# Wi-Fi & Bluetooth® Evaluation Kit with Raspberry Pi CM4 Host

# CYW9RPIWIFIBT-EVK

# Kit contents

- CYW9RPIWIFIBT-EVK evaluation board
   (with Raspberry Pi CM4 module and CYW955573 radio M.2 card)
- 2. Two tri-band dipole antenna

- 3. USB-C to USB-C cable
- 4. Quick start guide (this document)



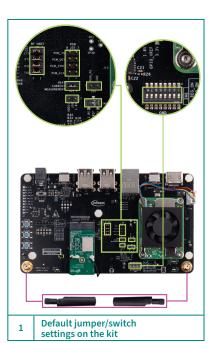












# Before you start

- 1. Ensure that you have the following:
  - PC with Type-C USB port
  - USB-compatible mouse and keyboard
  - Monitor with HDMI interface
  - Pre-flashed SD card present in the SD card slot (J17)
- Connect the dipole antenna to SMA connectors on the baseboard and connect the antenna cable assembly to the UFL connectors (Main and Aux) on the M.2 radio card.
- 3. Ensure the following jumper and switch settings on the hoard

| Position           |
|--------------------|
| 1-2                |
| 1-2, 3-4, 5-6, 7-8 |
| Open               |
| Open               |
| Open               |
| off (All poles)    |
| 1.8 V              |
| 3.3 V              |
| off                |
|                    |

# Connect the peripherals and power on

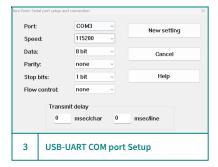
2

# Powering the kit

- Connect the USB-compatible mouse and keyboard to the USB port (J3/J4).
   Connect the HDMI-compatible monitor to HDMI port (J8)
- and ethernet cable (optional) to RJ45 connector (J11).

  NOTE: If HDMI monitor and peripherals are not available, follow the section 'Getting started with serial console access' to access the serial debug console.
- 3. Connect the kit to PC through the USB Type-C port (J47) with the provided USB cable.
- Switch on the power switch (SW10) and check for the CM4 power LED (D14), M.2 VBAT LED (D15) to glow, and activity LED (D13) to blink.
- Observe the boot-up screen on the monitor and check for the instructions on the screen to proceed.

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# Getting started with serial console access

To access the serial debug console of the CYW9RPIWFIBT-EVK kit, do the following:

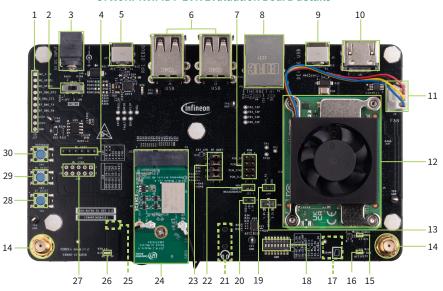
- 1. Ensure that you have the following:
  - PC with Type-C USB port
  - UART terminal software such as Tera Term or Minicom
- 2. Connect the kit to the PC through the USB Type-C port (J47) using the USB cable provided.
- Turn on the power switch (SW10) and check for the CM4 power LED (D14), M.2 VBAT LED (D15) to glow and the activity LED (D13) to blink.
- Open the UART terminal software and connect to the kit's USB-to-UART COM port with the following settings:
  - Baud rate: 115200, Data: 8 bit, Parity: None,
     Stop bit: 1 bit, Flow control: None
- Power cycle the board and check for the boot logs on the terminal. Once boot is complete, enter the below credentials to access the console.

- Username: ifx

- Password: ifx

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# CYW9RPIWIFIBT-EVK Evaluation Board details



- 1 M.2 GPIO header (J37)\*\*
- 2 Power on/off switch (SW10)
- 3 5 V DC iack (J48)
- 4 WL UART connector (J35)
- 5 Raspberry-Pi debug USB Type-C connector (J47)
- 6 4 x USB Type-A connectors (J3, J4)
- 7 PCM connector (J25)
- 8 1G ethernet connector (J11)
- 9 Device USB Type-C connector (J1)
- 10 HDMI connector (J8)
- 11 Fan connector (J9)
- 12 Raspberry Pi CM4 module
- 13 CM4 GPIO voltage select switch (SW9)
- 14 Antenna connectors (ANT1, ANT2)
- 15 CM4 power LED (D14)

- 16 CM4 activity LED (D13)
- 17 Micro SD card connector (J17)\*
- 18 DIP control switches (SW8)
- 19 CM4 reset jumper (J49)
- 20 M.2 VDDIO current measurement jumper (J36)
- 21 Audio out jack (J46)\*
- 22 M.2 VBAT isolation jumper (J21)
- 23 Bluetooth® UART connector (J30)
- 24 2EA M.2 radio module
- 25 M.2 VBAT voltage select switch (SW5)\*
- 26 M.2 3.3 V power LED (D15)
- 27 WL JTAG connector (J38)\*\*
- 28 Bluetooth® reset button (SW2)
- 29 WLAN reset button (SW3)
- 30 Autobaud button (SW4)

\*Component is located at the bottom side of the board.

\*\*Component is not mounted on the board.

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