

Thank you for using the Smart Configurator for RH850.

This document describes the restrictions and points for caution. Read this document before using the product.

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Chapter 1. Introduction

The Smart Configurator for RH850 is a software tool to generate control programs (device driver programs) for peripheral modules (timers, UART, A/D, etc.). It generates device driver codes using user settings through GUI. Initialize code and API (Application Programming Interface) functions are provided.

Chapter 2. Target Devices

Below is a list of devices supported by the Smart Configurator for RH850 V1.1.0.

RH850/F1KM-S1 Group	
PIN	Device name
48pin	R7F701693, R7F701694, R7F701695
64pin	R7F701690, R7F701691, R7F701692
80pin	R7F701687, R7F701688, R7F701689
100pin	R7F701684, R7F701685, R7F701686
RH850/F1KM-S4 Group	
PIN	Device name
100pin	R7F701644, R7F701645
144pin	R7F701646, R7F701647
176pin	R7F701648, R7F701649
232pin	R7F701650, R7F701651
following documents	
Manual name	Document Number
RH850/F1KM User's Manual: Hardware	R01UH0684EJ0100
	R01UH0684JJ0100

Chapter 3. Operating Environment

▪ Host machine

- IBM PC/AT compatibles (Windows® 10, Windows® 8.1, Windows® 7)
- Processor: 1 GHz or higher (must support hyper-threading, multi-core CPUs)
- Memory capacity: 2 GB or more recommended. Minimum requirement is 1 GB or more (64-bit Windows requires 2 GB or more)
- Hard disk capacity: 200 MB or more spare capacity
- Display: 1024 x 768 or higher resolution, 65,536 or more colors
- All other necessary software environments in addition to Windows OS
 - .NET Framework version4.5

▪ Development Environments

Product Name	Version
Renesas Integrated Development Environment CS+ for CC	V7.00.00 or later
GHS Multi®	V7.6.1 or later
IAR Embedded Workbench for RH850	V1.40.5 or later

Chapter 4. Points for Caution

This section describes points for caution regarding the Smart Configurator for RH850 V1.1.0.

4.1 List of Caution

No.	Description	version *1	
		RH850/F1KM-S1 V1.0.0	RH850/F1KM-S4 V1.0.0
1	The function which isn't supported	○	○
2	About the I/O define header file	○	○
3	About loading the project on CS+	○	○

○: Applicable, /: Not Applicable

Note 1: Version is described in the generated code.

4.2 Details of Caution

4.2.1 The function which isn't supported

✓ : Supported - : Not supported

Peripheral	Support status by Smart Configurator
Exception/Interrupts	✓ (Only Table reference method)
DMA Controller	✓
Supply Voltage Monitor	-
Clock controller	✓
Clock Monitor (CLMA)	×
Stand-By controller(STBC)	✓ (Only Stop and DeepStop mode)
Low-Power Sampler (LPS)	-
External Memory Access Controller (MEMC)	-
Serial Flash Memory Interface A (SFMA)	-
Multi Media Card Interface A (MMCA)	-
Clocked Serial Interface G (CSIG)	✓
Clocked Serial Interface H (CSIH)	✓
LIN Master Interface (RLIN2)	-
LIN/UART Interface (RLIN3)	✓ (Only UART mode)
I2C Bus Interface (RIIC)	✓
CANFD Interface (RS-CANFD)	-
FlexRay (FLXA)	-
Ethernet AVB (ETNB)	-
Single Edge Nibble Transmission (RSENT)	-
Window Watchdog Timer (WDTA)	✓
OS Timer (OSTM)	✓
Timer Array Unit B (TAUB)	✓
Timer Array Unit D (TAUD)	✓
Timer Array Unit J (TAUJ)	✓
Real-Time Clock (RTCA)	✓
Encoder Timer (ENCA)	-
Motor Control	-
PWM Output/Diagnostic (PWM-Diag)	-
A/D Converter (ADCA)	✓
Key Return (KR)	✓
Functional Safety	-
Data CRC (DCRA)	✓
Security Function	-
On-Chip Debug Unit (OCD)	-
Flash Memory	-
RAM	-
Boundary Scan	-

4.2.2 About the I/O define header file

Please use Renesas iodefne.h for the header file that defines the register. Because RH850 Smart Configurator V1.1.0 outputs code conforming to the definition in Renesas iodefne.h, a build error occurs when using the register definition file provided by other environments.

4.2.3 About loading the project on CS+

When launching RH850 Smart Configurator V1.1.0 from CS+, please set 'RH850 Build tool CC-RH plugin' and 'RH850 Build tool GHS CCRH850 plugin' to enable. If these plugins are disable, the error occurs when CS+ project that includes the setting of RH850 Smart Configurator V1.1.0 is loaded.

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