Release Notes SRN062

PSoC Programmer Version 3.00.0.93

Release Date: October 30, 2008

Thank you for your interest in PSoC Programmer version 3.00.0.93. This document lists installation requirements and describes software updates and changes. This programmer release incorporates new PSoC Device support for CY8CTST1xx, CY8CTMG1xx, CY8CTMA1xx, CY8CTST200, and CY8CTMG200 devices. Additionally the Miniprog1 firmware has been updated to revision 1.75. Please refer to the User Guide for directions to update the Miniprog1 firmware.

System Requirements and Recommendations

System Requirements	Minimum	Recommended
• Processor Speed	500 MHz	1 GHz
• MB of RAM	64 MB	512 MB
• MB of Free Hard Drive Space	200 MB	512 MB
• Screen Resolution	1024x768	1280x1024
• CD-ROM Drive		✓
• USB Port, preferably Open Host Controller or Universal	✓	✓
• Windows® 2000, XP (SP 1 or 2), or Vista 32-bit and 64-bit	✓	✓
• Windows .NET Framework (32 or 64 Bit)	✓	✓
• Microsoft Internet Explorer 6.0 (SP1)	✓	✓
• Adobe Reader (For Viewing of .PDF Documentation)	✓	✓

Updates

PSoC Programmer is updated frequently, adding support for new devices as they appear.

Check http://www.cypress.com/psocprogrammer for the latest downloads of software and documentation.

New for PSoC Programmer 3.00.0.93

The following table is a list of new devices for PSoC Programmer 3.00.0.93.

Device Family	Device
CY8CTST1xx	CY8CTST110-32LTXI
	CY8CTST120-56LFXI
	CY8CTST110-00PVXI
	CY8CTST120-00AXI
CY8CTMG1xx	CY8CTMG110-32LTXI
	CY8CTMG120-32LTXI
	CY8CTMG110-00PVXI
	CY8CTMG120-00AXI
CY8CTMA1xx	CY8CTMA120-56LFXI
	CY8CTMA120-100BVXI
	CY8CTMA120-00AXI

CY8CTST2xx	CY8CTST200-16LGXI
	CY8CTST200-24LQXI
	CY8CTST200-32LQXI
	CY8CTST200-48LTXI
	CY8CTST200-48PVXI
CY8CTMG2xx	CY8CTMG200-16LGXI
	CY8CTMG200-24LQXI
	CY8CTMG200-32LQXI
	CY8CTMG200-48LTXI
	CY8CTMG200-48PVXI
	CY8CTMG200-00LTXI

PSoC Programmer 3.00.0.93 Miniprog1 Firmware Update

PSoC Programmer 3.00.0.93 supports the new Miniprog1 firmware revision 1.75. This revision fixes programming issues seen in the Universal CapSense Controller boards (CY3280). Please refer to the User Guide for directions on upgrading the Miniprog1 firmware.

PSoC Programmer 3.00.0.93 Limitations

1. The port selection window does not display port information if the port string is wider than the text window.
2. The status bar in the modern view has a slightly different color. This is only with Vista.
3. If PSoC Programmer is open when the computer is put into Hibernation mode, upon returning to normal operations PSoC Programmer displays a programming error when trying to program a part. Exit and re-enter PSoC Programmer to solve the problem.
4. The “Not Powered” status message blinks once when first plugging in FirstTouch device.
5. You may temporarily see distorted text in the status bar in Vista resizing the window in both Classic and Modern views. This issue appears on some computers and not others.
6. In Windows XP 64 bit when you uninstall PSoC Programmer 3.00 the windows Add/Remove wizard may occasionally freeze. This issue has not been seen on all computers. The simple fix is to Log out or Restart the computer.
7. The upgrade firmware button is active even when no programmer is connected. If pressed PSoC Programmer attempts to upgrade firmware and times out after 30 seconds.
8. When enough windows are open and PSoC Programmer is stacked in the taskbar, the entry reads “COM Surrogate”. This is a Windows issue.
9. On 64-bit XP machines occasionally Phantom devices are seen left in the port selection menu. This has been seen with multiple combinations of two or more FirstTouch kits, ICE-Cube, and miniprog1’s. When unplugging the devices sometimes a device is left in the port selection window. This error is not repeatable. You can simply close and re-open PSoC Programmer to refresh the Port Selection window.
10. A very limited number of users have seen an error at the end of installation: “Microsoft Windows must close Programmer”. The work around requires you to go into the command window and execute two commands.

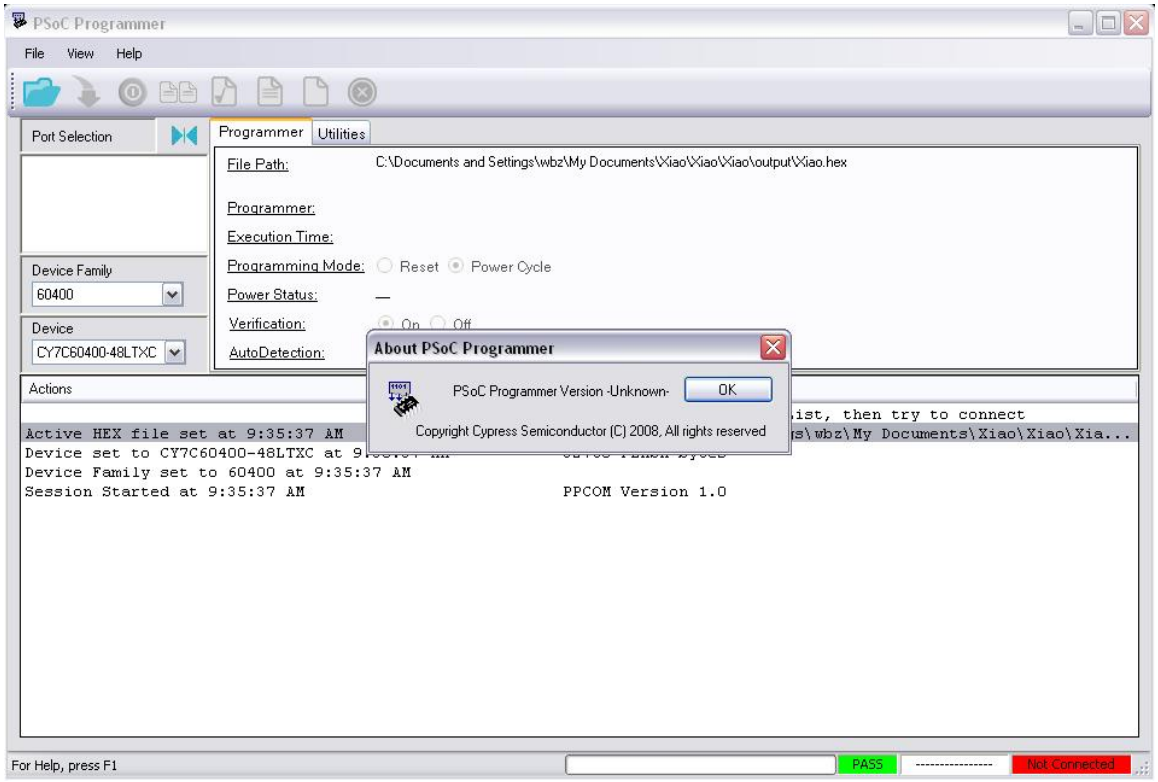
Open a command window by selecting to Start → Run. In the Run box type `CMD.` When the command window opens type the following two lines into the command window, followed by the [Enter] key:

```
"C:\Program Files\Cypress\Programmer\3.00\PSoCProgrammer.exe" /r
"C:\Program Files\Cypress\Programmer\3.00\PSoCProgrammerCOM.exe"
/RegServer
```

11. During installation the COM object is registered using the Microsoft Distributed Transaction Coordinator (MSDTC) service. Some users have seen that the MSDTC service was incorrectly installed on their computer. Microsoft has posted instructions to reinstall this service at: http://support.microsoft.com/kb/891801 . Please uninstall PSoC Programmer application and drivers before performing these steps. Re-install PSoC Programmer when the steps detailed in the link have been completed.

Installation Issues

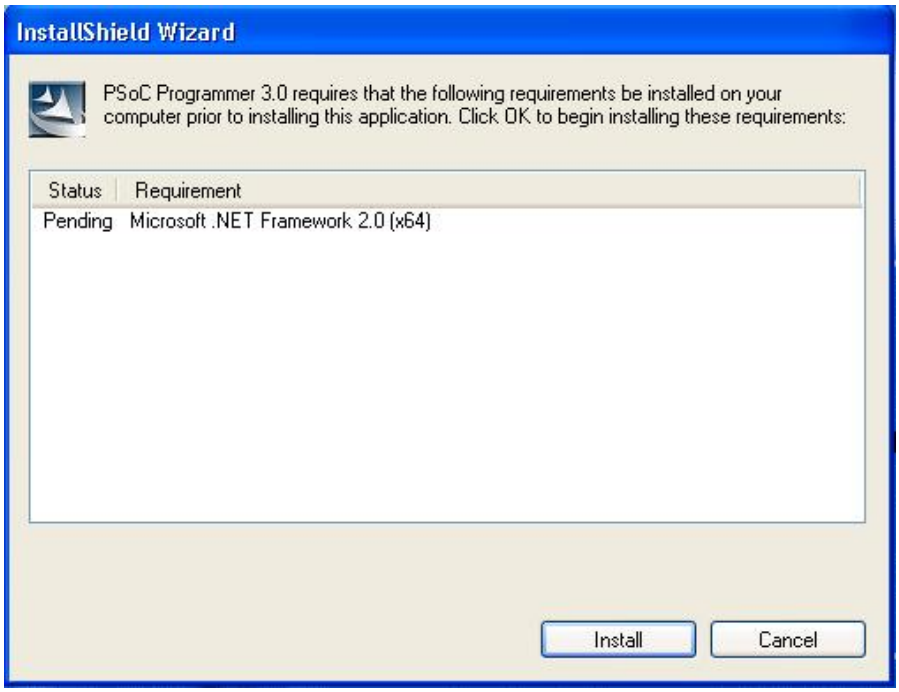
You may see an error displaying the programmer version, if you install PSoC Programmer 3.00 followed by PSoC Programmer 2.33. PSoC Programmer 3.00 displays the following error when selecting *Help/About PSoC Programmer*:



PSoC Programmer 3.00 displays “PSoC Programmer Version -Unknown- “. The work around is to uninstall PSoC Programmer 3.00 and re-install. PSoC Programmer 3.00 and PSoC Programmer 2.33 can coexist but it requires that you install PSoC Programmer 3.00 after PSoC Programmer 2.33.

Microsoft .NET Framework Installation

PSoC Programmer 3.00 bundles together the Microsoft .NET Framework for both 32 and 64 bit XP machines. This is the reason the PSoC Programmer 3.00 installation file is ~95mb. During installation the installer tests the Windows XP version that is on your machine and installs the appropriate .NET Framework. If you do not have the .NET Framework the installer prompts you to accept installation, as seen below.



After installing the .Net Framework, if necessary, the PSoC Programmer installation is complete. Both the 32 and 64 bit .NET Frameworks installers, which are bundled with the PSoC Programmer installation, are removed after PSoC Programmer is installed. The final installation for PSoC Programmer 3.00 is ~27mb. If you have Windows Vista the Windows .NET Framework is installed with the operating system.

Use a USB2.0 Hub for Optimal Programming with MiniProg1

MiniProg1 programmer hardware has a low-speed USB interface. If you use a USB2.0 Hub between the computer running PSoC Programmer and the MiniProg1, the overhead in USB transactions is greatly reduced and actual programming time for the PSoC device is reduce by 30%. Dlink and Belkin USB2.0 Hubs were used to verify this behavior.

PSoC Programmer 3.00 allows you to turn off the verification procedure during programming. If you turn off verification and use a high-speed USB hub you may see reductions of 40-50% in programming time.

Programmer Limitations

1. You must change the programming mode manually (Power cycle or Reset mode). MiniProg shuts itself off if there is voltage on the board.
2. After one Programmer instance is opened on a USB port, it holds the original port even if it is unplugged and moved to another port. This prevents another instance from using the original port. Closing and reopening the first instance resolves this.

3. There is no programming support for wafer sale parts.
4. When programming verification fails, the specific failing location(s) are not indicated.
5. Program voltage from the ICE is fixed at 3.3V. Cypress has verified that there is no degradation of data retention for a 5V system.
6. ICE4000 drivers are not provided in the installer. If you are upgrading your installation and previously had a working ICE4000 programmer it still works.
7. 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.
8. The MiniProg1 programming device does not support CY8C25/26xxx parts.
9. 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.
10. Occasionally, the programmer GUI may open and close right away when invoked from PSoC Express. If this happens, start PSoC Programmer in standalone mode, select the MiniProg1 port, and then exit. You can then invoke it from PSoC Express.
11. PSoC Programmer may experiences “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.
12. There are known issues with certain incompatible I2C slaves sharing the programming lines SClk and SData. This incompatibility manifests itself as a failure in the checksum or verification steps of programming. The incompatibility can be repaired by disconnecting the I2C slaves from the programming lines.

Documentation

Documentation is available in the PSoC Programmer Root Directory under Documents. The documents include *Programmer User Guide*, *psoc_programmer_com*, and *psoc_programmer_cli*.

For additional assistance go to http://www.cypress.com or contact our Application Team at 425.787.4814.

PSoC Training

It is recommend that first time users visit www.cypress.com/training for access to free comprehensive PSoC training modules.

Silicon Errata

The most up-to-date versions of the silicon errata are available on the web site at http://www.cypress.com/psoc and navigating to Errata Update → PSoC Mixed-Signal Array.

For assistance go to http://www.cypress.com or contact our Applications Team at 425.787.4814.

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

© Cypress Semiconductor Corporation, 2007. The information contained herein is subject to change without notice. Cypress Semiconductor Corporation assumes no responsibility for the use of any circuitry other than circuitry embodied in a Cypress product. Nor does it convey or imply any license under patent or other rights. Cypress products are not warranted nor intended to be used for medical, life support, life saving, critical control or safety applications, unless pursuant to an express written agreement with Cypress. Furthermore, Cypress does not authorize its products for use as critical components in life-support systems where a malfunction or failure may reasonably be expected to result in significant injury to the user. The inclusion of Cypress products in life-support systems application implies that the manufacturer assumes all risk of such use and in doing so indemnifies Cypress against all charges.

PSoC Designer™, Programmable System-on-Chip™, and PSoC Express™ are trademarks and PSoC® is a registered trademark of Cypress Semiconductor Corp. All other trademarks or registered trademarks referenced herein are property of the respective corporations.

This Source Code (software and/or firmware) is owned by Cypress Semiconductor Corporation (Cypress) and is protected by and subject to worldwide patent protection (United States and foreign), United States copyright laws and international treaty provisions. Cypress hereby grants to licensee a personal, non-exclusive, non-transferable license to copy, use, modify, create derivative works of, and compile the Cypress Source Code and derivative works for the sole purpose of creating custom software and or firmware in support of licensee product to be used only in conjunction with a Cypress integrated circuit as specified in the applicable agreement. Any reproduction, modification, translation, compilation, or representation of this Source Code except as specified above is prohibited without the express written permission of Cypress.

Disclaimer: CYPRESS MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARD TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Cypress reserves the right to make changes without further notice to the materials described herein. Cypress does not assume any liability arising out of the application or use of any product or circuit described herein. Cypress does not authorize its products for use as critical components in life-support systems where a malfunction or failure may reasonably be expected to result in significant injury to the user. The inclusion of Cypress' product in a life-support systems application implies that the manufacturer assumes all risk of such use and in doing so indemnifies Cypress against all charges.

Use may be limited by and subject to the applicable Cypress software license agreement.