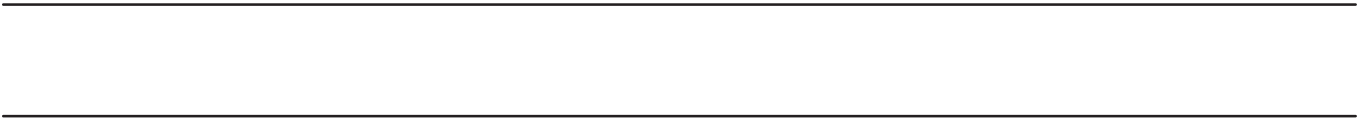

80C51 8-bit microcontroller family
8K–64K/256–1K OTP/ROM/ROMless, low voltage (2.7V–5.5V),
low power, high speed (33 MHz)

8XC52/54/58/80C32
8XC51FA/FB/FC/80C51FA
8XC51RA+/RB+/RC+/RD+/80C51RA+



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8XC51FA/FB/FC/80C51FA
8XC51RA+/RB+/RC+/RD+/80C51RA+

LOGIC SYMBOL



8XC52/54/58/80C32
8XC51FA/FB/FC/80C51FA

80C51 8-bit microcontroller family

8XC52/54/58/80C32

8K–64K/256–1K OTP/ROM/ROMless, low voltage (2.7V–5.5V),

8XC51FA/FB/FC/80C51FA

low power, high speed (33MHz)

8XC51RA+/RB+/RC+/RD+/80C51RA+

8XC51FA/FB/FC AND 80C51FA ORDERING INFORMATION

MEMORY SIZE

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8XC52/54/58/80C32

8K-64K/256-1K OTP/ROM/ROMless, low voltage (2.7V-5.5V),

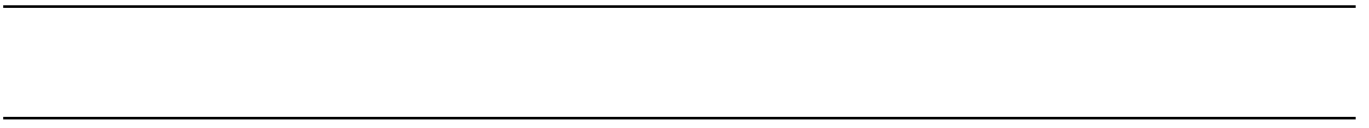
8XC51FA/FB/FC/80C51FA

low power, high speed (33MHz)

8XC51RA+/RB+/RC+/RD+/80C51RA+

87C51RA+/RB+/RC+/RD+ AND 80C51RA+ ORDERING INFORMATION





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TIMER 2 OPERATION

Timer 2

Timer 2 is a 16-bit Timer/Counter which can operate as either an event timer or an event counter, as selected by $C/T2^*$ in the special function register T2CON (see Figure 1). Timer 2 has three operating

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Table 4. Timer 2 Operating Modes

RCLK + TCLK	CP/RL2	TR2	MODE
0	0	1	16-bit Auto-reload
0	1	1	16-bit Capture
1	X	1	Baud rate generator
X			

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When Timer 2 is in the baud rate generator mode, one should not try to read or write TH2 and TL2. As a baud rate generator, Timer 2 is

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Enhanced UART

8XC52/54/58/80C32
8XC51FA/FB/FC/80C51FA

80C51 8-bit microcontroller family

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DC ELECTRICAL CHARACTERISTICS

T_{amb} = 0°C to +70°C or –40°C to +85°C, 33MHz devices; 5V ±10%; V_{SS} = 0V

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP ¹	MAX	
V _{IL}						

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EXPLANATION OF THE AC SYMBOLS

Each timing symbol has five characters. The first character is always 't' (= time). The other characters, depending on their positions, indicate the name of a signal or the logical status of that signal. The designations are:

A – Address

C – Clock

D – Input data

H – Logic level high

I – Instruction (program memory contents)

L – Logic level low, or ALE

P – $\overline{\text{PSEN}}$

Q – Output data

R – $\overline{\text{RD}}$ signal

t – Time

V – Valid

W – $\overline{\text{WR}}$ signal

X – No longer a valid logic level

Z – Float

Examples:

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t_{LLAX}

8XC52/54/58/80C32
8XC51FA/FB/FC/80C51FA

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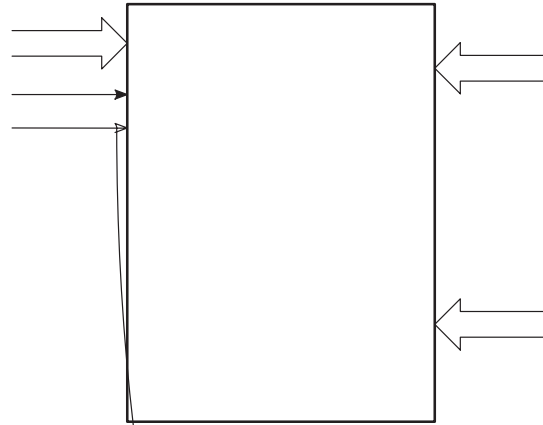
8XC52/54/58/80C32
 8XC51FA/FB/FC/80C51FA
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Table 9. EPROM Programming Modes

MODE	RST	PSEN	ALE/PROG	EA/V _{PP}	P2.7	P2.6	P3.7	P3.6P3.6
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EPROM PROGRAMMING AND VERIFICATION CHARACTERISTICS

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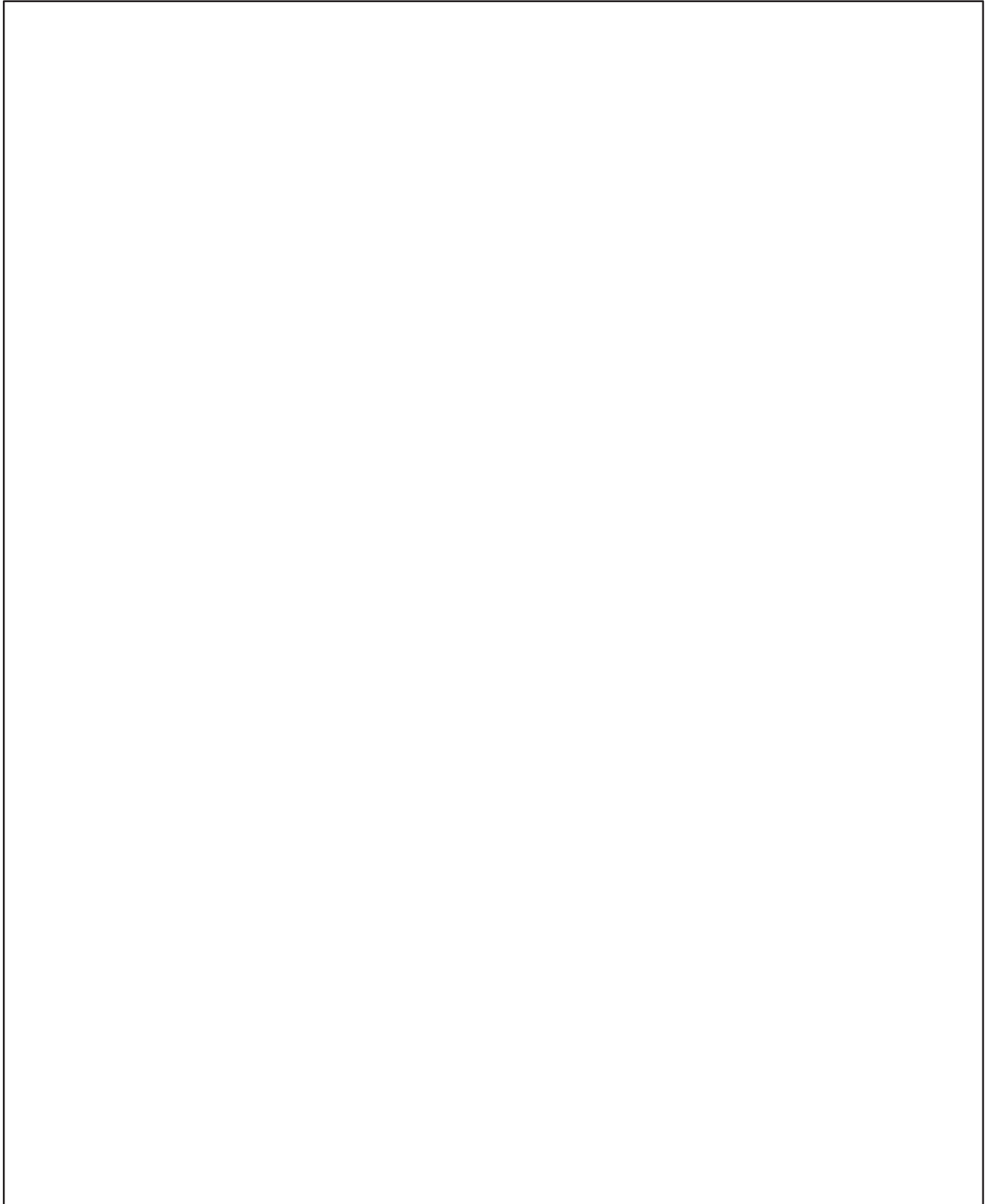
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DIP40: plastic dual in-line package; 40 leads (600 mil)

SOT129-1



80C51 8-bit microcontroller family
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NOTES

