| | Datasheet Summary | Processor Board |
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## Processor: STM32F051K8T6                Part Number: 20-1002-STM32F051K8T6
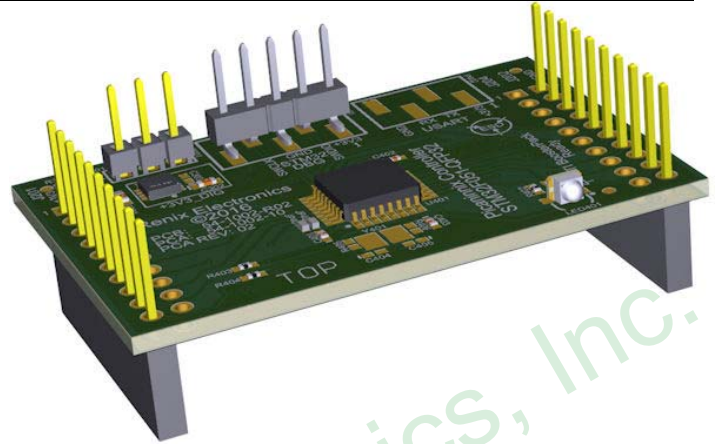
### General Description

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

- STMicroelectronics ARM 32-bit Cortex M0
- 64 Kbytes of Flash memory, 8 Kbytes of SRAM
- 25 GPIO
- 32-bit and 16-bit timers
- Watchdog timer
- 2 UART - (RX/TX)
- 1 I2C (SDA, SCK)
- 1 SPI (MOSI, MISO, CLK)
- 6 channels PWM output
- 1 x 12-bit, 1.0 µs ADC (up to 16 channels)
- One 12-bit D/A converter (DAC)
- Two fast low-power analog comparators
- Capacitive sensing channels

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

http://www.st.com/web/catalog/mmc/FM141/SC1169/SS1574/LN7/PF251890

### Features

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