PSoC® Programmer 3.13 Release Notes

PSoC Programmer version 3.13

Release Date: May 9, 2011

Thank you for your interest in PSoC® Programmer 3.13. These release notes list all new features, installation requirements, supported devices and defects fixed from the previous release.

PSoC Programmer supports PSoC Creator™ and PSoC Designer™ applications as well as supporting secondary application such as the Bridge Control Panel and the Clock Programmer. PSoC Programmer provides a COM layer customers can use to create applications using Cypress hardware.

PSoC Programmer supports all PSoC architectures including PSoC® 1, PSoC 3 and PSoC 5.

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New Features for PSoC Programmer 3.13

This release expands device support for the PSoC Designer 5.1 SP2 release, which includes fixes for defects from the PSoC Programmer 3.12.5 release, new device support and delivers an update to the Bridge Control Panel.

Improved Programming Functionality for First Touch Kits

PSoC Programmer 3.13 includes a new patch programming option for users programming the FTK3/5, DVKProg, Kit-030, Kit-050 kits. The option will dramatically improve programming times. Please see the User Guide for details on this new feature.

Clear EEPROM Capability

PSoC Programmer 3.13 now provides the user, in the Programming Options menu, the ability to clear the EEPROM after programming. This selection is defaulted to off and must be enabled by the user. Please see the User Guide for more information on this new feature.

Expanded PSoC3/5 COM Examples

PSoC Programmer 3.13 provides expanded example projects that customers may use to develp custom applications for testing and programming PSoC devices. For this release PSoC Programmer 3.13 is providing new and expanded PSoC3/5 based examples across PERL, Python, C++ and C# languages.

Improved JTAG Programming

PSoC Programmer 3.13 now supports JTAG programming for target systems that have unidirectional buffers between the Programmer and the target device.

Update to the Miniprog3 Firmware

PSoC Programmer 3.13 will release an update to the Miniprog3 firmware to address an I2C defect seen with the SendI2CPacket() API.

Bridge Control Panel v1.3

PSoC Programmer 3.13 includes the Bridge Control Panel v1.3. The Bridge Control Panel v1.3 includes an update to the Charting capabilities to allow for bar graph charting display and centroid calculations. This update will support CapSense button and slider development.

New Supported Devices

The following table lists the new device support for PSoC Programmer 3.13.

Device Family	Device
CYONSxxxx	CYONSFN3050-XW07
	CYONSFN3050-XW11
	CYONSFN3050-XWTH
CY8CTST24x	CY8CTST241-FDC-01
	CY8CTST242-LQI-01
	CY8CTST242-LTI-01
	CY8CTST242-FDC-01
CY8CTMG24x	CY8CTMG240-FDC-01

Device Family	Device
CY8CTMA34x	CY8CTMA341-FNI-01
	CY8CTMA341-LQI-01
	CY8CTMA341-48LQI-01
	CY8CTMA342-FNI-09
	CY8CTMA342-LQI-09
	CY8CTMA342-48LQI-09
CY8CTMA35x	CY8CTMA351-FNI-03
	CY8CTMA351-LQI-03
	CY8CTMA351-48LQI-03
	CY8CTMA352-FNI-11
	CY8CTMA352-LQI-11
	CY8CTMA352-48LQI-11
CY8CTMA395	CY8CTMA395-LTI-00
	CY8CTMA395-LTI-01
CY8C8xxx	CY8CTMA884AI-13
	CY8CTMA884LTI-12
	CY8CTMA884LTI-13
CY8C6xxx	CY8CTMA616LTI-12
	CY8CTMA616LTI-13
CY8CTMA4xx	CY8CTMA4xx

Update / Upgrade Notes

Upgrade Using Cypress Update Manager

All users who installed PSoC Programmer 3.13 or earlier, should use the CyInstaller Update Manager to upgrade their programmer release.

PSoC 3 ES2 vs. ES3 Support

PSoC Programmer 3.13 allows Hex files targeting 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. Warning messages are displayed if you attempt to program a Hex file into the wrong silicon revision. Make sure the tools you are using support the silicon revision you are using.

Coexistence with Older PSoC Programmer Releases

Uninstall all releases of PSoC Programmer 3.06 and earlier before you install or update to PSoC Programmer 3.13.

Defects Fixed

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

Defect	Fix and Impact	Defect
Programmer Application		
CY8C32xx,34xx,36xx are not listed under Device Family in PSoC Programer 3.12	The device database was updated to be more reflective of the available PSoC 3 devices.	83548

Require an Option to Clear EEPROM During Programming	An option has been added to the Programming Options menu in PSoC Programmer to enable or disable clearing of the EEPROM after programming.	87080
Unable to program EEPROM using the Command Line Interface.	The PSoC Programmer COM has enabled EEPROM arrays for PSoC3_ProgramRow and PSoC3_WriteRow APIs. For more information please see the PSoC Programmer CLI Guide.	81284
PSoC Programmer JTAG Programming Issue	Software solution implemented to acquire and program devices in pure JTAG mode.	91752
Change the "Program Write Once NVL" to be done before "Program Protect" step.	The PSoC 3/5 programming flow was updated to reflect the algorithm change. This does not affect devices that have already been programmed successfully.	94547
Hardware		
N/A	N/A	N/A
Installer		
N/A	N/A	N/A
Documentation		
N/A	N/A	N/A
Bridge Control Panel		
Miniprog3 SendI2CPacket() failure and lockup when CY3240-I2USB works	The Miniprog3 firmware has been updated to address this defect.	72486
Update CapSense example to demonstrace Bar Graph mode	Example projects have been updated to demonstrate the new Bar Graph capabilities of the Bridge Control Panel	79050

Known Issues

The following is a list of known issues for PSoC Programmer 3.13 release.

Defect	Fix and Impact	Defect
Miniprog1 firmware v1.77 causes an acquire failure.	In previous releases of the Miniprog1 firmware, the reset line was pulled low during 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 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 SWD and JTAG protocols. A firmware solution will be available for future revisions of silicon. If development is blocked please file a tightlink support case with Cypress.	69694
CyInstaller Live Update is not supported for Windows 2000 systems.	Customers will be able to install PSoC Programmer using the CyInstaller. To update to a new version users must completely uninstall the existing version of PSoC Programmer using 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

Device Reorganization and Consequences:

An update was made to the PSoC Programmer database organization that will impact 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 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 PSoC Programmer.
- When using the ICE-Cube or MiniProg1 for programming, PSoC Programmer applies 3.3V to the XRES pin during connection. This may cause power to be applied to the target system. During programming, 3.3V 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 supported the CY8C25/26xxx parts. Users will need to user 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 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. Users 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
Win 2000, 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

- 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 will also be installed and located on the **Start** menu under the Cypress folder. You can use this utility to update all programs you have installed when updates for them become available.

Follow the instructions provided by CyInstaller.

Installation Notes

The installation process is a set of wizards that walk you through installing various components. You can install 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 a 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 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 PSoC Programmer InstallShield Wizard.
2. Install all prerequisites as needed.
3. Follow the prompts to install PSoC Programmer. The CyInstaller for PSoC Programmer opens and displays a series of steps to install PSoC Programmer and various drivers. When complete, close the installer.

Please note that some users will 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 PSoC Programmer, as well as 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 will prompt to install PSoC Programmer.

   The CyInstaller for PSoC Programmer opens and displays a series of steps to install 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 PSoC Programmer as well as additional applications such as PSoC Creator or PSoC Designer, documentation, and prerequisites needed for the associated kit. The installation process is very 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 will prompt to install PSoC Programmer.
3. The CyInstaller for PSoC Programmer opens and displays a series of steps to install 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 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 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 software or 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.

Cypress Semiconductor
198 Champion Ct.
San Jose, CA 95134-1709 USA
Tel: 408.943.2600
Fax: 408.943.4730
Application Support Hotline: 425.787.4814
www.cypress.com

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