

Quick start guide

AIROC™ CYW20829 Bluetooth® LE SoC Evaluation Kit



Kit contents

- 1. CYW20829 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)



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. Visit the kit website to download and install the required software.
- Ensure the following jumper settings to select 3.3 V:

Jumper	Position
J9	1 - 3
J10	1 - 3
J12	1 - 2

- 4. Connect the KitProg3 USB connector (J5) to your PC.
- 5. Wait for the driver installation to complete.
- Open the UART terminal software and set the USB-UART COM port terminal setting by referring to COM port setup image.

Run the AIROC™ Bluetooth® Connect application

- 1. Turn ON Bluetooth on your Android or iOS device.
- 2. Launch the AIROC™ Bluetooth® Connect app.
- Press the reset switch on the CYW920829M2EVK-02 board to start sending advertisements and observe the "Advertisement started" message on the serial terminal and confirm USER LED2 blinking.
- Swipe down on the AIROC™ Bluetooth® Connect app home screen to start scanning for LE Peripheral devices.
- Your device ("Find Me Target") appears on the home screen. Tap Connect to establish a Bluetooth* LE connection with the device.
- The USER LED2 changes from blinking state to always ON state after establishing a successful connection with the device.
- 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

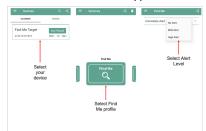
USB cable connected to the KitProg3 USB connector



USB-UART COM port setup



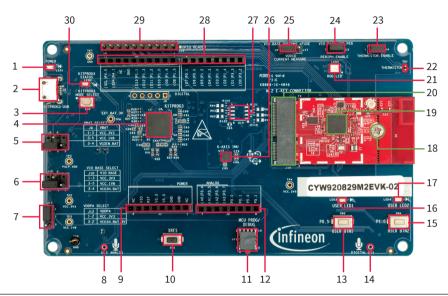
AIROC™ Bluetooth® Connect app - Android



AIROC™ Bluetooth® Connect app - iOS



AIROC™ CYW20829 Evaluation Board details



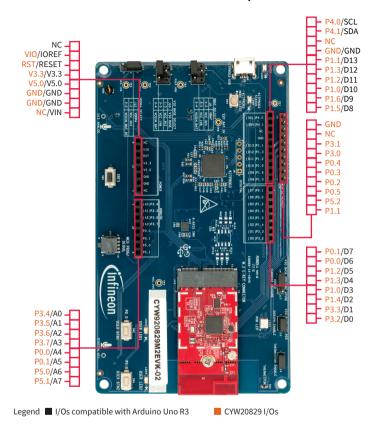
- 1. Power LED (LED1)
- KitProg3 USB Micro-B connector (J5)
- 3. KitProg3 programming mode selection button (SW3)
- KitProg3 (PSoC™ 5LP) programmer and debugger (CY8C5868LTI - LP039, U5)
- 5. VBAT voltage selection jumper (J9)
- 6. VIO_BASE voltage selection jumper (J10)
- 7. VDDPA voltage selection 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. Peripheral enable header (J13)
- 25. VDDIO current measurement header (J17)
- 26. Six-axis IMU (U12)
- 27. QSPI flash memory (U14)*
- 28. Digital I/O headers compatible with Arduino Uno R3 (J3, J4)
- 29. Extended GPIO header (J18)
- 30. KitProg3 status LED (LED2)

^{*}Footprint only, not populated on the board

^{**}Component is located at the bottom side of the board

AIROC™ CYW20829 Evaluation Board pinout details



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

www.infineon.com

Published by Infineon Technologies AG 81726 Munich, Germany

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