

# □ MN103SB5 Series

Type	MN103SFB5K
Internal ROM type	FLASH
ROM (byte)	256K
RAM (byte)	8K
Package (Lead-free)	LQFP064-P-1414
Minimum Instruction Execution Time	20.9 ns (at 3.0 V to 3.6 V, 48 MHz, When USB used) 16.7 ns (at 2.7 V to 3.6 V, 60 MHz, When USB unused)

## ■ Interrupts

RESET. IRQ × 4. Timer × 10. I<sup>2</sup>C × 1. SIF × 4. DMA × 12. WDT. System error. USB × 2

## ■ Timer Counter

8-bit timer × 4

Reload-down count. Cascade connection possible (usable as a 16-bit to 32-bit timer)

16-bit timer × 2

Up-down count. Input capture. PWM output. Compare/capture register 2 channels

Watchdog timer × 1

## ■ Serial interface

Multi-master I<sup>2</sup>C × 1

UART/Synchronous interface selective × 2

## ■ DMA controller

Number of channels: 4 channels

Unit of transfer: 8/16/32 bits

Maximum transfer cycles: 65535

Starting factor: External interrupt. Timer. Serial transmission/reception. I<sup>2</sup>C transmission/reception. Software. USB transmission/reception end

Transfer method: 2-bus cycle transfer

Addressing modes: Fixed. Increment. Decrement

Transfer mode: Word transfer. Burst transfer. Intermittent transfer

## ■ USB HOST Controller

Conforms to USB 2.0: Full-speed (12 Mbps) supported

OHCI R1.0a standard conforming. External power supply control function. USB transceiver built-in

## ■ I/O Pins

I/O            8 : (5 V I/O) Common use

                 33 : (3 V I/O) Common use

Input          1 : (3 V I/O) Common use

## ■ ROM Correction

4 channels

## ■ Development tools

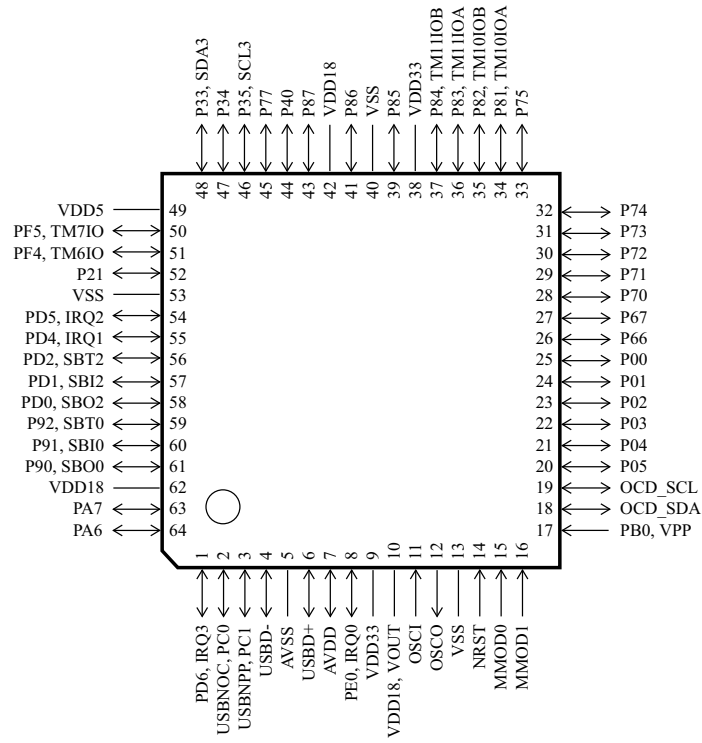
In-circuit Emulator

PX-ICE-103SB5

On-board Development Tools

PX-ODB103S-D0

■ Pin Assignment  
LQFP064-P-1414



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