

Processor: PIC16F1829-I/ML**Part Number: 20-0502-PIC16F1829**

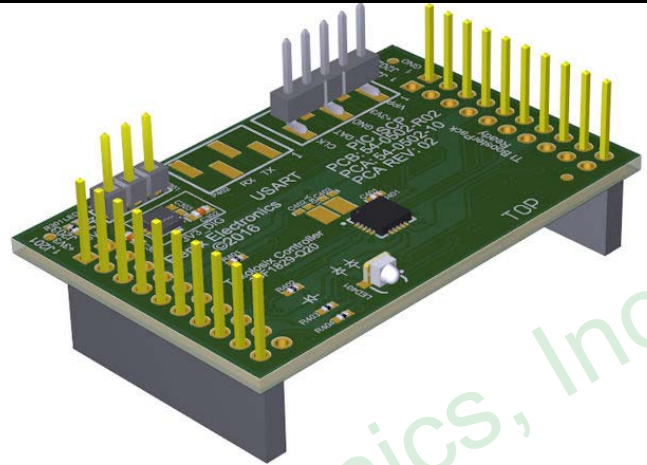
General Description

This Plugin Processor board is part of a Cost effective Evaluation Board family. Use Standalone or Stacked.

Stack it with one or more Interface & Sensor Boards to expand the functionality for different applications.

The interface connectors are designed to be compatible with LaunchPad Development Kits from Texas Instruments.

<http://www.ti.com/ww/en/launchpad/launchpads.html>



Processor Highlights

- Microchip 8-bit PIC16F1829-I/ML
- 14 Kbytes of Flash memory, 1024 bytes of SRAM
- 256 bytes of EEPROM
- 18 GPIO
- 1x 16-bit and 4x 8-bit timers
- Watchdog timer (WDT)
- 1 UART - (RX/TX)
- 1 I2C (SDA, SCK) (Or use as SPI2)
- 1 SPI (MOSI, MISO, CLK) (Or I2C2)
- 4 channels PWM output (Or Capture Compare)
- 1 x 10-bit, 1.0 μ s ADC (Up to 30 channels)
- One 5-bit D/A converter (DAC)
- Two analog comparators
- SR Latch

Data sheets for the Processor can be found on Microchip's website

<http://www.microchip.com/wwwproducts/en/PIC16F1829>

Features

- 2 Analog Input
- 1 UART - (RX/TX) to IO Connector
- 1 UART - (RX/TX) to IO Output/Debug
- 3 GPIO
- 2 GPIO Used for LEDs(RED GREEN)
- 1 GPIO Used as RST
- 1 SPI (MOSI, MISO, CLK) with SS1/SS2
- 1 I2C
- 1 PWM Output
- 1 DAC Output

Crystal – 8MHz

The Crystel is not populated. If needed, a crystal and two (2) capacitors can be soldered onto the existing pads.

Power Supply

User can supply +5V0 via P301

Onboard +3V3 1A LDO powers the Controller and I/O Power