

# **MN101CD0 Series**

Type	MN101CD0A	MN101CD0C	MN101CD0D	MN101CD0G	MN101CFD0G
Internal ROM type	Mask ROM				FLASH
ROM (byte)	32K	48K	64K	124K	128K
RAM (byte)	1K	2K			
Package (Lead-free)	SSOP032-P-0300B				SSOP032-P-0300B
Minimum Instruction Execution Time	0.10 $\mu$ s (at 2.7 V to 3.6 V, 10 MHz) 0.125 $\mu$ s (at 1.8 V to 3.6 V, 8 MHz) 100 $\mu$ s (at 1.8 V to 3.6 V, 20 kHz)				

## ■ Interrupts

RESET. Watchdog. External 0 to 4. External 6 (key interrupt dedicated). Timer 0 to 3. Timer 6. Timer 7 (2 systems). Time base. Serial 0 (2 systems). A/D conversion finish

## ■ Timer Counter

8-bit timer  $\times$  5

Timer 0 .....Square-wave/8-bit PWM output. Event count. Simple pulse width measurement. Added pulse (2-bit) type PWM output. Square-wave/PWM output to large current terminal P35 possible

Timer 1 .....Serial 0 baud rate timer

Timer 2 .....Square-wave output. Added pulse (2-bit) type PWM output. PWM output. Event count. Simple pulse width measurement. Serial 0 baud rate timer. Square-wave/PWM output to large current terminal P34 possible

Timer 3 .....Interval timer

Timer 6 .....8-bit freerun timer

Timer 0, 1 can be cascade-connected

Timer 2, 3 can be cascade-connected

16-bit timer  $\times$  1

Timer 7 .....Square-wave output. 16-bit PWM output (cycle/duty continuous variable). Event count. Pulse width measurement. Input capture. Square-wave/PWM output to large current terminal P33 possible

Time base timer: One-minute count setting

Watchdog timer  $\times$  1

Watchdog timer 2  $\times$  1

## ■ Serial interface

Synchronous type/UART (full-duplex)  $\times$  1: Serial 0

## ■ I/O Pins

I/O 23 : Common use. Specified pull-up resistor available. Input/output selectable (bit unit)

## ■ A/D converter

10-bit  $\times$  5 channels (with S/H)

## ■ Special Ports

High-current drive port

## ■ ROM Correction

Correcting address designation: Up to 3 addresses possible

## ■ Gain Amplifier

2 channels

## ■ Reference Power Supply Output

1.7 V: Output to REF17 terminal possible. Supply to A/D converter input, A/D converter reference voltage possible

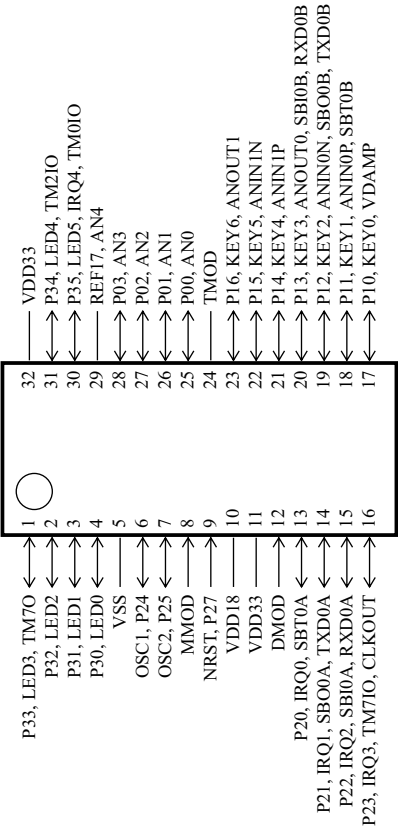
## ■ Reset

Automatic Reset

## ■ Internal oscillation

High speed: 8 MHz. Low speed: 20 kHz

Pin Assignment  
SSOP032-P-0300B



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