

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>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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RENESAS TECHNICAL UPDATE

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Product Category	Development Environment		Document No.	TN-EML-A138A/E	Rev.	1.00
Title	SH-2A, SH-2 E200F Emulator (R0E0200F1EMU00): Procedures to Turn the Power on		Information Category	Technical notification		
Applicable Product	- E200F EV-chip units (regarding the procedures to turn the power on) - R0E570800VKK00 and R0E571470VKK00 (regarding the reset state)	Lot No.	Reference Document	SH-2A, SH-2 E200F Emulator User's Manual (REJ10J1003-0900)		
		All lots				

Thank you for using our products.

We have found that the order of steps from turning on the power of the E200F and user system to starting up the High-performance Embedded Workshop (HEW) given in the SH-2A, SH-2 E200F Emulator User's Manual must be changed.

Please read the following report before you use the E200F.

[Steps given in the user's manual]

1. Turn on the power of the user system.
2. Turn on the power of the E200F.
3. Start up the HEW.

[Problems]

- 1) When the E200F is started up in the order given above, excessive power will be supplied to the EV chip in the EV-chip unit which may lead to abnormal heating or malfunction.
- 2) When R0E570800VKK00 or R0E571470VKK00 is in use, the EV chip leaves the reset state before the E200F is started up and then the program in the flash memory of the EV chip will be executed. If you have changed the user system to another one, for example, the program in the flash memory of the EV chip has nothing to do with the user system being debugged. Even port pins supposed to be used for input may act as output pins so this will lead to damage on the user system.

[Causes]

- 1) When the E200F is started up, FPGA data is loaded into the control FPGA in the EV-chip unit. Turning the power of the user system on before the loading is complete means a spec-violation regarding I/O voltages of the EV chip and the user system. Excessive power may damage the emulator.
- 2) In the case of EV-chip units R0E570800VKK00 and R0E571470VKK00, turning the power of the user system on before the loading of FPGA data is complete causes the EV chip leave the reset state. This will automatically execute a program that is not intended.

[Resolution]

To turn on the power of the E200F and user system and start up the HEW, follow the procedures given below.

■ Turning the power on

1. Turn on the power of the E200F.
2. Start up the HEW and check that loading of FPGA data is complete. When the [Function select] window appears after the [Connecting] window (see figure 1), loading of FPGA data in the EV-chip unit is complete.

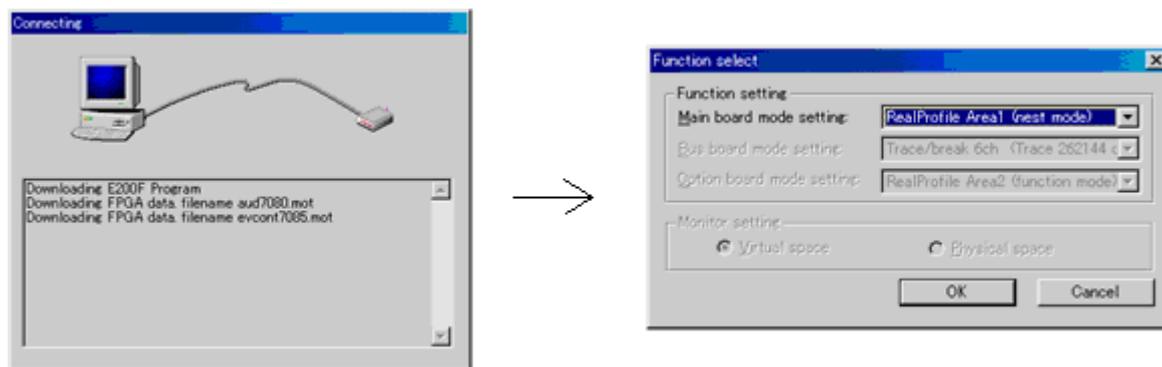


Figure 1 Loading of FPGA Data Completed

3. Turn on the power of the user system.
4. Check that the E200F has been started up.

■ Turning the power off

1. Turn off the power of the user system.
2. Turn off the power of the E200F.

Note: Do not leave either the E200F or user system with its power on. Otherwise the E200F and user system will be damaged.

We only anticipate that, however, even after this resolution has been taken, turning on the power of the E200F will produce leakage current on the user system which will lift the VCC level and disable any reset input in the user system. To prevent this problem, use an input/output-tolerant IC for user interface with the E200F. This problem applies to all EV-chip units usable with the E200F emulator (R0E0200F1EMU00).

In the case of EV-chip units R0E570800VKK00 and R0E571470VKK00, the resolution given in this document prevents the problem that the EV chip leaving the reset state leads to execution of a program that is not intended. If you still have any inconvenience, please contact your local distributor.