

CYPRESS

PSoC[®]4

PIONEER KIT

PRODUCT OVERVIEW

THE MOST FLEXIBLE, ARM[®] CORTEX[™]-M0 BASED LOW-COST PSoC[®] DEVELOPMENT KIT

The PSoC[®]4 Pioneer Kit is an easy-to-use and inexpensive development platform enabling you to create unique designs with the flexibility of PSoC 4. Featuring a member of the PSoC 4200 family, this kit gives you the power of an ARM[®] Cortex[™]-M0 combined with the fully customizable analog and digital fabric of the PSoC in the palm of your hands.

INFINITELY EXPANDABLE

The PSoC 4 Pioneer Kit includes connectors for Arduino[™] Shields and Digilent[®] Pmod[™] daughter cards, enabling you to pick from a variety of third party expansion boards. The board also features a CapSense[®] Slider, an RGB LED, a push button switch, and more!

DESIGNED FOR LOW POWER

The PSoC 4 architecture supports an extremely low-leakage hibernate mode consuming only 150 nA. It features a best-in-class 20 nA stop mode, eliminating the need for external power circuitry for sleep and wake-up control. While in active mode, it provides fully functional analog capabilities from 1.71 – 5.5 V.

DEBUG LIKE A PRO

An onboard PSoC 5LP device serves as the programmer and debugger, eliminating the need for external programmers. Interface through the USB connector to talk to your PC over SWD, USB-UART or USB-I²C. With PSoC Creator[™] you can design your system, write firmware, and step-through code using the built-in debugger.

ONBOARD PSoC[®]4 CY8C4245AXI

- 32-bit ARM[®] Cortex[™]-M0 48 MHz CPU
- 16-bit Timer/PWM
- Low Power Comparator
- 12-bit 1 Msps SAR ADC
- Programmable Analog Block
- Programmable Digital Block
- Versatile I/O System
- 150 nA Low Leakage Hibernate Mode
- 20 nA Stop Mode
- 1.71 – 5.5 V Operation

ONBOARD PSoC 5LP CY8C5868LTI

- 32-bit ARM Cortex-M3 67 MHz CPU
- Programmer and Debugger for Target PSoC 4
- Supports SWD, USB-UART, USB-I²C

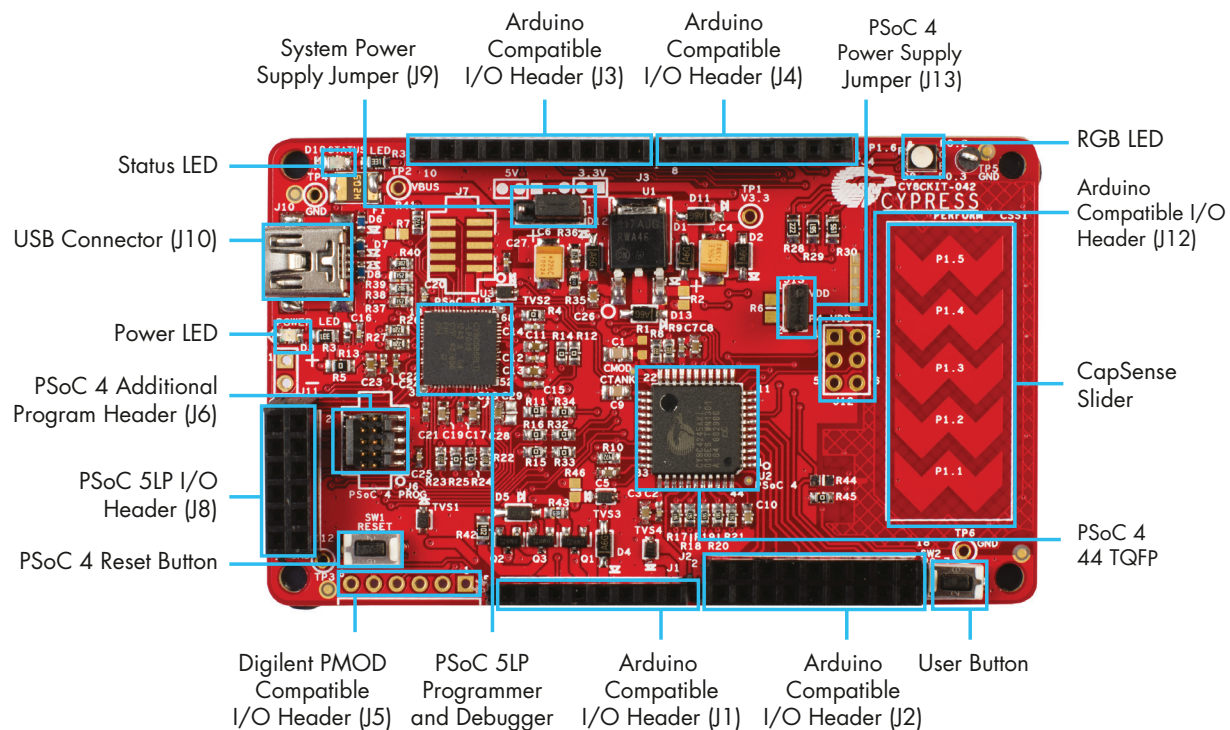
KIT EXPANSION PORTS

- Arduino[™] Shield Compatible Headers
- Digilent[®] Pmod[™] Compatible Header
- Cypress PSoC 5LP GPIO Header

INCLUDED EXAMPLE PROJECTS

- Blinking LED with PWM
- RGB LEDs Color Cycle with PWMs
- Low-Power Demo
- CapSense[®] Slider Demo

PSoC[®] 4 PIONEER KIT



PSoC 4 Pioneer Kit Details

KIT CONTENTS

- PSoC 4 Pioneer Board
- Quick Start Guide
- USB-A to USB-mini B Cable
- Jumper Wires (x6)

GETTING STARTED

Order a kit and download the required PSoC 4 Pioneer Kit software from www.cypress.com/go/CY8CKIT-042.

For more information on PSoC 4, please visit www.cypress.com/go/PSoC4.

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