Capabilities

The Amitron Corporation teams of professionally trained CAD/CAM engineers assure a seamless transition of your engineering data to the manufacturing floor. The following information outlines our engineering and manufacturing capabilities.

Process Options:

- Solder mask over bare copper (SMOBC)
- Gold tab plating
- Electroless nickel Immersion gold (ENIG)
- Immersion Silver
- Carbon ink
- Entek Organic Surface Protectant (OSP)
- Immersion tin
- Lead Free Hot Air Solder Level (LF-HASL)
- Solder mask: LPI & Thermal options available
- CNC skip scoring

Data Formats:

- Gerber 274D
- Gerber 274X (imbedded apertures)
- DXF
- PDF
- HPGL
- Auto cad
- ASCII or EIA NC drill files

CAM Capabilities:

- Dual photocircuit plotters
- Valor Genesis software
- Micro-modifications performed with customer approval

- Panel/array optimization available
- Pre-manufacturing design checks on every part
- Artwork generation from bare boards or blueprints
- Net list test fixture generation

PCB Process Capabilities:

Laminate Types: FR-4 (140Tg, 170Tg, 180Tg) (all UL94V-0 rated), RF and Teflon, Arlon, Getek, Rogers, Nelco and more! Thermal materials including Laird, Arlon, Ventec, Iteq and Chin-Shi, bonded to Aluminum or Copper.

Laminate Thickness: 0.003" to 0.250"

Copper Weight: ½ ounce to 20 ounce, finished

Layer Count: Single, Double, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20

Line & Space Widths: 0.003"/0.003"

Mechanical Process Tolerances

Minimum annular ring: .004"

Board edge to edge, routed: +/- 0.005"

Tooling hole to hole: +/- 0.002"

Tooling hole to edge: +/- 0.005"

Holes to copper registration: +/- 0.003"

Top to bottom registration: +/- 0.003"

Image line tolerance: 90% art work

Scoring tolerance: +/- 0.005"

Edge to copper: +/- 0.008"

Minimum Solder mask clearance: 0.002"

Minimum hole size: 0.008"

Minimum inside radius: 0.012"

Minimum trace width: 0.003"

Pad to pad clearance: 0.007"

Hole diameter: (plated thru)   +/- 0.0025"

Hole diameter: (non-plated up to .250")   +/- 0.001"

Board thickness: +/- 8%