

PSoC® 6 WIFI-BT PIONEER KIT

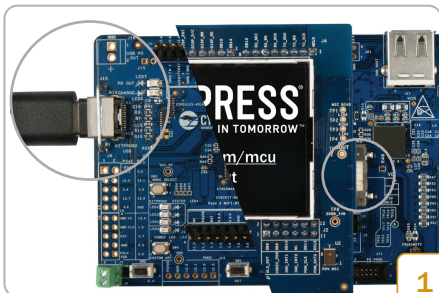


Kit Contents:

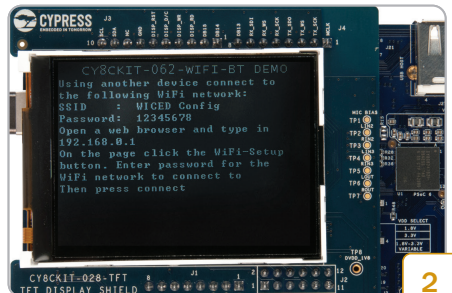
- 1 PSoC® 6 WiFi-BT Pioneer Board
- 2 CY8CKIT-028-TFT Display Shield
- 3 USB Type-A to Type-C cable
- 4 Four jumper wires (four inches each)
- 5 Two proximity sensor wires (five inches each)
- 6 Quick Start Guide (this document)



www.cypress.com/CY8CKIT-062-WIFI-BT



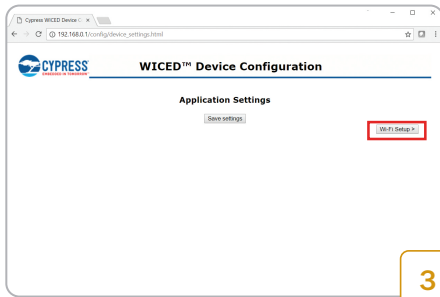
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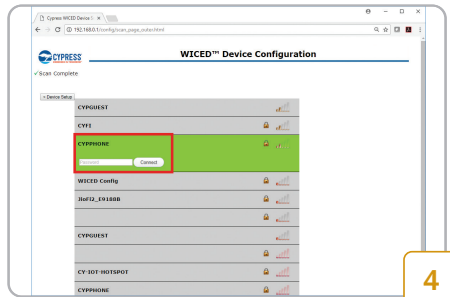
- Ensure that SW5 on the CY8CKIT-062-WIFI-BT board is set to the middle (3.3V) position. This switch is in the middle of the board.
 - For this demo, you need to setup a WiFi network or a mobile hotspot.
 - Peel off the sticker on the TFT screen to read the instructions displayed.
 - Power the board by connecting it to your PC by using the provided USB cable through the USB-C connector (J10).
- 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 WiFi network called "WICED Config". Connect to this network using your PC/mobile device, see step 3.

PSoC® 6 WIFI-BT PIONEER KIT



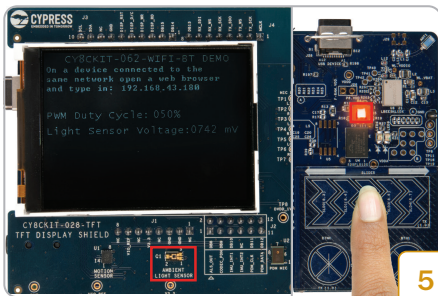
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- Join the network “WICED Config” using your PC/mobile. The password is 12345678.
- Open a web browser in your PC/mobile and go to <http://192.168.0.1>.
- Click on “Wi-Fi Setup” button.



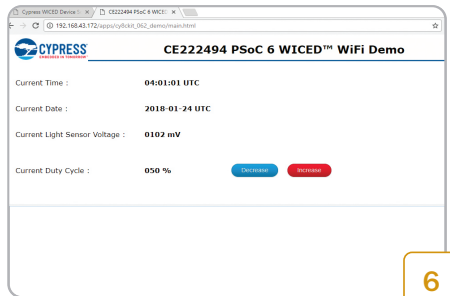
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- Click on the WiFi/mobile hotspot created in step 1.
- Type in the password for the desired network and click **Connect**.
- The kit connects to this network, starts an http server and synchronizes to a time server. This can take 2 minutes to complete.



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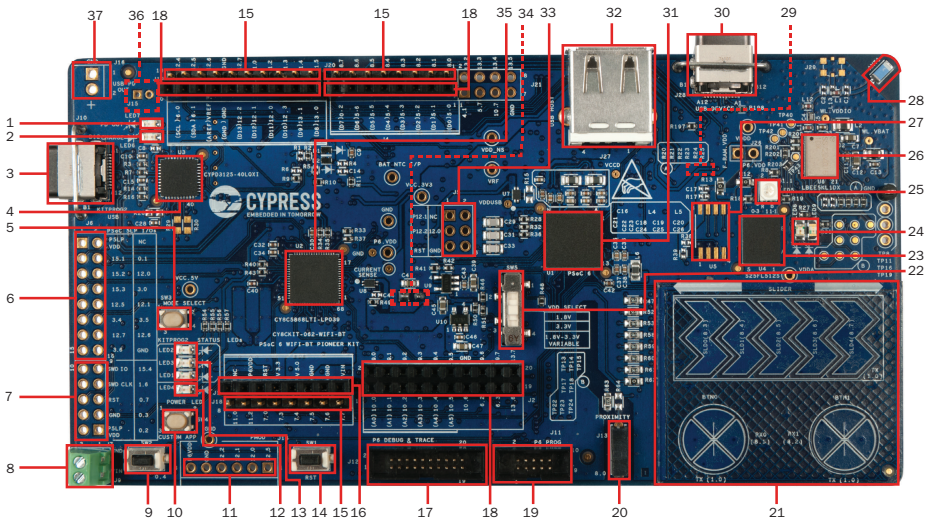
- After connecting to the time server, the TFT screen displays the PWM duty cycle and the light sensor voltage. Light sensor voltage changes with intensity of ambient light. Swipe your finger on the CapSense slider or press the CapSense buttons (BTNO or BNT1) on the board to change PWM Duty Cycle and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



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- On your PC/mobile connect to the WiFi/mobile hotspot created in step 1.
- 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 CE22494 PSoC 6 WICED WiFi Demo.

PSoC 6 WiFi-BT Pioneer Board Details

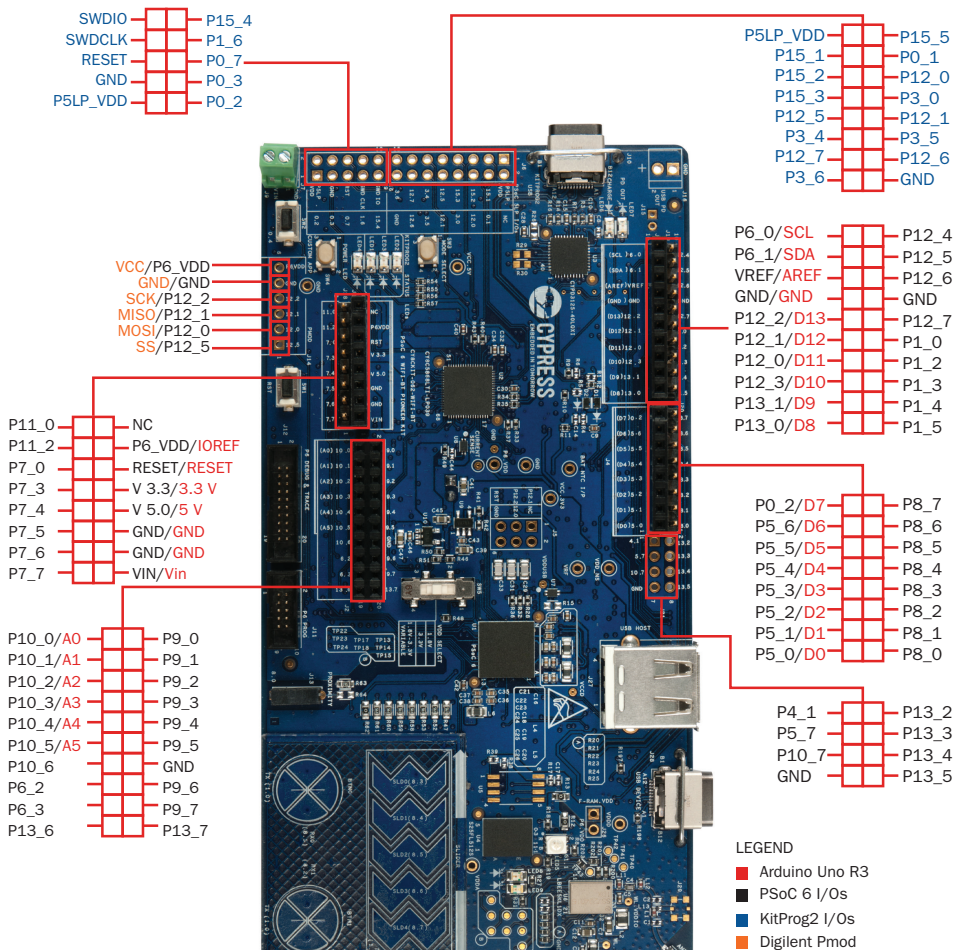


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|---|--|
| 1. USB PD output voltage availability indicator (LED7) | 20. CapSense proximity header (J13) |
| 2. Battery charging indicator (LED6) | 21. CapSense slider and buttons |
| 3. KitProg2 USB Type-C connector (J10) | 22. PSoC 6 VDD selection switch (SW5) |
| 4. Cypress EZ-PD™ CCG3 Type-C Port Controller with PD (CYPD3125-40LQXI, U3) | 23. Cypress 512-Mbit serial NOR Flash memory (S25FL512S, U4) |
| 5. KitProg2 programming mode selection button (SW3) | 24. PSoC 6 user LEDs (LED8 and LED9) |
| 6. KitProg2 I/O header (J6) ¹ | 25. RGB LED (LED5) |
| 7. KitProg2 programming/custom application header (J7) ¹ | 26. WiFi/BT module (LBEE5KL 1DX, U6) |
| 8. External power supply connector (J9) | 27. Cypress serial Ferroelectric RAM (U5) ¹ |
| 9. PSoC 6 user button (SW2) | 28. WiFi-BT Antenna |
| 10. KitProg2 application selection button (SW4) | 29. Vbackup and PMIC control selection switch (SW7) ² |
| 11. Digilent® Pmod™ compatible I/O header (J14) ¹ | 30. PSoC 6 USB device Type-C connector (J28) |
| 12. Power LED (LED4) | 31. Cypress PSoC 6 (CY8C6247BZI-D54, U1) |
| 13. KitProg2 status LEDs (LED1, LED2, and LED3) | 32. PSoC 6 USB Host Type-A connector (J27) |
| 14. PSoC 6 reset button (SW1) | 33. Arduino™ Uno R3 compatible ICSP header (J5) ¹ |
| 15. PSoC 6 I/O header (J18, J19 and J20) | 34. PSoC 6 power monitoring jumper (J8) ² |
| 16. Arduino™ Uno R3 compatible power header (J1) | 35. KitProg2 (PSoC 5LP) programmer and debugger (CY8C5868LT-LP039, U2) |
| 17. PSoC 6 debug and trace header (J12) | 36. Battery connector (J15) ^{1,2} |
| 18. Arduino™ Uno R3 compatible PSoC 6 I/O header (J2, J3 and J4) | 37. USB PD output voltage (9V/12V) connector (J16) ¹ |
| 19. PSoC 6 program and debug header (J11) | |

¹Footprints only, not populated on the board

²Components at the bottom side of the board

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For the latest information about this kit, visit www.cypress.com/CY8CKIT-062-WIFI-BT