Embedded Software Design

Indesign has extensive embedded software design experience that can help get your product to market quickly. Our product design experience includes consumer, medical, industrial control, military, automotive, and computer peripheral devices for clients ranging in size from start-up to Fortune 100 companies.

Indesign software engineers are experienced with many different microprocessor platforms, ranging from 8-bit micros running basic applications to 32-bit micros running Linux or Windows® Embedded OS for driving touch-screens and high resolution graphical displays. Indesign specialists can integrate sophisticated video and audio algorithms into DSP devices to support enhanced user experiences. Our engineers develop devices implementing a wide range of communication protocols: USB, Ethernet, UART, SPI, I2C, and RF including Bluetooth®, Bluetooth Smart (BLE), ZigBee®, WiFi, cellular and custom RF protocols.

Our embedded software team works with you throughout your entire product design cycle. At Indesign, we listen to your product concepts and help define feature requirements and create system architectures. We provide test code used by many disciplines: by the hardware design team to prove in PCB designs, by the factory to prove in production hardware, by system testers to prove in product operation and by qualification bodies to obtain certification approval. Whether you need a one-of-kind prototype or a high-volume product, our embedded software team will develop the system appropriate for your needs.

The strength of Indesign’s software expertise lies in the team of experienced developers that work together, sharing our design experiences and constantly looking for opportunities to improve our ISO-9001 certified quality management system.

### Microcontroller Software
- Embedded Linux
- Android
- Windows Embedded OS
- ARM Cortex
- Multi-threaded applications
- Low power
- Sensor interfaces
- Bootloaders
- Board support packages
- Graphical user interface

### DSP Software
- Video
- Audio
- Digital filters
- Algorithm porting

### RF Software
- Bluetooth / Bluetooth Smart (BLE) / Bluetooth Smart Ready (Dual Mode)
- ZigBee / 802.15.4
- GPS
- WiFi
- Cellular
- Custom RF protocols

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*ZigBee and Windows are registered trademarks owned by their proprietors. *Bluetooth is a registered trademark owned by its proprietor.

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About Indesign:

Indesign is a multi-discipline engineering design firm that provides full turnkey electronic product development to allow clients to get their new product ideas into the market quickly. Indesign offers complete product development capabilities, starting with a product concept and finishing with a ready-to-manufacture design. Indesign has an ISO 9001 certified quality management system and a proven track record for on-time, on-budget, high quality product realization.

Indesign provides specific design engineering services and expertise in electrical design, RF/wireless design, embedded software design, and mechanical design. Indesign also provides engineering services and expertise in a variety of other technical areas including systems engineering, human factors, project management and product validation testing. Indesign engineers can complement a client’s in-house design engineering staff, working in partnership with clients on joint development projects.