



## **PCB Fabrication Capabilities**

An automated PCB fabrication process designed to enable you to benefit from our cost effective PCB fabrication capabilities. These integrated capabilities enable you to benefit from high quality services and yield.

Shax Engineering and Systems PCB fabrication capabilities include:

- Prototype to production quantities
- Quick turn around
- Design rule and net list check
- 2 – 40 layers capabilities
- 14:1 Aspect Ratio
- Maximum Panel Size 24" x 30" x 0.300"
- Impedance Modeling and layer stack generation
- Bind and buried Vias and Microvias
- Laser Drill Micro Vias
- Silver Filled Vias
- **Base Materials:**
  - o High Temperature FR4
  - o Getek
  - o Nelco 4000-13
  - o Nelco 6000
  - o Polyimide
  - o BT
  - o Ester
  - o Rogers 4000 Series
  - o Rogers 3010
  - o Rogers 5880
- High Temperature and low loss Epoxy
- BGA, Micro BGA, SMT, PTH and Edge Plating
- **Selective Plating Finishes:**
  - o Electroless Nickel/Immersion Gold
  - o HASL
  - o Organic OSP
  - o Hard & Soft Gold
  - o Immersion Silver
- **Solder Mask:**
  - o LPI(Most Colors)
  - o Dry Film
  - o SR1000
- **Specs and Tolerance:**
  - o Minimum Trace/Space: .003"/.004"
  - o Minimum Hole Size .008"
  - o Minimum Feature to Edge .010"
  - o Minimum Thickness Tolerance .005"
  - o Minimum Core Thickness .002"
  - o Plated Thru Hole Tolerance .003"
  - o Minimum Solder Mask Clearance 10%\*
  - o Controlled Impedance Tolerance .014"
  - o Minimum Pad to PTH