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RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RX*-A105A/E	Rev.	1.00
Title	Corrections of the electrical characteristics in the 'RX21A Group User's Manual: Hardware Rev.1.00'		Information Category	Technical Notification		
Applicable Product	RX21A Group	Lot No. All	Reference Document	RX21A Group User's Manual: Hardware Rev.1.00 (R01UH0251EJ0100)		

This document describes the corrections of the electrical characteristics in the 'RX21A Group User's Manual: Hardware Rev.1.00'. Changes are underlined in the list below.

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Add the description to **11.7 Usage Notes**.

11.7.8 Canceling All-Module Clock Stop Mode

If the ICLK is set so as to be slower than the PCLKB, a TMR interrupt cannot be used to cancel all-module clock stop mode. To use the TMR interrupt as the all-module clock stop mode canceling source, change the ICLK so as to be faster than the PCLKB before all-module clock stop mode is entered.

11.7.9 Point for Caution when Using the Sub-Clock as the Source of the System Clock

If the sub-clock is in use as the source of the system clock, make sure that the RTC or the low-speed clock oscillator is operating (by setting the RCR3.RTCEN = 1 or the LOCOCR.LCSTP = 0, respectively) for a transition to software standby mode.

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Correct a note of ‘Table 44.24 Clock Timing‘.

Original

Note 5. When specifying the sub-clock oscillation stabilization time, load SOSCWTCR register with the resonator-vendor-recommended stabilization time value minus 2 seconds.

Correction

Note 5. When specifying the sub-clock oscillation stabilization time, load SOSCWTCR register with a stabilization time value that is greater than the resonator-vendor-recommended value.

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Correct descriptions in ‘Table 44.34 ΔΣ A/D Conversion Characteristics‘.

Original

Item	Min.	Typ.	Max.	Unit	Test Conditions
Input impedance (x1, x2, x4, x8, x16)	40	66	—	kΩ	
Input impedance (x32, x64.)	30	50	—	kΩ	

Correction

Item	Min.	Typ.	Max.	Unit	Test Conditions
Input pull-up resistor	120	200	—	kΩ	
Input impedance for differential input (x1, x2, x4, x8)	40	66	—	kΩ	
Input impedance for differential input (x16, x32, x64)	30	50	—	kΩ	
Input impedance for single-ended input (x1)	48	80	—	kΩ	
Input impedance for single-ended input (x2)	51	86	—	kΩ	
Input impedance for single-ended input (x4)	54	91	—	kΩ	

Original

Item	Min.	Typ.	Max.	Unit	Test Conditions
Oversampling frequency	3.125	3.125	3.125	MHz	

Correction

Item	Min.	Typ.	Max.	Unit	Test Conditions
Oversampling frequency	3.125	3.125	3.125	MHz	
Oversampling period	0.32	0.32	0.32	µs	

Original

Item	Min.	Typ.	Max.	Unit	Test Conditions
Conversion with the ΔΣ modulator only Common mode input voltage	—	700.0	—	mV	
Reference voltage startup time	—	1	5	ms	

Correction

Item	Min.	Typ.	Max.	Unit	Test Conditions
Conversion with the ΔΣ modulator only Common mode input voltage	—	700.0	—	mV	
Input bias voltage	—	700.0	—	mV	
PGA output common mode voltage	—	700.0	—	mV	
Reference voltage startup time	—	1	5	ms	