



From Concept to Commercialization

Electronic Systems Design Consulting

Logic Tectonics is a strategic partner for organizations and individuals seeking exceptional electronic system design, development and commercialization services.

Areas of Expertise

Market Sectors

- Medical
- Military
- Consumer
- Industrial
- Communications
- Automotive
- Prosumer

Technologies

Circuit Boards

- Digital
- Analog
- High Density

Integrated Circuit Design

- FPGA
- CPLD
- ASIC
- SoC

Wireless

- Bluetooth
- IR
- WiFi
- Cellular

Video

- Digital
- Processing
- Analog

Software

- Embedded

Electronic Systems Design Consulting

Engineering On Demand

Logic Tectonics is an electronic technology development service specializing in new product design, certification, and introduction to manufacturing. We partner with emerging entrepreneurs and established corporations to provide local, reliable, expert engineering resources.

We offer clients manufacturing options difficult to access on the global market, including:

- Short term production runs
- Low to mid-range volume
- Fast turnaround

Service Options

Whether you need a single integrated circuit or an entire project designed and managed, we are committed to helping you bring your concept to consumer.

Technology Partnerships

The Tectonic team can provide engineering expertise necessary to develop and deliver the technology your new product needs.

Management Partnerships

The Tectonic team can provide expert guidance from high level project management to hands-on administration of product development and testing tasks.

Fully Functional Facility

Our fully equipped lab means we can support your new product through every stage of development – from concept to design to manufacturing. Capabilities include:

- Design Testing
- Debugging
- Prototype Testing

Offsite Efficiency

Tectonic team members primarily work remotely. Minimizing time at client sites and operating from our own facility promotes efficiency, reduces costs, and eliminates client-side consultant hosting resource allocations.



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Technical Services

Integrated Circuits and Circuit Boards

We provide the design, development, coding, simulation testing and debugging for new integrated circuits, circuit boards and related systems. Service highlights include:

- Requirement, Design and Test Specifications
- Design Reviews, Debug Strategies
- Board Level and Integration Testing
- Simulation Test Bench Creation

FPGA / ASIC Integrated Circuits

- Algorithm Modeling and Development
- Commented VHDL or Verilog RTL Code
- Embedded Processor Subsystems and Custom IP/Interfaces
- Synthesis, Place and Route

Circuit Boards

- Schematic Generation / Board Layout
- Processor, Memory, and IO Subsystems
- Board Level Integration Testing

To ensure the successful transition of a newly developed products to manufacture, we will also conduct reviews on site at contract manufacturers as needed.

Intellectual Property Development

We offer development and design verification services for IP technologies, including:

- Bus Interfaces (PCI, SPI, Processor, ASYNC, SYNC)
- Memory Interfaces
 - SRAM,SSRAM,DDR,LPDDR,HyperRAM,QDR
- Video Interfaces and Video Processing Modules
- Control Interfaces, Control Loops
- Filters (IIR, FIR, custom)
- UART, I2C, SPI, CAN, Custom Protocols
- Networks, Ethernet

Software and Firmware

We perform development and verification for software and firmware, including:

- ANDROID, iOS
- Zypher, uCOSII, FreeRTOS, C Loop w/IRQ
- Windows Applications (Visual Basic / C++ / C)
- Embedded Drivers
- Embedded Applications

Consulting Services

Project Management

As a collaborative partner on your project management team, we will perform key reviews and implement vital process controls inherent to successful product development, including:

- Concept Viability Reviews
- Design Reviews
- Schedule Review / Management
- Process Management
- Bug Tracking

We can also serve as the technical liaison between engineering and manufacturing to support a successful transition from design to manufacture.

Product Management

Our objective as a product management partner is to ensure your new product is viable and reliable. In this role we will conduct and coordinate crucial quality control milestones, including:

- System Failure Mode and Effect Analysis (SFMEA) Reviews
- Design Failure Mode and Effect Analysis (DFMEA) Reviews
- First Article Inspection

We can also leverage our overseas inspection partnership to support international supply chain quality assurance, facilitating the manufacture of your new product.

Experience You Can Count On

Our consultants are all veteran engineers with 10 to 20 years of experience in the field. The Tectonic team has been supporting product innovation in the technology sector for more than 20 years.

Contact us today to arrange an initial consultation.

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