☐ MN101CB6 Series

Type	MN101CB6A	MN101CB6D	MN101CB6G	MN101CFB6G
Internal ROM type	Mask ROM			FLASH
ROM (byte)	32K	64K	124K	128K
RAM (byte)	1K	2K		
Package (Lead-free)	SSOP032-P-0300B			
Minimum Instruction Execution Time	0.10 μs (at 2.7 V to 3.6 V, 10 MHz) 0.125 μs (at 1.8 V to 3.6 V, 8 MHz) 100 μs (at 1.8 V to 3.6 V, 20 kHz)			

■ Interrupts

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

■ Timer Counter

8-bit timer × 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 × 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 × 1

Watchdog timer 2 × 1

■ Serial interface

Synchronous type/UART (full-duplex) × 1: Serial 0

■ I/O Pins

I/O   17 : Common use. Specified pull-up resistor available. Input/output selectable (bit unit)

■ A/D converter

10-bit × 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 and a reference power for Double Booster Circuit possible

■ Double Booster Circuit

Counle boosts REF17 terminal input voltage or Reference Power Supply Output
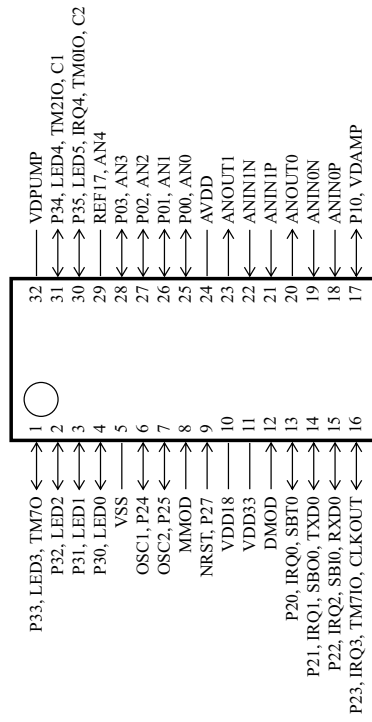
■ Reset

Automatic Reset

■ Internal oscillation

High speed: 8 MHz. Low speed: 20 kHz

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■ Pin Assignment
  SSOP032-P-0300B

Top row (pins 32–17):
- 32 — VDPUMP
- 31 — P34, LED4, TM2IO, C1
- 30 — P35, LED5, IRQ4, TM0IO, C2
- 29 — REF17, AN4
- 28 — P03, AN3
- 27 — P02, AN2
- 26 — P01, AN1
- 25 — P00, AN0
- 24 — AVDD
- 23 — ANOUT1
- 22 — ANIN1N
- 21 — ANIN1P
- 20 — ANOUT0
- 19 — ANIN0N
- 18 — ANIN0P
- 17 — P10, VDAMP

Bottom row (pins 1–16):
- 1 — P33, LED3, TM7O
- 2 — P32, LED2
- 3 — P31, LED1
- 4 — P30, LED0
- 5 — VSS
- 6 — OSC1, P24
- 7 — OSC2, P25
- 8 — MMOD
- 9 — NRST, P27
- 10 — VDD18
- 11 — VDD33
- 12 — DMOD
- 13 — P20, IRQ0, SBT0
- 14 — P21, IRQ1, SBO0, TXD0
- 15 — P22, IRQ2, SBI0, RXD0
- 16 — P23, IRQ3, TM7IO, CLKOUT

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