/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Project 5 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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\* File: Proj5.h

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//stepper motor constants:

#define HS 1

#define FS 2

#define CW 1

#define CCW 2

//Timer1 consts:

#define T1\_PRESCALE 1

#define TOGGLES\_PER\_SEC 1000

#define T1\_TICK (FPB/T1\_PRESCALE/TOGGLES\_PER\_SEC) //FPB = periph bus clk

/\* Software timer const \*/

#define COUNTS\_PER\_MS 8889 /\* Exact value is to be determined \*/

//Debounce btns const:

#define DEBOUNCE\_TIME 20 //debounce btns for 20ms

//global variables:

unsigned int step\_delay, dir, mode;

/\* Function Prototypes \*/

void system\_init (void); /\* hardware initialization \*/

//interrupts initialization functs:

void t1\_intr\_init(void);

void cn\_intr\_init(void);

int read\_buttons(void);

void decode\_buttons( unsigned int buttons, unsigned int \*step\_delay,

unsigned int \*dir, unsigned int \*mode );

unsigned int sw\_fsm( unsigned int dir, unsigned int mode );

void output\_sm\_code( unsigned int sm\_code );

void sw\_msDelay(unsigned int mS);