## $\square$ MN101C95 Series

| Type | MN101CF95G |
| :---: | :---: |
| Internal ROM type | FLASH |
| ROM (byte) | 128K |
| RAM (byte) | 6 K |
| Package (Lead-free) | TQFP080-P-1212D |
| Minimum Instruction Execution Time | [Standard] $0.2 \mu \mathrm{~s}$ (at 2.7 V to $3.6 \mathrm{~V}, 10 \mathrm{MHz}$ ) $0.5 \mu \mathrm{~s}$ (at 2.7 V to $3.6 \mathrm{~V}, 4 \mathrm{MHz}$ ) $62.5 \mu \mathrm{~s}$ (at 2.7 V to $3.6 \mathrm{~V}, 32 \mathrm{kHz}$ ) [Double speed] $0.1 \mu \mathrm{~s}$ (at 2.7 V to $3.6 \mathrm{~V}, 10 \mathrm{MHz}$ ) |

## Interrupts

RESET. Watchdog. External 0 to 5 . Timer 0 to 8 . Time base. Serial 0 reception. Serial 0 transmission. Serial 1 reception. Serial 1 transmission. Serial 2. Serial 3. Serial 4 reception. Serial 4 transmission. Automatic transfer finish. A/D conversion finish. Key interrupts (12 lines)

## Timer Counter

8 -bit timer $\times 7$
Timer 0 .................Square-wave/8-bit PWM output. Event count. Pulse width measurement. Serial transfer clock output. Real time output control. Remote control carrier output
Timer 1 ..................Square-wave output. Event count. Synchronous output event. Serial transfer clock output
Timer 2 ..................Square-wave output. PWM output. Event count. Pulse width measurement. Timer synchronous output. Serial transfer clock output
Timer 3 ..................Square-wave output. Event count. Serial transfer clock output
Timer 4 ..................Square-wave/8-bit PWM output. Event count. Pulse width measurement. Real time output control. Serial transfer clock output
Timer 5 ..................Square-wave/8-bit PWM output. Event count. Pulse width measurement. Serial transfer clock output
Timer 6 $\qquad$ .8-bit freerun timer
Timer 0,1 can be cascade-connected
Timer $0,1,2$ can be cascade-connected
Timer 2, 3 can be cascade-connected
Timer $0,1,2,3$ can be cascade-connected
Timer 4,5 can be cascade-connected
16 -bit timer $\times 2$
Timer 7 . $\qquad$ Square-wave/16-bit PWM output (cycle/duty continuous variable). Event count. Synchronous output event. Pulse width measurement. Input capture. Real time output control
Timer 8 ..................Square-wave output. PWM output (duty continuous variable). Event count. Pulse width measurement. Input capture
Time base timer: One-minute count setting
Watchdog timer $\times 1$

## Serial interface

Synchronous type/UART (full-duplex) $\times 3$ : Serial $0,1,4$
Synchronous type/Multi-master $\mathrm{I}^{2} \mathrm{C} \times 1$ : Serial 2
Synchronous type/Single-master I2C $\times 1$ : Serial 3

## DMA controller

Maximum transfer cycles: 255
Starting factor: Various types of interrupt. Software
Transfer mode: 1-byte transfer. Word transfer. Burst transfer
■ I/O Pins
I/O
67: Common use. Specified pull-up resistor available. Input/output selectable (bit unit)

## ■ A/D converter

10 -bit $\times 11$ channels (with $\mathrm{S} / \mathrm{H}$ )

- Extended Calculation

16-bit $\times 16$-bit multiplication. 32-bit / 16-bit division

## Special Ports

Buzzer output. Remote control carrier output. High-current drive port

## Development tools

In-circuit Emulator
PX-ICE101C/D + PX-PRB101C95-TQFP080-P-1212D
Pin Assignment
TQFP080-P-1212D


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