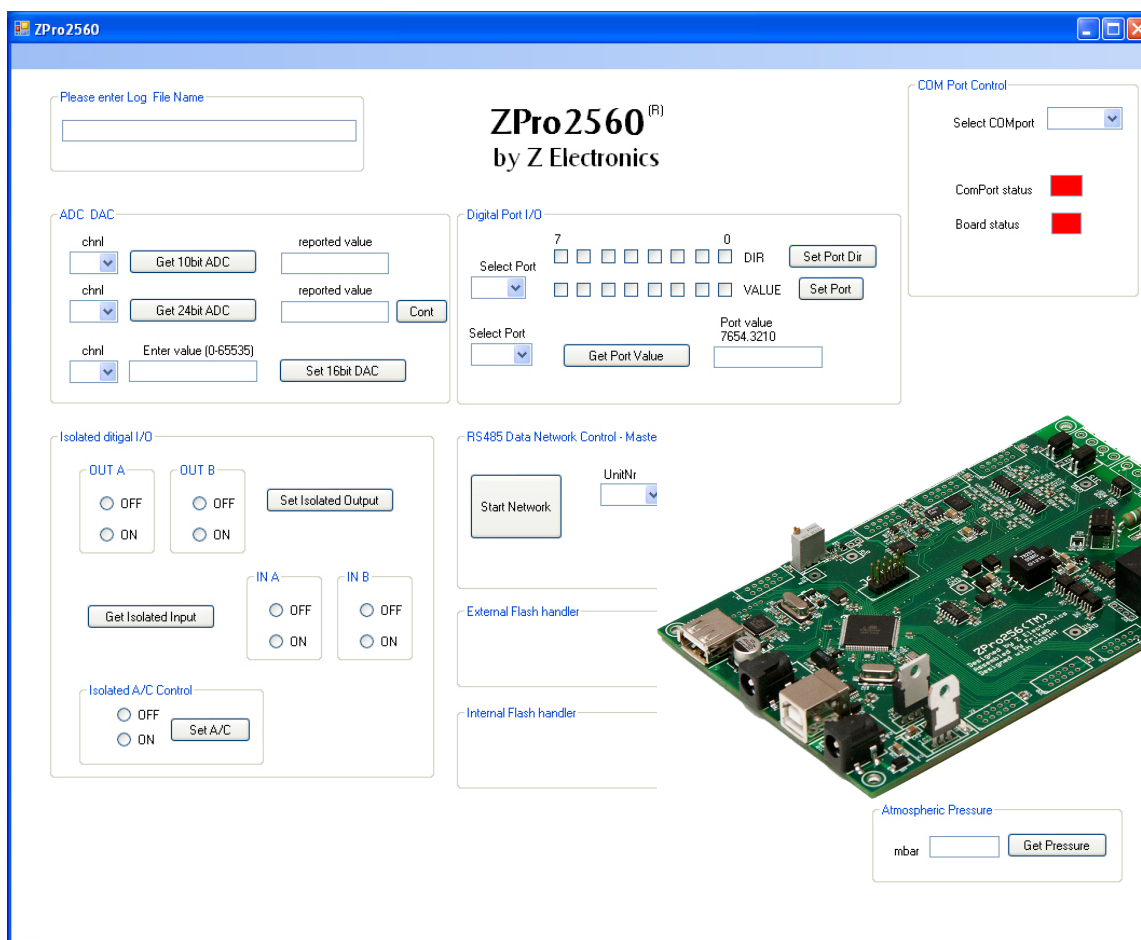


ZPro2560



Professional/Educational Experiment Board using ATmega2560

Save time, start developing your application, not your board!

This is for the professional as well as schools and the serious amateur!
Analog measurements, digital & analog control, serial communication.
All interconnected and driven by included software/drivers.
PC application in VB2010 to control most of the board included.

Use the free Atmel Studio 4 or Studio 6 to load and debug your own applications!

The board contains:

- ATmega2560 processor
- Dual output 16 bit DAC with up to 5V output
- Access to USBmemory stick using internal UART
- Serial comm with a PC using USB via internal UART
- 1 unassigned UART available on I/O pins.
- 6 channel 24 bits external ADC .
- 5 channel 10 bits internal ADC with buffered inputs and user selectable gain on each channel
- 4 channel 10 bits internal ADC w unbuffered inputs
- 1mA Current Source (trimmable to high precision)
- 3 axis MEMS acceleration sensor
- Pressure sensor for 500—1150 mbar (atmospheric pressure)
- PowerON reset circuit
- OnBoard main Crystal of 10MHz
- Secondary Crystal of 32768Hz for timing purposes
- 34 digital IO pins on 2x5 IDC connectors incl Vcc and GND
- Modular board design for add-on boards
- +7.5VDC Power Input & Output to other boards
- JTAG Connector for easy debugging
- ESD protected Reset Input
- On board SPI Flash memory of 64KBytes
- I2C available on IO Connector
- 2 Optoisolated Digital Inputs & 2 Outputs
- 1 Optoisolated ZVT controlled Triac for AC motor applications
- Opto isolated RS485 half duplex bus using internal UART
- 4-layer board for optimum EMI & EMC performance
- Board size: 160 x 100mm.