

# PSoC® 6 WiFi-BT PIONEER KIT

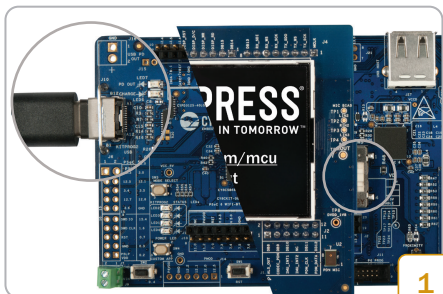


## Kit Contents:

- 1 PSoC® 6 WiFi-BT Pioneer Board
- 2 CY8CKIT-028-TFT Display Shield
- 3 USB Type-A to Type-C cable
- 4 Four jumper wires (four inches each)
- 5 Two proximity sensor wires (five inches each)
- 6 Quick Start Guide (this document)

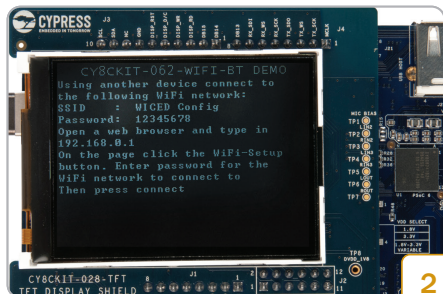


[www.cypress.com/CY8CKIT-062-WIFI-BT](http://www.cypress.com/CY8CKIT-062-WIFI-BT)



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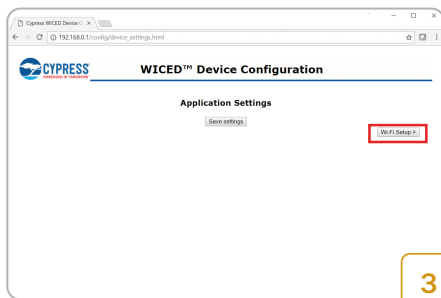
- Ensure that SW5 on the CY8CKIT-062-WIFI-BT board is set to the middle (3.3V) position. This switch is in the middle of the board.
- For this demo, you need to setup a Wi-Fi network or a mobile hotspot.
- Peel off the sticker on the TFT screen to read the instructions displayed.
- Power the board by connecting it to your PC by using the provided USB cable through the USB-C connector (J10).



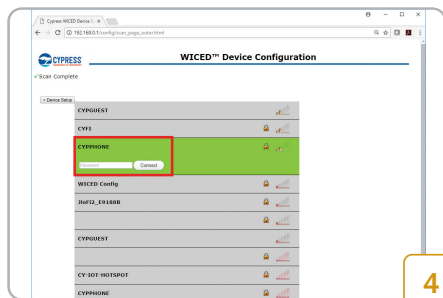
2

- The TFT screen displays the instructions to evaluate the pre-programmed code example: *CE222494 - PSoC 6 WICED WiFi Demo*.
- The kit with the pre-programmed code example will create a Wi-Fi network called "WICED Config". Connect to this network using your PC/mobile device, see step 3.

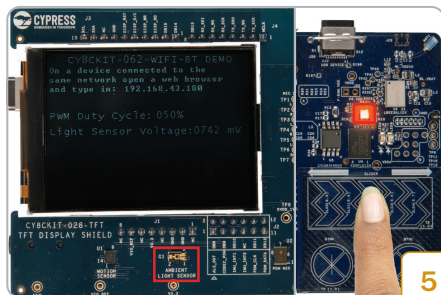
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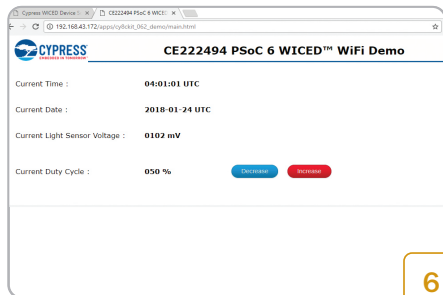
- Join the network “WICED Config” using your PC/mobile. The password is 12345678.
- Open a web browser in your PC/mobile and go to <http://192.168.0.1>.
- Click on “Wi-Fi Setup” button.



- Select the Wi-Fi network that you wish to connect to from the list.
- Type in the password for the desired network and click **Connect**.
- The kit connects to this network, starts an http server and synchronizes to a time server. This can take 2 minutes to complete.

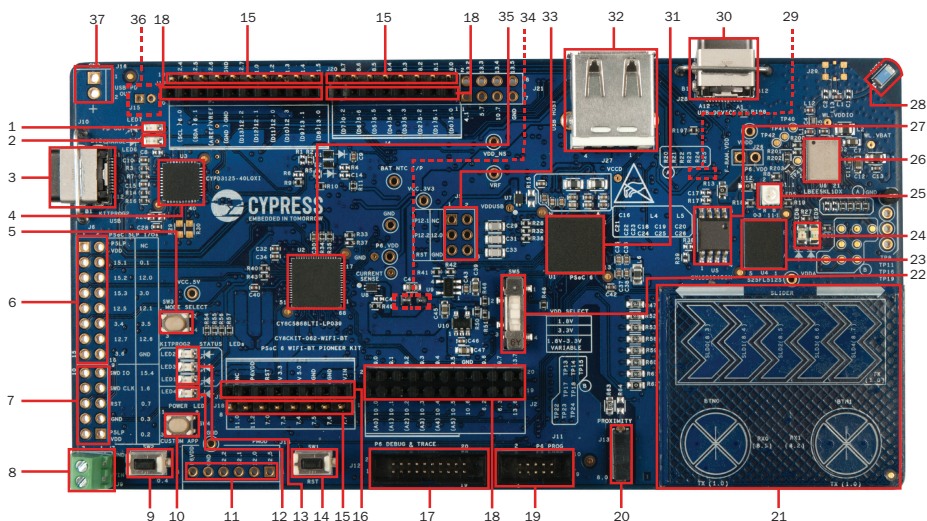


- After connecting to the time server, the TFT screen displays the PWM duty cycle and the light sensor voltage. Light sensor voltage changes with intensity of ambient light. Swipe your finger on the CapSense slider or press the CapSense buttons (BTN0 or BNT1) on the board to change PWM Duty Cycle and LED5 brightness.



- On your PC/mobile connect to the same Wi-Fi network that the kit was connected to in step 4.
- Open a new web browser and go to the address shown on the TFT display.
- The webpage shows the current time, date, light sensor voltage and duty cycle.
- You can decrease or increase LED5 brightness by pressing the “Decrease” or “Increase” buttons on the webpage.
- To evaluate additional features of this code example, install the kit software and refer to the code example CE222494 PSoC 6 WICED WiFi Demo.

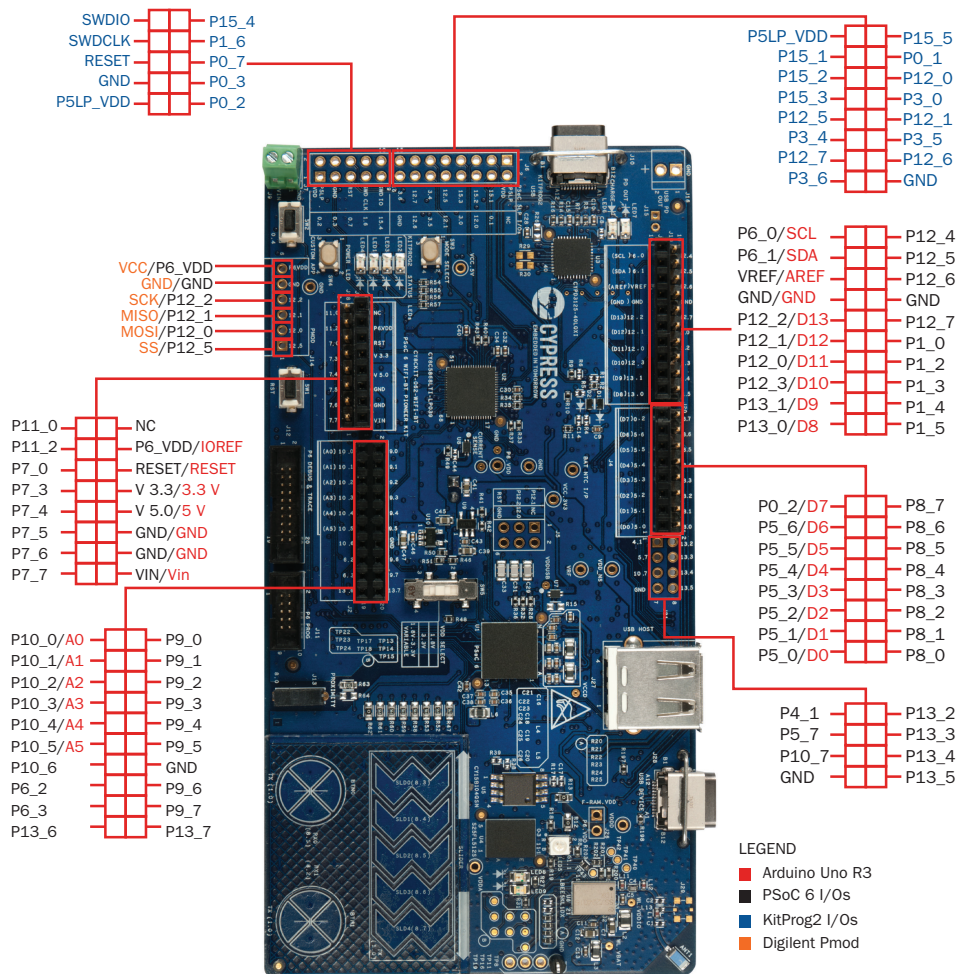
## PSoC 6 WiFi-BT Pioneer Board Details



1. USB PD output voltage availability indicator (LED7)
2. Battery charging indicator (LED6)
3. KitProg2 USB Type-C connector (J10)
4. Cypress EZ-PD™ CCG3 Type-C Port Controller with PD (CYPD3125-40LQXI, U3)
5. KitProg2 programming mode selection button (SW3)
6. KitProg2 I/O header (J6)<sup>1</sup>
7. KitProg2 programming/custom application header (J7)<sup>1</sup>
8. External power supply connector (J9)
9. PSoC 6 user button (SW2)
10. KitProg2 application selection button (SW4)
11. Digilent® Pmod™ compatible I/O header (J14)<sup>1</sup>
12. Power LED (LED4)
13. KitProg2 status LEDs (LED1, LED2, and LED3)
14. PSoC 6 reset button (SW1)
15. PSoC 6 I/O header (J18, J19 and J20)
16. Arduino™ Uno R3 compatible power header (J1)
17. PSoC 6 debug and trace header (J12)
18. Arduino™ Uno R3 compatible PSoC 6 I/O header (J2, J3 and J4)
19. PSoC 6 program and debug header (J11)
20. CapSense proximity header (J13)
21. CapSense slider and buttons
22. PSoC 6 VDD selection switch (SW5)
23. Cypress 512-Mbit serial NOR Flash memory (S25FL512S, U4)
24. PSoC 6 user LEDs (LED8 and LED9)
25. RGB LED (LED5)
26. WiFi/BT module (LBEE5KL 1DX, U6)
27. Cypress Excelon™ -Ultra Quad-SPI F-GRAM™ (CY15B104QSN, U5)
28. WiFi-BT Antenna
29. Vbackup and PMIC control selection switch (SW7)<sup>2</sup>
30. PSoC 6 USB device Type-C connector (J28)
31. Cypress PSoC 6 (CY8C6247BZH-D54, U1)
32. PSoC 6 USB Host Type-A connector (J27)
33. Arduino™ Uno R3 compatible ICSP header (J5)<sup>1</sup>
34. PSoC 6 power monitoring jumper (J8)<sup>2</sup>
35. KitProg2 (PSoC 5LP) programmer and debugger (CY8C5868LTH-LP039, U2)
36. Battery connector (J15)<sup>1,2</sup>
37. USB PD output voltage (9V/12V) connector (J16)<sup>1</sup>

<sup>1</sup>Footprints only, not populated on the board<sup>2</sup>Components at the bottom side of the board

## PSoC 6 WiFi-BT Pioneer Board Details



For the latest information about this kit, visit [www.cypress.com/CY8CKIT-062-WIFI-BT](http://www.cypress.com/CY8CKIT-062-WIFI-BT)