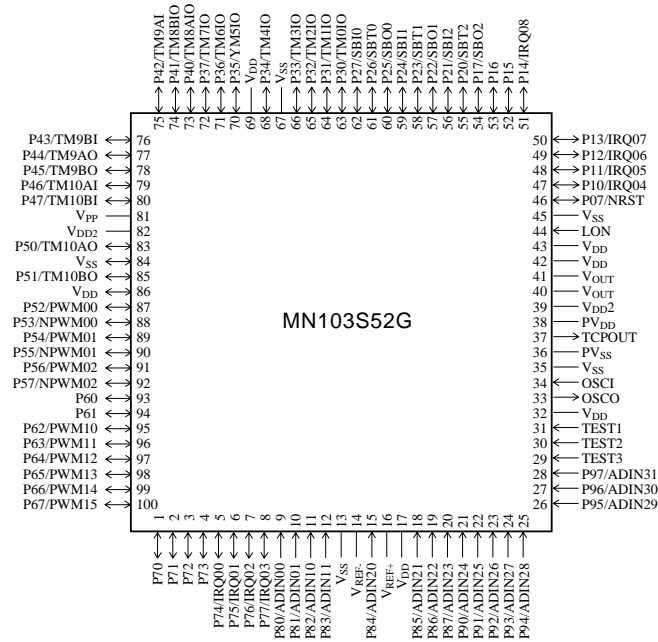


# □ MN103S52G

<b>Type</b>	MN103S52G		
<b>Internal ROM</b>	128 K-byte		
<b>Internal RAM</b>	4 K-byte SRAM		
<b>Package</b>	QFP100-P-1818B *Lead-free		
<b>Minimum Instruction Execution Time</b>	25 ns (at 4.3 V to 5.5 V, 10 MHz internal regulator used) 25 ns (at 3.0 V to 3.6 V, 10 MHz) *at internal 4 times oscillation used)		
<b>Interrupts</b>	<ul style="list-style-type: none"> <li>• 9 external interrupts</li> <li>• 42 internal interrupts (watch dog timer, timer, serial I/F, PWM, A/D, system error)</li> </ul>		
<b>Timer Counter</b>	<p>Eight 8-bit timers Interval timer, Event counter, Cascading</p> <p>Four 16-bit timers Interval timer, Event counter, PWM output, Double buffer Watch dog timer</p>		
<b>Serial Interface</b>	UART (full duplex) / synchronous interfaces selective: 3		
<b>I/O Pins</b>	<b>I/O</b>	56	exclusive: 8, selective: 48
	<b>Input</b>	16	selective: 16
<b>A/D Inputs</b>	10-bit, 2 inputs: 2, 12 inputs: 1 Minimum conversion time 1.5us		
<b>PWM</b>	3-phase PWM output 16-bit counter, triangular waveform or jigsaw waveform dead time setup, Double buffer		
<b>Electrical Characteristics</b>	T.B.D.		

Pin Assignment



QFP100-P-1818B \*Lead-free

Support Tool

In-circuit Emulator	PX-ICE-103S52	
On board Debugger	PX-ODB103S-DO	
Flash Memory Built-in Type	Type	MN103SF52G
	ROM	128 K-byte
	RAM	4 K-byte SRAM
	Minimum instruction execution time	25 ns (at 4.3 V to 5.5 V, 10 MHz internal regulator used) 25 ns (at 3.0 V to 3.6 V, 10 MHz)
	Package	QFP100-P-1818B *Lead-free

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