAR OUTSIDE
19. MANUFACTURER SHOULD NOT ADD ANY OTHER DATA EXCEPT ABOVE MENTIONED LIKE NAME, LOGO, DATE CODE, UL LISTING OR ANY OTHER MARKING TO ANY VISIBLE LAYER
20. AFTER ASSEMBLY TRIM SOLDER FILLETS AND COMPONENT LEADS TO 0.06" (MAX)
    BEYOND BOARD SURFACE ON BOTTOM SIDE.
21. BOARDS MUST PASS VISUAL INSPECTION PER IPC-A-600 CLASS 2
22. FINISHED BOARD MUST MEET UL94V-0 RATING AND ROHS COMPLIANCE
23. DOCUMENTATION THAT MUST BE DELIVERED WITH BOARDS:
    - CROSS SECTION REPORT (SPACING BETWEEN COPPER LAYERS AND COPPER THICHNESS)
    - ELECTRICAL TEST CERTIFICATION OF COMPILANCE (ACC. TO IPC-ET-652 CLASS 2)
    - CERTIFICATION OF COMPILANCE (BOARD HAS BEEN MANUFACTURED TO DRAWING REQUIREMENTS)
    - ROHS CERTIFICATION OF COMPILANCE

Notes:

1.) Hole locations are indicated in separate .drl file, included with the gerber package. That file takes precedence over this drawing.
2.) Board outline indicated in separate Edge.Cuts file, included with the gerber package. That file takes precedence over this drawing.
3.) Vendor to plate holes and exposed copper pads
4.) Board shall be

PCB dimentions: 43 mm x 50 mm x 1.57 mm



| Layer (Material) Type | Layer (File) Name | Thickness (mm) | Dielectric Constant | Notes |
|---|---|---|---|---|
| Silkscreen | F.Silk | 0.00762 | | |
| Soldermask | F.Mask | 0.0127 | 3.8 | |
| Copper | F.Cu | 0.035 | | [USB] 90 OHM DIFFERENTIAL IMPEDENCE: Layer 1: 10.28 mil trace width with 8 mil spacing are to be 90 ohm differential +/-10% |
| 2-2313 (Prepreg) | ----- | 0.1 | 4.05 | |
| Copper | GND | 0.0175 | | |
| FR4 (Core) | ----- | 1.265 | | |
| Copper | PWR | 0.0175 | | |
| 2-2313 (Prepreg) | ----- | 0.1 | 4.05 | |
| Copper | B.Cu | 0.035 | | |
| Soldermask | B.Mask | 0.0127 | 3.8 | |
| Silkscreen | B.Silk | 0.00762 | | |

Drill Map:

- 0.20mm / 0.008" (55 holes)
- 0.30mm / 0.012" (86 holes)
- 0.40mm / 0.016" (36 holes)
- 0.55mm / 0.022" (0 holes + 2 slots)
- 0.65mm / 0.026" (2 holes)
- 0.85mm / 0.033" (0 holes + 2 slots)
- 1.00mm / 0.039" (58 holes)
- 0.80mm / 0.031" (2 holes) (not plated)
- 0.90mm / 0.035" (4 holes) (not plated)