



AMERICAN CIRCUITS

PCB Manufacturing Capabilities

Design:

- PCB Layout
- Circuit Design
- Software and Firmware
- Mechanical Design
- Product Design
- Reverse Engineering

Board Fabrication:

- 1 to 20 Layers
- Plating up to 10 oz. copper
- FR4, FR5, High Temp Teflon, Kapton, Polyimide, and exotic materials
- Flex and Rigid Flex
- Blind, Buried, and Blind Buried Vias
- Selective Gold and Total Gold

Printed Circuit Assembly:

- SMT and Thru Hole Technology
- Placement Speed Up To 20,000 Components Per Hour
- Lead or Lead Free Solder
- 0201, BGA, and Micro BGA Capability
- Large Board Capability
- Selective Solder
- Component Programming (on and off board)
- Automated Optical Inspection (AOI)
- Labeling, Serialization, and Bar Coding
- Conformal Coating, Encapsulation, and Potting

Cable Assembly:

- 0-36 AWG Wire
- Cable, Coax Cable, and Fiber Optic Cable
- Automated Wire Prep and Termination
- Wire Marking
- Harness Assembly

Upper-Level Assembly:

- Enclosures, Wire Harnesses
- Electro-Mechanical, Hydraulic, and Pneumatic Assembly
- Keypads and Displays
- Box Builds

Testing:

- Bare Board Electrical Test
- Automated Optical Inspection (AOI)
- X-ray Inspection
- Custom Test Fixtures
- Functional Test
- Thermal Cycling
- Burn-In

Additional Capabilities:

- Supply Chain Management
- Procurement & Kitting Services
- Vendor Managed Inventory (including Just-In-Time and Kanban)
- Drop Shipping
- Thermocouple Welding
- Bare Board Scanning / Replication
- Quick Turns
- Rapid Prototyping

Certifications and Standards:

- IPC Class I, II, and III Capability
- IPC 7711/7721 Compliant
- AS9100 Compliant
- ANSI/ESD s20.20 Compliant
- ISO 9001 Certified
- ITAR Registered
- UL Listed
- RoHS Compliant
- Build to Industrial, Automotive, and Mil-Spec Standards
- Better than 99.5% On Time