S5U1C17001W (rev1.0)

Gang Programmer

- Supports all S1C17 Family models with FLASH in order.
- Up to eight devices can be programmed simultaneously.
- Simple one button operation to start programming.
- A buzzer is provided to notify that programming has completed.
- Programmer/programming data can be setup through an SD card.
- Explicit status display using LEDs and an LCD panel.
- Checksum determination function.
- Serial numbering function.
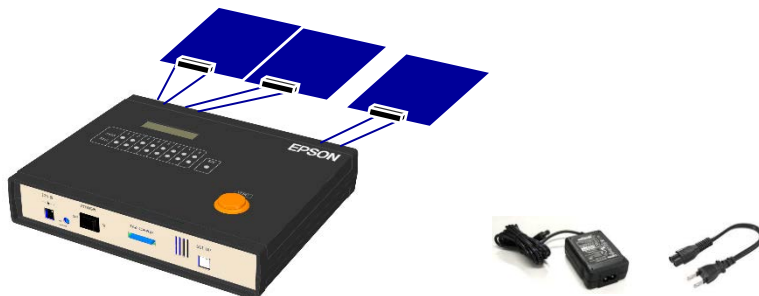- Log recording function.

■ DESCRIPTIONS

The Gang Programmer (S5U1C17001W) is a flash memory programmer dedicated to the Seiko Epson original 16-bit microcontrollers (S1C17 Family). The Gang Programmer allows up to eight devices to be programmed simultaneously. The Gang Programmer configuration and programming data setup can be performed through an SD card. After performing this using the SETUP button, programming can be started by only pressing the START button.

■ FEATURES

Model	S5U1C17001W (Gang Programmer)
Specifications	
Microcontrollers supported	EPSON original S1C17 Family microcontrollers with 16–bit RISC CPU core
	Note only models that have an embedded FLASH ROM and are connectable with an external FLASH ROM are supported.
	A 24 MHz or lower DCLK is supported.
Maximum number of devices connectable	8 devices
Built-in buffer memory	15 MB (The SD card can be removed after the buffer memory has loaded the required data from the SD card.)
Button operation	Erasing/Programming starts by pressing the START button once.
Status notification	Green LED: Indicates that the processing has normally terminated.
	Red LED: Indicates that an erasing, programming, or verifying error has occurred.
	Yellow LED: Indicates that processing is being executed.
	The buzzer sounds to notify that programming has completed. (On or Off selectable)
	The LCD panel displays detailed information on the status and the errors that occur.
Verification function	All data verification or checksum verification
Serial device numbering function	Programmable initial number, automatic count up, retention of the historic record and number for resuming while power is off
Log recording function	Log data is recorded in the Gang Programmer main unit and can be written to an SD card in TSV format.
User information check function	The version number of the user data loaded in the Gang Programmer can be displayed.
Target power supply	7.0 V/7.5 V for FLASH (max. 100 mA), 3.3 V (max. 50 mA), 1.8 V (max. 50 mA)
Firmware update function	The firmware can be updated through an SD card.
Media supported	SD and SDHC cards (not included in this package)
Accessories	Gang Programmer main unit, AC adaptor, power cable
Dimensions	
Gang Programmer main unit	270 mm (W) × 220 mm (D) × 50 mm (H) (rubber legs not included)
Power supply	
Gang Programmer input voltage	DC 12 V (supplied from the attached AC adopter)
AC adaptor input voltage	AC 90 to 264 V, 47 to 63 Hz
Current consumption	18 W or less
Other	
Option	Target interface cable (not required when user's own making cable is used. 30 cm (max.)) * Eight complimentary cables are included in the first lot.
	SD or SDHC card * A complimentary card is included in the second and subsequent lots.

S5U1C17001W

■ TARGET CONNECTION EXAMPLE

■ TARGET INTERFACE CABLE (OPTION)

Gang Programmer side   Target board side

0.25-mm pitch
10-pin general-purpose connector
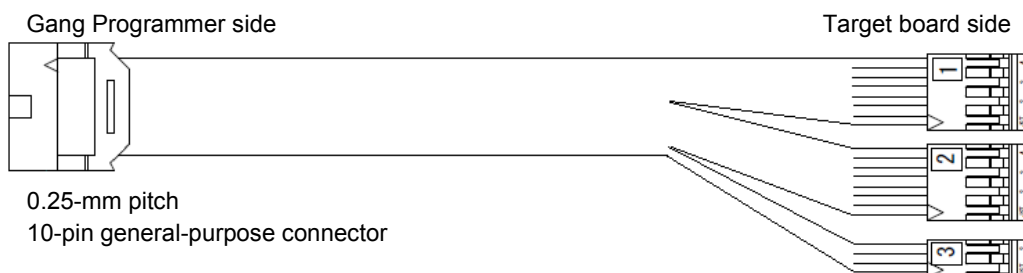
No.	Pin name	I/O	Pin function
1	**DCLK**	I	Clock signal input for debugging
2	**GND**	–	Ground
3	**DSIO**	I/O	Serial communication signal input/output for debugging
4	**DST2**	I	Debug status signal input
5	**FLASH_VCC_OUT***	–	Flash memory programming voltage output
6	GND	–	Ground
7	**TARGET_RST_OUT**	O	Target reset signal output
8	TARGET_VCC_IN	–	Target power supply voltage input (interface voltage input)
9	VCC 3.3V	–	Power supply (3.3 V)
10	VCC1.8V	–	Power supply (1.8 V)

Boldface means the pins that must be connected.
*: This pin must be connected to the V_{PP} pin (if available) of the device when an external V_{PP} is supplied to the device.