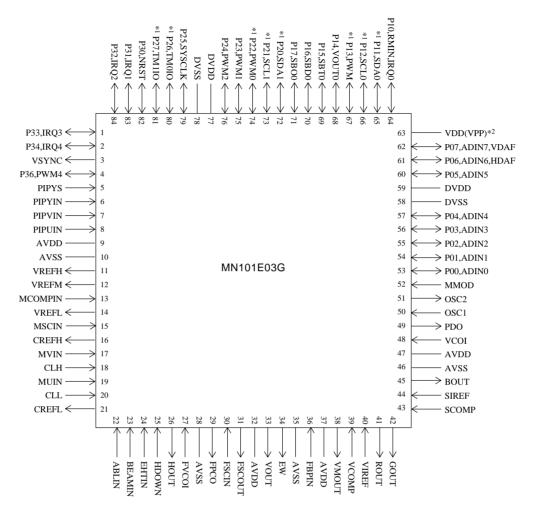
## ■ MN101E03G

Туре	MN101E03G [ES (Engineering sample available)]		
ROM (×16-bit)	128 K		
RAM (×16-bit)	4 K		
Package	QFP084-P-1818E *Lead-free		
Minimum Instruction Execution Time	100 ns (at 3.135 V to 3.465 V, normal-mode)		
Interrupts	External (7 lines) Internal (13 lines): Timer $\times$ 4, A/D $\times$ 1, RESET $\times$ 1, OSD $\times$ 1, Serial $\times$ 2, $I^2C \times 1$ , Caption $\times$ 1, Remote control $\times$ 1, HSYNC $\times$ 1, VSYNC $\times$ 1		
Timer Counter	8-bit timer × 4  Watchdog timer: Time-out period is selectable.		
Serial Interface	I <sup>2</sup> C × 1: for multimaster mode, bus line (output) has 2 systems Sync serial / UART × 1		
Caption/Teletext Decoder	• Built-in sync separator × 1		
I/O Pins I/O	35 • Common use		
A/D Inputs	10-bit × 8-ch. (with S/H)		
PWM	8-bit $\times$ 6-ch.		
Special Ports	Remote control reception		
CRTC	1-layer display (graphics, characters, splits)		
Notes	Remote control input discriminant circuit built-in, build-in NTSC video signal processing circuit, built-in 3-line comb filter		

## Pin Assignment



QFP084-P-1818E \*Lead-free

- \*1: 5V dielectric Nch open drain output pin
- \*2: Mask ROM=VDD, Flash Memory built-in type=VPP

## **Support Tool**

In-circuit Emulator	PX-PAC101E02-4W9J	
Flash Memory Built-in Type	Туре	MN101EF03G [ES (Engineering Sample) available]
	ROM (× 8-bit)	128 K
	RAM (× 8-bit)	4 K
	Minimum instruction execution time	100 ns
	Package	QFP084-P-1818E *Lead-free

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