

Flexibly combining software through 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"

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

### Middleware/driver/clock Configuration

#### Importing middleware/drivers

The Flexible Software Package (FSP) and Firmware Integration Technology (FIT) are provided as middleware and drivers. You can easily add and configure the highly functional peripherals through the GUI of the Smart Configurator.

#### Clock settings

The [Clocks configuration] window allows you to configure clock settings while selecting from a block diagram in the GUI and confirming clock sources without the need for referring to the user's manual.

### Code Generation

Source code that reflects the pin, clock, driver, and middleware configurations can be output. If the IDEs are linked, the generated source code is automatically incorporated into the software project that is being edited.

### Editions provided for each version of the integrated development environment

e <sup>2</sup> studio plug-in	Optionally available version for CS+	Optionally available version for partner products	Optionally available version for RZ
RA, RZ, RL78, RX, RH850, RISC-V MCU	RL78, RX, RH850	RA, RL78, RX, RH850, RZ (RZ/T2 and RZ/N2), RISC-V MCU	RZ
e <sup>2</sup> studio includes the Smart Configurator. You can use the Smart Configurator by installing e <sup>2</sup> studio.	To use the Smart Configurator with CS+, you need to additionally install the optionally available version of the Smart Configurator.	To use the Smart Configurator with the partner IDEs (such as MULTI from Green Hills Software, Keil from Arm, or Embedded Workbench from IAR System), install the optionally available version of the Smart Configurator for the partner IDEs.	Only the setting of pins is handled. For Linux-based products, source code (a DTS file) that reflects pin settings can be output.
<a href="http://www.renesas.com/e2studio_download">www.renesas.com/e2studio_download</a>	<a href="http://www.renesas.com/smart-configurator">www.renesas.com/smart-configurator</a>		

Note: Download Smart Configurator from the Smart Configurator page for the microcontroller.

### Pin Settings

#### Pin configuration through a GUI

You can verify and resolve conflicts between multiplexed pin functions.

#### [Pins Configuration] window

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

#### [MCU Package] window

Displays used pins, unused pins, and pins with conflicts of multiplexed functions in different colors for easy confirmation of the overall state. For conflicts between multiplexed pin functions, the pin assignment can be automatically changed to resolve the contention by a single click.



### Videos

- [www.renesas.com/ra-how-to-video](http://www.renesas.com/ra-how-to-video)  [www.renesas.com/rx-how-to-video](http://www.renesas.com/rx-how-to-video)
- [www.renesas.com/rl78-how-to-video](http://www.renesas.com/rl78-how-to-video)
- [www.renesas.com/software-tool/rh850-smart-configurator#videos\\_training](http://www.renesas.com/software-tool/rh850-smart-configurator#videos_training)
- [www.renesas.com/software-tool/risc-v-smart-configurator#videos\\_training](http://www.renesas.com/software-tool/risc-v-smart-configurator#videos_training)
- [www.renesas.com/software-tool/rz-smart-configurator#videos\\_training](http://www.renesas.com/software-tool/rz-smart-configurator#videos_training)

**FAQ** [en-support.renesas.com/knowledgeBase](http://en-support.renesas.com/knowledgeBase)

**Community** [community.renesas.com](http://community.renesas.com)

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