

*Our processes are lean and designed to align with customer expectations.*

## PCB Layout – Design

- Standard Printed Circuit Board layout; no limit to layer configurations, Rigid-Flex and Flex
- Sequential lamination, Blind/Buried vias, Skip Drilling, Buried Capacitance, Micro-Vias, HDI, Impedance Control, and High Speed Digital designs to GHz+ on FR4 and advanced high performance material
- Chip-on-Board, Multi-Chip Modules, Die Attach
- Pre-layout thermal & stack-up planning, controlled stack development and multi-layer aluminum & other metallic PCB's
- High-speed digital designs to GHz + on FR4 and high performance materials
- Pre-layout simulation and analysis services, EMC/EMI and SI analyses

## Areas of Expertise

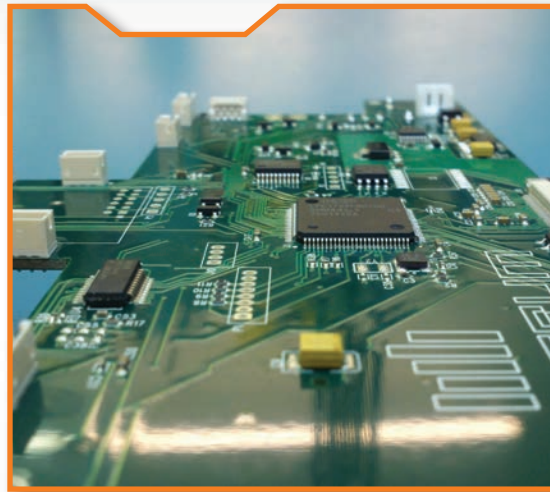
- Memory, DVI, Ethernet, USB2/3, PCI, PCI-X, all current DIMM DDR memory platforms
- RF Signal Design/RF Antenna Design
- Backplane/Frontplane Design

## Capabilities

- Termination and topology strategies
- Stack-up and impedance analysis
- Post-layout simulation and analysis verification
- DFM reports and feedback on design

## Software Platforms

- Cadence Design Systems- Allegro/OrCAD Capture/OrCAD layout
- Cadence Concept HDL
- Altium Designer
- Mentor Graphics- PADS Logic and DX Designer for PADS Layout



## Hardware & Software Engineering Services

TouchPad Electronics' strategic partnerships allow for an integrated solution to your hardware and software design needs. A large team of engineers in several disciplines are ready to take your project through the design process to finished product.

## Software Development Platforms

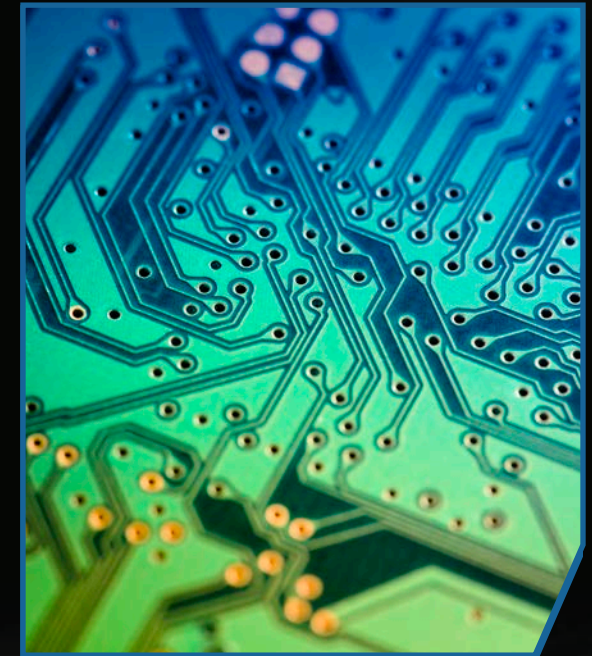
- Desktop programming for Windows, Linux and Macintosh
- Embedded systems design (C, C++, C#)
- Mobile applications software for Android and IOS

## TouchPad Electronics, LLC

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*Responsive, Accurate, Fast*



PCB Design & Layout

Quick-Turn Prototype &  
Short-Run Production Assembly

Hardware & Software  
Engineering



## Our Capabilities

TouchPad Electronics serves the who's who in medical, commercial, industrial, consumer, and some of the worlds most advanced research organizations. When quality, delivery and value are prime factors, **TouchPad is the choice.**

### Offerings

- PCB Layout and Design
- Quick-Turn Prototype & Production Assemblies
- Hardware and Software Engineering

### Low Volume-High Mix Production

- Dedicated and agile production lines using the latest automation equipment
- Utilizing the latest equipment such as full forced convection ovens, screen printers with paste inspection and selective soldering machines to ensure quality and repeatability
- Flexible placement machines capable of uBGAs and 0201s
- Automated Optical Inspection, X-Ray Inspection, and functional test that confirm quality
- Automatic Screen Printers with paste inspection, multi zone forced convection ovens, and selective soldering machines that ensure repeatability
- Programming and test fixture design
- Box build and other value added services

## Quick-Turn Prototype & Short-Run Production Assembly

### Our Prototype Service Sets Us Apart

TouchPad Electronics is first and foremost a prototyping and low volume facility, staffing only the top talent electronic technicians and engineers in the Engineering Technology field to execute on your assembly projects. We make quality our number one priority.

### What you can expect from TouchPad Electronics

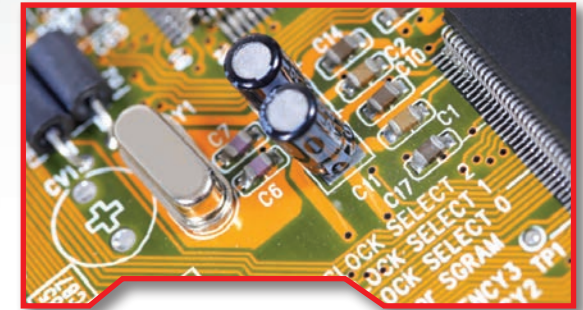
- An unsurpassed level of service, from the time you send us your files through the delivery of your finished assemblies
- Effective communication and project management throughout your entire project
- Focus on quality and on-time delivery
- Aggressive delivery dates with 3 to 5 day turns
- Optically inspected assemblies, ensuring a quality product
- Full engineering review on the front end of your project

*When quality, delivery and value are prime factors, TouchPad is the choice.*

### Flex/Rigid Flex Manufacturing

- Receive Flex/Rigid Flex prototypes in as few as 5 days
- No blade tooling or steel tooling charges for prototypes
- FPC test fixture design

*It is our mission to be flexible and adaptable.*



### Quick-Turn Assembly

Our approach is simple: we don't impose rigid requirements that can add unnecessary time to your project. Instead, our processes have been developed around our customers. It is our mission to be flexible and adaptable. We analyze each job throughout the production process for any discrepancies, and work with you to resolve immediately to keep your build on schedule. We will document these changes in our DFM report to be addressed on your next iteration or production run.

### All assemblies are built in a lean environment

Using our ISO 9001:2008 quality management system, TouchPad Electronics is process driven to ensure your design is sound and your build runs smoothly. All assemblies are built using our automated equipment and IPC certified technicians to the most rigid quality standards, allowing our customers to troubleshoot engineering issues in their new designs, rather than workmanship issues.

