

# MN6750165 / 245 / 325 / 405

<b>Type</b>	<b>MN6750165 / 245 / 325 / 405</b>		
<b>ROM (x8-bit)</b>	16K / 24K / 32K / 40K		
<b>RAM (x8-bit)</b>	384 / 512 / 640 / 768		
<b>Minimum Instruction Execution Time</b>	<b>0.5<math>\mu</math>s (at 4.5 to 5.5V, 8MHz)</b> <b>128<math>\mu</math>s (at 3.0 to 5.5V, 8MHz, operates in fosc/256)</b> <b>(Operation with 32.768kHz by Mask Option)</b>		
<b>Interrupts</b>	<ul style="list-style-type: none"> <li>• RESET • Runaway • External • Input Capture 0 • Input Capture 1 • Timer 0 • Timer 1</li> <li>• Timer 2 • Timer 3 • Timer 4 • Serial Transmission/Reception</li> <li>• Serial Transmission/Reception / A/D</li> </ul>		
<b>Timer Counter</b>	<p><b>Timer Counter 0 : 16-bit x 1</b> (Synchronous Interrupt function)  Clock Source .....System Clock, 1/16, 1/256 of OSC Oscillation Clock  Interrupt Source .....Overflow of Timer Counter 0,  Coincidence of Output Compare Register 0 compare to Timer Counter 0</p> <p><b>Timer Counter 1 : 16-bit x 1</b> (Timer Output, Event Count, Synchronous Serial Clock Generator, Linear Time Counter [Counter for CTL Signal])  Clock Source .....System Clock, 1/16 of OSC Oscillation Clock, CTL Signal  Interrupt Source .....Overflow of Timer Counter 1</p> <p><b>Timer Counter 2 : 16-bit x 1</b> (Timer Output, Input Capture)  Clock Source .....System Clock, 1/16, 1/24 of OSC Oscillation Clock  Interrupt Source .....Overflow of Timer Counter 2, DCTL Signal Edge,  Shift Register 4-bit Counter Underflow,  Coincidence of Compare Register and Shift Register</p> <p><b>Timer Counter 3 : 16-bit x 1</b> (Timer Output, Serial Index Search)  Clock Source .....System Clock, 1/16 of OSC Oscillation Clock  Interrupt Source .....Overflow of Timer Counter 3</p> <p><b>Timer Counter 4 : 16-bit x 1</b> (Timer Output, Event Count, Time Base)  Clock Source .....1/4, 1/16, 1/256 of OSC Oscillation Clock, XI Oscillation Clock, External Clock  Input  Interrupt Source .....SPGIRQ, HOCRIRQ, Overflow of Timer Counter 4</p> <p><b>Timer Counter 5 : 16-bit x 1</b> (Timer Output, Watchdog)  Clock Source .....1/4 of OSC Oscillation Clock</p>		
<b>Serial Interface</b>	<p><b>Serial 0 : 8-bit x 1</b> (Synchronous Type) (Transfer direction of MSB/LSB selectable, Start Condition function)  Clock Source .....1/2 1/4, 1/8 of Timer Counter 1, 1/2 of Timer 4, <math>\overline{\text{SBT0}}</math> Pin Input</p> <p><b>Serial 1 : 8-bit x 1</b> (Synchronous Type) (Transfer direction of MSB/LSB selectable, Start Condition function, Simple Remote Control Reception)  Clock Source .....1/2, 1/4, 1/8 of Timer Counter 2, 1/2 of Timer 4, <math>\overline{\text{SBT1}}</math> Pin Input</p>		
<b>I/O Pins</b>	<b>I/O</b>	<b>39</b>	• Common use : 23 • Clock / HSW Synchronous Output Port selectable (Mask Option)
	<b>Input</b>	<b>12</b>	• Common use
	<b>Output</b>	<b>1</b>	• Common use
<b>A/D Inputs</b>	8-bit x 8ch (without S/H)		
<b>PWM</b>	11-bit x 2ch (at Repetition Cycle 256 $\mu$ s, 8MHz), 10-bit x 2ch (at Repetition Cycle 128 $\mu$ s, 8MHz), 14-bit x 1ch (at Repetition Cycle 8.192ms, 8MHz)		
<b>ICR</b>	16-bit x 5ch		

