❑ MN1876478

Type			**MN1876478**
ROM (x8-bit)			64K
RAM (x8-bit)			928
Minimum Instruction Execution Time			**2/3 dividing 0.5μs (at 4.5 to 5.5V, 12MHz)**
Interrupts			• RESET • External 0 • External 1 • External 2 • External 3 • Timer 0 • Timer 1 • Timer 2 • I²C • Serial • Remote Control • Line 21 • MOSD • COSD
Timer Counter			**Timer Counter 0 : 8-bit x 1** Clock Source .....1/1, 1/4, 1/16, 1/64 of System Clock Interrupt Source .....Overflow of Timer Counter 0 **Timer Counter 1 : 8-bit x 1** Clock Source .....1/2, 1/16, 1/64, 1/256, 1/512 of System Clock Interrupt Source .....Overflow of Timer Counter 1 **Time Base Counter** Clock Source .....1/4096 of System Clock Interrupt Source .....1/1, 1/2, 1/4, 1/8 of Timer Counter 2 **Watchdog** **Counter for Clock (Clock function)** **AC Counter**
Serial Interface			**Serial 0 : 8-bit x 1** (Transmission/Reception of variable bit length, Transfer direction of MSB/LSB selectable, Clock Polarity selectable, Start Condition function) Clock Source .....System Clock **I²C x 1** (Two bus line system)
I/O Pins	**I/O**	**36**	• Common use : 29
	Input	**3**	• Common use : 3
	High Voltage Output	**7**	• Nch Open-drain (Breakdown Voltage 12V) : 7
A/D Inputs			5/7-bit x 10ch (without S/H)
PWM			14-bit x 1ch (Repetition Cycle 16μs, at 12MHz), 8-bit x 8ch (Repetition Cycle 32μs, at 12MHz), 7-bit x 1ch (Repetition Cycle 16μs, at 12MHz)
Special Ports			Hsync Detection, Remote Control Reception
CRTC			Double OSD built-in (Menu OSD : 12 x 18, 512 letters, Caption OSD : 12 x 26, 176 letters)
Notes			Remote Control Data Detection Circuit built-in, On-chip synchronous separator for caption decoder
Package			SDIP064-P-0750

Electrical Characteristics

A/D Converter Characteristics

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
A/D Conversion Time	TAD	fosc=12MHz	9/12			µs
Analog Input Voltage	VAD		VSS		VDD	V

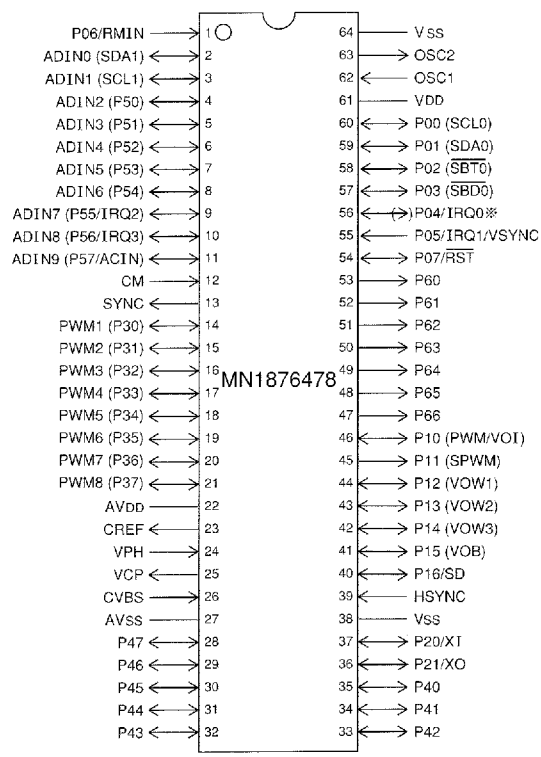
(Ta= –20 to +70°C, VDD=5.0V, VSS=0V)

Support Tool

In-Circuit Emulator PX-iCE1870 / 80 + PX-PRB1876462, PX-PRB1876476, PX-PRB1879682

EPROM built-in Type Use **MN18P79682** in SDIP064-P-0750 package.
(PWM are 5V ; not connectable to 12V systems)

Pin Assignment



SDIP064-P-0750

※ P04 • IRQ0 pin

TYPE A	Stand-by function is availabe	Input pin
TYPE B	Stand-by function is not available	I/O pin