

# CYW920829M2EVK-02 Evaluation Kit release notes

## About this document

### Scope and purpose

Thank you for your interest in the CYW920829M2EVK-02 Evaluation Kit. This document lists kit contents, installation requirements, kit documentation, and limitations.

### Intended audience

This document is intended for anyone who uses the CYW920829M2EVK-02 Evaluation Kit.



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## Release contents

# 1 Release contents

## 1.1 Kit contents

The CYW920829M2EVK-02 Evaluation Kit box includes the following:

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

## Tool information

## 2 Tool information

### 2.1 Software and tools

Code examples for this kit require ModusToolbox™ software 3.0 or later. This is available on the [ModusToolbox™ software](#) webpage. Refer to the kit guide for details.

KitProg3 firmware v2.40 or later is required to program the [AIROC™ CYW20829 Bluetooth® LE SoC](#) device on the kit. The ModusToolbox™ installer automatically installs KitProg3 drivers.

### 2.2 Code examples and kit collateral

The kit [webpage](#) includes the documents and hardware files. The code examples are available on the Infineon [GitHub repository](#).

### 2.3 Installation

All required software installation instructions are provided in the kit guide, which is available on the kit [webpage](#).

### 2.4 Kit revision

This is the initial revision (Rev. \*\*)

### 2.5 Limitations

1. The SWD and SPI (MOSI, MISO) interfaces share the same GPIOs and must use one interface at a time. See the kit guide for more information on enabling the SPI option.
  - Workaround: None
2. The SPI (CS, CLK), User Button2, and USER LED1 share the same GPIOs, when you install the R105 to use SPI\_CLK, the USER LED1 will be glowing based on SPI CLK speed as R90 is loaded by default.
  - Workaround: This can be isolated with tripad resistors.
    - o Default P1.0 is connected to USER\_BTN2 via R87; remove it and install R104 to use SPI\_CS
    - o Default P1.1 is connected to USER\_LED1 via R90; remove it and install R105 to use SPI\_CLK
3. SCB1 UART is not connected via KitProg3, if you need to use SCB1 UART.
  - Workaround: Connect the UART lines from Arduino-compatible shield pins D4 and D5 to MiniProg4 or FTDI.
4. SCB2 I2C (P5.0, P5.1) pins are not connected to resistor pull-ups.
  - Resistor pull-ups are not given, as the same pins are used for CANFD by default.
  - Workaround: Follow any one of the methods to make SCB2 work as a master.
    - o You can use the SCB0 I2C pins (P4.0, P4.1) as master and loop back the SCB2 I2C pins (P5.0, P5.1).
    - o HAL: Connect external pull-up resistors
    - o PDL: Enable the SCB from the device configurator and change the pin drive mode from **“open drain, drives low, input buffer on”** to **“resistive pull-up, input buffer on”**.
5. The Rev. \*\* version of the kit contains the engineering sample (ES) parts of the AIROC™ CYW20829 Bluetooth® LE SoC. The production parts will be available in the next revision of the kit.
  - Workaround: None

## Tool information

6. Mismatch of EXT\_LPO pin connection
  - EXT\_LPO is connected to P5.0(WCO\_IN); this should have been connected to P5.1(WCO\_OUT)
  - Workaround:
    - PILO is used as default clock source, in case you need to use external crystal oscillator, you need to rework the following tripad resistors in M.2 board CYW920829M2IPA2:
      - R31-Remove resistor from option AC and install at position BC
      - R30-Remove resistor from option AC and install at position BC
      - R6- Remove resistor from the M.2 Board
7. a. When device is in DS-RAM mode the following pins are utilized for SWD operation.
  - P1\_0\_CPUSS\_SWJ\_SWO\_TDO
  - P1\_1\_CPUSS\_SWJ\_SWDOE\_TDI
  - P1\_2\_CPUSS\_SWJ\_SWDIO\_TMS
  - P1\_3\_CPUSS\_CLK\_SWJ\_SWCLK\_TCLK
  - Workaround: To utilize these pins, disable the debug mode before the device enters DS-RAM mode by using the `Cy_Syslib_SetWarmBootEntryPoint()` API. To disable debug mode in DS-RAM, 2<sup>nd</sup> parameter in the API must be set to 'false'.b. If the debug mode is disabled, the evaluation kit cannot be programmed.
  - Workaround: To re-program the device use 'make erase' command on modus shell.
8. VDDIO current is more than 2  $\mu$ A in DS and DS-RAM during current measurement.
  - Workaround:
    - Remove the R12 and R13 resistors that are loaded by default on the CYW920829M2IPA2.
    - Configure the RTS and CTS pins to Analog High-Z state before entering DeepSleep/DeepSleep-RAM and after waking up, it should be reconfigured back to its original state.
9. I2C and SPI doesn't operate when we provide power using coin cell for Master and Slave devices. Since the KitProg 3 section is not powered ON, the current is sinking into KitProg 3 internal ESD diodes.
  - Workaround:
    - For I2C, resistors R31 and R32 which are connected to KitProg3 must be isolated at the master side.
    - For SPI, resistors R56 and R57 which are connected to SWDCLK and SWDIO must be isolated at the Master side.
10. KitProg3 section in the kit does not support hardware interface for JTAG, Secondary UART, SPI, and GPIO.
  - Workaround: None

## 2.6 Documentation

The following kit documents are available on the kit [webpage](#).

- CYW920829M2EVK-02 Evaluation Kit guide
- CYW920829M2EVK-02 Evaluation Kit quick start guide
- CYW920829M2EVK-02 Evaluation Kit release notes

## 2.7 Technical support

For assistance, go to [www.infineon.com/support](http://www.infineon.com/support). Visit [community.infineon.com](http://community.infineon.com) to ask your questions in the Infineon developer community.

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## Tool information

### 2.8 Additional information

- For more information about the AIROC™CYW20829 Bluetooth® LE SoC, associated documentation and software, visit <https://www.infineon.com/cms/en/product/promopages/airoc20829/>
- For more information about ModusToolbox™ software functionality and releases, visit the ModusToolbox™ software webpage: [www.infineon.com/cms/en/design-support/tools/sdk/modustoolbox-software](http://www.infineon.com/cms/en/design-support/tools/sdk/modustoolbox-software).
- For a list of trainings on ModusToolbox™ software, visit [www.github.com/Infineon/training-modustoolbox](http://www.github.com/Infineon/training-modustoolbox).

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