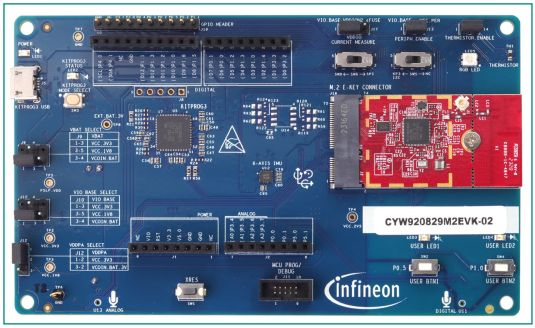
QUICK START GUIDE

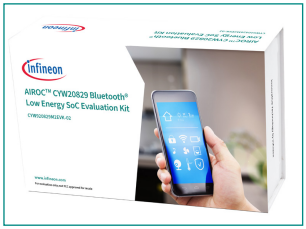
AIROC™ CYW20829 Bluetooth® Low Energy SoC Evaluation Kit

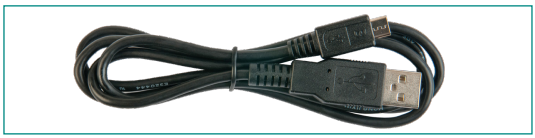
CYW920829M2EVK-02

Kit contents

1. AIROC™ CYW20829 Bluetooth® Low Energy SoC Evaluation Board (CYW9BTM2BASE3+CYW920829M2IPA2)
2. USB Type-A to Micro-B cable
3. Six jumper wires (five inches each)
4. Quick start guide (this document)







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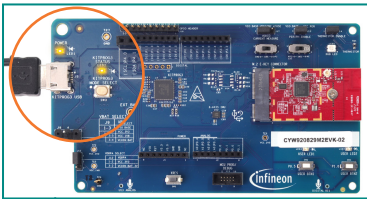
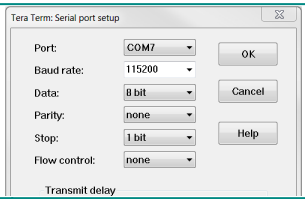
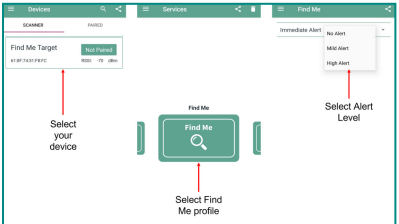


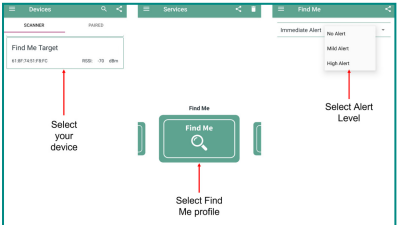
1 | USB cable connected to the KitProg3 USB connector



2 | USB-UART COM port setup



3 | AIROC™ Bluetooth® Connect app – Android



4 | AIROC™ Bluetooth® Connect app – iOS

Before you start

1. Ensure that you have the following:
   - PC with USB 2.0 port
   - UART terminal software such as Tera Term or Minicom
   - Download and install the AIROC™ Bluetooth® Connect app from Play Store or iOS App Store.
2. Connect the KitProg3 USB connector (J5) to your PC.
3. Visit the kit webpage to download and install the required software.
4. Ensure the following jumper settings to select 3.3 V. and other jumpers as default state.

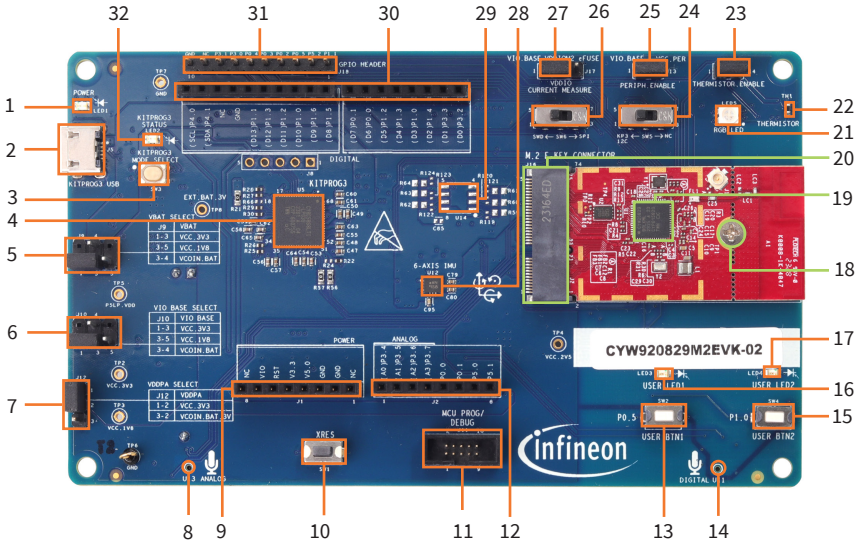
Jumper	Position
J9	1 - 3
J10	1 - 3
J12	1 - 2
J13	1 - 2
J14	1 - 2
J17	1 - 2

5. Once the driver installation is complete, open the UART terminal software and set the COM port parameters to 8N1 and 115200 baud.

Run the AIROC™ Bluetooth® Connect application

1. Turn ON Bluetooth® on your Android or iOS device.
2. Launch the AIROC™ Bluetooth® Connect app.
3. Press the reset button (SW1) on the CYW920829M2EVK-02 board to send advertisements and when the “Advertisement started” message on the serial terminal is displayed, confirm that USER LED2 is blinking.
4. Swipe down on the AIROC™ Bluetooth® Connect app home screen to scan for Bluetooth® Low Energy peripheral devices.
5. Your device (“Find Me Target”) appears on the home screen. Tap to establish a Bluetooth® LE connection with the device.
6. The USER LED2 changes from blinking state to always ON state after establishing a successful connection with the device.
7. Select ‘Find Me Profile’ and select an Alert level. The USER LED1 state is linked to the type of alert sent.
   - No Alert: USER LED1 OFF
   - Mild Alert: USER LED1 blinking
   - High Alert: USER LED1 ON

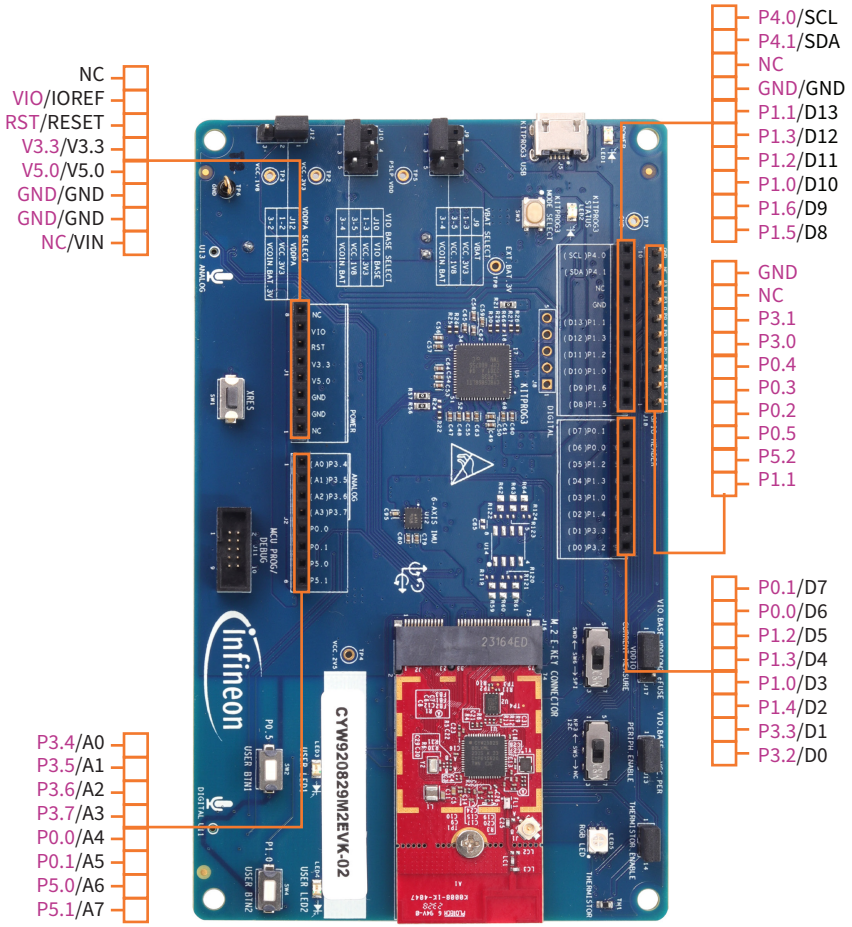
AIROC™ CYW20829 Bluetooth® Low Energy SoC Evaluation Board details



1. Power LED (LED1)
2. KitProg3 USB Micro-B connector (J5)
3. KitProg3 programming mode selection button (SW3)
4. KitProg3 (PSoC™ 5LP) programmer and debugger (CY8C5868LTI - LP039, U5)
5. VBAT voltage selection jumper (J9)
6. VIO_BASE voltage selection jumper (J10)
7. VDDPA voltage selection jumper (J12)
8. Analog mic (U13)**
9. Power header compatible with Arduino Uno R3 (J1)
10. Reset button (SW1)
11. 10-pin MCU PROG/DEBUG header (J11)
12. Analog header compatible with Arduino (J2)
13. User Button 1 (SW2)
14. Digital mic (U11)**
15. User Button 2 (SW4)
16. User LED 1 (LED3)
17. User LED 2 (LED4)
18. M.2 stand-off (MT1)
19. AIROC™ CYW20829 Bluetooth® and Bluetooth® LE system on chip
20. M.2 E-key interface connector (J16)
21. RGB LED (LED5)
22. Thermistor (TH1)
23. Thermistor enable header (J14)
24. KP3 to I2C Bus connect/ NC Selection SW (SW5)
25. Peripheral enable header (J13)
26. SWD /SPI Selection SW (SW6)
27. VDDIO current measurement header (J17)
28. Six-axis IMU (U12)
29. QSPI flash memory (U14)*
30. Digital I/O headers compatible with Arduino Uno R3 (J3, J4)
31. Extended GPIO header (J18)
32. KitProg3 status LED (LED2)

***Footprint only, not populated on the board**
****Component is located at the bottom side of the board**

AIROC™ CYW20829 Bluetooth® Low Energy SoC Evaluation Board pinout



Legend ■ I/Os compatible with Arduino Uno R3 ■ CYW20829 I/Os

See the kit guide available at www.infineon.com/CYW920829M2EVK-02 for more details.

Document number: 002-37204 Rev. *B
Date: 02 / 2024