

net/compiler.h File Reference

Detailed Description

Compiler specific defines.

Author:

[Modtronix Engineering](#)

Dependencies:

none

Compiler:

MPLAB C18 v2.10 or higher
HITECH PICC-18 V8.35PL3 or higher

Description

This module is an interface between the code and different compilers. It defines generic names for compiler specific defines and variables.

```
#include <p18cxxx.h>
#include <stddef.h>
#include <stdlib.h>
```

Data Structures

```
union \_BYTE\_VAL
union \_DWORD\_VAL
union \_SWORD\_VAL
struct \_WORD\_ARRAY
union \_WORD\_VAL
```

Defines

```
#define ADCON0\_ADON ADCON0bits.ADON
#define ADCON0\_GO ADCON0bits.GO
#define CLEAR\_BIT(theByte, mask) (theByte &= (~mask))
#define CLRWDT() ClrWdt()
#define DISBALE\_INTERRUPTS() INTCON_GIEH = 0
#define EECON1\_CFGS EECON1bits.CFGS
```

```
#define EECON1\_EEPGD EECON1bits.EEPGD
#define EECON1\_FREE EECON1bits.FREE
#define EECON1\_RD EECON1bits.RD
#define EECON1\_WR EECON1bits.WR
#define EECON1\_WREN EECON1bits.WREN
#define ENABLE\_INTERRUPTS\(\) INTCON_GIEH = 1
#define INTCON2\_RBPU INTCON2bits.RBPU
#define INTCON\_GIEH INTCONbits.GIEH
#define INTCON\_GIEL INTCONbits.GIEL
#define INTCON\_TMR0IE INTCONbits.TMR0IE
#define INTCON\_TMR0IF INTCONbits.TMR0IF
#define IS\_BIT\_CLEAR(theByte, mask) ((theByte & mask) == 0)
#define IS\_BIT\_SET(theByte, mask) (theByte & mask)
#define LATA0 LATAbits.LATA0
#define LATA1 LATAbits.LATA1
#define LATA2 LATAbits.LATA2
#define LATA3 LATAbits.LATA3
#define LATA4 LATAbits.LATA4
#define LATA5 LATAbits.LATA5
#define LATB0 LATBbits.LATB0
#define LATB1 LATBbits.LATB1
#define LATB2 LATBbits.LATB2
#define LATB3 LATBbits.LATB3
#define LATB4 LATBbits.LATB4
#define LATB5 LATBbits.LATB5
#define LATB6 LATBbits.LATB6
#define LATB7 LATBbits.LATB7
#define LATC0 LATCbits.LATC0
#define LATC1 LATCbits.LATC1
#define LATC2 LATCbits.LATC2
#define LATC3 LATCbits.LATC3
#define LATC4 LATCbits.LATC4
#define LATC5 LATCbits.LATC5
#define LATC6 LATCbits.LATC6
#define LATC7 LATCbits.LATC7
#define LATE0 LATEbits.LATE0
#define LATE1 LATEbits.LATE1
#define LATE2 LATEbits.LATE2
#define LATE3 LATEbits.LATE3
#define LATE4 LATEbits.LATE4
#define LATE5 LATEbits.LATE5
#define LATE6 LATEbits.LATE6
#define LATE7 LATEbits.LATE7
#define LATF0 LATFbits.LATF0
#define LATF1 LATFbits.LATF1
#define LATF2 LATFbits.LATF2
#define LATF3 LATFbits.LATF3
#define LATF4 LATFbits.LATF4
#define LATF5 LATFbits.LATF5
```

```
#define LATF6 LATFbits.LATF6
#define LATF7 LATFbits.LATF7
#define LATG0 LATGbits.LATG0
#define LATG1 LATGbits.LATG1
#define LATG2 LATGbits.LATG2
#define LATG3 LATGbits.LATG3
#define LATG4 LATGbits.LATG4
#define LATG5 LATGbits.LATG5
#define LOWER\_LSB\(a\) ((a).v[0])
#define LOWER\_MSB\(a\) ((a).v[1])
#define LSB\(a\) ((a).v[0])
#define MCHP\_C18
#define MSB\(a\) ((a).v[1])
#define NOP\(\) Nop()
#define OSCCON\_LOCK OSCCONbits.LOCK
#define OSCCON\_PLEN OSCCONbits.PLEN
#define OSCCON\_SCS0 OSCCONbits.SCS0
#define OSCCON\_SCS1 OSCCONbits.SCS1
#define PIE1\_RCIE PIE1bits.RCIE
#define PIE1\_TXIE PIE1bits.TXIE
#define PIR1\_RCIF PIR1bits.RCIF
#define PIR1\_TXIF PIR1bits.TXIF
#define PIR2\_BCLIF PIR2bits.BCLIF
#define PIR3\_TMR4IF PIR3bits.TMR4IF
#define PORTA\_RA0 PORTAbits.RA0
#define PORTA\_RA1 PORTAbits.RA1
#define PORTA\_RA2 PORTAbits.RA2
#define PORTA\_RA3 PORTAbits.RA3
#define PORTA\_RA4 PORTAbits.RA4
#define PORTA\_RA5 PORTAbits.RA5
#define PORTB\_RB0 PORTBbits.RB0
#define PORTB\_RB1 PORTBbits.RB1
#define PORTB\_RB2 PORTBbits.RB2
#define PORTB\_RB3 PORTBbits.RB3
#define PORTB\_RB4 PORTBbits.RB4
#define PORTB\_RB5 PORTBbits.RB5
#define PORTB\_RB6 PORTBbits.RB6
#define PORTB\_RB7 PORTBbits.RB7
#define PORTC\_RC0 PORTCbits.RC0
#define PORTC\_RC1 PORTCbits.RC1
#define PORTC\_RC2 PORTCbits.RC2
#define PORTC\_RC3 PORTCbits.RC3
#define PORTC\_RC4 PORTCbits.RC4
#define PORTC\_RC5 PORTCbits.RC5
#define PORTC\_RC6 PORTCbits.RC6
#define PORTC\_RC7 PORTCbits.RC7
#define PORTD\_RD0 PORTDbits.RD0
#define PORTD\_RD1 PORTDbits.RD1
#define PORTD\_RD2 PORTDbits.RD2
```

```

#define PORTD_RD3 PORTDbits.RD3
#define PORTD_RD4 PORTDbits.RD4
#define PORTD_RD5 PORTDbits.RD5
#define PORTD_RD6 PORTDbits.RD6
#define PORTD_RD7 PORTDbits.RD7
#define PORTE_RE0 PORTEbits.RE0
#define PORTE_RE1 PORTEbits.RE1
#define PORTE_RE2 PORTEbits.RE2
#define PORTE_RE3 PORTEbits.RE3
#define PORTE_RE4 PORTEbits.RE4
#define PORTE_RE5 PORTEbits.RE5
#define PORTE_RE6 PORTEbits.RE6
#define PORTE_RE7 PORTEbits.RE7
#define PORTF_RF0 PORTFbits.RF0
#define PORTF_RF1 PORTFbits.RF1
#define PORTF_RF2 PORTFbits.RF2
#define PORTF_RF3 PORTFbits.RF3
#define PORTF_RF4 PORTFbits.RF4
#define PORTF_RF5 PORTFbits.RF5
#define PORTF_RF6 PORTFbits.RF6
#define PORTF_RF7 PORTFbits.RF7
#define PORTG_RG0 PORTGbits.RG0
#define PORTG_RG1 PORTGbits.RG1
#define PORTG_RG2 PORTGbits.RG2
#define PORTG_RG3 PORTGbits.RG3
#define PORTG_RG4 PORTGbits.RG4
#define PORTG_RG5 PORTGbits.RG5
#define RCON_POR RCONbits.POR
#define RCSTA1_CREN RCSTA1bits.CREN
#define RCSTA2_CREN RCSTA2bits.CREN
#define RCSTA_CREN RCSTAbits.CREN
#define RESET() Reset()
#define ROM rom
#define SET_BIT(theByte, mask) (theByte |= mask)
#define SLEEP() Sleep()
#define SSPCON1_WCOL SSPCON1bits.WCOL
#define SSPCON2_ACKDT SSPCON2bits.ACKDT
#define SSPCON2_ACKEN SSPCON2bits.ACKEN
#define SSPCON2_ACKSTAT SSPCON2bits.ACKSTAT
#define SSPCON2_PEN SSPCON2bits.PEN
#define SSPCON2_RCEN SSPCON2bits.RCEN
#define SSPCON2_RSEN SSPCON2bits.RSEN
#define SSPCON2_SEN SSPCON2bits.SEN
#define SSPSTAT_BF SSPSTATbits.BF
#define SSPSTAT_R_W SSPSTATbits.R_W
#define T0CON_TMR0ON T0CONbits.TMR0ON
#define T2CON_TMR2ON T2CONbits.TMR2ON
#define T4CON_TMR4ON T4CONbits.TMR4ON
#define TRISA_RA0 TRISAbits.TRISA0

```

```
#define TRISA\_RA1 TRISAbits.TRISA1
#define TRISA\_RA2 TRISAbits.TRISA2
#define TRISA\_RA3 TRISAbits.TRISA3
#define TRISA\_RA4 TRISAbits.TRISA4
#define TRISA\_RA5 TRISAbits.TRISA5
#define TRISB\_RB0 TRISBbits.TRISB0
#define TRISB\_RB1 TRISBbits.TRISB1
#define TRISB\_RB2 TRISBbits.TRISB2
#define TRISB\_RB3 TRISBbits.TRISB3
#define TRISB\_RB4 TRISBbits.TRISB4
#define TRISB\_RB5 TRISBbits.TRISB5
#define TRISB\_RB6 TRISBbits.TRISB6
#define TRISB\_RB7 TRISBbits.TRISB7
#define TRISC\_RC0 TRISCbits.TRISC0
#define TRISC\_RC1 TRISCbits.TRISC1
#define TRISC\_RC2 TRISCbits.TRISC2
#define TRISC\_RC3 TRISCbits.TRISC3
#define TRISC\_RC4 TRISCbits.TRISC4
#define TRISC\_RC5 TRISCbits.TRISC5
#define TRISC\_RC6 TRISCbits.TRISC6
#define TRISC\_RC7 TRISCbits.TRISC7
#define TRISD\_RD0 TRISDbits.TRISD0
#define TRISD\_RD1 TRISDbits.TRISD1
#define TRISD\_RD2 TRISDbits.TRISD2
#define TRISD\_RD3 TRISDbits.TRISD3
#define TRISD\_RD4 TRISDbits.TRISD4
#define TRISD\_RD5 TRISDbits.TRISD5
#define TRISD\_RD6 TRISDbits.TRISD6
#define TRISD\_RD7 TRISDbits.TRISD7
#define TRISE\_RE0 TRISEbits.TRISE0
#define TRISE\_RE1 TRISEbits.TRISE1
#define TRISE\_RE2 TRISEbits.TRISE2
#define TRISE\_RE3 TRISEbits.TRISE3
#define TRISE\_RE4 TRISEbits.TRISE4
#define TRISE\_RE5 TRISEbits.TRISE5
#define TRISE\_RE6 TRISEbits.TRISE6
#define TRISE\_RE7 TRISEbits.TRISE7
#define TRISF\_RF0 TRISFbits.TRISF0
#define TRISF\_RF1 TRISFbits.TRISF1
#define TRISF\_RF2 TRISFbits.TRISF2
#define TRISF\_RF3 TRISFbits.TRISF3
#define TRISF\_RF4 TRISFbits.TRISF4
#define TRISF\_RF5 TRISFbits.TRISF5
#define TRISF\_RF6 TRISFbits.TRISF6
#define TRISF\_RF7 TRISFbits.TRISF7
#define TRISG\_RG0 TRISGbits.TRISG0
#define TRISG\_RG1 TRISGbits.TRISG1
#define TRISG\_RG2 TRISGbits.TRISG2
#define TRISG\_RG3 TRISGbits.TRISG3
```

```

#define TRISG\_RG4 TRISGbits.TRISG4
#define TRISG\_RG5 TRISGbits.TRISG5
#define TXSTA1\_BRGH TXSTA1bits.BRGH
#define TXSTA1\_TRMT TXSTA1bits.TRMT
#define TXSTA2\_BRGH TXSTA2bits.BRGH
#define TXSTA2\_TRMT TXSTA2bits.TRMT
#define TXSTA\_BRGH TXSTAbits.BRGH
#define TXSTA\_TRMT TXSTAbits.TRMT
#define UPPER\_LSB\(a\) ((a).v[2])
#define UPPER\_MSB\(a\) ((a).v[3])
#define WORD\_LSB\(a\) ( (unsigned char) (WORD\_ARRAY)a).offset0 )
#define WORD\_MSB\(a\) ( (unsigned char)
    (WORD\_ARRAY)a).offset1 )

```

Typedefs

```

typedef enum \_BOOL BOOL
    typedef BYTE BUFFER
typedef unsigned char BYTE
typedef \_BYTE\_VAL BYTE\_VAL
typedef unsigned long DWORD
typedef \_DWORD\_VAL DWORD\_VAL
typedef unsigned short
    long SWORD
typedef \_SWORD\_VAL SWORD\_VAL
typedef unsigned short int WORD
typedef \_WORD\_ARRAY WORD\_ARRAY
typedef \_WORD\_VAL WORD\_VAL

```

Enumerations

```

enum \_BOOL { FALSE = 0, TRUE }

```

Define Documentation

```

#define ADCON0\_ADON ADCON0bits.ADON
#define ADCON0\_GO ADCON0bits.GO
#define CLEAR\_BIT ( theByte,
    mask ) (theByte &= (~mask))
#define CLRWDT ( ) ClrWdt()
#define DISBALE\_INTERRUPTS ( ) INTCON_GIEH = 0

```

```

#define EECON1_CFGS EECON1bits.CFGS
#define EECON1_EEPGD EECON1bits.EEPGD
#define EECON1_FREE EECON1bits.FREE
#define EECON1_RD EECON1bits.RD
#define EECON1_WR EECON1bits.WR
#define EECON1_WREN EECON1bits.WREN
#define ENABLE_INTERRUPTS ( ) INTCON_GIEH = 1
#define INTCON2_RBPU INTCON2bits.RBPU
#define INTCON_GIEH INTCONbits.GIEH
#define INTCON_GIEL INTCONbits.GIEL
#define INTCON_TMR0IE INTCONbits.TMR0IE
#define INTCON_TMR0IF INTCONbits.TMR0IF
#define IS_BIT_CLEAR ( theByte,
                        mask ) ((theByte & mask) == 0)
#define IS_BIT_SET ( theByte,
                    mask ) (theByte & mask)
#define LATA0 LATABits.LATA0
#define LATA1 LATABits.LATA1
#define LATA2 LATABits.LATA2
#define LATA3 LATABits.LATA3
#define LATA4 LATABits.LATA4
#define LATA5 LATABits.LATA5
#define LATB0 LATBbits.LATB0
#define LATB1 LATBbits.LATB1
#define LATB2 LATBbits.LATB2
#define LATB3 LATBbits.LATB3
#define LATB4 LATBbits.LATB4
#define LATB5 LATBbits.LATB5
#define LATB6 LATBbits.LATB6

```

Examples:

[ex_tcp.c](#), [ex_udp.c](#), and [ex_udp_client2.c](#).

```

#define LATB7 LATBbits.LATB7
#define LATC0 LATCbits.LATC0
#define LATC1 LATCbits.LATC1
#define LATC2 LATCbits.LATC2
#define LATC3 LATCbits.LATC3

```

```
#define LATC4 LATCbits.LATC4
#define LATC5 LATCbits.LATC5
#define LATC6 LATCbits.LATC6
#define LATC7 LATCbits.LATC7
#define LATE0 LATEbits.LATE0
#define LATE1 LATEbits.LATE1
#define LATE2 LATEbits.LATE2
#define LATE3 LATEbits.LATE3
#define LATE4 LATEbits.LATE4
#define LATE5 LATEbits.LATE5
#define LATE6 LATEbits.LATE6
#define LATE7 LATEbits.LATE7
#define LATF0 LATFbits.LATF0
#define LATF1 LATFbits.LATF1
#define LATF2 LATFbits.LATF2
#define LATF3 LATFbits.LATF3
#define LATF4 LATFbits.LATF4
#define LATF5 LATFbits.LATF5
#define LATF6 LATFbits.LATF6
#define LATF7 LATFbits.LATF7
#define LATG0 LATGbits.LATG0
#define LATG1 LATGbits.LATG1
#define LATG2 LATGbits.LATG2
#define LATG3 LATGbits.LATG3
#define LATG4 LATGbits.LATG4
#define LATG5 LATGbits.LATG5
#define LOWER_LSB ( a ) ((a).v[0])
#define LOWER_MSB ( a ) ((a).v[1])
#define LSB ( a ) ((a).v[0])
#define MCHP_C18
#define MSB ( a ) ((a).v[1])
#define NOP ( ) Nop()
#define OSCCON_LOCK OSCCONbits.LOCK
#define OSCCON_PLEN OSCCONbits.PLEN
#define OSCCON_SCS0 OSCCONbits.SCS0
```

```
#define OSCCON_SCS1  OSCCONbits.SCS1
#define PIE1_RCIE  PIE1bits.RCIE
#define PIE1_TXIE  PIE1bits.TXIE
#define PIR1_RCIF  PIR1bits.RCIF
#define PIR1_TXIF  PIR1bits.TXIF
#define PIR2_BCLIF  PIR2bits.BCLIF
#define PIR3_TMR4IF  PIR3bits.TMR4IF
#define PORTA_RA0  PORTAbits.RA0
#define PORTA_RA1  PORTAbits.RA1
#define PORTA_RA2  PORTAbits.RA2
#define PORTA_RA3  PORTAbits.RA3
#define PORTA_RA4  PORTAbits.RA4
#define PORTA_RA5  PORTAbits.RA5
#define PORTB_RB0  PORTBbits.RB0
```

Examples:

[ex_udp_client2.c](#).

```
#define PORTB_RB1  PORTBbits.RB1
#define PORTB_RB2  PORTBbits.RB2
#define PORTB_RB3  PORTBbits.RB3
#define PORTB_RB4  PORTBbits.RB4
#define PORTB_RB5  PORTBbits.RB5
#define PORTB_RB6  PORTBbits.RB6
#define PORTB_RB7  PORTBbits.RB7
#define PORTC_RC0  PORTCbits.RC0
#define PORTC_RC1  PORTCbits.RC1
#define PORTC_RC2  PORTCbits.RC2
#define PORTC_RC3  PORTCbits.RC3
#define PORTC_RC4  PORTCbits.RC4
#define PORTC_RC5  PORTCbits.RC5
#define PORTC_RC6  PORTCbits.RC6
#define PORTC_RC7  PORTCbits.RC7
#define PORTD_RD0  PORTDbits.RD0
#define PORTD_RD1  PORTDbits.RD1
#define PORTD_RD2  PORTDbits.RD2
#define PORTD_RD3  PORTDbits.RD3
```

```
#define PORTD_RD4 PORTDbits.RD4
#define PORTD_RD5 PORTDbits.RD5
#define PORTD_RD6 PORTDbits.RD6
#define PORTD_RD7 PORTDbits.RD7
#define PORTE_RE0 PORTEbits.RE0
#define PORTE_RE1 PORTEbits.RE1
#define PORTE_RE2 PORTEbits.RE2
#define PORTE_RE3 PORTEbits.RE3
#define PORTE_RE4 PORTEbits.RE4
#define PORTE_RE5 PORTEbits.RE5
#define PORTE_RE6 PORTEbits.RE6
#define PORTE_RE7 PORTEbits.RE7
#define PORTF_RF0 PORTFbits.RF0
#define PORTF_RF1 PORTFbits.RF1
#define PORTF_RF2 PORTFbits.RF2
#define PORTF_RF3 PORTFbits.RF3
#define PORTF_RF4 PORTFbits.RF4
#define PORTF_RF5 PORTFbits.RF5
#define PORTF_RF6 PORTFbits.RF6
#define PORTF_RF7 PORTFbits.RF7
#define PORTG_RG0 PORTGbits.RG0
#define PORTG_RG1 PORTGbits.RG1
#define PORTG_RG2 PORTGbits.RG2
#define PORTG_RG3 PORTGbits.RG3
#define PORTG_RG4 PORTGbits.RG4
#define PORTG_RG5 PORTGbits.RG5
#define RCON_POR RCONbits.POR
#define RCSTA1_CREN RCSTA1bits.CREN
#define RCSTA2_CREN RCSTA2bits.CREN
#define RCSTA_CREN RCSTAbits.CREN
#define RESET ( ) Reset()
#define ROM rom
```

Examples:

[ex_file_read.c](#), [ex_httpgetvar.c](#), [ex_httpgetvar2.c](#), and [ex_tcp_sendfile.c](#).

```
#define SET_BIT ( theByte,
```

```

                mask      )  (theByte != mask)
#define SLEEP (    )  Sleep()
#define SSPCON1_WCOL  SSPCON1bits.WCOL
#define SSPCON2_ACKDT  SSPCON2bits.ACKDT
#define SSPCON2_ACKEN  SSPCON2bits.ACKEN
#define SSPCON2_ACKSTAT  SSPCON2bits.ACKSTAT
#define SSPCON2_PEN  SSPCON2bits.PEN
#define SSPCON2_RCEN  SSPCON2bits.RCEN
#define SSPCON2_RSEN  SSPCON2bits.RSEN
#define SSPCON2_SEN  SSPCON2bits.SEN
#define SSPSTAT_BF  SSPSTATbits.BF
#define SSPSTAT_R_W  SSPSTATbits.R_W
#define T0CON_TMR0ON  T0CONbits.TMR0ON
#define T2CON_TMR2ON  T2CONbits.TMR2ON
#define T4CON_TMR4ON  T4CONbits.TMR4ON
#define TRISA_RA0  TRISAbits.TRISA0
#define TRISA_RA1  TRISAbits.TRISA1
#define TRISA_RA2  TRISAbits.TRISA2
#define TRISA_RA3  TRISAbits.TRISA3
#define TRISA_RA4  TRISAbits.TRISA4
#define TRISA_RA5  TRISAbits.TRISA5
#define TRISB_RB0  TRISBbits.TRISB0
#define TRISB_RB1  TRISBbits.TRISB1
#define TRISB_RB2  TRISBbits.TRISB2
#define TRISB_RB3  TRISBbits.TRISB3
#define TRISB_RB4  TRISBbits.TRISB4
#define TRISB_RB5  TRISBbits.TRISB5
#define TRISB_RB6  TRISBbits.TRISB6
Examples:
    ex\_udp\_client2.c

#define TRISB_RB7  TRISBbits.TRISB7
#define TRISC_RC0  TRISCbits.TRISC0
#define TRISC_RC1  TRISCbits.TRISC1
#define TRISC_RC2  TRISCbits.TRISC2
#define TRISC_RC3  TRISCbits.TRISC3

```

```
#define TRISC_RC4 TRISCbits.TRISC4
#define TRISC_RC5 TRISCbits.TRISC5
#define TRISC_RC6 TRISCbits.TRISC6
#define TRISC_RC7 TRISCbits.TRISC7
#define TRISD_RD0 TRISDbits.TRISD0
#define TRISD_RD1 TRISDbits.TRISD1
#define TRISD_RD2 TRISDbits.TRISD2
#define TRISD_RD3 TRISDbits.TRISD3
#define TRISD_RD4 TRISDbits.TRISD4
#define TRISD_RD5 TRISDbits.TRISD5
#define TRISD_RD6 TRISDbits.TRISD6
#define TRISD_RD7 TRISDbits.TRISD7
#define TRISE_RE0 TRISEbits.TRISE0
#define TRISE_RE1 TRISEbits.TRISE1
#define TRISE_RE2 TRISEbits.TRISE2
#define TRISE_RE3 TRISEbits.TRISE3
#define TRISE_RE4 TRISEbits.TRISE4
#define TRISE_RE5 TRISEbits.TRISE5
#define TRISE_RE6 TRISEbits.TRISE6
#define TRISE_RE7 TRISEbits.TRISE7
#define TRISF_RF0 TRISFbits.TRISF0
#define TRISF_RF1 TRISFbits.TRISF1
#define TRISF_RF2 TRISFbits.TRISF2
#define TRISF_RF3 TRISFbits.TRISF3
#define TRISF_RF4 TRISFbits.TRISF4
#define TRISF_RF5 TRISFbits.TRISF5
#define TRISF_RF6 TRISFbits.TRISF6
#define TRISF_RF7 TRISFbits.TRISF7
#define TRISG_RG0 TRISGbits.TRISG0
#define TRISG_RG1 TRISGbits.TRISG1
#define TRISG_RG2 TRISGbits.TRISG2
#define TRISG_RG3 TRISGbits.TRISG3
#define TRISG_RG4 TRISGbits.TRISG4
#define TRISG_RG5 TRISGbits.TRISG5
#define TXSTA1_BRGH TXSTA1bits.BRGH
#define TXSTA1_TRMT TXSTA1bits.TRMT
```

```
#define TXSTA2_BRGH TXSTA2bits.BRGH
#define TXSTA2_TRMT TXSTA2bits.TRMT
#define TXSTA_BRGH TXSTAbits.BRGH
#define TXSTA_TRMT TXSTAbits.TRMT
#define UPPER_LSB ( a ) ((a).v[2])
#define UPPER_MSB ( a ) ((a).v[3])
#define WORD_LSB ( a ) ((unsigned char)((WORD_ARRAY)a).offset0 )
#define WORD_MSB ( a ) ((unsigned char)((WORD_ARRAY)a).offset1 )
```

Typedef Documentation

typedef enum [_BOOL](#) [BOOL](#)

typedef [BYTE](#) [BUFFER](#)

typedef unsigned char [BYTE](#)

Examples:

[ex_file_image.c](#), [ex_file_read.c](#), [ex_httpexecgetcmd.c](#), [ex_httpgetvar.c](#), [ex_httpgetvar2.c](#),
[ex_tcp.c](#), [ex_tcp_client.c](#), [ex_tcp_echo.c](#), [ex_tcp_sendfile.c](#), [ex_udp.c](#), [ex_udp_client.c](#),
[ex_udp_client2.c](#), [ex_udp_echo.c](#), and [ex_udp_echo2.c](#).

typedef union [_BYTE_VAL](#) [BYTE_VAL](#)

typedef unsigned long [DWORD](#)

typedef union [_DWORD_VAL](#) [DWORD_VAL](#)

typedef unsigned short long [SWORD](#)

typedef union [_SWORD_VAL](#) [SWORD_VAL](#)

typedef unsigned short int [WORD](#)

Examples:

[ex_httpgetvar.c](#), [ex_httpgetvar2.c](#), and [ex_udp_echo2.c](#).

typedef struct [_WORD_ARRAY](#) [WORD_ARRAY](#)

typedef union [_WORD_VAL](#) [WORD_VAL](#)

Enumeration Type Documentation

enum [_BOOL](#)

Enumerator:

FALSE

TRUE
