

# MN152811

<b>Type</b>	<b>MN152811</b>		
<b>ROM (x8-bit)</b>	8K		
<b>RAM (x4-bit)</b>	256		
<b>Number of Instructions</b>	115		
<b>Minimum Instruction Execution Time</b>	<b>2.0µs (at 4.5 to 5.5V, 6MHz)</b>		
<b>Interrupts</b>	• RESET • SIRQ • Remote Control Input • Timer • Serial (Only when choosing Mask Option)		
<b>Timer Counter</b>	<b>Timer Counter : 8-bit x 1</b> (Timer Output, Event Count) Clock Source            1/2, 1/8, 1/32, 1/128 of System Clock Interrupt Source        Overflow of Timer Counter		
<b>Serial Interface</b>	<b>Serial : 8-bit x 1</b> Clock Source            System Clock, $\overline{\text{SBT}}$ Pin Input		
<b>I/O Pins</b>	<b>I/O</b>	<b>5</b>	• Common use · 2 • Specified pull-up Resistor available (Mask Option) · 2 • Nch Open-drain available (Output) 5
	<b>Input</b>	<b>4</b>	• Common use 1 • Specified pull-up Resistor available (Mask Option) 1 • Output selectable (Software Programmable) 3
	<b>High Voltage Output</b>	<b>5</b>	• Nch Open-drain (Breakdown Voltage 12V) · 5 • Push-pull Output selectable (Mask Option) 4
	<b>Output</b>	<b>3</b>	
<b>A/D Inputs</b>	5-bit x 4ch (Conversion by Software)		
<b>PWM</b>	7-bit x 6ch (Repetition Cycle 256µs, at 6MHz), 14-bit x 1ch (Repetition Cycle 32 8ms, at 6MHz)		
<b>Special Ports</b>	Tri-state Output (PTO), Remote Control Reception		
<b>CRTC</b>	5 x 7 dots, 16 characters, 2 lines, 7 colors, 56 patterns, Rounding function, Framing function		
<b>Notes</b>	Remote Control Data Detection Circuit built-in, For Voltage Synthesizer		
<b>Package</b>	SDIP042-P-0600		

**Electrical Characteristics**

**Supply Current**

Parameter	Symbol	Condition	Limit			Unit
			min	typ	max	
Operating Supply Current	IDD1	fosc=6MHz, VDD=5V Ta=25°C		5.0	10	mA
Supply Current at STOP	IDD3	fosc=0Hz, VDD=5V Ta=25°C			2.0	µA

(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
Analog Input Voltage			VSS		VDD	

(VDD=5.0V, VSS=0V, Ta=25, 80°C)

**Support Tool**

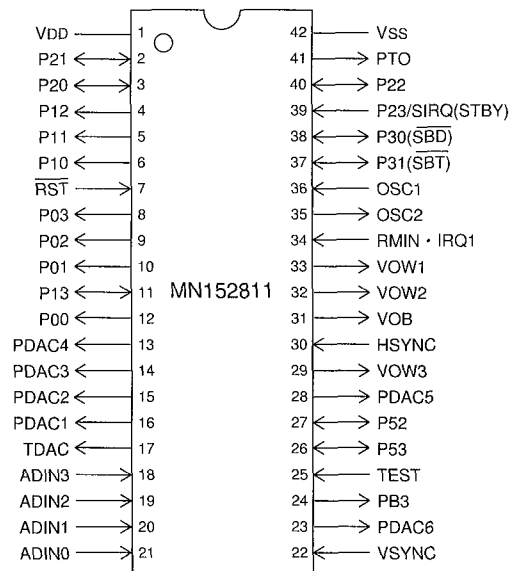
**In-Circuit Emulator**

PX-ICE1500 + PX-PRB152811

**Piggyback**

Use EP152811

**Pin Assignment**



SDIP042-P-0600