■ MN102L610B

Туре	MN102L610B External				
ROM (x8-bit / x16-bit)					
RAM (×8-bit / ×16-bit)	4 K LQFP100-P-1414 *Lead-free 88.5 ns (at 4.5 V to 5.5 V, 22.6 MHz)				
Package					
Minimum Instruction Execution Time					
Interrupts	 RESET • Watchdog • Timer counter 0 to 5 • Timer counter 6 to 7 • Timer counter 6 to 7 compare capture A • Timer counter 6 to 7 compare capture B • ATC transfer finish • External 0 to 4 • Serial ch.0, 1 transmission • Serial ch.0, 1 reception • NMI pin • A/D conversion finish 				
Timer Counter	Timer counter 0: 8-bit × 1 (timer output, event count) Clock source				
	Interrupt source				
	Timer counter 4, 5: 8-bit × 1 (timer output, event count) Clock source				
	Timer counter 6, 7: 16-bit × 1 (timer output, event count, input capture, output compare, PWM output, 2-phase encoder input) Clock source				
	Connectable timer counter 0 to 5				
Serial Interface	Serial 0: 7, 8-bit × 1 (common use with UART, transfer direction of MSB/LSB selectable) Clock source				
	Serial 1:7, 8-bit × 1 (common use with UART, transfer direction of MSB/LSB selectable) Clock source				
	UART \times 2 (common use with serial 0, 1)				
	$I^2C \times 2$ (single master)				
I/O Pins I/O	80 • Common use : 16 (by 8 bits), 8 (by 4 bits), 56 (by bit)(MN102LF61G) • Common use : 8 (by 4 bits), 40 (by bit)(MN102L610B)				
A/D Inputs	8-bit \times 8-ch. (with S/H)				
PWM	16-bit × 2-ch.				
Special Ports	LED drive port × 2				
Notes	Burst ROM inferface support, ATC (between serial 0ch and internal RAM) support Panasonic MAE0000				

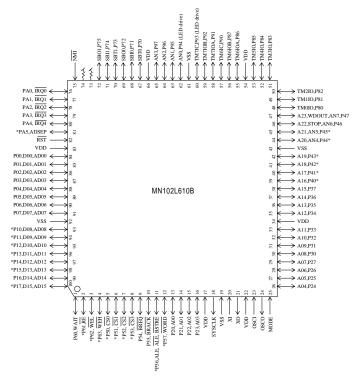
Electrical Characteristics

A/D characteristics

Parameter	Symbol	Condition		Limit			Unit
				min	typ	max	Unit
A/D conversion relative error		VDD = 5 V , VSS = 0 V	ch.0 to 3			±3	LSB
			ch.4 to 7			±4	
A/D conversion time				4.248			μs
Analog input voltage	VIA			VSS		VDD	V

 $(Ta = 25^{\circ}C, VDD = 5.0 V, VSS = 0 V)$

Pin Assignment



LQFP100-P-1414 *Lead-free

Support Tool

In-circuit Emulator	PX-ICE102L00 + PX-PRB102L53-LQFP100-P-1414		
Flash Memory Built-in Type	Туре	MN102LF61G	
	ROM (× 8-bit / × 16-bit)	128 K	
	RAM (× 8-bit / × 16-bit)	4 K	
	Minimum instruction execution time	88.5 ns (at 4.5 V to 5.5 V, 22.6 MHz)	
	Package	LQFP100-P-1414 *Lead-free	

^{*}PortunusableinMN102L610B

^{*} The MN102LF61G is manufactured and sold under license agreement with BULL CP8 Inc. Note that MN102LF61G cannot be used as the IC card.

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