Project Creation Guide for DSCs

This guide will assist you when developing any part of the **56F8xxx series**.

<table>
<thead>
<tr>
<th>Product</th>
<th>CodeWarrior</th>
<th>Processor Expert integrated into CodeWarrior</th>
<th><strong>Quick Start Tool integrated into CodeWarrior</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>56F8xxx</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

(*Not recommended for new developments)

Please choose between the following four options.

**Option #1: Create a project based on a Processor Expert® based project within CW8.3**

Processor Expert® Software is a development system to create, configure, optimize, migrate, and deliver software components that generate source code for our silicon. Processor Expert Software is available as part of the CodeWarrior® tool suite.

Use this option when developing any part of the **56F8xxx series** to create a Processor Expert® based project within CW8.3.

Follow these steps to start the development:

1. Install the CodeWarrior® for MCUs (Eclipse IDE) for Microcontrollers CW8.3 and any required patches
2. Processor Expert® is already integrated into CW8.3 after step 1.
3. Use project wizard to create a new project based on Processor Expert.

**Option #2: Create a project based on a Quick Start based project within CW8.3**

Use this option when developing any part of the **56F8xxx series** to create a Quick Start based project within CW8.3. The DSC56800EX_Quick_Start tool is a software environment for the embedded applications development. The Quick Start tool is provided for legacy users. In order for DSC56800EX_Quick_Start to integrate itself with the development tools, the CodeWarrior tools should be installed prior to the installation of the DSC56800EX_Quick_Start tool.

Follow these steps to start the development:

1. Install the CodeWarrior® for MCUs (Eclipse IDE) for Microcontrollers CW8.3 and any required patches
2. Install and configure Quick Start v2.5.
Option #3: Create a project based on a Processor Expert® based project within CW11.1

Use this option when developing any part of the 56F8xxx series to create a Processor Expert® based project within CW11.1. Processor Expert is Processor Expert® Software is a development system to create, configure, optimize, migrate, and deliver software components that generate source code for our silicon.

Follow these steps to start the development:

1. Install the CodeWarrior® for MCUs (Eclipse IDE) for Microcontrollers V11.1 and any required patches. Following steps show how to install the patches.
   a. Launch CodeWarrior 11.1, then go to Help -> check for updates.
   b. Select the update sites.
   c. Check the boxes for ‘MCU v11.1 Updates’ and ‘MCU v11.1 Updates for DSC.’ Uncheck the box next to ‘Contact all update sites during install to find required software’ then click Next.
   d. Follow the prompts until it completes the installation and prompts for restart of tool, click Yes and the tool will restart and the installation of the updates is complete.

2. Follow the steps to create a Processor Expert based project (take 56F8257 for example)
   a. Start the CodeWarrior IDE and open the new project wizard by clicking File -> New -> Bareboard project or clicking the tool bar New icon and select Bareboard project, then click Next.
   b. Enter the desired project name in the Project name field, then click Next.
c. In the device page, expand the tree control and select 56800/E (DSC) -> MC56F825x -> MC56F8257, then click Next.
d. In the connection page, select the desired connections, then click Next.
e. In the language page, select C language, then click Next.
f. Choose the “Processor Expert” under rapid application development. Click Finish, a new processor expert based project is created.

g. The Processor Expert view is opened automatically. Processor Expert provides a GUI interface to easily configure pins, clock, peripherals and middleware such as FreeMASTER. Start development by adding the desired components from Components Library.
Option #4: Create a new project within CW8.3/CW11.1

Use this option when developing any part of the 56F8xxx series without Processor Expert® or Quick Start.

Follow this step to start the development:

1. Install the CodeWarrior® for MCUs (Eclipse IDE) for Microcontrollers CW8.3 or CW11.1 and any required patches
2. Create a new empty project through new project wizard within CodeWarrior as described in option #3. The difference is that Processor Expert is not selected in step f.