

## How to integrate Quick Start 2.6 for DSC with CodeWarrior 10.6.4

The DSC56800E/EX Quick Start is a software environment for the embedded applications development. It is based on the graphical configuration tool (GCT) and a unified application programming interface (API)-style of accessing the peripheral modules.

There are two versions of Quick Start tools on website for downloading. The Quick\_Start tool version 2.6 is for the 56800EX family of Digital Signal Controllers. It provides the out of box support for 56F82xxx and 56F84xxx devices and evaluation boards. The version 2.5 is for 56800E families of DSC (56F83xx, 56F82xx and 56F80xx).

This document shows how to integrate Quick Start 2.6 for 56800EX with CodeWarrior v10.6.4.

### 1. Install tools and integrate with CodeWarrior

#### 1.1 Download and install Quick Start 2.6

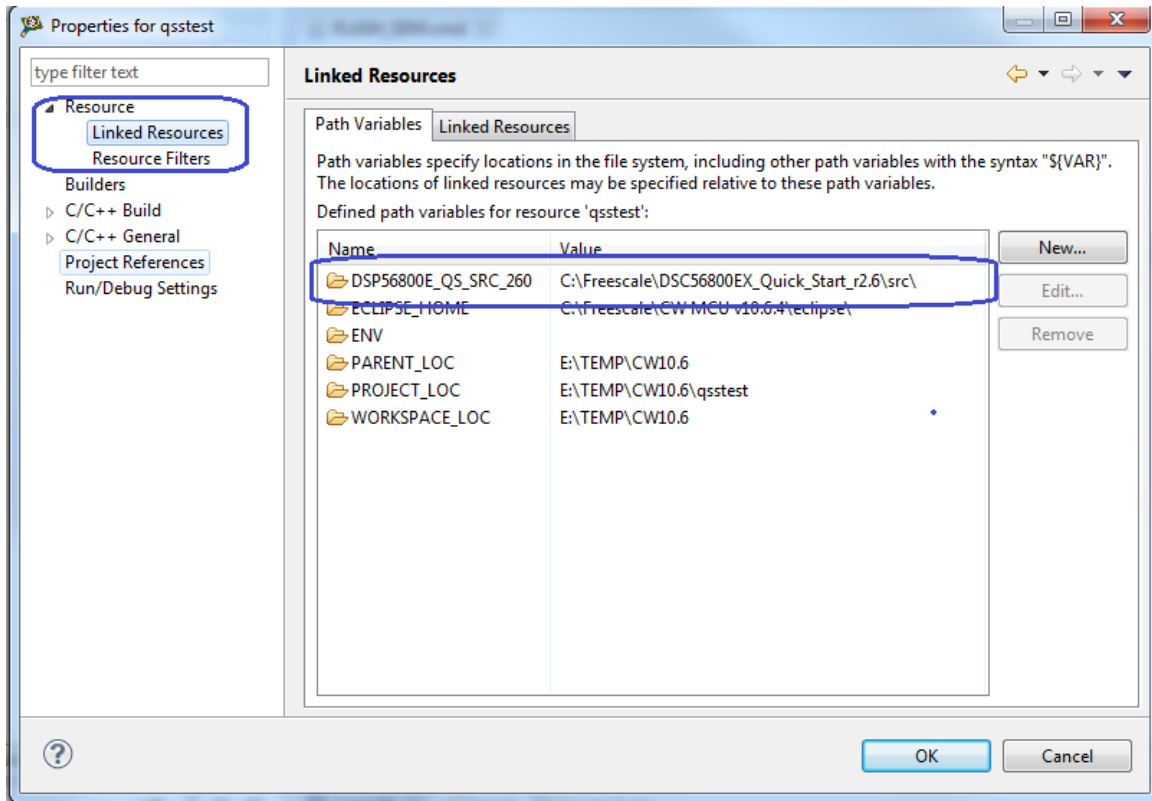
CodeWarrior tools should be installed prior to the installation of Quick Start installation. Quick Start v2.6 can be download from:

<http://tinyurl.com/htpe5wj>

It is recommended to use the default installation directory path:  
*C:\Freescale\DSC56800EX\_Quick\_Start\_r2.6*

In case the DSC56800EX\_Quick\_Start was installed into a non-default location in the host computer, user needs to update the path variable pointing to DSC56800EX\_Quick\_Start source files when work with a new project.

To do that, open "Project Properties" dialog, go to the "Resource / Linked Resources" page, select the DSP56800E\_QS\_SRC\_260 variable and press the Edit button. Specify the installation folder of the DSC56800EX\_Quick\_Start tool.



## 1.2 Install Graphical Configuration Tool

For this part, user can follow the instructions in 1.2.2.1<Install Graphical Configuration Tool> in User Manual:

*C:\Freescale\DSC56800EX\_Quick\_Start\_r2.6\docs\user\_manual\DSC56800EX\_Quick\_Start\_User\_Manual.pdf*

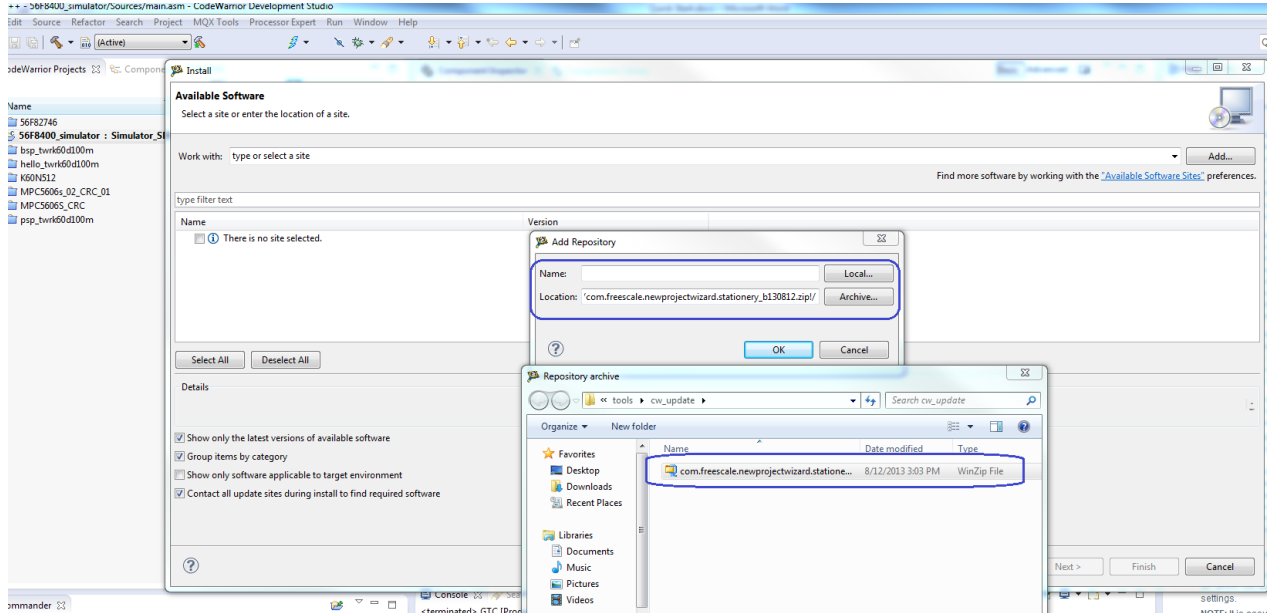
## 1.3 Install Stationery Project Wizard

The process is similar with the CodeWarrior update package installing. In the CodeWarrior IDE, go to menu Help -> Install New Software...

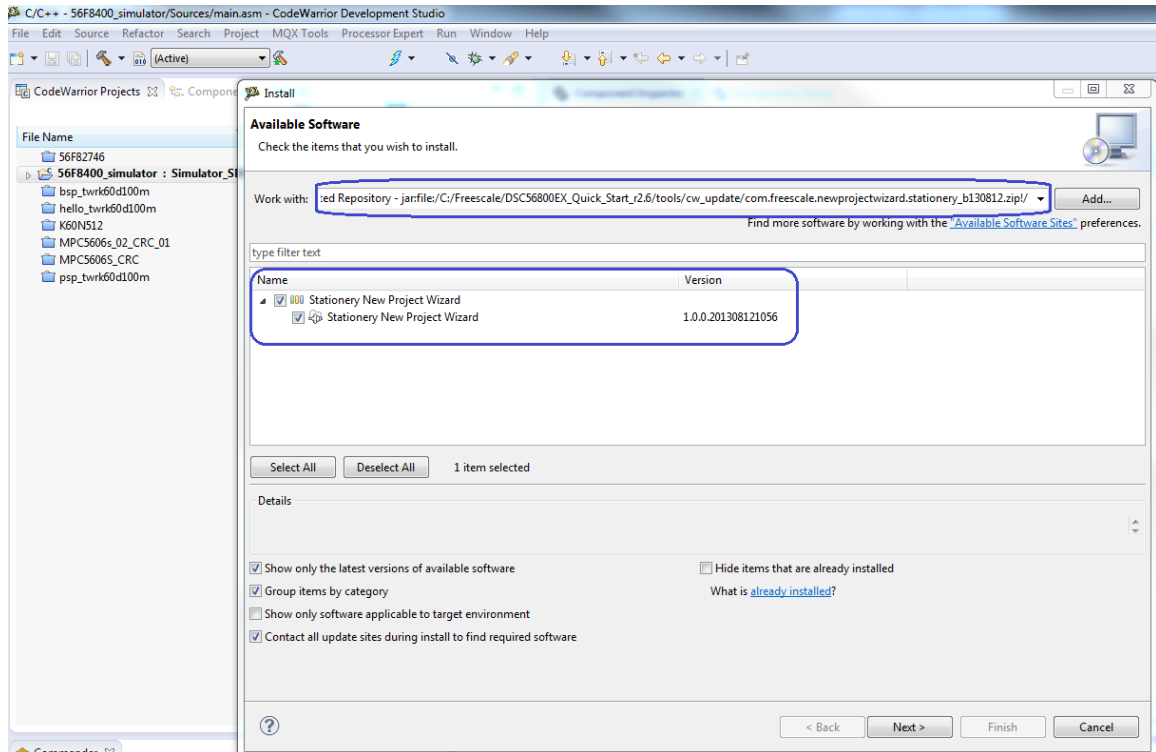
Click the "Add" button to add an offline update site. The "Add Repository" window opens.

Use the "Archive" button to browse to the ZIP file ("com.freescale.newprojectwizard.stationery\_b130812.zip") which is located in the DSC56800EX\_Quick\_Start installation folder:

*C:\Freescale\DSC56800EX\_Quick\_Start\_r2.6\tools\cw\_update*



The content of the archive is displayed and should show the "Stationery New Project Wizard" item. Press the Next button and proceed to Finish.

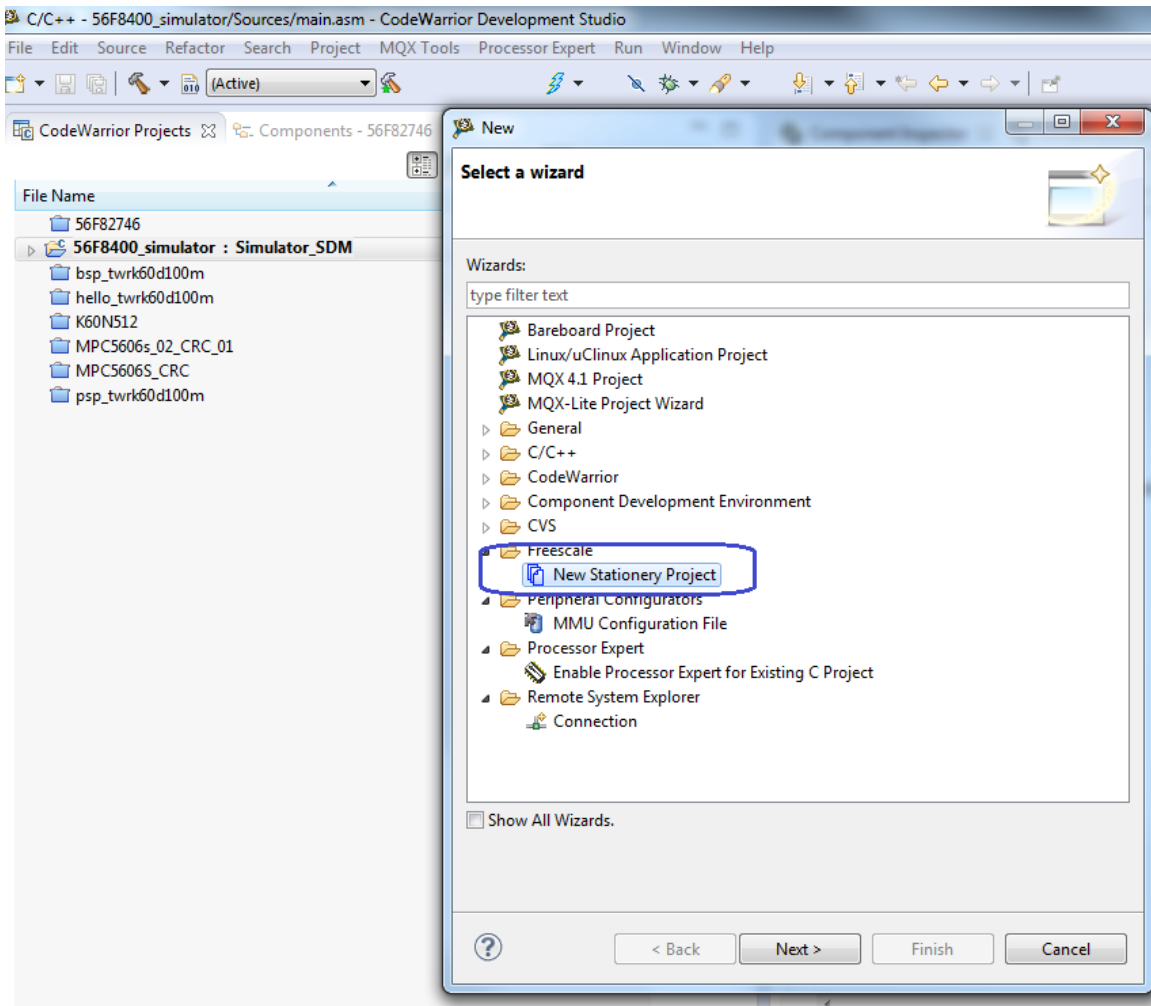


## 2. Create new project and develop software

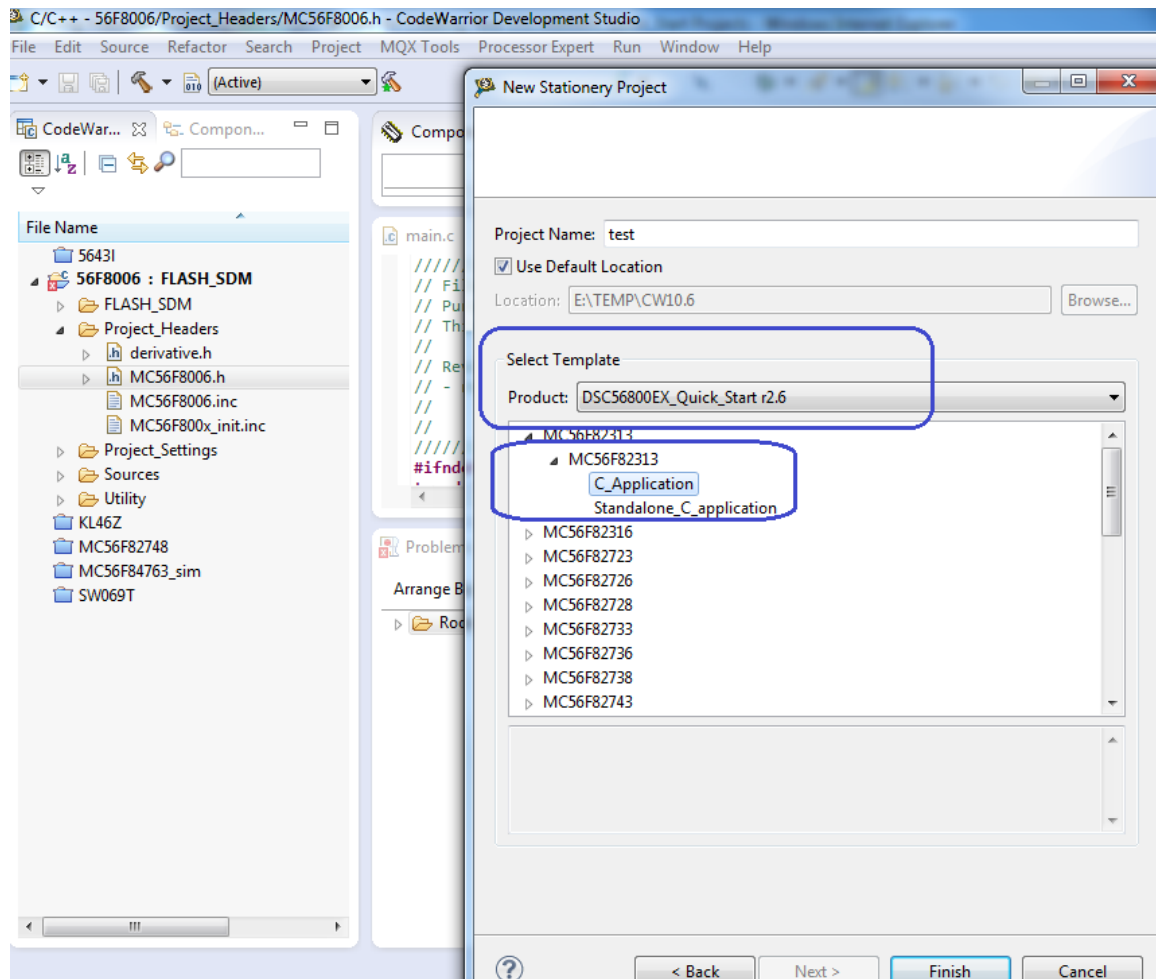
### 2.1. Create new project from stationery

Now, the Quick Start is integrated with CodeWarrior, and user can create a new project from Quick Start Stationery. To do that, click on menu File in CodeWarrior IDE, then New -> Project->Freescale->New Stationery Project

Or user can go to menu File, then New -> Other...->Freescale->New Stationery Project.



Then name the project, and select the DSC part number and template.

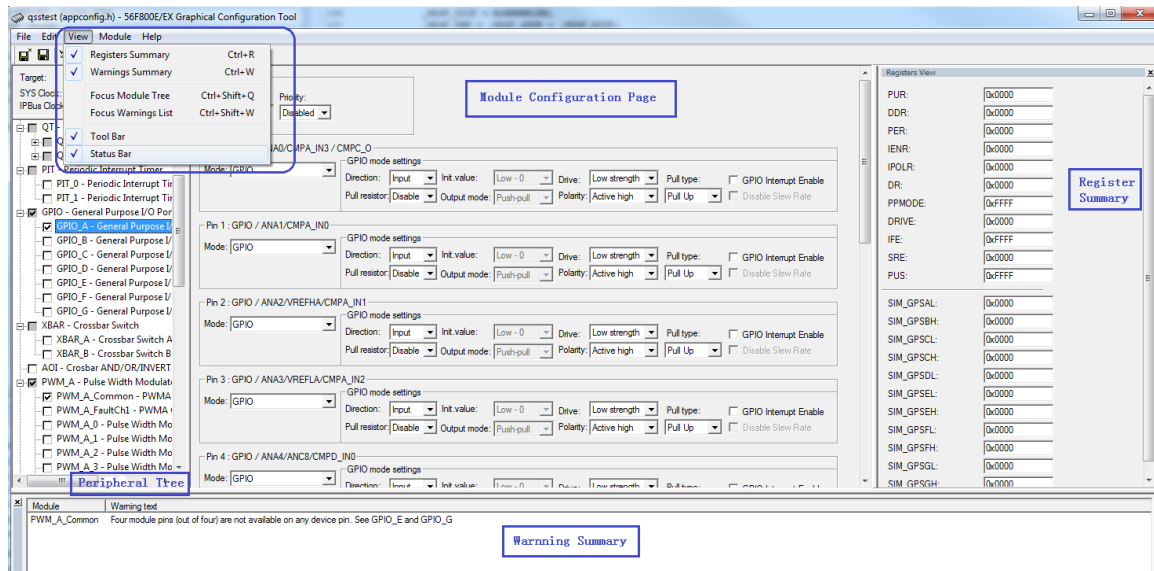


On the selection list, two options are available:

- Standalone C-application - all essential driver files are located in the project folder.
- C-application - driver files are linked to the project from DSC56800EX\_Quick\_Start depository.

## 2.2. Start GCT to configure peripheral module

To start GCT (Graphical Configuration Tool, click on menu Run in CodeWarrior IDE, then External Tools -> GTC, or directly press the key shortcut which was set in step 1.2. GCT is started as below:



Select the module on the left Peripheral Tree and configure its initialization state on the Module Configuration Page. The initialize value for registers is shown on the Register View. The Register View and Warning Summary are only visible after they are enabled under View menu.

After configure the peripheral module, click on the Save button or go to menu File->save. The appconfig.h file will be updated under project's subfolder "ApplicationConfig".

To dynamically configure the peripherals, please call the following command in user's application code:

```
ioctl(peripheral_module_identifier,command,command_specific_parameter);
```

For details, please refer to its user manual.

### 3. Example Projects

Quick Start 2.6 installation contains the demo applications for TWR-56F8400 and TWR-56F82xx module. They are located under:  
C:\Freescale\DSC56800EX\_Quick\_Start\_r2.6\sample\_applications

The demo project can be imported into CodeWarrior 10.6.4 from File menu->Import command ->General->Existing Projects. And it can also be built in the same way as common projects. Please make "Copy project into workspace" enabled when importing the demo project.

