

PSoC® Creator™ Quick Start Guide



Install

Download PSoC Creator from www.cypress.com/psoccreator, or install from a kit CD.

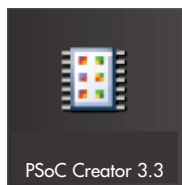
For assistance, call Cypress Support at 1-800-541-4736 and select 8.

For features, system requirements, and installation notes, refer to the Release Notes available at: www.cypress.com/go/creator/releasesnotes.

Launch

Find the **PSoC Creator 3.3** icon to launch the tool.

Windows® 8 or above



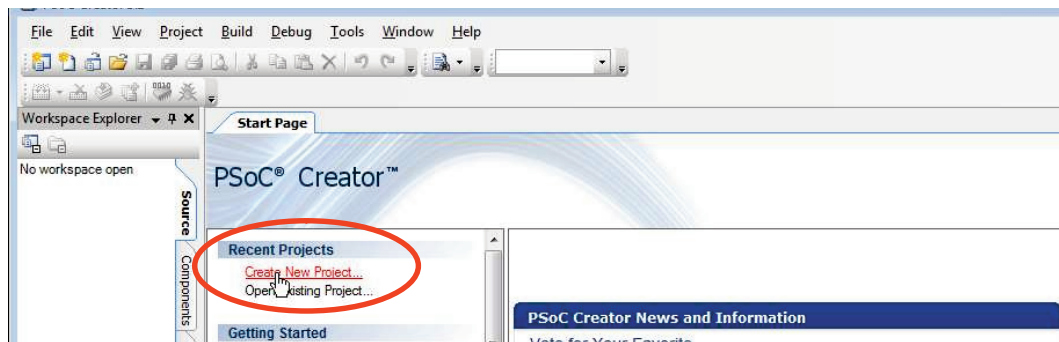
Windows 7 or before



You can launch the tool from the Installer application. You can also use the Windows Start key and type “PSoC Creator” to locate it.

Create New Project

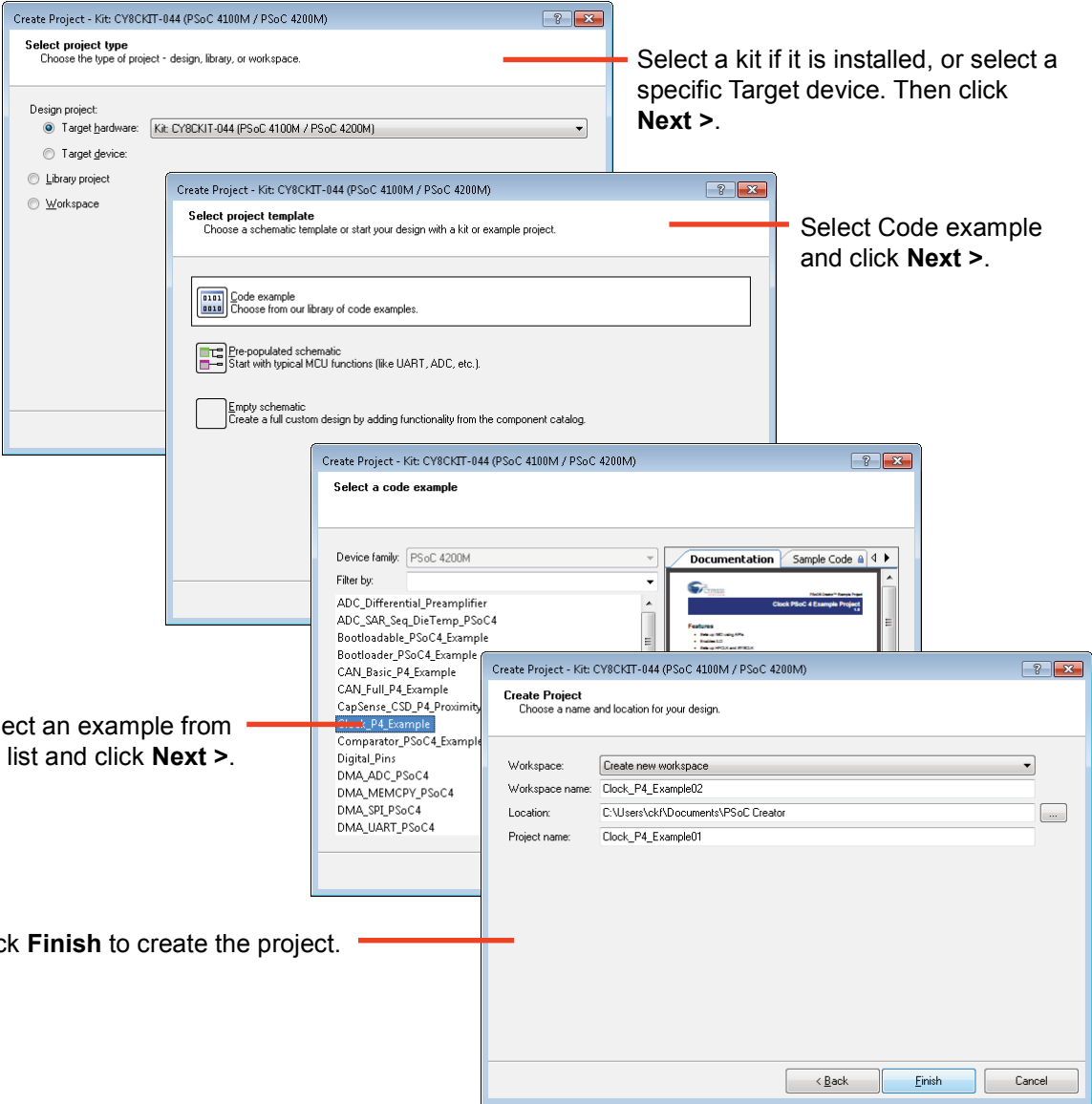
Click the **Create New Project** link on the Start Page to open the New Project dialog.



Note There are also example projects available from the **Find Example Projects** link on the Start Page and **File** menu.

Complete New Project Wizard

Follow the instructions on the New Project wizard to select/complete information needed for your project. This wizard provides several options to create projects from code examples and pre-populated schematics.



Select a kit if it is installed, or select a specific Target device. Then click **Next >**.

Select Code example and click **Next >**.

Select an example from the list and click **Next >**.

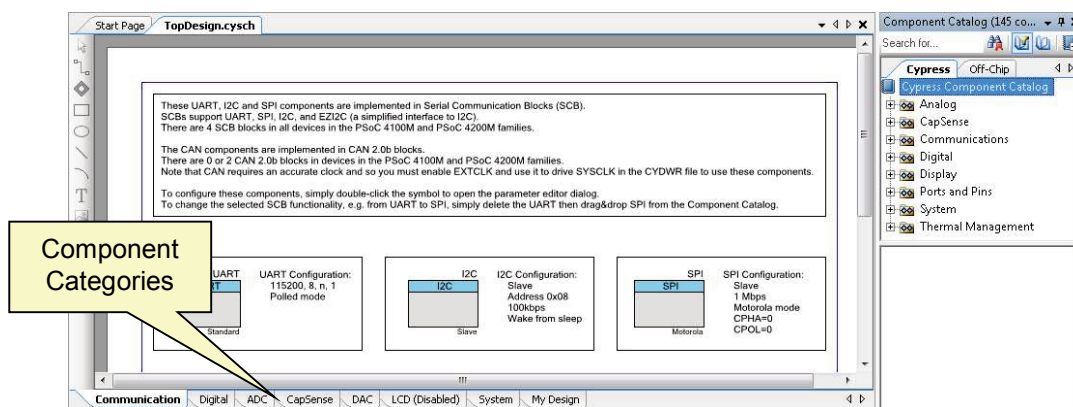
Click **Finish** to create the project.

For more information, refer to the PSoC Creator Help topic “Creating a New Project.” Also, each example project contains a description document.

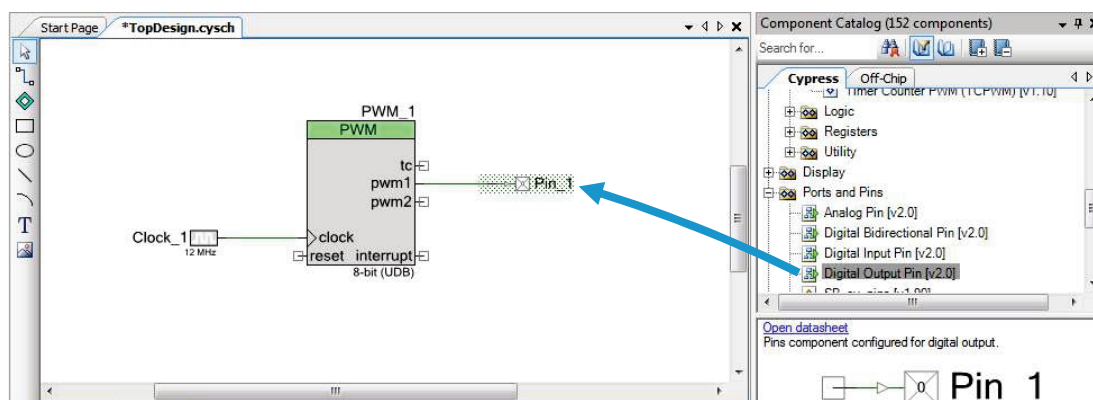
Modify the Design

As needed, you can add components and functionality to modify the design to fit your needs.

For PSoC 4xxx devices, pre-populated schematics contain preconfigured Components to use in your design. Components are divided into separate categories by schematic tabs. There is a "My Design" tab to customize your design. You can disable individual Components or disable complete schematic tabs.



As needed, add a Pin, Clock, and other Components to complete the design by dragging items from the Component Catalog.



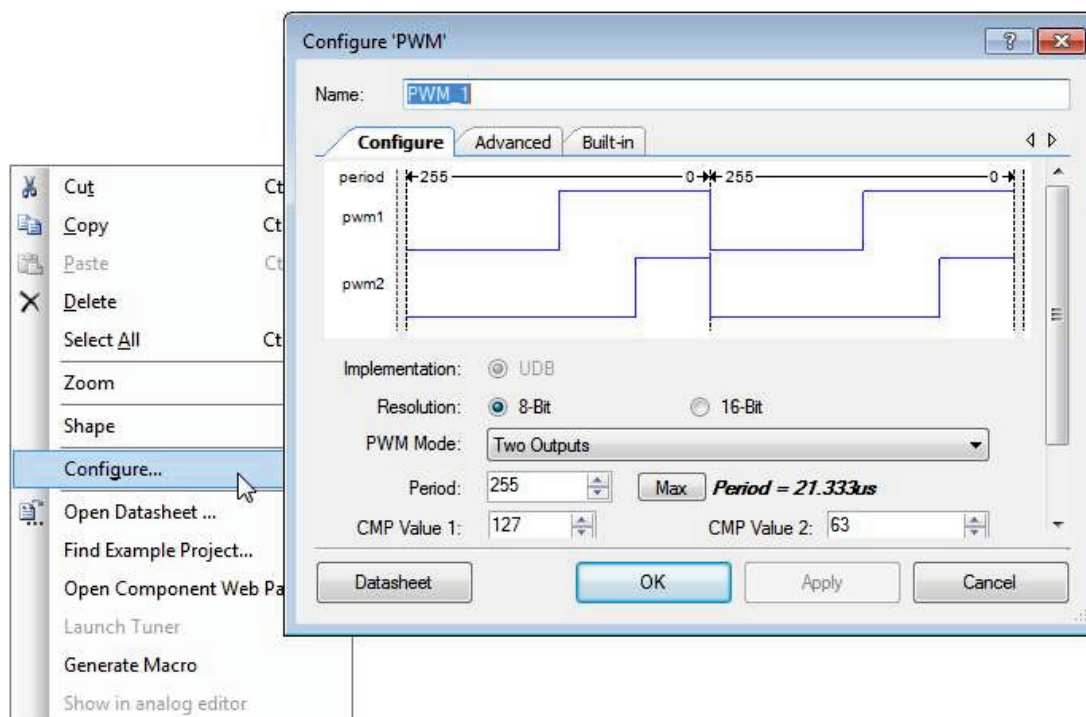
If needed, connect various components using the Wire tool. 

If you have complex or frequent wiring, double-click the wire tool to enable "Sticky" mode to use it repeatedly. Then press **[Esc]** to return to "Normal" mode.

For more information, refer to the PSoC Creator Help topic "Schematic Editor."

Configure Components

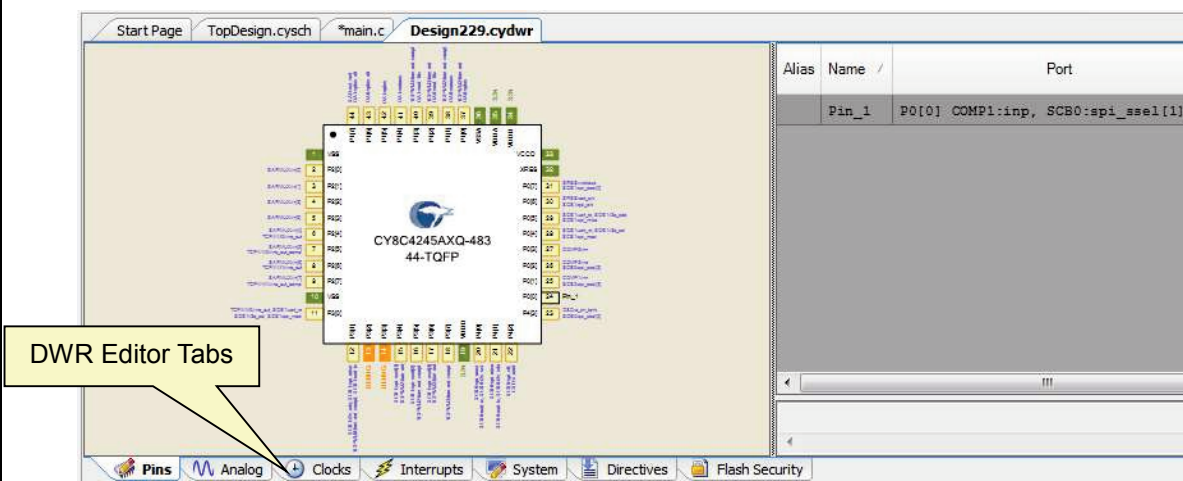
As needed, configure various component parameters to modify the behavior.



For more information, refer to each component's datasheet, available from the Configure dialog, the Component Catalog, or from the **Datasheets** tab in the Workspace Explorer.

Configure Design-Wide Resources (DWR)

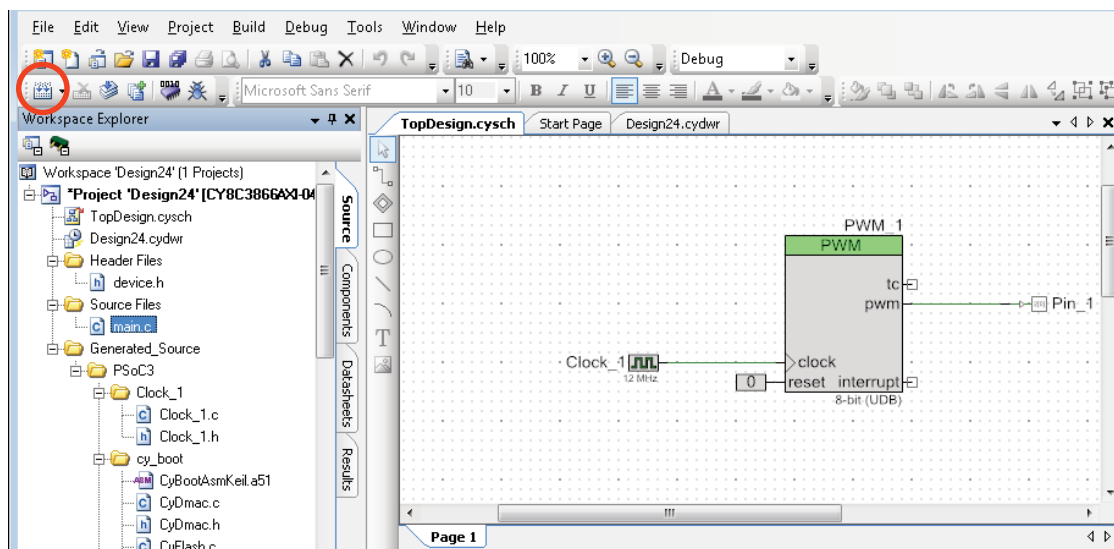
Open the "<projectname>.cydwr" file to configure Design-Wide Resources, such as pins, clocks, interrupts, DMA, and more.



For more information, refer to the PSoC Creator Help topic "Design-Wide Resources."

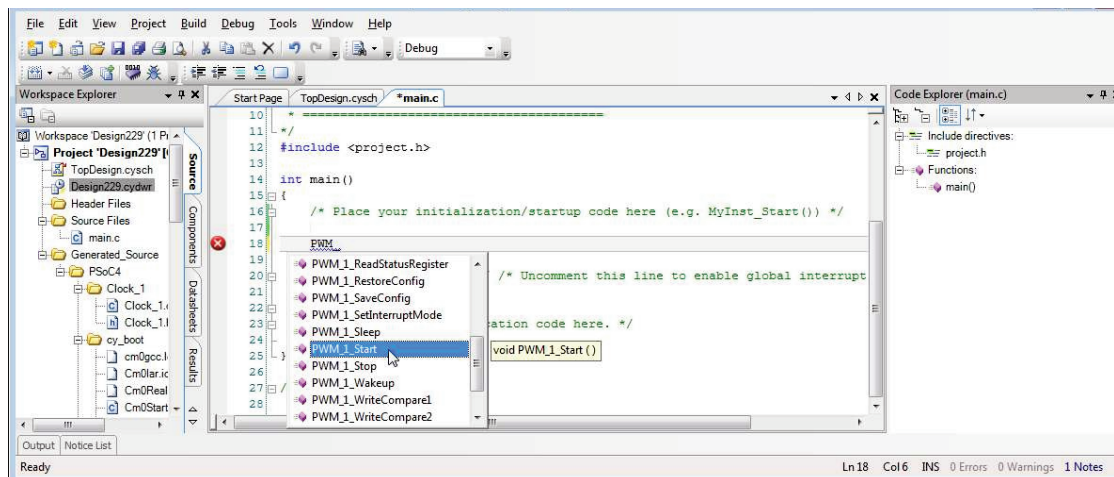
Build the Design

After completing the design, use the **Build**  command to generate source code.



For more information about these files, refer to the *System Reference Guide*, located on the **Help** menu, under **Documentation**.

Add Code in PSoC Creator



Inside PSoC Creator, open the *main.c* and insert the necessary code for your application.

Note For many components, you must add at least a start function to enable the component. This start function is usually named [component_instance_name]_Start(). For more information, refer to the applicable Component datasheet API section.

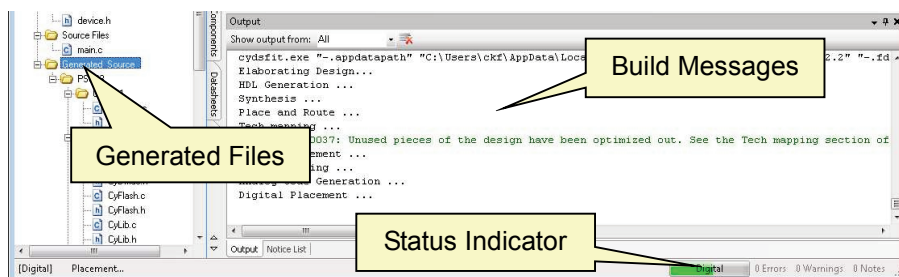
Cypress provides various PSoC Creator example projects that can help you design faster. Open the Find Example Project dialog from the **File** menu. For more information, refer to the PSoC Creator Help topic "Find Example Project."

Program the Device

Connect your development kit to your computer, and click **Program** 

You can obtain a kit from the Cypress web page at: <http://www.cypress.com/go/store>.

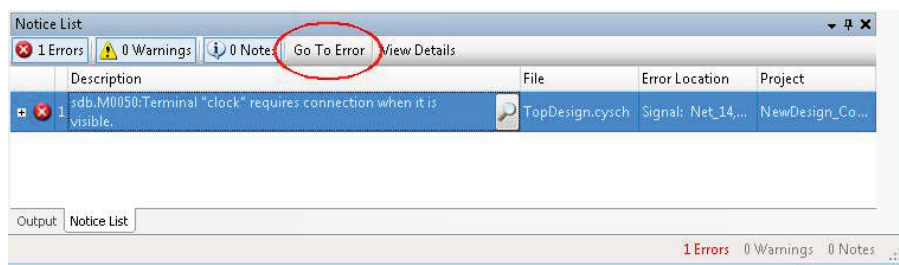
If your design has no errors, PSoC Creator will build the design ...



... and program the device.



If there are errors, view the Notice List window and click **Go To Error** to find and resolve them.



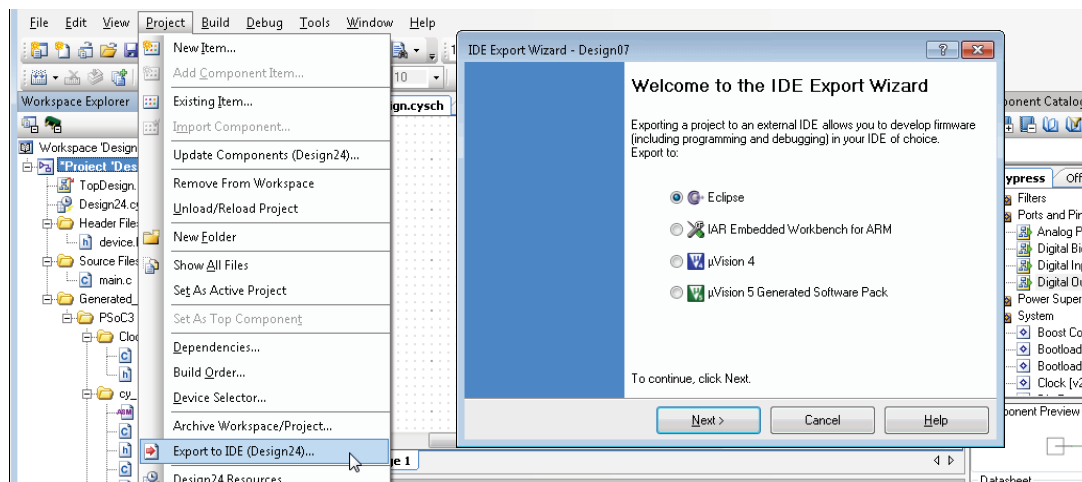
Next Steps

Now that you have created a design, open a few example projects and explore different ways to improve it. The PSoC Creator Help is available from the Start Page or by pressing **[F1]**. You can also open numerous documents using the Document Manager located on the **Help** menu or **Start** menu. Refer also to these for more information:

- PSoC 3: AN54181: www.cypress.com/go/PSoC3GettingStarted
- PSoC 4: AN79953: www.cypress.com/go/PSoC4GettingStarted
- PSoC 4 BLE: AN91267: www.cypress.com/go/AN91267
- PSoC 5LP: AN77759: www.cypress.com/go/PSoC5GettingStarted
- PSoC BLE: AN94020: www.cypress.com/go/AN94020
- PSoC Creator Training: www.cypress.com/go/creatorstart/creatortraining

Optional: Export to External IDE

After a successful build in PSoC Creator, if preferred, you can export the design to an external IDE to code, debug, and test firmware. Select **Export to IDE** from the **Project** menu to open the IDE Export Wizard.



Refer to the PSoC Creator Help topic “Exporting a Design to a 3rd Party IDE” for full details.

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