

## NEW UNIVERSAL FLASH PROGRAMMER

for NEC Electronics All Flash Microcontrollers

PG-FP5 is new flash memory programmer with high performance and strengthened functions for production lines.

Figure 1 Connection Image

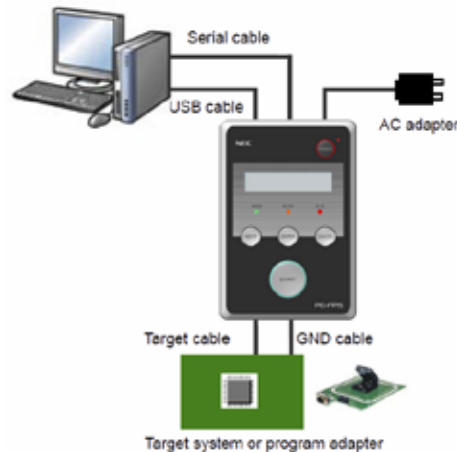
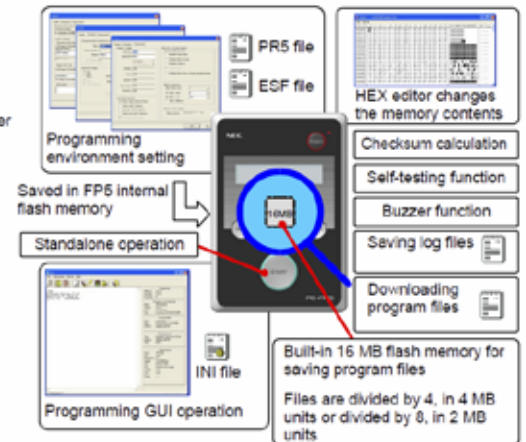


Figure 2 Function Overview



### What is PG-FP5?

The PG-FP5 flash programmer was designed by NEC Electronics for its 8-, 16-, and 32-bit all flash microcontrollers. The PG-FP5 can be used as a production line programmer, and is a replacement of the PG-FP4 programmer, which NEC Electronics will continue to support for a few more years.

### What are PG-FP5 features?

- Flash programming voltage (VPP): 1.5–12.0V (for MCUs with on-chip dual- or single-voltage power supplies)
- Flash programming operation: standalone or host computer-controlled
- On- and off-board programming: using NEC Electronics programming adapters based on microcontroller package types

- 16 MB flash memory that can store up to eight 2 MB and/or four 4 MB program files in Intel or Motorola hexadecimal format
- Parameter file (PR5 file) and programming settings file (ESF file) that can be used to store device-specific parameters in internal flash memory
- CSI (SPI), UART, I2C, and PORT I/O programming interfaces
- VDD (main power supply voltage) and clock to the microcontroller
- USB or serial (RS-232C) connection to host computer

### NEC Electronics advantages?

NEC Electronics is one of the few microcontroller vendors to have a flash memory programmer that supports all of its 8-, 16-, and 32-bit flash-memory based microcontrollers.

### When is PG-FP5 available?

The PG-FP5 is available in mass production quantities now.

### What supporting information is available?

- To request the PG-FP5 User's Manual and programming GUI software, send a message to [julie.huang@am.necel.com](mailto:julie.huang@am.necel.com) or [vincent.siu@am.necel.com](mailto:vincent.siu@am.necel.com).
- To submit suggestions or comments or request that your name be removed from our e-mail list, send a message to [julie.huang@am.necel.com](mailto:julie.huang@am.necel.com).

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