RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-R8C-A025A/E	Rev.	1.00
Title	R8C/L3xx Group Descriptions Complemented in the User's Manual: Hardware		Information Category	Technical Notification		
Applicable Products	R8C/L35A, L35B, L35C, L35M Groups R8C/L36A, L36B, L36C, L36M Groups R8C/L38A, L38B, L38C, L38M Groups R8C/L3AA, L3AB, L3AC, L3AM Groups	Lot No. __	Reference Document			

Descriptions in the User's Manual: Hardware have been complemented for the above applicable products.

The functions described below do not exist in some MCUs. Refer to the applicable User's Manual: Hardware for details.

1. CPU clock when exiting stop mode

   The clock divided by 8 specified by bits CM36 and CM37 in the CM3 register is used as the CPU clock when the MCU exits stop mode by a peripheral function interrupt. For more details, refer to the CM3 and CM0 register diagrams in the User's Manual: Hardware.

2. Pin states in stop, power-off 0, and power-off 1 modes.

   The following shows pin states in stop, power-off 0, and power-off 1 modes.

   Power-off modes in the R8C/L3xA and R8C/L3xB Groups are the same state as power-off 0 mode.

Pin		Stop Mode	Power-Off 0 Mode	Power-Off 1 Mode
I/O port		Retain the status immediately before entering stop mode	High impedance	High impedance
When selecting XIN, XOUT functions (CM13 = 1)		Comply with the settings of P12_0 and P12_1	High impedance	High impedance
XCIN, XCOUT		Oscillation stops (high impedance)	Oscillation stops (high impedance)	Oscillate
When selecting COM, SEG functions		Output low	Output low	Output low
When selecting CL1, CL2 functions		Undefined (high impedance /Vss/VL1/Vcc)	High impedance	High impedance
VL4, VL3, VL2		High impedance	High impedance	High impedance
VL1	External divide resistor used (LVUPE = 0)	High impedance	High impedance	High impedance
	Internal voltage multiplier used VL1 external input voltage used (LVUPE = 1, LVURS = 0)	High impedance	High impedance	High impedance
	Internal voltage multiplier used VL1 internal generation voltage used (LVUPE = 1, LVURS = 1)	Output low Note: Do not apply external voltage.	High impedance	High impedance

3. Note on pins XIN and XOUT

   The XIN pin is shared with the P12_0 pin and the XOUT pin is shared with the P12_1 pin. When using I/O ports P12_0 and P12_1 without using the XIN clock, set the CM13 bit to 0 (I/O ports P12_0 and P12_1) and CM05 bit to 0 (XIN clock oscillates).