

# □ MN102L35G

Type	MN102L35G						
ROM (×16-bit)	144 K						
RAM (×16-bit)	5 K						
Package (Conventional Package)	SDIP064-P-0750C *Lead-free (SDIP064-P-0750)						
Minimum Instruction Execution Time	167 ns (at 4.75 V to 5.25 V, 12 MHz)						
Interrupts	External (4 lines) Internal (23 lines) : Timer × 8, A/D × 1, Undefined command × 1, RESET × 1, OSD × 2, Serial × 2, I <sup>2</sup> C × 1, Caption × 2, Remote control × 1, Address coincidence × 4						
Timer Counter	8-bit timer × 2 16-bit timer × 2 Watchdog timer: 17-bit × 1						
Serial Interface	I <sup>2</sup> C × 1: for multimaster mode, bus line (output) has 2 systems Sync serial / I <sup>2</sup> C (master) / UART × 1						
Caption	• Built-in sync separator × 2						
I/O Pins	<table border="1"> <tr> <td>I/O</td> <td>49</td> <td>• Common use</td> </tr> <tr> <td>Input</td> <td>1</td> <td>• Common use</td> </tr> </table>	I/O	49	• Common use	Input	1	• Common use
I/O	49	• Common use					
Input	1	• Common use					
A/D Inputs	8-bit × 8-ch. (with S/H)						
D/A Outputs	4-bit × 4-ch. (analog R, G, B, YM output)						
PWM	8-bit × 6-ch.						
Special Ports	Remote control reception						
CRTC	3-layer display (graphics, characters, splits)						
Notes	Remote control input discriminant circuit built-in						

## Electrical Characteristics

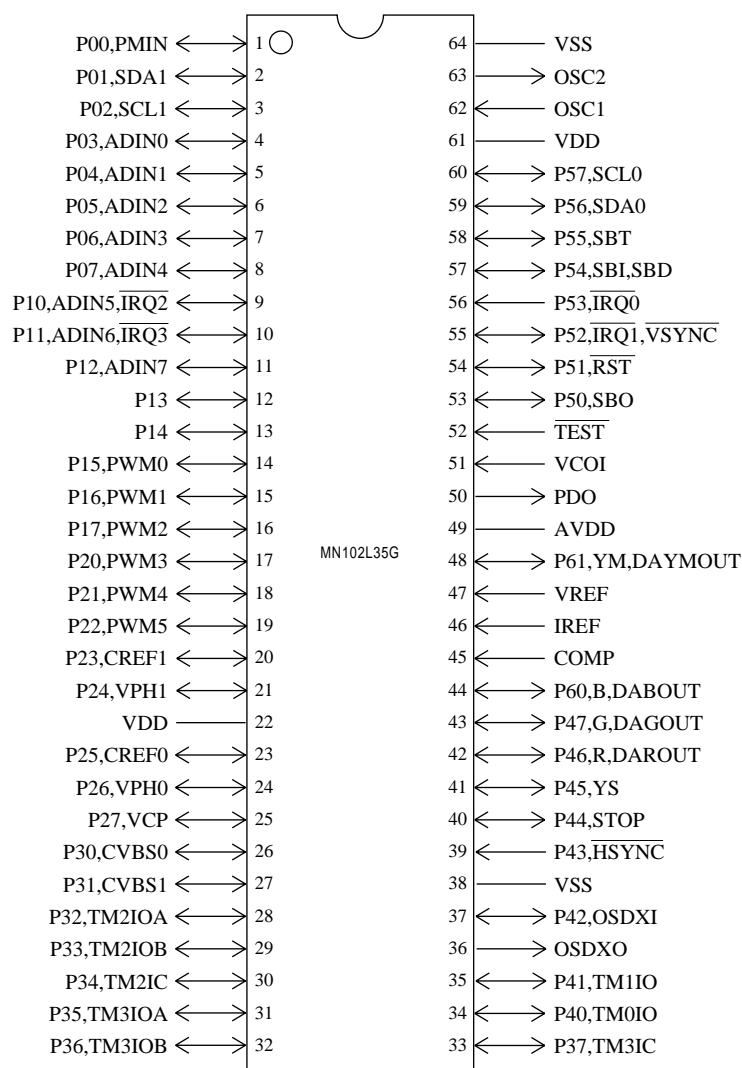
### D/A characteristics

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
D/A full-scale output current	IFS	RL = 200 Ω, VREF = 1.2 V, RIREF = 1.2 kΩ	4.5	5.0	5.5	mA
D/A output voltage setting range	VO	RL = 200 Ω, VREF = 1.2 V, RIREF = 1.2 kΩ			1.1	V
D/A non-linear error	NLE	RL = 200 Ω, VREF = 1.2 V, RIREF = 1.2 kΩ			± 0.5	LSB
D/A differential non-linear error	DNLE	RL = 200 Ω, VREF = 1.2 V, RIREF = 1.2 kΩ			± 0.5	LSB
D/A channel interval error	IFS	VREF = 1.2 V, RIREF = 1.2 kΩ, Error from 4-channel average IFS			± 5	%

(Ta = 25°C, VDD = AVDD = 5.0 V, VSS = 0 V, fosc = 4 MHz)

**Pin Assignment**

( ) : Conventional Package



SDIP064-P-0750C \*Lead-free

(SDIP064-P-0750)

**Support Tool**

<b>In-circuit Emulator</b>	PX-ICE102L00 + PX-PRB102L35-SDIP064-P-0750	
<b>EPROM Built-in Type</b>	Type	MN102LP35Z
	ROM (× 16-bit)	144 K
	RAM (× 16-bit)	5 K
	Minimum instruction execution time	167 ns (at 4.75 V to 5.25 V, 12 MHz)
	Package	SDIP064-P-0750C *Lead-free
	(Conventional Package)	(SDIP064-P-0750)

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