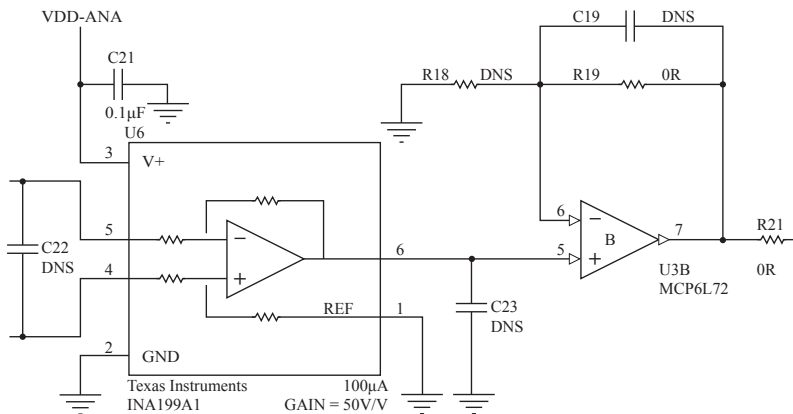
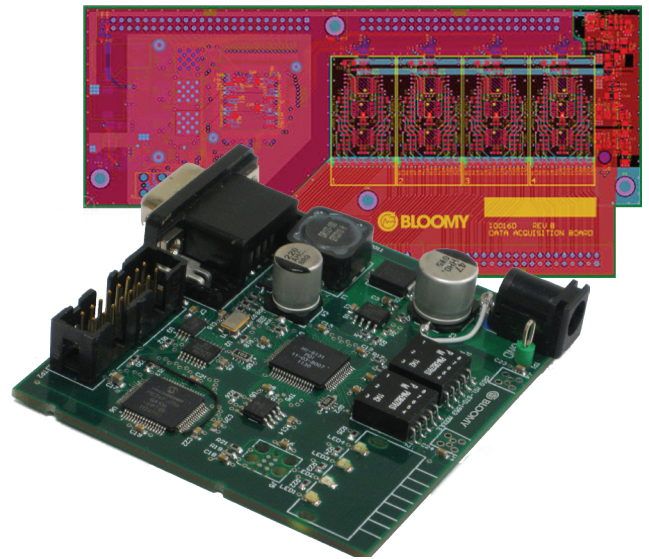


Electronic Design

Custom hardware design services

Bloomys' electronic design services fulfill special requirements not available from commercial off-the-shelf measurement and control products. We have the capabilities to design custom circuit boards, electronic test fixtures, high and low power analog and digital circuits, and custom cable assemblies. Additionally, we provide consulting services to help optimize your electronic designs.



SPECIALIZING IN

- Analog circuits
- Digital circuits
- Printed circuit boards
- Microprocessor firmware
- Digital signal processing
- Field programmable gate arrays (FPGAs)
- Electronic test fixtures
- Cable assemblies
- Mechanical assemblies
- Regulatory compliance

Do you need firmware or embedded software?

Inquire about Bloomy's embedded control speciality.

Contact us with your special requirements
not available in a commercial product



ANALOG CIRCUIT DESIGN

- High-speed and high-density voltage, current, and temperature measurements
- Custom measurement ranges, ADC rates
- High-voltage and high-current isolation
- Filtering, amplification, excitation, and conditioning

PRINTED CIRCUIT LAYOUT AND FABRICATION

- High layer count
- High-density designs including BGA and QFN packages
- Space-constrained designs for specialized enclosures

FPGA DEVELOPMENT

- Xilinx Spartan 3, Spartan 6
- Verilog, VHDL firmware design
- LabVIEW FPGA

CABLE ASSEMBLIES

- IPC/WHMA-A-620 Certified IPC Trainer
- Mixed-signal interconnect
- MIL-STD connectors
- Mass interconnect PCB

MANUFACTURING STANDARDS

- IPC-A-610
- IPC-A-620
- J-STD-001
- Regulatory compliance – UL, CE, FCC, RoHS, ITAR

DIGITAL CIRCUIT DESIGN

- High speed
- Digital isolation
- Communication buses – Ethernet, USB, SPI, I2C, GPIB, RS232, RS485, RS422, LVDS, MIL-STD-1553
- Wi-Fi, Bluetooth, and Zigbee
- Low-powered (battery) circuits

MICROPROCESSOR FIRMWARE DEVELOPMENT

- Microchip PIC 18, 24, 32, dsPIC – MPLab
- Atmel AVR, XMEGA, AVR32, AT91SAM
- Texas Instruments MSP430, Stellaris ARM, ST Micro STM32

DIGITAL SIGNAL PROCESSING DEVELOPMENT

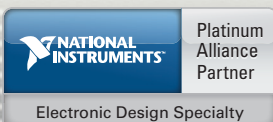
- Audio DSPs from Texas Instruments and Freescale
- Filtering and FFT

ELECTRONIC TEST FIXTURE DESIGN

- Virginia Panel or TTI Testron
- Edge connector or bed of nails
- Custom PCBs
- Relay control boards

CUSTOM NATIONAL INSTRUMENTS MODULES

- Single-Board RIO mezzanine cards
- C Series modules
- FlexRIO adapter modules



Call 860-298-9925 or visit
www.bloomy.com