

您設計產品時的好朋友！



Forum: 8-bit PIC

Topic: MPLAB 16F 頻率設定問題

Subject: Re: MPLAB 16F 頻率設定問題

作者: jason680

2018年05月13日 20:48:55

<http://ww1.microchip.com/downloads/en/DeviceDoc/41250E.pdf>

XT與HS適用不同的(頻率)範圍...

附加檔案:

16F914_Table19-1.jpg(202.94 KB)

TABLE 19-1: EXTERNAL CLOCK TIMING REQUIREMENTS

Standard Operating Conditions (unless otherwise stated) Operating Temperature $-40^{\circ}\text{C} \leq T_A \leq +125^{\circ}\text{C}$							
Param No.	Sym.	Characteristic	Min.	Typ†	Max.	Units	Conditions
	Fosc	External CLKI Frequency ⁽¹⁾	DC	—	37	kHz	LP Oscillator mode
			DC	—	4	MHz	XT Oscillator mode
			DC	—	20	MHz	HS Oscillator mode
			DC	—	20	MHz	EC Oscillator mode
		Oscillator Frequency ⁽¹⁾	5	—	37	kHz	LP Oscillator mode
			—	4	—	MHz	INTOSC mode
1	Tosc	External CLKI Period ⁽¹⁾	DC	—	4	MHz	RC Oscillator mode
			0.1	—	4	MHz	XT Oscillator mode
			1	—	20	MHz	HS Oscillator mode
			DC	—	4	MHz	RC Oscillator mode
		Oscillator Period ⁽¹⁾	27	—	∞	μs	LP Oscillator mode
			50	—	∞	ns	HS Oscillator mode
			50	—	∞	ns	EC Oscillator mode
			250	—	∞	ns	XT Oscillator mode
			27	—	200	μs	LP Oscillator mode
			—	250	—	ns	INTOSC mode
250	—	—	ns	RC Oscillator mode			
250	—	10,000	ns	XT Oscillator mode			
50	—	1,000	ns	HS Oscillator mode			
2	Tcy	Instruction Cycle Time ⁽¹⁾	200	Tcy	DC	ns	Tcy = 4/Fosc
3	TosL, TosH	External CLKI (OSC1) High	2*	—	—	μs	LP oscillator, TosC L/H duty cycle
		External CLKI Low	20*	—	—	ns	HS oscillator, TosC L/H duty cycle
			100 *	—	—	ns	XT oscillator, TosC L/H duty cycle
4	TosR, TosF	External CLKI Rise	—	—	50*	ns	LP oscillator
		External CLKI Fall	—	—	25*	ns	XT oscillator
			—	—	15*	ns	HS oscillator