



## Realizing your envisioned solution.



In today's world of connected devices, customers are no longer satisfied with great performance of individual parts, but expect seamless and flawless performance throughout a holistic system. Choosing a partner who can translate these needs into breakthrough technologies has never been more critical.

Logic PD, a Compass Electronics Solutions Company, combines a highly skilled, full-service team of experts in design and systems with electrical, software and mechanical engineers. When our award-winning designers work seamlessly with our experienced engineering team, the result is synergy that propels clients' businesses beyond their expectations.

### DESIGN

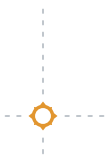
- Product design
- Design research
- Interaction design
- Industrial design

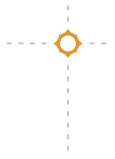
### CERTIFICATIONS

- ITAR Registered
- ISO 9001
- ISO 13485
- FDA 21 CFR 820 Registered

### ENGINEERING

- System engineering
- Mechanical engineering
- Test development
- Software engineering
- Electrical engineering
- Device technology





We operate as an extension of your team and tackle your most complex problems.



### DESIGN CAPABILITIES

With nearly 60 years of product design experience, Logic PD has the expertise to guide you in putting together all the pieces to make a great user experience.

#### Design Research

- Contextual inquiry
- Ethnographic studies
- Co-discovery research
- Persona development
- User experience models
- Collaborative design
- Scenario development
- Trend analysis

#### Interaction Design

- Graphical and natural UI design
- Physical interface & visual design
- Heuristic analysis
- Interface prototyping
- Usability testing

#### Industrial Design

- Concept development & visualization
- Platform strategy
- Competitive product & market analysis
- Compact product packaging
- Wireless technology integration
- Product identity and graphics
- DfX and sustainable design
- Class A surface dev. – Pro/ENGINEER

### ENGINEERING CAPABILITIES

Our firm grasp on the latest technology, including embedded systems and connected device development, helps us solve tough technical challenges when others fear them.

#### Systems Engineering

- Cross-functional technical leadership of complex system development
- Requirements management
- Human factors and usability
- Risk management
- Systems integration and testing
- Regulatory expertise

#### Mechanical Engineering

- Material selection
- Electronics packaging
- Rugged and sealed enclosures
- DfM and design for assembly
- Thermal simulation and analysis
- Complex mechanisms
- Rapid prototypes
- Regulatory & certification testing

#### Electrical Engineering

- Electronic system architecture
- High-speed digital and analog design
- Single- and multi-core microprocessors from a 8- to 64-bit
- Single- and multi-radio RF integration
- Optimized battery-powered systems
- Single- and multi-touch user interfaces
- Digital audio and video systems
- Networks and communication
- Signal processing
- Signal integrity simulation
- High-complexity PCBA design
- FPGA design & simulation
- Microprocessor subsystem design

#### Software Engineering

- Architect, design and develop for: 8- to 64-bit processing systems C, C++, C#, Java, and other languages
- Bare metal, uCOSII, freeRTOS, Linux, iOS, Android, and Windows

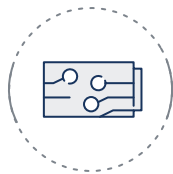
#### Test Development

- In-circuit, Flying Probe, AOI
- Functional (board & system level)
- Environmental stress test

#### Device Technology

- Fast boot
- Battery power design
- Thermal/Power management
- DSP and PCB design
- SOM embedded & connected devices

### MORE SOLUTIONS FROM LOGIC PD, MAC, QUALITRONICS, AND PROTECH



**Embedded Products**



**Cable & Wire Harnesses**



**Electronics Manufacturing Services (EMS)**



**Box Build & Custom Kiosks**



**Supply Chain & Logistics**

Learn more about Logic PD's capabilities at [LogicPD.com](http://LogicPD.com)

*Logic PD, MAC, Protech and Qualitronics have teamed up to form Compass Electronics Solutions: The premier partner for the design, development, manufacturing, and support of the world's most innovative products.*



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