

□ MN101C42 Series

Type	MN101C425	MN101C427	MN101CP427
Internal ROM type	Mask ROM		EPROM
ROM (byte)	8K	16K	
RAM (byte)	0.25K	0.5K	
Package (Lead-free)	QFP044-P-1010F, SDIP042-P-0600C, TQFP048-P-0707B		
Minimum Instruction Execution Time	0.10 μ s (at 4.5 V to 5.5 V, 20 MHz) 0.238 μ s (at 2.7 V to 5.5 V, 8.39 MHz) 0.477 μ s (at 2.0 V to 5.5 V, 4.19 MHz)* 125 μ s (at 2.0 V to 5.5 V, 32.768 kHz)* *: The lower limit for operation guarantee for EPROM built-in type is 2.7 V.		

■ Interrupts

RESET. Watchdog. External 0 to 2. External 3 (only 48-pin package). Timer 2 to 5. Time base. Serial 0. A/D conversion finish

■ Timer Counter

8-bit timer \times 2

Timer 2Square-wave/8-bit PWM output. Event count. Synchronous output event

Timer 3Square-wave output. Event count. Remote control carrier output. Serial 0 baud rate timer

Timer 2, 3 can be cascade-connected

16-bit timer \times 1

Timer 4Square-wave/16-bit PWM output. Event count. Synchronous output event. Input capture

Time base timer: One-minute count setting. Independently operable 8-bit timer 5

Watchdog timer \times 1

■ Serial interface

Synchronous type/Simple UART (half-duplex) \times 1: Serial 0

■ I/O Pins

I/O 27: Common use: 16. Specified pull-up resistor available
 Input/output selectable (bit unit): 26 (for 44-pin). 25 (for 42-pin)

Input 12: Common use. Specified pull-up resistor available

■ A/D converter

10-bit \times 8 channels (with S/H)

■ 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	fosc = 20 MHz. VDD = 5 V		15	40	mA
	IDD2	fosc = 8.39 MHz. VDD = 5 V		6	18	mA
	IDD3	fx = 32.768 kHz. VDD = 3 V			100	μ A
Supply current at HALT	IDD4	fx = 32.768 kHz. VDD = 3 V. Ta = 25 °C			8	μ A
	IDD5	fx = 32.768 kHz. VDD = 3 V. Ta = -40 °C to +85 °C			18	μ A
Supply current at STOP	IDD6	VDD = 5 V. Ta = 25 °C			2	μ A
		VDD = 5 V. Ta = -40 °C to +85 °C			20	μ A

■ Development tools

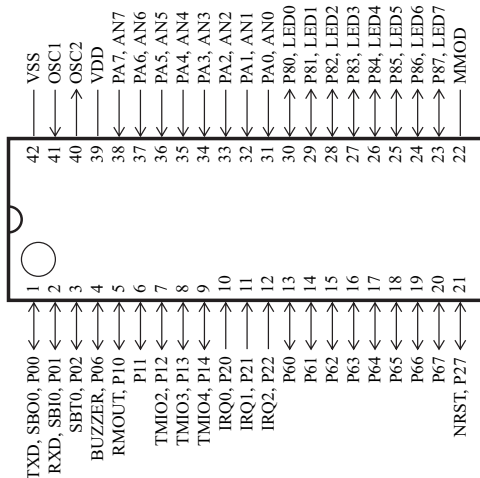
In-circuit Emulator

PX-ICE101C/D + PX-PRB101C42-QFP044-P-1010

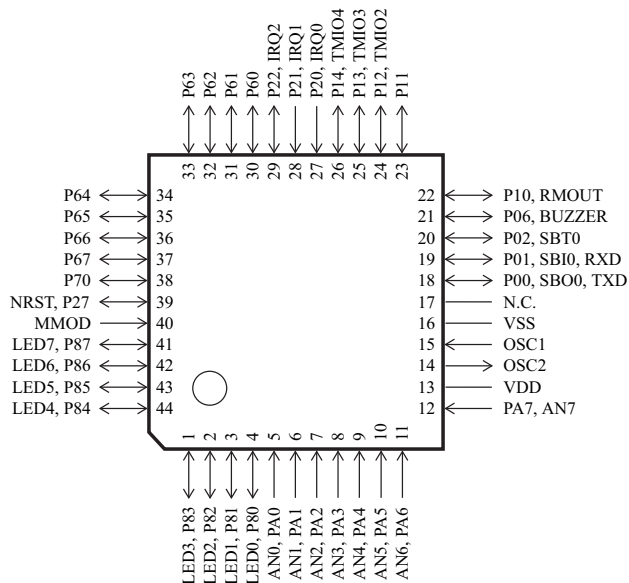
PX-ICE101C/D + PX-PRB101C42-TQFP048-P-0707B

PX-ICE101C/D + PX-PRB101C42-SDIP042-P-0600

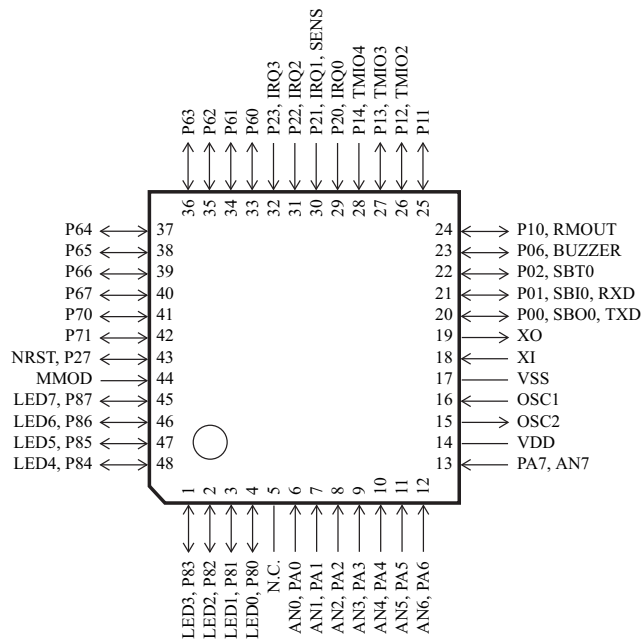
■ Pin Assignment
SDIP042-P-0600C



QFP044-P-1010F



TQFP048-P-0707B



MAD00002HEM

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