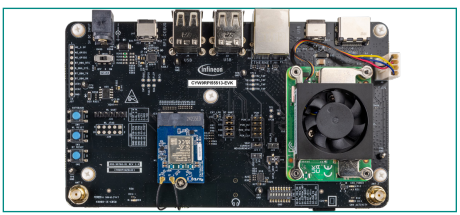
QUICK START GUIDE

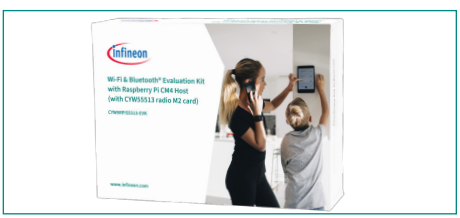
Wi-Fi & Bluetooth® Evaluation Kit with Raspberry Pi CM4 Host (with CYW55513 radio M.2 card)

CYW9RPI55513-EVK

Kit contents

1. CYW9RPI55513-EVK evaluation board (with Raspberry Pi CM4 module and CYW55513 radio M.2 card)
2. Two tri-band dipole antennas
3. SMA to U.FL Coaxial cable assembly (2 Qty)
4. USB-C to USB-C cable
5. Quick start guide (this document)





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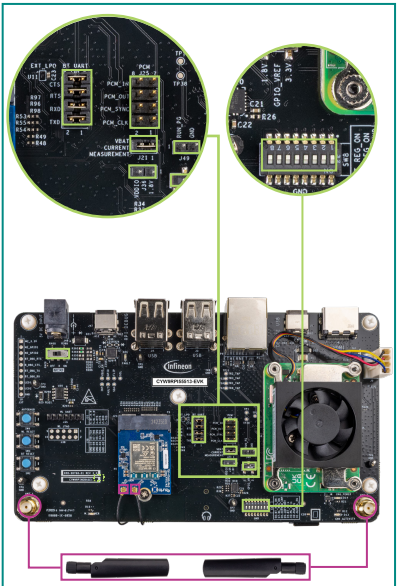
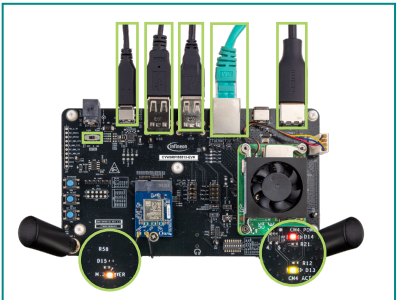


1 Default jumper/switch settings on the kit



2 Connect the peripherals and power on

Before you start

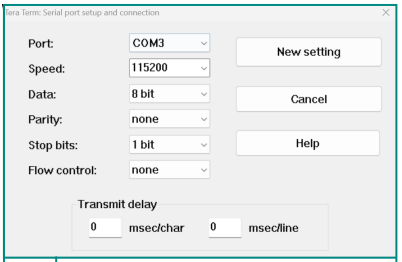
1. Ensure that you have the following:
   - PC with USB-C port
   - USB-compatible mouse and keyboard
   - Monitor with HDMI interface
   - Pre-flashed SD card present in the SD card slot (J17)
2. Connect the dipole antenna to SMA connectors (ANT1, ANT2) on the baseboard and make sure the antenna cable assemblies connected to the MHF4 connectors (J2 and J3) on the M.2 card.
3. Ensure the following jumper and switch settings on the board.

Jumper/switch	Position
J21	1-2
J30	1-2, 3-4, 5-6, 7-8
J36	Open
J25	Open
J49	Open
SW8	off (All poles)
SW9	1.8 V
SW5 (Bottom)	3.3 V
SW10	off

Powering the kit

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

   Note: If the 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-C port (J47) with the provided USB cable.
4. Switch on the power switch (SW10) and check for the CM4 power LED (D14), M.2 power LED (D15) to glow, and activity LED (D13) to blink.
5. Observe the boot-up screen on the monitor and check for the instructions on the screen to proceed.



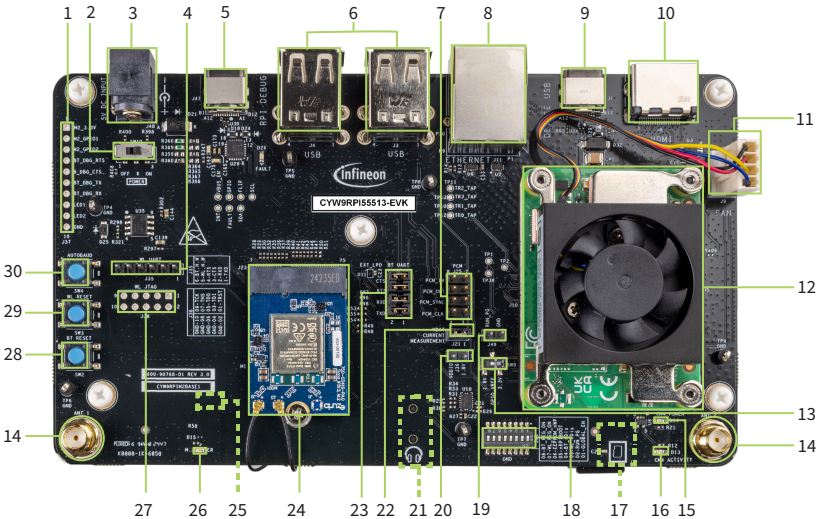
3 USB-UART COM port setup

Getting started with Serial console access

To access the serial debug console of the CYW9RPI55513-EVK, do the following:

1. Ensure that you have the following:
   - PC with USB-C port
   - UART terminal software such as Tera Term or Minicom
2. Connect the kit to the PC through the USB-C port (J47) using the USB cable provided.
3. Turn on the power switch (SW10) and check for the CM4 power LED (D14), M.2 power LED (D15) to glow, and the activity LED (D13) to blink.
4. 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
5. 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

CYW9RPI55513-EVK Evaluation Board details



1 M.2 GPIO header (J37)**
2 Power ON/OFF switch (SW10)
3 5 V DC jack (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 1Gb ethernet connector (J11)
9 Device USB-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 power isolation jumper (J21)
23 Bluetooth® UART connector (J30)
24 CYW55513 radio M2 card
25 M.2 power 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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