

Quick start guide

PSoC™ 62S4 pioneer kit

CY8CKIT-062S4

The PSoC™ 62S4 pioneer kit (CY8CKIT-062S4) is a low-cost hardware platform that enables you to design and debug applications using the PSoC 62 MCU.

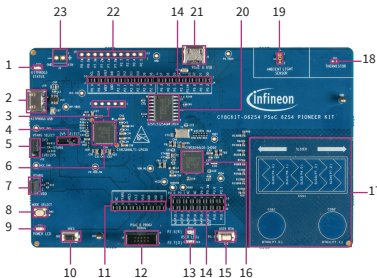


Kit contents

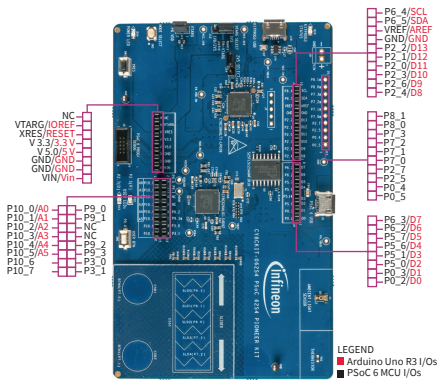
- > PSoC 62S4 pioneer board
- > USB type-A to micro-B cable
- > Six jumper wires (five inches each)
- > Quick start guide (this document)

PSoC 62S4 pioneer board pinout details

PSoC 62S4 pioneer board details



- 1 KitProg3 status LED (D10)
- 2 KitProg3 USB connector (J10)
- 3 PSoC 5LP programming header (J7)*
- 4 2.5 V selection jumper (J14)
- 5 PSoC 6 MCU power selection jumper (J12)
- 6 PSoC 5LP based KitProg3 programmer and debugger (CY8C5868LT1-LP039, U7)
- 7 PSoC 6 MCU current measurement jumper (J13)
- 8 KitProg3 programming mode selection button (SW3)
- 9 Power LED (D14)
- 10 PSoC 6 MCU reset button (SW1)
- 11 Arduino™ UNO R3 compatible power header (J1)
- 12 PSoC 6 MCU 10-pin SWD/JTAG program and debug header (J8)



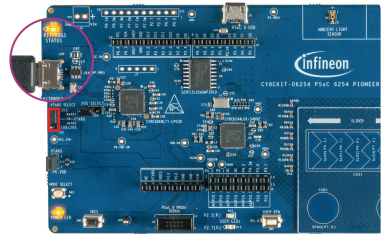
- 13 User LEDs (D12 and D13)
- 14 Arduino UNO R3 compatible I/O headers (J2, J3 and J4)
- 15 PSoC 6 MCU user button/hibernate wakeup (SW2)
- 16 PSoC 6 MCU (CY8C6244LQ1-S4D92, U8)
- 17 CapSense™ buttons and slider (CSB1, CSB2 and CSS1)
- 18 Thermistor (TH1)
- 19 Ambient light sensor (Q8)
- 20 QSPI NOR flash (S25FL512SAGMFI10, U9)
- 21 PSoC 6 MCU USB connector (J5)
- 22 PSoC 6 MCU extended I/O header (J11)*
- 23 External power supply connector (J9)*

* Footprint only, not populated on the board



Before you start

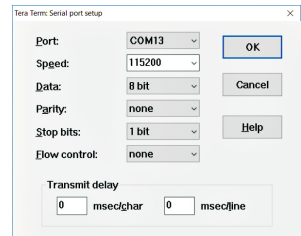
- Ensure that you have the following:
 - PC with USB port
 - UART terminal software such as Tera Term or Minicom
- Visit the kit website to download and install the required software.
- Ensure the jumper J12 is at position 2-3 to select 3.3 V.
- Connect the KitProg3 USB connector (J10) to your PC.
- Wait for the driver installation to complete.



PSoC 6254 pioneer board

Step 1: Connect the kit with UART terminal software

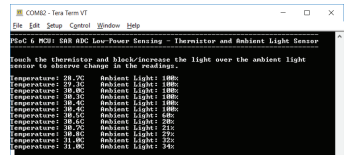
- Open the UART terminal software and connect to the kit's USB-UART COM port with the following settings:
 - Baud rate: 115200 bps
 - Data: 8 bit
 - Parity: None
 - Stop bit: 1 bit
 - Flow control: None
- Press the XRES switch (SW1) to reset the device.



USB-UART COM port setup

Step 2: Run the pre-programmed code example

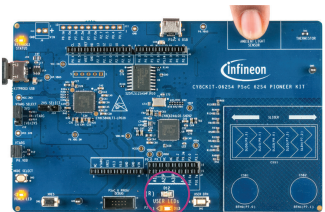
- Follow the instructions displayed on the UART terminal to use the pre-programmed code example.



Instructions displayed on the UART terminal

Step 3: Observe the user LED (D13) brightness variation

- Observe the state of the user LED (D13) with the variation of ambient light intensity. The LED turns ON when the ambient light intensity is lower than 45% and turns OFF when higher than 55%.



Observe the brightness in LED (D13)