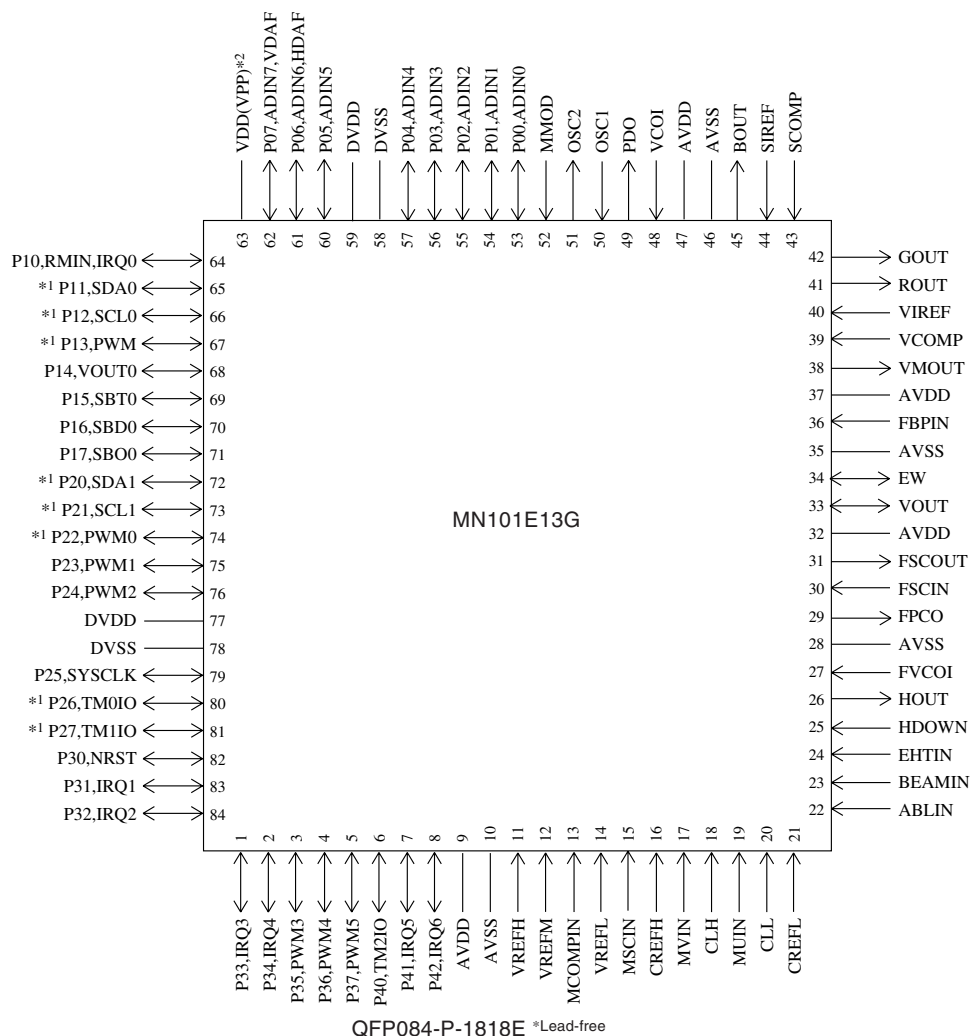


# MN101E13G

<b>Type</b>			MN101E13G
<b>ROM (×16-bit)</b>			128 K
<b>RAM (×16-bit)</b>			4 K
<b>Package</b>			QFP084-P-1818E *Lead-free
<b>Minimum Instruction Execution Time</b>			100 ns (at 3.135 V to 3.465 V, normal-mode)
<b>Interrupts</b>			External (7 lines) Internal (13 lines) : Timer × 4, A/D × 1, RESET × 1, OSD × 1, Serial × 2, I <sup>2</sup> C × 1, Caption × 1, Remote control × 1, HSYNC× 1, VSYNC× 1
<b>Timer Counter</b>			8-bit timer × 4 Watchdog timer: Time-out period is selectable.
<b>Serial Interface</b>			I <sup>2</sup> C × 1: for multimaster mode, bus line (output) has 2 systems Sync serial / UART × 1
<b>Caption/Teletext Decoder</b>			• Built-in sync separator × 1
<b>I/O Pins</b>	<b>I/O</b>	35	• Common use
<b>A/D Inputs</b>			10-bit × 8-ch. (with S/H)
<b>PWM</b>			8-bit × 6-ch. , 14-bit × 1-ch.
<b>Special Ports</b>			Remote control reception
<b>CRTC</b>			1-layer display (graphics, characters, splits)
<b>Notes</b>			Remote control input discriminant circuit built-in, build-in NTSC video signal processing circuit, built-in 3-line comb filter

## Pin Assignment



\*1: 5V dielectric Nch open drain output pin

\*2: Mask ROM=VDD, Flash Memory built-in type=VPP

## Support Tool

<b>In-circuit Emulator</b>	PX-PAC101E02-4W9J	
<b>Flash Memory Built-in Type</b>	Type	MN101EF13G [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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