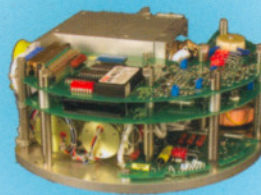




High Density Interconnect Printed Circuit Board Facility



Printed circuit Board facility was established at ECIL in the year 1972 to meet the PCB requirements of in-house Production for Atomic Energy, Defence, Telecom and other sectors. Over the years we are continuously updating our process and equipments to maintain the lead in the PCB Technology requirements.

Today we have upgraded our facility with State-of-the-art technology to manufacture HDI / Micro via PCBs. We produce proto type PCBs, Small Quantities and Medium Quantities with Committed delivery Schedules.

The facility is certified to ISO 9001:2000 Quality System requirements for its capabilities in Design and Manufacturing.

Technical Specifications

- Maximum Layer Count up to 16 Layers
- Minimum trace width / spacing 3 mil / 3mil (0.075mm / 0.075mm)
- Minimum via Pad size/ via hole size 18 mil / 8 mil (0.45mm / 0.2mm) for a PCB thickness up to 2.4 mm
- Minimum Board thickness 0.8 mm
- Maximum Board thickness 3.2mm
- Board thickness Tolerance $\pm 10\%$
- Through hole Aspect Ratio 12:1
- Outline tolerance ± 0.2 mm
- Max. Panel size 450x 600 mm
- Copper Thickness 18 to 70 Microns
- PCB Type Rigid, Rigid-Flex & Flex
- Material Type
 - 1) FR4 –Tg 140 to 180 degrees.
 - 2) Polyimide Rigid
 - 3) Rogers RO 4350; Taconic, Arlon
 - 4) Polyimide Kapton (Flex)
- Surface Finish
 - 1) Hot Air Leveling with solder(Tin Lead)
 - 2) Immersion Nickel/Gold(ENIG)
 - 3) Immersion Tin
- Solder mask Photoimagable Liquid Green Solder Mask (Glossy & Matte)
- Legend Print White color
- Profile Finishing CNC routing
- Electrical test
 - 1) On flying Probe tester, referenced to gerber file,
 - 2) On Bed of Nails tester
- Inputs acceptable
 - 1) Gerber files standard gerber (RS-274D) or Extended Gerber (RS-274X).
 - 2) Drill data in excellon format with tool list.
- Manufacturing standards JSS -52300, IPC-A-600G, IPC 6012B, Customer Standard.



Photo Plotter



CNC Drilling



Direct Metalization Process
(An alternate to electroless copper)



Full Automatic UV Exposure for Photo Printing in Class
10,000 Clean Room



Developing Machine



Automatic Pattern Plating Line
(Reverse Pulse Plating)



Wet Processing
Strip-Etch-Strip Line



Automatic Optical Inspection
(Inner Layer Inspection)



Chemical Cleaning/Oxide Treatment Line



Post Etch Punch System



Multi-layer Vacuum Lamination Press



Solder Masking Process



Hot Air Levelling Process



Bare Board Testing
(Flying Probe Tester)



Quality Assurance Test Facility



for further information please contact

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