

# MN102L35G

<b>Type</b>	<b>MN102L35G</b>		
<b>ROM (×16-Bit)</b>	144 K		
<b>RAM (×16-Bit)</b>	5 K		
<b>Minimum Instruction Execution Time</b>	167 ns (at 4.75 V to 5.25 V, 12 MHz)		
<b>Interrupts</b>	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		
<b>Timer Counter</b>	8-Bit timer × 2  16-Bit timer × 2  Watchdog timer: 17-Bit × 1		
<b>Serial Interface</b>	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		
<b>Caption</b>	• Built-in sync separator × 2		
<b>I/O Pins</b>	<b>I/O</b>	<b>49</b>	• Common use 49
	<b>Input</b>	<b>1</b>	• Common use 1
<b>A/D Inputs</b>	8-Bit × 8ch (with S/H)		
<b>D/A Inputs</b>	4-Bit × 4ch (Analog R, G, B, YM Output)		
<b>PWM</b>	8-Bit × 6ch		
<b>Special Ports</b>	Remote Control Reception		
<b>CRTC</b>	3-Layer display (graphics, characters, splits)		
<b>Notes</b>	Remote control input discriminant circuit built-in		
<b>Package</b>	SDIP064-P-0750		

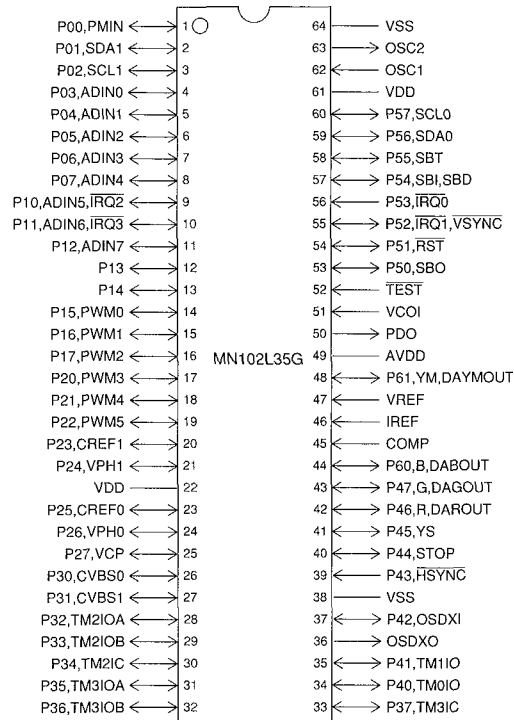
## Electrical Characteristics

### 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	0		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**



SDIP064-P-0750

**Support Tool**

<b>In-Circuit Emulator</b>	PX-ICE102L00 + PX-PRB102L35	
<b>EPROM built-in Type</b>	<b>Type</b>	MN102LP35G
	<b>ROM (× 16-Bit)</b>	144 K
	<b>RAM (× 16-Bit)</b>	5 K
	<b>Minimum Instruction Execution Time</b>	167 μs (at 4.75 V to 5.25 V, 12 MHz)
	<b>Package</b>	SDIP064-P-0750