

□ MN101CA2 Series

Type	MN101CA27	MN101CFA2D
Internal ROM type	Mask ROM	FLASH
ROM (byte)	16K	64K
RAM (byte)	0.5K	2K
Package (Lead-free)	LQFP064-P-1414	LQFP064-P-1414 (Under development)
Minimum Instruction Execution Time	0.25 μ s (at 2.7 V to 3.6 V, 8 MHz) 0.50 μ s (at 1.8 V to 3.6 V, 4 MHz) 62.5 μ s (at 1.8 V to 3.6 V, 32 kHz)	

■ Interrupts

RESET, Watchdog, External 2, External 6, Timer 0, Timer 1, Timer 6, Time base

■ Timer Counter

8-bit timer \times 2

Timer 0Square-wave/8-bit PWM output. Simple pulse width measurement

Timer 1Square-wave output

Timer 0, 1 can be cascade-connected

Time base timer: One-minute count setting

Watchdog timer \times 1

Remote control carrier output

■ I/O Pins

I/O 16 : Common use. Specified pull-up resistor available. Input/output selectable (bit unit)

Input 9 : Common use. Specified pull-up resistor available

■ Display control function

LCD: 32 segments \times 4 commons (1/3 or 1/4 duty)

■ Special Ports

Buzzer output, Remote control carrier output, High-current drive port

■ Electrical Characteristics (Supply current)

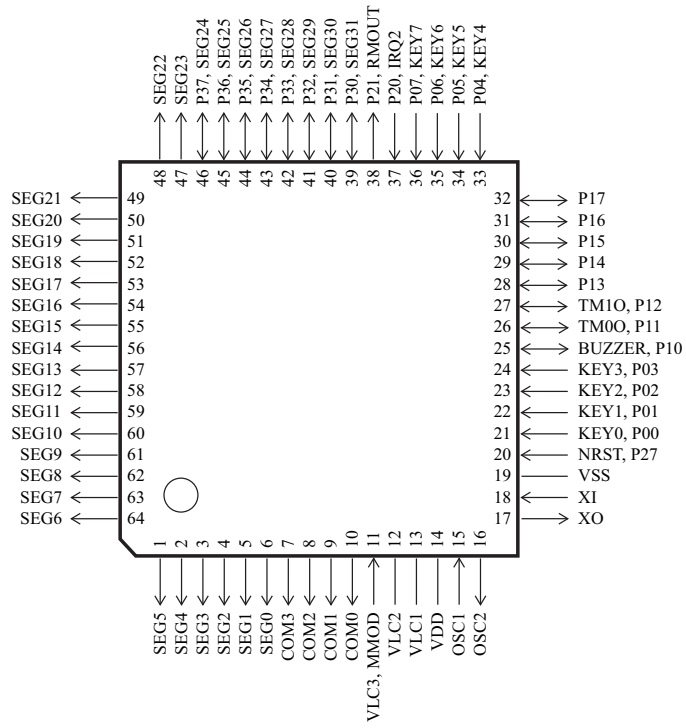
Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
Operating supply current	IDD1	$f_{osc} = 8 \text{ MHz}$, $V_{DD} = 3 \text{ V}$		1.0	1.8	mA
	IDD2	$f_x = 32 \text{ kHz}$, $V_{DD} = 3 \text{ V}$		4.8	17	μ A
Supply current at HALT	IDD3	$f_x = 32 \text{ kHz}$, $V_{DD} = 3 \text{ V}$, $T_a = 25 \text{ }^\circ\text{C}$		2.7	5	μ A
	IDD4	$f_x = 32 \text{ kHz}$, $V_{DD} = 3 \text{ V}$, $T_a = -40 \text{ }^\circ\text{C}$ to $+70 \text{ }^\circ\text{C}$			13	μ A
Supply current at STOP	IDD5	$V_{DD} = 3 \text{ V}$, $T_a = 25 \text{ }^\circ\text{C}$			2	μ A
		$V_{DD} = 3 \text{ V}$, $T_a = -40 \text{ }^\circ\text{C}$ to $+70 \text{ }^\circ\text{C}$			20	μ A

■ Development tools

In-circuit Emulator

PX-ICE101C/D + PX-PRB101CA2-LQFP064-P-1414

■ Pin Assignment
LQFP064-P-1414



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