



Cypress Programmer Release Notes

Version 3.0

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.

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 v0.10.0 software with Cypress enhancements, fixes, and updates.

Cypress Programmer 3.0 delivers:

- Support of PSoC 4000S, PSoC4100S, PSoC 4100S Plus and PSoC 4500 product lines and corresponding Cypress kits
- Support of JTAG programming via MiniProg4
- Enhanced reporting of the connected KitProg3
- Support of new IoT Wi-Fi and Bluetooth kits
- Support of new PSoC 6 Pioneer and Prototyping kits
- Bug fixes

What's Included

- Cypress Programmer Graphical User Interface 3.0: This tool provides a graphical user interface to Program, Erase, Verify, and Read the flash of the target device.
- Cypress OpenOCD 3.0: This tool provides debugging and in-system programming functionality for target devices in Cypress Programmer.
- KitProg3 1.21: This tool provides communication firmware that supports both CMSIS-DAP and DAPLink programming and debugging.
- CyBridge library 2.3.1: This is a cross-platform library providing access to KitProg3, MiniProg4 and UART devices via high-level API.

Supported Operating Systems

- Windows 7 (x64) and Windows 10 (x64)
- macOS X 10.13 (x64), macOS X 10.14 (x64) and macOS X 10.15 (x64)
- Ubuntu 18.04 LTS (x64)

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
- Wi-Fi Cypress Kits
 - CYW9P62S1-43438EVB-01
 - CYW9P62S1-43012EVB-01
- PSoC 64 Cypress kits
 - CY8CPROTO-064-SB
 - CY8CKIT-064S2-4343W
 - CY8CPROTO-064B0S3
 - CY8CPROTO-064B0S1-BLE
 - CY8CKIT-064B0S2-4343W
- PSoC 4 Cypress kits
 - CY8CKIT-041-40XX
 - CY8CKIT-041-41XX
 - CY8CKIT-145-40XX
 - CY8CKIT-149
- IoT Wi-Fi kits and boards
 - BCM94343WWCD2
 - BCM943362WCD4
 - BCM943438WCD1
 - BCM943364WCD1
 - CYW943012EVB-04
 - CYW943340WCD1
 - CYW943455EVB-02
 - CYW943907AEVAL1F (Rev 1.1)
 - CYW943907WAE4
 - CYW954907AEVAL1F
- IoT Bluetooth kits and boards
 - CYBT-213043-EVAL
 - CYBT-213043-MESH
 - CYW920719Q40EVB-01
 - CYW920721B2EVK-03
 - CYW920819EVB-02
 - CYW920820EVB-02
 - CYW989820EVB-01

Supported Product Families

- PSoC 60xx/61xx/62xx/63xx/64xx
- PSoC 4000S, PSoC4100S, PSoC 4100S Plus, and PSoC 4500

Supported Programming Hardware

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

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 "udev_rules/install_rules.sh" script before the first tool launch. Script location:

<install_dir>/udev_rules

Resolved Issues

Limitation ID	Description
PROGTOOLS-886	The user cannot change SMIF region size in GUI.

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: <ul style="list-style-type: none"> • CYW920719Q40EVB-01 • CYW920819EVB-02 • CYBT-213043-MESH • CYW920820EVB-02 	Put the device into recovery mode: <ol style="list-style-type: none"> 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.

Defect ID	Defect Description	Impact / Workaround
PROGTOOLS-884	Read operation does not work on the following kits: <ul style="list-style-type: none"> • CYW920719Q40EVB-01 • CYW920819EVB-02 • CYBT-213043-MESH • CYW920820EVB-02 • CYBT-213043-EVAL • CYW920721B2EVK-01 • CYW920721B2EVK-03 • CYW989820EVB-01 	No workaround
PROGTOOLS-888	Cypress Programmer GUI/OpenOCD does not report an error on IoT devices during external flash programming when 'Offset' parameter is close to UINT32_MAX	Addresses close to UINT32_MAX are invalid, so they will not be used in real use cases.
PROGTOOLS-885	Unable to program the following kits after erase: <ul style="list-style-type: none"> • CYW920719Q40EVB-01 • CYW920819EVB-02 • CYBT-213043-MESH • CYW920820EVB-02 	After erase put the device into recovery mode: <ol style="list-style-type: none"> 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-1561	The CYBT-213043-EVAL kit is not accessible if hot-plugged on Ubuntu 18.04	After restarting application this device should be available in Cypress Programmer GUI

Known Limitations:

Limitation ID	Description
CYPROGRAMMER-15	Not able to detect KitProg3/MiniProg4 probe when the OpenOCD process has been killed. Killing 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 invalid image. Messages regarding lost connection can be safely ignored. Connection with target is restored during next operation.
CYPROGRAMMER-157	Unable to access PSoC 6 device via JTAG of jLink if DAP has been switched to SWD mode previously. Hardware Reset or power cycle is required in order to switch the DAP back to JTAG mode.

Limitation ID	Description
MTBIDE-781	<p>There is a programming error for Cypress platforms that connect via FTDI on macOS Catalina. The boards include:</p> <ul style="list-style-type: none"> • CYW920819EVB-02 • CYW920820EVB-02 • CYW920719Q40EVB-01 • CYW920721B2EVK-01 • CYW920721B2EVK-03 • CYW989820EVB-01 <p>This only happens in macOS Catalina because of a serial port detection error. The macOS Catalina FTDI driver is missing the necessary device identification information.</p> <p>If your project is gated by this issue, please contact Cypress Support. We will provide steps for how to work around the issue for the board you are using.</p>
PROGTOOLS-893	External memory programming does not work on CYW943340WCD1 kit
None	Changing chip protection state is not supported for PSoC 4A devices

Documentation and Links

Original OpenOCD sources v0.10.0:

<https://sourceforge.net/projects/openocd/files/openocd/0.10.0/>

OpenOCD v0.10.0 release notes:

<http://openocd.org/2017/01/openocd-0-10-0-release-is-out/>

OpenOCD v0.10.0 user guide:

<http://openocd.org/doc-release/pdf/openocd.pdf>



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