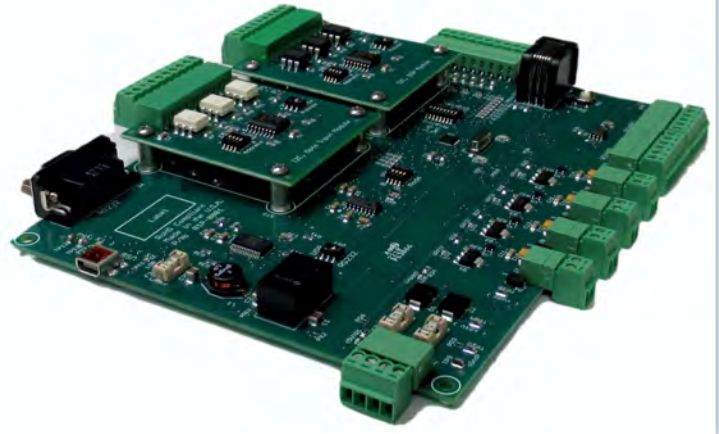


# 81 Controller Board

Graves Electronics, LLC

## FEATURES:

- Powerful PIC18F46K22-I/ MV Microcontroller.
- Program in whatever language you want!
- Off-the-shelf.
- Eight I/O; analog; protected, buffered digital with pull-ups; and digital out. All at 5V TTL Levels.
- Four common rail MOSFET outputs; 0.5A per MOSFET up to 40V DC each.
- Separate VDD rail for MOSFET outputs.
- Two module ports to expand capabilities via I<sup>2</sup>C bus.
- Builtin RS-232; either DB-9 or USB UART.
- Builtin RS-485.
- Wide input voltage range: 9-30V DC.
- Mode selector switch allows software to be written with many configurations and changed by the flip of a switch.
- Designed and assembled in the U.S.A



Designed for industrial control applications and machine builders, the 81 board is a unique platform that allows for embedded hardware without having to design a custom circuit board, while giving you more flexibility than a PLC could offer. The 81 is at home in material handling equipment, plant automation equipment, pump controllers, conveyors, or any other type of industrial equipment. Built around the powerful PIC18F46K22-I/MV microcontroller chip from Microchip, the 81 board offers a host of features that you would expect from an industrial controller board. All you need to do is supply software to make it work. You can write in whatever language is most comfortable to you; C, C++, Assembly, Basic, whatever you like. Go ahead, use your favorite compiler. Just generate the hex code and program the microcontroller chip via the in-circuit programming header. It couldn't be easier! No more trying to cobble a system together using "maker" boards. Avoid the headaches, problems, and time consuming process of designing your own hardware. With an already proven design the 81 board is ready to go to work for you!



Graves Electronics, LLC

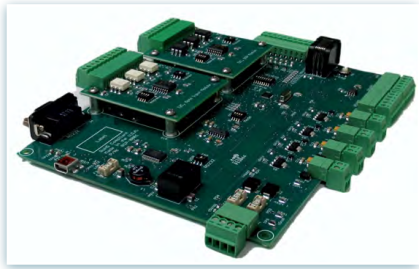
Oakdale, CT 06370

Email: [graveselectronics@gmail.com](mailto:graveselectronics@gmail.com)

Website: [graveselectronicsapps.com](http://graveselectronicsapps.com)

Phone: 860-295-3074    Voice or Text

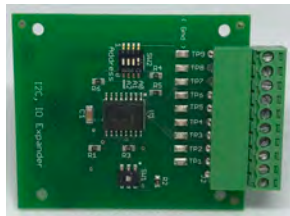
## 81 Controller Board



Part Number: 81P-0001

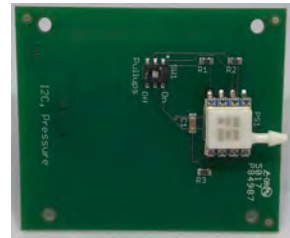
81 Main Control Board

## Modules \*



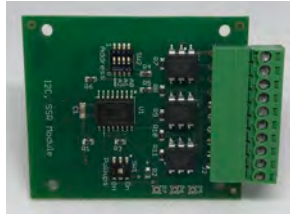
Part Numbers: 81P-0100 & 81P-0101

Expansion I/O, 8-Channels



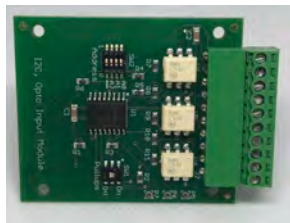
Part Number: 81P-0110

Pressure, 100 PSI



Parts Numbers: 81P-0120 & 81P-0121

Relay, 40V, 2A, 5-Channels Output



Parts Numbers: 81P-0130 & 81P-0131

Opto-coupler, 5-Channels , Input

\* Modules connect via I<sup>2</sup>C. All modules *except* the Pressure Module utilize an I/O Expander chip. Two versions of each module are offered based around expander chips with different I<sup>2</sup>C addresses. Please visit our website for more information and part numbers.

\* All specifications/pictures subject to change without notice.

Scan to go to our website —————>

