

```

/*****
/* Program      : BUZZER.H
/* Function     : Buzzer Control Procedures Header File
/* Author      : John F. Fitter B.E.
/*
/*              Copyright © 1998 Eagle Air Australia Pty. Ltd. All rights reserved
*****/

#ifndef _BUZZER_H
#define _BUZZER_H

/*****
/* Buzzer defines and macros
*****/

// Hardware defines
#define BUZPORT      PORTC           // port for buzzer control
#define BUZDIR      TRISC           // direction reg for buzzer
#define BUZPIN      0               // port pin for buzzer control
#define BUZPLOG     // buzzer logic (positive logic)

// Buzzer macros
#ifndef BUZPLOG
#define buzzer_on()      buz_drive=1
#define buzzer_off()    buz_drive=0
#else
#define buzzer_on()      buz_drive=0
#define buzzer_off()    buz_drive=1
#endif // BUZPLOG
#define enable_buzzer(s) flg_buzzen=s
#define init_buzzer()   buz_dir=B_OUT;\
                        enable_buzzer(true);\
                        flg_buzzing=false;\
                        buz_beeps=0;\
                        buzzer_off()
#define finish_buzzing() while(update_buzzer())

/*****
// Function prototypes
*****/

void beep(unsigned char);
unsigned char update_buzzer();

/*****
// Variables
*****/

#ifndef _BUZZER_C
bank1 bit flg_buzzen;           // buzzer enabled flag
bank1 bit flg_buzzing;         // buzzer is buzzing (not pausing)
bank1 unsigned char buz_beeps; // number of buzzer beeps
bank1 volatile unsigned char buz_elaps; // 10mS counter for buzzer
#else
extern bank1 bit flg_buzzen;
extern bank1 bit flg_buzzing;
extern bank1 unsigned char buz_beeps;
extern bank1 volatile unsigned char buz_elaps;
#endif // _BUZZER_C

static volatile bit buz_drive @ (unsigned)&BUZPORT*8+BUZPIN; // buzzer drive
static volatile bit buz_dir   @ (unsigned)&BUZDIR*8+BUZPIN; // buzzer drive direction

#endif // _BUZZER_H

// ***** EOF BUZZER.H *****

```