❑ MN187818 , MN1871618

Type			**MN187818 , MN1871618**
ROM (×8-Bit)			8 K / 16 K
RAM (×8-Bit)			1 536 / 768
Minimum Instruction Execution Time			With Main Clock operated **1/8 dividing 1.0 µs (at 3.3 V to 5.5 V, 8 MHz)** With Sub-Clock operated **122 µs (at 2.2 V to 5.5 V, 32.768 kHz)**
Interrupts			• RESET • External 0 • External 1 • Timer 0 • Timer 1 • Timer 2 stop • Timer 3 • Serial 0 • Serial 1 • Key Scan • Timer 2
Timer Counter			**Timer Counter 0 : 8-Bit × 1** (Timer Output, Event Count, Pulse Width Measurement) Clock Source: 1/1, 1/4, 1/16, 1/64 of External Clock Input, 1/1, 1/4, 1/16, 1/64 of System Clock, 1/1, 1/4, 1/16, 1/64 of XI Oscillation Clock Interrupt Source . Overflow of Timer Counter 0 **Timer Counter 1 : 16-Bit × 1** (Event Count, Pulse Width Measurement) Clock Source: External Clock Input, System Clock, OSC Oscillation Clock Interrupt Source: Pulse Width Measurement finished or Overflow of Timer Counter 1 **Timer Counter 2 : 16-Bit × 1** (Input Capture, Synchronous Serial Clock Generator, Pulse Width Measurement) Clock Source: 1/1 to 1/16 of External Clock Input, 1/1 to 1/16 of OSC Oscillation Clock, 1/1 to 1/16 of System Clock Interrupt Source: Overflow of Timer Counter 2, Pulse Width Measurement finish **Timer Counter 3 : 8-Bit × 1** (Clock function, Time Base) Clock Source: 1/4096 of System Clock, 1/128 of XI Oscillation Clock Interrupt Source: 1/1, 1/2, 1/4, 1/8 of Timer Counter 3 **Watchdog**
Serial Interface			**Serial 0 : 8-Bit × 1** (Synchronous Type) (Transmission/Reception of variable bit length, Transfer direction of MSB/LSB selectable,Clock Polarity selectable, Start Condition function) Clock Source: 1/1, 1/8, 1/16 of System Clock, 1/2 of Timer Counter 2, $\overline{SBT0}$ Pin Input, P20 Pin Input **Serial 1 : 8-Bit × 1** (Synchronous Type) (Transmissio/Reception of variable bit length, MSB/LSB selectable, Start Condition function Clock Source: 1/1, 1/8, 1/16 of System Clock, 1/2 of Timer Counter 2, $\overline{SBT1}$ Pin Input [Connectable] Serial 0 + Serial 1
I/O Pins	**I/O**	**54**	• Common use 11 • Specified pull-up Resistor available 17 (Software Programmable)
	Input	**2**	• Common use
	Output	**3**	—
Special Ports			Buzzer Output, Remote Control Transmission/Reception
Notes			Carrier Generator Circuit for Remote Controller built-in, Remote Controller Reception Amp built-in, Learning function of Remote Control
Package			QFP064-P-1414

Electrical Characteristics

Supply Current

Parameter	Symbol	Condition	Limit min	Limit typ	Limit max	Unit
Operating Supply Current	IDD1	fosc = 8 MHz			20	mA
	IDD2	fosc = 32 kHz, VDD = 3 V			200	µA
Supply Current at STOP	IDD3	VDD = 3 V			10	µA
	IDD4	VDD = 2 V			3	

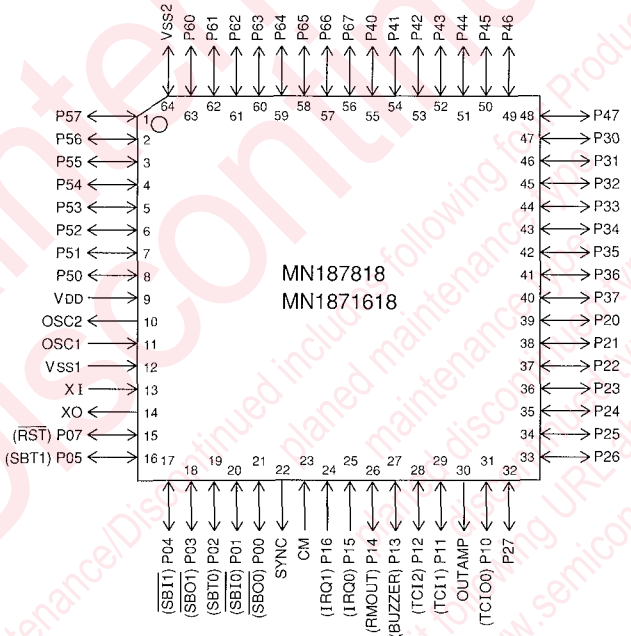
(Ta = –20 °C to +70 °C, VDD = 5.0 V, VSS = 0 V)

Support Tool

In-Circuit Emulator PX-ICE1870 / 80 + PX-PRB1873218

Piggyback Use **EP187818** (EP1873218) as piggy in QFP064-P-1818 package

Pin Assignment



QFP064-P-1414

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(6) Comply with the instructions for use in order to prevent breakdown and characteristics change due to external factors (ESD, EOS, thermal stress and mechanical stress) at the time of handling, mounting or at customer's process. When using products for which damp-proof packing is required, satisfy the conditions, such as shelf life and the elapsed time since first opening the packages.