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, $\overline{SBT}$ 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 min	Limit typ	Limit max	Unit
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 min	Limit typ	Limit max	Unit
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

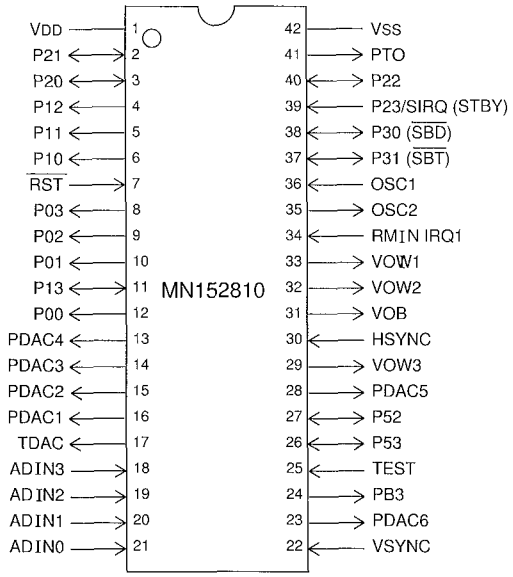
(Ta=25, 80°C, VDD=5.0V, VSS=0V, VSSC=0V, VDDC=AVDD=5V)

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