

MN102H95 Series

Type	MN102H950F
Internal ROM type	External
ROM (byte)	—
RAM (byte)	10K
Package (Lead-free)	LQFP100-P-1414
Minimum Instruction Execution Time	[With main clock operated] 58 ns (at 3.0 V to 3.6 V, 34 MHz)

■ Interrupts

/RST pin, Watchdog, /NMI pin, Timer counter 0 to 9 underflow, Timer counter 10 to 14 underflow, Timer counter 10 to 14 compare capture A, Timer counter 10 to 14 compare capture B, ATC ch.0 to ch.3 transfer finish, External 0 to 4, Serial ch.0 to ch.4 transmission, Serial ch.0 to ch.4 reception, A/D conversion finish

■ Timer Counter

8-bit timer × 10

16-bit timer × 5

Timer 10 to 14timer output, event count, input capture, PWM output, 2-phase encoder input

■ Serial interface

Serial 0, 1 : 8-bit × 1 (transfer direction of MSB / LSB selectable, transmission / reception of 7, 8-bit length)

Serial 2, 3 : 8-bit × 1 (transfer direction of MSB / LSB selectable, transmission / reception of 7, 8-bit length)

UART × 4 (common use with serial 0 to 3)

I²C × 2 (common use with serial 1,3; single master)

■ I/O Pins

I/O 63 : Common use : 43 (use of full address, address data separate 16-bit mode)
 Common use : 57 (use of address 16-bit, address data separate 8-bit mode)
 Common use : 56 (use of full address, address data multiplex 16-bit mode)
 Common use : 63 (use of address 16-bit, address data multiplex 8-bit mode)

■ A/D converter

10-bit × 12-ch. (with S/H)

■ D/A converter

8-bit × 4-ch.

■ PWM

16-bit × 5-ch. (timer counter 10 to 14)

■ ICR

16-bit × 5-ch. (timer counter 10 to 14)

■ OCR

16-bit × 5-ch. (timer counter 10 to 14)

■ Notes

Address / data separate bus interface; 8 / 16-bit bus width selectable; SRAM interface

Address / data multiplex bus interface support

■ Electrical Characteristics (Supply current)

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
Operating supply current	IDDopr	VI = VDD or VSS, output open f = 34 MHz, VDD = 3.3 V			60	mA
Supply current at STOP	IDDS	Pin with pull-up resistor is open all other input pins and Hi-Z state input/output pins are simultaneously applied VDD or VSS level			70	μA
Supply current at HALT	IDDH	f = 34 MHz, VDD = 3.3 V, output open			30	mA

(Ta = -40°C to +85°C, VDD = AVDD = 3.3 V, VSS = AVSS = 0 V)

■ Development tools

In-circuit Emulator

PX-ICE102H930F-LQFP100-P-1414

■ Pin Assignment
LQFP100-P-1414

