

MN101C077 / 07A

Type			MN101C077 (under planning) / 07A (under development)
ROM (x8-bit)			16K/32K
RAM (x8-bit)			1024/1024
Minimum Instruction Execution Time			0.238 μs (at 2.7 to 5.5V, 8.4MHz) 122 μs (at 2.7 to 5.5V, 32.768kHz)
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 x 1 (Square-wave/8-bit PWM Output, Event Count, Synchronous Output Event) Clock Source 1/1, 1/4 of System Clock, 1/1 of XI Oscillation Clock, External Clock Input Interrupt Source Coincidence with Compare Register 2 Timer Counter 3 : 8-bit x 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, 1/1 of OSC Oscillation Clock, External Clock Input Interrupt Source Coincidence with Compare Register 3 Timer Counter 2, 3 can be cascade-connected. Timer Counter 4 : 16-bit x 1 (Square-wave/16-bit PWM Output, Event Count, Synchronous Output Event, Input Capture) Clock Source 1/4, 1/16 of System Clock, 1/1 of OSC Oscillation Clock, External Clock Input Interrupt Source Coincidence with Compare Register 4 Time Base Timer (One-minute Count Setting, Five independently operable 8-bit Timer Counter) Clock Source 1/4 of System Clock, 1/1, 1/8192 of OSC Oscillation Clock, 1/1, 1/8192 of XI Oscillation Clock Interrupt Source Coincidence with Compare Register 5, 1/8192 Prescaler Overflow Watchdog Timer Interrupt Source 1/2097152 of System Clock
Serial Interface			Serial 0 : 8-bit x 1 (Synchronous Type/Simple UART[Half-duplex]) Clock Source 1/2, 1/4, 1/16 of System Clock 1/2 of Timer Counter 3 Serial 1 : 8-bit x 1 (Synchronous Type) Clock Source .. 1/2, 1/8, 1/64 of System Clock 1/2 of Timer Counter 3
I/O Pins	I/O	27	• Common use 21 • Specified Pull-up Resistor available • Input / Output Selectable (big unit)
	High Voltage	26	• Output 18 • Number of I/O 8 • Pch open drain (Breakdown Voltage -30V) FL drive 26 • Specified pull-down resistor mask option 8

A/D Inputs	8-bit x 5ch (with S/H)
FL	(8 to 16) segments x (18 to 10) digits
Special Ports	Buzzer Output, Remote Control Carrier Signal Output
Package	LQFP064-P-1414
Electrical Characteristics	

Supply Current

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
Operating Supply Current	IDD1	fosc = 8 4MHz, VDD = 5V			25	mA
	IDD2	fx = 32 768kHz, VDD = 3V			120	μA
Supply Current at HALT	IDD3	fx = 32 768kHz, VDD = 3V			10	μA
Supply Current at STOP	IDD4	VDD = 3V			10	μA

Support Tool

In-Circuit Emulator	PX-ICE101C / D + PX-PRB101C07-64LF14-C / D	
	PX-ICE101C / D + PX-PRB101C07-64SDIP-C / D	
EPROM built-in Type	Type	MN101CP07D (under development)
	ROM (x 8-bit)	64K
	RAM (x 8-bit)	2048
	Minimum Instruction Execution Time	0 238μs (at 2 7 to 5 5V, 8 4MHz)
		122μs (at 2 7 to 5 5V, 32 768kHz)
	Package	LQFP064-P-1414

Pin Assignment

