

Select PIC18F4620 Interrupts

note: OSC/4 = 10MHz (10MHz xtal x4 PLL) - rev October 26, 2015

Interrupt	Description	Input	Output	Conditions	Enable	Flag
Timer 0	Trigger after N events N = 1 .. 2 ²⁴ 100ns to 1.67 sec	RA4: TOCS = 1 OSC/4: TOCS = 0	none	N = (PS)(Y) T0CON = 0x88: PS = 1 T0CON = 0x80: PS = 2 T0CON = 0x81: PS = 4 T0CON = 0x82: PS = 8 T0CON = 0x83: PS = 16 T0CON = 0x84: PS = 32 T0CON = 0x85: PS = 64 T0CON = 0x86: PS = 128 T0CON = 0x87: PS = 256 TMR0 = -Y	TMR0ON = 1 TMR0IE = 1 TMR0IP = 1 PEIE = 1	TMR0IF
Timer 1	Trigger after N events N = 1 .. 2 ¹⁹ 100ns to 0.52 sec	RC0 TMR1CS = 1 OSC/4 TMR1CS = 0	none	N = (PS)(Y) T1CON = 0x81: PS = 1 T1CON = 0x91: PS = 2 T1CON = 0xA1: PS = 4 T1CON = 0xB1: PS = 8 TMR1 = -Y	TMR1ON = 1 TMR1IE = 1 TMR1IP = 1 PEIE = 1	TMR1IF
Timer2	Interupt every N clocks (OSC/4) N = 1 .. 65,535	OSC/4	none	N = A * B * C A = 1..16 (T2CON 3:6) B = 1..256 (PR2) C = 1, 4, 16 (T2CON 0:1)	T2E = 1 TMR2IE = 1 PEIE = 1	TMR2IF
Timer 3	Trigger after N events N = 1 .. 2 ¹⁹ 100ns to 0.52 sec	RC1 TMR3CS = 1 OSC/4 TMR3CS = 0	none	N = (PS)(Y) T3CON = 0x81: PS = 1 T3CON = 0x91: PS = 2 T3CON = 0xA1: PS = 4 T3CON = 0xB1: PS = 8 TMR3 = -Y	TMR3ON = 1 TMR3IE = 1 TMR3IP = 1 PEIE = 1	TMR3IF
Timer 1 Compare Mode 1	Drive a pin high or low at a precise time Interrupt when TMR1 = CCPR1	OSC/4	RC2	Interrupt when CCPR1 = TMR1 CCP1CON = 0000 10ab ab = 00: Set RC2 ab = 01: Clear RC2 ab = 1x: no change	CCP1IE = 1 TMR1ON = 1 PEIE = 1; CCP1CON = 0000 10ab	CCP1IF
Timer 1 Compare Mode 2	Drive a pin high or low at a precise time Interrupt when TMR1 = CCPR2	OSC/4	RC1	Interrupt when CCPR2 = TMR1 CCP2CON = 0000 10ab ab = 00: Set RC1 ab = 01: Clear RC1 ab = 1x: no change	CCP12E = 1 TMR1ON = 1 PEIE = 1; CCP2CON = 0000 10ab	CCP2IF
Timer 1 Capture Mode 1	On an event, record the TIMER1 counter and trigger an interrupt. Time of the event is stored in CCPR1	RC2	none	CCP1CON = 0000 01ab Capture every falling edge (ab = 00) Every rising edge (ab = 01) Every 4th rising edge (ab = 10) Every 16th rising edge (ab = 11)	TMR1ON = 1 CCP1CON = 0000 01xx CCP1IE = 1 PEIE = 1;	CCP1IF
Timer 1 Capture Mode 2	On an event, record the TIMER1 counter and trigger an interrupt. Time of the event is stored in CCPR2	RC1	none	CCP2CON = 0000 01ab Capture every falling edge (ab = 00) Every rising edge (ab = 01) Every 4th rising edge (ab = 10) Every 16th rising edge (ab = 11)	TMR1ON = 1 CCP2CON = 0000 01xx CCP2IE = 1 PEIE = 1;	CCP2IF
INT0	Interrupt on a rising or falling edge	RB0	none	rising: INTEDG0 = 1 falling: INTEDG0 = 0	INT0IE = 1 TRISB0 = 1	INT0IF
INT1	Interrupt on a rising or falling edge	RB1	none	rising: INTEDG1 = 1 falling: INTEDG1 = 0	INT1IE = 1 INT1IP = 1 TRISB1 = 1	INT1IF
INT2	Interrupt on a rising or falling edge	RB2	none	rising: INTEDG2 = 1 falling: INTEDG2 = 0	INT2IE = 1 INT2IP = 1 TRISB2 = 1	INT2IF
UART Receive	Trigger an interrupt when one byte has been read	RC7	-	RX9 = 1 (9-bit) or 0 (8-bit) data SREN = 1 (enable single receive) CREN = 1 (enable continuous receive) SPBRG & BRGH to set baud rate (see p. 98) SYNC = 0 (asynch)	RCIE = 1 PEIE = 1	RCIF