

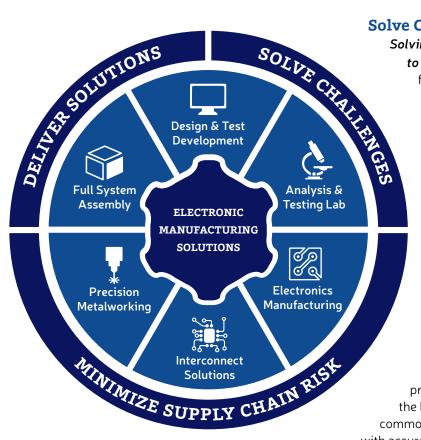
Electronic Manufacturing Solutions For Life-Saving And Mission Critical Products

Trusted Ingenuity. Proven Reliability.**

Deliver Solutions

Delivering a full spectrum of solutions. Life-saving and mission critical products are highly complex and require a sophisticated level of manufacturing to ensure they can reliably perform every time - all the time. Our mission at IEC Electronics is to minimize supply chain risks and solve complex technical challenges with our unique set of advanced capabilities.

IEC is a manufacturing partner who is focused on your complex challenges. Our manufacturing capabilities include PCBA, cables, metal enclosures, and engineering services for design optimization, full system assembly, product configuration, and fulfillment directly to your end customer. We are committed to life-saving and mission critical products and understand that field failure is not an option.



Solve Challenges

Solving challenges by helping to accelerate your time to market. Ensuring quality and performance is critical for business success. IEC provides engineering solutions to design products and develop customized stress testing platforms to simulate a product's end application.

On-site advanced laboratories provide time-sensitive solutions to any technical challenge - including counterfeit component detection, complex failure analysis, and advanced manufacturing process development.

Minimize Supply Chain Risk

Minimizing risk with vertical manufacturing.

Our in-house fabrication of critical key commodities provides a complete transition from concept to full production and simplifies your supply chain. IEC controls the lead times, cost, and product quality for each commodity - ensuring your product comes together with accuracy and efficiency.

SBA

Product Examples

AS9100 Aerospace ISO 13485 Medical Devices

ISO 9001 Quality ISO 14001

Medical • Infusion pumps • Resuscitation systems • Imaging systems • Diagnostic equipment **Aerospace & Defense** • Encrypted satellite communication • Weapons systems • Flight controls **Industrial** • Ruggedized Industrial controls • Remote inspection equipment • Heavy duty transport

Nadcap

Electronic:







Electronic Manufacturing Solutions For Life-Saving And Mission Critical Products

Advanced Capabilities to Solve Challenges and Minimize Supply Chain Risk.



Full System Assembly

- Vertical manufacturing of PCBA, metals, and interconnect solutions for complex electronic mechanical and electro-mechanical assemblies
- Full product serialization and traceability down to the component level
- Reliability testing and custom software/hardware system configuration
- · Logistics management and direct order fulfillment to the end customer
- Upgrade, depot and warranty repair services

Design & Test Development

- · Component selection and lifecycle management, including product modifications for obsolescence
- · Electrical design services including schematic capture and layout design
- Product development for manufacturing cost reduction and feature enhancements
- · Automatic optical inspection (AOI), 3DX-Ray (AXI-CT), Flying Probe
- · Functional testing for digital, analog, JTAG compliant devices, and RF from LF to SHF bands
- Custom production ready functional test design including hardware, software, firmware



Analysis & Testing Lab

- · ISO 17025 certified lab providing services for components, PCBA, cables, and full system assemblies
 - Risk Mitigation and Parts Screening - Destructive Physical Analysis (DPA)
- Scanning Electron Microscopy (SEM)

- Failure Analysis
- Material and Product Qualifications
- Decapsulation

- Testing Capabilities
- Cross-Sectional Analysis
- FTIR Spectrometry
- Dage X-Ray Inspection

Electronics Manufacturing

- FDA registered and IQ/OQ/PQ support for medical products
- · Leaded or lead-free soldering for IPC-A-610 or J-STD-001 Class 3
- In-house conformal coating: acrylic, silicone, polyurethane and parylene
- · Automated Functional Testing: boundary scan, RF, HASS, vibration and dynamic ESS testing
- · Product Acceleration Center dedicated for NPI including quick turn prototypes or pre-production qualifications





Interconnect Solutions

- Dedicated engineering staff to custom design and fabricate molded cable assemblies
- 3D Printer technology for quick turn prototype over molded cables
- Custom EMI/RFI Shielding back shells terminated with over mold boots and strain reliefs
- Over molded cables with custom material compounding
- RF/VSWR testing to super high frequency (SHF)
- Harnessing for complex assemblies with multiple breakouts and junction points

Precision Metalworking

- · Solid works 3D modeling and Finite Element Analysis (FEA)
- · CNC machining, sheet metal fabrication, laser cutting, welding (GMAW, GTAW, robotic), and resistance welding
- Clean room environment for FOD control
- · In-house design engineering services such as chassis and enclosure design
- · Plating, painting, graining, and silk screening finishing services



