

Flexibly combining software from a GUI with powerful support functions

Smart Configurator

<https://www.renesas.com/smart-configurator>

Code generation aid tool based on a concept of "flexibly combining software"

Smart Configurator is a tool that can automatically generate a microcontroller initial configuration program. This tool provides basic pin configuration functions and a GUI that allows for easy addition and configuration of drivers and middleware, thus facilitating combination and configuration of software applicable to the application under development.

Middleware/driver/clock configuration

Importing Middleware/Drivers

Smart Configurator provides a GUI from which you can easily add and configure middleware and drivers applicable to the target microcontroller, such as Software Package, Flexible Software Package (FSP), and the Firmware Integration Technology (FIT) module. You can download necessary middleware and drivers from the Renesas webpage. Some of them can be downloaded and installed directly from Smart Configurator.

Clock settings

The clock configuration window allows you to configure clock settings while confirming clock sources and connections in the block diagram displayed in the window.

Code Generation

Can output source code that reflects the pin, clock, driver, and middleware configurations. If the integrated development environment is linked, generated C code is automatically incorporated into the Software project that is being edited.

Edition provided for each version of the integrated development environment

| e ² studio plug-in | Optionally available version for CS+ | Optionally available version for a partner company | Optionally available version for DTS file generation (for pin configuration products and Linux-based products) |
|--|---|---|--|
| RA, RZ, RL78, RX, RH850, RISC-V MCU | RL78, RX, RH850 | RA, RZ, RL78, RX, RH850, RISC-V MCU | RZ |
| e ² studio includes Smart Configurator. You can use Smart Configurator by installing e ² studio. | To use Smart Configurator with CS+, you need to additionally install the optionally available version of Smart Configurator. | To use Smart Configurator with IDE of a specific partner company (such as MULTI from Green HILLS, Keil from ARM, or IAR EWARM), install the optionally available version of Smart Configurator for the partner company. | For pin configuration products and some Linux-based products, source code (DTS file) that reflects pin settings can be output. |
| www.renesas.com/e2studio_download | www.renesas.com/smart-configurator Note: Download Smart Configurator from the Smart Configurator page for the microcontroller. | | |

Video

- For RA Family www.renesas.com/ra-how-to-video
- For RX Family www.renesas.com/rx-how-to-video
- For RL78 Family www.renesas.com/rl78-how-to-video
- For RH850 Family www.renesas.com/software-tool/rh850-smart-configurator#videos_training
- For RISC-V MCU www.renesas.com/software-tool/risc-v-smart-configurator#videos_training

FAQ en-support.renesas.com/knowledgeBase

Community community.renesas.com

renesas.com

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Contact information

For further information on a product technology, to most up-to-date version of a document, or your nearest office, please visit www.renesas.com/contact/

Pin Settings

Pin configuration in GUI screens

You can verify and resolve conflict of multi pin functions.

The [Pins Configuration] window

Used for configuring the pins to be used for each peripheral.

[MCU Package] window

Displays used pins, unused pins, and function-conflicting pins in different colors for easy confirmation of overall status. For a pin assigned different functions, pin assignment can be automatically changed to solve conflict by a single click.

