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Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: <http://www.renesas.com>

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Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-SH7-A743A/E	Rev.	1.00
Title	Differences between SH71241 and SH71241A series (A mask Version)		Information Category	Product Generation Change		
Applicable Product	SH7124 Group	Lot No.	Reference Document	SH7125 Group,SH7124 Group Hardware Manual REJ09B0243-0500		
		All lots				

In the Slim version of the SH71241 series, a portion of the debugging functions have been removed and electrical characteristics have been improved. Differences between the current version (SH71241) and the slim version (SH71241A) of the SH7146 series are as follows.

1. Differences of type number

Table1 shows differences between the current version and the slim version of the SH71241 (R5F71241) series.

Table1. Differences between the current and slim versions of SH71241

Product Group	Flash memory	SH71241 (Current version)	SH71241A (Slim version)	Remarks
SH7124	32kB	R5F71241N50FP	R5F71241AN50FP (A mask)	Switch to the Slim version
		R5F71241D50FP	R5F71241AD50FP (A mask)	Switch to the Slim version
		R5F71241N50NP	R5F71241AN50NP (A mask)	Switch to the Slim version
		R5F71241D50NP	R5F71241AD50NP (A mask)	Switch to the Slim version

2. Differences of functions and specifications

Table2 shows differences of functions and specifications between the current version and the slim version of the SH71241 series.

Table2. Differences of functions and specifications between the current version and the slim version of the SH71241 series

Item	Current version	Slim version	Remarks
User Break Controller (UBC)	Built-in	Not built-in	Please use SH71242(R5F71242)or SH71243(R5F71243) when on the chip debugger is used.
User Debug Interface (H-UDI)	Built-in	Not built-in	
User programming mode	Yes	None	-

3. Differences of characteristic

Table3 shows differences of characteristic between the current version and the slim version of the SH71241 (R5F71241) series.

Table3. Differences of characteristic between the current version and the Slim version (power supply current)

Item		Symbol	Current version			Slim version			Unit	Remark
			Min.	Typ.	Max.	Min.	Typ.	Max.		
power supply current	Normal operation	Icc	-	52	70	-	35	50	mA	IΦ=50MHz
	Sleep mode		-	33	50	-	22	30		IΦ=50MHz