



PSoC® Programmer Release Notes

Version 3.14

Release Date: February 23, 2012

Thank you for your interest in the PSoC® Programmer. The release notes lists all the new features, installation requirements, supported devices and defects fixed from the previous release.

The PSoC Programmer supports the PSoC Creator™ and the PSoC Designer™ applications and also supports secondary applications, such as the Bridge Control Panel and the Clock Programmer. The PSoC Programmer also provides to all users a COM layer that can be used to create custom applications using Cypress hardware, such as the MiniProg1, MiniProg3 or the CY3240 USB-I2C Bridge.

The PSoC Programmer supports all the PSoC architectures including PSoC® 1, PSoC 3, PSoC 5 and the TrueTouch devices.

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New Features for PSoC Programmer

This PSoC Programmer release supports new devices.

New Device Support

For a complete list of new devices supported in this release of PSoC Programmer, please see the subsequent section. This release is adding new devices to support the PSoC Creator and TrueTouch device families.

Updated USB Bootloader Example Projects

This release of PSoC Programmer will provide updated PSoC1 USB Bootloader example projects. In this release we support new updated example applications, HID driver support, and expanded PSoC 1 example projects. The new Bootloader content is included in the root installation directory for PSoC Programmer.

C:\Program Files\Cypress\Programmer\3.14\Bootloaders

SWV Debugging Support for PSoC 3 and 5 Devices

PSoC Programmer has added SWV debugging support for PSoC 3 and PSoC 5 devices. This update includes new API support and updated Minipro3 firmware to support the new protocol. Minipro3 will now support high-speed data trace support for PSoC 3/5 devices. For more information on this debugging protocol please see the PSoC 3/5 datasheets and technical reference manuals as well as the PSoC Programmer COM guide and examples.

C:\Program Files\Cypress\Programmer\3.14\Examples\Protocols\SWV

TX8 (UART) Capabilities

With support the SWV protocol the Minipro3 and PSoC Programmer can now support TX8 data acquire capabilities. PSoC Programmer has included example projects and sample code to support this interface. The PSoC Programmer COM guide has also been updated to reflect the new TX8 capabilities as a subset of the SWV actions.

C:\Program Files\Cypress\Programmer\3.14\Examples\Protocols\UART

New Supported Devices for PSoC Programmer

The following table lists the new device support for PSoC Programmer.

Device Family	Devices
CYRF69x13	CYRF69313-40LFXC
	CYRF69313-40LTXC
CYRF69x03	CYRF69303-40LFXC

Device Family	Devices
	CYRF69303-40LTXC
CY8CTMA4xx	CY8CTMA463-60BUI
	CY8CTMA463-60BUIES2
CY8CTMA7xx	CY8CTMA768BZI-12
	CY8CTMA768BZI-13
	CY8CTMA768BZI-22
	CY8CTMA768BZI-23
	CY8CTMA768BZI-33
	CY8CTMA768BUI-12
	CY8CTMA768BUI-13
	CY8CTMA768BUI-22
	CY8CTMA768BUI-23
	CY8CTMA768BUI-33
	CY8CTMA768BUI-43
	CY8CTMA768BZI-43
CY8CTMA1xxx	CY8CTMA1036BZI-12
	CY8CTMA1036BZI-22
	CY8CTMA1036BZI-23
	CY8CTMA1036BZI-33
	CY8CTMA1036BZI-00

Device Family	Devices
	CY8CTMA1036BUI-12
	CY8CTMA1036BUI-13
	CY8CTMA1036BUI-22
	CY8CTMA1036BUI-23
	CY8CTMA1036BUI-33
	CY8CTMA1036BUI-00
	CY8CTMA1036BUI-43
	CY8CTMA1036BZI-43
	CY8CTMA1271BUI-12
	CY8CTMA1271BUI-13
	CY8CTMA1271BUI-22
	CY8CTMA1271BUI-23
	CY8CTMA1271BUI-33
	CY8CTMA1271BUI-43
	CY8CTMA1728BUI-12
	CY8CTMA1728BUI-13
	CY8CTMA1728BUI-22
	CY8CTMA1728BUI-23
	CY8CTMA1728BUI-33
	CY8CTMA1728BUI-43

Device Family	Devices
CY8C20xx7x	CY8C20237-24SXI
	CY8C20237-24LKXI
	CY8C20247-24LKXI
	CY8C20247-24SXI
	CY8C20247S-24LKXI
	CY8C20337-24LQXI
	CY8C20347-24LQXI
	CY8C20347S-24LQXI
	CY8C20437-24LQXI
	CY8C20447-24LQXI
	CY8C20447S-24LQXI
	CY8C20467-24LQXI
	CY8C20467S-24LQXI
	CY8C20637-24LQXI
	CY8C20647-24LQXI
	CY8C20647S-24LQXI
	CY8C20667-24LQXI
	CY8C20667S-24LQXI
	CY8C20747-24FDXC
	CY8C20767-24FDXC



Update / Upgrade Notes

Upgrade Using Cypress Update Manager

All users who currently have PSoC Programmer 3.10 or later installed, should use the CyInstaller Update Manager to upgrade their programmer release.

PSoC 3 ES2 vs. ES3 Support

PSoC Programmer allows Hex files targeting the specific silicon to be programmed into that silicon only. For example, if you generate a Hex file for ES2 revision silicon, you will not be able to program that file into ES3 devices. The warning messages are displayed if you attempt to program a Hex file into the wrong silicon revision. Make sure the tools that you are using should support the silicon revision..

Coexistence with Older PSoC Programmer Releases

Uninstall all releases of the PSoC Programmer 3.06 before you install or update to the latest PSoC Programmer.

Defects Fixed

The following defects were fixed in this release of the PSoC Programmer.

Defect	Fix and Impact	Defect
Programmer Application		
Designer can not program "CY8C28243-24PVXI " but programmer can program	Updated Programmer database	115005
Cy USB Bootloader is not detected in Vista 64-bit machine	Updated bootloader examples to include HID driver for use on 64 bit machines.	80565
MiniProg3: Add support to receive TX8 data	Minipro3 and Programmer COM updated	89724
Errors in TrueTouch MPN in PP "CY8C" vs. "CP8C"	Updated Programmer database	108507
MP3 keeps SDATA high after MR, MW, and IOW operations of ISSP protocol	Update Minipro3 firmware	110188
Hardware		
N/A	N/A	N/A
Installer		
N/A	N/A	N/A
Documentation		
Bus clock selection for JTAG/SWD	Updated user guide documentation	57931
Bridge Control Panel		
N/A	N/A	N/A

Known Issues

The following is a list of known issues for PSoC Programmer release.

Defect	Fix and Impact	Defect
Miniprogram1 firmware v1.77 causes an acquire failure.	In the previous releases of the MiniProg1 firmware, the reset line was pulled low during the power cycle programming. The MiniProg1 now supports devices that have active low reset line states. To account for this, the MiniProg1 now leaves the reset line in a high-z state. Be aware of any pull up or pull down resistor circuitry that could hold the chip in a reset state.	69058
Power Cycle Mode for PSoC 3 and PSoC 5 using the revision *A MiniProg3 is implemented with reset toggling.	The Power Cycle mode for the MiniProg3 is currently using the reset line to acquire the target device using both the SWD and the JTAG protocols. A firmware solution is available for future revisions of silicon. If development is blocked, please file a tight link support case with Cypress.	69694
CyInstaller Live Update is not supported for Windows 2000 systems.	Customers will be able to install the PSoC Programmer using the CyInstaller. To update to a new version, you must completely uninstall the existing version of the PSoC Programmer using the CyInstaller and then download the latest CyInstaller from the PSoC Programmer web page.	75099
Uninstall of PSoC Programmer does not uninstall drivers.	The PSoC Programmer installer does not uninstall the device drivers by design. Many Cypress software tools utilize the drivers.	96542
Programming Encore II devices using Power Detect programming mode is not working with the Miniprogram3.	The Miniprogram3 does not support power detect programming for Encore II due to its Pull-Down interface on Data line. The Miniprogram3 does support power cycle and reset modes for the Encore II devices.	119896

Device Reorganization and Consequences:

An update was made to the PSoC Programmer database organization that impacts customers programming certain devices using PSoC Programmer 3.12 Beta (or older) with PSoC Designer SP6 and earlier. Please see the following knowledge based article that details the issue and solution.

<http://www.cypress.com/?rid=45688>

Limitations

The following are the known limitations with PSoC Programmer:

- You must change the programming mode manually using the provided buttons.
- The supported programming and bridging hardware can only be used by one application at a time. Closing the port in one application releases the hardware for other client applications.

- There is no programming support for wafer sale parts.
- When programming verification fails, the specific failing location(s) are not indicated.
- ICE4000 is no longer supported in the PSoC Programmer.
- When using the ICE-Cube or MiniProg1 for programming, the PSoC Programmer applies 3.3 V to the XRES pin during connection. This may cause power to be applied to the target system. During programming, 3.3 V is applied to the target system's SCLK(P1-1), SDATA (P1-0), and XRES pins.
- The MiniProg1 programmer does not support CY8C25/26xxx parts. The ICE-LPT and ICE-4000 programmers support the CY8C25/26xxx parts. You need to use PSoC Programmer version 2.33 or earlier if needed.
- A very infrequent USB connection issue notifies you that an unknown device was detected when a MiniProg is plugged in. Unplugging the MiniProg1 and then reconnecting it solves this issue.
- PSoC Programmer may experience “Can't Acquire Device” errors for CYRF69103-40LFXC. There have been intermittent reports of “Can't Acquire Device” errors, which may be individually chip dependent. Programming another device clears the problem.
- If you select the Fixed Reminder option, please know that there may not be an update for PSoC Programmer currently available. Please reset the reminder interval under the Fixed Reminder, switch to an automatic web update, or disable the update reminder. Close and restart the PSoC Programmer to reset the notification in the banner and in the status window.
- CY3210-MiniProg1 may have two capacitors soldered onto the SCL and SDA programming lines causing failures during programming. To remove these capacitors, please contact Cypress technical support for additional steps in addressing this issue.
- The CY3240 USB-I2C Bridge firmware cannot be upgraded in the field. You are urged to purchase a MiniProg3 programmer and bridge, which supports USB-I2C functionality and supports field upgrades.

Installation

Minimum and Recommended Requirements

Hardware/Operation System Requirements	Minimum	Recommended
Processor Speed	2 GHz	2 GHz Dual Core
MB of RAM	2 GB	3 GB
MB of Free Hard Drive Space	1 GB	1 GB
Screen Resolution	1024x768	1280x1024
CD/DVD Drive	Not Req.	✓ *
USB	Full Speed	2.0 Hi-Speed
Windows® XP (SP2 or higher), Vista, or Windows 7	✓	✓
Software Prerequisites **	Minimum/Recommended Version	
Microsoft Internet Explorer (not IE8 beta)	7	
.NET Framework	2.0 SP1	
Adobe Reader (for viewing PDF Documentation)	6	9+
Windows Installer	3.1	

* CD/DVD drive is only required for installation with no web access.



Applications Dependent on a PSoC Programmer Installation

The following applications require PSoC Programmer to be preinstalled. Both PSoC Designer and PSoC Creator installers will deliver the correct version of PSoC Programmer.

- PSoC Designer
- PSoC Creator

The following applications are included in the PSoC Programmer installation:

- Bridge Control Panel is selectable from PSoC Programmer CyInstaller installation
- Clock Programmer is selectable from PSoC Programmer CyInstaller installation

Update Instructions

As part of the installation process, the Cypress Update Manager utility is also installed and located on the **Start** menu under the Cypress folder. You can use this utility to update all the programs you have installed when updates for them become available.

Follow the instructions provided by the CyInstaller.

Installation Notes

The installation process is a set of wizards that walk you through installing various components. You can install the PSoC Programmer and various prerequisites from the web, or from a CD. There are slight differences in the process, based on the medium used to install the software. CyInstaller is supported by both the web installation and through an ISO image that can be downloaded and burned to a CD.

The CDs provide the necessary prerequisites and the wizards to guide you through installing the appropriate software. The Web installation requires you to download and install the executables separately. The following sections contain more specific installation details.

Note Do NOT plug in any programming hardware until all the software installation is complete.

Web Installation

If you are downloading the software from the web, you should run the PSoC Programmer executable.

1. Double-click the PSoC Programmer executable file to launch the PSoC Programmer InstallShield Wizard.
2. Install all the prerequisites as needed.
3. Follow the prompts to install the PSoC Programmer. The CyInstaller for the PSoC Programmer opens and displays a series of steps to install the PSoC Programmer and various drivers. When complete, close the installer.

Please note that you may experience installation failure using the web installation method, this is commonly due to firewall or administration privileges. Please contact your IT individual for assistance or download the ISO image provided on the Programmer web page and burn the image and install Programmer from the CD.

PSoC Programmer CD Installation

The PSoC Programmer ISO image contains the PSoC Programmer, and various prerequisites.

1. Burn and Load the CD into the PC. The main installer program should run automatically. If not, double-click the *cyautorun.exe* file to launch it.

2. On the main installer, click the **Install Software for PSoC...** button to launch the PSoC Creator InstallShield Wizard.
3. Follow the prompts on the wizard. The first step prompts to install the PSoC Programmer.
The CyInstaller for PSoC Programmer opens and displays a series of steps to install the PSoC Programmer and various drivers.
4. Continue to follow the prompts until PSoC Programmer and the drivers are installed, and then resume with the main installer program.

Cypress PSoC Kit CD Installation

A kit CD contains the PSoC Programmer, and additional applications, such as PSoC Creator or the PSoC Designer, documentation, and prerequisites needed for the associated kit. The installation process is similar to the PSoC Programmer CD installation; however the overall process differs, as follows:

1. Load the CD. The kit installer program should run automatically. If not, double-click the autorun program to launch it.
2. On the kit installer, follow the prompts to begin the installation process. The first step prompts to install the PSoC Programmer.
3. The CyInstaller for PSoC Programmer opens and displays a series of steps to install the PSoC Programmer and various drivers.
4. Continue to follow the prompts until PSoC Programmer and the drivers are installed, then resume with the kit installer program.
5. Continue the prompts to install the application IDE's, PSoC Creator or PSoC Designer. Please see the respective release notes for these tools for detailed instructions.

Device Driver Re-Installation

During installation of PSoC Programmer you are prompted to install the device drivers for the PSoC Programmer. If you clicked "Cancel" originally, and now you want to re-install the drivers, please do the following:

Navigate to the PSoC Programmer root installation directory.

Open the *Drivers* folder and run the *driver.bat* file. This installs the PSoC Programmer drivers.

Further Reading

Documentation

Documentation is available in the PSoC Programmer Root Directory under Documents. The documents include:

- Programmer User Guide
- PSoC Programmer COM Interface Guide
- PSoC Programmer Command Line Interface Guide



- PSoC Programmer Example Code

Updates

Check for the software updates to the Cypress PSoC development tools on the following web pages:

PSoC Software Tool	Link
PSoC Designer	http://www.cypress.com/go/psocdesigner
PSoC Creator	http://www.cypress.com/go/psoccreator
PSoC Programmer	http://www.cypress.com/go/psocprogrammer

Customer Issues

We recommend that customers, who experience any issues with the software or the PSoC devices, please contact customer support at the following phone numbers 1-800-541-4736 (ext. 8) or 1-425-787-4814.

Customers may also file a Tech Support Case at the following web page:

www.cypress.com/go/support

Silicon Errata

The most up-to-date versions of the silicon errata are available on the website at <http://www.cypress.com/psoc> under Related Documentation.



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