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/*****

Header file for FAC functions on the E128

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#ifndef FAC_FSM_H
#define FAC_FSM_H

//#include headers
#include "ES_Configure.h"
#include "ES_Framework.h"
#include "ES_Types.h"
#include <stdio.h>
#include <stdlib.h>
#include <mc9s12e128.h>
#include <S12e128bits.h>
#include <Bin_Const.h>
#include <termio.h>

#include "E128_SPI.h"

//typedefs for the states
//State definitions for use with the query function
typedef enum { WaitingForUpdate, PausingbtXfer, XferingByte1, XferingByte2, XferingByte3,
XferingByte4, XferingByte5 } FACState_t ;

//Declare Public Function Prototypes
boolean InitFAC_FSM ( uint8_t Priority );
boolean PostFAC_FSM( ES_Event ThisEvent );
ES_Event RunFAC_FSM( ES_Event ThisEvent );

unsigned char QueryX(unsigned char ShipNum);
unsigned char QueryY(unsigned char ShipNum);
unsigned char QueryTheta(unsigned char ShipNum);
unsigned char QueryGameState(void);
unsigned char QueryColor(void);
unsigned char DetermineEnemy(void);
unsigned char DetermineShip2Target(unsigned char SelfColor_);
void GameStartIntel(void);

//#defines
#define HI                1
#define LO                0
#define SelfNum          16
#define RED               0
#define BLUE              1
#define STOPPED           0x00
#define REDPOWER_REPAIR   BIT7HI
#define BLUEPOWER_REPAIR  BIT6HI
#define INPLAY            0x0A
#define RED_WON           0x0B
#define BLUE_WON          0x0C

#endif /* FAC_FSM_H */

```