RX610

Renesas Starter Kit Sample Code

Introduction

Renesas Starter Kits (RSK) are supplied as complete development systems for the selected microcontroller. The kit includes an evaluation board, portable On Chip Debugger and a set of peripheral sample code. This peripheral sample code is supplied as an installer providing a High-performance Embedded Workshop (HEW) Project Generator plus full User Documentation.

Target Device

RX610

Contents

1. Installation

The RSK Sample Code is supplied as an installer providing a High-performance Embedded Workshop (HEW) Project Generator plus full User Documentation.

Note: Please ensure that HEW plus the RX toolchain are already installed on your PC. Evaluation versions of the RX toolchain including the HEW IDE are readily available from the Renesas website.
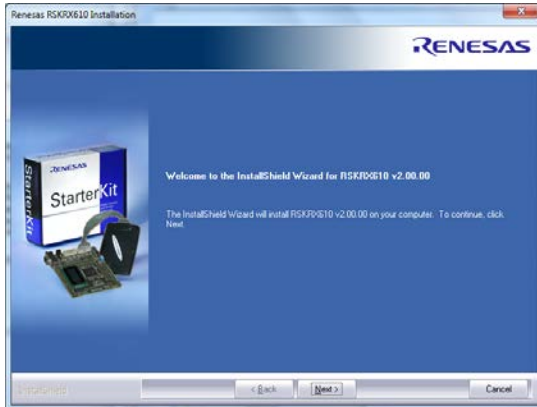

Locate the downloaded installer package, for example rskrx6102000011075.exe and double click to run it. Follow the installation instructions.

Once installed the RSK Sample Code documentation is available using the Renesas Manual Navigator. From the Windows Start button select All Programs | Renesas | High-performance Embedded Workshop | Manual Navigator. Expand the Renesas USB Host Stack Documentation branch and double click on the manual title to open the document.
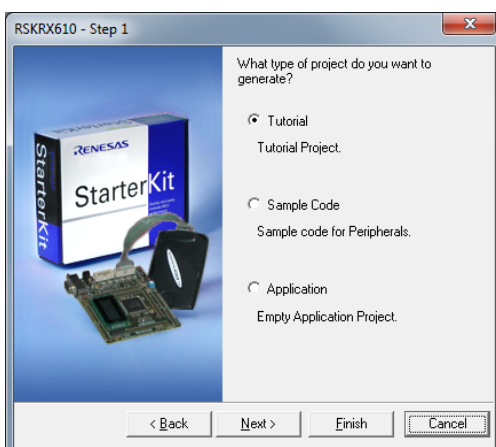
The Project Generator can be run from within HEW from the File | New Workspace menu item.

2. Creating the Sample Code Workspace

In the New Project Workspace dialog select RSKRX610 project type and assign a Workspace Name before clicking Ok.
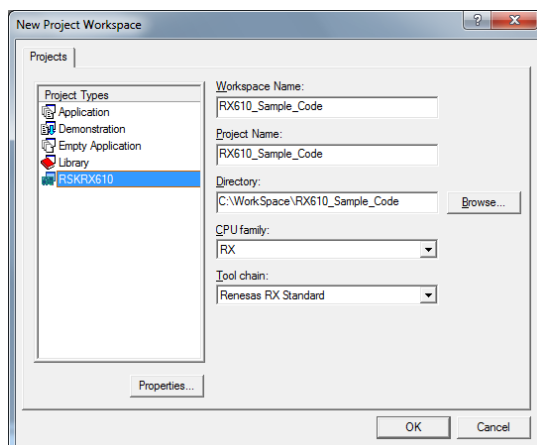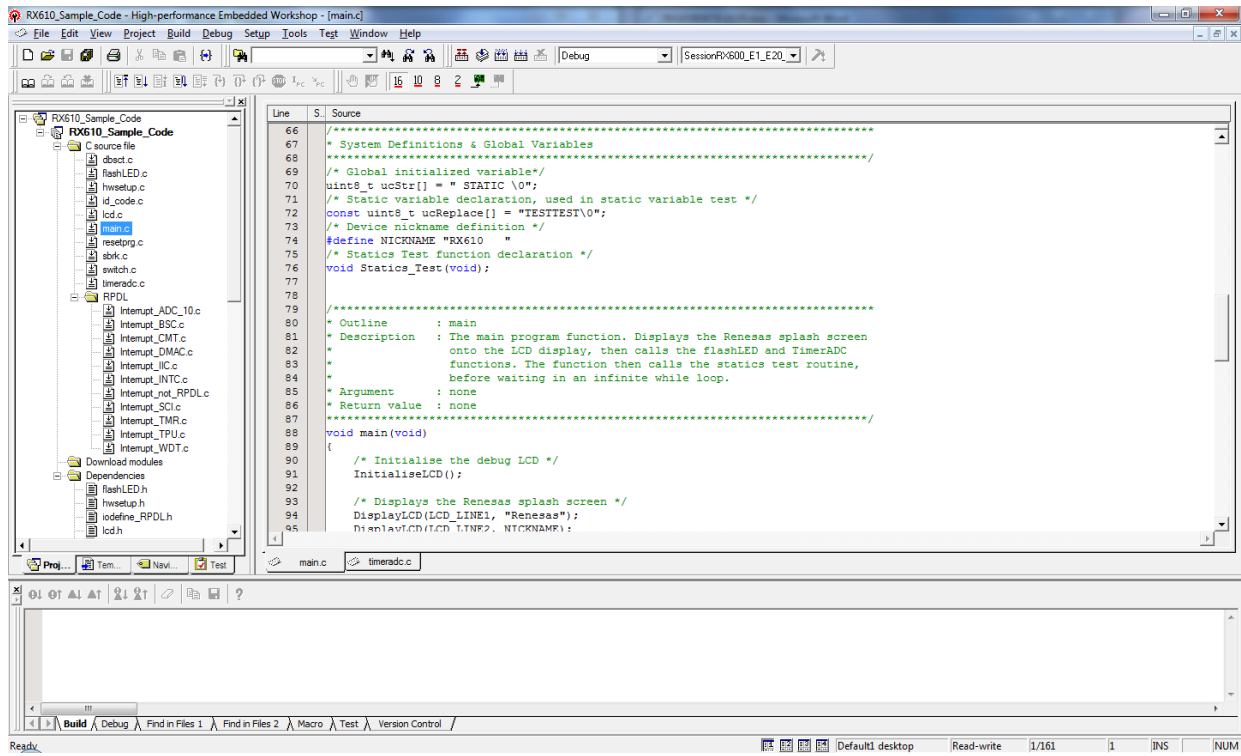

There are 3 project types available. Make your selection and complete the New Project Workspace Wizard.

3. Opening sample code source files

Once the workspace and project is loaded the source code and all dependant files can be opened in the editor by double clicking the file in the workspace window.

Example

4. Source code functionality

The source code project is specifically written to run on the appropriate RSK. However this source code can be useful as an example even without the RSK.

The project will contain a C source file 'main.c'. This source file will include the C function main().

5. Website and Support

Renesas Electronics Website
    http://www.renesas.com/

Inquiries
    http://www.renesas.com/inquiry

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6. Revision Record

Rev.	Date	Description	
		Page	**Summary**
1.00	Oct 14, 2011	—	First edition issued
1.01	Mar 04, 2013	1,2	Hi-performance was corrected to High-performance

General Precautions in the Handling of MPU/MCU Products

The following usage notes are applicable to all MPU/MCU products from Renesas. For detailed usage notes on the products covered by this document, refer to the relevant sections of the document as well as any technical updates that have been issued for the products.

1. Handling of Unused Pins

   Handle unused pins in accord with the directions given under Handling of Unused Pins in the manual.

   — The input pins of CMOS products are generally in the high-impedance state. In operation with an unused pin in the open-circuit state, extra electromagnetic noise is induced in the vicinity of LSI, an associated shoot-through current flows internally, and malfunctions occur due to the false recognition of the pin state as an input signal become possible. Unused pins should be handled as described under Handling of Unused Pins in the manual.

2. Processing at Power-on

   The state of the product is undefined at the moment when power is supplied.

   — The states of internal circuits in the LSI are indeterminate and the states of register settings and pins are undefined at the moment when power is supplied.
   In a finished product where the reset signal is applied to the external reset pin, the states of pins are not guaranteed from the moment when power is supplied until the reset process is completed. In a similar way, the states of pins in a product that is reset by an on-chip power-on reset function are not guaranteed from the moment when power is supplied until the power reaches the level at which resetting has been specified.

3. Prohibition of Access to Reserved Addresses

   Access to reserved addresses is prohibited.

   — The reserved addresses are provided for the possible future expansion of functions. Do not access these addresses; the correct operation of LSI is not guaranteed if they are accessed.

4. Clock Signals

   After applying a reset, only release the reset line after the operating clock signal has become stable. When switching the clock signal during program execution, wait until the target clock signal has stabilized.

   — When the clock signal is generated with an external resonator (or from an external oscillator) during a reset, ensure that the reset line is only released after full stabilization of the clock signal. Moreover, when switching to a clock signal produced with an external resonator (or by an external oscillator) while program execution is in progress, wait until the target clock signal is stable.

5. Differences between Products

   Before changing from one product to another, i.e. to a product with a different part number, confirm that the change will not lead to problems.

   — The characteristics of an MPU or MCU in the same group but having a different part number may differ in terms of the internal memory capacity, layout pattern, and other factors, which can affect the ranges of electrical characteristics, such as characteristic values, operating margins, immunity to noise, and amount of radiated noise. When changing to a product with a different part number, implement a system-evaluation test for the given product.

RENESAS

Renesas Electronics Corporation

http://www.renesas.com