

# RENESAS TECHNICAL UPDATE

TOYOSU FORESIA, 3-2-24, Toyosu, Koto-ku, Tokyo 135-0061, Japan  
Renesas Electronics Corporation

Product Category	MPU/MCU	Document No.	TN-RA*-A0112A/E	Rev.	1.00
Title	Remove the description of sub-section [Pin Handling When the Sub-Clock Oscillator Is Not Used]		Information Category	Technical Notification	
Applicable Product	RA2L1 Group RA2E1 Group RA2E3 Group RA2A2 Group RA0E1 Group	Lot No.	Reference Document	RA2L1 Group User's Manual: Hardware Rev.1.40 (R01UH0853EJ0140) RA2E1 Group User's Manual: Hardware Rev.1.40 (R01UH0852EJ0140) RA2E3 Group User's Manual: Hardware Rev.1.10 (R01UH0992EJ0110) RA2A2 Group User's Manual: Hardware Rev.1.10 (R01UH1005EJ0110) RA0E1 Group User's Manual: Hardware Rev.1.00 (R01UH1040EJ0100)	
		All			

Remove the description of sub-section [Pin Handling When the Sub-Clock Oscillator Is Not Used] and figure of the User's Manual for specific product groups.

## [Before correction of RA2L1, RA2E1 and RA2E3]

### 8.4.2 Pin Handling When the Sub-Clock Oscillator Is Not Used

When the sub-clock oscillator is not in use, connect the XCIN pin to VSS through a resistor (to pull VSS down) and leave the XCOU pin open as shown in [Figure 8.10](#). In addition, if an oscillator is not connected, set the Sub-Clock Oscillator Stop bit (SOSCCR.SOSTP) to 1 to stop the oscillator.

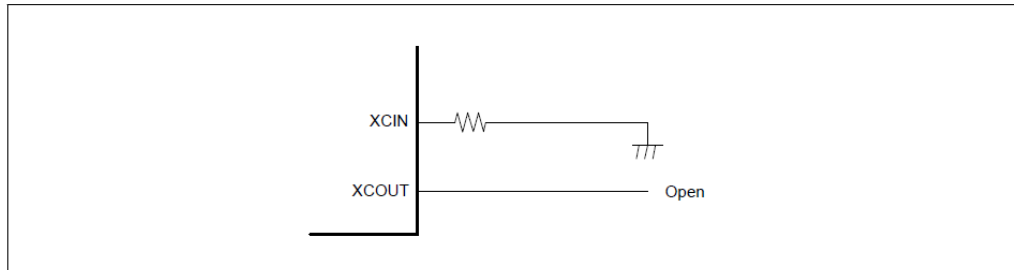


Figure 8.10 Pin handling when the sub-clock oscillator is not used

## [Before correction of RA2A2]

### 9.4.2 Pin Handling When the Sub-Clock Oscillator Is Not Used

When the sub-clock oscillator is not in use, connect the XCIN pin to VSS through a resistor (to pull VSS down) and leave the XCOU pin open as shown in [Figure 9.10](#). In addition, if an oscillator is not connected, set the Sub-Clock Oscillator Stop bit (SOSCCR.SOSTP) to 1 to stop the oscillator.

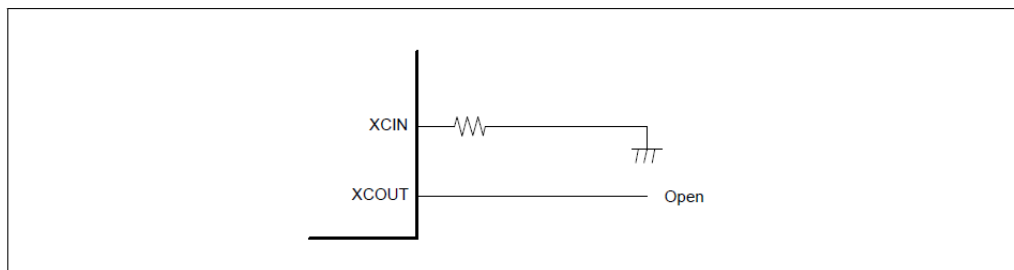
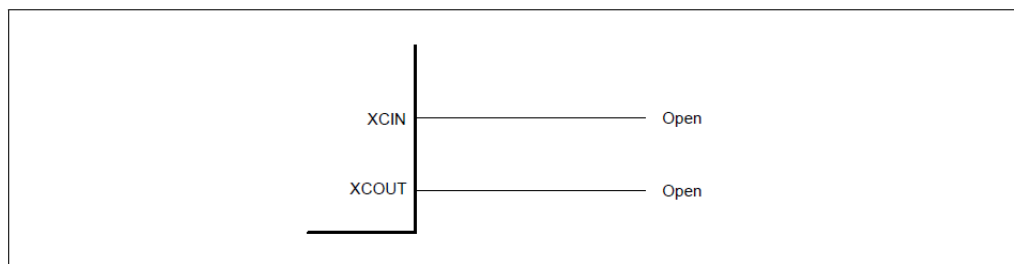


Figure 9.10 Pin handling when the sub-clock oscillator is not used

**[Before correction of RA0E1]**

**8.4.2 Pin Handling When the Sub-clock Oscillator Is Not Used**

When the sub-clock oscillator is not in use, connect the XCIN pin to VSS through a resistor (to pull VSS down) and leave the XCOUT pin open as shown in Figure 8.9. In addition, if an oscillator is not connected, set Sub Clock Oscillator Switching bit (CMC.SOSEL) is set resonator mode, and the Sub-Clock Oscillator Stop bit (SOSCCR.SOSTP) to 1 to stop the oscillator.



**Figure 8.9 Pin handling when the sub-clock oscillator is not used**

**[After correction of RA2L1, RA2E1, RA2E3, RA2A2 and RA0E1]**

Remove sub-section and figure.

The following table lists the specific sub-sections and figure in the User's Manual that require correction for each product group:

Product group	Sub-ection & figure number	Section title
RA2L1	8.4.2 and Figure 8.10	Pin Handling When the Sub-Clock Oscillator Is Not Used
RA2E1	8.4.2 and Figure 8.10	Pin Handling When the Sub-Clock Oscillator Is Not Used
RA2E3	8.4.2 and Figure 8.10	Pin Handling When the Sub-Clock Oscillator Is Not Used
RA2A2	9.4.2 and Figure 9.10	Pin Handling When the Sub-Clock Oscillator Is Not Used
RA0E1	8.4.2 and Figure 8.9	Pin Handling When the Sub-Clock Oscillator Is Not Used