

Gen4eXtremeSwitch

Processor Expert Software

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Content

This archive contains a Processor Expert component providing software support for MC12XSF/MC12XS6/MC12XSG families of 4th generation of eXtreme Switch devices and example projects for Kinetis Design Studio 3.2.0 and newer.

Gen4eXtremeSwitch_Bxxx.PEupd - Processor Expert component for Gen4 eXtreme Switch

SPI_Device_Bxxx.PEupd - Processor Expert component for SPI interface sharing

Licensing

The component in this archive is available for free and without any warranty to the users of NXP Processor Expert.

Installation instructions

Please follow these instructions to install the component:

1. Unzip the archive into a folder.
2. Start CodeWarrior and click 'Processor Expert->Import Component(s)' in menu. In the pop-up window, locate Component file (.PEupd) in 'Gen4eXtremeSwitch_PEx_SW\Component'. Select Gen4eXtremeSwitch_Bxxx.PEupd and SPI_Device_Bxxx.PEupd files, then click 'Open' (similar with Kinetis Design Studio 3.0).
3. If import is successful, then **Gen4eXtremeSwitch** and **SPI_Device** components are in 'Components Library->SW->User Component'.
4. Now both components are ready to use.

Examples

Content and description of this package is shown in Table 1.

Table 1: Content of the downloaded zip file

Component	Processor Expert components folder.
Gen4eXtremeSwitch_Bxxx.PEupd	Gen4eXtremeSwitch component update file
SPI_Device_Bxxx.PEupd	SPI_Device component update file
KDS_Examples	Example projects folder for Kinetis Design Studio.
G4XS_KL25Z_FreeMASTER	This demo project shows how to use FreeMASTER application along with Gen4eXtremeSwitch component to drive 32V eXtreme Switch device and FRDM-KL25Z.
G4XS_KL25Z_IncrementalPWM	The purpose of this example project is to show how to use incremental PWM feature of 32V eXtreme Switch with FRDM-KL25Z.
G4XS_KL25Z_Measurement	The purpose of this example project is to show how to configure feedback monitoring and how to get measured values with FRDM-KL25Z.
G4XS_KL25Z_ParseStatusData	The purpose of this example project is to show how to parse and interpret status data with use of the Gen4eXtremeSwitch component with FRDM-KL25Z.
G4XS_KL25Z_SetPWMDutyParallel	The purpose of this example project is to show how to set the PWM duty value of selected channels on multiple devices with FRDM-KL25Z.
G4XS_KL25Z_SetPWMDutySingle	The purpose of this example project is to show how to set the PWM duty value of selected channels on single device with FRDM-KL25Z.
G4XS_K64F_FreeMASTER	This demo project shows how to use FreeMASTER application along with Gen4eXtremeSwitch component to drive 32V eXtreme Switch device and FRDM-K64F.
G4XS_K64F_IncrementalPWM	The purpose of this example project is to show how to use incremental PWM feature of 32V eXtreme Switch with FRDM-K64F.

G4XS_K64F_Measurement	The purpose of this example project is to show how to configure feedback monitoring and how to get measured values with FRDM-K64F.
G4XS_K64F_ParseStatusData	The purpose of this example project is to show how to parse and interpret status data with use of the Gen4eXtremeSwitch component with FRDM-K64F.
G4XS_K64F_SetPWMDutySingle	The purpose of this example project is to show how to set the PWM duty value of selected channels on single device with FRDM-K64F.
G4XS_KV10Z_IncrementalPWM	The purpose of this example project is to show how to use incremental PWM feature of 32V eXtreme Switch with FRDM-KV10Z.
G4XS_KV10Z_ParseStatusData	The purpose of this example project is to show how to parse and interpret status data with use of the Gen4eXtremeSwitch component with FRDM-KV10Z.
G4XS_KV10Z_SetPWMDutySingle	The purpose of this example project is to show how to set the PWM duty value of selected channels on single device with FRDM-KV10Z.

To import an example into Kinetis Design Studio, follow these steps:

1. In Kinetis Design Studio menu bar, click File->Import... In the pop-up window, select General -> Existing Projects into Workspace and click to Next.

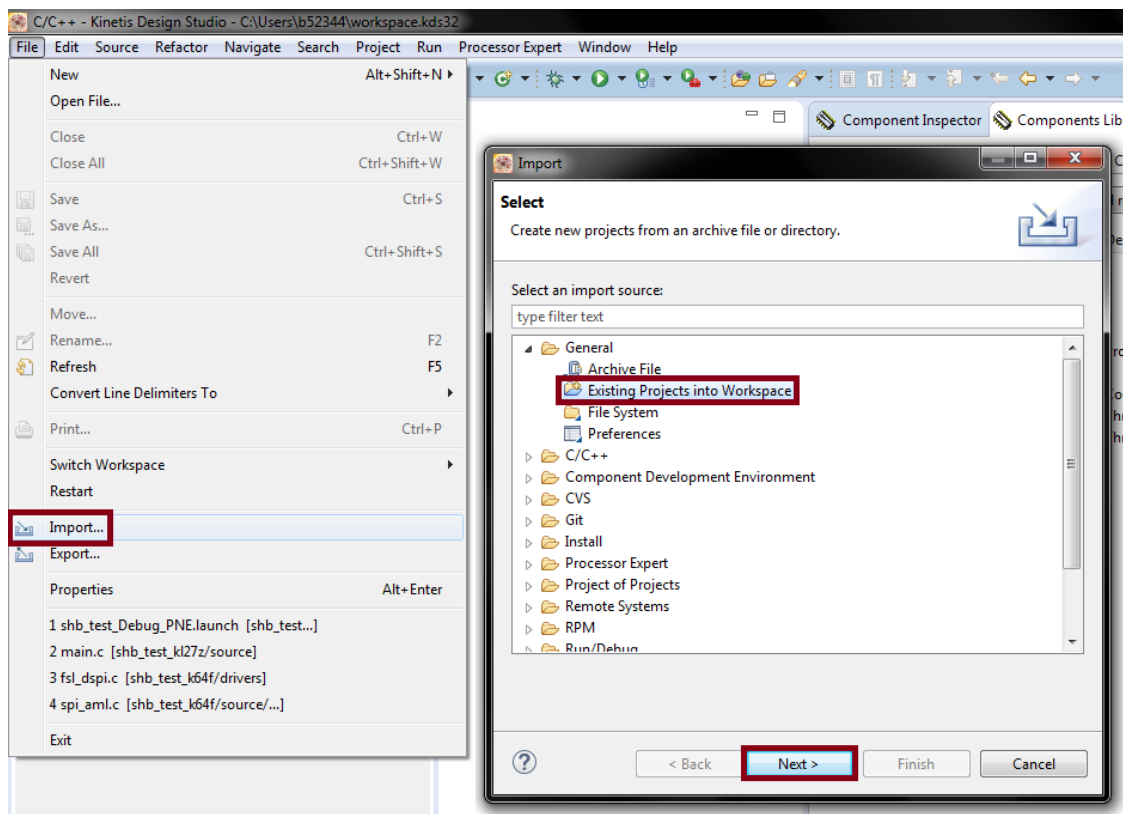


Figure 1. Importing an Example Project

2. Click Browse and locate the folder where you unzipped the downloaded example files. Find the folder: Gen4eXtremeSwitch_PEx_SW\KDS_Examples and select a project to import. Then click OK.
3. With your project now loaded in the Select root directory box, click on the Copy projects into workspace checkbox. Then click Finish. The project is now in the Kinetis Design Studio workspace where you can build and run it.

Known issues of Gen4eXtremeSwitch

There might be warnings from PWM_LDD component that SetDutyMS will just return error code, this warning doesn't affect the functionality, the method SetDutyMS is not used.