RX630 Group

Renesas Peripheral Driver Library

R20AN0317EJ0110
Rev.1.10
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Introduction

This application note describes the introductory procedure of Renesas Peripheral Driver Library for RX families.

Target Device

RX630 Group

Contents

1. Overview

The Renesas Peripheral Driver Library (RPDL) is a unified API for controlling the peripheral modules on the microcontrollers made by Renesas Electronics. The Renesas Peripheral Driver Library is bundled with Renesas Starter Kits and the Peripheral Driver Generator.

2. Bundled Items and the version

Renesas Peripheral Driver Library	RX630 Group Renesas Peripheral Driver Library V1.21
Renesas Peripheral Driver Library Source program	Rev.1.21 for RX630 Group
User's Manual (English only)	RX630 Group Renesas Peripheral Driver Library User's Manual Rev.1.21 (R20UT0817EE0121)
Library selection (Copy) Batch file Unzip the downloaded file	-

3. Supported device manual

This product is developed based on the following manual.

- RX630 Group User's Manual: Hardware Rev.1.60
  Document Number: R01UH0040JJ0160 (Japanese) or R01UH0040EJ0160 (English)

4. Supported tools

This product can be used with the following tools.

- C/C++ compiler for RX family V.1.02 Release 01

5. Introductory Procedure

5.1 Unzip the downloaded file

This product can be used with the following tools.

- Renesas Peripheral Driver Library Self-extracting file (Library and Batch file)
- Renesas Peripheral Driver Library Source program ZIP file
- User's Manual (English only) PDF file

5.2 Usage

After unzipping the file, refer to the User's Manual "1. Introduction" and use the Renesas Peripheral Driver Library.

Website and Support

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

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

Revision Record

		Description	
Rev.	**Date**	**Page**	**Summary**
1.00	May 20, 2014	—	First edition issued
1.10	Oct 10, 2014	—	“RX630 group Renesas peripheral driver generator” which corresponds to “RX630 Group User’s Manual: Hardware Rev.1.60” is released.

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 accordance 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.

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