

MN102L35G

Type	MN102L35G (under development)		
ROM (x16-bit)	144K		
RAM (x16-bit)	5K		
Minimum Instruction Execution Time	167ns (at 4.75 to 5.25V, 12MHz)		
Interrupts	External (4 lines) Internal (23 lines) Timer x 8, A/D x 1, Undefined command x 1, RESET x 1, OSD x 2, Serial x 2, I ² C x 1, Caption x 2, Remote Control x 1, Address coincidence x 4		
Timer Counter	8-bit timer x 2		
	16-bit timer x 2		
	Watchdog timer: 17-bit x 1		
Serial Interface	I ² Cx1 For multimaster mode, Bus line (output) has 2 systems Sync serial / I ² C (master) / UART x 1		
Caption	• Built-in sync separator x 2		
I/O Pins	I/O	49	• Common use 49
	Input	1	• Common use 1
A/D Inputs	8-bit x 8ch (with S/H)		
D/A Inputs	4-bit x 4ch (Analog R, G, B, YM Output)		
PWM	8-bit x 6ch		
Special Ports	Remote Control Reception (with serial store function)		
CRTC	3-layer display (graphics, characters, splits)		
Notes	Remote control input discriminant circuit built-in		
Package	SDIP064-P-0750		

Electrical Characteristics

A/D, D/A Characteristics

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
A/D Conversion Absolute Error		AVDD=5V, VSS=0V			±5	LSB
A/D Conversion Time		OSC=at 4MHz	40			μs
A/D Analog Input Voltage	VIA		VSS		VDD	V
D/A Full-scale Output Current	IFS	RL=200Ω VREF=1.2V RIREF=1.2kΩ	4.5	5.0	5.5	mA
D/A Output Voltage Setting Range	VO	RL=200Ω VREF=1.2V RIREF=1.2kΩ	0		1.1	V
D/A Non-linear Error	NLE	RL=200Ω VREF=1.2V RIREF=1.2kΩ			±0.5	LSB
D/A Differential Non-linear Error	DNLE	RL=200Ω VREF=1.2V RIREF=1.2kΩ			±0.5	LSB
D/A Channel Interval Error	IFS	VREF=1.2V RIREF=1.2kΩ Error from 4-channel average IFS			±5	%

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

Support Tool

In-Circuit Emulator

PX-ICE102L00 + PX-PRB102L35

Pin Assignment

