



```

T
weight
D
y
y0
objectID
  
```

Timers

```

Timer0: PWM (servo motor)
TIMSK[1:0]=0b00
TCCR0=0b01101101
fast PWM mode
set OC0 at top, clear at OCR0
want: 50 Hz (20 ms) period
want: 0.5-2.5 ms pulse width
ideal prescaler = 1250, use 1024 (16.384 ms)
ideal compare values = 6.4-32, use 7.8125-39.0625

Timer1: 1 ms base (LCD, matlab, inputs)
TIMSK[5:2]=0b0100 (?)
-----
Timer0: 1 ms base (LCD, matlab, inputs)
TIMSK[1:0]=0b10
TCCR0=0b00001011
clear on compare match
prescaler=64
OCR0=250

Timer1: 20 ms period (servo motor)
fast PWM mode
set OC1A at OCR1A, clear OC1A at OCR1B
want 20 ms period
?

Timer2: PWM (temperature)
TIMSK[7:6]=0b00
fast PWM mode
TCCR2=0b01111001
full speed (no prescaler)
vary OCR2 for amount of heat flow (0=off, 256=full on/dangerous?)
  
```

Hardware Ports/Pins

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PINB: switches
PORTC.0: solenoid
PORTC.8: servo motor
PORTD[1:0]: LEDs/USART/LCD
PORTD.4: Peltier Reference
PORTD.5: Peltier PWM
PINA[2:0]: flex sensors
  
```