

Intelligent Instrument Design

Custom Single Board Computers**8 & 16 bit CPU's & MCU's****Intelligent Instruments****Dedicated Controllers****CMOS Battery Powered Systems****C & C++ Programming****Real-time Embedded****Real-time ROM Based****New Product Development****Mechanical Case Design****Technical Software Training**

Custom Single Board Computers (SBC) have been designed around Intel, Signetics, Infineon, National Semiconductor, and Zilog CPU's and MCU's.

In addition to the processor, the SBC's typically include CMOS RAM, EPROM or flash memory, analog sensors and amplifiers, A/D converters, programmable counter/timers, PWM output, serial and parallel I/O, switch or keypad input, LCD and audible output, and power control circuitry.

Hardware and software are designed to maximize battery life via selecting low power components, processor sleep or idle mode, reduced processor speed, reduced system voltage, and powering on/off peripheral chips as needed via software control.

Protel DXP is used for end to end EDA from schematic capture, through simulation, to PCB design and fabrication. A variety of C & C++ compilers and other development tools are used for software development.

The principal has been programming in C since 1984, and C++ since 1991. DeepSoft, Inc. focuses exclusively on C & C++ analysis, design, and programming for engineering, scientific, medical, and ROM based intelligent instrument applications. DeepSoft, Inc. emphasizes developing accurate, fast, compact, and well documented source code.

Previous C programming applications include real-time process control, data acquisition, graphics, engineering analysis, Palm Pilot, and ROM based microprocessor (CPU) and microcontroller (MCU) applications used in intelligent instruments, and embedded dedicated controllers. DeepSoft, Inc. is recognized as a small business by the SBA and is listed on PRO-Net.