

```

MotorDriveInit
  /*** PWM Initialization ***/
  set PWM Chan 3&4 enabled
  set to output initially high
  set to output initially high
  select clock SA /SB
  set clk to M/8
  set CLOCKSA to 20 kHz
  set CLOCKSB to 20 kHz
  Map ports T4 & T3 to PWM chan 4 and chan 3
  set PSMPER3 and PWMPER4 equal to 128

  // make motor drive directions outputs
  set MOTOR_DRIVE_REG |= (MOTOR_LB |MOTOR_RB)

SetMotorDriveDuty(int DC, char channel)
// note that the LMD18200 motor driver was used (operates differently than
the 1298n introduced in class)

  subtract 128 from DC // now 128 is full forward, -128 is full reverse
  if channel equals MOTOR_LA
    if DC < 0
      set MOTOR_LB pin high
    else
      set MOTOR_LB pin low

  if channel equals MOTOR_RA
    if DC < 0
      set MOTOR_RB pin high
    else
      set MOTOR_RB pin low

  if DC < 0, multiply by -1
  if DC is greater than 128, set DC = 128

  switch(channel)

    case MOTOR_RA:
      set PWMDTY3 equal to DC

    case MOTOR_LA:
      set PWMDTY4 equal to DC

```