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# CY8CKIT-002 PSoC<sup>®</sup> MiniProg3 Program and Debug Kit

#### Last Updated:Aug 30, 2018

The MiniProg3 supports the following protocols:

- SWD
- JTAG
- ISSP
- USB-I2C

Included with the kit is a 10-pin ribbon cable for connecting to standard 10-pin SWD/JTAG header interfaces utilized for our PSoC 3, PSoC 4, PSoC 5LP and PSoC 6 device families and the 5-pin ISSP programming header for PSoC 1 device family. The 5-pin connector also supports the USB-I2C Bridging capabilities and is a superset of the CY3240 capabilities. Please note, the CY8CKIT-002 only contains the MiniProg3 and supporting cables.



#### MiniProg3 \*C Revision Update:

MiniProg3 hardware has been updated to Rev \*C to support programming the eFuses of PSoC 6 MCU devices. The eFuse programming requires the reported voltage to be within +/- 5% tolerance and now the MiniProg3 reports the measured voltage within +/- 5% tolerance at 2.5V settings.

This revision also improves the accuracy of voltage detection for other voltage settings.

#### MiniProg3 \*B Revision Update:

Cypress Semiconductor has completed a hardware update to the MiniProg3 to address hardware issues seen with programming, ESD, and power management. The MiniProg3 revision, either \*A or \*B, is indicated using Downloaded from Arrow.com.

# PRICE & AVAILABILITY

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Development Kits/Boards (20) Application Notes (6) User Module Datasheets (1) Other Resources (1) PSoC Programmer (1) Development Kits (1)

### **RELATED PAGES**

CapSense® Controllers EZ-BLE and EZ-BT Bluetooth Modules EZ-BLE™ PRoC™ Module EZ-BLE™ PSoC™ Module PSoC® 3 PSoC® 5 PSoC® 5LP sticker on the back of the programmer. The following are a list of updates made to the MiniProg3 \*B programmer.

# Updated Hardware to Improve Power Cycle Programming:

The MiniProg3 hardware has been updated to better improve power cycle programming for all PSoC devices. It was discovered that the MiniProg3 \*A programmer revision did not correctly implement the power cycle programming methodology. Due to this issue the MiniProg3 \*A programmer could not correctly support power cycle programming for PSoC 3, PSoC 4 and PSoC 5LP devices. This specifically impacts customers who do not route out the XRES line to the programming connector or disable the optional XRES line on certain devices. The \*B revision of the MiniProg3 will support power cycle programming for all PSoC 3, PSoC 4, PSoC 5LP and PSoC 6 device families.

# Over-current and Non-Polarized Connection Updates:

There are known electrical risks to the MiniProg3 \*A revision that have been addressed with the \*B update. To address the electrical issues the MiniProg3 \*B programmer has added ESD over-current protection to the USB lines and has added electrical protection to the 5 and 10-pin connectors in case of a reverse polarity condition.

# Improved Voltage Detection Capabilities:

The MiniProg3 \*B programmer has been updated to improve the voltage detection capabilities. The MiniProg3 will measure the target voltage within an accuracy of 20 mV for a range of 1.8V – 5.0V.

# Supported Software:

The MiniProg3 \*B programmer is supported on the latest release of PSoC Programmer. To download the latest release, please navigate to the PSoC Programmer web page:

#### www.cypress.com/go/psocprogrammer

#### PSoC Programmer 3.22.2 Update:

MiniProg3 must be used with PSoC Programmer 3.22.2 or later. MiniProg3 may show intermittent failure while programming in SWD or JTAG mode when used with older versions of PSoC Programmer.

#### Additional Programming Information

The MiniProg3 programmer is part of a suite of programming options and programming content available to PSoC users. For customers who are looking for more information on general programming options and information please navigate to the web page linked below. On the General Programming web page we discuss all of the available programming options for customers including Software, Schematics, Programming Specifications, and 3rd party mass programming.

#### www.cypress.com/go/programming

The MiniProg3 programmer is not recommended for production programming. We suggest customers who need production programming support consult our 3rd party programming vendors on our General Programming page listed above or through our distribution partners: www.cypress.com/go/distributors

Software Title	Description	Link
PSoC Programmer	This kit requires PSoC Programmer for programming	Download

# **Related Files**

File Title	Language	Size	Last Updated
CY8CKIT-002 MiniProg3 Release Notes.pdf	English	159.7 KB	03/12/2018
CY8CKIT-002 MiniProg3 Quick Start Guide.pdf	English	4.24 MB	04/12/2017
CY8CKIT-002 MiniProg3 Kit Guide.pdf	English	514.81 KB	04/12/2017

Need help? Ask a question and find answers in the Cypress Developer Community Forums.

Low/intermittent bandwidth users tip: Firefox and Chrome browsers will allow downloads to be resumed if your connection is lost during download.

# **Related Resources**

CY8CKIT-044 PSoC® 4 M-Series Pioneer Kit	08/29/2018
CY8CKIT-142: PSoC 4 BLE Module	02/18/2018
CY5670: CySmart USB Dongle	02/18/2018
CY5671: PRoC BLE Module	02/18/2018
CY5674: PRoC BLE SMA Module	08/28/2018
General PSoC <sup>®</sup> Programming	09/08/2015
CY8CKIT-001 PSoC® Development Kit	08/30/2018
CY8CKIT-003 PSoC® 3 FirstTouch™ Starter Kit	08/28/2018
CY8CKIT-006 PSoC® 3 LCD Segment Drive Evaluation Kit (OBSOLETE)	01/25/2018
CY8CKIT-007 PSoC® 3 Precision Analog Voltmeter Demo Kit	01/25/2018
CY8CKIT-017 CAN/LIN Expansion Board Kit	01/25/2018
CY8CKIT-014 PSoC® 5 FirstTouch™ Starter Kit (OBSOLETE)	01/25/2018
CY8CKIT-030 PSoC® 3 Development Kit	08/29/2018
CY8CKIT-050 PSoC® 5LP Development Kit	04/02/2018
CY8CKIT-033A PSoC® 3 MFi (Made for iPod®   iPhone®   iPad®) Digital Audio Development Kit for Lightning™	08/29/2018
CY8CKIT-042 PSoC® 4 Pioneer Kit	04/08/2018
PSoC® 4 Development Kits	09/17/2018
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PSoC® 5LP Development Kits	08/29/2018
CY8CKIT-038 PSoC® 4200 Family Processor Module Kit	09/10/2018
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