



PSoC® Programmer Release Notes

Version 3.15

Release Date: May 16, 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™, PSoC Designer™, MTK, and TrueTouch Host Emulator applications. PSoC Programmer also installs secondary applications such as the Bridge Control Panel and the Clock Programmer. PSoC Programmer supports all Cypress programming hardware such as the MiniProg1, MiniProg3, TrueTouch Bridge or the CY3240 USB-I2C Bridge. The PSoC Programmer provides to all users a COM layer that can be used to create custom applications.

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

Contents

New Features for PSoC Programmer	2
New Device Support	2
Removed Classic and Modern Views from PSoC Programmer	2
Autodetect for Checksum/Read/Verify Operations	2
New TrueTouch Bridge Firmware	2
uVision/uLink IDE Support for CY8CTMA4xx/4xxM/5xx Silicon	2
New Supported Devices for PSoC Programmer	2
Update / Upgrade Notes	5
Upgrade Using Cypress Update Manager	5
PSoC 3 ES2 vs. ES3 Support	5
Coexistence with Older PSoC Programmer Releases	5
Defects Fixed	5
Known Issues	5
Limitations	6
Installation	7
Minimum and Recommended Requirements	7
Applications Dependent on a PSoC Programmer Installation	8
Update Instructions	8
Installation Notes	8
Device Driver Re-Installation	9
Further Reading	9
Silicon Errata	10

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.

Removed Classic and Modern Views from PSoC Programmer

Both the Classic and Modern views have been removed from the PSoC Programmer GUI selections.

Autodetect for Checksum/Read/Verify Operations

PSoC Programmer will now support autodetecting the target device when the autodetect option is selected for checksum, read, and verify operations.

New TrueTouch Bridge Firmware

An update to the TrueTouch Bridge has been made for this release, which will add new programming support for new CY8CTMA12xx/17xx device families.

uVision/uLink IDE Support for CY8CTMA4xx/4xxM/5xx Silicon

PSoC Programmer will distribute configuration files for integrating CY8CTMA4xx, CY8CTMA4xxM, and CY8CTMA5xx silicon with the uVision and uLink development tools. The configuration files are located in the following installation directory:

C:\Program Files\Cypress\Programmer\3.15\3rd_party_configuration_files\

Accompanying the configuration files are help documents that include instructions on installing the configuration files in uVision.

New Supported Devices for PSoC Programmer

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

Device Family	Devices
CY8C29xxx	CY8C29666-24LTXI
CY8C27xxx	CY8C27643-24LTXI
CY8C20xx6A	CY8C20236A-24LKXA
	CY8C20566A-24PVXA
CY8CTMA6xx	CY8CTMA616AA-12
	CY8CTMA616AE-12
	CY8CTMA616AA-13

Device Family	Devices
	CY8CTMA616AE-13
CY8CTMA8xx	CY8CTMA884AA-12
	CY8CTMA884AE-12
	CY8CTMA884AA-13
	CY8CTMA884AE-13
CY8C38xx	CY8C3866AXA-040
CY8C4xxx	CY8C4111PVI-013
	CY8C4111PVI-025
	CY8C4111PVI-004
	CY8C4111LTI-011
	CY8C4111LTI-008
	CY8C4111LTI-007
	CY8C4111AXI-031
	CY8C4111AXI-021
	CY8C4111AXI-034
	CY8C4112PVI-011
	CY8C4112PVI-014
	CY8C4112PVI-009
	CY8C4112LTI-022
	CY8C4112LTI-005
	CY8C4112LTI-017
	CY8C4112AXI-025
	CY8C4112AXI-018
	CY8C4112AXI-028

Device Family	Devices
	CY8C4112AXI-027
CYRF89xxx	CYRF89535-68LTXC
	CYRF89435-40LTXC
	CYRF89235-40LTXC
CY8CPEN1xx	CY8CPEN100LTXI
CY8CTMA4xx	CY8CTMA443-48LQIES4
	CY8CTMA483-44LQI
	CY8CTMA483-48LQI
	CY8CTMA483-60BUI
CY8CTMA1xxx	CY8CTMA1036BZI-13ES4
	CY8CTMA1036BZI-13ES3
CY8CTMA12xx	CY8CTMA1271BUI-00
	CY8CTMA1271BUI-00ES2
	CY8CTMA1271BUI-33ES2
	CY8CTMA1271BUI-43ES2
CY8cTMA17xx	CY8CTMA1728BUI-00
	CY8CTMA1728BUI-00ES2
	CY8CTMA1728BUI-33ES2
	CY8CTMA1728BUI-43ES2
CY8CTMA15x	CY8CTMA151-44LQI
	CY8CTMA152-44LQI
CY8CTMA16x	CY8CTMA161-44LQI
	CY8CTMA162-44LQI
CY8CTMA17x	CY8CTMA171-44LQI

Device Family	Devices
	CY8CTMA172-44LQI

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		
Support for CY8C270021 Devices	Updated database files	116510
Hardware		
N/A	N/A	N/A
Installer		
N/A	N/A	N/A
Documentation		
Improving I2C Perl Example Code	Updated readability and usability of code examples	114744
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	69058

	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.	
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 Minipro3.	The Minipro3 does not support power detect programming for Encore II due to its Pull-Down interface on Data line. The Minipro3 does support power cycle and reset modes for the Encore II devices.	119896
Cancelling Uninstall Corrupts COM object	If the user cancels a PSoC Programmer uninstallation after the Black DOS windows appears, uninstallation may fail, leaving Programmer in an unusable but still installed state. If cancel is pressed before that window then there will be no issue. This issue will be addressed in the PSoC Programmer 3.16 release. To workaround this issue, users can re-run the uninstaller.	116544

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 base 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.
- 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
- TrueTouch Host Emulator
- MTK

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 CylnInstaller 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 CylnInstaller 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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