❑ MN101C07A

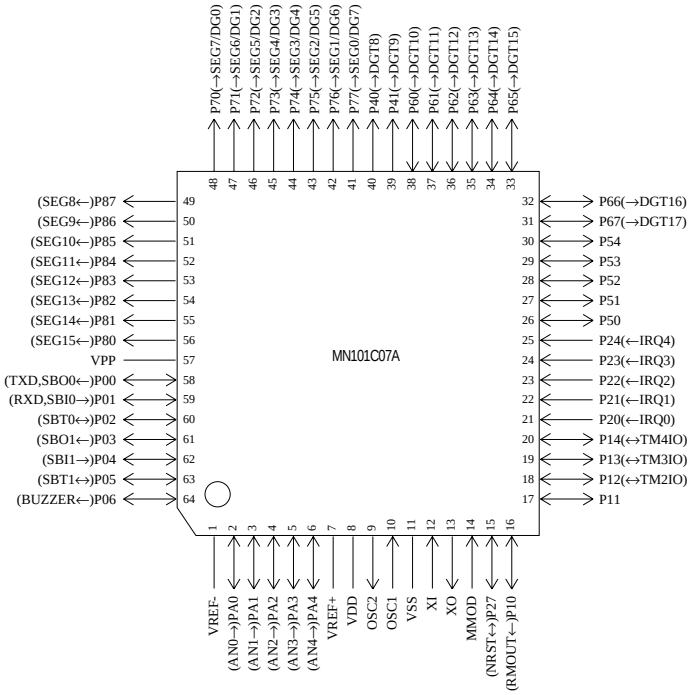
Type			MN101C07A
ROM (×8-bit)			32 K
RAM (×8-bit)			1 K
Package			LQFP064-P-1414 *Lead-free
Minimum Instruction Execution Time			0.25 µs (at 2.7 V to 5.5 V, 8 MHz) 125 µs (at 2.7 V to 5.5 V, 32 kHz)
Interrupts			• RESET • Watchdog • External 0 • External 1 • External 2 • External 3 • External 4 • Timer 2 • Timer 3 • Timer 4 • Timer 5 • Time base • Serial 0 • Serial 1 • Automatic transfer finish • A/D conversion finish • Key scan
Timer Counter			Timer counter 2 : 8-bit × 1 (square-wave/8-bit PWM output, event count, synchronous output event) Clock source ····· 1/1, 1/4 of system clock frequency; 1/1 of XI oscillation clock frequency; external clock input Interrupt source ····· coincidence with compare register 2 Timer counter 3 : 8-bit × 1 (square-wave output, event count, generation of remote control carrier, serial 0 baud rate timer) Clock source ····· 1/4, 1/16 of system clock frequency; 1/1 of OSC oscillation clock frequency; external clock input Interrupt source ····· coincidence with compare register 3 Timer counter 2, 3 can be cascade-connected. Timer counter 4 : 16-bit × 1 (square-wave/16-bit PWM output, event count, synchronous output event, input capture) Clock source ····· 1/4, 1/16 of system clock frequency; 1/1 of OSC oscillation clock frequency; external clock input Interrupt source ····· coincidence with compare register 4 Time base timer (one-minute count setting, independently operable 8-bit timer counter 5) Clock source ····· 1/4 of system clock frequency; 1/1, 1/8192 of OSC oscillation clock frequency; 1/1, 1/8192 of XI oscillation clock frequency Interrupt source ····· coincidence with compare register 5; 1/8192 prescaler overflow Watchdog timer Interrupt source ····· 1/2097152 of system clock frequency
Serial Interface			Serial 0 : synchronous type/simple UART (half-duplex) × 1 Clock source ····· 1/2, 1/4, 1/16 of system clock frequency; 1/2 of timer counter 3 frequency Serial 1 : synchronous type × 1 Clock source ····· 1/2, 1/8, 1/64 of system clock frequency; 1/2 of timer counter 3 frequency
I/O Pins	**I/O**	27	• Common use : 21 • Specified pull-up resistor avaiable • Input/output selectable (bit unit)
	High Voltage	26	• Output: 18 • I/O: 8 • P-ch open drain (breakdown voltage −30 V): FL drive: 26 • Specified pull-down resistor mask option: 8
A/D Inputs			8-bit × 5-ch. (with S/H)
FL			(8 to 16) segments × (18 to 10) digits
Special Ports			Buzzer output, remote control carrier signal output

Electrical Characteristics

Supply current

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
Operating supply current	IDD1	fosc = 8 MHz, VDD = 5 V			25	mA
	IDD2	fx = 32 kHz, VDD = 3 V			120	µA
Supply current at HALT	IDD3	fx = 32 kHz, VDD = 3 V			10	µA
Supply current at STOP	IDD4	VDD = 3 V			10	µA

Pin Assignment



LQFP064-P-1414 *Lead-free

Support Tool

In-circuit Emulator	PX-ICE101C / D + PX-PRB101C07-LQFP064-P-1414	
EPROM Built-in Type	Type	MN101CP07D
	ROM (× 8-bit)	64 K
	RAM (× 8-bit)	2 K
	Minimum instruction execution time	0.25 µs (at 2.7 V to 5.5 V, 8 MHz)
		125 µs (at 2.7 V to 5.5 V, 32 kHz)
	Package	LQFP064-P-1414 *Lead-free

Request for your special attention and precautions in using the technical information and semiconductors described in this material

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(7) When using products for which damp-proof packing is required, observe the conditions (including shelf life and amount of time let standing of unsealed items) agreed upon when specification sheets are individually exchanged.