#include "definitions.h"

#include "function\_prototypes.h"

#include "peripheral\_registers.h"

#include "data.h"

#include <math.h>

#include "MC56F836x.h"

unsigned int oldBFlag = 0;

int main(void)

{

 initialize\_unit();

 oldBFlag = BFlag;

 while (program\_running == TRUE)

 {

 check\_msg\_Q();

 if(oldBFlag != BFlag && Debouncing == 0)

 {

 Debouncing = 1;

 timerD2\_control.bit.count\_mode = 1;

 oldBFlag = BFlag;

 if(BFlag == 1)

 {

 OpenCount++;

 GPIOD\_Data\_reg.bit.DB3 = 0;

 SystemState = Open;

 TripEvent();

 }

 else

 {

 CloseCount++;

 GPIOD\_Data\_reg.bit.DB3 = 1;

 SystemState = Close;

 CloseEvent();

 }

 }

 }

}