

# RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RA*-A0155A/E	Rev.	1.00
Title	Corrections to recommended operating conditions and CTSU characteristics		Information Category	Technical Notification		
Applicable Product	RA2L1 Group	Lot No.	Reference Document	Renesas RA2L1 Group User's Manual: Hardware Rev. 1.50 Aug.2024 Renesas RA2E1 Group User's Manual: Hardware Rev. 1.50 Jun. 2024		
	RA2E1 Group	All				

The following corrections have been made to the RA2L1 and RA2E1 user's manuals for hardware.

## Correction details

Affected Documents	Corrected Pages/Sections	Content
RA2L1 Group	P.1031 Table 41.3 Recommended operating conditions(2)	Additions
	P.1085 Table 41.50 CTSU characteristics	Deletions
RA2E1 Group	P.960 Table 39.3 Recommended operating conditions(2)	Additions
	P.1014 Table 39.49 CTSU characteristics	Deletions

## Document Improvement Plan

These corrections will be made in the next revision of the user's manuals.

**1. Corrections for the RA2L1 Group**

Delete "Table 41.50 CTSU Characteristics" and add the following:

**Table 41.3 Recommended operating conditions(2)**

Conditions: VCC = AVCC0 = 1.8 to 5.5 V

Parameter	Symbol	Value
External capacitance for stabilizing connected to TSCAP pin	CTSCAP	10nF±10% (*1)

Note1. Use a multilayer ceramic capacitor with a nominal capacitance of 10 nF and a capacitance tolerance of ±10% or less. Select a capacitor with a temperature characteristic of ±15% or less, such as X7R (EIA), to match the operating environment.

**2. Corrections for the RA2E1 Group**

Delete "Table 39.49 CTSU Characteristics" and add the following:

**Table 39.3 Recommended operating conditions(2)**

Conditions: VCC = AVCC0 = 1.8 to 5.5 V

Parameter	Symbol	Value
External capacitance for stabilizing connected to TSCAP pin	CTSCAP	10nF±10% (*1)

Note1. Use a multilayer ceramic capacitor with a nominal capacitance of 10 nF and a capacitance tolerance of ±10% or less. Select a capacitor with a temperature characteristic of ±15% or less, such as X7R (EIA), to match the operating environment.