

Product Specifications of the RL78/G1F MCUs

Group name		RL78/G1F				
Pin count		24 pins	32 pins	36 pins	48 pins	64 pins
Part Name ^(Note1)		R5F11B7	R5F11BB	R5F11BC	R5F11BG	R5F11BL
Package (Body size (mm))		HWQFN (4x4)	LQFP (7x7)	WFLGA (4x4)	LFQFP (7x7)	LFQFP (10x10)
Flash ROM (KB)		32 or 64				
Data Flash (KB)		4				
RAM (KB)		5.5				
Power Supply Voltage	V _{DD}	1.6V to 5.5V				
	EV _{DD0}	—	1.6V to V _{DD}	—	1.6V to V _{DD}	—
CPU operating frequency		32 MHz (max.)				
Clock	Main system	•X1 oscillation / External input: 1 to 20 MHz •High-speed on-chip oscillator: 1 to 32 MHz (Accuracy: ±1% ^{note2} , Only Timer RD/RX can be operated at 48, 64 MHz)				
	Subsystem	—	XT1 oscillation / External input: 32.768 KHz			
	Low-speed	Low-speed on-chip oscillator: 15 KHz				
CPU		RL78 CPU (Multiplication and Division/ Multiplication and Accumulation instructions are supported)				
I/O ports		20	28	31	44	58
Timer ^{Note3}		16-bit: 9ch, 12-bit: 1ch, WDT: 1ch, RTC: 1ch				
10-bit A/D		8 channels	13 channels	15 channels	17 channels	17 channels
8-bit D/A		1 channel	2 channels			
Comparator		2 channels				
PGA		1 channel				
Serial I/F ^{Note4}	CSI	3 channels			5 channels	6 channels
	UART	3 channels (LIN-bus supported: 1 channel, IrDA supported: 1 channel)				
	Simplified I ² C	3 channels			5 channels	6 channels
	I ² C	1 channel				
External interrupt terminal		9	11	10	16	20
Other peripheral functions		Data transfer controller (DTC), Event link controller (ELC), Low voltage detector (LVD), Power-on-reset circuit (POR), Safety functions				
Operating ambient temperature		T _A = -40 to +85°C (A: Consumer applications) T _A = -40 to +105°C (G: Industrial applications)				

(Note 1) The characters following the Part Names listed above differ depending on the flash ROM size, application classification, etc.

(Note 2) Accuracy is for the ambient temperature range of -20 to +85°C, V_{DD} ≥ 1.8V.

(Note 3) The 12-bit timer is used exclusively as an interval timer. The RTC can count time only when a subsystem clock is in use.

(Note 4) The CSI, UART, and I²C interfaces utilize a common module and are used exclusively in one- or two-channel units.

###

(Remarks) All registered trademarks or trademarks are the property of their respective owners.