

May 24, 2012

## Product Specifications of the RX220 Group of MCUs

Group name		RX220 Group			
Part #		R5F 52206BDXX*1	R5F 52205BDXX*1	R5F 52203BDXX*1	R5F 52201BDXX*1
Memory	ROM	256 KB	128 KB	64 KB	32 KB
	E2 data flash	8 KB			
	RAM	16 KB	8 KB		4 KB
CPU core		RX CPU <ul style="list-style-type: none"> <li>• General registers: 32-bit × 16</li> <li>• Multiplier: 32-bit multiplier</li> <li>• Divider: 32-bit divider</li> <li>• Multiply-accumulator: Yes (two types: memory)</li> </ul>			
Current consumption		<ul style="list-style-type: none"> <li>• Operating mode: 0.2mA/MHz*2</li> <li>• Software standby mode: 2 μA*2</li> </ul>			
Floating-point processing unit		Not supported			
Maximum operating frequency		32 MHz / 2.7 V-5.5 V, 8 MHz / 1.8 V-2.7 V, 4 MHz / 1.62 V-1.8 V			
Clock	Main clock oscillator	1-20 MHz			
	Sub-clock oscillator	32.768 KHz			
	On-chip oscillator	Low-speed on-chip oscillator, high-speed on-chip oscillator			
On-chip peripheral functions		<ul style="list-style-type: none"> <li>• DMAC (DMACA): 4 channels</li> <li>• Data transfer controller (DTCa)</li> <li>• Multi-function timer pulse unit 2 (MTU2a): 16-bit × 6 channels</li> <li>• Port output enable 2 (POE2a)</li> </ul>			

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	<ul style="list-style-type: none"> <li>• 8-bit timer (TMR): 8-bit x 4 channels</li> <li>• Compare match timer (CMT): 16-bit x 4 channels</li> <li>• Real-time clock (RTC)</li> <li>• Independent watchdog timer (IWDT)</li> <li>• Serial communications interface (SC1c): 100-pin [4 channels], 64-pin, 48-pin [3 channels]</li> <li>• Serial communications interface (SC1d)</li> <li>• I<sup>2</sup>C bus interface (RIIC)</li> <li>• 12-bit A/D converter (S12ADb): 100-pin [16 channels], 64-pin [12 channels] 48-pin [8 channels]</li> <li>• CRC calculator (CRC)</li> <li>• Comparator A (CMPA): 2 channels</li> <li>• Voltage detection (LVDAa)</li> <li>• Event link controller (ELC)</li> <li>• Multi-function pin controller (MPC)</li> <li>• Clock frequency accuracy checker (CAC)</li> <li>• Data operation circuit (DOC)</li> </ul>
Operating temperature	-40°C - +85°C
Packages	<ul style="list-style-type: none"> <li>• LQFP100 (FP: 0.5 mm pitch) &lt;ROM Capacity 256 KB/128 KB/64 KB&gt;</li> <li>• LQFP64 (FM: 0.5 mm pitch) &lt;ROM Capacity 256 KB/128 KB/64 KB/32 KB&gt;</li> <li>• LQFP48 (FL: 0.5 mm pitch) &lt;ROM Capacity 256 KB /128 KB /64/32 KB&gt;</li> </ul>

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

\*2: Target value