

[New release]

R20TS0202EJ0102

Rev.1.02

Oct. 1, 2017

The PG-FP6, a New Flash Memory Programmer

- Further Enhancement of High-Performance, Security, and Functions for Production Lines -

Outline

We are announcing the launch of the PG-FP6, a new flash memory programmer. Additionally, we are newly releasing V1.00.00 of FP6 Terminal, the programming GUI for the PG-FP6.

1. Overview

The PG-FP6, a new flash memory programmer, a successor to the PG-FP5, is a tool for erasing, programming, and verifying programs for Renesas MCUs containing flash memory on user systems.

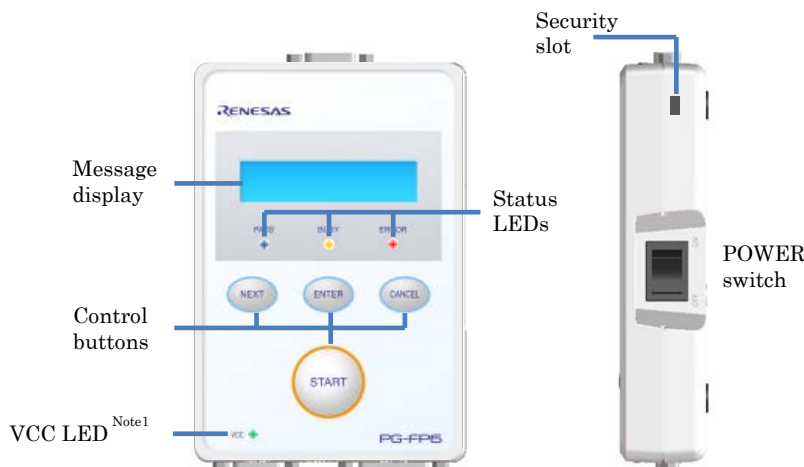
The PG-FP6 is designed to be compatible with the PG-FP5, and can be connected to any boards to which the PG-FP5 can be connected.

Furthermore, in response to user requests, the PG-FP6 now has enhanced programming speeds and supports large-scale flash memory.



Figure 1. Appearance of PG-FP6

The PG-FP6 has a control panel and a security slot suitable for standalone operation.



Note1: The VCC LED is lit when the target power supply is turned on.

Figure 2. Control Panel Suitable for Standalone Operation

Since FP6 Terminal, the programming GUI of the PG-FP6, is compatible with the PG-FP5 in terms of GUI configuration and operation, users of PG-FP5 can transition smoothly to using the PG-FP6. We also plan to add a function to enable import of PG-FP5 projects.

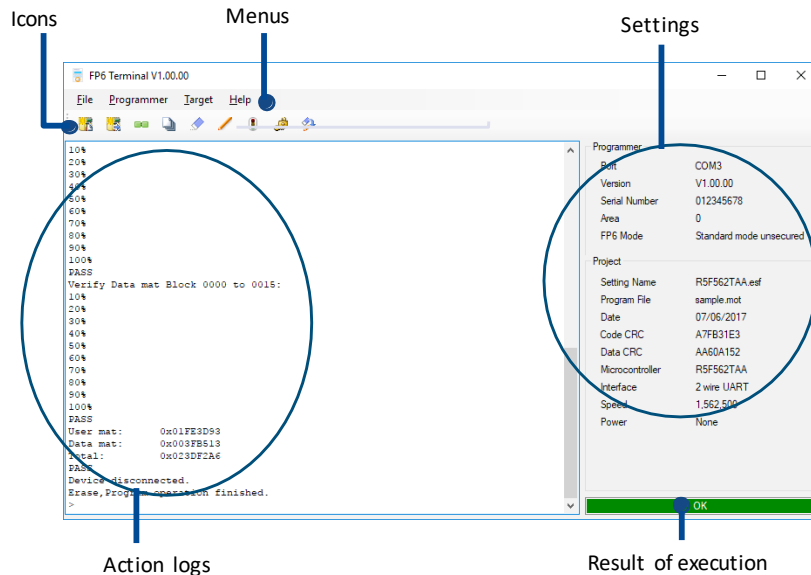


Figure 3. User-Friendly GUI (FP6 Terminal)

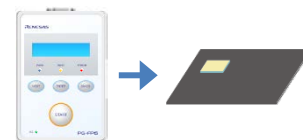
2. Features

The PG-FP6 has inherited the reliability of the PG-FP5 which has been widely used on many sites for development, production line programming, field programming, and other purposes since the launch in 2007. Please consider introducing the enhanced PG-FP6.

2.1 High Performance

(1) High-speed programming

Programming speed is improved by using faster data transfer than that of the PG-FP5. Productivity is improved and costs are reduced.



	RH850/E1M-S2 Code:4MB Data:64KB	RX71M Code:4MB Data:64KB	RL78/F15 Code:512KB Data:16KB
PG-FP5	26 sec.	25 sec.	11 sec.
PG-FP6	21 sec.	15 sec.	10 sec.

↓
19% faster

↓
40% faster

↓
9% faster

Numeric values are reference values.

(2) High-speed download

Downloading of programs to the product main body is 40% faster than that for the PG-FP5. Development is now more efficient.



High-speed download

(3) Large-scale memory

With 256 MB of large-scale memory mounted, the PG-FP6 is compatible with large-scale flash memory MCUs of the RH850 family.

2.2 Security

For security measures against theft of programs saved in the PG-FP6, you can connect a Kensington's security cable (sold separately) to the security slot of the PG-FP6.

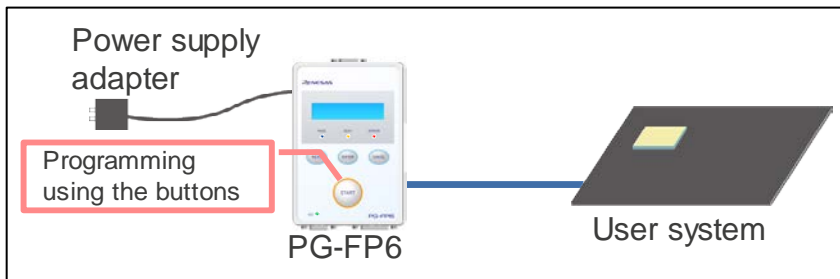


2.3 Functions for Production Lines

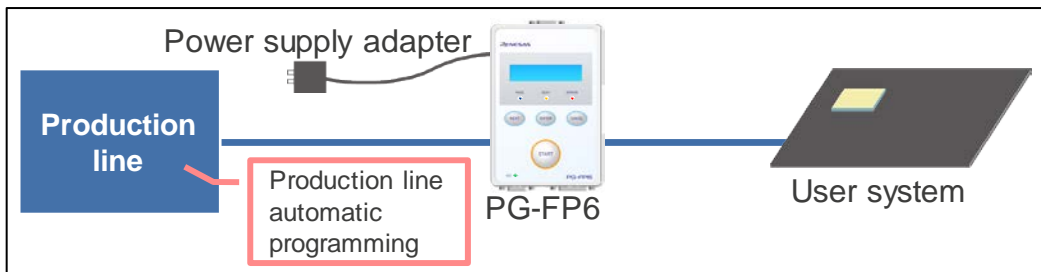
Functions for production lines are fully prepared and can be introduced smoothly.

- (1) Programming by button operation, automatic programming through production lines, and programming by GUI operation are available.

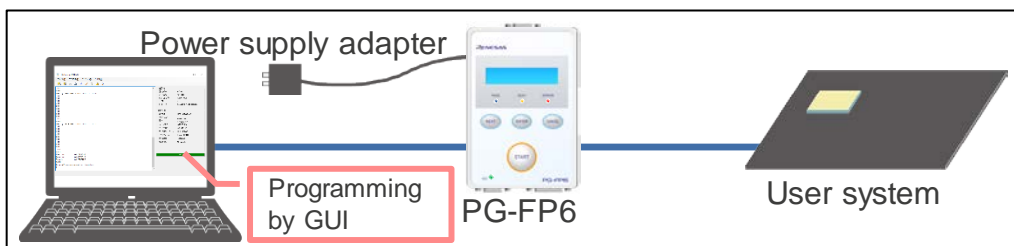
Stand-alone programming



Production line programming



PC programming



- (2) A maximum of eight types of programming environments can be saved.
- (3) Programming of unique codes in a designated area of flash memory is supported.
- (4) A function to limit the operation of the PG-FP6 main body is provided. (function to prohibit uploading and setup)
- (5) Software-type power switch changed to hardware type (allowing for power on by production line centralized switch).
- (6) A mounted VCC LED lights up when the power supply of the target system is detected. (Allows for checking whether power is turned on before programming.)

2.4 High Compatibility with the Legacy Product

Designed for compatibility with the legacy product, PG-FP5, for smooth migration.

- (1) PG-FP5-enabled MCUs are supported.
- (2) The control buttons, message display, and status LEDs have the same specifications.
- (3) The connector layout is the same.
- (4) Mass-produced boards for use in the PG-FP5 are connectable.
- (5) Furthering the compatibility of the programming GUI

For details about the PG-FP6, see the following URL:

<https://www.renesas.com/pg-fp6>

3. Contents of the Product Package

PG-FP6, USB cable, target cable (14-pin type), GND cable, power adapter

4. Supported MCUs

The following MCUs will be supported. New MCUs will be added to the support line in the future.

- RL78 family
- RX family
- RH850 family
- Battery Management in the Power management
- C30 group in the Renesas USB Power Delivery family
- ICs for Motor Control in the ICs for Motor Driver/Actuator Driver
- SuperH family
- V850 family
- 78K family
- R8C family

For details, refer to the "Available microcontroller list for PG-FP6" at the following URL:

<https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut4163>

5. Purchasing the Product

For product ordering, contact your local Renesas Electronics marketing office or distributor with the following information.

For product pricing, make inquiries in the same manner.

Product name	PG-FP6 Flash Memory Programmer
Orderable part name	RTE0T00001FWRJP000R (Corresponding region: Japan) RTE0T00001FWREA000R (Corresponding region: Europe and U.S.A.) RTE0T00001FWRAS000R (Corresponding region: China, Hong Kong, Taiwan, Korea, and Singapore)

Remarks: Products are shipped according to the destination region from where the order is made. For information about regions other than the above, contact your local Renesas Electronics sales office or distributor.

6. Obtaining the Programming GUI

We have newly released V1.00.00 of FP6 Terminal, the programming GUI for the PG-FP6.

Download the installer for the product from the following URL:

<https://www.renesas.com/pg-fp6#downloads>

7. Remarks

The PG-FP5 is to be discontinued, with final orders being accepted until May 2018.

Addition of MCUs supported by the PG-FP5 will continue until September 2018.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Oct. 1, 2017	-	First edition issued
1.01	Oct. 5, 2017	2	Change the MCU name.
1.02	Oct. 27, 2017	5	Correction of 7. Remarks

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■Inquiry

<https://www.renesas.com/contact/>

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