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RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RX*-A0249A/E	Rev.	1.00
Title	RX66T Group and RX72T Group, Extension of Data Retention of Flash Memory		Information Category	Technical Notification		
Applicable Product	RX66T Group, RX72T Group	Lot No. All	Reference Document	User's Manual: Hardware for applicable products (see the table at the last page)		

This document describes the extension of the data retention of the flash memory specified in the "Electrical Characteristics" chapter of User's Manual: Hardware for the applicable products.
Page and table numbers are based on the RX66T Group. Refer to the table on the last page for the corresponding page and table numbers in the other groups.

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The specification of the data retention in Table 45.53, Code Flash Memory Characteristics is changed as follows.

Before correction

Table 45.53 Code Flash Memory Characteristics

Conditions: Omitted.

Item	Symbol	FCLK = 4 MHz			20 MHz ≤ FCLK ≤ 60 MHz			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	
Omitted.								
Data retention*3	t_{DRP}	10	—	—	10	—	—	Year

Omitted.

Note 3. This shows the characteristic when the program/erase cycle does not exceed the specified value.

After correction

Table 45.53 Code Flash Memory Characteristics

Conditions: Omitted.

Item	Symbol	FCLK = 4 MHz			20 MHz ≤ FCLK ≤ 60 MHz			Unit	Conditions
		Min.	Typ.	Max.	Min.	Typ.	Max.		
Omitted.									
Data retention*3, *4	t_{DRP}	20	—	—	20	—	—	Year	$T_a \le 85°C$
		10	—	—	10	—	—		$T_a \le 105°C$

Omitted.

Note 3. This shows the characteristics when a self-programming library provided by Renesas Electronics or a flash programmer is used and the program/erase cycle does not exceed the specified value.

Note 4. This result is obtained from reliability testing.

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The specification of the data retention in Table 45.54, Data Flash Memory Characteristics is changed as follows.

Before correction

Table 45.54 Data Flash Memory Characteristics

Conditions: Omitted.

Item	Symbol	FCLK = 4 MHz			20 MHz ≤ FCLK ≤ 60 MHz			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	
Omitted.								
Data retention*3	t_{DRP}	10	—	—	10	—	—	Year

Omitted.

Note 3. This shows the characteristic when the program/erase cycle does not exceed the specified value.

After correction

Table 45.54 Data Flash Memory Characteristics

Conditions: Omitted.

Item	Symbol	FCLK = 4 MHz			20 MHz ≤ FCLK ≤ 60 MHz			Unit	Conditions
		Min.	Typ.	Max.	Min.	Typ.	Max.		
Omitted.									
Data retention*3, *4	t_{DRP}	20	—	—	20	—	—	Year	$T_a \le 85°C$
		10	—	—	10	—	—		$T_a \le 105°C$

Omitted.

Note 3. This shows the characteristics when a self-programming library provided by Renesas Electronics or a flash programmer is used and the program/erase cycle does not exceed the specified value.

Note 4. This result is obtained from reliability testing.

Reference Documents

Applicable Products	Manual Title (Document Number)
RX66T Group	RX66T Group User's Manual: Hardware Rev1.10 (R01UH0749EJ0110)
RX72T Group	RX72T Group User's Manual: Hardware Rev1.00 (R01UH0803EJ0100)

Page Number, Section/Figure/Table Number

Item	Page Number, Section/Figure/Table Number	
	RX66T Group	RX72T Group
Code flash memory characteristics	Page 2287 of 2306 Table 45.53	Page 2263 of 2277 Table 46.51
Data flash memory characteristics	Page 2288 of 2306 Table 45.54	Page 2264 of 2277 Table 46.52