

September 6, 2012

## Product Specifications of the RX21A Group

Product	RX21A Group		
Pin	64-pin	80-pin	100-pin
Part No.	R5F521AxxDFM	R5F521AxxDFN	R5F521AxxDFP
CPU	RX CPU		
Maximum operating frequency / Voltage range	50 MHz: VCC = 2.7 to 3.6 V 25 MHz: VCC = 1.8 to 3.6 V		
ROM	256 KB, 384 KB, 512 KB		
E2 Data Flash	8 KB		
RAM	32 KB, 64 KB		
24-bit $\Delta\Sigma$ A/D converter (SNDR = 85 dB)	3 ch	4 ch	7 ch
Data encryption unit	Yes		
Real time clock	Yes		
Serial peripheral interface	2 ch		
Serial communications interfaces	5 ch (including one channel for IrDA)		
I2C bus interface	1 ch	2 ch	2 ch
Event link controller	Yes		
Multi-function pin controller	Yes		
DMA controller	4 ch		
Data transfer controller	Yes		
Multi-function timer pulse unit 2	16-bit $\times$ 6 ch		
Port output enable 2	5		
8-bit timer	8-bit 4 ch		
Compare match timer	16-bit 4 ch		
CRC calculator	Yes		
Data operating circuit	Yes		

Product	RX21A Group		
10-bit A/D converter	4 ch	7 ch	7 ch
D/A converter	No	2 ch	2 ch
Voltage detection	Yes		
Comparator	3 ch	4 ch	4 ch
Safety functions	Independent Watchdog Timer, Clock-Accuracy Check: etc.		
Clock	Main clock oscillator, sub-clock oscillator		
Internal Clock	Low-speed on-chip oscillator, high-speed on-chip oscillator		
Current consumption	Normal operation (CPU-Core): 0.2 mA/MHz*2		
	Deep software standby mode (with RTC operation): 1.0 $\mu$ A*2		
	Delta-sigma A/D Converter: 1mA/ch*2		
Operating temperature	-40°C to +85°C, -40°C to +105°C		
Package	LQFP (0.5mm pitch)		

\*1: "xx" differs depending on package type

\*2: Target value