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## RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RX*-A198A/E	Rev.	1.00
Title	Notes on Boot Mode (USB Interface) for RX231 Group		Information Category	Technical Notification		
Applicable Product	RX231 Group	Lot No.				
		All	Reference Document	RX230 Group, RX231 Group User's Manual: Hardware Rev.1.10 (R01UH0496EJ0110)		

This document describes notes on accessing to the flash memory using boot mode (USB interface) for the RX231 group. This note is not applicable when using single-chip mode, or accessing to the flash memory in boot mode (SCI interface) or boot mode (FINE interface).

## Note

When using USB Direct to connect the MCU with the PC, the communications between the MCU and Renesas Flash Programmer (RFP) that is the flash memory programming software may be lost after the MCU starts in boot mode (USB interface).

## Cause

The boot program on the applicable products as above does not properly respond to the standard device request for the USB.

When other software sends the standard device request while the RFP is communicating with the MCU, the boot program may not be able to respond to it appropriately, which may be recognized as a communication error.

## Countermeasures

Try other PCs.

If you cannot arrange other PCs, you can avoid the problem by applying the following procedures as a temporary expedient.

- 1. Unplug the USB cable.
- 2. Reset the MCU.
- 3. Select the boot mode (USB interface) and release the MCU from a reset.
- 4. Connect the USB cable.

