

# PSoC Designer Release Notes

## Version 5.1 Service Pack 1.1

Release Date: September 16, 2011

Thank you for your interest in PSoC® Designer™ 5.1 Service Pack 1.1. PSoC Designer is a complete Integrated Development Environment (IDE) for designing with PSoC1 devices. This release is the production release of version 5.1 Service Pack 1.1. It is also a complete release for new users.

This document describes new features and changes since the previous release.

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## New Features, User Modules, and Device Support

The following section details the new features released with PSoC Designer 5.1 Service Pack 1.1. The parenthesis in each title represents the maturity of the respective designer content.

### Internet Explorer 9 Support

PSoC Designer 5.1 SP1.1 has now added support for Internet Explorer 9. For additional references regarding installation and Internet Explorer 9 please see the Internet Explorer 9 section below.

### Defect Fixes

PSoC Designer 5.1 SP1.1 addressed three defects found in the PSoC Designer 5.1 SP1 release. The defects are seen when users right click on a digital user module in the workspace explorer and select the 'Next Allowed Placement'. PSoC Designer then incorrectly highlights the next available digital blocks. This issues is only seen on User Modules that occupy more than one digital block.

## Supported Tool Chains

### ImageCraft Compiler (Standard and Pro versions)

ICCV7 for M8C STD version 7.04.

ICCV8 for M8C PRO version 8.04.01

## User Module Versioning

There are no user module version for this patch release.

## Open Source

Portions of this software package are licensed under free and/or open source licenses. Such free and/or open source software is subject to the applicable license agreement and not the Cypress license agreement covering this software package. The applicable license terms will accompany each source code package. You may obtain the source code of such free and/or open source software at no charge from this web site: [www.cypress.com/go/opensource](http://www.cypress.com/go/opensource).

## Internet Explorer 9 Installation

After installing PSoC Designer 5.1 SP1.1, if users update or install Internet Explorer 9 an issue may arise with the SVG Viewer that will require a reinstall of the SVG Viewer. PSoC Designer has implemented a runtime check that will warn users if this error is found. To eliminate this error please perform the following actions.

Navigate to the following directory from within the PSoC Designer installation path:

`<User_Path>\Cypress\PSoC Designer\5.1\Common\CypressSemiBuildMgr\tools`

Inside the *Tools* folder is the SVG installer, "SVGView.exe". The user must run this installer and follow the installation instructions. Once the SVG viewer has been re-installed users will not receive the runtime message and PSoC Designer will function properly.

Users with Internet Explorer 9 installed prior to the PSoC Designer installation will not need to reinstall SVG viewer. The CyInstaller will update the SVG viewer during installation.

## Installation

### Minimum and Recommended Requirements

Hardware/Operation System Requirements	Minimum	Recommended
• Processor Speed	2 GHz	2 GHz Dual Core
• RAM	2 GB	3 GB
• 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
• Microsoft Internet Explorer	7	
• .NET Framework	2.0 SP1	
• Adobe Reader (for viewing PDF Documentation)	6	9+
• Windows Installer	3.1	
• PSoC Programmer	3.12.4	

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

\*\* Software Prerequisites – In order to install and run the PSoC Designer, you may also need to install additional software. The Cypress Installer guides you through the process if the additional programs are not already installed.

## Update Instructions

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

Follow the instructions provided with the tool, as needed.

## Installation Notes

The Installation process has changed from PSoC Designer 5.0. This was done to accommodate a Live Update capability and decrease download size. The installation process is a set of wizards that walk you through the installation process. You can install PSoC Designer and various prerequisites from the web. If you have issues with installing behind a firewall or on a machine with no internet connection, an ISO file is provided on the web for creation of your own CD. There are slight differences in the process, based on the medium used to install the software.

In order to install PSoC Designer, you need to first install PSoC Programmer. 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 connect your Cypress Programmers (Minipro1, Minipro3, etc) until all software installation is complete AND the PSoC Designer application is open.

### *How to Install PD5.1 Service Pack 1.1 from the Web:*

1. Download PSoCDesignerSetup.exe from the Cypress website.
2. PSoCDesignerSetup.exe will install CyInstaller for PSoC Designer.
3. CyInstaller will do a pre-requisite test, leading the user through the install process for missing prerequisites such as PSoC Programmer.
4. When the pre-requisite tests are passed, CyInstaller will provide the user with the option to do a "Typical", "Complete" or "Custom" install.
  - a. Typical or Complete Install: Will install the latest available PSoC Designer 5.1 Service Pack 1.1 release.
  - b. Custom Install: Will show the user all releases of PSoC Designer 5.1 Service Pack 1.1 and install the selected release (for now there is just one).
5. Once the PD5.1 Service Pack 1.1 release is downloaded, CyInstaller displays the EULA and other applicable licenses.
6. Once the install is complete, CyInstaller displays the finish screen with options to view the "Release Notes" and "Add Desktop Shortcut".

### *How to Install Using an ISO Image (Two Methods):*

1. Create a CDROM using the ISO image:
  - a. Drag the ISO image onto the CD/DVD drive containing the CD/DVD. Right click on the CD/DVD drive and select "Burn" to create a CD/DVD for PD5.1 Service Pack 1.1 installation.
  - b. Download MagicISO (<http://www.magiciso.com/download.htm>) and follow the tutorial to create a CD/DVD from ISO <http://www.magiciso.com/tutorials/miso-burnwin.htm>.

**Note** – To burn a CD with MagicISO, you need to pay \$30 for the full version. There are also Freeware versions and tools that allow you to mount the ISO file without burning a CD. This is described in step 2.

- c. The installer, cyautorun.exe, launches once the CD/DVD is inserted in the CD/DVD drive. if not., double click cyautorun.
2. Install directly from an ISO image:
  - a. Download MagicISO (<http://www.magiciso.com/download.htm>) or other Virtual Drive creators (these are typically freeware) and create a virtual drive. Mount the ISO image on the drive from the “Mount” option in MagicISO.
    - For help on mounting and unmounting ISO images see <http://www.magiciso.com/tutorials/tutorials.htm> .
  - b. When you have mounted the ISO file, the installer should start.
    - if it does not start, double click on cyautorun.
  - c. An alternative to using Virtual Drive creators is to download winrar (<http://www.rarlab.com/download.htm>) and open the ISO file in it. Then, extract and run “cyautorun.exe”.
3. cyautorun.exe prompts you to install PSoC Designer 5.1 Service Pack 1.1. Then follow steps 3-6 from the Web Installation instructions.

#### *Customers with TrueTouch SDK R2 Installed:*

Customers who have PSoC Designer Beta 2 and TrueTouch SDK R2 installed will be able to update to PSoC Designer 5.1 Service Pack 1.1 production without any backward compatibility issues. Users will receive a notice via the CylInstaller update manager that a new version of PSoC Designer is available. Users will be able to update from the Beta 2 installation without impacting their TrueTouch SDK R2 installation. Customers will proceed with the Installation of PSoC Designer using CylInstaller.

#### *System Level Design Users:*

Customers who wish to continue developing system level projects will need to install PSoC Designer 5.0 SP6. System level development has been removed from PSoC Designer 5.1 Service Pack 1.1. PSoC Designer 5.0 SP6 will be provided on the PSoC Designer web page or PSoC Designer archives page for any users interested in developing System Level projects. PSoC Designer 5.0 SP6 and PSoC Designer 5.1 Service Pack 1.1 will coexist on the same machine allowing customers to continue developing System Level designs and continue designing new chip level designs with PSoC Designer.

#### **Note to HI-TECH Compiler Users**

You must manually update the *psoc.ini* file to add device support before you can compile projects that use the new devices. The HI-TECH *psoc.ini* file is found in the HI-Tech installation folder. The default location of the *psoc.ini* is here:

*C:\Program Files\HI-TECH Software\HCPSoC\PRO\9.61\dat\psoc.ini*

The default location of the replacement *psoc.ini* file that adds support for the new devices is here:

*C:\Program Files\Cypress\PSoC Designer\5.1\Common\CypressSemiBuildMgr\tools\psoc.ini*

#### **Known Problems and Limitations for PSoC Designer 5.1 Service Pack 1.1**

In PSoC Designer 5.1 Service Pack 1.1, the Known Problems and Solutions (KPS) are included in a separate file. Please download it from the appropriate PSoC Designer directory, <http://www.cypress.com/?rID=41083>.

## Further Reading

Documentation for PSoC Designer is provided with on-line Help, which you can open from the **Help** menu or by pressing [F1]. There are numerous other documents under the Help->Documentation menu, including:

- IDE User Guide
- PSoC Designer Release Notes
- PSoC Device Selector
- Updating the boot.tpl file (*update of BOOT.pdf*)
- Project Update help (*Version Update.pdf*)
- ICE User Guide
- C Language Compiler User Guide
- Math Libraries User Guide
- ImageCraft Release Notes
- Assembly Language Users Guide
- Hi-Tech to ImageCraft Migration guide
- User Module and device datasheets

## Customer Filed Defects Fixed

The following table lists the customer filed defects that were fixed between the PSoC Designer 5.1 and PSoC Designer 5.1 Service Pack 1.1 release:

CY CDT #	Category	Title	Fix and Impact
86434	User Module	DS:wrong input resistance in ADCINC user module datasheet	Datasheet Update
55954	User Module Datasheet	DS: LED7SEG Parameters DigitPort and Digit Drive Pins need better explanation	Updated datasheet
56095	User Module Datasheet	DS:Must add CSD Tuning to Datasheet for CY8C21x34	Updated datasheet
74689	User Module Datasheet	DS:SPI functionality Clarification on data being transferred from the TX Buffer register to the Shift Register	Updated datasheet
75589	User Module Datasheet	Need More UART Information in UM D/S regarding particular errors while using UART	Updated datasheet
77195	User Module Datasheet	DS:Char:Add SPI AC/DC specification to Indium SPI UM datasheet	Updated datasheet

<b>CY CDT #</b>	<b>Category</b>	<b>Title</b>	<b>Fix and Impact</b>
82331	User Module Datasheet	DS: ADC10 maximum resolution	Updated datasheet
82401	User Module and User module Datasheet Update	DS:I2C Bootloader User module problem with multiple global variables	Updated user module and datasheet
83205	Tool Update	In global resources A_Buf_Power is not available for CY8C28xxx devices	PSoC Designer Updated
84599	User Module Updates	Issues with USB EP0	User Module Update
85010	Tool Update	Pin out diagram for CY8C20396A is different in Designer 5.0, 5.1 & data sheet	PSC Designer Updated
85524	Tool Update	SLIMO mode needs to be made available for automotive E-grade devices	PSoC Designer Updated
85829	User Module Update	LCD.asm template change	User Module Update
86282	User Module Datasheet	DS:Relocatable start addr BootloaderI2C module does not getreset after removal	User Module Datasheet Update
86351	Tool Update	PD 5.1 crashes while cloning the project	PSoC Designer Updated
86670	Tool Update	INT_MSK2 register missing in IO Register Bank on CY8C20xx6A Devices	PSoC Designer Updates
87232	User Module Update	USBFS Bootloader bug, ug with bootValidateChecksumBlock function in USB_Bt_loader.asm line 1562	User Module Update
88161	Tool Update	FN0GS register is not updated on CY8CLED04D02 Devices	PSoC Designer Updates
88634	User Module Update	Data Toggle issue with USBFS UM	User Module Update
90542	Tool Update	The drag and drop feature in PSoC Designer 5.1 FCS is not working.	PSoC Designer Update

## For More Information Regarding PSoC Development Tools

For more information regarding PSoC Designer functionality and releases please review the user guide and release notes on the PSoC Designer web page:

[www.cypress.com/go/psocdesigner](http://www.cypress.com/go/psocdesigner)

For more information regarding PSoC Programmer, supported hardware and COM layer please go to the PSoC Programmer web page:

[www.cypress.com/go/psocprogrammer](http://www.cypress.com/go/psocprogrammer)

For more information regarding Cypress's new and exciting PSoC3 and PSoC5 products and the new PSoC Creator development environment please go to the PSoC Creator web page:

[www.cypress.com/go/psoccreator](http://www.cypress.com/go/psoccreator)

For a list of PSoC Designer-related trainings, please see

<http://www.cypress.com/?rID=40543>

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