

Separate Summary Sheet

Product Specifications of the RX24T Group of MCUs

Group name	RX24T Group			(Reference) RX23T Group		
	80-pin LFQFP 0.5mm	80-pin LQFP 0.65mm	100-pin LFQFP 0.5mm	48-pin LFQFP 0.5mm	52-pin LQFP 0.65mm	64-pin LFQFP 0.5mm
Flash ROM (KB)	128 to 256			64 to 128		
RAM (KB)	16			12		
E2 Data Flash (KB)	8			Not support		
Power supply voltages	2.7 V - 5.5 V					
Operating frequencies	80 MHz			40 MHz		
I/O port	I/O: 58 Input: 1		I/O: 78 Input: 1	I/O: 35 Input: 1	I/O: 38 Input: 1	I/O: 48 Input: 1
CPU	32-bit CPU RXv2 (Floating-point instructions: 11,DSP instructions: 23)					
FPU	Single precision (32-bit) floating point Data types and floating-point exceptions in conformance with the IEEE754 standard					
Peripheral function	3-phase non-overlapping waveform output for inverter control: 2 channel			3-phase non-overlapping waveform output for inverter control: 1 channel		
	Phase counting modes for encoder sensor					
	Controls the high-impedance state for PWM output					
	12-bit AD converter 0 (5 ch)			12-bit AD converter (10 ch) with three sample-and-hold circuits for current sensing		
	12-bit AD converter1 (5 ch) with Three sample-and-hold circuits for current sensing			Not support		
	12-bit AD converter 2 (12 ch)			Not support		
	Program gain amplifier 4 ch			Not support		
	Comparator: 4 channels (D/A converter (DA) for generating comparator reference voltage)			Comparator: 3 channels (D/A converter (DA) for generating comparator reference voltage)		
	Serial communications Interfaces : 3 channels			Serial communications Interfaces : 2 channels		
	I2C bus interface: 1 channel					
	Serial peripheral interface (SPI): 1 channel					
Safety function	Clock frequency accuracy measurement circuit					
	RAM test assistance functions using the DOC					
	Independent watchdog timer					
	Self-diagnostic and disconnection-detection assistance					

	CRC calculator (CRC)					
	Register write protection function					
Operating temperature range	Ta = -40°C to +85°C			Ta = -40°C to +85°C, -40°C to 105°C		
Part No. (ROM= Max size, Ta= -40°C to 85°C)	R5F524TA ADFN	R5F524TA ADFF	R5F524TA ADFP	R5F523T5 ADFL	R5F523T5 ADFD	R5F523T5 ADFM

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