

Please note that Cypress is an Infineon Technologies Company.

The document following this cover page is marked as “Cypress” document as this is the company that originally developed the product. Please note that Infineon will continue to offer the product to new and existing customers as part of the Infineon product portfolio.

Continuity of document content

The fact that Infineon offers the following product as part of the Infineon product portfolio does not lead to any changes to this document. Future revisions will occur when appropriate, and any changes will be set out on the document history page.

Continuity of ordering part numbers

Infineon continues to support existing part numbers. Please continue to use the ordering part numbers listed in the datasheet for ordering.



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>



Cypress Semiconductor
An Infineon Technologies Company
198 Champion Ct.
San Jose, CA 95134-1709 USA
Application Support Hotline: 425.787.4814
www.cypress.com

© Cypress Semiconductor Corporation, 2020. This document is the property of Cypress Semiconductor Corporation and its subsidiaries, including Spansion LLC ("Cypress"). This document, including any software or firmware included or referenced in this document ("Software"), is owned by Cypress under the intellectual property laws and treaties of the United States and other countries worldwide. Cypress reserves all rights under such laws and treaties and does not, except as specifically stated in this paragraph, grant any license under its patents, copyrights, trademarks, or other intellectual property rights. If the Software is not accompanied by a license agreement and you do not otherwise have a written agreement with Cypress governing the use of the Software, then Cypress hereby grants you a personal, non-exclusive, nontransferable license (without the right to sublicense) (1) under its copyright rights in the Software (a) for Software provided in source code form, to modify and reproduce the Software solely for use with Cypress hardware products, only internally within your organization, and (b) to distribute the Software in binary code form externally to end users (either directly or indirectly through resellers and distributors), solely for use on Cypress hardware product units, and (2) under those claims of Cypress's patents that are infringed by the Software (as provided by Cypress, unmodified) to make, use, distribute, and import the Software solely for use with Cypress hardware products. Any other use, reproduction, modification, translation, or compilation of the Software is prohibited.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CYPRESS MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARD TO THIS DOCUMENT OR ANY SOFTWARE OR ACCOMPANYING HARDWARE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. To the extent permitted by applicable law, Cypress reserves the right to make changes to this document without further notice. Cypress does not assume any liability arising out of the application or use of any product or circuit described in this document. Any information provided in this document, including any sample design information or programming code, is provided only for reference purposes. It is the responsibility of the user of this document to properly design, program, and test the functionality and safety of any application made of this information and any resulting product. Cypress products are not designed, intended, or authorized for use as critical components in systems designed or intended for the operation of weapons, weapons systems, nuclear installations, life-support devices or systems, other medical devices or systems (including resuscitation equipment and surgical implants), pollution control or hazardous substances management, or other uses where the failure of the device or system could cause personal injury, death, or property damage ("Unintended Uses"). A critical component is any component of a device or system whose failure to perform can be reasonably expected to cause the failure of the device or system, or to affect its safety or effectiveness. Cypress is not liable, in whole or in part, and you shall and hereby do release Cypress from any claim, damage, or other liability arising from or related to all Unintended Uses of Cypress products. You shall indemnify and hold Cypress harmless from and against all claims, costs, damages, and other liabilities, including claims for personal injury or death, arising from or related to any Unintended Uses of Cypress products.

Cypress, the Cypress logo, Spansion, the Spansion logo, and combinations thereof, ModusToolbox, WICED, PSoC, CapSense, EZ-USB, F-RAM, and Traveo are trademarks or registered trademarks of Cypress in the United States and other countries. For a more complete list of Cypress trademarks, visit cypress.com. Other names and brands may be claimed as property of their respective owners.