

## **Notification about the transfer of the semiconductor business**

The semiconductor business of Panasonic Corporation was transferred on September 1, 2020 to Nuvoton Technology Corporation (hereinafter referred to as "Nuvoton"). Accordingly, Panasonic Semiconductor Solutions Co., Ltd. became under the umbrella of the Nuvoton Group, with the new name of Nuvoton Technology Corporation Japan (hereinafter referred to as "NTCJ").

In accordance with this transfer, semiconductor products will be handled as NTCJ-made products after September 1, 2020. However, such products will be continuously sold through Panasonic Corporation.

Publisher of this Document is NTCJ.

If you would find description "Panasonic" or "Panasonic semiconductor solutions", please replace it with NTCJ.

※ Except below description page

"Request for your special attention and precautions in using the technical information and semiconductors described in this book"

**Nuvoton Technology Corporation Japan**

# □ MN101C95 Series

Type	MN101CF95G
Internal ROM type	FLASH
ROM (byte)	128K
RAM (byte)	6K
Package (Lead-free)	TQFP080-P-1212D
Minimum Instruction Execution Time	[Standard] 0.2 μs (at 2.7 V to 3.6 V, 10 MHz) 0.5 μs (at 2.7 V to 3.6 V, 4 MHz) 62.5 μs (at 2.7 V to 3.6 V, 32 kHz) [Double speed] 0.1 μs (at 2.7 V to 3.6 V, 10 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 × 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 .....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 × 2

Timer 7 .....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 × 1

## ■ Serial interface

Synchronous type/UART (full-duplex) × 3: Serial 0, 1, 4

Synchronous type/Multi-master I<sup>2</sup>C × 1: Serial 2

Synchronous type/Single-master I<sup>2</sup>C × 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 × 11 channels (with S/H)

## ■ Extended Calculation

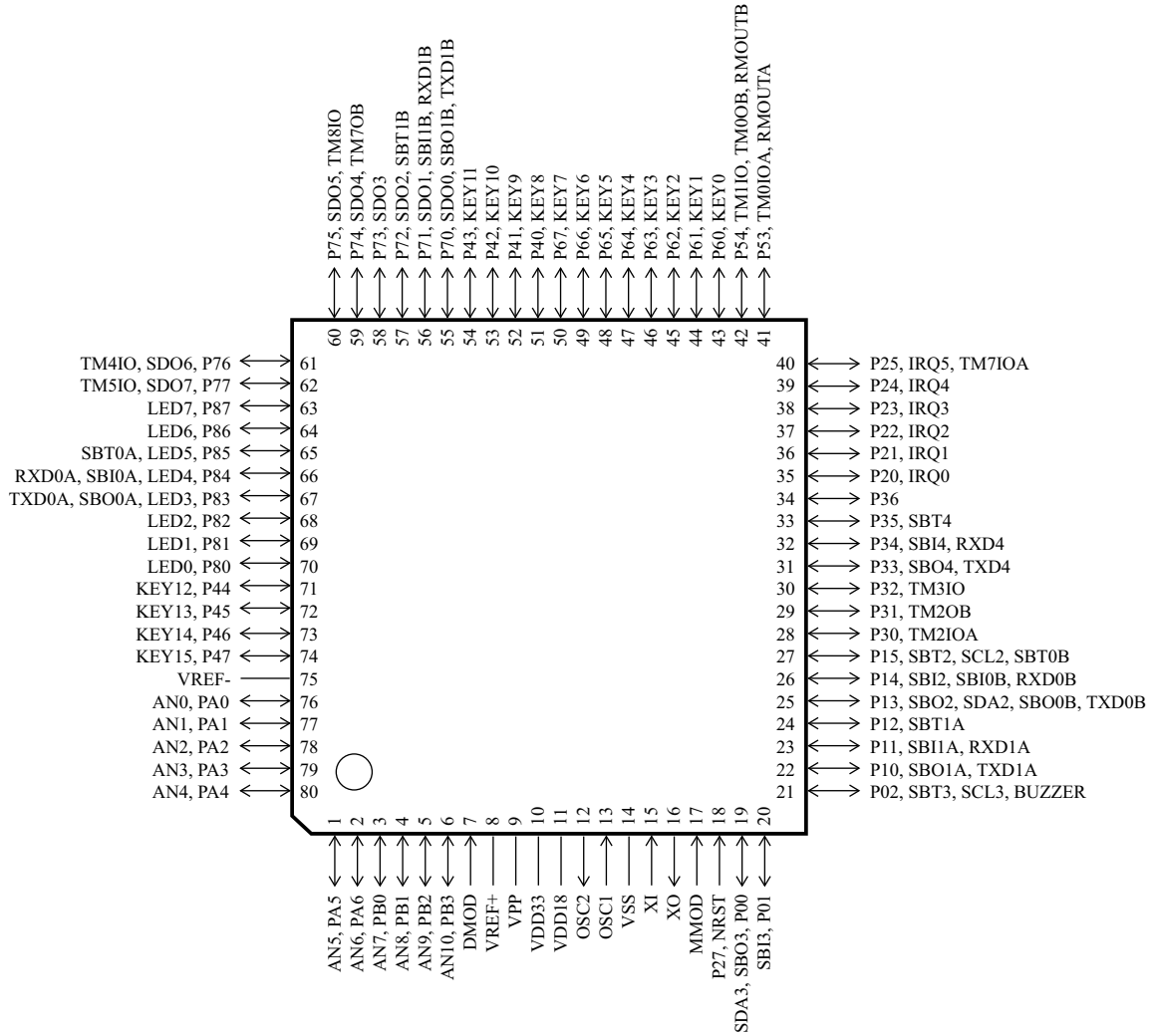
16-bit × 16-bit multiplication. 32-bit / 16-bit division

■ Special Ports

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

■ Pin Assignment

TQFP080-P-1212D



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