

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RX*-A0272A/E	Rev.	1.00
Title	RX64M Group, RX71M Group, RX65N Group, RX651 Group; Addition of the Specification of the Decoupling Capacitance for Stabilizing the Internal Voltage		Information Category	Technical Notification		
Applicable Product	RX64M Group, RX71M Group, RX65N Group, RX651 Group	Lot No.	Reference Document	User's Manual: Hardware for applicable products (refer to Reference Documents below)		
		All				

This document is to notify of the addition of the specification of the decoupling capacitance (for stabilizing the internal voltage) to be connected to the VCL pin in User's Manual: Hardware for the applicable products.

•RX64M Group

Table 1. Decoupling Capacitance for the VCL Pin of the RX64M Group Products

Item	Symbol	Value
Decoupling capacitance for stabilizing the internal voltage	C_{VCL}	$0.1 \mu\text{F} \pm 30\%^{*1}$

Note 1. Use a multilayer ceramic capacitor with a nominal capacitance of $0.1 \mu\text{F}$, for which the sum of the capacitance tolerance and change in the capacitance under the usage conditions will be no greater than $\pm 30\%$.

•RX71M Group

Table 2. Decoupling Capacitance for the VCL Pin of the RX71M Group Products

Item	Symbol	Value
Decoupling capacitance for stabilizing the internal voltage	C_{VCL}	$0.22 \mu\text{F} \pm 30\%^{*1}$

Note 1. Use a multilayer ceramic capacitor with a nominal capacitance of $0.22 \mu\text{F}$, for which the sum of the capacitance tolerance and change in the capacitance under the usage conditions will be no greater than $\pm 30\%$.

•RX65N Group, RX651 Group

Table 3. Decoupling Capacitance for the VCL Pin of the RX65N/RX651 Group Products

Item	Symbol	Value
Decoupling capacitance for stabilizing the internal voltage	C_{VCL}	$0.22 \mu\text{F} \pm 30\%^{*1}$

Note 1. Use a multilayer ceramic capacitor with a nominal capacitance of $0.22 \mu\text{F}$, for which the sum of the capacitance tolerance and change in the capacitance under the usage conditions will be no greater than $\pm 30\%$.

•Reference Documents

Group	Manual Title (Document Number)
RX64M Group	RX64M Group User's Manual: Hardware Rev.1.20 (R01UH0377EJ0120)
RX71M Group	RX71M Group User's Manual: Hardware Rev.1.20 (R01UH0493EJ0120)
RX65N Group, RX651 Group	RX65N Group, RX651 Group User's Manual: Hardware Rev.2.30 (R01UH0590EJ0230)