

Custom Electronic Design

From prototype to production rely on M Squared



For over 30 years M Squared Electronics has offered clients full product design capabilities. We can take your product from initial specification to a completed production ready prototype, and we can do that quickly.

Let M Squared become an extension of your company providing engineering services to decrease overhead while maintaining quality and service.

M Squared offers in-house hardware and software design services using industry standard tools. We can handle the complete design including:

- Schematic Capture
- PCB Layout
- BOM Generation
- Firmware Design
- Debug
- Parts Procurement
- Prototype
- Production Assembly

Our Process

For schematic capture and PCB layout, we utilize p-cad, OrCAD and Altium Designer. We generate Gerber and Excellon file formats used by all leading PCB manufacturers in the production of circuit boards. Our capabilities include a full array of design types including Multilayer and SMT. Documentation is provided in the form of netlists via PDF format or in native p-cad, OrCAD or Altium Design files. We can also supply DXF files of any mechanical drawing(s) required. If needed, we can import your CAD files in any of the above formats.

We utilize c, c++, and assembler for all software development. Our engineers have experience with programming, debugging, and development tools for x86, 8051, PIC16, PIC18, AVR8, AVR32, 68XX chipsets. If your design requires other chipsets not listed, please let us know. Software design experience includes motor control, PID loops, sensor linearization, signal processing, CAN bus applications, USB, audio, and many other real-time applications.

Software Design Experience

- Motor Control
- PID loops
- Sensor linearization
- Signal processing
- CAN bus applications
- USB
- Audio
- And many other real-time applications

Quality Production - Fast Turnaround

A key advantage to selecting M Squared Electronics for your project is the ability to transition from prototype to full production. We utilize a custom designed job control system that allows us to create and manage bills of materials, assemblies, component information, purchasing, and inventory control. Using DFM (Design for Manufacturability) combined with over 30 years of experience, the workflow from the design stage to production proceeds with ease and results in a robust, high quality assembly.

We have an extensive collection of test and lab equipment from major suppliers such as: Tektronix, Lecroy, Wavetek, HP/Agilent, Fluke, and Schaffner.

The M Squared Electronics advantage is our vertical integration, full service design and production capabilities, along with fast response times.

Contact Us For Proposals

215-945-6658 or info@msquaredelectronics.com