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\* Stepper.c

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\* Author : Vaibhav

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#include <avr/io.h>

#include "delay.h"

#include "adc.h"

#define stepPin PB3

#define dirPin PB4

#define Enable PB5

int speedUp();

int customDelay,customDelayMapped;

int main(void)

{

ADC\_Init();

/\* Replace with your application code \*/

DDRB |= (1<<3)|(1<<4)|(1<<5);

PORTB |= (1<<4);

PORTB &= ~(1<<5);

int x;

while (1)

{

//volt = (adcValue\*5.00)/1023;

customDelayMapped = speedUp();

// for(x=0; x<200; x++)

// {

PORTB |=(1<<3);

DELAY\_us(customDelayMapped);

PORTB &=~(1<<3);

DELAY\_us(customDelayMapped);

// }

//DELAY\_ms(1000);

// PORTB &= ~(1<<4);

//for(x=0; x<400; x++)

//{

// PORTB |=(1<<3);

// DELAY\_us(4000);

// PORTB &=~(1<<3);

// DELAY\_us(4000);

//}

// DELAY\_ms(1000);

}

}

// Function for reading the Potentiometer

int speedUp() {

int customDelay = ADC\_GetAdcValue(0); // Reads the potentiometer

// int newCustom = map(customDelay, 0, 1023, 300,4000); // Convrests the read values of the potentiometer from 0 to 1023 into desireded delay values (300 to 4000)

return customDelay;

}