CYPRESS™ Programmer

release notes

Version

4.2.0

About this document

Scope and purpose

Thank you for your interest in CYPRESS™ Programmer. This document lists the installation requirements, software and hardware updates, limitations, and known issues with the tool.

Document conventions

Convention	Explanation
Bold	Emphasizes heading levels, column headings, menus and sub-menus
Italics	Denotes file names and paths.
`Courier New`	Denotes APIs, functions, interrupt handlers, events, data types, error handlers, file/folder names, directories, command line inputs, code snippets
File > New	Indicates that a cascading sub-menu opens when you select a menu item

References

Refer to the Infineon programming solutions website for more information as needed.

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1 Product description

CYPRESS™ Programmer is a flexible, cross-platform application used to program CYPRESS™ devices. It can program, erase, verify, and read the flash of the target device.

CYPRESS™ Programmer is both a command-line tool and a GUI tool. It is based on OpenOCD v0.11.0 software with CYPRESS™ enhancements, fixes, and updates.

2 What's changed

2.1 Version 4.2.0

CYPRESS™ Programmer has been updated to 4.2.0 and delivers:

- Support for XMC7100/7200 and CYT4BB/BF devices
- Support for AIROC™ Bluetooth® CYW20829 devices
- Support for PSoC 4000T and EZ-PD™ PAG2S devices
- Support for CCG4, CCG3PA and CCG8 devices

2.2 Version 4.1.0

CYPRESS™ Programmer has been updated to 4.1.0 and delivers:

- Support for EZ-PD™ CCG7S, CCG7D and PMG1-B1 devices

2.3 Version 4.0.1

CYPRESS™ Programmer 4.0.1 was a minor update to version 4.0.0 and delivered:

- Support for WLC1 (Wireless Charging ICs) devices
- Blocking access to the SFlash User Rows on PMG1 and WLCx devices

2.4 Version 4.0.0

CYPRESS™ Programmer 4.0.0 was a major update to version 3.x and delivered:

- Support for PSoC™ 64 secure targets with 1M, 2M, 512K flash size and kits
- Support for PSoC™ 62 and PSoC™ 61 MCU targets with 256K flash size and kits
- Support for single-core PSoC™ 61 and PSoC™ 62 devices with 2M and 512K flash size
- Support for EZ-PD™ PMG1-S0, S1, S2, S3 devices and kits
- Support of PSoC™ 4100S Max targets and kits
- Support for chip protection and SFlash programming in PSoC™ 4000S, PSoC™ 4100S, PSoC™ 4100S Plus, PSoC™ 4100S Max, and PSoC™ 4500S devices
- Support for new IoT Bluetooth® kits
- Ability to specify the OpenOCD Telnet port number
- Bug fixes

3 What's included

- CYPRESS™ Programmer graphical user interface 4.2.0: This tool provides a graphical user interface to program, erase, verify, and read the flash of the target device.
- CYPRESS™ OpenOCD 4.4.0: This tool provides debugging and in-system programming functionality for target devices in CYPRESS™ Programmer.
- KitProg3 2.40: This tool provides communication firmware that supports both CMSIS-DAP and DAPLink programming and debugging.
- CyBridge library 3.4.0: This is a cross-platform library providing access to KitProg3, MiniProg4, and UART devices via high-level API.
- ChipLoad 1.6.1: This tool allows to download firmware to AIROC™ Bluetooth® platforms

3.1 Supported operating systems

- Windows 11 (x64), Windows 10 (x64) and Windows 7 SP1 (x64)
- macOS X 11 (x64) and macOS X 12 (x64), macOS 13 (x64)
- Ubuntu 18.04 LTS (x64), Ubuntu 20.04 (x64), and Ubuntu 22.04 (x64)

3.2 Supported kits

- PSoC™ 6 Pioneer and Prototyping kits
  - CY8CKIT-062-WiFi-BT
  - CY8CKIT-062-BLE
  - CY8CPROTO-062-4343W
  - CY8CPROTO-063-BLE
  - CY8CKIT-062S2-43012
  - CY8CPROTO-062S2-43012
  - CY8CPROTO-062S3-4343W
  - CY8CPROTO-062S2-43439
  - CY8CEVAL-062S2
  - CY8CKIT-062S4
- Wi-Fi kits
  - CYW9P62S1-43438EVB-01
  - CYW9P62S1-43012EVB-01
- PSoC™ 64 kits
  - CY8CPROTO-064S1-SB
  - CY8CPROTO-064B0S3
  - CY8CPROTO-064B0S1-BLE
  - CY8CKIT-064B0S2-4343W
  - CY8CEVAL-064SXS2
- PSoC™ 4 kits
  - CY8CKIT-041-40XX
  - CY8CKIT-041-41XX

- CY8CKIT-145-40XX
- CY8CKIT-149
- CY8CKIT-045S
- CY8CKIT-041S-MAX
- CY8CKIT-040T

- PMG1 kits
  - CY7110
  - CY7111
  - CY7112
  - CY7113
- AIROC™ Wi-Fi kits and boards
  - BCM94343WWCD2
  - BCM943362WCD4
  - BCM943438WCD1
  - BCM943364WCD1
  - CYW943012EVB-04
  - CYW943340WCD1
  - CYW943455EVB-02
  - CYW943907AEVAL1F (Rev 1.1)
  - CYW943907WAE4
  - CYW954907AEVAL1F
- AIROC™ Bluetooth® kits and boards
  - CYBT-213043-EVAL
  - CYBT-213043-MESH
  - CYBT-343026-EVAL
  - CYBT-413055-EVAL
  - CYBT-423054-EVAL
  - CYBT-483056-EVAL
  - CYW920719Q40EVB-01
  - CYW920719B2Q40EVB-01
  - CYW920706WCDEVAL
  - CYW920721B2EVK-02
  - CYW920721B2EVK-03
  - CYW920735Q60EVB-01
  - CYW920819EVB-02
  - CYW920820EVB-02
  - CYW989820EVB-01
  - CYW9M2BASE-43012BT
  - CYW920829M2EVB-01

- XMC7100/7200 kits and boards
  - KIT_XMC72_EVK

3.3 Supported product families

- PSoC™ 60xx, PSoC™ 61xx, PSoC™ 62xx, PSoC™ 63xx, PSoC™ 64xx
- PSoC™ 4000S, PSoC™ 4000T, PSoC™ 4100S, PSoC™ 4100S Plus, PSoC™ 4100S Max, PSoC™ 4500S, and PSoC™ 4500H
- PMG1-Sx, PMG1-Bx
- WLC1
- EZ-PD™ CCG7S, CCG7D
- CCG4, CCG3PA and CCG8
- PAG2S
- XMC7100/7200
- CYT4BB/BF
- AIROC™ CYW20829

3.4 Supported programming hardware

- SEGGER J-Link probe
- MiniProg4 stand-alone programmer/debugger
- KitProg3 onboard programmer/debugger
- FTDI FT2232H

4 Installation

- For Windows, use the .exe installer.
- For macOS, use the PKG installer. Approve the system software from developer "Cypress Semiconductor" in **System Preferences > Security & Privacy > General > Allow**.
- For Linux, unzip the tar.gz file and run the *<install_dir>/udev_rules/install_rules.sh* script before the first tool launch.

See also instructions in the CYPRESS™ Programmer GUI user guide.

5 Issues and defects

5.1 Known problems and solutions

The following problems are known in this release:

Defect ID	Defect description	Impact / workaround
PROGTOOLS-887	Not able to reliably program the following kits: • CYBT-213043-EVAL • CYBT-213043-MESH • CYBT-343026-EVAL • CYBT-413055-EVAL • CYBT-423054-EVAL • CYBT-483056-EVAL • CYW920719Q40EVB-01 • CYW920719B2Q40EVB-01 • CYW920706WCDEVAL • CYW920721B2EVK-02 • CYW920721B2EVK-03 • CYW920735Q60EVB-01 • CYW920819EVB-02 • CYW920820EVB-02 • CYW989820EVB-01	Put the device into recovery mode: 1. Press and hold the Recovery button. 2. Press and hold the Reset button for one second. 3. Release the Reset button. 4. Release the Recovery button. 5. Re-program the board as usual.
PROGTOOLS-884	Read operation does not work on the following kits: • CYBT-213043-EVAL • CYBT-213043-MESH • CYBT-343026-EVAL • CYBT-413055-EVAL • CYBT-423054-EVAL • CYBT-483056-EVAL • CYW920719Q40EVB-01 • CYW920719B2Q40EVB-01 • CYW920706WCDEVAL • CYW920721B2EVK-02 • CYW920721B2EVK-03 • CYW920735Q60EVB-01 • CYW920819EVB-02 • CYW920820EVB-02 • CYW989820EVB-01 • CYW9M2BASE-43012BT	No workaround

Defect ID	Defect description	Impact / workaround
PROGTOOLS-885	Unable to program the following kits after erase: • CYW920719Q40EVB-01 • CYW920719B2Q40EVB-01 • CYW920819EVB-02 • CYW920820EVB-02 • CYW989820EVB-01 • CYW920721B2EVK-02 • CYW920721B2EVK-03 • CYW920706WCDEVAL • CYW920735Q60EVB-01 • CYBT-213043-EVAL • CYBT-213043-MESH • CYBT-343026-EVAL • CYBT-413055-EVAL • CYBT-423054-EVAL • CYBT-483056-EVAL	After erase put the device into recovery mode: 1. Press and hold the Recovery button. 2. Press and hold the Reset button for one second. 3. Release the Reset button. 4. Release the Recovery button. 5. Re-program the board as usual.
PROGTOOLS-2459	Some AIROC™ Bluetooth® kits may not be accessible if hot-plugged on particular Windows 10 x64 PCs. Affected platforms are CYW9207xx and CYW9208xx.	After restarting application, the device should be available in CYPRESS™ Programmer.

5.2 Known limitations

The following are known limitations in this release:

Limitation ID	Description
CYPROGRAMMER-15	Not able to detect KitProg3/MiniProg4 probe when the OpenOCD process has been killed. Killing the OpenOCD process leaves KitProg3/MiniProg4 in unpredictable/invalid state. Unplug KitProg3/MiniProg4 from the USB port and re-attach.
CYPROGRAMMER-120	CYPRESS™ Programmer GUI loses connection with CYW943907AEVAL1F, CYW943907WAE4 kits in case they are programmed with an invalid image. Messages about lost connection can be safely ignored. Connection with target is restored during next operation.
CYPROGRAMMER-157	Unable to access PSoC™ 6 MCU via JTAG of J-Link if DAP has been switched to SWD mode previously. Hardware reset or power cycle is required to switch the DAP back to JTAG mode.

Limitation ID	Description
MTBIDE-781	There is a programming error for CYPRESS™ platforms that connect via FTDI on macOS Catalina. The boards include: • CYW920819EVB-02 • CYW920820EVB-02 • CYW920719B2Q40EVB-01 • CYW920719Q40EVB-01 • CYW920721B2EVK-02 • CYW920721B2EVK-03 • CYW989820EVB-01 • CYW920706WCDEVAL • CYW920735Q60EVB-01 This only happens in macOS Catalina 10.15.5 because of a serial port detection error. The macOS Catalina FTDI driver is missing the necessary device identification information. To resolve this issue, update to macOS Catalina 10.15.6.
PROGTOOLS-893	External memory programming does not work on CYW943340WCD1 kit
None	The CYW9M2BASE-43012BT kit supports only direct download to the RAM. To recover or reset this device, you should power cycle the board. Due to this limitation, the only allowed operation for this device is program to the RAM.
None	Due to significant changes in design of production PSoC™ 64 devices, CYPRESS™ Programmer 4.1.0 does not support previous pre-released PSoC™ 64 secure devices. In case if pre-released PSoC™ 64 silicon is connected to CYPRESS™ Programmer 4.1.0, the appropriate warning message is displayed in the Log view.
None	Some PMG1 devices can be acquired by programmer tool only in the Power Cycle mode. See description of the “Programming Mode” setting in the CYPRESS™ Programmer 4.1.0 user guide.

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