

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		1.818µs at 1/8 frequency dividing (at 1.8 to 3.6V, 4.4MHz) 3.636µs at 1/16 frequency dividing (at 1.8 to 3.6V, 4.4MHz) 7.273µs at 1/32 frequency dividing (at 1.8 to 3.6V, 4.4MHz)	
Interrupts		• RESET • External (Key Interrupt is available) • Timer • Serial	
Timer Counter		Timer Counter 1 : 8-bit x 1 Clock Source 1/2, 1/8, 1/32, 1/128 of System Clock, Remote Control Carrier Output Interrupt Source Overflow of Timer Counter 1 Timer Counter 2 : 8-bit x 1 Clock Source 1/1, 1/16, 1/32, 1/64 of OSC Oscillation Clock 1/1, 1/16, 1/32, 1/64 of TCI2 Pin Input, Remote Control Carrier Output Interrupt Source Overflow of Timer Counter 2 Watchdog Timer Connectable Timer Counter 1 + Timer Counter 2	
Serial Interface		Serial : 8-bit x 1 (Synchronous Type) Clock Source System 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

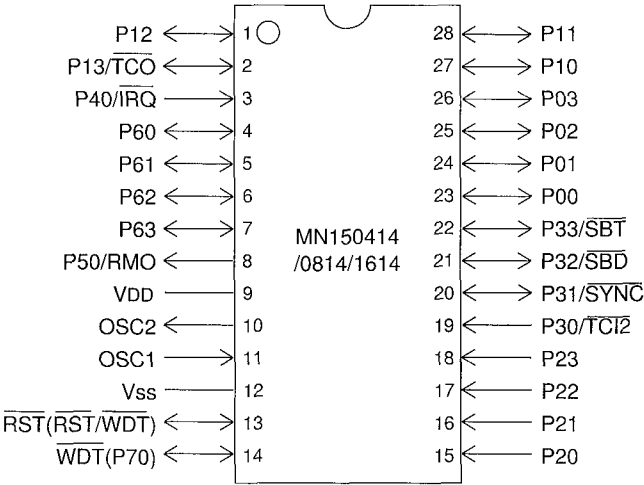
Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
Operating Supply Current	IDD1	fosc=4MHz, 1/8 dividing		1 0	3 0	mA
Supply Current at STOP	IDD3	Auto Reset Circuit built-in		1 0	5	µA
Supply Current at HALT	IDD2	fosc=4MHz, 1/8 dividing		0 6	1 2	mA

(Ta= -20 to +85°C, VDD=3V, VSS=0V)

Support Tool

In-Circuit Emulator		PX-ICE1500 + PX-PRB150414 / 0814 / 1614	
EPROM built-in Type	Type	MN15P1614 [ES (Engineering Sample) available]	
	ROM (x 8-bit)	8K (Table ROM 8K)	
	RAM (x 4-bit)	320	
	Minimum Instruction Execution Time	1 818μs (at 2 35 to 3 6V, 4 4MHz)	
	Package	SOP028-P-0375	

Pin Assignment



SOP028-P-0375