

To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: <http://www.renesas.com>

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Precautions for the SH7040 Series E7000 Emulator

Thank you for using the SH7040 series E7000 emulator (HS7040EPD71H). Note the following when using this emulator.

1. Restrictions on Emulator Usage

1.1 Trace Monitor Function

When an 8-bit area is accessed in word cycles, only the low-order eight bits can be displayed on the monitor.

1.2 MODE Command

Though the internal ROM size (64 kB/128 kB/256 kB) can be selected with the MODE command, the following specifications must be considered.

Internal ROM: Even when selecting 64 kB or 128 kB, the 256-kbyte area is valid, and its memory area status in trace display is ROM.

Internal RAM: Though internal RAM is only 4 kB in the device, a 6-kbyte area is valid in the emulator, and its memory area status in trace display is RAM.

1.3 Memory Contents Change Function

When an instruction on memory (internal ROM, internal RAM, or external RAM) is changed while debugging a program using cache memory, the memory contents and cache memory contents may not match.

If using one of the following commands to change an instruction on memory, initialize cache memory before starting emulation.

ASSEMBLE	DATA_CHANGE	FILL	MEMORY
MOVE	MOVE_TO_RAM	LOAD	FILE_LOAD
LAN_LOAD	INTFC_LOAD		

1.4 Memory Access Function

To set a write-protection area with the memory access function, set the operating frequency to 28.7 MHz or lower.

2. Restrictions on Device

2.1 Functions and Performance

Restrictions on the functions and performance of the device also apply to the emulator.

2.2 A/D Module

This emulator supports a medium-speed A/D module. When using it, consider the specifications of the registers related to the A/D module. For details, refer to the SH7040 Series Hardware Manual.

2.3 Minimizing EMI Noise

To minimize EMI* noise, insert a supplied core to each of the station-pod interface cables before using the emulator, as shown in figure 1. The cores must be inserted to the cables in a range that is at least 200 mm away and up to 300 mm from the emulator station.

Note: EMI stands for Electrical Magnetic Interference.

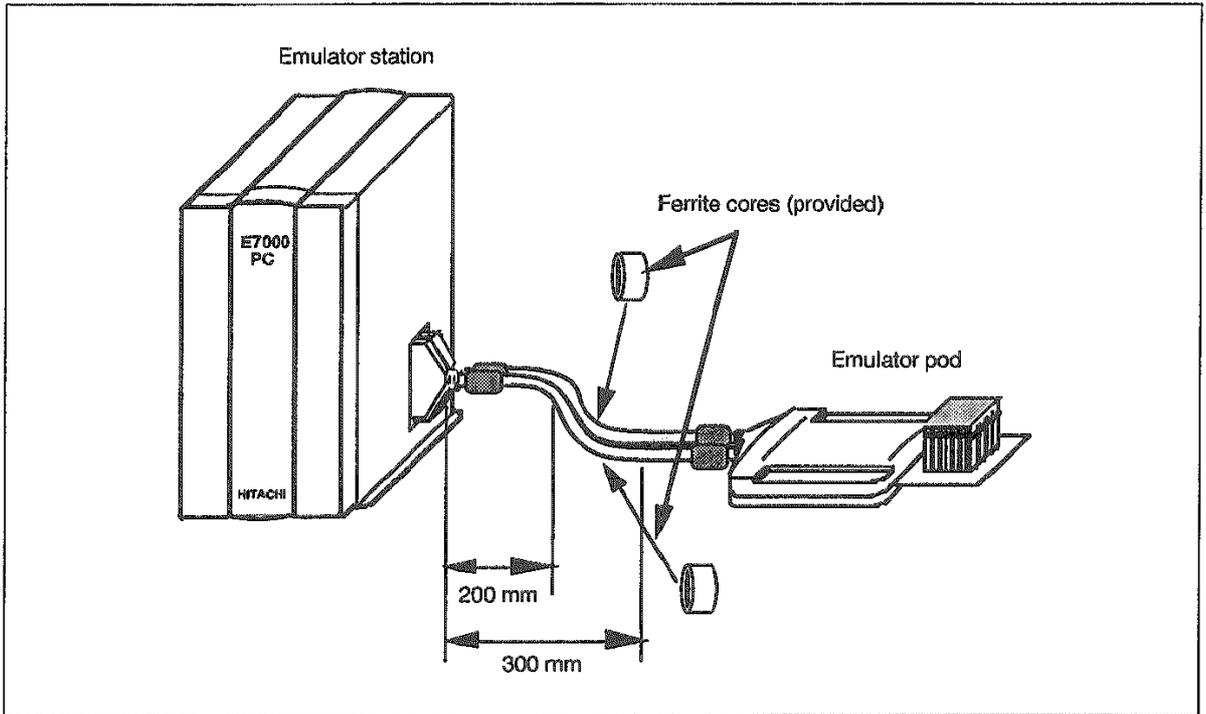


Figure 1 Core Insertion