



The BotBoard05 Pro is an entry-level robotics platform suitable for small hobbyist and educational robotics projects. Powered by an 8-bit microcontroller running at 5 MIPS, the system is configured for low-cost programming, plentiful I/O and an easy-to-use on-board motor controller. Code samples are available through the McMaster IEEE Student Branch website.

Programming

The BotBoard05 Pro is equipped with a serial port for easy programming. Using the Bloader bootloader from sparkfun.com and the accompanying PC software, the user can download code using no more than a standard serial cable. In addition, programming and debugging via the Microchip ICD / ICD2 is supported via the ICSP header.

Further Reading

PIC16F877A Data Sheet,
www.microchip.com

Pricing

IEEE members: \$35, non-members: \$50

Features

- Powered by a Microchip PIC16F877A microcontroller
 - 8 bit data path, 14 bit instruction word
 - 20 MHz clock, 5 MIPS
 - 368 bytes RAM
 - 256 bytes data EEPROM
 - 8192 words program Flash
 - On-chip PWM, serial port, ICSP
 - 8-channel, 10-bit ADC
- I/O
 - 14 dedicated digital (12 with serial port)
 - 8 ADC in / digital I/O (configurable)
- On-board 4-channel motor controller with speed control
- Input voltage: 8-12VDC logic, 3-20VDC motor

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