□ MN101C539

Туре		MN101C539				
ROM (x8-bit)		24 K (External memory can not be expanded)				
RAM (×8-bit)		0.5 K (External memory can not be expanded)				
Package		TQFP048-P-0707B *Lead-free				
Minimum Inst Execution Tin		High speed mode: 0.10 μs (at 4.5 V to 5.5 V, 20 MHz) 0.238 μs (at 2.7 V to 5.5 V, 8.39 MHz) 1.00 μs (at 2.0 V to 5.5 V, 4 MHz)* Low speed mode: 61.04 μs (at 2.0 V to 5.5 V, 32.768 kHz)* * The lower limit for operation guarantee for EPROM built-in type is 2.7 V.				
Interrupts		• RESET • Watchdog • External 0 • External 1 • External 2 • External 3 • Timer 2 • Timer 3 • Timer 6 • Time Base • Serial 0 (2 systems) • A/D conversion finish • Timer 7 (2 systems)				
Timer Count	er	Timer counter 2 : 8-bit × 1 (square-wave/8-bit PWM output, event count, synchronous output event, pulse width measurement) Clock source				
		Timer counter 3 : 8-bit × 1 (square-wave output, event count, generation of remote control carrier) Clock source				
		Timer counter 2, 3 can be cascade-connected.				
		Timer counter 6 : 8-bit freerun timer Clock source				
		Timer counter 7 : 16-bit × 1 (square-wave/16-bit PWM output, cycle / duty continuous variable, event count, synchronous output evevt, puls width measurement, input capture) Clock source				
		Time base timer (one-minute count setting) Clock source				
		Watchdog timer Interrupt source 1/65536, 1/262144, 1/1048576 of system clock frequency				
Serial Interface		Serial 0 : synchronous type/UART (full-duplex) × 1 Clock source				
I/O Pins	I/O	36 • Common use • Specified pull-up resistor available • Input/output selectable (bit unit)				
	Input	4 • Common use • Specified pull-up resistor available				

MN101C539 🗆

A/D Inputs

10-bit \times 8-ch. (with S/H)

Special Ports

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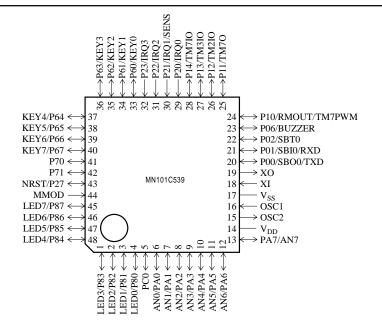
Buzzer output, remote control carrier signal output, high-current drive port

Electrical Characteristics

Supply current

Parameter	Symbol	Condition	Limit			Unit
Falallielei	Symbol	Condition		typ	max	
	IDD1	fosc = 20 MHz, VDD = 5 V		20	50	mA
Operating supply current	IDD2	fosc = 8.39 MHz, VDD = 5 V		10	20	mA
	IDD3	fx = 32.768 kHz, VDD = 3 V		20	70	μA
Supply current at HALT	IDD4	fx = 32.768 kHz, VDD = 3 V, Ta = 25°C		2	6	μA
	IDD5	$fx = 32.768 \text{ kHz}, \text{VDD} = 3 \text{ V}, \text{ Ta} = -40^{\circ}\text{C} \text{ to} +85^{\circ}\text{C}$			15	μA
Supply current at STOP	IDD6	$VDD = 5 V, Ta = 25^{\circ}C$			2	μA
		$VDD = 5 V$, $Ta = -40^{\circ}C to +85^{\circ}C$			20	μA

Pin Assignment



TQFP048-P-0707B *Lead-free

Support Tool

In-circuit Emulator	PX-ICE101C/D+PX-PRB101C53-TQFP048-P-0707B-M		
EPROM Built-in Type	Туре	MN101CP539HT	
	ROM (× 8-bit)	24 K	
	RAM (× 8-bit)	0.5 K	
	Minimum instruction execution time	High speed mode: 0.10 µs (at 4.5 V to 5.5 V, 20 MHz)	
		0.238 µs (at 2.7 V to 5.5 V, 8.39 MHz)	
		1.00 µs (at 2.7 V to 5.5 V, 4 MHz)	
		Low speed mode:61.04 μs (at 2.7 V to 5.5 V, 32.768 kHz)	
	Package	TQFP048-P-0707B *Lead-free	

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