

Parallel I/O			
Register	Name	Description	Use
PAIN	Port A input	Input data on PA	x= *PAIN; read PA
POUT	Port A output	Output data to PA	*PAIN = x; output to PA
PADIR	Port A direction	Set PA[x] to 0/1 input/output direction	PADIR = 0x00; set all pins as input
			PADIR = 0xFF; set all pins as output
PBIN	Port B input	Input data on PB	x= *PAIN; read PA
PBOUT	Port B output	Output data to PB	*PAIN = x; output to PA
PBDIR	Port B direction	Set PB[x] to 0/1 input/output direction	*PBDIR = 0x00; set all pins as input
			*PBDIR = 0xFF; set all pins as output
PSTAT	Status register		
	0 - PASIN	Set to 1 when new data is on PAIN. Cleared when PAIN is read	
	1 - PASOUT	Set to 1 when data in PAOUT is accepted by connected device. Clear when new data is written into PAOUT	
	2 - PBSIN	~	
	3 - PBSOUT	~	
	4 - IAIN	Set to 1 when an input interrupt due to new data on PAIN	
	5 - IAOUT	Set to 1 when an input interrupt due to PAOUT being ready for new data	
	6 - IBIN	~	
	7 - IBOUT	~	
PCONT	Control register		
	0 - PAREG	if 1 a buffer register is used between bins, if 0 then direct path to pin	
	1 - PBREG	~	
	4 - ENAIN	Enables interrupts when PASIN is raised (new data on PAIN)	
	5 - ENAOUT	Enables interrupts when PASOUT is raised (PASOUT ready for new data)	
	6 - ENBIN	Enables interrupts when PBSIN is raised (new data on PBIN)	
	7 - ENBOUT	Enables interrupts when PBSOUT is raised (PBSOUT ready for new data)	
Counter (Counts down)			
Register	Name	Description	Use
CNTM	Initial value	Sets initial value of counter	*CNTM = 0xFF; sets initial value to max value
COUNT	Counter contents	Contains counter value	x = *COUNT; real counter current value
CTSTAT	Status register	Bit 0 is set when counter reaches zero	
CTCON	Control register		
	0 - Start	Start the counter when set to 1 clear once counter starts	
	1 - Stop	Stop the counter when set to 1	
	4- Enable Interrupt	When set to 1 trigger interrupt when counter reaches zero in counter mode	
	7 - Counter/Timer	When set to 0 enter counter mode, counts down, when zero is hit, sets CTCON1 to 1 and raises interrupt if enabled. Reloads initial value into COUNT	
		When set to 1 enter timer mode, counts down, when zero is hit, invert Timer_out I/O bit and reload initial value (creates pulse wave)	