



Excellence Across the Board

MPI has delivered excellence in circuit card assembly and box build Electronics Manufacturing Services (EMS) to the Aerospace and Defense industry for decades. As a woman owned and AS9100 certified contract manufacturer specializing in RF technology, count on MPI to deliver on mission critical systems.

Leading Edge

- ▶ Four decades of experience in high-mix reliability manufacturing
- ▶ State-of-the-art high volume SMT lines
- ▶ Seasoned engineering talent: RF, DFM/DFT, electrical, industrial, mechanical
- ▶ Test capabilities: ATE functional test, functional fixture designs
- ▶ Analog, digital & RF test services
- ▶ Paperless factory with forced router manufacturing execution system
- ▶ Long-term and highly-trained employee population
- ▶ Woman-owned and capitalized for growth

Quality

- ▶ ISO 9001, ISO 13485, AS9100C, ITAR/UL, IPC-A-610 / J-STD-001 Class II and Class III
- ▶ Component and product traceability to CCA level serial number
- ▶ Supplier management program insures flow down compliance
- ▶ Lean disciplines drive continuous improvement & streamlined manufacturing
- ▶ Real-time DPMO analytics
- ▶ GIDEP and counterfeit protection plans in place

Flexibility

- ▶ Volume flexibility from prototype and pilot through production
- ▶ Significant CCA and box build capacity available
- ▶ Investment in feeder set up carts and reel feeders enables quick turn transitions
- ▶ Automated, climate-controlled storage towers shorten kitting times
- ▶ Parts X-ray machine controls attrition and enhances line productivity
- ▶ Supply chain designed to flex with demand variation
- ▶ Immediate ECO cut-in facilitated by dedicated program manager
- ▶ Focus on a select customer base allows tailored service and superior response

Microboard Processing Inc.

36 Cogwheel Lane, Seymour, CT 06483
(203) 881-4300 | www.microboard.com



Our Facility

Meeting our customers' critical EMS needs with **the right combination of technical expertise, equipment and software.**

- ▶ Highly trained staff; extensive engineering experience
- ▶ Specialty laminates, sophisticated board stackups
- ▶ Tight geometric spacing, blind/buried vias
- ▶ Design for manufacturability and test
- ▶ NPI to full volume production
- ▶ System integration, repair depot
- ▶ Failure analysis, root cause mitigation

MPI can manage all facets of your manufacturing needs with our **best-in-class equipment**, including:

- ▶ Fuji NXT III SMT capable of 03015 chip placement
- ▶ Automated Climate Controlled Inventory Towers
- ▶ Koh Young Solder Paste Inspection
- ▶ Vitronics Soltec XPM3m Convection Reflow Ovens
- ▶ Mirtec Automated Optical Inspection Systems
- ▶ Erska Selective Solder
- ▶ On-site Nitrogen Generation
- ▶ Electrovert Aquastorm 200 Aqueous Cleaner
- ▶ Vitrox V810 Series II 5D X-Ray Laminography System
- ▶ Scionscope X-6000 2D X-Ray
- ▶ Asymtek 920N BGA Underfill
- ▶ Thermal Chamber
- ▶ IBL Vapor Phase System
- ▶ Flex Dip Capabilities and Package on Package (POP)

Case Studies

Case Study #1

Problem: Yield Issue with "RF Notch Filter" performance

Investigation: MPI determined a design issue

Solution: Provided feedback utilizing RF Sim tools, demonstrating "notch" was off center

Tasks performed:

- Collected multiple data points via simulations to demonstrate design changes
- Collected statistical backup to support these changes

Customer feedback:

- Critical schedule was met to keep the program on schedule to the "Military Theater"
- Customer realized \$350,000 in savings in potential scrap

Accolades: MPI received "most valued supplier" award

Case Study #2

Problem: A high performance packet data analysis server, in production with another EMS provider, was experiencing substantial field failures (32 layer PCB, 3300+ components)

Investigation: MPI was asked to investigate failed units

Solution: X-ray laminography (2D and 3D), component de-lidding, schematic debugging

Result: Microprocessor high temperature failure mode root cause determined. Large BGA (43mm x 43mm) recall replacement program initiated; alternate EEPROM identified for customer (selected)

Find out what MPI can do for you!

Microboard Processing Inc.

36 Cogwheel Lane, Seymour, CT 06483
(203) 881-4300 | www.microboard.com