

TEST & PROJECT ENGINEERING

"DEDICATED TO CUSTOMER SATISFACTION"

UEI has developed test strategies for a wide range of products, giving our engineers extensive experience that is used to develop comprehensive test methodologies for your product. Test development can occur in parallel with your product development team, or during product startup. We can suggest changes to your product to help test it more completely, faster, and at less cost.

Services Include:

- Test strategy development
- Design for testability (DFT)
- In-circuit test (ICT)
- Flying Probe
- Automated optical inspection (AOI)
- X-ray inspection
- Automated functional test using rack and stack equipment
- Automated functional test using embedded processor technology in stand-alone test fixtures
- Bench testing

In addition to our test fixture design and construction services, UEI provides high quality maintenance, repair and upgrading of your test fixtures and test procedures.

We also provide comprehensive Project Engineering services. The Project Engineer – as the dedicated technical leader of your project team – focuses on product realization, leading other members of our manufacturing group, and is responsible for all technical aspects of your projects, including:

- New product introductions
- Detailed BOM analysis to ensure proper component usage
- Product change analysis and implementation
- Project document control
- Product cost reduction initiatives
- Product manufacturability review and risk analysis using DFM guidelines with feedback
- PCB panelization for optimized process flow
- CAD/CAM software generated SMT machine programming and documented process controls
- Continuous process flow
- Custom assembly fixtures
- Data supported process improvements
- Assurance that all customer requirements are realized during the manufacturing process





NPI-PLUS

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At Universal Electronics, we have learned a thing or two after 30+ years of excellent electronic contract manufacturing in the US. We realize that it takes a team commitment and investment to bring incremental VALUE for our clients throughout a products life cycle.

What is NPI-PLUS?

NPI-Plus is a FAST-TURN PCBA prototyping organization that is re-defining the expectations of how prototype board assemblies are built. NPI-Plus has invested in design and BOM analysis tools along with state-of-the-art manufacturing equipment to bring your new products to market quickly, and cost effectively!

Many organizations can do prototype assemblies, but NPI-Plus is designed to provide the enhanced value to our customers.

- Dedicated NPI manager and manufacturing team, and state of the art equipment
- Direct support from manufacturing and test engineering team, dedicated supply chain personnel
- Valor[™] software and formal process for Design for Excellence (DFF, DFM, DFT)
- SiliconExpert[™] software for complete Bill of Material (BOM) analysis (RoHS, REACH, etc)
- SPEA Flying Probe™ for fixtureless testing, AOI, and X-ray is standard in all NPI-Plus programs
- Ramp-to-volume strategies with seamless transition

How does NPI-PLUS bring you value?

The goal is to be involved early in the NPI process so that manufacturing issues are addressed in the design phase where it is far more cost effective to resolve issues. You can work with our team in a variety of ways, services include:

- EARLY stage material and concept Design Review
- NPI and Prototype Labor-Only and Turnkey Quotes
- FAST-TURN:
 - o Turnkey quotes in less than 48 hours
 - o BOM entered into ERP system within 24 hours
 - o All material on order within 48 hours from BOM entry
 - o Material availability date within 5 days of BOM entry
 - o From material dock to assembly ship is 5 days
- Formal post build reviews

Founded in 1980, UEI is a privately held and full service electronics contract manufacturer that is registered for ISO 9001:2008 and ISO13485:2003 in Whitewater, WI and ISO9001:2008 in East Troy, WI. With almost three decades of manufacturing excellence, UEI has become the leading provider of contract manufacturing services for many industries, including: Medical, Industrial, Telecom, Laboratory, Consumer, Lighting, and Military/Aerospace. UEI employs approximately 300 people at two state-of-the-art facilities in WI.

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