❑ MN101C07A

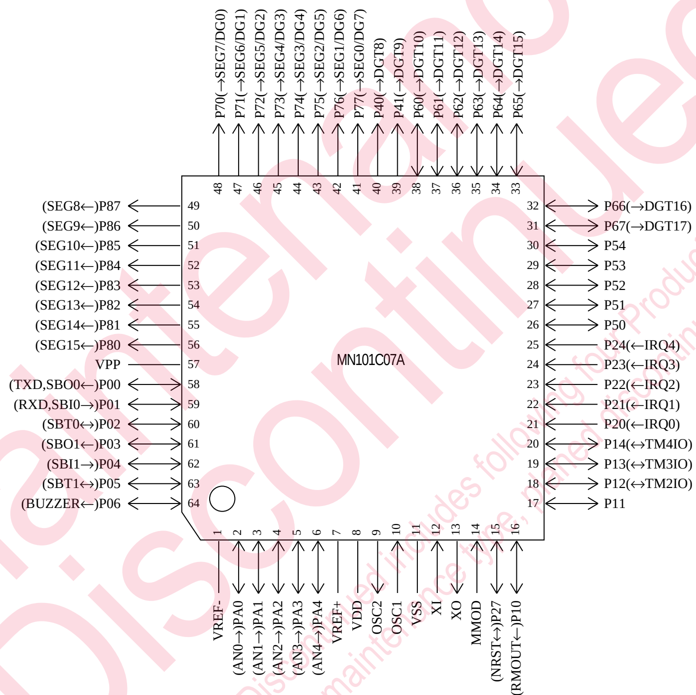
Type			MN101C07A
ROM (×8-bit)			32 K
RAM (×8-bit)			1 K
Package			LQFP064-P-1414 *Lead-free
Minimum Instruction Execution Time			0.25 µs (at 2.7 V to 5.5 V, 8 MHz) 125 µs (at 2.7 V to 5.5 V, 32 kHz)
Interrupts			• RESET • Watchdog • External 0 • External 1 • External 2 • External 3 • External 4 • Timer 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

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Even when the products are used within the guaranteed values, take into the consideration of incidence of break down and failure mode, possible to occur to semiconductor products. Measures on the systems such as redundant design, arresting the spread of fire or preventing glitch are recommended in order to prevent physical injury, fire, social damages, for example, by using the products.

(6) Comply with the instructions for use in order to prevent breakdown and characteristics change due to external factors (ESD, EOS, thermal stress and mechanical stress) at the time of handling, mounting or at customer's process. When using products for which damp-proof packing is required, satisfy the conditions, such as shelf life and the elapsed time since first opening the packages.

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