

MN152810

Type	MN152810		
ROM (x8-bit)	8K		
RAM (x4-bit)	320		
Number of Instructions	115		
Minimum Instruction Execution Time	2.0µs at 1/12 frequency dividing (at 4.5 to 5.5V, 6MHz)		
Interrupts	• RESET • SIRQ • Remote Control Input • Timer • Serial (Only when choosing Mask Option)		
Timer Counter	Timer Counter : 8-bit x 1 Clock Source 1/2, 1/8, 1/32, 1/128 of System Clock Interrupt Source Overflow of Timer Counter		
Serial Interface	Serial : 8-bit x 1 (Synchronous Type) Clock Source System Clock, $\overline{\text{SBT}}$ Pin Input		
I/O Pins	I/O	6	• Common use 2 • Specified pull-up Resistor available (Mask Option) • Nch Open-drain available (Output) 4
	Input	4	• Common use 1 • Specified pull-up Resistor available 4 (Mask Option) • Output selectable 3 (Software Programmable)
	High Voltage Output	5	• Nch Open-drain (Breakdown Voltage 12V) 5 • Push-pull Output selectable 4 (Mask Option)
	Output	5	
A/D Inputs	5-bit x 4ch (Conversion by Software)		
D/A Inputs	6-bit x 5ch		
PWM	7-bit x 4ch (Repetition Cycle 256µs, at 6MHz), 14-bit x 1ch (Repetition Cycle 32 8ms, at 6MHz)		
Special Ports	Tri-state Output (PTO), Remote Control Reception		
CRTC	5 x 7 dots, 16 characters, 6 lines, 7 colors, 120 patterns, Rounding function, Framing function		
Notes	Remote Control Data Detection Circuit built-in, For Voltage Synthesizer, Stand-by		
Package	SDIP052-P-0600		

Electrical Characteristics

Supply Current

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
Operating Supply Current	IDD1	fosc=6MHz, VDD=VDDC=AVDD=5V VSSC=2V, Ta=25°C		28	50	mA
	IDD2	fosc=6MHz, VDD=VDDC=AVDD=5V VSSC=2V, Ta=25°C		4.0	8.0	mA
Supply Current at STOP	IDD3	VDD=VDDC=AVDD=3V, VSSC=0V fosc=0Hz, Ta=25°C			2.0	µA

(Ta=25, 80°C, VDD=5.0V, VSS=0V)

A/D, D/A Converter Characteristics

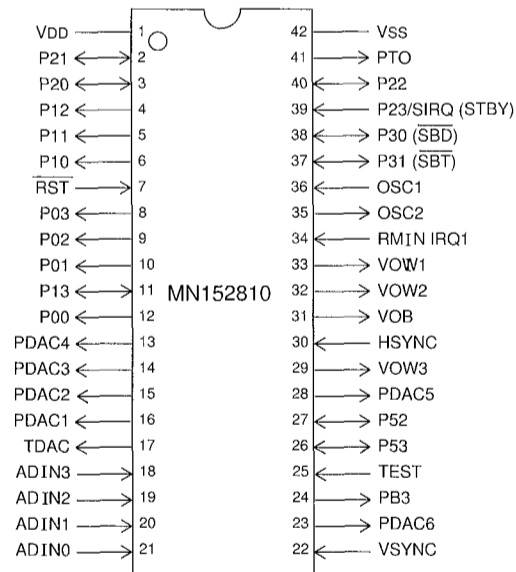
Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
A/D Conversion Absolute Error		VDD=5V, VSS=0V			±1	LSB
D/A Conversion Absolute Error		VDD=5V, VSS=0V			±1/2	LSB
Analog Input Voltage			VSS		VDD	V

(Ta=25, 80°C, VDD=5.0V, VSS=0V, VSSC=0V, VDDC=AVDD=5V)

Support Tool

In-Circuit Emulator	PX-ICE1500 + PX-PRB152810
Piggyback	Use EP152810 as piggy in SDIP052-P-0600 package

Pin Assignment



SDIP052-P-0600

NC Nothing connected with pin