

# □ MN103SE5 Series

Type	MN103SFE5P
Internal ROM type	FLASH
ROM (byte)	624K
RAM (byte)	32K
Package (Lead-free)	LQFP048-P2-0707A
Minimum Instruction Execution Time	20.9 ns (at 3.0 V to 3.6 V, 48 MHz)

## ■ Interrupts

RESET. IRQ × 3. Timer × 12. I<sup>2</sup>C × 7. SIF × 8. DMA × 12. Stream DMA × 1. WDT. System error. USB × 2. I2S × 1

## ■ Timer Counter

8-bit timer × 6

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 × 2

UART/Synchronous interface selective × 4

## ■ Audio Output Interface

I2S interface × 1

## ■ 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. I2S empty

Transfer method: 2-bus cycle transfer

Addressing modes: Fixed. Increment. Decrement

Transfer mode: Word transfer. Burst transfer. Intermittent transfer

## ■ Stream DMA controller

Number of channels: 1 channels

Unit of transfer: 8/32 bits

Maximum transfer cycles: 65535

Transfer source: Interface RAM

Transfer destination: Serial I/F. Audio output interface

## ■ USB HOST Controller

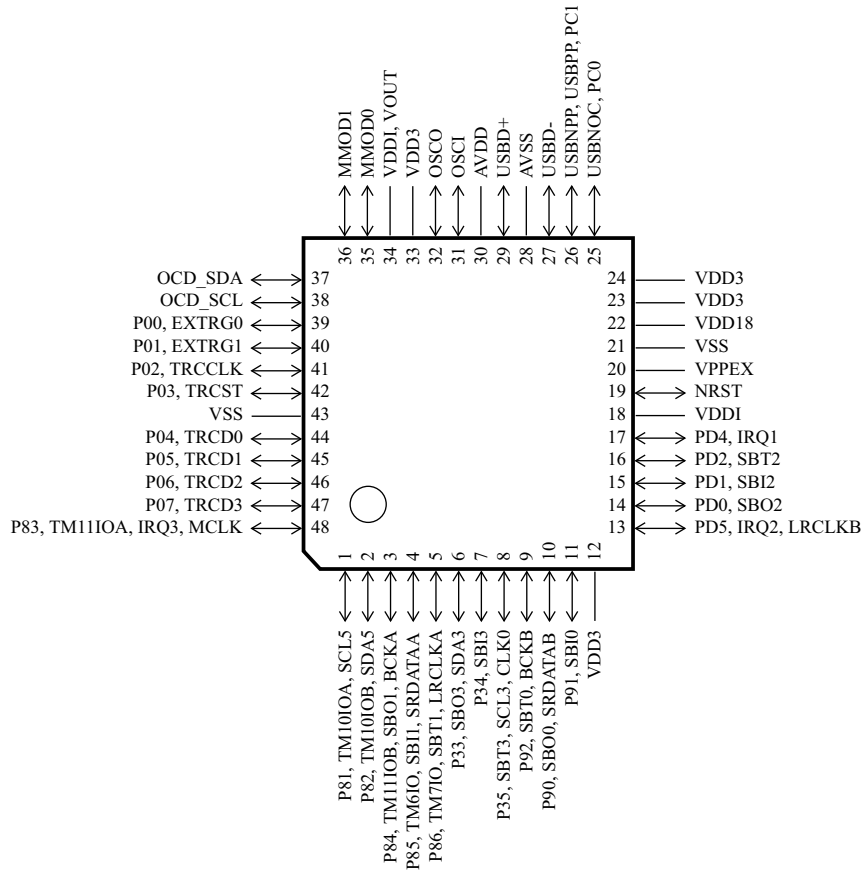
Conforms to USB 2.0: Full-speed (12 Mbps) supported

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

## ■ I/O Pins

I/O 27 : (3 V I/O) Common use

■ Pin Assignment  
LQFP048-P2-0707A



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