

■ MN150414 / 0814 / 1614

Type		MN150414 / 0814 / 1614	
ROM (x8-bit)		4K / 8K / 8K (Table ROM 8K)	
RAM (x4-bit)		256 / 320 / 320	
Number of Instructions		103	
Minimum Instruction Execution Time		At 1/8 frequency dividing 2.0μs (at 1.8 to 3.6V, 4MHz) At 1/16 frequency dividing 4.0μs (at 1.8 to 3.6V, 4MHz) At 1/32 frequency dividing 8.0μs (at 1.8 to 3.6V, 4MHz)	
Interrupts		• RESET • External (Key Interrupt is available) • Timer • Serial	
Timer Counter		Timer Counter 1 : 8-bit x 1 Clock Source1/2, 1/8, 1/32, 1/128 of System Clock, Remote Control Carrier Output Interrupt SourceOverflow of Timer Counter 1 Timer Counter 2 : 8-bit x 1 Clock Source1/1, 1/16, 1/32, 1/64 of OSC Oscillation Clock1/1, 1/16, 1/32, 1/64 of TC12 Pin Input, Remote Control Carrier Output Interrupt SourceOverflow of Timer Counter 2 Watchdog Timer Connectable Timer Counter 1 + Timer Counter 2	
Serial Interface		Serial : 8-bit x 1 (Synchronous Type) Clock SourceSystem Clock, $\overline{\text{SBT}}$ Pin Input	
I/O Pins	I/O	12 (13)	• Common use : 1 • Specified pull-up Resistor available : 13 (Software Programmable) (WDT Output by $\overline{\text{RST}}$ Pin Output)
	Input	9	• Common use : 5 • Specified pull-up Resistor available : 9 (Software Programmable)
	Output	1	• Common use : 1
Special Ports		Remote Control Transmission	
Notes		Carrier Generator Circuit for Remote Controller built-in and Auto Reset Circuit built-in	
Package		SOP028-P-0375	

Electrical Characteristics

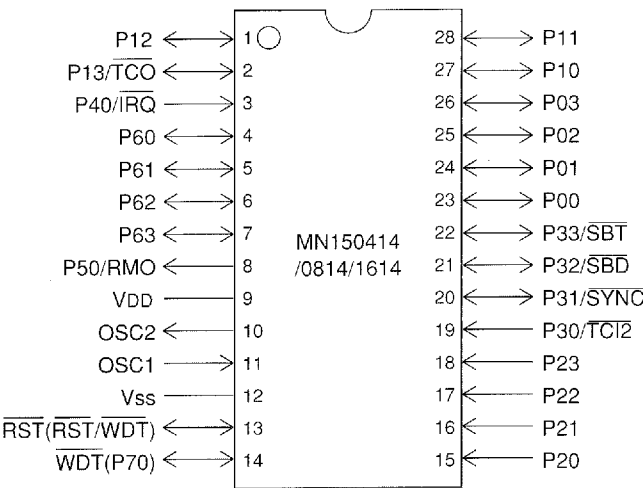
Supply Current

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
Operating Supply Current	IDD1	fosc=4MHz, 1/8 dividing		1.0	3.0	mA
Supply Current at STOP	IDD3	Auto Reset Circuit built-in		1.0	5	μA
Supply Current at HALT	IDD2	fosc=4MHz, 1/8 dividing		0.6	1.2	mA

(Ta = -20 to +85°C, VDD = 3V, VSS = 0V)

Support Tool

In-Circuit Emulator	PX-ICE1500 + PX-PRB150414 / 0814 / 1614
EPROM built-in Type	Use MN15P1614 [ES (Engineering Sample) available] in SOP028-P-0375 package.
Pin Assignment	



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