

MN103SA5K

Type	MN103SA5K	MN103SFA5K
Internal ROM type	Mask ROM	FLASH
ROM (byte)	256K	
RAM (byte)	8K	
Package (Lead-free)	QFP100-P-1818B	
Minimum Instruction Execution Time	16.7 ns (at 4.5 V to 5.5 V) * at internal 4 times oscillation used	16.7 ns (at 4.5 V to 5.5 V)

■ Interrupts

9 external interrupts

45 internal interrupts : watch dog timer, timer, serial I/F, PWM, A/D, system error

■ Timer Counter

8-bit timer × 12

Interval timer, Event counter, Cascading connectable

16-bit timer × 6

Interval timer, Event counter, PWM output, Double buffer

Watch dog timer

■ Serial interface

UART (full duplex) / synchronous interfaces selective × 3

■ I/O Pins

I/O	81	Common use × 81
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■ A/D converter

10-bit × 3 unit, 20 inputs

Minimum conversion time 1.0 μs

■ PWM

3-phase PWM outputs × 2

16-bit counter, triangular wave, saw-tooth wave, dead time setup, double buffer

■ Development tools

In-circuit Emulator

PX-ICE-103SA5

■ Pin Assignment

