

p24FJ256GB110

```

/*-----
 * MPLAB-Cxx PIC24FJ256GB110 processor header
 *
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 *-----*/

```

```

#ifndef __PIC24FJ256GB110__
#error "Include file does not match processor setting"
#endif

```

```

#ifndef __24FJ256GB110_H
#define __24FJ256GB110_H

```

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extern volatile unsigned int WREG0
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG1
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG2
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG3
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG4
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG5
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG6
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG7
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG8
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG9
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG10
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG11
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG12
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG13
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG14
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int WREG15
__attribute__((__sfr__, __deprecated__, __unsafe__));
extern volatile unsigned int SPLIM __attribute__((__sfr__));
extern volatile unsigned int PCL __attribute__((__sfr__));
extern volatile unsigned char PCH __attribute__((__sfr__));
extern volatile unsigned char TBLPAG __attribute__((__sfr__));
extern volatile unsigned char PSVPAG __attribute__((__sfr__));
extern volatile unsigned int RCOUNT __attribute__((__sfr__));
extern volatile unsigned int SR __attribute__((__sfr__));
__extension__ typedef struct tagSRBITS {
    union {
        struct {
            unsigned C: 1;
            unsigned Z: 1;
            unsigned OV: 1;
            unsigned N: 1;
            unsigned RA: 1;
            unsigned IPL: 3;
            unsigned DC: 1;
        };
    };
    struct {
        unsigned : 5;
        unsigned IPL0: 1;
        unsigned IPL1: 1;
        unsigned IPL2: 1;
    };
};

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    };
};
} SRBITS;
extern volatile SRBITS SRbits __attribute__((__sfr__));

extern volatile unsigned int CORCON __attribute__((__sfr__));
typedef struct tagCORCONBITS {
    unsigned :2;
    unsigned PSV:1;
    unsigned IPL3:1;
} CORCONBITS;
extern volatile CORCONBITS CORCONbits __attribute__((__sfr__));

extern volatile unsigned int DISICNT __attribute__((__sfr__));
extern volatile unsigned int CNPD1 __attribute__((__sfr__));
typedef struct tagCNPD1BITS {
    unsigned CNOPDE:1;
    unsigned CN1PDE:1;
    unsigned CN2PDE:1;
    unsigned CN3PDE:1;
    unsigned CN4PDE:1;
    unsigned CN5PDE:1;
    unsigned CN6PDE:1;
    unsigned CN7PDE:1;
    unsigned CN8PDE:1;
    unsigned CN9PDE:1;
    unsigned CN10PDE:1;
    unsigned CN11PDE:1;
    unsigned CN12PDE:1;
    unsigned CN13PDE:1;
    unsigned CN14PDE:1;
    unsigned CN15PDE:1;
} CNPD1BITS;
extern volatile CNPD1BITS CNPD1bits __attribute__((__sfr__));

extern volatile unsigned int CNPD2 __attribute__((__sfr__));
typedef struct tagCNPD2BITS {
    unsigned CN16PDE:1;
    unsigned CN17PDE:1;
    unsigned CN18PDE:1;
    unsigned CN19PDE:1;
    unsigned CN20PDE:1;
    unsigned CN21PDE:1;
    unsigned CN22PDE:1;
    unsigned CN23PDE:1;
    unsigned CN24PDE:1;
    unsigned CN25PDE:1;
    unsigned CN26PDE:1;
    unsigned CN27PDE:1;
    unsigned CN28PDE:1;
    unsigned CN29PDE:1;
    unsigned CN30PDE:1;
    unsigned CN31PDE:1;
} CNPD2BITS;
extern volatile CNPD2BITS CNPD2bits __attribute__((__sfr__));

extern volatile unsigned int CNPD3 __attribute__((__sfr__));
typedef struct tagCNPD3BITS {
    unsigned CN32PDE:1;
    unsigned CN33PDE:1;
    unsigned CN34PDE:1;
    unsigned CN35PDE:1;
    unsigned CN36PDE:1;
    unsigned CN37PDE:1;
    unsigned CN38PDE:1;
    unsigned CN39PDE:1;
    unsigned CN40PDE:1;
    unsigned CN41PDE:1;

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    unsigned CN42PDE: 1;
    unsigned CN43PDE: 1;
    unsigned CN44PDE: 1;
    unsigned CN45PDE: 1;
    unsigned CN46PDE: 1;
    unsigned CN47PDE: 1;
} CNPD3BITS;
extern volatile CNPD3BITS CNPD3bits __attribute__((__sfr__));

extern volatile unsigned int CNPD4 __attribute__((__sfr__));
typedef struct tagCNP4BITS {
    unsigned CN48PDE: 1;
    unsigned CN49PDE: 1;
    unsigned CN50PDE: 1;
    unsigned CN51PDE: 1;
    unsigned CN52PDE: 1;
    unsigned CN53PDE: 1;
    unsigned CN54PDE: 1;
    unsigned CN55PDE: 1;
    unsigned CN56PDE: 1;
    unsigned CN57PDE: 1;
    unsigned CN58PDE: 1;
    unsigned CN59PDE: 1;
    unsigned CN60PDE: 1;
    unsigned CN61PDE: 1;
    unsigned CN62PDE: 1;
    unsigned CN63PDE: 1;
} CNPD4BITS;
extern volatile CNPD4BITS CNPD4bits __attribute__((__sfr__));

extern volatile unsigned int CNPD5 __attribute__((__sfr__));
typedef struct tagCNP5BITS {
    unsigned CN64PDE: 1;
    unsigned CN65PDE: 1;
    unsigned CN66PDE: 1;
    unsigned CN67PDE: 1;
    unsigned CN68PDE: 1;
    unsigned CN69PDE: 1;
    unsigned CN70PDE: 1;
    unsigned CN71PDE: 1;
    unsigned : 2;
    unsigned CN74PDE: 1;
    unsigned CN75PDE: 1;
    unsigned CN76PDE: 1;
    unsigned CN77PDE: 1;
    unsigned CN78PDE: 1;
    unsigned CN79PDE: 1;
} CNPD5BITS;
extern volatile CNPD5BITS CNPD5bits __attribute__((__sfr__));

extern volatile unsigned int CNPD6 __attribute__((__sfr__));
typedef struct tagCNP6BITS {
    unsigned CN80PDE: 1;
    unsigned CN81PDE: 1;
    unsigned CN82PDE: 1;
} CNPD6BITS;
extern volatile CNPD6BITS CNPD6bits __attribute__((__sfr__));

extern volatile unsigned int CNEN1 __attribute__((__sfr__));
typedef struct tagCNE1BITS {
    unsigned CN01E: 1;
    unsigned CN11E: 1;
    unsigned CN21E: 1;
    unsigned CN31E: 1;
    unsigned CN41E: 1;
    unsigned CN51E: 1;
    unsigned CN61E: 1;
    unsigned CN71E: 1;

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    unsigned CN81E: 1;
    unsigned CN91E: 1;
    unsigned CN101E: 1;
    unsigned CN111E: 1;
    unsigned CN121E: 1;
    unsigned CN131E: 1;
    unsigned CN141E: 1;
    unsigned CN151E: 1;
} CNEN1BITS;
extern volatile CNEN1BITS CNEN1bits __attribute__((__sfr__));

extern volatile unsigned int CNEN2 __attribute__((__sfr__));
typedef struct tagCNEN2BITS {
    unsigned CN161E: 1;
    unsigned CN171E: 1;
    unsigned CN181E: 1;
    unsigned CN191E: 1;
    unsigned CN201E: 1;
    unsigned CN211E: 1;
    unsigned CN221E: 1;
    unsigned CN231E: 1;
    unsigned CN241E: 1;
    unsigned CN251E: 1;
    unsigned CN261E: 1;
    unsigned CN271E: 1;
    unsigned CN281E: 1;
    unsigned CN291E: 1;
    unsigned CN301E: 1;
    unsigned CN311E: 1;
} CNEN2BITS;
extern volatile CNEN2BITS CNEN2bits __attribute__((__sfr__));

extern volatile unsigned int CNEN3 __attribute__((__sfr__));
typedef struct tagCNEN3BITS {
    unsigned CN321E: 1;
    unsigned CN331E: 1;
    unsigned CN341E: 1;
    unsigned CN351E: 1;
    unsigned CN361E: 1;
    unsigned CN371E: 1;
    unsigned CN381E: 1;
    unsigned CN391E: 1;
    unsigned CN401E: 1;
    unsigned CN411E: 1;
    unsigned CN421E: 1;
    unsigned CN431E: 1;
    unsigned CN441E: 1;
    unsigned CN451E: 1;
    unsigned CN461E: 1;
    unsigned CN471E: 1;
} CNEN3BITS;
extern volatile CNEN3BITS CNEN3bits __attribute__((__sfr__));

extern volatile unsigned int CNEN4 __attribute__((__sfr__));
typedef struct tagCNEN4BITS {
    unsigned CN481E: 1;
    unsigned CN491E: 1;
    unsigned CN501E: 1;
    unsigned CN511E: 1;
    unsigned CN521E: 1;
    unsigned CN531E: 1;
    unsigned CN541E: 1;
    unsigned CN551E: 1;
    unsigned CN561E: 1;
    unsigned CN571E: 1;
    unsigned CN581E: 1;
    unsigned CN591E: 1;
    unsigned CN601E: 1;
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    unsigned CN611E: 1;
    unsigned CN621E: 1;
    unsigned CN631E: 1;
} CNEN4BITS;
extern volatile CNEN4BITS CNEN4bits __attribute__((__sfr__));

extern volatile unsigned int CNEN5 __attribute__((__sfr__));
typedef struct tagCNEN5BITS {
    unsigned CN641E: 1;
    unsigned CN651E: 1;
    unsigned CN661E: 1;
    unsigned CN671E: 1;
    unsigned CN681E: 1;
    unsigned CN691E: 1;
    unsigned CN701E: 1;
    unsigned CN711E: 1;
    unsigned : 2;
    unsigned CN741E: 1;
    unsigned CN751E: 1;
    unsigned CN761E: 1;
    unsigned CN771E: 1;
    unsigned CN781E: 1;
    unsigned CN791E: 1;
} CNEN5BITS;
extern volatile CNEN5BITS CNEN5bits __attribute__((__sfr__));

extern volatile unsigned int CNEN6 __attribute__((__sfr__));
typedef struct tagCNEN6BITS {
    unsigned CN801E: 1;
    unsigned CN811E: 1;
    unsigned CN821E: 1;
} CNEN6BITS;
extern volatile CNEN6BITS CNEN6bits __attribute__((__sfr__));

extern volatile unsigned int CNPU1 __attribute__((__sfr__));
typedef struct tagCNPU1BITS {
    unsigned CNOPUE: 1;
    unsigned CN1PUE: 1;
    unsigned CN2PUE: 1;
    unsigned CN3PUE: 1;
    unsigned CN4PUE: 1;
    unsigned CN5PUE: 1;
    unsigned CN6PUE: 1;
    unsigned CN7PUE: 1;
    unsigned CN8PUE: 1;
    unsigned CN9PUE: 1;
    unsigned CN10PUE: 1;
    unsigned CN11PUE: 1;
    unsigned CN12PUE: 1;
    unsigned CN13PUE: 1;
    unsigned CN14PUE: 1;
    unsigned CN15PUE: 1;
} CNPU1BITS;
extern volatile CNPU1BITS CNPU1bits __attribute__((__sfr__));

extern volatile unsigned int CNPU2 __attribute__((__sfr__));
typedef struct tagCNPU2BITS {
    unsigned CN16PUE: 1;
    unsigned CN17PUE: 1;
    unsigned CN18PUE: 1;
    unsigned CN19PUE: 1;
    unsigned CN20PUE: 1;
    unsigned CN21PUE: 1;
    unsigned CN22PUE: 1;
    unsigned CN23PUE: 1;
    unsigned CN24PUE: 1;
    unsigned CN25PUE: 1;
    unsigned CN26PUE: 1;
} CNPU2BITS;

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    unsigned CN27PUE: 1;
    unsigned CN28PUE: 1;
    unsigned CN29PUE: 1;
    unsigned CN30PUE: 1;
    unsigned CN31PUE: 1;
} CNPU2BITS;
extern volatile CNPU2BITS CNPU2bits __attribute__((__sfr__));

extern volatile unsigned int CNPU3 __attribute__((__sfr__));
typedef struct tagCNPU3BITS {
    unsigned CN32PUE: 1;
    unsigned CN33PUE: 1;
    unsigned CN34PUE: 1;
    unsigned CN35PUE: 1;
    unsigned CN36PUE: 1;
    unsigned CN37PUE: 1;
    unsigned CN38PUE: 1;
    unsigned CN39PUE: 1;
    unsigned CN40PUE: 1;
    unsigned CN41PUE: 1;
    unsigned CN42PUE: 1;
    unsigned CN43PUE: 1;
    unsigned CN44PUE: 1;
    unsigned CN45PUE: 1;
    unsigned CN46PUE: 1;
    unsigned CN47PUE: 1;
} CNPU3BITS;
extern volatile CNPU3BITS CNPU3bits __attribute__((__sfr__));

extern volatile unsigned int CNPU4 __attribute__((__sfr__));
typedef struct tagCNPU4BITS {
    unsigned CN48PUE: 1;
    unsigned CN49PUE: 1;
    unsigned CN50PUE: 1;
    unsigned CN51PUE: 1;
    unsigned CN52PUE: 1;
    unsigned CN53PUE: 1;
    unsigned CN54PUE: 1;
    unsigned CN55PUE: 1;
    unsigned CN56PUE: 1;
    unsigned CN57PUE: 1;
    unsigned CN58PUE: 1;
    unsigned CN59PUE: 1;
    unsigned CN60PUE: 1;
    unsigned CN61PUE: 1;
    unsigned CN62PUE: 1;
    unsigned CN63PUE: 1;
} CNPU4BITS;
extern volatile CNPU4BITS CNPU4bits __attribute__((__sfr__));

extern volatile unsigned int CNPU5 __attribute__((__sfr__));
typedef struct tagCNPU5BITS {
    unsigned CN64PUE: 1;
    unsigned CN65PUE: 1;
    unsigned CN66PUE: 1;
    unsigned CN67PUE: 1;
    unsigned CN68PUE: 1;
    unsigned CN69PUE: 1;
    unsigned CN70PUE: 1;
    unsigned CN71PUE: 1;
    unsigned : 2;
    unsigned CN74PUE: 1;
    unsigned CN75PUE: 1;
    unsigned CN76PUE: 1;
    unsigned CN77PUE: 1;
    unsigned CN78PUE: 1;
    unsigned CN79PUE: 1;
} CNPU5BITS;

```

p24FJ256GB110

```
extern volatile CNPU5BITS CNPU5bits __attribute__((__sfr__));
extern volatile unsigned int CNPU6 __attribute__((__sfr__));
typedef struct tagCNPU6BITS {
    unsigned CN80PUE: 1;
    unsigned CN81PUE: 1;
    unsigned CN82PUE: 1;
} CNPU6BITS;
extern volatile CNPU6BITS CNPU6bits __attribute__((__sfr__));

extern volatile unsigned int INTCON1 __attribute__((__sfr__));
typedef struct tagINTCON1BITS {
    unsigned : 1;
    unsigned OSCFAIL: 1;
    unsigned STKERR: 1;
    unsigned ADDRERR: 1;
    unsigned MATHERR: 1;
    unsigned : 10;
    unsigned NSTDIS: 1;
} INTCON1BITS;
extern volatile INTCON1BITS INTCON1bits __attribute__((__sfr__));

extern volatile unsigned int INTCON2 __attribute__((__sfr__));
typedef struct tagINTCON2BITS {
    unsigned INTOEP: 1;
    unsigned INT1EP: 1;
    unsigned INT2EP: 1;
    unsigned INT3EP: 1;
    unsigned INT4EP: 1;
    unsigned : 9;
    unsigned DISI: 1;
    unsigned ALTI VT: 1;
} INTCON2BITS;
extern volatile INTCON2BITS INTCON2bits __attribute__((__sfr__));

extern volatile unsigned int IFS0 __attribute__((__sfr__));
typedef struct tagIFS0BITS {
    unsigned INTOIF: 1;
    unsigned IC1IF: 1;
    unsigned OC1IF: 1;
    unsigned T1IF: 1;
    unsigned : 1;
    unsigned IC2IF: 1;
    unsigned OC2IF: 1;
    unsigned T2IF: 1;
    unsigned T3IF: 1;
    unsigned SPF1IF: 1;
    unsigned SPI1IF: 1;
    unsigned U1RXIF: 1;
    unsigned U1TXIF: 1;
    unsigned AD1IF: 1;
} IFS0BITS;
extern volatile IFS0BITS IFS0bits __attribute__((__sfr__));

extern volatile unsigned int IFS1 __attribute__((__sfr__));
typedef struct tagIFS1BITS {
    unsigned SI2C1IF: 1;
    unsigned MI2C1IF: 1;
    unsigned CMI F: 1;
    unsigned CNI F: 1;
    unsigned INT1IF: 1;
    unsigned : 1;
    unsigned IC7IF: 1;
    unsigned IC8IF: 1;
    unsigned : 1;
    unsigned OC3IF: 1;
    unsigned OC4IF: 1;
    unsigned T4IF: 1;
```

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    unsigned T5IF: 1;
    unsigned INT2IF: 1;
    unsigned U2RXIF: 1;
    unsigned U2TXIF: 1;
} IFS1BITS;
extern volatile IFS1BITS IFS1bits __attribute__((__sfr__));

extern volatile unsigned int IFS2 __attribute__((__sfr__));
typedef struct tagIFS2BITS {
    unsigned SPF2IF: 1;
    unsigned SPI2IF: 1;
    unsigned : 3;
    unsigned IC3IF: 1;
    unsigned IC4IF: 1;
    unsigned IC5IF: 1;
    unsigned IC6IF: 1;
    unsigned OC5IF: 1;
    unsigned OC6IF: 1;
    unsigned OC7IF: 1;
    unsigned OC8IF: 1;
    unsigned PMPIF: 1;
} IFS2BITS;
extern volatile IFS2BITS IFS2bits __attribute__((__sfr__));

extern volatile unsigned int IFS3 __attribute__((__sfr__));
typedef struct tagIFS3BITS {
    unsigned : 1;
    unsigned SI2C2IF: 1;
    unsigned MI2C2IF: 1;
    unsigned : 2;
    unsigned INT3IF: 1;
    unsigned INT4IF: 1;
    unsigned : 7;
    unsigned RTCIF: 1;
} IFS3BITS;
extern volatile IFS3BITS IFS3bits __attribute__((__sfr__));

extern volatile unsigned int IFS4 __attribute__((__sfr__));
typedef struct tagIFS4BITS {
    unsigned : 1;
    unsigned U1ERIF: 1;
    unsigned U2ERIF: 1;
    unsigned CRCIF: 1;
    unsigned : 4;
    unsigned LVDIF: 1;
    unsigned : 4;
    unsigned CTMUIF: 1;
} IFS4BITS;
extern volatile IFS4BITS IFS4bits __attribute__((__sfr__));

extern volatile unsigned int IFS5 __attribute__((__sfr__));
typedef struct tagIFS5BITS {
    unsigned : 1;
    unsigned U3ERIF: 1;
    unsigned U3RXIF: 1;
    unsigned U3TXIF: 1;
    unsigned SI2C3IF: 1;
    unsigned MI2C3IF: 1;
    unsigned USB1IF: 1;
    unsigned U4ERIF: 1;
    unsigned U4RXIF: 1;
    unsigned U4TXIF: 1;
    unsigned SPF3IF: 1;
    unsigned SPI3IF: 1;
    unsigned OC9IF: 1;
    unsigned IC9IF: 1;
} IFS5BITS;
extern volatile IFS5BITS IFS5bits __attribute__((__sfr__));

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extern volatile unsigned int IEC0 __attribute__((__sfr__));
typedef struct tagIECOBITS {
    unsigned INT0IE: 1;
    unsigned IC1IE: 1;
    unsigned OC1IE: 1;
    unsigned T1IE: 1;
    unsigned : 1;
    unsigned IC2IE: 1;
    unsigned OC2IE: 1;
    unsigned T2IE: 1;
    unsigned T3IE: 1;
    unsigned SPF1IE: 1;
    unsigned SPI1IE: 1;
    unsigned U1RXIE: 1;
    unsigned U1TXIE: 1;
    unsigned AD1IE: 1;
} IECOBITS;
extern volatile IECOBITS IECObits __attribute__((__sfr__));

extern volatile unsigned int IEC1 __attribute__((__sfr__));
typedef struct tagIEC1BITS {
    unsigned SI2C1IE: 1;
    unsigned MI2C1IE: 1;
    unsigned CMIIE: 1;
    unsigned CNIIE: 1;
    unsigned INT1IE: 1;
    unsigned : 1;
    unsigned IC7IE: 1;
    unsigned IC8IE: 1;
    unsigned : 1;
    unsigned OC3IE: 1;
    unsigned OC4IE: 1;
    unsigned T4IE: 1;
    unsigned T5IE: 1;
    unsigned INT2IE: 1;
    unsigned U2RXIE: 1;
    unsigned U2TXIE: 1;
} IEC1BITS;
extern volatile IEC1BITS IEC1bits __attribute__((__sfr__));

extern volatile unsigned int IEC2 __attribute__((__sfr__));
typedef struct tagIEC2BITS {
    unsigned SPF2IE: 1;
    unsigned SPI2IE: 1;
    unsigned : 3;
    unsigned IC3IE: 1;
    unsigned IC4IE: 1;
    unsigned IC5IE: 1;
    unsigned IC6IE: 1;
    unsigned OC5IE: 1;
    unsigned OC6IE: 1;
    unsigned OC7IE: 1;
    unsigned OC8IE: 1;
    unsigned PMPIE: 1;
} IEC2BITS;
extern volatile IEC2BITS IEC2bits __attribute__((__sfr__));

extern volatile unsigned int IEC3 __attribute__((__sfr__));
typedef struct tagIEC3BITS {
    unsigned : 1;
    unsigned SI2C2IE: 1;
    unsigned MI2C2IE: 1;
    unsigned : 2;
    unsigned INT3IE: 1;
    unsigned INT4IE: 1;
    unsigned : 7;
    unsigned RTCIE: 1;

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} IEC3BITS;
extern volatile IEC3BITS IEC3bits __attribute__((__sfr__));

extern volatile unsigned int IEC4 __attribute__((__sfr__));
typedef struct tagIEC4BITS {
    unsigned : 1;
    unsigned U1ERIE: 1;
    unsigned U2ERIE: 1;
    unsigned CRCIE: 1;
    unsigned : 4;
    unsigned LVDIE: 1;
    unsigned : 4;
    unsigned CTMUIE: 1;
} IEC4BITS;
extern volatile IEC4BITS IEC4bits __attribute__((__sfr__));

extern volatile unsigned int IEC5 __attribute__((__sfr__));
typedef struct tagIEC5BITS {
    unsigned : 1;
    unsigned U3ERIE: 1;
    unsigned U3RXIE: 1;
    unsigned U3TXIE: 1;
    unsigned SI2C3IE: 1;
    unsigned MI2C3IE: 1;
    unsigned USB1IE: 1;
    unsigned U4ERIE: 1;
    unsigned U4RXIE: 1;
    unsigned U4TXIE: 1;
    unsigned SPF3IE: 1;
    unsigned SPI3IE: 1;
    unsigned OC9IE: 1;
    unsigned IC9IE: 1;
} IEC5BITS;
extern volatile IEC5BITS IEC5bits __attribute__((__sfr__));

extern volatile unsigned int IPC0 __attribute__((__sfr__));
__extension__ typedef struct tagIPC0BITS {
    union {
        struct {
            unsigned INTOIP: 3;
            unsigned : 1;
            unsigned IC1IP: 3;
            unsigned : 1;
            unsigned OC1IP: 3;
            unsigned : 1;
            unsigned T1IP: 3;
        };
        struct {
            unsigned INTOIP0: 1;
            unsigned INTOIP1: 1;
            unsigned INTOIP2: 1;
            unsigned : 1;
            unsigned IC1IP0: 1;
            unsigned IC1IP1: 1;
            unsigned IC1IP2: 1;
            unsigned : 1;
            unsigned OC1IP0: 1;
            unsigned OC1IP1: 1;
            unsigned OC1IP2: 1;
            unsigned : 1;
            unsigned T1IP0: 1;
            unsigned T1IP1: 1;
            unsigned T1IP2: 1;
        };
    };
} IPC0BITS;
extern volatile IPC0BITS IPC0bits __attribute__((__sfr__));

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extern volatile unsigned int IPC1 __attribute__((__sfr__));
__extension__ typedef struct tagIPC1BITS {
    union {
        struct {
            unsigned : 4;
            unsigned IC2IP: 3;
            unsigned : 1;
            unsigned OC2IP: 3;
            unsigned : 1;
            unsigned T2IP: 3;
        };
        struct {
            unsigned : 4;
            unsigned IC2IP0: 1;
            unsigned IC2IP1: 1;
            unsigned IC2IP2: 1;
            unsigned : 1;
            unsigned OC2IP0: 1;
            unsigned OC2IP1: 1;
            unsigned OC2IP2: 1;
            unsigned : 1;
            unsigned T2IP0: 1;
            unsigned T2IP1: 1;
            unsigned T2IP2: 1;
        };
    };
} IPC1BITS;
extern volatile IPC1BITS IPC1bits __attribute__((__sfr__));

extern volatile unsigned int IPC2 __attribute__((__sfr__));
__extension__ typedef struct tagIPC2BITS {
    union {
        struct {
            unsigned T3IP: 3;
            unsigned : 1;
            unsigned SPF1IP: 3;
            unsigned : 1;
            unsigned SPI1IP: 3;
            unsigned : 1;
            unsigned U1RXIP: 3;
        };
        struct {
            unsigned T3IP0: 1;
            unsigned T3IP1: 1;
            unsigned T3IP2: 1;
            unsigned : 1;
            unsigned SPF1IP0: 1;
            unsigned SPF1IP1: 1;
            unsigned SPF1IP2: 1;
            unsigned : 1;
            unsigned SPI1IP0: 1;
            unsigned SPI1IP1: 1;
            unsigned SPI1IP2: 1;
            unsigned : 1;
            unsigned U1RXIP0: 1;
            unsigned U1RXIP1: 1;
            unsigned U1RXIP2: 1;
        };
    };
} IPC2BITS;
extern volatile IPC2BITS IPC2bits __attribute__((__sfr__));

extern volatile unsigned int IPC3 __attribute__((__sfr__));
__extension__ typedef struct tagIPC3BITS {
    union {
        struct {
            unsigned U1TXIP: 3;
            unsigned : 1;
        };
    };
}

```

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    unsigned AD11P: 3;
};
struct {
    unsigned U1TXI P0: 1;
    unsigned U1TXI P1: 1;
    unsigned U1TXI P2: 1;
    unsigned : 1;
    unsigned AD11 P0: 1;
    unsigned AD11 P1: 1;
    unsigned AD11 P2: 1;
};
};
} IPC3BITS;
extern volatile IPC3BITS IPC3bits __attribute__((__sfr__));

extern volatile unsigned int IPC4 __attribute__((__sfr__));
__extension__ typedef struct tagIPC4BITS {
    union {
        struct {
            unsigned SI 2C1P: 3;
            unsigned : 1;
            unsigned MI 2C1P: 3;
            unsigned : 1;
            unsigned CMI P: 3;
            unsigned : 1;
            unsigned CNI P: 3;
        };
        struct {
            unsigned SI 2C1P: 3;
            unsigned : 1;
            unsigned MI 2C1P: 3;
        };
        struct {
            unsigned SI 2C1P0: 1;
            unsigned SI 2C1P1: 1;
            unsigned SI 2C1P2: 1;
            unsigned : 1;
            unsigned MI 2C1P0: 1;
            unsigned MI 2C1P1: 1;
            unsigned MI 2C1P2: 1;
            unsigned : 1;
            unsigned CMI P0: 1;
            unsigned CMI P1: 1;
            unsigned CMI P2: 1;
            unsigned : 1;
            unsigned CNI P0: 1;
            unsigned CNI P1: 1;
            unsigned CNI P2: 1;
        };
        struct {
            unsigned SI 2C1P0: 1;
            unsigned SI 2C1P1: 1;
            unsigned SI 2C1P2: 1;
            unsigned : 1;
            unsigned MI 2C1P0: 1;
            unsigned MI 2C1P1: 1;
            unsigned MI 2C1P2: 1;
        };
    };
};
} IPC4BITS;
extern volatile IPC4BITS IPC4bits __attribute__((__sfr__));

extern volatile unsigned int IPC5 __attribute__((__sfr__));
__extension__ typedef struct tagIPC5BITS {
    union {
        struct {
            unsigned INT1P: 3;
            unsigned : 5;

```

```

    unsigned IC7IP: 3;
    unsigned : 1;
    unsigned IC8IP: 3;
};
struct {
    unsigned INT1IP0: 1;
    unsigned INT1IP1: 1;
    unsigned INT1IP2: 1;
    unsigned : 5;
    unsigned IC7IP0: 1;
    unsigned IC7IP1: 1;
    unsigned IC7IP2: 1;
    unsigned : 1;
    unsigned IC8IP0: 1;
    unsigned IC8IP1: 1;
    unsigned IC8IP2: 1;
};
};
} IPC5BITS;
extern volatile IPC5BITS IPC5bits __attribute__((__sfr__));

extern volatile unsigned int IPC6 __attribute__((__sfr__));
__extension__ typedef struct tagIPC6BITS {
    union {
        struct {
            unsigned : 4;
            unsigned OC3IP: 3;
            unsigned : 1;
            unsigned OC4IP: 3;
            unsigned : 1;
            unsigned T4IP: 3;
        };
        struct {
            unsigned : 4;
            unsigned OC3IP0: 1;
            unsigned OC3IP1: 1;
            unsigned OC3IP2: 1;
            unsigned : 1;
            unsigned OC4IP0: 1;
            unsigned OC4IP1: 1;
            unsigned OC4IP2: 1;
            unsigned : 1;
            unsigned T4IP0: 1;
            unsigned T4IP1: 1;
            unsigned T4IP2: 1;
        };
    };
};
} IPC6BITS;
extern volatile IPC6BITS IPC6bits __attribute__((__sfr__));

extern volatile unsigned int IPC7 __attribute__((__sfr__));
__extension__ typedef struct tagIPC7BITS {
    union {
        struct {
            unsigned T5IP: 3;
            unsigned : 1;
            unsigned INT2IP: 3;
            unsigned : 1;
            unsigned U2RXIP: 3;
            unsigned : 1;
            unsigned U2TXIP: 3;
        };
        struct {
            unsigned T5IP0: 1;
            unsigned T5IP1: 1;
            unsigned T5IP2: 1;
            unsigned : 1;
            unsigned INT2IP0: 1;
        };
    };
};
} IPC7BITS;
extern volatile IPC7BITS IPC7bits __attribute__((__sfr__));

```

```

    unsigned INT2I P1: 1;
    unsigned INT2I P2: 1;
    unsigned : 1;
    unsigned U2RXI P0: 1;
    unsigned U2RXI P1: 1;
    unsigned U2RXI P2: 1;
    unsigned : 1;
    unsigned U2TXI P0: 1;
    unsigned U2TXI P1: 1;
    unsigned U2TXI P2: 1;
};
};
} IPC7BITS;
extern volatile IPC7BITS IPC7bits __attribute__((__sfr__));

extern volatile unsigned int IPC8 __attribute__((__sfr__));
__extension__ typedef struct tagIPC8BITS {
    union {
        struct {
            unsigned SPF2I P: 3;
            unsigned : 1;
            unsigned SPI 2I P: 3;
        };
        struct {
            unsigned SPF2I P0: 1;
            unsigned SPF2I P1: 1;
            unsigned SPF2I P2: 1;
            unsigned : 1;
            unsigned SPI 2I P0: 1;
            unsigned SPI 2I P1: 1;
            unsigned SPI 2I P2: 1;
        };
    };
};
} IPC8BITS;
extern volatile IPC8BITS IPC8bits __attribute__((__sfr__));

extern volatile unsigned int IPC9 __attribute__((__sfr__));
__extension__ typedef struct tagIPC9BITS {
    union {
        struct {
            unsigned : 4;
            unsigned IC3I P: 3;
            unsigned : 1;
            unsigned IC4I P: 3;
            unsigned : 1;
            unsigned IC5I P: 3;
        };
        struct {
            unsigned : 4;
            unsigned IC3I P0: 1;
            unsigned IC3I P1: 1;
            unsigned IC3I P2: 1;
            unsigned : 1;
            unsigned IC4I P0: 1;
            unsigned IC4I P1: 1;
            unsigned IC4I P2: 1;
            unsigned : 1;
            unsigned IC5I P0: 1;
            unsigned IC5I P1: 1;
            unsigned IC5I P2: 1;
        };
    };
};
} IPC9BITS;
extern volatile IPC9BITS IPC9bits __attribute__((__sfr__));

extern volatile unsigned int IPC10 __attribute__((__sfr__));
__extension__ typedef struct tagIPC10BITS {
    union {

```

```

struct {
    unsigned IC6IP: 3;
    unsigned : 1;
    unsigned OC5IP: 3;
    unsigned : 1;
    unsigned OC6IP: 3;
    unsigned : 1;
    unsigned OC7IP: 3;
};
struct {
    unsigned IC6IP0: 1;
    unsigned IC6IP1: 1;
    unsigned IC6IP2: 1;
    unsigned : 1;
    unsigned OC5IP0: 1;
    unsigned OC5IP1: 1;
    unsigned OC5IP2: 1;
    unsigned : 1;
    unsigned OC6IP0: 1;
    unsigned OC6IP1: 1;
    unsigned OC6IP2: 1;
    unsigned : 1;
    unsigned OC7IP0: 1;
    unsigned OC7IP1: 1;
    unsigned OC7IP2: 1;
};
};
} IPC10BITS;
extern volatile IPC10BITS IPC10bits __attribute__((__sfr__));

extern volatile unsigned int IPC11 __attribute__((__sfr__));
__extension__ typedef struct tagIPC11BITS {
    union {
        struct {
            unsigned OC8IP: 3;
            unsigned : 1;
            unsigned PMPIP: 3;
        };
        struct {
            unsigned OC8IP0: 1;
            unsigned OC8IP1: 1;
            unsigned OC8IP2: 1;
            unsigned : 1;
            unsigned PMPIP0: 1;
            unsigned PMPIP1: 1;
            unsigned PMPIP2: 1;
        };
    };
};
} IPC11BITS;
extern volatile IPC11BITS IPC11bits __attribute__((__sfr__));

extern volatile unsigned int IPC12 __attribute__((__sfr__));
__extension__ typedef struct tagIPC12BITS {
    union {
        struct {
            unsigned : 4;
            unsigned SI2C2P: 3;
            unsigned : 1;
            unsigned MI2C2P: 3;
        };
        struct {
            unsigned : 4;
            unsigned SI2C2IP: 3;
            unsigned : 1;
            unsigned MI2C2IP: 3;
        };
        struct {
            unsigned : 4;
        };
    };
};

```

```

    unsigned SI 2C2P0: 1;
    unsigned SI 2C2P1: 1;
    unsigned SI 2C2P2: 1;
    unsigned : 1;
    unsigned MI 2C2P0: 1;
    unsigned MI 2C2P1: 1;
    unsigned MI 2C2P2: 1;
};
struct {
    unsigned : 4;
    unsigned SI 2C2I P0: 1;
    unsigned SI 2C2I P1: 1;
    unsigned SI 2C2I P2: 1;
    unsigned : 1;
    unsigned MI 2C2I P0: 1;
    unsigned MI 2C2I P1: 1;
    unsigned MI 2C2I P2: 1;
};
};
} IPC12BITS;
extern volatile IPC12BITS IPC12bits __attribute__((__sfr__));

extern volatile unsigned int IPC13 __attribute__((__sfr__));
__extension__ typedef struct tagIPC13BITS {
    union {
        struct {
            unsigned : 4;
            unsigned INT3I P: 3;
            unsigned : 1;
            unsigned INT4I P: 3;
        };
        struct {
            unsigned : 4;
            unsigned INT3I P0: 1;
            unsigned INT3I P1: 1;
            unsigned INT3I P2: 1;
            unsigned : 1;
            unsigned INT4I P0: 1;
            unsigned INT4I P1: 1;
            unsigned INT4I P2: 1;
        };
    };
};
} IPC13BITS;
extern volatile IPC13BITS IPC13bits __attribute__((__sfr__));

extern volatile unsigned int IPC15 __attribute__((__sfr__));
__extension__ typedef struct tagIPC15BITS {
    union {
        struct {
            unsigned : 8;
            unsigned RTCI P: 3;
        };
        struct {
            unsigned : 8;
            unsigned RTCI P0: 1;
            unsigned RTCI P1: 1;
            unsigned RTCI P2: 1;
        };
    };
};
} IPC15BITS;
extern volatile IPC15BITS IPC15bits __attribute__((__sfr__));

extern volatile unsigned int IPC16 __attribute__((__sfr__));
__extension__ typedef struct tagIPC16BITS {
    union {
        struct {
            unsigned : 4;
            unsigned U1ERI P: 3;

```



```

    unsigned : 1;
    unsigned U2ERIP: 3;
    unsigned : 1;
    unsigned CRCP: 3;
};
struct {
    unsigned : 4;
    unsigned U1ERIP0: 1;
    unsigned U1ERIP1: 1;
    unsigned U1ERIP2: 1;
    unsigned : 1;
    unsigned U2ERIP0: 1;
    unsigned U2ERIP1: 1;
    unsigned U2ERIP2: 1;
    unsigned : 1;
    unsigned CRCP0: 1;
    unsigned CRCP1: 1;
    unsigned CRCP2: 1;
};
};
} IPC16BITS;
extern volatile IPC16BITS IPC16bits __attribute__((__sfr__));

extern volatile unsigned int IPC18 __attribute__((__sfr__));
__extension__ typedef struct tagIPC18BITS {
    union {
        struct {
            unsigned LVDIP: 3;
        };
        struct {
            unsigned LVDIP0: 1;
            unsigned LVDIP1: 1;
            unsigned LVDIP2: 1;
        };
    };
};
} IPC18BITS;
extern volatile IPC18BITS IPC18bits __attribute__((__sfr__));

extern volatile unsigned int IPC19 __attribute__((__sfr__));
__extension__ typedef struct tagIPC19BITS {
    union {
        struct {
            unsigned : 4;
            unsigned CTMUIP: 3;
        };
        struct {
            unsigned : 4;
            unsigned CTMUIP0: 1;
            unsigned CTMUIP1: 1;
            unsigned CTMUIP2: 1;
        };
    };
};
} IPC19BITS;
extern volatile IPC19BITS IPC19bits __attribute__((__sfr__));

extern volatile unsigned int IPC20 __attribute__((__sfr__));
__extension__ typedef struct tagIPC20BITS {
    union {
        struct {
            unsigned : 4;
            unsigned U3ERIP: 3;
            unsigned : 1;
            unsigned U3RXIP: 3;
            unsigned : 1;
            unsigned U3TXIP: 3;
        };
        struct {
            unsigned : 4;
        };
    };
};
}

```

```

    unsigned U3ERI P0: 1;
    unsigned U3ERI P1: 1;
    unsigned U3ERI P2: 1;
    unsigned : 1;
    unsigned U3RXI P0: 1;
    unsigned U3RXI P1: 1;
    unsigned U3RXI P2: 1;
    unsigned : 1;
    unsigned U3TXI P0: 1;
    unsigned U3TXI P1: 1;
    unsigned U3TXI P2: 1;
};
};
} IPC20BITS;
extern volatile IPC20BITS IPC20bits __attribute__((__sfr__));

extern volatile unsigned int IPC21 __attribute__((__sfr__));
__extension__ typedef struct tagIPC21BITS {
    union {
        struct {
            unsigned SI2C3P: 3;
            unsigned : 1;
            unsigned MI2C3P: 3;
            unsigned : 1;
            unsigned USB1IP: 3;
            unsigned : 1;
            unsigned U4ERI P: 3;
        };
        struct {
            unsigned SI2C3P0: 1;
            unsigned SI2C3P1: 1;
            unsigned SI2C3P2: 1;
            unsigned : 1;
            unsigned MI2C3P0: 1;
            unsigned MI2C3P1: 1;
            unsigned MI2C3P2: 1;
            unsigned : 1;
            unsigned USB1IP0: 1;
            unsigned USB1IP1: 1;
            unsigned USB1IP2: 1;
            unsigned : 1;
            unsigned U4ERI P0: 1;
            unsigned U4ERI P1: 1;
            unsigned U4ERI P2: 1;
        };
    };
};
} IPC21BITS;
extern volatile IPC21BITS IPC21bits __attribute__((__sfr__));

extern volatile unsigned int IPC22 __attribute__((__sfr__));
__extension__ typedef struct tagIPC22BITS {
    union {
        struct {
            unsigned U4RXI P: 3;
            unsigned : 1;
            unsigned U4TXI P: 3;
            unsigned : 1;
            unsigned SPF3IP: 3;
            unsigned : 1;
            unsigned SPI3IP: 3;
        };
        struct {
            unsigned U4RXI P0: 1;
            unsigned U4RXI P1: 1;
            unsigned U4RXI P2: 1;
            unsigned : 1;
            unsigned U4TXI P0: 1;
            unsigned U4TXI P1: 1;
        };
    };
};

```

```

    unsigned U4TXI P2: 1;
    unsigned : 1;
    unsigned SPF3I P0: 1;
    unsigned SPF3I P1: 1;
    unsigned SPF3I P2: 1;
    unsigned : 1;
    unsigned SPI 3I P0: 1;
    unsigned SPI 3I P1: 1;
    unsigned SPI 3I P2: 1;
};
};
} IPC22BITS;
extern volatile IPC22BITS IPC22bits __attribute__((__sfr__));

extern volatile unsigned int IPC23 __attribute__((__sfr__));
__extension__ typedef struct tagIPC23BITS {
    union {
        struct {
            unsigned OC9I P: 3;
            unsigned : 1;
            unsigned IC9I P: 3;
        };
        struct {
            unsigned OC9I P0: 1;
            unsigned OC9I P1: 1;
            unsigned OC9I P2: 1;
            unsigned : 1;
            unsigned IC9I P0: 1;
            unsigned IC9I P1: 1;
            unsigned IC9I P2: 1;
        };
    };
};
} IPC23BITS;
extern volatile IPC23BITS IPC23bits __attribute__((__sfr__));

extern volatile unsigned int INTTREG __attribute__((__sfr__));
__extension__ typedef struct tagINTTREGBITS {
    union {
        struct {
            unsigned VECNUM: 6;
            unsigned : 2;
            unsigned ILR: 4;
            unsigned : 2;
            unsigned TMODE: 1;
            unsigned IRQtoCPU: 1;
        };
        struct {
            unsigned VECNUM0: 1;
            unsigned VECNUM1: 1;
            unsigned VECNUM2: 1;
            unsigned VECNUM3: 1;
            unsigned VECNUM4: 1;
            unsigned VECNUM5: 1;
            unsigned : 2;
            unsigned ILR0: 1;
            unsigned ILR1: 1;
            unsigned ILR2: 1;
            unsigned ILR3: 1;
        };
    };
};
} INTTREGBITS;
extern volatile INTTREGBITS INTTREGbits __attribute__((__sfr__));

extern volatile unsigned int TMR1 __attribute__((__sfr__));
extern volatile unsigned int PR1 __attribute__((__sfr__));
extern volatile unsigned int T1CON __attribute__((__sfr__));
__extension__ typedef struct tagT1CONBITS {
    union {

```

```

struct {
    unsigned : 1;
    unsigned TCS: 1;
    unsigned TSYNC: 1;
    unsigned : 1;
    unsigned TCKPS: 2;
    unsigned TGATE: 1;
    unsigned : 6;
    unsigned TSI DL: 1;
    unsigned : 1;
    unsigned TON: 1;
};
struct {
    unsigned : 4;
    unsigned TCKPS0: 1;
    unsigned TCKPS1: 1;
};
};
} T1CONBITS;
extern volatile T1CONBITS T1CONbits __attribute__((__sfr__));

extern volatile unsigned int TMR2 __attribute__((__sfr__));
extern volatile unsigned int TMR3HLD __attribute__((__sfr__));
extern volatile unsigned int TMR3 __attribute__((__sfr__));
extern volatile unsigned int PR2 __attribute__((__sfr__));
extern volatile unsigned int PR3 __attribute__((__sfr__));
extern volatile unsigned int T2CON __attribute__((__sfr__));
__extension__ typedef struct tagT2CONBITS {
    union {
        struct {
            unsigned : 1;
            unsigned TCS: 1;
            unsigned : 1;
            unsigned T32: 1;
            unsigned TCKPS: 2;
            unsigned TGATE: 1;
            unsigned : 6;
            unsigned TSI DL: 1;
            unsigned : 1;
            unsigned TON: 1;
        };
        struct {
            unsigned : 4;
            unsigned TCKPS0: 1;
            unsigned TCKPS1: 1;
        };
    };
};
} T2CONBITS;
extern volatile T2CONBITS T2CONbits __attribute__((__sfr__));

extern volatile unsigned int T3CON __attribute__((__sfr__));
__extension__ typedef struct tagT3CONBITS {
    union {
        struct {
            unsigned : 1;
            unsigned TCS: 1;
            unsigned : 2;
            unsigned TCKPS: 2;
            unsigned TGATE: 1;
            unsigned : 6;
            unsigned TSI DL: 1;
            unsigned : 1;
            unsigned TON: 1;
        };
        struct {
            unsigned : 4;
            unsigned TCKPS0: 1;
            unsigned TCKPS1: 1;
        };
    };
};
} T3CONBITS;
extern volatile T3CONBITS T3CONbits __attribute__((__sfr__));

```

```

    };
};
} T3CONBITS;
extern volatile T3CONBITS T3CONbits __attribute__((__sfr__));

extern volatile unsigned int TMR4 __attribute__((__sfr__));
extern volatile unsigned int TMR5HLD __attribute__((__sfr__));
extern volatile unsigned int TMR5 __attribute__((__sfr__));
extern volatile unsigned int PR4 __attribute__((__sfr__));
extern volatile unsigned int PR5 __attribute__((__sfr__));
extern volatile unsigned int T4CON __attribute__((__sfr__));
__extension__ typedef struct tagT4CONBITS {
    union {
        struct {
            unsigned : 1;
            unsigned TCS: 1;
            unsigned : 1;
            unsigned T32: 1;
            unsigned TCKPS: 2;
            unsigned TGATE: 1;
            unsigned : 6;
            unsigned TSI DL: 1;
            unsigned : 1;
            unsigned TON: 1;
        };
        struct {
            unsigned : 4;
            unsigned TCKPS0: 1;
            unsigned TCKPS1: 1;
        };
    };
};
} T4CONBITS;
extern volatile T4CONBITS T4CONbits __attribute__((__sfr__));

extern volatile unsigned int T5CON __attribute__((__sfr__));
__extension__ typedef struct tagT5CONBITS {
    union {
        struct {
            unsigned : 1;
            unsigned TCS: 1;
            unsigned : 2;
            unsigned TCKPS: 2;
            unsigned TGATE: 1;
            unsigned : 6;
            unsigned TSI DL: 1;
            unsigned : 1;
            unsigned TON: 1;
        };
        struct {
            unsigned : 4;
            unsigned TCKPS0: 1;
            unsigned TCKPS1: 1;
        };
    };
};
} T5CONBITS;
extern volatile T5CONBITS T5CONbits __attribute__((__sfr__));

extern volatile unsigned int IC1CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC1CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSI DL: 1;
        };
    };
};

```

```

};
struct {
    unsigned ICM0: 1;
    unsigned ICM1: 1;
    unsigned ICM2: 1;
    unsigned : 2;
    unsigned IC10: 1;
    unsigned IC11: 1;
    unsigned : 3;
    unsigned ICTSEL0: 1;
    unsigned ICTSEL1: 1;
    unsigned ICTSEL2: 1;
};
};
} IC1CON1BITS;
extern volatile IC1CON1BITS IC1CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC1CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC1CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned : 1;
            unsigned TRIGSTAT: 1;
            unsigned ICTRIG: 1;
            unsigned IC32: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
        };
    };
};
} IC1CON2BITS;
extern volatile IC1CON2BITS IC1CON2bits __attribute__((__sfr__));

/* Generic structure of entire SFR area for Input Capture modules */
typedef struct tagIC {
    unsigned int icxbuf;
    unsigned int icxcon;
} IC, *PIC;

/* SFR blocks for Input Capture modules */
extern volatile IC IC1 __attribute__((__sfr__));
extern volatile IC IC2 __attribute__((__sfr__));
extern volatile IC IC3 __attribute__((__sfr__));
extern volatile IC IC4 __attribute__((__sfr__));
extern volatile IC IC5 __attribute__((__sfr__));

extern volatile unsigned int IC1BUF __attribute__((__sfr__));
extern volatile unsigned int IC1TMR __attribute__((__sfr__));
extern volatile unsigned int IC2CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC2CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSIDL: 1;
        };
        struct {
            unsigned ICM0: 1;

```

```

    unsigned ICM1: 1;
    unsigned ICM2: 1;
    unsigned : 2;
    unsigned ICI0: 1;
    unsigned ICI1: 1;
    unsigned : 3;
    unsigned ICTSELO: 1;
    unsigned ICTSEL1: 1;
    unsigned ICTSEL2: 1;
};
};
} IC2CON1BITS;
extern volatile IC2CON1BITS IC2CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC2CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC2CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned : 1;
            unsigned TRIGSTAT: 1;
            unsigned ICTRIG: 1;
            unsigned IC32: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
        };
    };
};
} IC2CON2BITS;
extern volatile IC2CON2BITS IC2CON2bits __attribute__((__sfr__));

extern volatile unsigned int IC2BUF __attribute__((__sfr__));
extern volatile unsigned int IC2TMR __attribute__((__sfr__));
extern volatile unsigned int IC3CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC3CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSIDL: 1;
        };
        struct {
            unsigned ICM0: 1;
            unsigned ICM1: 1;
            unsigned ICM2: 1;
            unsigned : 2;
            unsigned ICI0: 1;
            unsigned ICI1: 1;
            unsigned : 3;
            unsigned ICTSELO: 1;
            unsigned ICTSEL1: 1;
            unsigned ICTSEL2: 1;
        };
    };
};
} IC3CON1BITS;
extern volatile IC3CON1BITS IC3CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC3CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC3CON2BITS {
    union {

```

```

struct {
    unsigned SYNCSEL: 5;
    unsigned : 1;
    unsigned TRIGSTAT: 1;
    unsigned ICTRIG: 1;
    unsigned IC32: 1;
};
struct {
    unsigned SYNCSELO: 1;
    unsigned SYNCSEL1: 1;
    unsigned SYNCSEL2: 1;
    unsigned SYNCSEL3: 1;
    unsigned SYNCSEL4: 1;
};
};
} IC3CON2BITS;
extern volatile IC3CON2BITS IC3CON2bits __attribute__((__sfr__));

extern volatile unsigned int IC3BUF __attribute__((__sfr__));
extern volatile unsigned int IC3TMR __attribute__((__sfr__));
extern volatile unsigned int IC4CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC4CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSIDL: 1;
        };
        struct {
            unsigned ICMO: 1;
            unsigned ICM1: 1;
            unsigned ICM2: 1;
            unsigned : 2;
            unsigned ICIO: 1;
            unsigned ICI1: 1;
            unsigned : 3;
            unsigned ICTSELO: 1;
            unsigned ICTSEL1: 1;
            unsigned ICTSEL2: 1;
        };
    };
};
} IC4CON1BITS;
extern volatile IC4CON1BITS IC4CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC4CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC4CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned : 1;
            unsigned TRIGSTAT: 1;
            unsigned ICTRIG: 1;
            unsigned IC32: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
        };
    };
};
} IC4CON2BITS;
extern volatile IC4CON2BITS IC4CON2bits __attribute__((__sfr__));

```


p24FJ256GB110

```

extern volatile unsigned int IC4BUF __attribute__((__sfr__));
extern volatile unsigned int IC4TMR __attribute__((__sfr__));
extern volatile unsigned int IC5CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC5CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSIDL: 1;
        };
        struct {
            unsigned ICMO: 1;
            unsigned ICM1: 1;
            unsigned ICM2: 1;
            unsigned : 2;
            unsigned ICIO: 1;
            unsigned ICI1: 1;
            unsigned : 3;
            unsigned ICTSELO: 1;
            unsigned ICTSEL1: 1;
            unsigned ICTSEL2: 1;
        };
    };
} IC5CON1BITS;
extern volatile IC5CON1BITS IC5CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC5CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC5CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned : 1;
            unsigned TRIGSTAT: 1;
            unsigned ICTRIG: 1;
            unsigned IC32: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
        };
    };
} IC5CON2BITS;
extern volatile IC5CON2BITS IC5CON2bits __attribute__((__sfr__));

extern volatile unsigned int IC5BUF __attribute__((__sfr__));
extern volatile unsigned int IC5TMR __attribute__((__sfr__));
extern volatile unsigned int IC6CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC6CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSIDL: 1;
        };
        struct {
            unsigned ICMO: 1;

```

```

    unsigned ICM1: 1;
    unsigned ICM2: 1;
    unsigned : 2;
    unsigned ICI0: 1;
    unsigned ICI1: 1;
    unsigned : 3;
    unsigned ICTSELO: 1;
    unsigned ICTSEL1: 1;
    unsigned ICTSEL2: 1;
};
};
} IC6CON1BITS;
extern volatile IC6CON1BITS IC6CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC6CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC6CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned : 1;
            unsigned TRIGSTAT: 1;
            unsigned ICTRIG: 1;
            unsigned IC32: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
        };
    };
};
} IC6CON2BITS;
extern volatile IC6CON2BITS IC6CON2bits __attribute__((__sfr__));

extern volatile unsigned int IC6BUF __attribute__((__sfr__));
extern volatile unsigned int IC6TMR __attribute__((__sfr__));
extern volatile unsigned int IC7CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC7CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSIDL: 1;
        };
        struct {
            unsigned ICM0: 1;
            unsigned ICM1: 1;
            unsigned ICM2: 1;
            unsigned : 2;
            unsigned ICI0: 1;
            unsigned ICI1: 1;
            unsigned : 3;
            unsigned ICTSELO: 1;
            unsigned ICTSEL1: 1;
            unsigned ICTSEL2: 1;
        };
    };
};
} IC7CON1BITS;
extern volatile IC7CON1BITS IC7CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC7CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC7CON2BITS {
    union {

```

```

struct {
    unsigned SYNCSEL: 5;
    unsigned : 1;
    unsigned TRIGSTAT: 1;
    unsigned ICTRIG: 1;
    unsigned IC32: 1;
};
struct {
    unsigned SYNCSELO: 1;
    unsigned SYNCSEL1: 1;
    unsigned SYNCSEL2: 1;
    unsigned SYNCSEL3: 1;
    unsigned SYNCSEL4: 1;
};
};
} IC7CON2BITS;
extern volatile IC7CON2BITS IC7CON2bits __attribute__((__sfr__));

extern volatile unsigned int IC7BUF __attribute__((__sfr__));
extern volatile unsigned int IC7TMR __attribute__((__sfr__));
extern volatile unsigned int IC8CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC8CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSIDL: 1;
        };
        struct {
            unsigned ICM0: 1;
            unsigned ICM1: 1;
            unsigned ICM2: 1;
            unsigned : 2;
            unsigned ICIO: 1;
            unsigned ICI1: 1;
            unsigned : 3;
            unsigned ICTSELO: 1;
            unsigned ICTSEL1: 1;
            unsigned ICTSEL2: 1;
        };
    };
};
} IC8CON1BITS;
extern volatile IC8CON1BITS IC8CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC8CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC8CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned : 1;
            unsigned TRIGSTAT: 1;
            unsigned ICTRIG: 1;
            unsigned IC32: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
        };
    };
};
} IC8CON2BITS;
extern volatile IC8CON2BITS IC8CON2bits __attribute__((__sfr__));

```

p24FJ256GB110

```

extern volatile unsigned int IC8BUF __attribute__((__sfr__));
extern volatile unsigned int IC8TMR __attribute__((__sfr__));
extern volatile unsigned int IC9CON1 __attribute__((__sfr__));
__extension__ typedef struct tagIC9CON1BITS {
    union {
        struct {
            unsigned ICM: 3;
            unsigned ICBNE: 1;
            unsigned ICOV: 1;
            unsigned ICI: 2;
            unsigned : 3;
            unsigned ICTSEL: 3;
            unsigned ICSIDL: 1;
        };
        struct {
            unsigned ICMO: 1;
            unsigned ICM1: 1;
            unsigned ICM2: 1;
            unsigned : 2;
            unsigned ICIO: 1;
            unsigned ICI1: 1;
            unsigned : 3;
            unsigned ICTSELO: 1;
            unsigned ICTSEL1: 1;
            unsigned ICTSEL2: 1;
        };
    };
} IC9CON1BITS;
extern volatile IC9CON1BITS IC9CON1bits __attribute__((__sfr__));

extern volatile unsigned int IC9CON2 __attribute__((__sfr__));
__extension__ typedef struct tagIC9CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned : 1;
            unsigned TRIGSTAT: 1;
            unsigned ICTRIG: 1;
            unsigned IC32: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
        };
    };
} IC9CON2BITS;
extern volatile IC9CON2BITS IC9CON2bits __attribute__((__sfr__));

extern volatile unsigned int IC9BUF __attribute__((__sfr__));
extern volatile unsigned int IC9TMR __attribute__((__sfr__));
extern volatile unsigned int OC1CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC1CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;
            unsigned OCFLT0: 1;
            unsigned : 2;
            unsigned ENFLT0: 1;
            unsigned : 2;
            unsigned OCTSEL: 3;
            unsigned OCSIDL: 1;
        };
        struct {

```

```

    unsigned OCM0: 1;
    unsigned OCM1: 1;
    unsigned OCM2: 1;
    unsigned : 1;
    unsigned OCFLT: 1;
    unsigned : 2;
    unsigned ENFLT: 1;
    unsigned : 2;
    unsigned OCTSELO: 1;
    unsigned OCTSEL1: 1;
    unsigned OCTSEL2: 1;
};
};
} OC1CON1BITS;
extern volatile OC1CON1BITS OC1CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC1CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC1CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned OCTRIS: 1;
            unsigned TRIGSTAT: 1;
            unsigned OCTRIG: 1;
            unsigned OC32: 1;
            unsigned : 3;
            unsigned OCINV: 1;
            unsigned FLTTRIGEN: 1;
            unsigned FLTOUT: 1;
            unsigned FLTMD: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
            unsigned : 10;
            unsigned FLTMODE: 1;
        };
    };
};
} OC1CON2BITS;
extern volatile OC1CON2BITS OC1CON2bits __attribute__((__sfr__));

/* Generic structure of entire SFR area for Output Compare modules */
typedef struct tagOC {
    unsigned int ocxrs;
    unsigned int ocxr;
    unsigned int ocxcon;
} OC, *POC;

/* SFR blocks for Output Compare modules */
extern volatile OC OC1 __attribute__((__sfr__));
extern volatile OC OC2 __attribute__((__sfr__));
extern volatile OC OC3 __attribute__((__sfr__));
extern volatile OC OC4 __attribute__((__sfr__));
extern volatile OC OC5 __attribute__((__sfr__));

extern volatile unsigned int OC1RS __attribute__((__sfr__));
extern volatile unsigned int OC1R __attribute__((__sfr__));
extern volatile unsigned int OC1TMR __attribute__((__sfr__));
extern volatile unsigned int OC2CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC2CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;

```

```

    unsigned OCFLTO: 1;
    unsigned : 2;
    unsigned ENFLTO: 1;
    unsigned : 2;
    unsigned OCTSEL: 3;
    unsigned OCSIDL: 1;
};
struct {
    unsigned OCM0: 1;
    unsigned OCM1: 1;
    unsigned OCM2: 1;
    unsigned : 1;
    unsigned OCFLT: 1;
    unsigned : 2;
    unsigned ENFLT: 1;
    unsigned : 2;
    unsigned OCTSELO: 1;
    unsigned OCTSEL1: 1;
    unsigned OCTSEL2: 1;
};
};
} OC2CON1BITS;
extern volatile OC2CON1BITS OC2CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC2CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC2CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned OCTRIS: 1;
            unsigned TRIGSTAT: 1;
            unsigned OCTRIG: 1;
            unsigned OC32: 1;
            unsigned : 3;
            unsigned OCINV: 1;
            unsigned FLTTREN: 1;
            unsigned FLTOUT: 1;
            unsigned FLTMD: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
            unsigned : 10;
            unsigned FLTMODE: 1;
        };
    };
};
} OC2CON2BITS;
extern volatile OC2CON2BITS OC2CON2bits __attribute__((__sfr__));

extern volatile unsigned int OC2RS __attribute__((__sfr__));
extern volatile unsigned int OC2R __attribute__((__sfr__));
extern volatile unsigned int OC2TMR __attribute__((__sfr__));
extern volatile unsigned int OC3CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC3CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;
            unsigned OCFLTO: 1;
            unsigned : 2;
            unsigned ENFLTO: 1;
            unsigned : 2;
            unsigned OCTSEL: 3;
            unsigned OCSIDL: 1;
        };
    };
};

```

```

struct {
    unsigned OCM0: 1;
    unsigned OCM1: 1;
    unsigned OCM2: 1;
    unsigned : 1;
    unsigned OCFLT: 1;
    unsigned : 2;
    unsigned ENFLT: 1;
    unsigned : 2;
    unsigned OCTSELO: 1;
    unsigned OCTSEL1: 1;
    unsigned OCTSEL2: 1;
};
} OC3CON1BITS;
extern volatile OC3CON1BITS OC3CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC3CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC3CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned OCTRIS: 1;
            unsigned TRIGSTAT: 1;
            unsigned OCTRIG: 1;
            unsigned OC32: 1;
            unsigned : 3;
            unsigned OCINV: 1;
            unsigned FLTTREN: 1;
            unsigned FLTOUT: 1;
            unsigned FLTMD: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
            unsigned : 10;
            unsigned FLTMODE: 1;
        };
    };
} OC3CON2BITS;
extern volatile OC3CON2BITS OC3CON2bits __attribute__((__sfr__));

extern volatile unsigned int OC3RS __attribute__((__sfr__));
extern volatile unsigned int OC3R __attribute__((__sfr__));
extern volatile unsigned int OC3TMR __attribute__((__sfr__));
extern volatile unsigned int OC4CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC4CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;
            unsigned OCFLTO: 1;
            unsigned : 2;
            unsigned ENFLTO: 1;
            unsigned : 2;
            unsigned OCTSEL: 3;
            unsigned OCSIDL: 1;
        };
        struct {
            unsigned OCM0: 1;
            unsigned OCM1: 1;
            unsigned OCM2: 1;
            unsigned : 1;
            unsigned OCFLT: 1;
            unsigned : 2;
        };
    };
} OC4CON1BITS;
extern volatile OC4CON1BITS OC4CON1bits __attribute__((__sfr__));

```

```

    unsigned ENFLT: 1;
    unsigned : 2;
    unsigned OCTSELO: 1;
    unsigned OCTSEL1: 1;
    unsigned OCTSEL2: 1;
};
};
} OC4CON1BITS;
extern volatile OC4CON1BITS OC4CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC4CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC4CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned OCTRIS: 1;
            unsigned TRIGSTAT: 1;
            unsigned OCTRIG: 1;
            unsigned OC32: 1;
            unsigned : 3;
            unsigned OCINV: 1;
            unsigned FLTTRIGEN: 1;
            unsigned FLTOUT: 1;
            unsigned FLTMD: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
            unsigned : 10;
            unsigned FLTMODE: 1;
        };
    };
};
} OC4CON2BITS;
extern volatile OC4CON2BITS OC4CON2bits __attribute__((__sfr__));

extern volatile unsigned int OC4RS __attribute__((__sfr__));
extern volatile unsigned int OC4R __attribute__((__sfr__));
extern volatile unsigned int OC4TMR __attribute__((__sfr__));
extern volatile unsigned int OC5CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC5CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;
            unsigned OCFLT0: 1;
            unsigned : 2;
            unsigned ENFLT0: 1;
            unsigned : 2;
            unsigned OCTSEL: 3;
            unsigned OCSIDL: 1;
        };
        struct {
            unsigned OCM0: 1;
            unsigned OCM1: 1;
            unsigned OCM2: 1;
            unsigned : 1;
            unsigned OCFLT: 1;
            unsigned : 2;
            unsigned ENFLT: 1;
            unsigned : 2;
            unsigned OCTSELO: 1;
            unsigned OCTSEL1: 1;
            unsigned OCTSEL2: 1;
        };
    };
};
};

```



```

} OC5CON1BITS;
extern volatile OC5CON1BITS OC5CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC5CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC5CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned OCTRIS: 1;
            unsigned TRIGSTAT: 1;
            unsigned OCTRIG: 1;
            unsigned OC32: 1;
            unsigned : 3;
            unsigned OCINV: 1;
            unsigned FLTTRIGEN: 1;
            unsigned FLTOUT: 1;
            unsigned FLTMD: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
            unsigned : 10;
            unsigned FLTMODE: 1;
        };
    };
};
} OC5CON2BITS;
extern volatile OC5CON2BITS OC5CON2bits __attribute__((__sfr__));

extern volatile unsigned int OC5RS __attribute__((__sfr__));
extern volatile unsigned int OC5R __attribute__((__sfr__));
extern volatile unsigned int OC5TMR __attribute__((__sfr__));
extern volatile unsigned int OC6CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC6CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;
            unsigned OCFLTO: 1;
            unsigned : 2;
            unsigned ENFLTO: 1;
            unsigned : 2;
            unsigned OCTSEL: 3;
            unsigned OCSIDL: 1;
        };
        struct {
            unsigned OCMO: 1;
            unsigned OCM1: 1;
            unsigned OCM2: 1;
            unsigned : 1;
            unsigned OCFLT: 1;
            unsigned : 2;
            unsigned ENFLT: 1;
            unsigned : 2;
            unsigned OCTSELO: 1;
            unsigned OCTSEL1: 1;
            unsigned OCTSEL2: 1;
        };
    };
};
} OC6CON1BITS;
extern volatile OC6CON1BITS OC6CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC6CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC6CON2BITS {
    union {
        struct {

```

```

    unsigned SYNCSEL: 5;
    unsigned OCTRIS: 1;
    unsigned TRIGSTAT: 1;
    unsigned OCTRIG: 1;
    unsigned OC32: 1;
    unsigned : 3;
    unsigned OCINV: 1;
    unsigned FLTTREN: 1;
    unsigned FLTOUT: 1;
    unsigned FLTMD: 1;
};
struct {
    unsigned SYNCSELO: 1;
    unsigned SYNCSEL1: 1;
    unsigned SYNCSEL2: 1;
    unsigned SYNCSEL3: 1;
    unsigned SYNCSEL4: 1;
    unsigned : 10;
    unsigned FLTMODE: 1;
};
};
} OC6CON2BITS;
extern volatile OC6CON2BITS OC6CON2bits __attribute__((__sfr__));

extern volatile unsigned int OC6RS __attribute__((__sfr__));
extern volatile unsigned int OC6R __attribute__((__sfr__));
extern volatile unsigned int OC6TMR __attribute__((__sfr__));
extern volatile unsigned int OC7CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC7CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;
            unsigned OCFLTO: 1;
            unsigned : 2;
            unsigned ENFLTO: 1;
            unsigned : 2;
            unsigned OCTSEL: 3;
            unsigned OCSIDL: 1;
        };
        struct {
            unsigned OCMO: 1;
            unsigned OCM1: 1;
            unsigned OCM2: 1;
            unsigned : 1;
            unsigned OCFLT: 1;
            unsigned : 2;
            unsigned ENFLT: 1;
            unsigned : 2;
            unsigned OCTSELO: 1;
            unsigned OCTSEL1: 1;
            unsigned OCTSEL2: 1;
        };
    };
};
} OC7CON1BITS;
extern volatile OC7CON1BITS OC7CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC7CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC7CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned OCTRIS: 1;
            unsigned TRIGSTAT: 1;
            unsigned OCTRIG: 1;
            unsigned OC32: 1;
            unsigned : 3;
            unsigned OCINV: 1;

```

```

    unsigned FLTTRLEN: 1;
    unsigned FLTOUT: 1;
    unsigned FLTMD: 1;
};
struct {
    unsigned SYNCSELO: 1;
    unsigned SYNCSEL1: 1;
    unsigned SYNCSEL2: 1;
    unsigned SYNCSEL3: 1;
    unsigned SYNCSEL4: 1;
    unsigned : 10;
    unsigned FLTMODE: 1;
};
} OC7CON2BITS;
extern volatile OC7CON2BITS OC7CON2bits __attribute__((__sfr__));

extern volatile unsigned int OC7RS __attribute__((__sfr__));
extern volatile unsigned int OC7R __attribute__((__sfr__));
extern volatile unsigned int OC7TMR __attribute__((__sfr__));
extern volatile unsigned int OC8CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC8CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;
            unsigned OCFLT0: 1;
            unsigned : 2;
            unsigned ENFLT0: 1;
            unsigned : 2;
            unsigned OCTSEL: 3;
            unsigned OCSIDL: 1;
        };
        struct {
            unsigned OCM0: 1;
            unsigned OCM1: 1;
            unsigned OCM2: 1;
            unsigned : 1;
            unsigned OCFLT: 1;
            unsigned : 2;
            unsigned ENFLT: 1;
            unsigned : 2;
            unsigned OCTSELO: 1;
            unsigned OCTSEL1: 1;
            unsigned OCTSEL2: 1;
        };
    };
} OC8CON1BITS;
extern volatile OC8CON1BITS OC8CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC8CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC8CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned OCTRIS: 1;
            unsigned TRIGSTAT: 1;
            unsigned OCTRIG: 1;
            unsigned OC32: 1;
            unsigned : 3;
            unsigned OC1NV: 1;
            unsigned FLTTRLEN: 1;
            unsigned FLTOUT: 1;
            unsigned FLTMD: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
        };
    };
} OC8CON2BITS;
extern volatile OC8CON2BITS OC8CON2bits __attribute__((__sfr__));

```

```

    unsigned SYNCSEL2: 1;
    unsigned SYNCSEL3: 1;
    unsigned SYNCSEL4: 1;
    unsigned : 10;
    unsigned FLTMODE: 1;
};
};
} OC8CON2BITS;
extern volatile OC8CON2BITS OC8CON2bits __attribute__((__sfr__));

extern volatile unsigned int OC8RS __attribute__((__sfr__));
extern volatile unsigned int OC8R __attribute__((__sfr__));
extern volatile unsigned int OC8TMR __attribute__((__sfr__));
extern volatile unsigned int OC9CON1 __attribute__((__sfr__));
__extension__ typedef struct tagOC9CON1BITS {
    union {
        struct {
            unsigned OCM: 3;
            unsigned TRIGMODE: 1;
            unsigned OCFLTO: 1;
            unsigned : 2;
            unsigned ENFLTO: 1;
            unsigned : 2;
            unsigned OCTSEL: 3;
            unsigned OCSIDL: 1;
        };
        struct {
            unsigned OCM0: 1;
            unsigned OCM1: 1;
            unsigned OCM2: 1;
            unsigned : 1;
            unsigned OCFLT: 1;
            unsigned : 2;
            unsigned ENFLT: 1;
            unsigned : 2;
            unsigned OCTSELO: 1;
            unsigned OCTSEL1: 1;
            unsigned OCTSEL2: 1;
        };
    };
};
} OC9CON1BITS;
extern volatile OC9CON1BITS OC9CON1bits __attribute__((__sfr__));

extern volatile unsigned int OC9CON2 __attribute__((__sfr__));
__extension__ typedef struct tagOC9CON2BITS {
    union {
        struct {
            unsigned SYNCSEL: 5;
            unsigned OCTRIS: 1;
            unsigned TRIGSTAT: 1;
            unsigned OCTRIG: 1;
            unsigned OC32: 1;
            unsigned : 3;
            unsigned OCINV: 1;
            unsigned FLTTREN: 1;
            unsigned FLTOUT: 1;
            unsigned FLTMD: 1;
        };
        struct {
            unsigned SYNCSELO: 1;
            unsigned SYNCSEL1: 1;
            unsigned SYNCSEL2: 1;
            unsigned SYNCSEL3: 1;
            unsigned SYNCSEL4: 1;
            unsigned : 10;
            unsigned FLTMODE: 1;
        };
    };
};
};
};

```

```

} OC9CON2BITS;
extern volatile OC9CON2BITS OC9CON2bits __attribute__((__sfr__));

extern volatile unsigned int OC9RS __attribute__((__sfr__));
extern volatile unsigned int OC9R __attribute__((__sfr__));
extern volatile unsigned int OC9TMR __attribute__((__sfr__));
extern volatile unsigned int I2C1RCV __attribute__((__sfr__));
extern volatile unsigned int I2C1TRN __attribute__((__sfr__));
extern volatile unsigned int I2C1BRG __attribute__((__sfr__));
extern volatile unsigned int I2C1CON __attribute__((__sfr__));
typedef struct tagI2C1CONBITS {
    unsigned SEN: 1;
    unsigned RSEN: 1;
    unsigned PEN: 1;
    unsigned RCEN: 1;
    unsigned ACKEN: 1;
    unsigned ACKDT: 1;
    unsigned STREN: 1;
    unsigned GCEN: 1;
    unsigned SMEN: 1;
    unsigned DISSLW: 1;
    unsigned A10M: 1;
    unsigned IPMIEN: 1;
    unsigned SCLREL: 1;
    unsigned I2CSI DL: 1;
    unsigned : 1;
    unsigned I2CEN: 1;
} I2C1CONBITS;
extern volatile I2C1CONBITS I2C1CONbits __attribute__((__sfr__));

extern volatile unsigned int I2C1STAT __attribute__((__sfr__));
__extension__ typedef struct tagI2C1STATBITS {
    union {
        struct {
            unsigned TBF: 1;
            unsigned RBF: 1;
            unsigned R_NOT_W: 1;
            unsigned S: 1;
            unsigned P: 1;
            unsigned D_NOT_A: 1;
            unsigned I2COV: 1;
            unsigned I2COL: 1;
            unsigned ADD10: 1;
            unsigned GCSTAT: 1;
            unsigned BCL: 1;
            unsigned : 3;
            unsigned TRSTAT: 1;
            unsigned ACKSTAT: 1;
        };
        struct {
            unsigned : 2;
            unsigned R_W: 1;
            unsigned : 2;
            unsigned D_A: 1;
        };
    };
} I2C1STATBITS;
extern volatile I2C1STATBITS I2C1STATbits __attribute__((__sfr__));

extern volatile unsigned int I2C1ADD __attribute__((__sfr__));
extern volatile unsigned int I2C1MSK __attribute__((__sfr__));
extern volatile unsigned int I2C2RCV __attribute__((__sfr__));
extern volatile unsigned int I2C2TRN __attribute__((__sfr__));
extern volatile unsigned int I2C2BRG __attribute__((__sfr__));
extern volatile unsigned int I2C2CON __attribute__((__sfr__));
typedef struct tagI2C2CONBITS {
    unsigned SEN: 1;
    unsigned RSEN: 1;

```

```

unsigned PEN: 1;
unsigned RCEN: 1;
unsigned ACKEN: 1;
unsigned ACKDT: 1;
unsigned STREN: 1;
unsigned GCEN: 1;
unsigned SMEN: 1;
unsigned DISSLW: 1;
unsigned A10M: 1;
unsigned IPMIEN: 1;
unsigned SCLREL: 1;
unsigned I2CSIDL: 1;
unsigned : 1;
unsigned I2CEN: 1;
} I2C2CONBITS;
extern volatile I2C2CONBITS I2C2CONbits __attribute__((__sfr__));

extern volatile unsigned int I2C2STAT __attribute__((__sfr__));
__extension__ typedef struct tagI2C2STATBITS {
    union {
        struct {
            unsigned TBF: 1;
            unsigned RBF: 1;
            unsigned R_NOT_W: 1;
            unsigned S: 1;
            unsigned P: 1;
            unsigned D_NOT_A: 1;
            unsigned I2COV: 1;
            unsigned IWCOL: 1;
            unsigned ADD10: 1;
            unsigned GCSTAT: 1;
            unsigned BCL: 1;
            unsigned : 3;
            unsigned TRSTAT: 1;
            unsigned ACKSTAT: 1;
        };
        struct {
            unsigned : 2;
            unsigned R_W: 1;
            unsigned : 2;
            unsigned D_A: 1;
        };
    };
} I2C2STATBITS;
extern volatile I2C2STATBITS I2C2STATbits __attribute__((__sfr__));

extern volatile unsigned int I2C2ADD __attribute__((__sfr__));
extern volatile unsigned int I2C2MSK __attribute__((__sfr__));

/* Generic structure of entire SFR area for each UART module */
typedef struct tagUART {
    unsigned int uxmode;
    unsigned int uxsta;
    unsigned int uxtxreg;
    unsigned int uxrreg;
    unsigned int uxbrg;
} UART, *PUART;

#define UxMODEBITS U1MODEBITS
#define UxSTABITS U1STABITS
#define UxTXREGBITS U1TXREGBITS
#define UxRXREGBITS U1RXREGBITS
#define UxBRGBITS U1BRGBITS

/* SFR blocks for each UART module */
extern volatile UART UART1 __attribute__((__sfr__));
extern volatile UART UART2 __attribute__((__sfr__));

```

p24FJ256GB110

```
extern volatile unsigned int U1MODE __attribute__((__sfr__));
__extension__ typedef struct tagU1MODEBITS {
    union {
        struct {
            unsigned STSEL: 1;
            unsigned PDSEL: 2;
            unsigned BRGH: 1;
            unsigned RXINV: 1;
            unsigned ABAUD: 1;
            unsigned LPBACK: 1;
            unsigned WAKE: 1;
            unsigned UEN: 2;
            unsigned : 1;
            unsigned RTSMD: 1;
            unsigned IREN: 1;
            unsigned USIDL: 1;
            unsigned : 1;
            unsigned UARTEN: 1;
        };
        struct {
            unsigned : 1;
            unsigned PDSELO: 1;
            unsigned PDSEL1: 1;
            unsigned : 5;
            unsigned UENO: 1;
            unsigned UEN1: 1;
        };
    };
};
} U1MODEBITS;
extern volatile U1MODEBITS U1MODEbits __attribute__((__sfr__));

extern volatile unsigned int U1STA __attribute__((__sfr__));
__extension__ typedef struct tagU1STABITS {
    union {
        struct {
            unsigned URXDA: 1;
            unsigned OERR: 1;
            unsigned FERR: 1;
            unsigned PERR: 1;
            unsigned RIDLE: 1;
            unsigned ADDEN: 1;
            unsigned URXSEL: 2;
            unsigned TRMT: 1;
            unsigned UTXBF: 1;
            unsigned UTXEN: 1;
            unsigned UTXBRK: 1;
            unsigned : 1;
            unsigned UTXSELO: 1;
            unsigned UTXINV: 1;
            unsigned UTXSEL1: 1;
        };
        struct {
            unsigned : 6;
            unsigned URXSELO: 1;
            unsigned URXSEL1: 1;
        };
    };
};
} U1STABITS;
extern volatile U1STABITS U1STABits __attribute__((__sfr__));

extern volatile unsigned int U1TXREG __attribute__((__sfr__));
extern volatile unsigned int U1RXREG __attribute__((__sfr__));
extern volatile unsigned int U1BRG __attribute__((__sfr__));
extern volatile unsigned int U2MODE __attribute__((__sfr__));
__extension__ typedef struct tagU2MODEBITS {
    union {
        struct {
            unsigned STSEL: 1;
```

```

    unsigned PDSEL: 2;
    unsigned BRGH: 1;
    unsigned RXINV: 1;
    unsigned ABAUD: 1;
    unsigned LPBACK: 1;
    unsigned WAKE: 1;
    unsigned UEN: 2;
    unsigned : 1;
    unsigned RTSMD: 1;
    unsigned IREN: 1;
    unsigned USIDL: 1;
    unsigned : 1;
    unsigned UARTEN: 1;
};
struct {
    unsigned : 1;
    unsigned PDSELO: 1;
    unsigned PDSEL1: 1;
    unsigned : 5;
    unsigned UENO: 1;
    unsigned UEN1: 1;
};
};
} U2MODEBITS;
extern volatile U2MODEBITS U2MODEbits __attribute__((__sfr__));

extern volatile unsigned int U2STA __attribute__((__sfr__));
__extension__ typedef struct tagU2STABITS {
    union {
        struct {
            unsigned URXDA: 1;
            unsigned OERR: 1;
            unsigned FERR: 1;
            unsigned PERR: 1;
            unsigned RIDLE: 1;
            unsigned ADDEN: 1;
            unsigned URXISEL: 2;
            unsigned TRMT: 1;
            unsigned UTXBF: 1;
            unsigned UTXEN: 1;
            unsigned UTXBRK: 1;
            unsigned : 1;
            unsigned UTXISELO: 1;
            unsigned UTXINV: 1;
            unsigned UTXISEL1: 1;
        };
        struct {
            unsigned : 6;
            unsigned URXISELO: 1;
            unsigned URXISEL1: 1;
        };
    };
};
} U2STABITS;
extern volatile U2STABITS U2STAbits __attribute__((__sfr__));

extern volatile unsigned int U2TXREG __attribute__((__sfr__));
extern volatile unsigned int U2RXREG __attribute__((__sfr__));
extern volatile unsigned int U2BRG __attribute__((__sfr__));

/* Generic structure of entire SFR area for each SPI module */
typedef struct tagSPI {
    unsigned int spisstat;
    unsigned int spiscon1;
    unsigned int spiscon2;
    unsigned int unused;
    unsigned int spisbuf;
} SPI, *PSPI;

```



```

#define SPIxSTATBITS SPI1STATBITS
#define SPIxCONBITS SPI1CONBITS

/* SFR blocks for each SPI module */
extern volatile SPI SPI1 __attribute__((__sfr__));
extern volatile SPI SPI2 __attribute__((__sfr__));

extern volatile unsigned int SPI1STAT __attribute__((__sfr__));
__extension__ typedef struct tagSPI1STATBITS {
    union {
        struct {
            unsigned SPIRBF: 1;
            unsigned SPITBF: 1;
            unsigned SISEL: 3;
            unsigned SRXMPT: 1;
            unsigned SPIROV: 1;
            unsigned SRMPT: 1;
            unsigned SPIBEC: 3;
            unsigned : 2;
            unsigned SPISIDL: 1;
            unsigned : 1;
            unsigned SPIEN: 1;
        };
        struct {
            unsigned : 2;
            unsigned SISELO: 1;
            unsigned SISEL1: 1;
            unsigned SISEL2: 1;
            unsigned : 3;
            unsigned SPIBECO: 1;
            unsigned SPIBEC1: 1;
            unsigned SPIBEC2: 1;
        };
    };
};
} SPI1STATBITS;
extern volatile SPI1STATBITS SPI1STATbits __attribute__((__sfr__));

extern volatile unsigned int SPI1CON1 __attribute__((__sfr__));
__extension__ typedef struct tagSPI1CON1BITS {
    union {
        struct {
            unsigned PPRE: 2;
            unsigned SPRE: 3;
            unsigned MSTEN: 1;
            unsigned CKP: 1;
            unsigned SSEN: 1;
            unsigned CKE: 1;
            unsigned SMP: 1;
            unsigned MODE16: 1;
            unsigned DISSDO: 1;
            unsigned DISSCK: 1;
        };
        struct {
            unsigned PPRE0: 1;
            unsigned PPRE1: 1;
            unsigned SPRE0: 1;
            unsigned SPRE1: 1;
            unsigned SPRE2: 1;
        };
    };
};
} SPI1CON1BITS;
extern volatile SPI1CON1BITS SPI1CON1bits __attribute__((__sfr__));

extern volatile unsigned int SPI1CON2 __attribute__((__sfr__));
typedef struct tagSPI1CON2BITS {
    unsigned SPIBEN: 1;
    unsigned SPIFE: 1;
    unsigned : 11;

```

```

    unsigned SPIFPOL: 1;
    unsigned SPIFSD: 1;
    unsigned FRMEN: 1;
} SPI1CON2BITS;
extern volatile SPI1CON2BITS SPI1CON2bits __attribute__((__sfr__));

extern volatile unsigned int SPI1BUF __attribute__((__sfr__));
extern volatile unsigned int U3MODE __attribute__((__sfr__));
__extension__ typedef struct tagU3MODEBITS {
    union {
        struct {
            unsigned STSEL: 1;
            unsigned PDSEL: 2;
            unsigned BRGH: 1;
            unsigned RXINV: 1;
            unsigned ABAUD: 1;
            unsigned LPBACK: 1;
            unsigned WAKE: 1;
            unsigned UEN: 2;
            unsigned : 1;
            unsigned RTSMD: 1;
            unsigned IREN: 1;
            unsigned USIDL: 1;
            unsigned : 1;
            unsigned UARTEN: 1;
        };
        struct {
            unsigned : 1;
            unsigned PDSEL0: 1;
            unsigned PDSEL1: 1;
            unsigned : 5;
            unsigned UENO: 1;
            unsigned UEN1: 1;
        };
    };
} U3MODEBITS;
extern volatile U3MODEBITS U3MODEbits __attribute__((__sfr__));

extern volatile unsigned int U3STA __attribute__((__sfr__));
__extension__ typedef struct tagU3STABITS {
    union {
        struct {
            unsigned URXDA: 1;
            unsigned OERR: 1;
            unsigned FERR: 1;
            unsigned PERR: 1;
            unsigned RIDLE: 1;
            unsigned ADDEN: 1;
            unsigned URXISEL: 2;
            unsigned TRMT: 1;
            unsigned UTXBF: 1;
            unsigned UTXEN: 1;
            unsigned UTXBRK: 1;
            unsigned : 1;
            unsigned UTXISEL0: 1;
            unsigned UTXINV: 1;
            unsigned UTXISEL1: 1;
        };
        struct {
            unsigned : 6;
            unsigned URXISEL0: 1;
            unsigned URXISEL1: 1;
        };
    };
} U3STABITS;
extern volatile U3STABITS U3STAbits __attribute__((__sfr__));

extern volatile unsigned int U3TXREG __attribute__((__sfr__));

```

p24FJ256GB110

```
extern volatile unsigned int U3RXREG __attribute__((__sfr__));
extern volatile unsigned int U3BRG __attribute__((__sfr__));
extern volatile unsigned int SPI2STAT __attribute__((__sfr__));
__extension__ typedef struct tagSPI2STATBITS {
    union {
        struct {
            unsigned SPIRBF: 1;
            unsigned SPITBF: 1;
            unsigned SISEL: 3;
            unsigned SRXMPT: 1;
            unsigned SPIROV: 1;
            unsigned SRMPT: 1;
            unsigned SPIBEC: 3;
            unsigned : 2;
            unsigned SPISIDL: 1;
            unsigned : 1;
            unsigned SPIEN: 1;
        };
        struct {
            unsigned : 2;
            unsigned SISELO: 1;
            unsigned SISEL1: 1;
            unsigned SISEL2: 1;
            unsigned : 3;
            unsigned SPIBEC0: 1;
            unsigned SPIBEC1: 1;
            unsigned SPIBEC2: 1;
        };
    };
} SPI2STATBITS;
extern volatile SPI2STATBITS SPI2STATbits __attribute__((__sfr__));

extern volatile unsigned int SPI2CON1 __attribute__((__sfr__));
__extension__ typedef struct tagSPI2CON1BITS {
    union {
        struct {
            unsigned PPRE: 2;
            unsigned SPRE: 3;
            unsigned MSTEN: 1;
            unsigned CKP: 1;
            unsigned SSEN: 1;
            unsigned CKE: 1;
            unsigned SMP: 1;
            unsigned MODE16: 1;
            unsigned DISSDO: 1;
            unsigned DISSCK: 1;
        };
        struct {
            unsigned PPRE0: 1;
            unsigned PPRE1: 1;
            unsigned SPRE0: 1;
            unsigned SPRE1: 1;
            unsigned SPRE2: 1;
        };
    };
} SPI2CON1BITS;
extern volatile SPI2CON1BITS SPI2CON1bits __attribute__((__sfr__));

extern volatile unsigned int SPI2CON2 __attribute__((__sfr__));
typedef struct tagSPI2CON2BITS {
    unsigned SPIBEN: 1;
    unsigned SPIFE: 1;
    unsigned : 11;
    unsigned SPIFPOL: 1;
    unsigned SPIFSD: 1;
    unsigned FRMEN: 1;
} SPI2CON2BITS;
extern volatile SPI2CON2BITS SPI2CON2bits __attribute__((__sfr__));
```

p24FJ256GB110

```

extern volatile unsigned int SPI2BUF __attribute__((__sfr__));
extern volatile unsigned int I2C3RCV __attribute__((__sfr__));
extern volatile unsigned int I2C3TRN __attribute__((__sfr__));
extern volatile unsigned int I2C3BRG __attribute__((__sfr__));
extern volatile unsigned int I2C3CON __attribute__((__sfr__));
typedef struct tagI2C3CONBITS {
    unsigned SEN: 1;
    unsigned RSEN: 1;
    unsigned PEN: 1;
    unsigned RCEN: 1;
    unsigned ACKEN: 1;
    unsigned ACKDT: 1;
    unsigned STREN: 1;
    unsigned GCEN: 1;
    unsigned SMEN: 1;
    unsigned DISSLW: 1;
    unsigned A10M: 1;
    unsigned IPMIEN: 1;
    unsigned SCLREL: 1;
    unsigned I2CSI DL: 1;
    unsigned : 1;
    unsigned I2CEN: 1;
} I2C3CONBITS;
extern volatile I2C3CONBITS I2C3CONbits __attribute__((__sfr__));

extern volatile unsigned int I2C3STAT __attribute__((__sfr__));
__extension__ typedef struct tagI2C3STATBITS {
    union {
        struct {
            unsigned TBF: 1;
            unsigned RBF: 1;
            unsigned R_NOT_W: 1;
            unsigned S: 1;
            unsigned P: 1;
            unsigned D_NOT_A: 1;
            unsigned I2COV: 1;
            unsigned I2WCOL: 1;
            unsigned ADD10: 1;
            unsigned GCSTAT: 1;
            unsigned BCL: 1;
            unsigned : 3;
            unsigned TRSTAT: 1;
            unsigned ACKSTAT: 1;
        };
        struct {
            unsigned : 2;
            unsigned R_W: 1;
            unsigned : 2;
            unsigned D_A: 1;
        };
    };
} I2C3STATBITS;
extern volatile I2C3STATBITS I2C3STATbits __attribute__((__sfr__));

extern volatile unsigned int I2C3ADD __attribute__((__sfr__));
extern volatile unsigned int I2C3MSK __attribute__((__sfr__));
extern volatile unsigned int SPI3STAT __attribute__((__sfr__));
__extension__ typedef struct tagSPI3STATBITS {
    union {
        struct {
            unsigned SPI RBF: 1;
            unsigned SPI TBF: 1;
            unsigned SI SEL: 3;
            unsigned SRXMPT: 1;
            unsigned SPI ROV: 1;
            unsigned SRMPT: 1;
            unsigned SPI BEC: 3;
        };
    };
} SPI3STATBITS;

```

```

    unsigned : 2;
    unsigned SPI SIDL: 1;
    unsigned : 1;
    unsigned SPI EN: 1;
};
struct {
    unsigned : 2;
    unsigned SI SEL0: 1;
    unsigned SI SEL1: 1;
    unsigned SI SEL2: 1;
    unsigned : 3;
    unsigned SPI BEC0: 1;
    unsigned SPI BEC1: 1;
    unsigned SPI BEC2: 1;
};
};
} SPI3STATBITS;
extern volatile SPI3STATBITS SPI3STATbits __attribute__((__sfr__));

extern volatile unsigned int SPI3CON1 __attribute__((__sfr__));
__extension__ typedef struct tagSPI3CON1BITS {
    union {
        struct {
            unsigned PPRE: 2;
            unsigned SPRE: 3;
            unsigned MSTEN: 1;
            unsigned CKP: 1;
            unsigned SSEN: 1;
            unsigned CKE: 1;
            unsigned SMP: 1;
            unsigned MODE16: 1;
            unsigned DISSDO: 1;
            unsigned DISSCK: 1;
        };
        struct {
            unsigned PPRE0: 1;
            unsigned PPRE1: 1;
            unsigned SPRE0: 1;
            unsigned SPRE1: 1;
            unsigned SPRE2: 1;
        };
    };
};
} SPI3CON1BITS;
extern volatile SPI3CON1BITS SPI3CON1bits __attribute__((__sfr__));

extern volatile unsigned int SPI3CON2 __attribute__((__sfr__));
typedef struct tagSPI3CON2BITS {
    unsigned SPI BEN: 1;
    unsigned SPI FE: 1;
    unsigned : 11;
    unsigned SPI FPOL: 1;
    unsigned SPI FSD: 1;
    unsigned FRMEN: 1;
} SPI3CON2BITS;
extern volatile SPI3CON2BITS SPI3CON2bits __attribute__((__sfr__));

extern volatile unsigned int SPI3BUF __attribute__((__sfr__));
extern volatile unsigned int U4MODE __attribute__((__sfr__));
__extension__ typedef struct tagU4MODEBITS {
    union {
        struct {
            unsigned STSEL: 1;
            unsigned PDSEL: 2;
            unsigned BRGH: 1;
            unsigned RXINV: 1;
            unsigned ABAUD: 1;
            unsigned LPBACK: 1;
            unsigned WAKE: 1;

```

```

    unsigned UEN: 2;
    unsigned : 1;
    unsigned RTSMD: 1;
    unsigned IREN: 1;
    unsigned USIDL: 1;
    unsigned : 1;
    unsigned UARTEN: 1;
};
struct {
    unsigned : 1;
    unsigned PDSELO: 1;
    unsigned PDSEL1: 1;
    unsigned : 5;
    unsigned UENO: 1;
    unsigned UEN1: 1;
};
};
} U4MODEBITS;
extern volatile U4MODEBITS U4MODEbits __attribute__((__sfr__));

extern volatile unsigned int U4STA __attribute__((__sfr__));
__extension__ typedef struct tagU4STABITS {
    union {
        struct {
            unsigned URXDA: 1;
            unsigned OERR: 1;
            unsigned FERR: 1;
            unsigned PERR: 1;
            unsigned RIDLE: 1;
            unsigned ADDEN: 1;
            unsigned URXISEL: 2;
            unsigned TRMT: 1;
            unsigned UTXBF: 1;
            unsigned UTXEN: 1;
            unsigned UTXBRK: 1;
            unsigned : 1;
            unsigned UTXISELO: 1;
            unsigned UTXINV: 1;
            unsigned UTXISEL1: 1;
        };
        struct {
            unsigned : 6;
            unsigned URXISELO: 1;
            unsigned URXISEL1: 1;
        };
    };
};
} U4STABITS;
extern volatile U4STABITS U4STAbits __attribute__((__sfr__));

extern volatile unsigned int U4TXREG __attribute__((__sfr__));
extern volatile unsigned int U4RXREG __attribute__((__sfr__));
extern volatile unsigned int U4BRG __attribute__((__sfr__));
extern volatile unsigned int TRI SA __attribute__((__sfr__));
typedef struct tagTRISABITS {
    unsigned TRI SA0: 1;
    unsigned TRI SA1: 1;
    unsigned TRI SA2: 1;
    unsigned TRI SA3: 1;
    unsigned TRI SA4: 1;
    unsigned TRI SA5: 1;
    unsigned TRI SA6: 1;
    unsigned TRI SA7: 1;
    unsigned : 1;
    unsigned TRI SA9: 1;
    unsigned TRI SA10: 1;
    unsigned : 3;
    unsigned TRI SA14: 1;
    unsigned TRI SA15: 1;
};

```

```

} TRISABITS;
extern volatile TRISABITS TRISAbits __attribute__((__sfr__));

extern volatile unsigned int PORTA __attribute__((__sfr__));
typedef struct tagPORTABITS {
    unsigned RA0: 1;
    unsigned RA1: 1;
    unsigned RA2: 1;
    unsigned RA3: 1;
    unsigned RA4: 1;
    unsigned RA5: 1;
    unsigned RA6: 1;
    unsigned RA7: 1;
    unsigned : 1;
    unsigned RA9: 1;
    unsigned RA10: 1;
    unsigned : 3;
    unsigned RA14: 1;
    unsigned RA15: 1;
} PORTABITS;
extern volatile PORTABITS PORTAbits __attribute__((__sfr__));

extern volatile unsigned int LATA __attribute__((__sfr__));
typedef struct tagLATABITS {
    unsigned LATA0: 1;
    unsigned LATA1: 1;
    unsigned LATA2: 1;
    unsigned LATA3: 1;
    unsigned LATA4: 1;
    unsigned LATA5: 1;
    unsigned LATA6: 1;
    unsigned LATA7: 1;
    unsigned : 1;
    unsigned LATA9: 1;
    unsigned LATA10: 1;
    unsigned : 3;
    unsigned LATA14: 1;
    unsigned LATA15: 1;
} LATABITS;
extern volatile LATABITS LATAbits __attribute__((__sfr__));

extern volatile unsigned int ODCA __attribute__((__sfr__));
typedef struct tagODCABITS {
    unsigned ODA0: 1;
    unsigned ODA1: 1;
    unsigned ODA2: 1;
    unsigned ODA3: 1;
    unsigned ODA4: 1;
    unsigned ODA5: 1;
    unsigned ODA6: 1;
    unsigned ODA7: 1;
    unsigned : 1;
    unsigned ODA9: 1;
    unsigned ODA10: 1;
    unsigned : 3;
    unsigned ODA14: 1;
    unsigned ODA15: 1;
} ODCABITS;
extern volatile ODCABITS ODCAbits __attribute__((__sfr__));

extern volatile unsigned int TRISB __attribute__((__sfr__));
typedef struct tagTRISBBITS {
    unsigned TRISB0: 1;
    unsigned TRISB1: 1;
    unsigned TRISB2: 1;
    unsigned TRISB3: 1;
    unsigned TRISB4: 1;
    unsigned TRISB5: 1;

```

```

unsigned TRI SB6: 1;
unsigned TRI SB7: 1;
unsigned TRI SB8: 1;
unsigned TRI SB9: 1;
unsigned TRI SB10: 1;
unsigned TRI SB11: 1;
unsigned TRI SB12: 1;
unsigned TRI SB13: 1;
unsigned TRI SB14: 1;
unsigned TRI SB15: 1;
} TRISBITS;
extern volatile TRISBITS TRISBbits __attribute__((__sfr__));

extern volatile unsigned int PORTB __attribute__((__sfr__));
typedef struct tagPORTBBITS {
    unsigned RB0: 1;
    unsigned RB1: 1;
    unsigned RB2: 1;
    unsigned RB3: 1;
    unsigned RB4: 1;
    unsigned RB5: 1;
    unsigned RB6: 1;
    unsigned RB7: 1;
    unsigned RB8: 1;
    unsigned RB9: 1;
    unsigned RB10: 1;
    unsigned RB11: 1;
    unsigned RB12: 1;
    unsigned RB13: 1;
    unsigned RB14: 1;
    unsigned RB15: 1;
} PORTBBITS;
extern volatile PORTBBITS PORTBbits __attribute__((__sfr__));

extern volatile unsigned int LATB __attribute__((__sfr__));
typedef struct tagLATBBITS {
    unsigned LATB0: 1;
    unsigned LATB1: 1;
    unsigned LATB2: 1;
    unsigned LATB3: 1;
    unsigned LATB4: 1;
    unsigned LATB5: 1;
    unsigned LATB6: 1;
    unsigned LATB7: 1;
    unsigned LATB8: 1;
    unsigned LATB9: 1;
    unsigned LATB10: 1;
    unsigned LATB11: 1;
    unsigned LATB12: 1;
    unsigned LATB13: 1;
    unsigned LATB14: 1;
    unsigned LATB15: 1;
} LATBBITS;
extern volatile LATBBITS LATBbits __attribute__((__sfr__));

extern volatile unsigned int ODCB __attribute__((__sfr__));
typedef struct tagODCBBITS {
    unsigned ODB0: 1;
    unsigned ODB1: 1;
    unsigned ODB2: 1;
    unsigned ODB3: 1;
    unsigned ODB4: 1;
    unsigned ODB5: 1;
    unsigned ODB6: 1;
    unsigned ODB7: 1;
    unsigned ODB8: 1;
    unsigned ODB9: 1;
    unsigned ODB10: 1;

```



```

    unsigned ODB11: 1;
    unsigned ODB12: 1;
    unsigned ODB13: 1;
    unsigned ODB14: 1;
    unsigned ODB15: 1;
} ODCBBITS;
extern volatile ODCBBITS ODCBbits __attribute__((__sfr__));

extern volatile unsigned int TRISC __attribute__((__sfr__));
typedef struct tagTRISCBITS {
    unsigned : 1;
    unsigned TRISC1: 1;
    unsigned TRISC2: 1;
    unsigned TRISC3: 1;
    unsigned TRISC4: 1;
    unsigned : 7;
    unsigned TRISC12: 1;
    unsigned TRISC13: 1;
    unsigned TRISC14: 1;
    unsigned TRISC15: 1;
} TRISCBITS;
extern volatile TRISCBITS TRISCbits __attribute__((__sfr__));

extern volatile unsigned int PORTC __attribute__((__sfr__));
typedef struct tagPORTCBITS {
    unsigned : 1;
    unsigned RC1: 1;
    unsigned RC2: 1;
    unsigned RC3: 1;
    unsigned RC4: 1;
    unsigned : 7;
    unsigned RC12: 1;
    unsigned RC13: 1;
    unsigned RC14: 1;
    unsigned RC15: 1;
} PORTCBITS;
extern volatile PORTCBITS PORTCbits __attribute__((__sfr__));

extern volatile unsigned int LATC __attribute__((__sfr__));
typedef struct tagLATCBITS {
    unsigned : 1;
    unsigned LATC1: 1;
    unsigned LATC2: 1;
    unsigned LATC3: 1;
    unsigned LATC4: 1;
    unsigned : 7;
    unsigned LATC12: 1;
    unsigned LATC13: 1;
    unsigned LATC14: 1;
    unsigned LATC15: 1;
} LATCBITS;
extern volatile LATCBITS LATCbits __attribute__((__sfr__));

extern volatile unsigned int ODCC __attribute__((__sfr__));
typedef struct tagODCCBITS {
    unsigned : 1;
    unsigned ODC1: 1;
    unsigned ODC2: 1;
    unsigned ODC3: 1;
    unsigned ODC4: 1;
    unsigned : 7;
    unsigned ODC12: 1;
    unsigned ODC13: 1;
    unsigned ODC14: 1;
    unsigned ODC15: 1;
} ODCCBITS;
extern volatile ODCCBITS ODCCbits __attribute__((__sfr__));

```

```

extern volatile unsigned int TRISD __attribute__((__sfr__));
typedef struct tagTRISDBITS {
    unsigned TRISD0: 1;
    unsigned TRISD1: 1;
    unsigned TRISD2: 1;
    unsigned TRISD3: 1;
    unsigned TRISD4: 1;
    unsigned TRISD5: 1;
    unsigned TRISD6: 1;
    unsigned TRISD7: 1;
    unsigned TRISD8: 1;
    unsigned TRISD9: 1;
    unsigned TRISD10: 1;
    unsigned TRISD11: 1;
    unsigned TRISD12: 1;
    unsigned TRISD13: 1;
    unsigned TRISD14: 1;
    unsigned TRISD15: 1;
} TRISDBITS;
extern volatile TRISDBITS TRISDbits __attribute__((__sfr__));

extern volatile unsigned int PORTD __attribute__((__sfr__));
typedef struct tagPORTDBITS {
    unsigned RD0: 1;
    unsigned RD1: 1;
    unsigned RD2: 1;
    unsigned RD3: 1;
    unsigned RD4: 1;
    unsigned RD5: 1;
    unsigned RD6: 1;
    unsigned RD7: 1;
    unsigned RD8: 1;
    unsigned RD9: 1;
    unsigned RD10: 1;
    unsigned RD11: 1;
    unsigned RD12: 1;
    unsigned RD13: 1;
    unsigned RD14: 1;
    unsigned RD15: 1;
} PORTDBITS;
extern volatile PORTDBITS PORTDbits __attribute__((__sfr__));

extern volatile unsigned int LATD __attribute__((__sfr__));
typedef struct tagLATDBITS {
    unsigned LATD0: 1;
    unsigned LATD1: 1;
    unsigned LATD2: 1;
    unsigned LATD3: 1;
    unsigned LATD4: 1;
    unsigned LATD5: 1;
    unsigned LATD6: 1;
    unsigned LATD7: 1;
    unsigned LATD8: 1;
    unsigned LATD9: 1;
    unsigned LATD10: 1;
    unsigned LATD11: 1;
    unsigned LATD12: 1;
    unsigned LATD13: 1;
    unsigned LATD14: 1;
    unsigned LATD15: 1;
} LATDBITS;
extern volatile LATDBITS LATDbits __attribute__((__sfr__));

extern volatile unsigned int ODCD __attribute__((__sfr__));
typedef struct tagODCDBITS {
    unsigned ODD0: 1;
    unsigned ODD1: 1;
    unsigned ODD2: 1;

```

```

unsigned ODD3: 1;
unsigned ODD4: 1;
unsigned ODD5: 1;
unsigned ODD6: 1;
unsigned ODD7: 1;
unsigned ODD8: 1;
unsigned ODD9: 1;
unsigned ODD10: 1;
unsigned ODD11: 1;
unsigned ODD12: 1;
unsigned ODD13: 1;
unsigned ODD14: 1;
unsigned ODD15: 1;
} ODCDBITS;
extern volatile ODCDBITS ODCDBits __attribute__((__sfr__));

extern volatile unsigned int TRI SE __attribute__((__sfr__));
typedef struct tagTRISEBITS {
    unsigned TRI SE0: 1;
    unsigned TRI SE1: 1;
    unsigned TRI SE2: 1;
    unsigned TRI SE3: 1;
    unsigned TRI SE4: 1;
    unsigned TRI SE5: 1;
    unsigned TRI SE6: 1;
    unsigned TRI SE7: 1;
    unsigned TRI SE8: 1;
    unsigned TRI SE9: 1;
} TRI SEBITS;
extern volatile TRI SEBITS TRI SEbits __attribute__((__sfr__));

extern volatile unsigned int PORTE __attribute__((__sfr__));
typedef struct tagPORTEBITS {
    unsigned RE0: 1;
    unsigned RE1: 1;
    unsigned RE2: 1;
    unsigned RE3: 1;
    unsigned RE4: 1;
    unsigned RE5: 1;
    unsigned RE6: 1;
    unsigned RE7: 1;
    unsigned RE8: 1;
    unsigned RE9: 1;
} PORTEBITS;
extern volatile PORTEBITS PORTEbits __attribute__((__sfr__));

extern volatile unsigned int LATE __attribute__((__sfr__));
typedef struct tagLATEBITS {
    unsigned LATE0: 1;
    unsigned LATE1: 1;
    unsigned LATE2: 1;
    unsigned LATE3: 1;
    unsigned LATE4: 1;
    unsigned LATE5: 1;
    unsigned LATE6: 1;
    unsigned LATE7: 1;
    unsigned LATE8: 1;
    unsigned LATE9: 1;
} LATEBITS;
extern volatile LATEBITS LATEbits __attribute__((__sfr__));

extern volatile unsigned int ODCE __attribute__((__sfr__));
typedef struct tagODCEBITS {
    unsigned ODE0: 1;
    unsigned ODE1: 1;
    unsigned ODE2: 1;
    unsigned ODE3: 1;
    unsigned ODE4: 1;

```

```

    unsigned ODE5: 1;
    unsigned ODE6: 1;
    unsigned ODE7: 1;
    unsigned ODE8: 1;
    unsigned ODE9: 1;
} ODCEBITS;
extern volatile ODCEBITS ODCEbits __attribute__((__sfr__));

extern volatile unsigned int TRISF __attribute__((__sfr__));
typedef struct tagTRISFBITS {
    unsigned TRISF0: 1;
    unsigned TRISF1: 1;
    unsigned TRISF2: 1;
    unsigned TRISF3: 1;
    unsigned TRISF4: 1;
    unsigned TRISF5: 1;
    unsigned : 2;
    unsigned TRISF8: 1;
    unsigned : 3;
    unsigned TRISF12: 1;
    unsigned TRISF13: 1;
} TRISFBITS;
extern volatile TRISFBITS TRISFbits __attribute__((__sfr__));

extern volatile unsigned int PORTF __attribute__((__sfr__));
typedef struct tagPORTFBITS {
    unsigned RF0: 1;
    unsigned RF1: 1;
    unsigned RF2: 1;
    unsigned RF3: 1;
    unsigned RF4: 1;
    unsigned RF5: 1;
    unsigned : 2;
    unsigned RF8: 1;
    unsigned : 3;
    unsigned RF12: 1;
    unsigned RF13: 1;
} PORTFBITS;
extern volatile PORTFBITS PORTFbits __attribute__((__sfr__));

extern volatile unsigned int LATF __attribute__((__sfr__));
typedef struct tagLATFBITS {
    unsigned LATF0: 1;
    unsigned LATF1: 1;
    unsigned LATF2: 1;
    unsigned LATF3: 1;
    unsigned LATF4: 1;
    unsigned LATF5: 1;
    unsigned : 2;
    unsigned LATF8: 1;
    unsigned : 3;
    unsigned LATF12: 1;
    unsigned LATF13: 1;
} LATFBITS;
extern volatile LATFBITS LATFbits __attribute__((__sfr__));

extern volatile unsigned int ODCF __attribute__((__sfr__));
typedef struct tagODCFBITS {
    unsigned ODF0: 1;
    unsigned ODF1: 1;
    unsigned ODF2: 1;
    unsigned ODF3: 1;
    unsigned ODF4: 1;
    unsigned ODF5: 1;
    unsigned : 2;
    unsigned ODF8: 1;
    unsigned : 3;
    unsigned ODF12: 1;

```

```

    unsigned ODF13: 1;
} ODCFBITS;
extern volatile ODCFBITS ODCFbits __attribute__((__sfr__));

extern volatile unsigned int TRISG __attribute__((__sfr__));
typedef struct tagTRISGBITS {
    unsigned TRISG0: 1;
    unsigned TRISG1: 1;
    unsigned TRISG2: 1;
    unsigned TRISG3: 1;
    unsigned : 2;
    unsigned TRISG6: 1;
    unsigned TRISG7: 1;
    unsigned TRISG8: 1;
    unsigned TRISG9: 1;
    unsigned : 2;
    unsigned TRISG12: 1;
    unsigned TRISG13: 1;
    unsigned TRISG14: 1;
    unsigned TRISG15: 1;
} TRISGBITS;
extern volatile TRISGBITS TRISGbits __attribute__((__sfr__));

extern volatile unsigned int PORTG __attribute__((__sfr__));
typedef struct tagPORTGBITS {
    unsigned RG0: 1;
    unsigned RG1: 1;
    unsigned RG2: 1;
    unsigned RG3: 1;
    unsigned : 2;
    unsigned RG6: 1;
    unsigned RG7: 1;
    unsigned RG8: 1;
    unsigned RG9: 1;
    unsigned : 2;
    unsigned RG12: 1;
    unsigned RG13: 1;
    unsigned RG14: 1;
    unsigned RG15: 1;
} PORTGBITS;
extern volatile PORTGBITS PORTGbits __attribute__((__sfr__));

extern volatile unsigned int LATG __attribute__((__sfr__));
typedef struct tagLATGBITS {
    unsigned LATG0: 1;
    unsigned LATG1: 1;
    unsigned LATG2: 1;
    unsigned LATG3: 1;
    unsigned : 2;
    unsigned LATG6: 1;
    unsigned LATG7: 1;
    unsigned LATG8: 1;
    unsigned LATG9: 1;
    unsigned : 2;
    unsigned LATG12: 1;
    unsigned LATG13: 1;
    unsigned LATG14: 1;
    unsigned LATG15: 1;
} LATGBITS;
extern volatile LATGBITS LATGbits __attribute__((__sfr__));

extern volatile unsigned int ODCG __attribute__((__sfr__));
typedef struct tagODCGBITS {
    unsigned ODG0: 1;
    unsigned ODG1: 1;
    unsigned ODG2: 1;
    unsigned ODG3: 1;
    unsigned : 2;

```

```

unsigned ODG6: 1;
unsigned ODG7: 1;
unsigned ODG8: 1;
unsigned ODG9: 1;
unsigned : 2;
unsigned ODG12: 1;
unsigned ODG13: 1;
unsigned ODG14: 1;
unsigned ODG15: 1;
} ODCGBITS;
extern volatile ODCGBITS ODCGbits __attribute__((__sfr__));

extern volatile unsigned int PADCFG1 __attribute__((__sfr__));
__extension__ typedef struct tagPADCFG1BITS {
    union {
        struct {
            unsigned PMPTTL: 1;
            unsigned RTSECSEL: 1;
        };
        struct {
            unsigned : 1;
            unsigned RTSECSELO: 1;
        };
    };
} PADCFG1BITS;
extern volatile PADCFG1BITS PADCFG1bits __attribute__((__sfr__));

extern volatile unsigned int ADC1BUF0 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF1 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF2 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF3 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF4 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF5 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF6 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF7 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF8 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUF9 __attribute__((__sfr__));
extern volatile unsigned int ADC1BUFA __attribute__((__sfr__));
extern volatile unsigned int ADC1BUFB __attribute__((__sfr__));
extern volatile unsigned int ADC1BUFC __attribute__((__sfr__));
extern volatile unsigned int ADC1BUFD __attribute__((__sfr__));
extern volatile unsigned int ADC1BUFE __attribute__((__sfr__));
extern volatile unsigned int ADC1BUFF __attribute__((__sfr__));
extern volatile unsigned int AD1CON1 __attribute__((__sfr__));
__extension__ typedef struct tagAD1CON1BITS {
    union {
        struct {
            unsigned DONE: 1;
            unsigned SAMP: 1;
            unsigned ASAM: 1;
            unsigned : 2;
            unsigned SSRC: 3;
            unsigned FORM: 2;
            unsigned : 3;
            unsigned ADSIDL: 1;
            unsigned : 1;
            unsigned ADON: 1;
        };
        struct {
            unsigned : 5;
            unsigned SSRC0: 1;
            unsigned SSRC1: 1;
            unsigned SSRC2: 1;
            unsigned FORM0: 1;
            unsigned FORM1: 1;
        };
    };
} AD1CON1BITS;

```

p24FJ256GB110

```
extern volatile AD1CON1BITS AD1CON1bits __attribute__((__sfr__));
```

```
extern volatile unsigned int AD1CON2 __attribute__((__sfr__));
```

```
__extension__ typedef struct tagAD1CON2BITS {
```

```
union {
```

```
struct {
```

```
    unsigned ALTS: 1;
```

```
    unsigned BUFM: 1;
```

```
    unsigned SMPI: 4;
```

```
    unsigned : 1;
```

```
    unsigned BUFS: 1;
```

```
    unsigned : 2;
```

```
    unsigned CSCNA: 1;
```

```
    unsigned : 2;
```

```
    unsigned VCFG: 3;
```

```
};
```

```
struct {
```

```
    unsigned : 2;
```

```
    unsigned SMPI0: 1;
```

```
    unsigned SMPI1: 1;
```

```
    unsigned SMPI2: 1;
```

```
    unsigned SMPI3: 1;
```

```
    unsigned : 7;
```

```
    unsigned VCFG0: 1;
```

```
    unsigned VCFG1: 1;
```

```
    unsigned VCFG2: 1;
```

```
};
```

```
};
```

```
} AD1CON2BITS;
```

```
extern volatile AD1CON2BITS AD1CON2bits __attribute__((__sfr__));
```

```
extern volatile unsigned int AD1CON3 __attribute__((__sfr__));
```

```
__extension__ typedef struct tagAD1CON3BITS {
```

```
union {
```

```
struct {
```

```
    unsigned ADCS: 8;
```

```
    unsigned SAMC: 5;
```

```
    unsigned : 2;
```

```
    unsigned ADRC: 1;
```

```
};
```

```
struct {
```

```
    unsigned ADCS0: 1;
```

```
    unsigned ADCS1: 1;
```

```
    unsigned ADCS2: 1;
```

```
    unsigned ADCS3: 1;
```

```
    unsigned ADCS4: 1;
```

```
    unsigned ADCS5: 1;
```

```
    unsigned ADCS6: 1;
```

```
    unsigned ADCS7: 1;
```

```
    unsigned SAMC0: 1;
```

```
    unsigned SAMC1: 1;
```

```
    unsigned SAMC2: 1;
```

```
    unsigned SAMC3: 1;
```

```
    unsigned SAMC4: 1;
```

```
};
```

```
};
```

```
} AD1CON3BITS;
```

```
extern volatile AD1CON3BITS AD1CON3bits __attribute__((__sfr__));
```

```
extern volatile unsigned int AD1CHS __attribute__((__sfr__));
```

```
__extension__ typedef struct tagAD1CHSBITS {
```

```
union {
```

```
struct {
```

```
    unsigned CHOSA: 5;
```

```
    unsigned : 2;
```

```
    unsigned CHONA: 1;
```

```
    unsigned CHOSB: 5;
```

```
    unsigned : 2;
```

```

    unsigned CHONB: 1;
};
struct {
    unsigned CHOSA0: 1;
    unsigned CHOSA1: 1;
    unsigned CHOSA2: 1;
    unsigned CHOSA3: 1;
    unsigned CHOSA4: 1;
    unsigned : 3;
    unsigned CHOSB0: 1;
    unsigned CHOSB1: 1;
    unsigned CHOSB2: 1;
    unsigned CHOSB3: 1;
    unsigned CHOSB4: 1;
};
};
} AD1CHSBITS;
extern volatile AD1CHSBITS AD1CHSBits __attribute__((__sfr__));

extern volatile unsigned int AD1CHS0 __attribute__((__sfr__));
__extension__ typedef struct tagAD1CHSOBITS {
    union {
        struct {
            unsigned CHOSA: 5;
            unsigned : 2;
            unsigned CHONA: 1;
            unsigned CHOSB: 5;
            unsigned : 2;
            unsigned CHONB: 1;
        };
        struct {
            unsigned CHOSA0: 1;
            unsigned CHOSA1: 1;
            unsigned CHOSA2: 1;
            unsigned CHOSA3: 1;
            unsigned CHOSA4: 1;
            unsigned : 3;
            unsigned CHOSB0: 1;
            unsigned CHOSB1: 1;
            unsigned CHOSB2: 1;
            unsigned CHOSB3: 1;
            unsigned CHOSB4: 1;
        };
    };
};
} AD1CHSOBITS;
extern volatile AD1CHSOBITS AD1CHSObits __attribute__((__sfr__));

extern volatile unsigned int AD1PCFGH __attribute__((__sfr__));
typedef struct tagAD1PCFGHBITS {
    unsigned PCFG16: 1;
    unsigned PCFG17: 1;
} AD1PCFGHBITS;
extern volatile AD1PCFGHBITS AD1PCFGHbits __attribute__((__sfr__));

extern volatile unsigned int AD1PCFG __attribute__((__sfr__));
typedef struct tagAD1PCFGBITS {
    unsigned PCFG0: 1;
    unsigned PCFG1: 1;
    unsigned PCFG2: 1;
    unsigned PCFG3: 1;
    unsigned PCFG4: 1;
    unsigned PCFG5: 1;
    unsigned PCFG6: 1;
    unsigned PCFG7: 1;
    unsigned PCFG8: 1;
    unsigned PCFG9: 1;
    unsigned PCFG10: 1;
    unsigned PCFG11: 1;
};

```



```

    unsigned PCFG12: 1;
    unsigned PCFG13: 1;
    unsigned PCFG14: 1;
    unsigned PCFG15: 1;
} AD1PCFGBITS;
extern volatile AD1PCFGBITS AD1PCFGbits __attribute__((__sfr__));

extern volatile unsigned int AD1PCFGL __attribute__((__sfr__));
typedef struct tagAD1PCFGLBITS {
    unsigned PCFG0: 1;
    unsigned PCFG1: 1;
    unsigned PCFG2: 1;
    unsigned PCFG3: 1;
    unsigned PCFG4: 1;
    unsigned PCFG5: 1;
    unsigned PCFG6: 1;
    unsigned PCFG7: 1;
    unsigned PCFG8: 1;
    unsigned PCFG9: 1;
    unsigned PCFG10: 1;
    unsigned PCFG11: 1;
    unsigned PCFG12: 1;
    unsigned PCFG13: 1;
    unsigned PCFG14: 1;
    unsigned PCFG15: 1;
} AD1PCFGLBITS;
extern volatile AD1PCFGLBITS AD1PCFGLbits __attribute__((__sfr__));

extern volatile unsigned int AD1CSSL __attribute__((__sfr__));
typedef struct tagAD1CSSLBITS {
    unsigned CSSL0: 1;
    unsigned CSSL1: 1;
    unsigned CSSL2: 1;
    unsigned CSSL3: 1;
    unsigned CSSL4: 1;
    unsigned CSSL5: 1;
    unsigned CSSL6: 1;
    unsigned CSSL7: 1;
    unsigned CSSL8: 1;
    unsigned CSSL9: 1;
    unsigned CSSL10: 1;
    unsigned CSSL11: 1;
    unsigned CSSL12: 1;
    unsigned CSSL13: 1;
    unsigned CSSL14: 1;
    unsigned CSSL15: 1;
} AD1CSSLBITS;
extern volatile AD1CSSLBITS AD1CSSLbits __attribute__((__sfr__));

extern volatile unsigned int AD1CSSH __attribute__((__sfr__));
typedef struct tagAD1CSSHBITS {
    unsigned CSSL16: 1;
    unsigned CSSL17: 1;
} AD1CSSHBITS;
extern volatile AD1CSSHBITS AD1CSSHbits __attribute__((__sfr__));

extern volatile unsigned int CTMUCON __attribute__((__sfr__));
__extension__ typedef struct tagCTMUCONBITS {
    union {
        struct {
            unsigned EDG1STAT: 1;
            unsigned EDG2STAT: 1;
            unsigned EDG1SEL: 2;
            unsigned EDG1POL: 1;
            unsigned EDG2SEL: 2;
            unsigned EDG2POL: 1;
            unsigned CTTRIG: 1;
            unsigned IDISSEN: 1;

```

```

    unsigned EDGSEQEN: 1;
    unsigned EDGEN: 1;
    unsigned TGEN: 1;
    unsigned CTMUSIDL: 1;
    unsigned : 1;
    unsigned CTMUEN: 1;
};
struct {
    unsigned : 2;
    unsigned EDG1SELO: 1;
    unsigned EDG1SEL1: 1;
    unsigned : 1;
    unsigned EDG2SELO: 1;
    unsigned EDG2SEL1: 1;
};
};
} CTMUCONBITS;
extern volatile CTMUCONBITS CTMUCONbits __attribute__((__sfr__));

extern volatile unsigned int CTMUICON __attribute__((__sfr__));
__extension__ typedef struct tagCTMUICONBITS {
    union {
        struct {
            unsigned : 8;
            unsigned IRNG: 2;
            unsigned ITRIM: 6;
        };
        struct {
            unsigned : 8;
            unsigned IRNG0: 1;
            unsigned IRNG1: 1;
            unsigned ITRIM0: 1;
            unsigned ITRIM1: 1;
            unsigned ITRIM2: 1;
            unsigned ITRIM3: 1;
            unsigned ITRIM4: 1;
            unsigned ITRIM5: 1;
        };
    };
};
} CTMUICONBITS;
extern volatile CTMUICONBITS CTMUICONbits __attribute__((__sfr__));

extern volatile unsigned int U10TGIR __attribute__((__sfr__));
typedef struct tagU10TGIRBITS {
    unsigned VBUSVDF: 1;
    unsigned : 1;
    unsigned SESENDIF: 1;
    unsigned SESVDF: 1;
    unsigned ACTVIF: 1;
    unsigned LSTATEIF: 1;
    unsigned T1MSECF: 1;
    unsigned IDIF: 1;
} U10TGIRBITS;
extern volatile U10TGIRBITS U10TGIRbits __attribute__((__sfr__));

extern volatile unsigned int U10TGIE __attribute__((__sfr__));
typedef struct tagU10TGIEBITS {
    unsigned VBUSVDIE: 1;
    unsigned : 1;
    unsigned SESENDIE: 1;
    unsigned SESVDIE: 1;
    unsigned ACTVIE: 1;
    unsigned LSTATEIE: 1;
    unsigned T1MSECF: 1;
    unsigned IDIE: 1;
} U10TGIEBITS;
extern volatile U10TGIEBITS U10TGIEbits __attribute__((__sfr__));

```

```

extern volatile unsigned int U10TGSTAT __attribute__((__sfr__));
typedef struct tagU10TGSTATBITS {
    unsigned VBUSVD: 1;
    unsigned : 1;
    unsigned SESEND: 1;
    unsigned SESVD: 1;
    unsigned : 1;
    unsigned LSTATE: 1;
    unsigned : 1;
    unsigned ID: 1;
} U10TGSTATBITS;
extern volatile U10TGSTATBITS U10TGSTATbits __attribute__((__sfr__));

extern volatile unsigned int U10TGCON __attribute__((__sfr__));
typedef struct tagU10TGCONBITS {
    unsigned VBUSDIS: 1;
    unsigned VBUSCHG: 1;
    unsigned OTGEN: 1;
    unsigned VBUSON: 1;
    unsigned DMPULDWN: 1;
    unsigned DPPULDWN: 1;
    unsigned DMPULUP: 1;
    unsigned DPPULUP: 1;
} U10TGCONBITS;
extern volatile U10TGCONBITS U10TGCONbits __attribute__((__sfr__));

extern volatile unsigned int U1PWRC __attribute__((__sfr__));
__extension__ typedef struct tagU1PWRCBITS {
    union {
        struct {
            unsigned USBPWR: 1;
            unsigned USUSPEND: 1;
            unsigned : 2;
            unsigned USLPGRD: 1;
            unsigned : 2;
            unsigned UACTPND: 1;
        };
        struct {
            unsigned : 1;
            unsigned USUSPND: 1;
        };
    };
} U1PWRCBITS;
extern volatile U1PWRCBITS U1PWRCbits __attribute__((__sfr__));

extern volatile unsigned int U1IR __attribute__((__sfr__));
__extension__ typedef struct tagU1IRBITS {
    union {
        struct {
            unsigned URSTIF: 1;
            unsigned UERRIF: 1;
            unsigned SOFIF: 1;
            unsigned TRNIF: 1;
            unsigned IDLEIF: 1;
            unsigned RESUMEIF: 1;
            unsigned ATTACHIF: 1;
            unsigned STALLIF: 1;
        };
        struct {
            unsigned DETACHIF: 1;
        };
    };
} U1IRBITS;
extern volatile U1IRBITS U1IRbits __attribute__((__sfr__));

extern volatile unsigned int U1IE __attribute__((__sfr__));
__extension__ typedef struct tagU1IEBITS {
    union {

```

```

struct {
    unsigned URSTIE: 1;
    unsigned UERRIE: 1;
    unsigned SOFIE: 1;
    unsigned TRNIE: 1;
    unsigned IDLEIE: 1;
    unsigned RESUMEIE: 1;
    unsigned ATTACHIE: 1;
    unsigned STALLIE: 1;
};
struct {
    unsigned DETACHIE: 1;
};
};
} U1IEBITS;
extern volatile U1IEBITS U1IEbits __attribute__((__sfr__));

extern volatile unsigned int U1EIR __attribute__((__sfr__));
__extension__ typedef struct tagU1EIRBITS {
    union {
        struct {
            unsigned PIDEF: 1;
            unsigned CRC5EF: 1;
            unsigned CRC16EF: 1;
            unsigned DFN8EF: 1;
            unsigned BTOEF: 1;
            unsigned DMAEF: 1;
            unsigned : 1;
            unsigned BTSEF: 1;
        };
        struct {
            unsigned : 1;
            unsigned EOFEF: 1;
        };
    };
} U1EIRBITS;
extern volatile U1EIRBITS U1EIRbits __attribute__((__sfr__));

extern volatile unsigned int U1EIE __attribute__((__sfr__));
__extension__ typedef struct tagU1EIEBITS {
    union {
        struct {
            unsigned PIDEE: 1;
            unsigned CRC5EE: 1;
            unsigned CRC16EE: 1;
            unsigned DFN8EE: 1;
            unsigned BTOEE: 1;
            unsigned DMAEE: 1;
            unsigned : 1;
            unsigned BTSEE: 1;
        };
        struct {
            unsigned : 1;
            unsigned EOFEE: 1;
        };
    };
} U1EIEBITS;
extern volatile U1EIEBITS U1EIEbits __attribute__((__sfr__));

extern volatile unsigned int U1STAT __attribute__((__sfr__));
__extension__ typedef struct tagU1STATBITS {
    union {
        struct {
            unsigned : 2;
            unsigned PPBI: 1;
            unsigned DIR: 1;
            unsigned ENDPT0: 1;
            unsigned ENDPT1: 1;
        };
    };
} U1STATBITS;
extern volatile U1STATBITS U1STATbits __attribute__((__sfr__));

```

```

    unsigned ENDPT2: 1;
    unsigned ENDPT3: 1;
};
struct {
    unsigned : 4;
    unsigned ENDPT: 4;
};
};
} U1STATBITS;
extern volatile U1STATBITS U1STATbits __attribute__((__sfr__));

extern volatile unsigned int U1CON __attribute__((__sfr__));
__extension__ typedef struct tagU1CONBITS {
    union {
        struct {
            unsigned USBEN: 1;
            unsigned PPBRST: 1;
            unsigned RESUME: 1;
            unsigned HOSTEN: 1;
            unsigned RESET: 1;
            unsigned PKTDIS: 1;
            unsigned SEO: 1;
            unsigned JSTATE: 1;
        };
        struct {
            unsigned SOFEN: 1;
            unsigned : 3;
            unsigned USBRST: 1;
            unsigned TOKBUSY: 1;
        };
    };
};
} U1CONBITS;
extern volatile U1CONBITS U1CONbits __attribute__((__sfr__));

extern volatile unsigned int U1ADDR __attribute__((__sfr__));
__extension__ typedef struct tagU1ADDRBITS {
    union {
        struct {
            unsigned ADDR0: 1;
            unsigned ADDR1: 1;
            unsigned ADDR2: 1;
            unsigned ADDR3: 1;
            unsigned ADDR4: 1;
            unsigned ADDR5: 1;
            unsigned ADDR6: 1;
            unsigned LSPDEN: 1;
        };
        struct {
            unsigned DEVADDR0: 1;
            unsigned DEVADDR1: 1;
            unsigned DEVADDR2: 1;
            unsigned DEVADDR3: 1;
            unsigned DEVADDR4: 1;
            unsigned DEVADDR5: 1;
            unsigned DEVADDR6: 1;
            unsigned LOWSPDEN: 1;
        };
        struct {
            unsigned DEVADDR: 7;
        };
    };
};
} U1ADDRBITS;
extern volatile U1ADDRBITS U1ADDRbits __attribute__((__sfr__));

extern volatile unsigned int U1BDTP1 __attribute__((__sfr__));
typedef struct tagU1BDTP1BITS {
    unsigned : 1;
    unsigned BDTPTRL: 7;
};

```

```

} U1BDTP1BITS;
extern volatile U1BDTP1BITS U1BDTP1bits __attribute__((__sfr__));

extern volatile unsigned int U1FRML __attribute__((__sfr__));
typedef struct tagU1FRMLBITS {
    unsigned FRM0: 1;
    unsigned FRM1: 1;
    unsigned FRM2: 1;
    unsigned FRM3: 1;
    unsigned FRM4: 1;
    unsigned FRM5: 1;
    unsigned FRM6: 1;
    unsigned FRM7: 1;
} U1FRMLBITS;
extern volatile U1FRMLBITS U1FRMLbits __attribute__((__sfr__));

extern volatile unsigned int U1FRMH __attribute__((__sfr__));
typedef struct tagU1FRMHBITS {
    unsigned FRM8: 1;
    unsigned FRM9: 1;
    unsigned FRM10: 1;
    unsigned FRM11: 1;
    unsigned FRM12: 1;
    unsigned FRM13: 1;
    unsigned FRM14: 1;
    unsigned FRM15: 1;
} U1FRMHBITS;
extern volatile U1FRMHBITS U1FRMHbits __attribute__((__sfr__));

extern volatile unsigned int U1TOK __attribute__((__sfr__));
__extension__ typedef struct tagU1TOKBITS {
    union {
        struct {
            unsigned EP0: 1;
            unsigned EP1: 1;
            unsigned EP2: 1;
            unsigned EP3: 1;
            unsigned PID0: 1;
            unsigned PID1: 1;
            unsigned PID2: 1;
            unsigned PID3: 1;
        };
        struct {
            unsigned EP: 4;
            unsigned PID: 4;
        };
    };
} U1TOKBITS;
extern volatile U1TOKBITS U1TOKbits __attribute__((__sfr__));

extern volatile unsigned int U1SOF __attribute__((__sfr__));
typedef struct tagU1SOFBITS {
    unsigned CNT: 8;
} U1SOFBITS;
extern volatile U1SOFBITS U1SOFbits __attribute__((__sfr__));

extern volatile unsigned int U1CNFG1 __attribute__((__sfr__));
__extension__ typedef struct tagU1CNFG1BITS {
    union {
        struct {
            unsigned PPB0: 1;
            unsigned PPB1: 1;
            unsigned : 2;
            unsigned USBSIDL: 1;
            unsigned : 1;
            unsigned UOEMON: 1;
            unsigned UTEYE: 1;
        };
    };
};

```

```

    struct {
        unsigned PPB: 2;
    };
};
} U1CNFG1BITS;
extern volatile U1CNFG1BITS U1CNFG1bits __attribute__((__sfr__));

extern volatile unsigned int U1CNFG2 __attribute__((__sfr__));
typedef struct tagU1CNFG2BITS {
    unsigned UTRDIS: 1;
    unsigned UVCMPDIS: 1;
    unsigned UVBUSDIS: 1;
    unsigned EXT12CEN: 1;
} U1CNFG2BITS;
extern volatile U1CNFG2BITS U1CNFG2bits __attribute__((__sfr__));

extern volatile unsigned int U1EP0 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP0BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
            unsigned : 1;
            unsigned RETRYDIS: 1;
            unsigned LSPD: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPINEN: 1;
            unsigned EPOUTEN: 1;
        };
        struct {
            unsigned : 7;
            unsigned LOWSPD: 1;
        };
    };
};
} U1EP0BITS;
extern volatile U1EP0BITS U1EP0bits __attribute__((__sfr__));

extern volatile unsigned int U1EP1 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP1BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPINEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
};
} U1EP1BITS;
extern volatile U1EP1BITS U1EP1bits __attribute__((__sfr__));

extern volatile unsigned int U1EP2 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP2BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;

```

```

    unsigned EPRXEN: 1;
    unsigned EPCONDIS: 1;
};
struct {
    unsigned : 2;
    unsigned EPI NEN: 1;
    unsigned EPOUTEN: 1;
};
};
} U1EP2BITS;
extern volatile U1EP2BITS U1EP2bits __attribute__((__sfr__));

extern volatile unsigned int U1EP3 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP3BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPI NEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
};
} U1EP3BITS;
extern volatile U1EP3BITS U1EP3bits __attribute__((__sfr__));

extern volatile unsigned int U1EP4 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP4BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPI NEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
};
} U1EP4BITS;
extern volatile U1EP4BITS U1EP4bits __attribute__((__sfr__));

extern volatile unsigned int U1EP5 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP5BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPI NEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
};
} U1EP5BITS;
extern volatile U1EP5BITS U1EP5bits __attribute__((__sfr__));

```



```

extern volatile unsigned int U1EP6 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP6BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPINEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
} U1EP6BITS;
extern volatile U1EP6BITS U1EP6bits __attribute__((__sfr__));

extern volatile unsigned int U1EP7 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP7BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPINEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
} U1EP7BITS;
extern volatile U1EP7BITS U1EP7bits __attribute__((__sfr__));

extern volatile unsigned int U1EP8 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP8BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPINEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
} U1EP8BITS;
extern volatile U1EP8BITS U1EP8bits __attribute__((__sfr__));

extern volatile unsigned int U1EP9 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP9BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
    };
};

```

```

    struct {
        unsigned :2;
        unsigned EPI NEN: 1;
        unsigned EPOUTEN: 1;
    };
};
} U1EP9BITS;
extern volatile U1EP9BITS U1EP9bits __attribute__((__sfr__));

extern volatile unsigned int U1EP10 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP10BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned :2;
            unsigned EPI NEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
};
} U1EP10BITS;
extern volatile U1EP10BITS U1EP10bits __attribute__((__sfr__));

extern volatile unsigned int U1EP11 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP11BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned :2;
            unsigned EPI NEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
};
} U1EP11BITS;
extern volatile U1EP11BITS U1EP11bits __attribute__((__sfr__));

extern volatile unsigned int U1EP12 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP12BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned :2;
            unsigned EPI NEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
};
} U1EP12BITS;
extern volatile U1EP12BITS U1EP12bits __attribute__((__sfr__));

extern volatile unsigned int U1EP13 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP13BITS {

```

```

union {
    struct {
        unsigned EPHSHK: 1;
        unsigned EPSTALL: 1;
        unsigned EPTXEN: 1;
        unsigned EPRXEN: 1;
        unsigned EPCONDIS: 1;
    };
    struct {
        unsigned : 2;
        unsigned EPI NEN: 1;
        unsigned EPOUTEN: 1;
    };
};
} U1EP13BITS;
extern volatile U1EP13BITS U1EP13bits __attribute__((__sfr__));

extern volatile unsigned int U1EP14 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP14BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPI NEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
} U1EP14BITS;
extern volatile U1EP14BITS U1EP14bits __attribute__((__sfr__));

extern volatile unsigned int U1EP15 __attribute__((__sfr__));
__extension__ typedef struct tagU1EP15BITS {
    union {
        struct {
            unsigned EPHSHK: 1;
            unsigned EPSTALL: 1;
            unsigned EPTXEN: 1;
            unsigned EPRXEN: 1;
            unsigned EPCONDIS: 1;
        };
        struct {
            unsigned : 2;
            unsigned EPI NEN: 1;
            unsigned EPOUTEN: 1;
        };
    };
} U1EP15BITS;
extern volatile U1EP15BITS U1EP15bits __attribute__((__sfr__));

extern volatile unsigned int U1PWMRRS __attribute__((__sfr__));
__extension__ typedef struct tagU1PWMRRSBITS {
    union {
        struct {
            unsigned PER0: 1;
            unsigned PER1: 1;
            unsigned PER2: 1;
            unsigned PER3: 1;
            unsigned PER4: 1;
            unsigned PER5: 1;
            unsigned PER6: 1;
            unsigned PER7: 1;
            unsigned DC0: 1;

```

```

    unsigned DC1: 1;
    unsigned DC2: 1;
    unsigned DC3: 1;
    unsigned DC4: 1;
    unsigned DC5: 1;
    unsigned DC6: 1;
    unsigned DC7: 1;
};
struct {
    unsigned USBRS0: 1;
    unsigned USBRS1: 1;
    unsigned USBRS2: 1;
    unsigned USBRS3: 1;
    unsigned USBRS4: 1;
    unsigned USBRS5: 1;
    unsigned USBRS6: 1;
    unsigned USBRS7: 1;
    unsigned USBR0: 1;
    unsigned USBR1: 1;
    unsigned USBR2: 1;
    unsigned USBR3: 1;
    unsigned USBR4: 1;
    unsigned USBR5: 1;
    unsigned USBR6: 1;
    unsigned USBR7: 1;
};
struct {
    unsigned USBRS: 8;
    unsigned USBR: 8;
};
struct {
    unsigned PER: 8;
    unsigned DC: 8;
};
};
} U1PWMRRSBITS;
extern volatile U1PWMRRSBITS U1PWMRRSbits __attribute__((__sfr__));

extern volatile unsigned int U1PWMCON __attribute__((__sfr__));
__extension__ typedef struct tagU1PWMCONBITS {
    union {
        struct {
            unsigned : 8;
            unsigned CNTEN: 1;
            unsigned PWMPOL: 1;
            unsigned USBTSEL: 3;
            unsigned : 2;
            unsigned PWMEN: 1;
        };
        struct {
            unsigned : 10;
            unsigned USBTSELO: 1;
            unsigned USBTSEL1: 1;
            unsigned USBTSEL2: 1;
        };
    };
};
} U1PWMCONBITS;
extern volatile U1PWMCONBITS U1PWMCONbits __attribute__((__sfr__));

extern volatile unsigned int PMCON __attribute__((__sfr__));
__extension__ typedef struct tagPMCONBITS {
    union {
        struct {
            unsigned RDSP: 1;
            unsigned WRSP: 1;
            unsigned BEP: 1;
            unsigned CS1P: 1;
            unsigned CS2P: 1;

```

```

    unsigned ALP: 1;
    unsigned CSF: 2;
    unsigned PTRDEN: 1;
    unsigned PTWREN: 1;
    unsigned PTBEEN: 1;
    unsigned ADRMUX: 2;
    unsigned PSDL: 1;
    unsigned : 1;
    unsigned PMPEN: 1;
};
struct {
    unsigned : 6;
    unsigned CSFO: 1;
    unsigned CSF1: 1;
    unsigned : 3;
    unsigned ADRMUX0: 1;
    unsigned ADRMUX1: 1;
};
};
} PMCONBITS;
extern volatile PMCONBITS PMCONbits __attribute__((__sfr__));

extern volatile unsigned int PMMODE __attribute__((__sfr__));
__extension__ typedef struct tagPMMODEBITS {
    union {
        struct {
            unsigned WAITE: 2;
            unsigned WAITM: 4;
            unsigned WAITB: 2;
            unsigned MODE0: 1;
            unsigned MODE1: 1;
            unsigned MODE16: 1;
            unsigned INCM: 2;
            unsigned IRQM: 2;
            unsigned BUSY: 1;
        };
        struct {
            unsigned WAITE0: 1;
            unsigned WAITE1: 1;
            unsigned WAITM0: 1;
            unsigned WAITM1: 1;
            unsigned WAITM2: 1;
            unsigned WAITM3: 1;
            unsigned WAITB0: 1;
            unsigned WAITB1: 1;
            unsigned MODE: 2;
            unsigned : 1;
            unsigned INCM0: 1;
            unsigned INCM1: 1;
            unsigned IRQM0: 1;
            unsigned IRQM1: 1;
        };
    };
};
} PMMODEBITS;
extern volatile PMMODEBITS PMMODEbits __attribute__((__sfr__));

extern volatile unsigned int PMADDR __attribute__((__sfr__));
__extension__ typedef struct tagPMADDRBITS {
    union {
        struct {
            unsigned ADDR: 14;
            unsigned CS: 2;
        };
        struct {
            unsigned ADDR0: 1;
            unsigned ADDR1: 1;
            unsigned ADDR2: 1;
            unsigned ADDR3: 1;
        };
    };
};

```

```

    unsigned ADDR4: 1;
    unsigned ADDR5: 1;
    unsigned ADDR6: 1;
    unsigned ADDR7: 1;
    unsigned ADDR8: 1;
    unsigned ADDR9: 1;
    unsigned ADDR10: 1;
    unsigned ADDR11: 1;
    unsigned ADDR12: 1;
    unsigned ADDR13: 1;
    unsigned CS1: 1;
    unsigned CS2: 1;
};
};
} PMADDRBITS;
extern volatile PMADDRBITS PMADDRbits __attribute__((__sfr__));

extern volatile unsigned int PMDOUT1 __attribute__((__sfr__));
__extension__ typedef struct tagPMDOUT1BITS {
    union {
        struct {
            unsigned ADDR: 14;
            unsigned CS: 2;
        };
        struct {
            unsigned ADDR0: 1;
            unsigned ADDR1: 1;
            unsigned ADDR2: 1;
            unsigned ADDR3: 1;
            unsigned ADDR4: 1;
            unsigned ADDR5: 1;
            unsigned ADDR6: 1;
            unsigned ADDR7: 1;
            unsigned ADDR8: 1;
            unsigned ADDR9: 1;
            unsigned ADDR10: 1;
            unsigned ADDR11: 1;
            unsigned ADDR12: 1;
            unsigned ADDR13: 1;
            unsigned CS1: 1;
            unsigned CS2: 1;
        };
    };
};
} PMDOUT1BITS;
extern volatile PMDOUT1BITS PMDOUT1bits __attribute__((__sfr__));

extern volatile unsigned int PMDOUT2 __attribute__((__sfr__));
extern volatile unsigned int PMDI N1 __attribute__((__sfr__));
extern volatile unsigned int PMDI N2 __attribute__((__sfr__));
extern volatile unsigned int PMAEN __attribute__((__sfr__));
typedef struct tagPMAENBITS {
    unsigned PTEN0: 1;
    unsigned PTEN1: 1;
    unsigned PTEN2: 1;
    unsigned PTEN3: 1;
    unsigned PTEN4: 1;
    unsigned PTEN5: 1;
    unsigned PTEN6: 1;
    unsigned PTEN7: 1;
    unsigned PTEN8: 1;
    unsigned PTEN9: 1;
    unsigned PTEN10: 1;
    unsigned PTEN11: 1;
    unsigned PTEN12: 1;
    unsigned PTEN13: 1;
    unsigned PTEN14: 1;
    unsigned PTEN15: 1;
} PMAENBITS;

```

p24FJ256GB110

```
extern volatile PMAENBITS PMAENbits __attribute__((__sfr__));
extern volatile unsigned int PMSTAT __attribute__((__sfr__));
typedef struct tagPMSTATBITS {
    unsigned OBOE: 1;
    unsigned OB1E: 1;
    unsigned OB2E: 1;
    unsigned OB3E: 1;
    unsigned : 2;
    unsigned OBUF: 1;
    unsigned OBE: 1;
    unsigned IBOF: 1;
    unsigned IB1F: 1;
    unsigned IB2F: 1;
    unsigned IB3F: 1;
    unsigned : 2;
    unsigned IBOV: 1;
    unsigned IBF: 1;
} PMSTATBITS;
extern volatile PMSTATBITS PMSTATbits __attribute__((__sfr__));
extern volatile unsigned int ALRMVAL __attribute__((__sfr__));
extern volatile unsigned int ALCFGRPT __attribute__((__sfr__));
__extension__ typedef struct tagALCFGRPTBITS {
    union {
        struct {
            unsigned ARPT: 8;
            unsigned ALRMPTR: 2;
            unsigned AMASK: 4;
            unsigned CHIME: 1;
            unsigned ALRMEN: 1;
        };
        struct {
            unsigned ARPT0: 1;
            unsigned ARPT1: 1;
            unsigned ARPT2: 1;
            unsigned ARPT3: 1;
            unsigned ARPT4: 1;
            unsigned ARPT5: 1;
            unsigned ARPT6: 1;
            unsigned ARPT7: 1;
            unsigned ALRMPTR0: 1;
            unsigned ALRMPTR1: 1;
            unsigned AMASK0: 1;
            unsigned AMASK1: 1;
            unsigned AMASK2: 1;
            unsigned AMASK3: 1;
        };
    };
} ALCFGRPTBITS;
extern volatile ALCFGRPTBITS ALCFGRPTbits __attribute__((__sfr__));
extern volatile unsigned int RTCVAL __attribute__((__sfr__));
extern volatile unsigned int RCFGCAL __attribute__((__sfr__));
__extension__ typedef struct tagRCFGCALBITS {
    union {
        struct {
            unsigned CAL: 8;
            unsigned RTCPTR: 2;
            unsigned RTCOE: 1;
            unsigned HALFSEC: 1;
            unsigned RTCSYNC: 1;
            unsigned RTCWREN: 1;
            unsigned : 1;
            unsigned RTCEN: 1;
        };
        struct {
            unsigned CAL0: 1;
        };
    };
}
```

```

    unsigned CAL1: 1;
    unsigned CAL2: 1;
    unsigned CAL3: 1;
    unsigned CAL4: 1;
    unsigned CAL5: 1;
    unsigned CAL6: 1;
    unsigned CAL7: 1;
    unsigned RTCPTR0: 1;
    unsigned RTCPTR1: 1;
};
};
} RCFGALBITS;
extern volatile RCFGALBITS RCFGALbits __attribute__((__sfr__));

extern volatile unsigned int CMSTAT __attribute__((__sfr__));
typedef struct tagCMSTATBITS {
    unsigned C1OUT: 1;
    unsigned C2OUT: 1;
    unsigned C3OUT: 1;
    unsigned C4OUT: 1;
    unsigned C5OUT: 1;
    unsigned C6OUT: 1;
    unsigned : 2;
    unsigned C1EVT: 1;
    unsigned C2EVT: 1;
    unsigned C3EVT: 1;
    unsigned C4EVT: 1;
    unsigned C5EVT: 1;
    unsigned C6EVT: 1;
    unsigned : 1;
    unsigned CMI DL: 1;
} CMSTATBITS;
extern volatile CMSTATBITS CMSTATbits __attribute__((__sfr__));

extern volatile unsigned int CVRCON __attribute__((__sfr__));
__extension__ typedef struct tagCVRCONBITS {
    union {
        struct {
            unsigned CVR: 4;
            unsigned CVRSS: 1;
            unsigned CVRR: 1;
            unsigned CVROE: 1;
            unsigned CVREN: 1;
        };
        struct {
            unsigned CVRO: 1;
            unsigned CVR1: 1;
            unsigned CVR2: 1;
            unsigned CVR3: 1;
        };
    };
};
} CVRCONBITS;
extern volatile CVRCONBITS CVRCONbits __attribute__((__sfr__));

extern volatile unsigned int CM1CON __attribute__((__sfr__));
__extension__ typedef struct tagCM1CONBITS {
    union {
        struct {
            unsigned CCH0: 1;
            unsigned CCH1: 1;
            unsigned : 2;
            unsigned CREF: 1;
            unsigned : 1;
            unsigned EVPOL0: 1;
            unsigned EVPOL1: 1;
            unsigned COUT: 1;
            unsigned CEVT: 1;
            unsigned : 3;

```



```

    unsigned CPOL: 1;
    unsigned COE: 1;
    unsigned CON: 1;
};
struct {
    unsigned CCH: 2;
    unsigned : 4;
    unsigned EVPOL: 2;
    unsigned : 7;
    unsigned CEN: 1;
};
};
} CM1CONBITS;
extern volatile CM1CONBITS CM1CONbits __attribute__((__sfr__));

extern volatile unsigned int CM2CON __attribute__((__sfr__));
__extension__ typedef struct tagCM2CONBITS {
    union {
        struct {
            unsigned CCHO: 1;
            unsigned CCH1: 1;
            unsigned : 2;
            unsigned CREF: 1;
            unsigned : 1;
            unsigned EVPOL0: 1;
            unsigned EVPOL1: 1;
            unsigned COUT: 1;
            unsigned CEVT: 1;
            unsigned : 3;
            unsigned CPOL: 1;
            unsigned COE: 1;
            unsigned CON: 1;
        };
        struct {
            unsigned CCH: 2;
            unsigned : 4;
            unsigned EVPOL: 2;
            unsigned : 7;
            unsigned CEN: 1;
        };
    };
};
} CM2CONBITS;
extern volatile CM2CONBITS CM2CONbits __attribute__((__sfr__));

extern volatile unsigned int CM3CON __attribute__((__sfr__));
__extension__ typedef struct tagCM3CONBITS {
    union {
        struct {
            unsigned CCHO: 1;
            unsigned CCH1: 1;
            unsigned : 2;
            unsigned CREF: 1;
            unsigned : 1;
            unsigned EVPOL0: 1;
            unsigned EVPOL1: 1;
            unsigned COUT: 1;
            unsigned CEVT: 1;
            unsigned : 3;
            unsigned CPOL: 1;
            unsigned COE: 1;
            unsigned CON: 1;
        };
        struct {
            unsigned CCH: 2;
            unsigned : 4;
            unsigned EVPOL: 2;
            unsigned : 7;
            unsigned CEN: 1;
        };
    };
};
} CM3CONBITS;
extern volatile CM3CONBITS CM3CONbits __attribute__((__sfr__));

```

```

};
};
} CM3CONBITS;
extern volatile CM3CONBITS CM3CONbits __attribute__((__sfr__));

extern volatile unsigned int CRCCON __attribute__((__sfr__));
__extension__ typedef struct tagCRCCONBITS {
    union {
        struct {
            unsigned PLEN: 4;
            unsigned CRCGO: 1;
            unsigned : 1;
            unsigned CRCMPT: 1;
            unsigned CRCFUL: 1;
            unsigned VWORD: 5;
            unsigned CSIDL: 1;
        };
        struct {
            unsigned PLEN0: 1;
            unsigned PLEN1: 1;
            unsigned PLEN2: 1;
            unsigned PLEN3: 1;
            unsigned : 4;
            unsigned VWORD0: 1;
            unsigned VWORD1: 1;
            unsigned VWORD2: 1;
            unsigned VWORD3: 1;
            unsigned VWORD4: 1;
        };
    };
};
} CRCCONBITS;
extern volatile CRCCONBITS CRCCONbits __attribute__((__sfr__));

extern volatile unsigned int CRCXOR __attribute__((__sfr__));
typedef struct tagCRCXORBITS {
    unsigned : 1;
    unsigned X1: 1;
    unsigned X2: 1;
    unsigned X3: 1;
    unsigned X4: 1;
    unsigned X5: 1;
    unsigned X6: 1;
    unsigned X7: 1;
    unsigned X8: 1;
    unsigned X9: 1;
    unsigned X10: 1;
    unsigned X11: 1;
    unsigned X12: 1;
    unsigned X13: 1;
    unsigned X14: 1;
    unsigned X15: 1;
} CRCXORBITS;
extern volatile CRCXORBITS CRCXORbits __attribute__((__sfr__));

extern volatile unsigned int CRCDAT __attribute__((__sfr__));
extern volatile unsigned int CRCWDAT __attribute__((__sfr__));
extern volatile unsigned int RPI NRO __attribute__((__sfr__));
__extension__ typedef struct tagRPI NROBITS {
    union {
        struct {
            unsigned : 8;
            unsigned INT1R: 6;
        };
        struct {
            unsigned : 8;
            unsigned INT1R0: 1;
            unsigned INT1R1: 1;
            unsigned INT1R2: 1;
        };
    };
};

```

```

    unsigned INT1R3: 1;
    unsigned INT1R4: 1;
    unsigned INT1R5: 1;
};
};
} RPI NROBITS;
extern volatile RPI NROBITS RPI NRObits __attribute__((__sfr__));

extern volatile unsigned int RPI NR1 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR1BITS {
    union {
        struct {
            unsigned INT2R: 6;
            unsigned : 2;
            unsigned INT3R: 6;
        };
        struct {
            unsigned INT2R0: 1;
            unsigned INT2R1: 1;
            unsigned INT2R2: 1;
            unsigned INT2R3: 1;
            unsigned INT2R4: 1;
            unsigned INT2R5: 1;
            unsigned : 2;
            unsigned INT3R0: 1;
            unsigned INT3R1: 1;
            unsigned INT3R2: 1;
            unsigned INT3R3: 1;
            unsigned INT3R4: 1;
            unsigned INT3R5: 1;
        };
    };
};
} RPI NR1BITS;
extern volatile RPI NR1BITS RPI NR1bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR2 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR2BITS {
    union {
        struct {
            unsigned INT4R: 6;
            unsigned : 2;
            unsigned T1CKR: 6;
        };
        struct {
            unsigned INT4R0: 1;
            unsigned INT4R1: 1;
            unsigned INT4R2: 1;
            unsigned INT4R3: 1;
            unsigned INT4R4: 1;
            unsigned INT4R5: 1;
            unsigned : 2;
            unsigned T1CKR0: 1;
            unsigned T1CKR1: 1;
            unsigned T1CKR2: 1;
            unsigned T1CKR3: 1;
            unsigned T1CKR4: 1;
            unsigned T1CKR5: 1;
        };
    };
};
} RPI NR2BITS;
extern volatile RPI NR2BITS RPI NR2bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR3 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR3BITS {
    union {
        struct {
            unsigned T2CKR: 6;
            unsigned : 2;

```

```

    unsigned T3CKR: 6;
};
struct {
    unsigned T2CKR0: 1;
    unsigned T2CKR1: 1;
    unsigned T2CKR2: 1;
    unsigned T2CKR3: 1;
    unsigned T2CKR4: 1;
    unsigned T2CKR5: 1;
    unsigned : 2;
    unsigned T3CKR0: 1;
    unsigned T3CKR1: 1;
    unsigned T3CKR2: 1;
    unsigned T3CKR3: 1;
    unsigned T3CKR4: 1;
    unsigned T3CKR5: 1;
};
};
} RPI NR3BI TS;
extern volatile RPI NR3BI TS RPI NR3bi ts __attribute__((__sfr__));

extern volatile unsigned int RPI NR4 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR4BI TS {
    union {
        struct {
            unsigned T4CKR: 6;
            unsigned : 2;
            unsigned T5CKR: 6;
        };
        struct {
            unsigned T4CKR0: 1;
            unsigned T4CKR1: 1;
            unsigned T4CKR2: 1;
            unsigned T4CKR3: 1;
            unsigned T4CKR4: 1;
            unsigned T4CKR5: 1;
            unsigned : 2;
            unsigned T5CKR0: 1;
            unsigned T5CKR1: 1;
            unsigned T5CKR2: 1;
            unsigned T5CKR3: 1;
            unsigned T5CKR4: 1;
            unsigned T5CKR5: 1;
        };
    };
};
} RPI NR4BI TS;
extern volatile RPI NR4BI TS RPI NR4bi ts __attribute__((__sfr__));

extern volatile unsigned int RPI NR7 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR7BI TS {
    union {
        struct {
            unsigned IC1R: 6;
            unsigned : 2;
            unsigned IC2R: 6;
        };
        struct {
            unsigned IC1R0: 1;
            unsigned IC1R1: 1;
            unsigned IC1R2: 1;
            unsigned IC1R3: 1;
            unsigned IC1R4: 1;
            unsigned IC1R5: 1;
            unsigned : 2;
            unsigned IC2R0: 1;
            unsigned IC2R1: 1;
            unsigned IC2R2: 1;
            unsigned IC2R3: 1;
        };
    };
};

```

```

    unsigned IC2R4: 1;
    unsigned IC2R5: 1;
};
};
} RPI NR7BITS;
extern volatile RPI NR7BITS RPI NR7bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR8 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR8BITS {
    union {
        struct {
            unsigned IC3R: 6;
            unsigned : 2;
            unsigned IC4R: 6;
        };
        struct {
            unsigned IC3R0: 1;
            unsigned IC3R1: 1;
            unsigned IC3R2: 1;
            unsigned IC3R3: 1;
            unsigned IC3R4: 1;
            unsigned IC3R5: 1;
            unsigned : 2;
            unsigned IC4R0: 1;
            unsigned IC4R1: 1;
            unsigned IC4R2: 1;
            unsigned IC4R3: 1;
            unsigned IC4R4: 1;
            unsigned IC4R5: 1;
        };
    };
};
} RPI NR8BITS;
extern volatile RPI NR8BITS RPI NR8bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR9 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR9BITS {
    union {
        struct {
            unsigned IC5R: 6;
            unsigned : 2;
            unsigned IC6R: 6;
        };
        struct {
            unsigned IC5R0: 1;
            unsigned IC5R1: 1;
            unsigned IC5R2: 1;
            unsigned IC5R3: 1;
            unsigned IC5R4: 1;
            unsigned IC5R5: 1;
            unsigned : 2;
            unsigned IC6R0: 1;
            unsigned IC6R1: 1;
            unsigned IC6R2: 1;
            unsigned IC6R3: 1;
            unsigned IC6R4: 1;
            unsigned IC6R5: 1;
        };
    };
};
} RPI NR9BITS;
extern volatile RPI NR9BITS RPI NR9bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR10 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR10BITS {
    union {
        struct {
            unsigned IC7R: 6;
            unsigned : 2;
            unsigned IC8R: 6;

```

```

};
struct {
    unsigned IC7R0: 1;
    unsigned IC7R1: 1;
    unsigned IC7R2: 1;
    unsigned IC7R3: 1;
    unsigned IC7R4: 1;
    unsigned IC7R5: 1;
    unsigned : 2;
    unsigned IC8R0: 1;
    unsigned IC8R1: 1;
    unsigned IC8R2: 1;
    unsigned IC8R3: 1;
    unsigned IC8R4: 1;
    unsigned IC8R5: 1;
};
};
} RPI NR10BITS;
extern volatile RPI NR10BITS RPI NR10bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR11 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR11BITS {
    union {
        struct {
            unsigned OCFAR: 6;
            unsigned : 2;
            unsigned OCFBR: 6;
        };
        struct {
            unsigned OCFAR0: 1;
            unsigned OCFAR1: 1;
            unsigned OCFAR2: 1;
            unsigned OCFAR3: 1;
            unsigned OCFAR4: 1;
            unsigned OCFAR5: 1;
            unsigned : 2;
            unsigned OCFBR0: 1;
            unsigned OCFBR1: 1;
            unsigned OCFBR2: 1;
            unsigned OCFBR3: 1;
            unsigned OCFBR4: 1;
            unsigned OCFBR5: 1;
        };
    };
};
} RPI NR11BITS;
extern volatile RPI NR11BITS RPI NR11bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR15 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR15BITS {
    union {
        struct {
            unsigned : 8;
            unsigned IC9R: 6;
        };
        struct {
            unsigned : 8;
            unsigned IC9R0: 1;
            unsigned IC9R1: 1;
            unsigned IC9R2: 1;
            unsigned IC9R3: 1;
            unsigned IC9R4: 1;
            unsigned IC9R5: 1;
        };
    };
};
} RPI NR15BITS;
extern volatile RPI NR15BITS RPI NR15bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR17 __attribute__((__sfr__));

```

```

__extension__ typedef struct tagRPI NR17BITS {
union {
struct {
unsigned : 8;
unsigned U3R XR: 6;
};
struct {
unsigned : 8;
unsigned U3R XR0: 1;
unsigned U3R XR1: 1;
unsigned U3R XR2: 1;
unsigned U3R XR3: 1;
unsigned U3R XR4: 1;
unsigned U3R XR5: 1;
};
};
} RPI NR17BI TS;
extern volatile RPI NR17BI TS RPI NR17bi ts __attribute__((__sfr__));

extern volatile unsigned int RPI NR18 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR18BI TS {
union {
struct {
unsigned U1R XR: 6;
unsigned : 2;
unsigned U1CTSR: 6;
};
struct {
unsigned U1R XR0: 1;
unsigned U1R XR1: 1;
unsigned U1R XR2: 1;
unsigned U1R XR3: 1;
unsigned U1R XR4: 1;
unsigned U1R XR5: 1;
unsigned : 2;
unsigned U1CTSR0: 1;
unsigned U1CTSR1: 1;
unsigned U1CTSR2: 1;
unsigned U1CTSR3: 1;
unsigned U1CTSR4: 1;
unsigned U1CTSR5: 1;
};
};
} RPI NR18BI TS;
extern volatile RPI NR18BI TS RPI NR18bi ts __attribute__((__sfr__));

extern volatile unsigned int RPI NR19 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR19BI TS {
union {
struct {
unsigned U2R XR: 6;
unsigned : 2;
unsigned U2CTSR: 6;
};
struct {
unsigned U2R XR0: 1;
unsigned U2R XR1: 1;
unsigned U2R XR2: 1;
unsigned U2R XR3: 1;
unsigned U2R XR4: 1;
unsigned U2R XR5: 1;
unsigned : 2;
unsigned U2CTSR0: 1;
unsigned U2CTSR1: 1;
unsigned U2CTSR2: 1;
unsigned U2CTSR3: 1;
unsigned U2CTSR4: 1;
unsigned U2CTSR5: 1;
};
};
} RPI NR19BI TS;
extern volatile RPI NR19BI TS RPI NR19bi ts __attribute__((__sfr__));

```

```

};
};
} RPI NR19BITS;
extern volatile RPI NR19BITS RPI NR19bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR20 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR20BITS {
    union {
        struct {
            unsigned SDI 1R: 6;
            unsigned : 2;
            unsigned SCK1R: 6;
        };
        struct {
            unsigned SDI 1R0: 1;
            unsigned SDI 1R1: 1;
            unsigned SDI 1R2: 1;
            unsigned SDI 1R3: 1;
            unsigned SDI 1R4: 1;
            unsigned SDI 1R5: 1;
            unsigned : 2;
            unsigned SCK1R0: 1;
            unsigned SCK1R1: 1;
            unsigned SCK1R2: 1;
            unsigned SCK1R3: 1;
            unsigned SCK1R4: 1;
            unsigned SCK1R5: 1;
        };
    };
};
} RPI NR20BITS;
extern volatile RPI NR20BITS RPI NR20bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR21 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR21BITS {
    union {
        struct {
            unsigned SS1R: 6;
            unsigned : 2;
            unsigned U3CTSR: 6;
        };
        struct {
            unsigned SS1R0: 1;
            unsigned SS1R1: 1;
            unsigned SS1R2: 1;
            unsigned SS1R3: 1;
            unsigned SS1R4: 1;
            unsigned SS1R5: 1;
            unsigned : 2;
            unsigned U3CTSR0: 1;
            unsigned U3CTSR1: 1;
            unsigned U3CTSR2: 1;
            unsigned U3CTSR3: 1;
            unsigned U3CTSR4: 1;
            unsigned U3CTSR5: 1;
        };
    };
};
} RPI NR21BITS;
extern volatile RPI NR21BITS RPI NR21bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR22 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR22BITS {
    union {
        struct {
            unsigned SDI 2R: 6;
            unsigned : 2;
            unsigned SCK2R: 6;
        };
        struct {

```



```

    unsigned SDI2R0: 1;
    unsigned SDI2R1: 1;
    unsigned SDI2R2: 1;
    unsigned SDI2R3: 1;
    unsigned SDI2R4: 1;
    unsigned SDI2R5: 1;
    unsigned : 2;
    unsigned SCK2R0: 1;
    unsigned SCK2R1: 1;
    unsigned SCK2R2: 1;
    unsigned SCK2R3: 1;
    unsigned SCK2R4: 1;
    unsigned SCK2R5: 1;
};
};
} RPI NR22BITS;
extern volatile RPI NR22BITS RPI NR22bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR23 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR23BITS {
    union {
        struct {
            unsigned SS2R: 6;
        };
        struct {
            unsigned SS2R0: 1;
            unsigned SS2R1: 1;
            unsigned SS2R2: 1;
            unsigned SS2R3: 1;
            unsigned SS2R4: 1;
            unsigned SS2R5: 1;
        };
    };
};
} RPI NR23BITS;
extern volatile RPI NR23BITS RPI NR23bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR27 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR27BITS {
    union {
        struct {
            unsigned U4RXR: 6;
            unsigned : 2;
            unsigned U4CTSR: 6;
        };
        struct {
            unsigned U4RXR0: 1;
            unsigned U4RXR1: 1;
            unsigned U4RXR2: 1;
            unsigned U4RXR3: 1;
            unsigned U4RXR4: 1;
            unsigned U4RXR5: 1;
            unsigned : 2;
            unsigned U4CTSR0: 1;
            unsigned U4CTSR1: 1;
            unsigned U4CTSR2: 1;
            unsigned U4CTSR3: 1;
            unsigned U4CTSR4: 1;
            unsigned U4CTSR5: 1;
        };
    };
};
} RPI NR27BITS;
extern volatile RPI NR27BITS RPI NR27bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR28 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR28BITS {
    union {
        struct {
            unsigned SDI3R: 6;

```

```

    unsigned : 2;
    unsigned SCK3R: 6;
};
struct {
    unsigned SDI 3R0: 1;
    unsigned SDI 3R1: 1;
    unsigned SDI 3R2: 1;
    unsigned SDI 3R3: 1;
    unsigned SDI 3R4: 1;
    unsigned SDI 3R5: 1;
    unsigned : 2;
    unsigned SCK3R0: 1;
    unsigned SCK3R1: 1;
    unsigned SCK3R2: 1;
    unsigned SCK3R3: 1;
    unsigned SCK3R4: 1;
    unsigned SCK3R5: 1;
};
};
} RPI NR28BITS;
extern volatile RPI NR28BITS RPI NR28bits __attribute__((__sfr__));

extern volatile unsigned int RPI NR29 __attribute__((__sfr__));
__extension__ typedef struct tagRPI NR29BITS {
    union {
        struct {
            unsigned SS3R: 6;
        };
        struct {
            unsigned SS3R0: 1;
            unsigned SS3R1: 1;
            unsigned SS3R2: 1;
            unsigned SS3R3: 1;
            unsigned SS3R4: 1;
            unsigned SS3R5: 1;
        };
    };
};
} RPI NR29BITS;
extern volatile RPI NR29BITS RPI NR29bits __attribute__((__sfr__));

extern volatile unsigned int RPOR0 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR0BITS {
    union {
        struct {
            unsigned RPOR: 6;
            unsigned : 2;
            unsigned RP1R: 6;
        };
        struct {
            unsigned RPOR0: 1;
            unsigned RPOR1: 1;
            unsigned RPOR2: 1;
            unsigned RPOR3: 1;
            unsigned RPOR4: 1;
            unsigned RPOR5: 1;
            unsigned : 2;
            unsigned RP1R0: 1;
            unsigned RP1R1: 1;
            unsigned RP1R2: 1;
            unsigned RP1R3: 1;
            unsigned RP1R4: 1;
            unsigned RP1R5: 1;
        };
    };
};
} RPOR0BITS;
extern volatile RPOR0BITS RPOR0bits __attribute__((__sfr__));

extern volatile unsigned int RPOR1 __attribute__((__sfr__));

```

```

__extension__ typedef struct tagRPOR1BITS {
  union {
    struct {
      unsigned RP2R: 6;
      unsigned : 2;
      unsigned RP3R: 6;
    };
    struct {
      unsigned RP2R0: 1;
      unsigned RP2R1: 1;
      unsigned RP2R2: 1;
      unsigned RP2R3: 1;
      unsigned RP2R4: 1;
      unsigned RP2R5: 1;
      unsigned : 2;
      unsigned RP3R0: 1;
      unsigned RP3R1: 1;
      unsigned RP3R2: 1;
      unsigned RP3R3: 1;
      unsigned RP3R4: 1;
      unsigned RP3R5: 1;
    };
  };
} RPOR1BITS;
extern volatile RPOR1BITS RPOR1bits __attribute__((__sfr__));

extern volatile unsigned int RPOR2 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR2BITS {
  union {
    struct {
      unsigned RP4R: 6;
      unsigned : 2;
      unsigned RP5R: 6;
    };
    struct {
      unsigned RP4R0: 1;
      unsigned RP4R1: 1;
      unsigned RP4R2: 1;
      unsigned RP4R3: 1;
      unsigned RP4R4: 1;
      unsigned RP4R5: 1;
      unsigned : 2;
      unsigned RP5R0: 1;
      unsigned RP5R1: 1;
      unsigned RP5R2: 1;
      unsigned RP5R3: 1;
      unsigned RP5R4: 1;
      unsigned RP5R5: 1;
    };
  };
} RPOR2BITS;
extern volatile RPOR2BITS RPOR2bits __attribute__((__sfr__));

extern volatile unsigned int RPOR3 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR3BITS {
  union {
    struct {
      unsigned RP6R: 6;
      unsigned : 2;
      unsigned RP7R: 6;
    };
    struct {
      unsigned RP6R0: 1;
      unsigned RP6R1: 1;
      unsigned RP6R2: 1;
      unsigned RP6R3: 1;
      unsigned RP6R4: 1;
      unsigned RP6R5: 1;
    };
  };
} RPOR3BITS;

```

```

    unsigned : 2;
    unsigned RP7R0: 1;
    unsigned RP7R1: 1;
    unsigned RP7R2: 1;
    unsigned RP7R3: 1;
    unsigned RP7R4: 1;
    unsigned RP7R5: 1;
};
};
} RPOR3BITS;
extern volatile RPOR3BITS RPOR3bits __attribute__((__sfr__));

extern volatile unsigned int RPOR4 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR4BITS {
    union {
        struct {
            unsigned RP8R: 6;
            unsigned : 2;
            unsigned RP9R: 6;
        };
        struct {
            unsigned RP8R0: 1;
            unsigned RP8R1: 1;
            unsigned RP8R2: 1;
            unsigned RP8R3: 1;
            unsigned RP8R4: 1;
            unsigned RP8R5: 1;
            unsigned : 2;
            unsigned RP9R0: 1;
            unsigned RP9R1: 1;
            unsigned RP9R2: 1;
            unsigned RP9R3: 1;
            unsigned RP9R4: 1;
            unsigned RP9R5: 1;
        };
    };
};
} RPOR4BITS;
extern volatile RPOR4BITS RPOR4bits __attribute__((__sfr__));

extern volatile unsigned int RPOR5 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR5BITS {
    union {
        struct {
            unsigned RP10R: 6;
            unsigned : 2;
            unsigned RP11R: 6;
        };
        struct {
            unsigned RP10R0: 1;
            unsigned RP10R1: 1;
            unsigned RP10R2: 1;
            unsigned RP10R3: 1;
            unsigned RP10R4: 1;
            unsigned RP10R5: 1;
            unsigned : 2;
            unsigned RP11R0: 1;
            unsigned RP11R1: 1;
            unsigned RP11R2: 1;
            unsigned RP11R3: 1;
            unsigned RP11R4: 1;
            unsigned RP11R5: 1;
        };
    };
};
} RPOR5BITS;
extern volatile RPOR5BITS RPOR5bits __attribute__((__sfr__));

extern volatile unsigned int RPOR6 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR6BITS {

```

```

union {
    struct {
        unsigned RP12R: 6;
        unsigned : 2;
        unsigned RP13R: 6;
    };
    struct {
        unsigned RP12R0: 1;
        unsigned RP12R1: 1;
        unsigned RP12R2: 1;
        unsigned RP12R3: 1;
        unsigned RP12R4: 1;
        unsigned RP12R5: 1;
        unsigned : 2;
        unsigned RP13R0: 1;
        unsigned RP13R1: 1;
        unsigned RP13R2: 1;
        unsigned RP13R3: 1;
        unsigned RP13R4: 1;
        unsigned RP13R5: 1;
    };
};
} RPOR6BITS;
extern volatile RPOR6BITS RPOR6bits __attribute__((__sfr__));

extern volatile unsigned int RPOR7 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR7BITS {
    union {
        struct {
            unsigned RP14R: 6;
            unsigned : 2;
            unsigned RP15R: 6;
        };
        struct {
            unsigned RP14R0: 1;
            unsigned RP14R1: 1;
            unsigned RP14R2: 1;
            unsigned RP14R3: 1;
            unsigned RP14R4: 1;
            unsigned RP14R5: 1;
            unsigned : 2;
            unsigned RP15R0: 1;
            unsigned RP15R1: 1;
            unsigned RP15R2: 1;
            unsigned RP15R3: 1;
            unsigned RP15R4: 1;
            unsigned RP15R5: 1;
        };
    };
} RPOR7BITS;
extern volatile RPOR7BITS RPOR7bits __attribute__((__sfr__));

extern volatile unsigned int RPOR8 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR8BITS {
    union {
        struct {
            unsigned RP16R: 6;
            unsigned : 2;
            unsigned RP17R: 6;
        };
        struct {
            unsigned RP16R0: 1;
            unsigned RP16R1: 1;
            unsigned RP16R2: 1;
            unsigned RP16R3: 1;
            unsigned RP16R4: 1;
            unsigned RP16R5: 1;
            unsigned : 2;
        };
    };
} RPOR8BITS;
extern volatile RPOR8BITS RPOR8bits __attribute__((__sfr__));

```

```

    unsigned RP17R0: 1;
    unsigned RP17R1: 1;
    unsigned RP17R2: 1;
    unsigned RP17R3: 1;
    unsigned RP17R4: 1;
    unsigned RP17R5: 1;
};
};
} RPOR8BITS;
extern volatile RPOR8BITS RPOR8bits __attribute__((__sfr__));

extern volatile unsigned int RPOR9 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR9BITS {
    union {
        struct {
            unsigned RP18R: 6;
            unsigned : 2;
            unsigned RP19R: 6;
        };
        struct {
            unsigned RP18R0: 1;
            unsigned RP18R1: 1;
            unsigned RP18R2: 1;
            unsigned RP18R3: 1;
            unsigned RP18R4: 1;
            unsigned RP18R5: 1;
            unsigned : 2;
            unsigned RP19R0: 1;
            unsigned RP19R1: 1;
            unsigned RP19R2: 1;
            unsigned RP19R3: 1;
            unsigned RP19R4: 1;
            unsigned RP19R5: 1;
        };
    };
};
} RPOR9BITS;
extern volatile RPOR9BITS RPOR9bits __attribute__((__sfr__));

extern volatile unsigned int RPOR10 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR10BITS {
    union {
        struct {
            unsigned RP20R: 6;
            unsigned : 2;
            unsigned RP21R: 6;
        };
        struct {
            unsigned RP20R0: 1;
            unsigned RP20R1: 1;
            unsigned RP20R2: 1;
            unsigned RP20R3: 1;
            unsigned RP20R4: 1;
            unsigned RP20R5: 1;
            unsigned : 2;
            unsigned RP21R0: 1;
            unsigned RP21R1: 1;
            unsigned RP21R2: 1;
            unsigned RP21R3: 1;
            unsigned RP21R4: 1;
            unsigned RP21R5: 1;
        };
    };
};
} RPOR10BITS;
extern volatile RPOR10BITS RPOR10bits __attribute__((__sfr__));

extern volatile unsigned int RPOR11 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR11BITS {
    union {

```

```

struct {
    unsigned RP22R: 6;
    unsigned : 2;
    unsigned RP23R: 6;
};
struct {
    unsigned RP22R0: 1;
    unsigned RP22R1: 1;
    unsigned RP22R2: 1;
    unsigned RP22R3: 1;
    unsigned RP22R4: 1;
    unsigned RP22R5: 1;
    unsigned : 2;
    unsigned RP23R0: 1;
    unsigned RP23R1: 1;
    unsigned RP23R2: 1;
    unsigned RP23R3: 1;
    unsigned RP23R4: 1;
    unsigned RP23R5: 1;
};
};
} RPOR11BITS;
extern volatile RPOR11BITS RPOR11bits __attribute__((__sfr__));

extern volatile unsigned int RPOR12 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR12BITS {
    union {
        struct {
            unsigned RP24R: 6;
            unsigned : 2;
            unsigned RP25R: 6;
        };
        struct {
            unsigned RP24R0: 1;
            unsigned RP24R1: 1;
            unsigned RP24R2: 1;
            unsigned RP24R3: 1;
            unsigned RP24R4: 1;
            unsigned RP24R5: 1;
            unsigned : 2;
            unsigned RP25R0: 1;
            unsigned RP25R1: 1;
            unsigned RP25R2: 1;
            unsigned RP25R3: 1;
            unsigned RP25R4: 1;
            unsigned RP25R5: 1;
        };
    };
} RPOR12BITS;
extern volatile RPOR12BITS RPOR12bits __attribute__((__sfr__));

extern volatile unsigned int RPOR13 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR13BITS {
    union {
        struct {
            unsigned RP26R: 6;
            unsigned : 2;
            unsigned RP27R: 6;
        };
        struct {
            unsigned RP26R0: 1;
            unsigned RP26R1: 1;
            unsigned RP26R2: 1;
            unsigned RP26R3: 1;
            unsigned RP26R4: 1;
            unsigned RP26R5: 1;
            unsigned : 2;
            unsigned RP27R0: 1;

```

```

    unsigned RP27R1: 1;
    unsigned RP27R2: 1;
    unsigned RP27R3: 1;
    unsigned RP27R4: 1;
    unsigned RP27R5: 1;
};
};
} RPOR13BITS;
extern volatile RPOR13BITS RPOR13bits __attribute__((__sfr__));

extern volatile unsigned int RPOR14 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR14BITS {
    union {
        struct {
            unsigned RP28R: 6;
            unsigned : 2;
            unsigned RP29R: 6;
        };
        struct {
            unsigned RP28R0: 1;
            unsigned RP28R1: 1;
            unsigned RP28R2: 1;
            unsigned RP28R3: 1;
            unsigned RP28R4: 1;
            unsigned RP28R5: 1;
            unsigned : 2;
            unsigned RP29R0: 1;
            unsigned RP29R1: 1;
            unsigned RP29R2: 1;
            unsigned RP29R3: 1;
            unsigned RP29R4: 1;
            unsigned RP29R5: 1;
        };
    };
};
} RPOR14BITS;
extern volatile RPOR14BITS RPOR14bits __attribute__((__sfr__));

extern volatile unsigned int RPOR15 __attribute__((__sfr__));
__extension__ typedef struct tagRPOR15BITS {
    union {
        struct {
            unsigned RP30R: 6;
            unsigned : 2;
            unsigned RP31R: 6;
        };
        struct {
            unsigned RP30R0: 1;
            unsigned RP30R1: 1;
            unsigned RP30R2: 1;
            unsigned RP30R3: 1;
            unsigned RP30R4: 1;
            unsigned RP30R5: 1;
            unsigned : 2;
            unsigned RP31R0: 1;
            unsigned RP31R1: 1;
            unsigned RP31R2: 1;
            unsigned RP31R3: 1;
            unsigned RP31R4: 1;
            unsigned RP31R5: 1;
        };
    };
};
} RPOR15BITS;
extern volatile RPOR15BITS RPOR15bits __attribute__((__sfr__));

extern volatile unsigned int RCON __attribute__((__sfr__));
__extension__ typedef struct tagRCONBITS {
    union {
        struct {

```



```

    unsigned POR: 1;
    unsigned BOR: 1;
    unsigned IDLE: 1;
    unsigned SLEEP: 1;
    unsigned WDTO: 1;
    unsigned SWDTEN: 1;
    unsigned SWR: 1;
    unsigned EXTR: 1;
    unsigned VREGS: 1;
    unsigned CM: 1;
    unsigned : 4;
    unsigned IOPUWR: 1;
    unsigned TRAPR: 1;
};
struct {
    unsigned : 8;
    unsigned PMSLP: 1;
};
};
} RCONBITS;
extern volatile RCONBITS RCONbits __attribute__((__sfr__));

extern volatile unsigned int OSCCON __attribute__((__sfr__));
__extension__ typedef struct tagOSCCONBITS {
    union {
        struct {
            unsigned OSWEN: 1;
            unsigned SOSSEN: 1;
            unsigned POSSEN: 1;
            unsigned CF: 1;
            unsigned : 1;
            unsigned LOCK: 1;
            unsigned ILOCK: 1;
            unsigned CLKLOCK: 1;
            unsigned NOSC: 3;
            unsigned : 1;
            unsigned COSC: 3;
        };
        struct {
            unsigned : 1;
            unsigned LPOSCEN: 1;
            unsigned : 6;
            unsigned NOSCO: 1;
            unsigned NOSC1: 1;
            unsigned NOSC2: 1;
            unsigned : 1;
            unsigned COSCO: 1;
            unsigned COSC1: 1;
            unsigned COSC2: 1;
        };
    };
};
} OSCCONBITS;
extern volatile OSCCONBITS OSCCONbits __attribute__((__sfr__));

extern volatile unsigned char OSCCONL __attribute__((__sfr__));
extern volatile unsigned char OSCCONH __attribute__((__sfr__));
extern volatile unsigned int CLKDIV __attribute__((__sfr__));
__extension__ typedef struct tagCLKDIVBITS {
    union {
        struct {
            unsigned : 6;
            unsigned CPDIV: 2;
            unsigned RCDIV: 3;
            unsigned DOZEN: 1;
            unsigned DOZE: 3;
            unsigned ROI: 1;
        };
    };
    struct {

```

```

    unsigned : 6;
    unsigned CPDI V0: 1;
    unsigned CPDI V1: 1;
    unsigned RCDI V0: 1;
    unsigned RCDI V1: 1;
    unsigned RCDI V2: 1;
    unsigned : 1;
    unsigned DOZE0: 1;
    unsigned DOZE1: 1;
    unsigned DOZE2: 1;
};
struct {
    unsigned : 6;
    unsigned USBDOZE0: 1;
    unsigned USBDOZE1: 1;
};
struct {
    unsigned : 6;
    unsigned USBDOZE: 2;
};
};
} CLKDIVBITS;
extern volatile CLKDIVBITS CLKDIVbits __attribute__((__sfr__));

extern volatile unsigned int OSCTUN __attribute__((__sfr__));
__extension__ typedef struct tagOSCTUNBITS {
    union {
        struct {
            unsigned TUN: 6;
        };
        struct {
            unsigned TUN0: 1;
            unsigned TUN1: 1;
            unsigned TUN2: 1;
            unsigned TUN3: 1;
            unsigned TUN4: 1;
            unsigned TUN5: 1;
        };
    };
};
} OSCTUNBITS;
extern volatile OSCTUNBITS OSCTUNbits __attribute__((__sfr__));

extern volatile unsigned int REFOCON __attribute__((__sfr__));
__extension__ typedef struct tagREFOCONBITS {
    union {
        struct {
            unsigned : 8;
            unsigned RODIV: 4;
            unsigned ROSEL: 1;
            unsigned ROSSLP: 1;
        };
        struct {
            unsigned : 8;
            unsigned RODIV0: 1;
            unsigned RODIV1: 1;
            unsigned RODIV2: 1;
            unsigned RODIV3: 1;
            unsigned : 3;
            unsigned ROON: 1;
        };
    };
};
} REFOCONBITS;
extern volatile REFOCONBITS REFOCONbits __attribute__((__sfr__));

extern volatile unsigned int NVMCON __attribute__((__sfr__));
__extension__ typedef struct tagNVMCONBITS {
    union {
        struct {

```

```

    unsigned NVMOP: 4;
    unsigned : 2;
    unsigned ERASE: 1;
    unsigned : 6;
    unsigned WRERR: 1;
    unsigned WREN: 1;
    unsigned WR: 1;
};
struct {
    unsigned NVMOP0: 1;
    unsigned NVMOP1: 1;
    unsigned NVMOP2: 1;
    unsigned NVMOP3: 1;
};
struct {
    unsigned PROGOP0: 1;
    unsigned PROGOP1: 1;
    unsigned PROGOP2: 1;
    unsigned PROGOP3: 1;
};
struct {
    unsigned PROGOP: 4;
};
};
} NVMCONBITS;
extern volatile NVMCONBITS NVMCONbits __attribute__((__sfr__));

extern volatile unsigned int NVMKEY __attribute__((__sfr__));
extern volatile unsigned int PMD1 __attribute__((__sfr__));
typedef struct tagPMD1BITS {
    unsigned ADC1MD: 1;
    unsigned : 2;
    unsigned SPI1MD: 1;
    unsigned SPI2MD: 1;
    unsigned U1MD: 1;
    unsigned U2MD: 1;
    unsigned I2C1MD: 1;
    unsigned : 3;
    unsigned T1MD: 1;
    unsigned T2MD: 1;
    unsigned T3MD: 1;
    unsigned T4MD: 1;
    unsigned T5MD: 1;
} PMD1BITS;
extern volatile PMD1BITS PMD1bits __attribute__((__sfr__));

extern volatile unsigned int PMD2 __attribute__((__sfr__));
typedef struct tagPMD2BITS {
    unsigned OC1MD: 1;
    unsigned OC2MD: 1;
    unsigned OC3MD: 1;
    unsigned OC4MD: 1;
    unsigned OC5MD: 1;
    unsigned OC6MD: 1;
    unsigned OC7MD: 1;
    unsigned OC8MD: 1;
    unsigned IC1MD: 1;
    unsigned IC2MD: 1;
    unsigned IC3MD: 1;
    unsigned IC4MD: 1;
    unsigned IC5MD: 1;
    unsigned IC6MD: 1;
    unsigned IC7MD: 1;
    unsigned IC8MD: 1;
} PMD2BITS;
extern volatile PMD2BITS PMD2bits __attribute__((__sfr__));

extern volatile unsigned int PMD3 __attribute__((__sfr__));

```

```

__extension__ typedef struct tagPMD3BITS {
    union {
        struct {
            unsigned : 1;
            unsigned I2C2MD: 1;
            unsigned I2C3MD: 1;
            unsigned U3MD: 1;
            unsigned : 3;
            unsigned CRCMD: 1;
            unsigned PMPMD: 1;
            unsigned RTCCMD: 1;
            unsigned CMPMD: 1;
        };
        struct {
            unsigned : 7;
            unsigned CRCPMD: 1;
        };
    };
} PMD3BITS;
extern volatile PMD3BITS PMD3bits __attribute__((__sfr__));

extern volatile unsigned int PMD4 __attribute__((__sfr__));
typedef struct tagPMD4BITS {
    unsigned USB1MD: 1;
    unsigned LVDMD: 1;
    unsigned CTMUMD: 1;
    unsigned REFOMD: 1;
    unsigned : 1;
    unsigned U4MD: 1;
    unsigned UPWMMD: 1;
} PMD4BITS;
extern volatile PMD4BITS PMD4bits __attribute__((__sfr__));

extern volatile unsigned int PMD5 __attribute__((__sfr__));
typedef struct tagPMD5BITS {
    unsigned OC9MD: 1;
    unsigned : 7;
    unsigned IC9MD: 1;
} PMD5BITS;
extern volatile PMD5BITS PMD5bits __attribute__((__sfr__));

extern volatile unsigned int PMD6 __attribute__((__sfr__));
typedef struct tagPMD6BITS {
    unsigned SPI3MD: 1;
} PMD6BITS;
extern volatile PMD6BITS PMD6bits __attribute__((__sfr__));

/* ----- */
/* Defines for unique SFR bit names */
/* ----- */

/* SR */
#define _C SRbits.C
#define _Z SRbits.Z
#define _OV SRbits.OV
#define _N SRbits.N
#define _RA SRbits.RA
#define _IPL SRbits.IPL
/* Bitname _DC cannot be defined because it is used by more than one SFR */
#define _IPL0 SRbits.IPL0
#define _IPL1 SRbits.IPL1
#define _IPL2 SRbits.IPL2

/* CORCON */
#define _PSV CORCONbits.PSV
#define _IPL3 CORCONbits.IPL3

```

```
/* CNPD1 */
#define _CN0PDE CNPD1bi ts. CN0PDE
#define _CN1PDE CNPD1bi ts. CN1PDE
#define _CN2PDE CNPD1bi ts. CN2PDE
#define _CN3PDE CNPD1bi ts. CN3PDE
#define _CN4PDE CNPD1bi ts. CN4PDE
#define _CN5PDE CNPD1bi ts. CN5PDE
#define _CN6PDE CNPD1bi ts. CN6PDE
#define _CN7PDE CNPD1bi ts. CN7PDE
#define _CN8PDE CNPD1bi ts. CN8PDE
#define _CN9PDE CNPD1bi ts. CN9PDE
#define _CN10PDE CNPD1bi ts. CN10PDE
#define _CN11PDE CNPD1bi ts. CN11PDE
#define _CN12PDE CNPD1bi ts. CN12PDE
#define _CN13PDE CNPD1bi ts. CN13PDE
#define _CN14PDE CNPD1bi ts. CN14PDE
#define _CN15PDE CNPD1bi ts. CN15PDE
```

```
/* CNPD2 */
#define _CN16PDE CNPD2bi ts. CN16PDE
#define _CN17PDE CNPD2bi ts. CN17PDE
#define _CN18PDE CNPD2bi ts. CN18PDE
#define _CN19PDE CNPD2bi ts. CN19PDE
#define _CN20PDE CNPD2bi ts. CN20PDE
#define _CN21PDE CNPD2bi ts. CN21PDE
#define _CN22PDE CNPD2bi ts. CN22PDE
#define _CN23PDE CNPD2bi ts. CN23PDE
#define _CN24PDE CNPD2bi ts. CN24PDE
#define _CN25PDE CNPD2bi ts. CN25PDE
#define _CN26PDE CNPD2bi ts. CN26PDE
#define _CN27PDE CNPD2bi ts. CN27PDE
#define _CN28PDE CNPD2bi ts. CN28PDE
#define _CN29PDE CNPD2bi ts. CN29PDE
#define _CN30PDE CNPD2bi ts. CN30PDE
#define _CN31PDE CNPD2bi ts. CN31PDE
```

```
/* CNPD3 */
#define _CN32PDE CNPD3bi ts. CN32PDE
#define _CN33PDE CNPD3bi ts. CN33PDE
#define _CN34PDE CNPD3bi ts. CN34PDE
#define _CN35PDE CNPD3bi ts. CN35PDE
#define _CN36PDE CNPD3bi ts. CN36PDE
#define _CN37PDE CNPD3bi ts. CN37PDE
#define _CN38PDE CNPD3bi ts. CN38PDE
#define _CN39PDE CNPD3bi ts. CN39PDE
#define _CN40PDE CNPD3bi ts. CN40PDE
#define _CN41PDE CNPD3bi ts. CN41PDE
#define _CN42PDE CNPD3bi ts. CN42PDE
#define _CN43PDE CNPD3bi ts. CN43PDE
#define _CN44PDE CNPD3bi ts. CN44PDE
#define _CN45PDE CNPD3bi ts. CN45PDE
#define _CN46PDE CNPD3bi ts. CN46PDE
#define _CN47PDE CNPD3bi ts. CN47PDE
```

```
/* CNPD4 */
#define _CN48PDE CNPD4bi ts. CN48PDE
#define _CN49PDE CNPD4bi ts. CN49PDE
#define _CN50PDE CNPD4bi ts. CN50PDE
#define _CN51PDE CNPD4bi ts. CN51PDE
#define _CN52PDE CNPD4bi ts. CN52PDE
#define _CN53PDE CNPD4bi ts. CN53PDE
#define _CN54PDE CNPD4bi ts. CN54PDE
#define _CN55PDE CNPD4bi ts. CN55PDE
#define _CN56PDE CNPD4bi ts. CN56PDE
#define _CN57PDE CNPD4bi ts. CN57PDE
#define _CN58PDE CNPD4bi ts. CN58PDE
#define _CN59PDE CNPD4bi ts. CN59PDE
```

```
#define _CN60PDE CNPD4bi ts. CN60PDE
#define _CN61PDE CNPD4bi ts. CN61PDE
#define _CN62PDE CNPD4bi ts. CN62PDE
#define _CN63PDE CNPD4bi ts. CN63PDE
```

```
/* CNPD5 */
#define _CN64PDE CNPD5bi ts. CN64PDE
#define _CN65PDE CNPD5bi ts. CN65PDE
#define _CN66PDE CNPD5bi ts. CN66PDE
#define _CN67PDE CNPD5bi ts. CN67PDE
#define _CN68PDE CNPD5bi ts. CN68PDE
#define _CN69PDE CNPD5bi ts. CN69PDE
#define _CN70PDE CNPD5bi ts. CN70PDE
#define _CN71PDE CNPD5bi ts. CN71PDE
#define _CN74PDE CNPD5bi ts. CN74PDE
#define _CN75PDE CNPD5bi ts. CN75PDE
#define _CN76PDE CNPD5bi ts. CN76PDE
#define _CN77PDE CNPD5bi ts. CN77PDE
#define _CN78PDE CNPD5bi ts. CN78PDE
#define _CN79PDE CNPD5bi ts. CN79PDE
```

```
/* CNPD6 */
#define _CN80PDE CNPD6bi ts. CN80PDE
#define _CN81PDE CNPD6bi ts. CN81PDE
#define _CN82PDE CNPD6bi ts. CN82PDE
```

```
/* CNEN1 */
#define _CN01E CNEN1bi ts. CN01E
#define _CN11E CNEN1bi ts. CN11E
#define _CN21E CNEN1bi ts. CN21E
#define _CN31E CNEN1bi ts. CN31E
#define _CN41E CNEN1bi ts. CN41E
#define _CN51E CNEN1bi ts. CN51E
#define _CN61E CNEN1bi ts. CN61E
#define _CN71E CNEN1bi ts. CN71E
#define _CN81E CNEN1bi ts. CN81E
#define _CN91E CNEN1bi ts. CN91E
#define _CN101E CNEN1bi ts. CN101E
#define _CN111E CNEN1bi ts. CN111E
#define _CN121E CNEN1bi ts. CN121E
#define _CN131E CNEN1bi ts. CN131E
#define _CN141E CNEN1bi ts. CN141E
#define _CN151E CNEN1bi ts. CN151E
```

```
/* CNEN2 */
#define _CN161E CNEN2bi ts. CN161E
#define _CN171E CNEN2bi ts. CN171E
#define _CN181E CNEN2bi ts. CN181E
#define _CN191E CNEN2bi ts. CN191E
#define _CN201E CNEN2bi ts. CN201E
#define _CN211E CNEN2bi ts. CN211E
#define _CN221E CNEN2bi ts. CN221E
#define _CN231E CNEN2bi ts. CN231E
#define _CN241E CNEN2bi ts. CN241E
#define _CN251E CNEN2bi ts. CN251E
#define _CN261E CNEN2bi ts. CN261E
#define _CN271E CNEN2bi ts. CN271E
#define _CN281E CNEN2bi ts. CN281E
#define _CN291E CNEN2bi ts. CN291E
#define _CN301E CNEN2bi ts. CN301E
#define _CN311E CNEN2bi ts. CN311E
```

```
/* CNEN3 */
#define _CN321E CNEN3bi ts. CN321E
#define _CN331E CNEN3bi ts. CN331E
#define _CN341E CNEN3bi ts. CN341E
#define _CN351E CNEN3bi ts. CN351E
#define _CN361E CNEN3bi ts. CN361E
```

```

#define _CN371E CNEN3bits. CN371E
#define _CN381E CNEN3bits. CN381E
#define _CN391E CNEN3bits. CN391E
#define _CN401E CNEN3bits. CN401E
#define _CN411E CNEN3bits. CN411E
#define _CN421E CNEN3bits. CN421E
#define _CN431E CNEN3bits. CN431E
#define _CN441E CNEN3bits. CN441E
#define _CN451E CNEN3bits. CN451E
#define _CN461E CNEN3bits. CN461E
#define _CN471E CNEN3bits. CN471E

```

```
/* CNEN4 */
```

```

#define _CN481E CNEN4bits. CN481E
#define _CN491E CNEN4bits. CN491E
#define _CN501E CNEN4bits. CN501E
#define _CN511E CNEN4bits. CN511E
#define _CN521E CNEN4bits. CN521E
#define _CN531E CNEN4bits. CN531E
#define _CN541E CNEN4bits. CN541E
#define _CN551E CNEN4bits. CN551E
#define _CN561E CNEN4bits. CN561E
#define _CN571E CNEN4bits. CN571E
#define _CN581E CNEN4bits. CN581E
#define _CN591E CNEN4bits. CN591E
#define _CN601E CNEN4bits. CN601E
#define _CN611E CNEN4bits. CN611E
#define _CN621E CNEN4bits. CN621E
#define _CN631E CNEN4bits. CN631E

```

```
/* CNEN5 */
```

```

#define _CN641E CNEN5bits. CN641E
#define _CN651E CNEN5bits. CN651E
#define _CN661E CNEN5bits. CN661E
#define _CN671E CNEN5bits. CN671E
#define _CN681E CNEN5bits. CN681E
#define _CN691E CNEN5bits. CN691E
#define _CN701E CNEN5bits. CN701E
#define _CN711E CNEN5bits. CN711E
#define _CN741E CNEN5bits. CN741E
#define _CN751E CNEN5bits. CN751E
#define _CN761E CNEN5bits. CN761E
#define _CN771E CNEN5bits. CN771E
#define _CN781E CNEN5bits. CN781E
#define _CN791E CNEN5bits. CN791E

```

```
/* CNEN6 */
```

```

#define _CN801E CNEN6bits. CN801E
#define _CN811E CNEN6bits. CN811E
#define _CN821E CNEN6bits. CN821E

```

```
/* CNPU1 */
```

```

#define _CN0PUE CNPU1bits. CN0PUE
#define _CN1PUE CNPU1bits. CN1PUE
#define _CN2PUE CNPU1bits. CN2PUE
#define _CN3PUE CNPU1bits. CN3PUE
#define _CN4PUE CNPU1bits. CN4PUE
#define _CN5PUE CNPU1bits. CN5PUE
#define _CN6PUE CNPU1bits. CN6PUE
#define _CN7PUE CNPU1bits. CN7PUE
#define _CN8PUE CNPU1bits. CN8PUE
#define _CN9PUE CNPU1bits. CN9PUE
#define _CN10PUE CNPU1bits. CN10PUE
#define _CN11PUE CNPU1bits. CN11PUE
#define _CN12PUE CNPU1bits. CN12PUE
#define _CN13PUE CNPU1bits. CN13PUE
#define _CN14PUE CNPU1bits. CN14PUE
#define _CN15PUE CNPU1bits. CN15PUE

```

```
/* CNPU2 */
#define _CN16PUE CNPU2bi ts. CN16PUE
#define _CN17PUE CNPU2bi ts. CN17PUE
#define _CN18PUE CNPU2bi ts. CN18PUE
#define _CN19PUE CNPU2bi ts. CN19PUE
#define _CN20PUE CNPU2bi ts. CN20PUE
#define _CN21PUE CNPU2bi ts. CN21PUE
#define _CN22PUE CNPU2bi ts. CN22PUE
#define _CN23PUE CNPU2bi ts. CN23PUE
#define _CN24PUE CNPU2bi ts. CN24PUE
#define _CN25PUE CNPU2bi ts. CN25PUE
#define _CN26PUE CNPU2bi ts. CN26PUE
#define _CN27PUE CNPU2bi ts. CN27PUE
#define _CN28PUE CNPU2bi ts. CN28PUE
#define _CN29PUE CNPU2bi ts. CN29PUE
#define _CN30PUE CNPU2bi ts. CN30PUE
#define _CN31PUE CNPU2bi ts. CN31PUE
```

```
/* CNPU3 */
#define _CN32PUE CNPU3bi ts. CN32PUE
#define _CN33PUE CNPU3bi ts. CN33PUE
#define _CN34PUE CNPU3bi ts. CN34PUE
#define _CN35PUE CNPU3bi ts. CN35PUE
#define _CN36PUE CNPU3bi ts. CN36PUE
#define _CN37PUE CNPU3bi ts. CN37PUE
#define _CN38PUE CNPU3bi ts. CN38PUE
#define _CN39PUE CNPU3bi ts. CN39PUE
#define _CN40PUE CNPU3bi ts. CN40PUE
#define _CN41PUE CNPU3bi ts. CN41PUE
#define _CN42PUE CNPU3bi ts. CN42PUE
#define _CN43PUE CNPU3bi ts. CN43PUE
#define _CN44PUE CNPU3bi ts. CN44PUE
#define _CN45PUE CNPU3bi ts. CN45PUE
#define _CN46PUE CNPU3bi ts. CN46PUE
#define _CN47PUE CNPU3bi ts. CN47PUE
```

```
/* CNPU4 */
#define _CN48PUE CNPU4bi ts. CN48PUE
#define _CN49PUE CNPU4bi ts. CN49PUE
#define _CN50PUE CNPU4bi ts. CN50PUE
#define _CN51PUE CNPU4bi ts. CN51PUE
#define _CN52PUE CNPU4bi ts. CN52PUE
#define _CN53PUE CNPU4bi ts. CN53PUE
#define _CN54PUE CNPU4bi ts. CN54PUE
#define _CN55PUE CNPU4bi ts. CN55PUE
#define _CN56PUE CNPU4bi ts. CN56PUE
#define _CN57PUE CNPU4bi ts. CN57PUE
#define _CN58PUE CNPU4bi ts. CN58PUE
#define _CN59PUE CNPU4bi ts. CN59PUE
#define _CN60PUE CNPU4bi ts. CN60PUE
#define _CN61PUE CNPU4bi ts. CN61PUE
#define _CN62PUE CNPU4bi ts. CN62PUE
#define _CN63PUE CNPU4bi ts. CN63PUE
```

```
/* CNPU5 */
#define _CN64PUE CNPU5bi ts. CN64PUE
#define _CN65PUE CNPU5bi ts. CN65PUE
#define _CN66PUE CNPU5bi ts. CN66PUE
#define _CN67PUE CNPU5bi ts. CN67PUE
#define _CN68PUE CNPU5bi ts. CN68PUE
#define _CN69PUE CNPU5bi ts. CN69PUE
#define _CN70PUE CNPU5bi ts. CN70PUE
#define _CN71PUE CNPU5bi ts. CN71PUE
#define _CN74PUE CNPU5bi ts. CN74PUE
#define _CN75PUE CNPU5bi ts. CN75PUE
#define _CN76PUE CNPU5bi ts. CN76PUE
#define _CN77PUE CNPU5bi ts. CN77PUE
```



```

#define _CN78PUE CNPU5bits.CN78PUE
#define _CN79PUE CNPU5bits.CN79PUE

/* CNPU6 */
#define _CN80PUE CNPU6bits.CN80PUE
#define _CN81PUE CNPU6bits.CN81PUE
#define _CN82PUE CNPU6bits.CN82PUE

/* INTCON1 */
#define _OSCFAIL INTCON1bits.OSCFAIL
#define _STKERR INTCON1bits.STKERR
#define _ADDRERR INTCON1bits.ADDRERR
#define _MATHERR INTCON1bits.MATHERR
#define _NSTDIS INTCON1bits.NSTDIS

/* INTCON2 */
#define _INTOEP INTCON2bits.INTOEP
#define _INT1EP INTCON2bits.INT1EP
#define _INT2EP INTCON2bits.INT2EP
#define _INT3EP INTCON2bits.INT3EP
#define _INT4EP INTCON2bits.INT4EP
#define _DISI INTCON2bits.DISI
#define _ALTI VT INTCON2bits.ALTI VT

/* IFS0 */
#define _INT0IF IFS0bits.INT0IF
#define _IC1IF IFS0bits.IC1IF
#define _OC1IF IFS0bits.OC1IF
#define _T1IF IFS0bits.T1IF
#define _IC2IF IFS0bits.IC2IF
#define _OC2IF IFS0bits.OC2IF
#define _T2IF IFS0bits.T2IF
#define _T3IF IFS0bits.T3IF
#define _SPF1IF IFS0bits.SPF1IF
#define _SPI1IF IFS0bits.SPI1IF
#define _U1RXIF IFS0bits.U1RXIF
#define _U1TXIF IFS0bits.U1TXIF
#define _AD1IF IFS0bits.AD1IF

/* IFS1 */
#define _SI2C1IF IFS1bits.SI2C1IF
#define _MI2C1IF IFS1bits.MI2C1IF
#define _CMI F IFS1bits.CMI F
#define _CNI F IFS1bits.CNI F
#define _INT1IF IFS1bits.INT1IF
#define _IC7IF IFS1bits.IC7IF
#define _IC8IF IFS1bits.IC8IF
#define _OC3IF IFS1bits.OC3IF
#define _OC4IF IFS1bits.OC4IF
#define _T4IF IFS1bits.T4IF
#define _T5IF IFS1bits.T5IF
#define _INT2IF IFS1bits.INT2IF
#define _U2RXIF IFS1bits.U2RXIF
#define _U2TXIF IFS1bits.U2TXIF

/* IFS2 */
#define _SPF2IF IFS2bits.SPF2IF
#define _SPI2IF IFS2bits.SPI2IF
#define _IC3IF IFS2bits.IC3IF
#define _IC4IF IFS2bits.IC4IF
#define _IC5IF IFS2bits.IC5IF
#define _IC6IF IFS2bits.IC6IF
#define _OC5IF IFS2bits.OC5IF
#define _OC6IF IFS2bits.OC6IF
#define _OC7IF IFS2bits.OC7IF
#define _OC8IF IFS2bits.OC8IF
#define _PMPIF IFS2bits.PMPIF

```

```

/* IFS3 */
#define _SI2C2IF IFS3bits.SI2C2IF
#define _MI2C2IF IFS3bits.MI2C2IF
#define _INT3IF IFS3bits.INT3IF
#define _INT4IF IFS3bits.INT4IF
#define _RTCIF IFS3bits.RTCIF

/* IFS4 */
#define _U1ERIF IFS4bits.U1ERIF
#define _U2ERIF IFS4bits.U2ERIF
#define _CRCIF IFS4bits.CRCIF
#define _LVDIF IFS4bits.LVDIF
#define _CTMUIF IFS4bits.CTMUIF

/* IFS5 */
#define _U3ERIF IFS5bits.U3ERIF
#define _U3RXIF IFS5bits.U3RXIF
#define _U3TXIF IFS5bits.U3TXIF
#define _SI2C3IF IFS5bits.SI2C3IF
#define _MI2C3IF IFS5bits.MI2C3IF
#define _USB1IF IFS5bits.USB1IF
#define _U4ERIF IFS5bits.U4ERIF
#define _U4RXIF IFS5bits.U4RXIF
#define _U4TXIF IFS5bits.U4TXIF
#define _SPF3IF IFS5bits.SPF3IF
#define _SPI3IF IFS5bits.SPI3IF
#define _OC9IF IFS5bits.OC9IF
#define _IC9IF IFS5bits.IC9IF

/* IEC0 */
#define _INT0IE IEC0bits.INT0IE
#define _IC1IE IEC0bits.IC1IE
#define _OC1IE IEC0bits.OC1IE
#define _T1IE IEC0bits.T1IE
#define _IC2IE IEC0bits.IC2IE
#define _OC2IE IEC0bits.OC2IE
#define _T2IE IEC0bits.T2IE
#define _T3IE IEC0bits.T3IE
#define _SPF1IE IEC0bits.SPF1IE
#define _SPI1IE IEC0bits.SPI1IE
#define _U1RXIE IEC0bits.U1RXIE
#define _U1TXIE IEC0bits.U1TXIE
#define _AD1IE IEC0bits.AD1IE

/* IEC1 */
#define _SI2C1IE IEC1bits.SI2C1IE
#define _MI2C1IE IEC1bits.MI2C1IE
#define _CMIIE IEC1bits.CMIIE
#define _CNIIE IEC1bits.CNIIE
#define _INT1IE IEC1bits.INT1IE
#define _IC7IE IEC1bits.IC7IE
#define _IC8IE IEC1bits.IC8IE
#define _OC3IE IEC1bits.OC3IE
#define _OC4IE IEC1bits.OC4IE
#define _T4IE IEC1bits.T4IE
#define _T5IE IEC1bits.T5IE
#define _INT2IE IEC1bits.INT2IE
#define _U2RXIE IEC1bits.U2RXIE
#define _U2TXIE IEC1bits.U2TXIE

/* IEC2 */
#define _SPF2IE IEC2bits.SPF2IE
#define _SPI2IE IEC2bits.SPI2IE
#define _IC3IE IEC2bits.IC3IE
#define _IC4IE IEC2bits.IC4IE
#define _IC5IE IEC2bits.IC5IE
#define _IC6IE IEC2bits.IC6IE
#define _OC5IE IEC2bits.OC5IE

```

```

#define _OC6IE IEC2bits.OC6IE
#define _OC7IE IEC2bits.OC7IE
#define _OC8IE IEC2bits.OC8IE
#define _PMPIE IEC2bits.PMPIE

/* IEC3 */
#define _SI2C2IE IEC3bits.SI2C2IE
#define _MI2C2IE IEC3bits.MI2C2IE
#define _INT3IE IEC3bits.INT3IE
#define _INT4IE IEC3bits.INT4IE
#define _RTCIIE IEC3bits.RTCIIE

/* IEC4 */
#define _U1ERIE IEC4bits.U1ERIE
#define _U2ERIE IEC4bits.U2ERIE
#define _CRCIE IEC4bits.CRCIE
#define _LVDIE IEC4bits.LVDIE
#define _CTMUIE IEC4bits.CTMUIE

/* IEC5 */
#define _U3ERIE IEC5bits.U3ERIE
#define _U3RXIE IEC5bits.U3RXIE
#define _U3TXIE IEC5bits.U3TXIE
#define _SI2C3IE IEC5bits.SI2C3IE
#define _MI2C3IE IEC5bits.MI2C3IE
#define _USB1IE IEC5bits.USB1IE
#define _U4ERIE IEC5bits.U4ERIE
#define _U4RXIE IEC5bits.U4RXIE
#define _U4TXIE IEC5bits.U4TXIE
#define _SPF3IE IEC5bits.SPF3IE
#define _SPI3IE IEC5bits.SPI3IE
#define _OC9IE IEC5bits.OC9IE
#define _IC9IE IEC5bits.IC9IE

/* IPC0 */
#define _INT0IP IPC0bits.INT0IP
#define _IC1IP IPC0bits.IC1IP
#define _OC1IP IPC0bits.OC1IP
#define _T1IP IPC0bits.T1IP
#define _INT0IP0 IPC0bits.INT0IP0
#define _INT0IP1 IPC0bits.INT0IP1
#define _INT0IP2 IPC0bits.INT0IP2
#define _IC1IP0 IPC0bits.IC1IP0
#define _IC1IP1 IPC0bits.IC1IP1
#define _IC1IP2 IPC0bits.IC1IP2
#define _OC1IP0 IPC0bits.OC1IP0
#define _OC1IP1 IPC0bits.OC1IP1
#define _OC1IP2 IPC0bits.OC1IP2
#define _T1IP0 IPC0bits.T1IP0
#define _T1IP1 IPC0bits.T1IP1
#define _T1IP2 IPC0bits.T1IP2

/* IPC1 */
#define _IC2IP IPC1bits.IC2IP
#define _OC2IP IPC1bits.OC2IP
#define _T2IP IPC1bits.T2IP
#define _IC2IP0 IPC1bits.IC2IP0
#define _IC2IP1 IPC1bits.IC2IP1
#define _IC2IP2 IPC1bits.IC2IP2
#define _OC2IP0 IPC1bits.OC2IP0
#define _OC2IP1 IPC1bits.OC2IP1
#define _OC2IP2 IPC1bits.OC2IP2
#define _T2IP0 IPC1bits.T2IP0
#define _T2IP1 IPC1bits.T2IP1
#define _T2IP2 IPC1bits.T2IP2

/* IPC2 */
#define _T3IP IPC2bits.T3IP

```

```

#define _SPF1P I PC2bi ts. SPF1P
#define _SPI1P I PC2bi ts. SPI1P
#define _U1RXIP I PC2bi ts. U1RXIP
#define _T3IP0 I PC2bi ts. T3IP0
#define _T3IP1 I PC2bi ts. T3IP1
#define _T3IP2 I PC2bi ts. T3IP2
#define _SPF1P0 I PC2bi ts. SPF1P0
#define _SPF1P1 I PC2bi ts. SPF1P1
#define _SPF1P2 I PC2bi ts. SPF1P2
#define _SPI1P0 I PC2bi ts. SPI1P0
#define _SPI1P1 I PC2bi ts. SPI1P1
#define _SPI1P2 I PC2bi ts. SPI1P2
#define _U1RXIP0 I PC2bi ts. U1RXIP0
#define _U1RXIP1 I PC2bi ts. U1RXIP1
#define _U1RXIP2 I PC2bi ts. U1RXIP2

```

```

/* IPC3 */
#define _U1TXIP I PC3bi ts. U1TXIP
#define _AD1IP I PC3bi ts. AD1IP
#define _U1TXIP0 I PC3bi ts. U1TXIP0
#define _U1TXIP1 I PC3bi ts. U1TXIP1
#define _U1TXIP2 I PC3bi ts. U1TXIP2
#define _AD1IP0 I PC3bi ts. AD1IP0
#define _AD1IP1 I PC3bi ts. AD1IP1
#define _AD1IP2 I PC3bi ts. AD1IP2

```

```

/* IPC4 */
#define _SI2C1P I PC4bi ts. SI2C1P
#define _MI2C1P I PC4bi ts. MI2C1P
#define _CMI P I PC4bi ts. CMI P
#define _CNI P I PC4bi ts. CNI P
#define _SI2C1P I PC4bi ts. SI2C1P
#define _MI2C1P I PC4bi ts. MI2C1P
#define _SI2C1P0 I PC4bi ts. SI2C1P0
#define _SI2C1P1 I PC4bi ts. SI2C1P1
#define _SI2C1P2 I PC4bi ts. SI2C1P2
#define _MI2C1P0 I PC4bi ts. MI2C1P0
#define _MI2C1P1 I PC4bi ts. MI2C1P1
#define _MI2C1P2 I PC4bi ts. MI2C1P2
#define _CMI P0 I PC4bi ts. CMI P0
#define _CMI P1 I PC4bi ts. CMI P1
#define _CMI P2 I PC4bi ts. CMI P2
#define _CNI P0 I PC4bi ts. CNI P0
#define _CNI P1 I PC4bi ts. CNI P1
#define _CNI P2 I PC4bi ts. CNI P2
#define _SI2C1P0 I PC4bi ts. SI2C1P0
#define _SI2C1P1 I PC4bi ts. SI2C1P1
#define _SI2C1P2 I PC4bi ts. SI2C1P2
#define _MI2C1P0 I PC4bi ts. MI2C1P0
#define _MI2C1P1 I PC4bi ts. MI2C1P1
#define _MI2C1P2 I PC4bi ts. MI2C1P2

```

```

/* IPC5 */
#define _INT1IP I PC5bi ts. INT1IP
#define _IC7IP I PC5bi ts. IC7IP
#define _IC8IP I PC5bi ts. IC8IP
#define _INT1IP0 I PC5bi ts. INT1IP0
#define _INT1IP1 I PC5bi ts. INT1IP1
#define _INT1IP2 I PC5bi ts. INT1IP2
#define _IC7IP0 I PC5bi ts. IC7IP0
#define _IC7IP1 I PC5bi ts. IC7IP1
#define _IC7IP2 I PC5bi ts. IC7IP2
#define _IC8IP0 I PC5bi ts. IC8IP0
#define _IC8IP1 I PC5bi ts. IC8IP1
#define _IC8IP2 I PC5bi ts. IC8IP2

```

```

/* IPC6 */
#define _OC3IP I PC6bi ts. OC3IP

```

```

#define _OC4I P IPC6bi ts. OC4I P
#define _T4I P IPC6bi ts. T4I P
#define _OC3I P0 IPC6bi ts. OC3I P0
#define _OC3I P1 IPC6bi ts. OC3I P1
#define _OC3I P2 IPC6bi ts. OC3I P2
#define _OC4I P0 IPC6bi ts. OC4I P0
#define _OC4I P1 IPC6bi ts. OC4I P1
#define _OC4I P2 IPC6bi ts. OC4I P2
#define _T4I P0 IPC6bi ts. T4I P0
#define _T4I P1 IPC6bi ts. T4I P1
#define _T4I P2 IPC6bi ts. T4I P2

/* IPC7 */
#define _T5I P IPC7bi ts. T5I P
#define _INT2I P IPC7bi ts. INT2I P
#define _U2RXI P IPC7bi ts. U2RXI P
#define _U2TXI P IPC7bi ts. U2TXI P
#define _T5I P0 IPC7bi ts. T5I P0
#define _T5I P1 IPC7bi ts. T5I P1
#define _T5I P2 IPC7bi ts. T5I P2
#define _INT2I P0 IPC7bi ts. INT2I P0
#define _INT2I P1 IPC7bi ts. INT2I P1
#define _INT2I P2 IPC7bi ts. INT2I P2
#define _U2RXI P0 IPC7bi ts. U2RXI P0
#define _U2RXI P1 IPC7bi ts. U2RXI P1
#define _U2RXI P2 IPC7bi ts. U2RXI P2
#define _U2TXI P0 IPC7bi ts. U2TXI P0
#define _U2TXI P1 IPC7bi ts. U2TXI P1
#define _U2TXI P2 IPC7bi ts. U2TXI P2

/* IPC8 */
#define _SPF2I P IPC8bi ts. SPF2I P
#define _SPI 2I P IPC8bi ts. SPI 2I P
#define _SPF2I P0 IPC8bi ts. SPF2I P0
#define _SPF2I P1 IPC8bi ts. SPF2I P1
#define _SPF2I P2 IPC8bi ts. SPF2I P2
#define _SPI 2I P0 IPC8bi ts. SPI 2I P0
#define _SPI 2I P1 IPC8bi ts. SPI 2I P1
#define _SPI 2I P2 IPC8bi ts. SPI 2I P2

/* IPC9 */
#define _IC3I P IPC9bi ts. IC3I P
#define _IC4I P IPC9bi ts. IC4I P
#define _IC5I P IPC9bi ts. IC5I P
#define _IC3I P0 IPC9bi ts. IC3I P0
#define _IC3I P1 IPC9bi ts. IC3I P1
#define _IC3I P2 IPC9bi ts. IC3I P2
#define _IC4I P0 IPC9bi ts. IC4I P0
#define _IC4I P1 IPC9bi ts. IC4I P1
#define _IC4I P2 IPC9bi ts. IC4I P2
#define _IC5I P0 IPC9bi ts. IC5I P0
#define _IC5I P1 IPC9bi ts. IC5I P1
#define _IC5I P2 IPC9bi ts. IC5I P2

/* IPC10 */
#define _IC6I P IPC10bi ts. IC6I P
#define _OC5I P IPC10bi ts. OC5I P
#define _OC6I P IPC10bi ts. OC6I P
#define _OC7I P IPC10bi ts. OC7I P
#define _IC6I P0 IPC10bi ts. IC6I P0
#define _IC6I P1 IPC10bi ts. IC6I P1
#define _IC6I P2 IPC10bi ts. IC6I P2
#define _OC5I P0 IPC10bi ts. OC5I P0
#define _OC5I P1 IPC10bi ts. OC5I P1
#define _OC5I P2 IPC10bi ts. OC5I P2
#define _OC6I P0 IPC10bi ts. OC6I P0
#define _OC6I P1 IPC10bi ts. OC6I P1
#define _OC6I P2 IPC10bi ts. OC6I P2

```

```

#define _OC7I P0 I PC10bi ts. OC7I P0
#define _OC7I P1 I PC10bi ts. OC7I P1
#define _OC7I P2 I PC10bi ts. OC7I P2

/* I PC11 */
#define _OC8I P I PC11bi ts. OC8I P
#define _PMPI P I PC11bi ts. PMPI P
#define _OC8I P0 I PC11bi ts. OC8I P0
#define _OC8I P1 I PC11bi ts. OC8I P1
#define _OC8I P2 I PC11bi ts. OC8I P2
#define _PMPI P0 I PC11bi ts. PMPI P0
#define _PMPI P1 I PC11bi ts. PMPI P1
#define _PMPI P2 I PC11bi ts. PMPI P2

/* I PC12 */
#define _SI 2C2P I PC12bi ts. SI 2C2P
#define _MI 2C2P I PC12bi ts. MI 2C2P
#define _SI 2C2I P I PC12bi ts. SI 2C2I P
#define _MI 2C2I P I PC12bi ts. MI 2C2I P
#define _SI 2C2P0 I PC12bi ts. SI 2C2P0
#define _SI 2C2P1 I PC12bi ts. SI 2C2P1
#define _SI 2C2P2 I PC12bi ts. SI 2C2P2
#define _MI 2C2P0 I PC12bi ts. MI 2C2P0
#define _MI 2C2P1 I PC12bi ts. MI 2C2P1
#define _MI 2C2P2 I PC12bi ts. MI 2C2P2
#define _SI 2C2I P0 I PC12bi ts. SI 2C2I P0
#define _SI 2C2I P1 I PC12bi ts. SI 2C2I P1
#define _SI 2C2I P2 I PC12bi ts. SI 2C2I P2
#define _MI 2C2I P0 I PC12bi ts. MI 2C2I P0
#define _MI 2C2I P1 I PC12bi ts. MI 2C2I P1
#define _MI 2C2I P2 I PC12bi ts. MI 2C2I P2

/* I PC13 */
#define _INT3I P I PC13bi ts. INT3I P
#define _INT4I P I PC13bi ts. INT4I P
#define _INT3I P0 I PC13bi ts. INT3I P0
#define _INT3I P1 I PC13bi ts. INT3I P1
#define _INT3I P2 I PC13bi ts. INT3I P2
#define _INT4I P0 I PC13bi ts. INT4I P0
#define _INT4I P1 I PC13bi ts. INT4I P1
#define _INT4I P2 I PC13bi ts. INT4I P2

/* I PC15 */
#define _RTCI P I PC15bi ts. RTCI P
#define _RTCI P0 I PC15bi ts. RTCI P0
#define _RTCI P1 I PC15bi ts. RTCI P1
#define _RTCI P2 I PC15bi ts. RTCI P2

/* I PC16 */
#define _U1ERI P I PC16bi ts. U1ERI P
#define _U2ERI P I PC16bi ts. U2ERI P
#define _CRCI P I PC16bi ts. CRCI P
#define _U1ERI P0 I PC16bi ts. U1ERI P0
#define _U1ERI P1 I PC16bi ts. U1ERI P1
#define _U1ERI P2 I PC16bi ts. U1ERI P2
#define _U2ERI P0 I PC16bi ts. U2ERI P0
#define _U2ERI P1 I PC16bi ts. U2ERI P1
#define _U2ERI P2 I PC16bi ts. U2ERI P2
#define _CRCI P0 I PC16bi ts. CRCI P0
#define _CRCI P1 I PC16bi ts. CRCI P1
#define _CRCI P2 I PC16bi ts. CRCI P2

/* I PC18 */
#define _LVDI P I PC18bi ts. LVDI P
#define _LVDI P0 I PC18bi ts. LVDI P0
#define _LVDI P1 I PC18bi ts. LVDI P1
#define _LVDI P2 I PC18bi ts. LVDI P2

```

```

/* I PC19 */
#define _CTMUI P I PC19bi ts. CTMUI P
#define _CTMUI P0 I PC19bi ts. CTMUI P0
#define _CTMUI P1 I PC19bi ts. CTMUI P1
#define _CTMUI P2 I PC19bi ts. CTMUI P2

```

```

/* I PC20 */
#define _U3ERI P I PC20bi ts. U3ERI P
#define _U3RXI P I PC20bi ts. U3RXI P
#define _U3TXI P I PC20bi ts. U3TXI P
#define _U3ERI P0 I PC20bi ts. U3ERI P0
#define _U3ERI P1 I PC20bi ts. U3ERI P1
#define _U3ERI P2 I PC20bi ts. U3ERI P2
#define _U3RXI P0 I PC20bi ts. U3RXI P0
#define _U3RXI P1 I PC20bi ts. U3RXI P1
#define _U3RXI P2 I PC20bi ts. U3RXI P2
#define _U3TXI P0 I PC20bi ts. U3TXI P0
#define _U3TXI P1 I PC20bi ts. U3TXI P1
#define _U3TXI P2 I PC20bi ts. U3TXI P2

```

```

/* I PC21 */
#define _SI 2C3P I PC21bi ts. SI 2C3P
#define _MI 2C3P I PC21bi ts. MI 2C3P
#define _USB1I P I PC21bi ts. USB1I P
#define _U4ERI P I PC21bi ts. U4ERI P
#define _SI 2C3P0 I PC21bi ts. SI 2C3P0
#define _SI 2C3P1 I PC21bi ts. SI 2C3P1
#define _SI 2C3P2 I PC21bi ts. SI 2C3P2
#define _MI 2C3P0 I PC21bi ts. MI 2C3P0
#define _MI 2C3P1 I PC21bi ts. MI 2C3P1
#define _MI 2C3P2 I PC21bi ts. MI 2C3P2
#define _USB1I P0 I PC21bi ts. USB1I P0
#define _USB1I P1 I PC21bi ts. USB1I P1
#define _USB1I P2 I PC21bi ts. USB1I P2
#define _U4ERI P0 I PC21bi ts. U4ERI P0
#define _U4ERI P1 I PC21bi ts. U4ERI P1
#define _U4ERI P2 I PC21bi ts. U4ERI P2

```

```

/* I PC22 */
#define _U4RXI P I PC22bi ts. U4RXI P
#define _U4TXI P I PC22bi ts. U4TXI P
#define _SPF3I P I PC22bi ts. SPF3I P
#define _SPI 3I P I PC22bi ts. SPI 3I P
#define _U4RXI P0 I PC22bi ts. U4RXI P0
#define _U4RXI P1 I PC22bi ts. U4RXI P1
#define _U4RXI P2 I PC22bi ts. U4RXI P2
#define _U4TXI P0 I PC22bi ts. U4TXI P0
#define _U4TXI P1 I PC22bi ts. U4TXI P1
#define _U4TXI P2 I PC22bi ts. U4TXI P2
#define _SPF3I P0 I PC22bi ts. SPF3I P0
#define _SPF3I P1 I PC22bi ts. SPF3I P1
#define _SPF3I P2 I PC22bi ts. SPF3I P2
#define _SPI 3I P0 I PC22bi ts. SPI 3I P0
#define _SPI 3I P1 I PC22bi ts. SPI 3I P1
#define _SPI 3I P2 I PC22bi ts. SPI 3I P2

```

```

/* I PC23 */
#define _OC9I P I PC23bi ts. OC9I P
#define _IC9I P I PC23bi ts. IC9I P
#define _OC9I P0 I PC23bi ts. OC9I P0
#define _OC9I P1 I PC23bi ts. OC9I P1
#define _OC9I P2 I PC23bi ts. OC9I P2
#define _IC9I P0 I PC23bi ts. IC9I P0
#define _IC9I P1 I PC23bi ts. IC9I P1
#define _IC9I P2 I PC23bi ts. IC9I P2

```

```

/* I INTTREG */
#define _VECNUM I INTTREGbi ts. VECNUM

```

```

#define _ILR INTTREGbits.ILR
#define _TMODE INTTREGbits.TMODE
#define _IRQtoCPU INTTREGbits.IRQtoCPU
#define _VECN0 INTTREGbits.VECN0
#define _VECN1 INTTREGbits.VECN1
#define _VECN2 INTTREGbits.VECN2
#define _VECN3 INTTREGbits.VECN3
#define _VECN4 INTTREGbits.VECN4
#define _VECN5 INTTREGbits.VECN5
#define _ILR0 INTTREGbits.ILR0
#define _ILR1 INTTREGbits.ILR1
#define _ILR2 INTTREGbits.ILR2
#define _ILR3 INTTREGbits.ILR3

/* T1CON */
#define _TCS T1CONbits.TCS
#define _TSYNC T1CONbits.TSYNC
#define _TCKPS T1CONbits.TCKPS
#define _TGATE T1CONbits.TGATE
#define _TSIDL T1CONbits.TSIDL
#define _TON T1CONbits.TON
#define _TCKPS0 T1CONbits.TCKPS0
#define _TCKPS1 T1CONbits.TCKPS1

/* T2CON */
/* Bitname _TCS cannot be defined because it is used by more than one SFR */
/* Bitname _T32 cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS cannot be defined because it is used by more than one SFR */
/* Bitname _TGATE cannot be defined because it is used by more than one SFR */
/* Bitname _TSIDL cannot be defined because it is used by more than one SFR */
/* Bitname _TON cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS0 cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS1 cannot be defined because it is used by more than one SFR */

/* T3CON */
/* Bitname _TCS cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS cannot be defined because it is used by more than one SFR */
/* Bitname _TGATE cannot be defined because it is used by more than one SFR */
/* Bitname _TSIDL cannot be defined because it is used by more than one SFR */
/* Bitname _TON cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS0 cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS1 cannot be defined because it is used by more than one SFR */

/* T4CON */
/* Bitname _TCS cannot be defined because it is used by more than one SFR */
/* Bitname _T32 cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS cannot be defined because it is used by more than one SFR */
/* Bitname _TGATE cannot be defined because it is used by more than one SFR */
/* Bitname _TSIDL cannot be defined because it is used by more than one SFR */
/* Bitname _TON cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS0 cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS1 cannot be defined because it is used by more than one SFR */

/* T5CON */
/* Bitname _TCS cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS cannot be defined because it is used by more than one SFR */
/* Bitname _TGATE cannot be defined because it is used by more than one SFR */
/* Bitname _TSIDL cannot be defined because it is used by more than one SFR */
/* Bitname _TON cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS0 cannot be defined because it is used by more than one SFR */
/* Bitname _TCKPS1 cannot be defined because it is used by more than one SFR */

/* IC1CON1 */
/* Bitname _ICM cannot be defined because it is used by more than one SFR */
/* Bitname _ICBNE cannot be defined because it is used by more than one SFR */
/* Bitname _ICOV cannot be defined because it is used by more than one SFR */
/* Bitname _IC1 cannot be defined because it is used by more than one SFR */
/* Bitname _ICTSEL cannot be defined because it is used by more than one SFR */

```



```

*/
/* Bitname _SYNCSEL3 cannot be defined because it is used by more than one SFR
*/
/* Bitname _SYNCSEL4 cannot be defined because it is used by more than one SFR
*/
/* Bitname _FLTMODE cannot be defined because it is used by more than one SFR */

/* OC9CON1 */
/* Bitname _OCM cannot be defined because it is used by more than one SFR */
/* Bitname _TRIGMODE cannot be defined because it is used by more than one SFR
*/
/* Bitname _OCFLT0 cannot be defined because it is used by more than one SFR */
/* Bitname _ENFLT0 cannot be defined because it is used by more than one SFR */
/* Bitname _OCTSEL cannot be defined because it is used by more than one SFR */
/* Bitname _OCSIDL cannot be defined because it is used by more than one SFR */
/* Bitname _OCMO cannot be defined because it is used by more than one SFR */
/* Bitname _OCM1 cannot be defined because it is used by more than one SFR */
/* Bitname _OCM2 cannot be defined because it is used by more than one SFR */
/* Bitname _OCFLT cannot be defined because it is used by more than one SFR */
/* Bitname _ENFLT cannot be defined because it is used by more than one SFR */
/* Bitname _OCTSELO cannot be defined because it is used by more than one SFR */
/* Bitname _OCTSEL1 cannot be defined because it is used by more than one SFR */
/* Bitname _OCTSEL2 cannot be defined because it is used by more than one SFR */

/* OC9CON2 */
/* Bitname _SYNCSEL cannot be defined because it is used by more than one SFR */
/* Bitname _OCTRIS cannot be defined because it is used by more than one SFR */
/* Bitname _TRIGSTAT cannot be defined because it is used by more than one SFR
*/
/* Bitname _OCTRIG cannot be defined because it is used by more than one SFR */
/* Bitname _OC32 cannot be defined because it is used by more than one SFR */
/* Bitname _OCINV cannot be defined because it is used by more than one SFR */
/* Bitname _FLTTRIEN cannot be defined because it is used by more than one SFR
*/
/* Bitname _FLTOUT cannot be defined because it is used by more than one SFR */
/* Bitname _FLTMD cannot be defined because it is used by more than one SFR */
/* Bitname _SYNCSELO cannot be defined because it is used by more than one SFR
*/
/* Bitname _SYNCSEL1 cannot be defined because it is used by more than one SFR
*/
/* Bitname _SYNCSEL2 cannot be defined because it is used by more than one SFR
*/
/* Bitname _SYNCSEL3 cannot be defined because it is used by more than one SFR
*/
/* Bitname _SYNCSEL4 cannot be defined because it is used by more than one SFR
*/
/* Bitname _FLTMODE cannot be defined because it is used by more than one SFR */

/* I2C1CON */
/* Bitname _SEN cannot be defined because it is used by more than one SFR */
/* Bitname _RSEN cannot be defined because it is used by more than one SFR */
/* Bitname _PEN cannot be defined because it is used by more than one SFR */
/* Bitname _RCEN cannot be defined because it is used by more than one SFR */
/* Bitname _ACKEN cannot be defined because it is used by more than one SFR */
/* Bitname _ACKDT cannot be defined because it is used by more than one SFR */
/* Bitname _STREN cannot be defined because it is used by more than one SFR */
/* Bitname _GCEN cannot be defined because it is used by more than one SFR */
/* Bitname _SMEN cannot be defined because it is used by more than one SFR */
/* Bitname _DISSLW cannot be defined because it is used by more than one SFR */
/* Bitname _A10M cannot be defined because it is used by more than one SFR */
/* Bitname _IPMIEN cannot be defined because it is used by more than one SFR */
/* Bitname _SCLREL cannot be defined because it is used by more than one SFR */
/* Bitname _I2CSIDL cannot be defined because it is used by more than one SFR */
/* Bitname _I2CEN cannot be defined because it is used by more than one SFR */

/* I2C1STAT */
/* Bitname _TBF cannot be defined because it is used by more than one SFR */
/* Bitname _RBF cannot be defined because it is used by more than one SFR */

```



```

/* Bitname _UENO cannot be defined because it is used by more than one SFR */
/* Bitname _UEN1 cannot be defined because it is used by more than one SFR */

/* U4STA */
/* Bitname _URXDA cannot be defined because it is used by more than one SFR */
/* Bitname _OERR cannot be defined because it is used by more than one SFR */
/* Bitname _FERR cannot be defined because it is used by more than one SFR */
/* Bitname _PERR cannot be defined because it is used by more than one SFR */
/* Bitname _RIDLE cannot be defined because it is used by more than one SFR */
/* Bitname _ADDEN cannot be defined because it is used by more than one SFR */
/* Bitname _URXSEL cannot be defined because it is used by more than one SFR */
/* Bitname _TRMT cannot be defined because it is used by more than one SFR */
/* Bitname _UTXBF cannot be defined because it is used by more than one SFR */
/* Bitname _UTXEN cannot be defined because it is used by more than one SFR */
/* Bitname _UTXBRK cannot be defined because it is used by more than one SFR */
/* Bitname _UTXISELO cannot be defined because it is used by more than one SFR */
*/
/* Bitname _UTXINV cannot be defined because it is used by more than one SFR */
/* Bitname _UTXSEL1 cannot be defined because it is used by more than one SFR */
*/
/* Bitname _URXISELO cannot be defined because it is used by more than one SFR */
*/
/* Bitname _URXSEL1 cannot be defined because it is used by more than one SFR */
*/

/* TRI SA */
#define _TRISA0 TRISAbits.TRISA0
#define _TRISA1 TRISAbits.TRISA1
#define _TRISA2 TRISAbits.TRISA2
#define _TRISA3 TRISAbits.TRISA3
#define _TRISA4 TRISAbits.TRISA4
#define _TRISA5 TRISAbits.TRISA5
#define _TRISA6 TRISAbits.TRISA6
#define _TRISA7 TRISAbits.TRISA7
#define _TRISA9 TRISAbits.TRISA9
#define _TRISA10 TRISAbits.TRISA10
#define _TRISA14 TRISAbits.TRISA14
#define _TRISA15 TRISAbits.TRISA15

/* PORTA */
#define _RA0 PORTAbits.RA0
#define _RA1 PORTAbits.RA1
#define _RA2 PORTAbits.RA2
#define _RA3 PORTAbits.RA3
#define _RA4 PORTAbits.RA4
#define _RA5 PORTAbits.RA5
#define _RA6 PORTAbits.RA6
#define _RA7 PORTAbits.RA7
#define _RA9 PORTAbits.RA9
#define _RA10 PORTAbits.RA10
#define _RA14 PORTAbits.RA14
#define _RA15 PORTAbits.RA15

/* LATA */
#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 _LATA6 LATAbits.LATA6
#define _LATA7 LATAbits.LATA7
#define _LATA9 LATAbits.LATA9
#define _LATA10 LATAbits.LATA10
#define _LATA14 LATAbits.LATA14
#define _LATA15 LATAbits.LATA15

/* ODCA */

```



```
#define _ODA0 ODCAbi ts. ODA0
#define _ODA1 ODCAbi ts. ODA1
#define _ODA2 ODCAbi ts. ODA2
#define _ODA3 ODCAbi ts. ODA3
#define _ODA4 ODCAbi ts. ODA4
#define _ODA5 ODCAbi ts. ODA5
#define _ODA6 ODCAbi ts. ODA6
#define _ODA7 ODCAbi ts. ODA7
#define _ODA9 ODCAbi ts. ODA9
#define _ODA10 ODCAbi ts. ODA10
#define _ODA14 ODCAbi ts. ODA14
#define _ODA15 ODCAbi ts. ODA15

/* TRI SB */
#define _TRISB0 TRISBbi ts. TRISB0
#define _TRISB1 TRISBbi ts. TRISB1
#define _TRISB2 TRISBbi ts. TRISB2
#define _TRISB3 TRISBbi ts. TRISB3
#define _TRISB4 TRISBbi ts. TRISB4
#define _TRISB5 TRISBbi ts. TRISB5
#define _TRISB6 TRISBbi ts. TRISB6
#define _TRISB7 TRISBbi ts. TRISB7
#define _TRISB8 TRISBbi ts. TRISB8
#define _TRISB9 TRISBbi ts. TRISB9
#define _TRISB10 TRISBbi ts. TRISB10
#define _TRISB11 TRISBbi ts. TRISB11
#define _TRISB12 TRISBbi ts. TRISB12
#define _TRISB13 TRISBbi ts. TRISB13
#define _TRISB14 TRISBbi ts. TRISB14
#define _TRISB15 TRISBbi ts. TRISB15

/* PORTB */
#define _RB0 PORTBbi ts. RB0
#define _RB1 PORTBbi ts. RB1
#define _RB2 PORTBbi ts. RB2
#define _RB3 PORTBbi ts. RB3
#define _RB4 PORTBbi ts. RB4
#define _RB5 PORTBbi ts. RB5
#define _RB6 PORTBbi ts. RB6
#define _RB7 PORTBbi ts. RB7
#define _RB8 PORTBbi ts. RB8
#define _RB9 PORTBbi ts. RB9
#define _RB10 PORTBbi ts. RB10
#define _RB11 PORTBbi ts. RB11
#define _RB12 PORTBbi ts. RB12
#define _RB13 PORTBbi ts. RB13
#define _RB14 PORTBbi ts. RB14
#define _RB15 PORTBbi ts. RB15

/* LATB */
#define _LATB0 LATBbi ts. LATB0
#define _LATB1 LATBbi ts. LATB1
#define _LATB2 LATBbi ts. LATB2
#define _LATB3 LATBbi ts. LATB3
#define _LATB4 LATBbi ts. LATB4
#define _LATB5 LATBbi ts. LATB5
#define _LATB6 LATBbi ts. LATB6
#define _LATB7 LATBbi ts. LATB7
#define _LATB8 LATBbi ts. LATB8
#define _LATB9 LATBbi ts. LATB9
#define _LATB10 LATBbi ts. LATB10
#define _LATB11 LATBbi ts. LATB11
#define _LATB12 LATBbi ts. LATB12
#define _LATB13 LATBbi ts. LATB13
#define _LATB14 LATBbi ts. LATB14
#define _LATB15 LATBbi ts. LATB15

/* ODCB */
```

```
#define _ODB0 ODCBbits. ODB0
#define _ODB1 ODCBbits. ODB1
#define _ODB2 ODCBbits. ODB2
#define _ODB3 ODCBbits. ODB3
#define _ODB4 ODCBbits. ODB4
#define _ODB5 ODCBbits. ODB5
#define _ODB6 ODCBbits. ODB6
#define _ODB7 ODCBbits. ODB7
#define _ODB8 ODCBbits. ODB8
#define _ODB9 ODCBbits. ODB9
#define _ODB10 ODCBbits. ODB10
#define _ODB11 ODCBbits. ODB11
#define _ODB12 ODCBbits. ODB12
#define _ODB13 ODCBbits. ODB13
#define _ODB14 ODCBbits. ODB14
#define _ODB15 ODCBbits. ODB15

/* TRISC */
#define _TRISC1 TRISCbits. TRISC1
#define _TRISC2 TRISCbits. TRISC2
#define _TRISC3 TRISCbits. TRISC3
#define _TRISC4 TRISCbits. TRISC4
#define _TRISC12 TRISCbits. TRISC12
#define _TRISC13 TRISCbits. TRISC13
#define _TRISC14 TRISCbits. TRISC14
#define _TRISC15 TRISCbits. TRISC15

/* PORTC */
#define _RC1 PORTCbits. RC1
#define _RC2 PORTCbits. RC2
#define _RC3 PORTCbits. RC3
#define _RC4 PORTCbits. RC4
#define _RC12 PORTCbits. RC12
#define _RC13 PORTCbits. RC13
#define _RC14 PORTCbits. RC14
#define _RC15 PORTCbits. RC15

/* LATC */
#define _LATC1 LATCbits. LATC1
#define _LATC2 LATCbits. LATC2
#define _LATC3 LATCbits. LATC3
#define _LATC4 LATCbits. LATC4
#define _LATC12 LATCbits. LATC12
#define _LATC13 LATCbits. LATC13
#define _LATC14 LATCbits. LATC14
#define _LATC15 LATCbits. LATC15

/* ODCC */
#define _ODC1 ODCCbits. ODC1
#define _ODC2 ODCCbits. ODC2
#define _ODC3 ODCCbits. ODC3
#define _ODC4 ODCCbits. ODC4
#define _ODC12 ODCCbits. ODC12
#define _ODC13 ODCCbits. ODC13
#define _ODC14 ODCCbits. ODC14
#define _ODC15 ODCCbits. ODC15

/* TRISD */
#define _TRISD0 TRISDbits. TRISD0
#define _TRISD1 TRISDbits. TRISD1
#define _TRISD2 TRISDbits. TRISD2
#define _TRISD3 TRISDbits. TRISD3
#define _TRISD4 TRISDbits. TRISD4
#define _TRISD5 TRISDbits. TRISD5
#define _TRISD6 TRISDbits. TRISD6
#define _TRISD7 TRISDbits. TRISD7
#define _TRISD8 TRISDbits. TRISD8
#define _TRISD9 TRISDbits. TRISD9
```

```
#define _TRISD10 TRISDbits.TRISD10
#define _TRISD11 TRISDbits.TRISD11
#define _TRISD12 TRISDbits.TRISD12
#define _TRISD13 TRISDbits.TRISD13
#define _TRISD14 TRISDbits.TRISD14
#define _TRISD15 TRISDbits.TRISD15
```

```
/* PORTD */
```

```
#define _RD0 PORTDbits.RD0
#define _RD1 PORTDbits.RD1
#define _RD2 PORTDbits.RD2
#define _RD3 PORTDbits.RD3
#define _RD4 PORTDbits.RD4
#define _RD5 PORTDbits.RD5
#define _RD6 PORTDbits.RD6
#define _RD7 PORTDbits.RD7
#define _RD8 PORTDbits.RD8
#define _RD9 PORTDbits.RD9
#define _RD10 PORTDbits.RD10
#define _RD11 PORTDbits.RD11
#define _RD12 PORTDbits.RD12
#define _RD13 PORTDbits.RD13
#define _RD14 PORTDbits.RD14
#define _RD15 PORTDbits.RD15
```

```
/* LATD */
```

```
#define _LATD0 LATDbits.LATD0
#define _LATD1 LATDbits.LATD1
#define _LATD2 LATDbits.LATD2
#define _LATD3 LATDbits.LATD3
#define _LATD4 LATDbits.LATD4
#define _LATD5 LATDbits.LATD5
#define _LATD6 LATDbits.LATD6
#define _LATD7 LATDbits.LATD7
#define _LATD8 LATDbits.LATD8
#define _LATD9 LATDbits.LATD9
#define _LATD10 LATDbits.LATD10
#define _LATD11 LATDbits.LATD11
#define _LATD12 LATDbits.LATD12
#define _LATD13 LATDbits.LATD13
#define _LATD14 LATDbits.LATD14
#define _LATD15 LATDbits.LATD15
```

```
/* ODCD */
```

```
#define _ODD0 ODCDbits.ODD0
#define _ODD1 ODCDbits.ODD1
#define _ODD2 ODCDbits.ODD2
#define _ODD3 ODCDbits.ODD3
#define _ODD4 ODCDbits.ODD4
#define _ODD5 ODCDbits.ODD5
#define _ODD6 ODCDbits.ODD6
#define _ODD7 ODCDbits.ODD7
#define _ODD8 ODCDbits.ODD8
#define _ODD9 ODCDbits.ODD9
#define _ODD10 ODCDbits.ODD10
#define _ODD11 ODCDbits.ODD11
#define _ODD12 ODCDbits.ODD12
#define _ODD13 ODCDbits.ODD13
#define _ODD14 ODCDbits.ODD14
#define _ODD15 ODCDbits.ODD15
```

```
/* TRISE */
```

```
#define _TRISE0 TRISEbits.TRISE0
#define _TRISE1 TRISEbits.TRISE1
#define _TRISE2 TRISEbits.TRISE2
#define _TRISE3 TRISEbits.TRISE3
#define _TRISE4 TRISEbits.TRISE4
#define _TRISE5 TRISEbits.TRISE5
```

```
#define _TRISE6 TRISEbits.TRISE6
#define _TRISE7 TRISEbits.TRISE7
#define _TRISE8 TRISEbits.TRISE8
#define _TRISE9 TRISEbits.TRISE9

/* PORTE */
#define _RE0 PORTEbits.RE0
#define _RE1 PORTEbits.RE1
#define _RE2 PORTEbits.RE2
#define _RE3 PORTEbits.RE3
#define _RE4 PORTEbits.RE4
#define _RE5 PORTEbits.RE5
#define _RE6 PORTEbits.RE6
#define _RE7 PORTEbits.RE7
#define _RE8 PORTEbits.RE8
#define _RE9 PORTEbits.RE9

/* LATE */
#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 _LATE8 LATEbits.LATE8
#define _LATE9 LATEbits.LATE9

/* ODCE */
#define _ODE0 ODCEbits.ODE0
#define _ODE1 ODCEbits.ODE1
#define _ODE2 ODCEbits.ODE2
#define _ODE3 ODCEbits.ODE3
#define _ODE4 ODCEbits.ODE4
#define _ODE5 ODCEbits.ODE5
#define _ODE6 ODCEbits.ODE6
#define _ODE7 ODCEbits.ODE7
#define _ODE8 ODCEbits.ODE8
#define _ODE9 ODCEbits.ODE9

/* TRISF */
#define _TRISF0 TRISFbits.TRISF0
#define _TRISF1 TRISFbits.TRISF1
#define _TRISF2 TRISFbits.TRISF2
#define _TRISF3 TRISFbits.TRISF3
#define _TRISF4 TRISFbits.TRISF4
#define _TRISF5 TRISFbits.TRISF5
#define _TRISF8 TRISFbits.TRISF8
#define _TRISF12 TRISFbits.TRISF12
#define _TRISF13 TRISFbits.TRISF13

/* PORTF */
#define _RF0 PORTFbits.RF0
#define _RF1 PORTFbits.RF1
#define _RF2 PORTFbits.RF2
#define _RF3 PORTFbits.RF3
#define _RF4 PORTFbits.RF4
#define _RF5 PORTFbits.RF5
#define _RF8 PORTFbits.RF8
#define _RF12 PORTFbits.RF12
#define _RF13 PORTFbits.RF13

/* LATF */
#define _LATF0 LATFbits.LATF0
#define _LATF1 LATFbits.LATF1
#define _LATF2 LATFbits.LATF2
#define _LATF3 LATFbits.LATF3
```

```
#define _LATF4 LATFbi ts. LATF4
#define _LATF5 LATFbi ts. LATF5
#define _LATF8 LATFbi ts. LATF8
#define _LATF12 LATFbi ts. LATF12
#define _LATF13 LATFbi ts. LATF13

/* ODCF */
#define _ODF0 ODCFbi ts. ODF0
#define _ODF1 ODCFbi ts. ODF1
#define _ODF2 ODCFbi ts. ODF2
#define _ODF3 ODCFbi ts. ODF3
#define _ODF4 ODCFbi ts. ODF4
#define _ODF5 ODCFbi ts. ODF5
#define _ODF8 ODCFbi ts. ODF8
#define _ODF12 ODCFbi ts. ODF12
#define _ODF13 ODCFbi ts. ODF13

/* TRISG */
#define _TRISG0 TRISGbi ts. TRISG0
#define _TRISG1 TRISGbi ts. TRISG1
#define _TRISG2 TRISGbi ts. TRISG2
#define _TRISG3 TRISGbi ts. TRISG3
#define _TRISG6 TRISGbi ts. TRISG6
#define _TRISG7 TRISGbi ts. TRISG7
#define _TRISG8 TRISGbi ts. TRISG8
#define _TRISG9 TRISGbi ts. TRISG9
#define _TRISG12 TRISGbi ts. TRISG12
#define _TRISG13 TRISGbi ts. TRISG13
#define _TRISG14 TRISGbi ts. TRISG14
#define _TRISG15 TRISGbi ts. TRISG15

/* PORTG */
#define _RG0 PORTGbi ts. RG0
#define _RG1 PORTGbi ts. RG1
#define _RG2 PORTGbi ts. RG2
#define _RG3 PORTGbi ts. RG3
#define _RG6 PORTGbi ts. RG6
#define _RG7 PORTGbi ts. RG7
#define _RG8 PORTGbi ts. RG8
#define _RG9 PORTGbi ts. RG9
#define _RG12 PORTGbi ts. RG12
#define _RG13 PORTGbi ts. RG13
#define _RG14 PORTGbi ts. RG14
#define _RG15 PORTGbi ts. RG15

/* LATG */
#define _LATG0 LATGbi ts. LATG0
#define _LATG1 LATGbi ts. LATG1
#define _LATG2 LATGbi ts. LATG2
#define _LATG3 LATGbi ts. LATG3
#define _LATG6 LATGbi ts. LATG6
#define _LATG7 LATGbi ts. LATG7
#define _LATG8 LATGbi ts. LATG8
#define _LATG9 LATGbi ts. LATG9
#define _LATG12 LATGbi ts. LATG12
#define _LATG13 LATGbi ts. LATG13
#define _LATG14 LATGbi ts. LATG14
#define _LATG15 LATGbi ts. LATG15

/* ODCG */
#define _ODG0 ODCGbi ts. ODG0
#define _ODG1 ODCGbi ts. ODG1
#define _ODG2 ODCGbi ts. ODG2
#define _ODG3 ODCGbi ts. ODG3
#define _ODG6 ODCGbi ts. ODG6
#define _ODG7 ODCGbi ts. ODG7
#define _ODG8 ODCGbi ts. ODG8
#define _ODG9 ODCGbi ts. ODG9
```

```

#define _ODG12 ODCGbits.ODG12
#define _ODG13 ODCGbits.ODG13
#define _ODG14 ODCGbits.ODG14
#define _ODG15 ODCGbits.ODG15

/* PADCFG1 */
#define _PMPTTL PADCFG1bits.PMPTTL
#define _RTSECSEL PADCFG1bits.RTSECSEL
#define _RTSECSELO PADCFG1bits.RTSECSELO

/* AD1CON1 */
#define _DONE AD1CON1bits.DONE
#define _SAMP AD1CON1bits.SAMP
#define _ASAM AD1CON1bits.ASAM
#define _SSRC AD1CON1bits.SSRC
#define _FORM AD1CON1bits.FORM
#define _ADSI DL AD1CON1bits.ADSIDL
#define _ADON AD1CON1bits.ADON
#define _SSRC0 AD1CON1bits.SSRC0
#define _SSRC1 AD1CON1bits.SSRC1
#define _SSRC2 AD1CON1bits.SSRC2
#define _FORM0 AD1CON1bits.FORM0
#define _FORM1 AD1CON1bits.FORM1

/* AD1CON2 */
#define _ALTS AD1CON2bits.ALTS
#define _BUFM AD1CON2bits.BUFM
#define _SMPI AD1CON2bits.SMPI
#define _BUFSS AD1CON2bits.BUFSS
#define _CSCNA AD1CON2bits.CSCNA
#define _VCFG AD1CON2bits.VCFG
#define _SMPI0 AD1CON2bits.SMPI0
#define _SMPI1 AD1CON2bits.SMPI1
#define _SMPI2 AD1CON2bits.SMPI2
#define _SMPI3 AD1CON2bits.SMPI3
#define _VCFG0 AD1CON2bits.VCFG0
#define _VCFG1 AD1CON2bits.VCFG1
#define _VCFG2 AD1CON2bits.VCFG2

/* AD1CON3 */
#define _ADCS AD1CON3bits.ADCS
#define _SAMC AD1CON3bits.SAMC
#define _ADRC AD1CON3bits.ADRC
#define _ADCS0 AD1CON3bits.ADCS0
#define _ADCS1 AD1CON3bits.ADCS1
#define _ADCS2 AD1CON3bits.ADCS2
#define _ADCS3 AD1CON3bits.ADCS3
#define _ADCS4 AD1CON3bits.ADCS4
#define _ADCS5 AD1CON3bits.ADCS5
#define _ADCS6 AD1CON3bits.ADCS6
#define _ADCS7 AD1CON3bits.ADCS7
#define _SAMC0 AD1CON3bits.SAMC0
#define _SAMC1 AD1CON3bits.SAMC1
#define _SAMC2 AD1CON3bits.SAMC2
#define _SAMC3 AD1CON3bits.SAMC3
#define _SAMC4 AD1CON3bits.SAMC4

/* AD1CHS */
#define _CHOSA AD1CHSbits.CHOSA
#define _CHONA AD1CHSbits.CHONA
#define _CHOSB AD1CHSbits.CHOSB
#define _CHONB AD1CHSbits.CHONB
#define _CHOSAO AD1CHSbits.CHOSAO
#define _CHOSA1 AD1CHSbits.CHOSA1
#define _CHOSA2 AD1CHSbits.CHOSA2
#define _CHOSA3 AD1CHSbits.CHOSA3
#define _CHOSA4 AD1CHSbits.CHOSA4
#define _CHOSB0 AD1CHSbits.CHOSB0

```

```

#define _CHOSB1 AD1CHSbi ts. CHOSB1
#define _CHOSB2 AD1CHSbi ts. CHOSB2
#define _CHOSB3 AD1CHSbi ts. CHOSB3
#define _CHOSB4 AD1CHSbi ts. CHOSB4

/* AD1PCFGH */
#define _PCFG16 AD1PCFGHbi ts. PCFG16
#define _PCFG17 AD1PCFGHbi ts. PCFG17

/* AD1PCFG */
#define _PCFG0 AD1PCFGbi ts. PCFG0
#define _PCFG1 AD1PCFGbi ts. PCFG1
#define _PCFG2 AD1PCFGbi ts. PCFG2
#define _PCFG3 AD1PCFGbi ts. PCFG3
#define _PCFG4 AD1PCFGbi ts. PCFG4
#define _PCFG5 AD1PCFGbi ts. PCFG5
#define _PCFG6 AD1PCFGbi ts. PCFG6
#define _PCFG7 AD1PCFGbi ts. PCFG7
#define _PCFG8 AD1PCFGbi ts. PCFG8
#define _PCFG9 AD1PCFGbi ts. PCFG9
#define _PCFG10 AD1PCFGbi ts. PCFG10
#define _PCFG11 AD1PCFGbi ts. PCFG11
#define _PCFG12 AD1PCFGbi ts. PCFG12
#define _PCFG13 AD1PCFGbi ts. PCFG13
#define _PCFG14 AD1PCFGbi ts. PCFG14
#define _PCFG15 AD1PCFGbi ts. PCFG15

/* AD1CSSL */
#define _CSSL0 AD1CSSLbi ts. CSSL0
#define _CSSL1 AD1CSSLbi ts. CSSL1
#define _CSSL2 AD1CSSLbi ts. CSSL2
#define _CSSL3 AD1CSSLbi ts. CSSL3
#define _CSSL4 AD1CSSLbi ts. CSSL4
#define _CSSL5 AD1CSSLbi ts. CSSL5
#define _CSSL6 AD1CSSLbi ts. CSSL6
#define _CSSL7 AD1CSSLbi ts. CSSL7
#define _CSSL8 AD1CSSLbi ts. CSSL8
#define _CSSL9 AD1CSSLbi ts. CSSL9
#define _CSSL10 AD1CSSLbi ts. CSSL10
#define _CSSL11 AD1CSSLbi ts. CSSL11
#define _CSSL12 AD1CSSLbi ts. CSSL12
#define _CSSL13 AD1CSSLbi ts. CSSL13
#define _CSSL14 AD1CSSLbi ts. CSSL14
#define _CSSL15 AD1CSSLbi ts. CSSL15

/* AD1CSSH */
#define _CSSL16 AD1CSSHbi ts. CSSL16
#define _CSSL17 AD1CSSHbi ts. CSSL17

/* CTMUCON */
#define _EDG1STAT CTMUCONbi ts. EDG1STAT
#define _EDG2STAT CTMUCONbi ts. EDG2STAT
#define _EDG1SEL CTMUCONbi ts. EDG1SEL
#define _EDG1POL CTMUCONbi ts. EDG1POL
#define _EDG2SEL CTMUCONbi ts. EDG2SEL
#define _EDG2POL CTMUCONbi ts. EDG2POL
#define _CTTRIG CTMUCONbi ts. CTTRIG
#define _IDI SSEN CTMUCONbi ts. IDI SSEN
#define _EDGSEQEN CTMUCONbi ts. EDGSEQEN
#define _EDGEN CTMUCONbi ts. EDGEN
#define _TGEN CTMUCONbi ts. TGEN
#define _CTMUSI DL CTMUCONbi ts. CTMUSI DL
#define _CTMUEN CTMUCONbi ts. CTMUEN
#define _EDG1SELO CTMUCONbi ts. EDG1SELO
#define _EDG1SEL1 CTMUCONbi ts. EDG1SEL1
#define _EDG2SELO CTMUCONbi ts. EDG2SELO
#define _EDG2SEL1 CTMUCONbi ts. EDG2SEL1

```

```

/* CTMUJCON */
#define _IRNG CTMUJCONbits.IRNG
#define _ITRIM CTMUJCONbits.ITRIM
#define _IRNGO CTMUJCONbits.IRNGO
#define _IRNG1 CTMUJCONbits.IRNG1
#define _ITRIMO CTMUJCONbits.ITRIMO
#define _ITRIM1 CTMUJCONbits.ITRIM1
#define _ITRIM2 CTMUJCONbits.ITRIM2
#define _ITRIM3 CTMUJCONbits.ITRIM3
#define _ITRIM4 CTMUJCONbits.ITRIM4
#define _ITRIM5 CTMUJCONbits.ITRIM5

/* U10TGI R */
#define _VBUSVDF U10TGI Rbits.VBUSVDF
#define _SESENDIF U10TGI Rbits.SESENDIF
#define _SESVDIF U10TGI Rbits.SESVDIF
#define _ACTVIF U10TGI Rbits.ACTVIF
#define _LSTATEIF U10TGI Rbits.LSTATEIF
#define _T1MSECF U10TGI Rbits.T1MSECF
#define _IDIF U10TGI Rbits.IDIF

/* U10TGI E */
#define _VBUSVDE U10TGI Ebits.VBUSVDE
#define _SESENDE U10TGI Ebits.SESENDE
#define _SESVDE U10TGI Ebits.SESVDE
#define _ACTVE U10TGI Ebits.ACTVE
#define _LSTATEIE U10TGI Ebits.LSTATEIE
#define _T1MSECE U10TGI Ebits.T1MSECE
#define _IDIE U10TGI Ebits.IDIE

/* U10TGSTAT */
#define _VBUSVD U10TGSTATbits.VBUSVD
#define _SESEND U10TGSTATbits.SESEND
#define _SESVD U10TGSTATbits.SESVD
#define _LSTATE U10TGSTATbits.LSTATE
#define _ID U10TGSTATbits.ID

/* U10TGCON */
#define _VBUSDIS U10TGCONbits.VBUSDIS
#define _VBUSCHG U10TGCONbits.VBUSCHG
#define _OTGEN U10TGCONbits.OTGEN
#define _VBUSON U10TGCONbits.VBUSON
#define _DMPULDWN U10TGCONbits.DMPULDWN
#define _DPPULDWN U10TGCONbits.DPPULDWN
#define _DMPULUP U10TGCONbits.DMPULUP
#define _DPPULUP U10TGCONbits.DPPULUP

/* U1PWRC */
#define _USBPWR U1PWRCbits.USBPWR
#define _USUSPEND U1PWRCbits.USUSPEND
#define _USLPGRD U1PWRCbits.USLPGRD
#define _UACTPND U1PWRCbits.UACTPND
#define _USUSPND U1PWRCbits.USUSPND

/* U1I R */
#define _URSTIF U1I Rbits.URSTIF
#define _UERRIF U1I Rbits.UERRIF
#define _SOFIF U1I Rbits.SOFIF
#define _TRNIF U1I Rbits.TRNIF
#define _IDLEIF U1I Rbits.IDLEIF
#define _RESUMEIF U1I Rbits.RESUMEIF
#define _ATTACHIF U1I Rbits.ATTACHIF
#define _STALLIF U1I Rbits.STALLIF
#define _DETACHIF U1I Rbits.DETACHIF

/* U1I E */
#define _URSTIE U1I Ebits.URSTIE
#define _UERRIE U1I Ebits.UERRIE

```



```

#define _SOFIE U1Ebi ts. SOFIE
#define _TRNIE U1Ebi ts. TRNIE
#define _IDLEIE U1Ebi ts. IDLEIE
#define _RESUMEIE U1Ebi ts. RESUMEIE
#define _ATTACHIE U1Ebi ts. ATTACHIE
#define _STALLIE U1Ebi ts. STALLIE
#define _DETACHIE U1Ebi ts. DETACHIE

/* U1EIR */
#define _PIDEF U1EIRbi ts. PIDEF
#define _CRC5EF U1EIRbi ts. CRC5EF
#define _CRC16EF U1EIRbi ts. CRC16EF
#define _DFN8EF U1EIRbi ts. DFN8EF
#define _BTOEF U1EIRbi ts. BTOEF
#define _DMAEF U1EIRbi ts. DMAEF
#define _BTSEF U1EIRbi ts. BTSEF
#define _EOFEF U1EIRbi ts. EOFEF

/* U1EIE */
#define _PIDEE U1EIEbi ts. PIDEE
#define _CRC5EE U1EIEbi ts. CRC5EE
#define _CRC16EE U1EIEbi ts. CRC16EE
#define _DFN8EE U1EIEbi ts. DFN8EE
#define _BTOEE U1EIEbi ts. BTOEE
#define _DMAEE U1EIEbi ts. DMAEE
#define _BTSEE U1EIEbi ts. BTSEE
#define _EOFEE U1EIEbi ts. EOFEE

/* U1STAT */
#define _PPBI U1STATbi ts. PPBI
#define _DIR U1STATbi ts. DIR
#define _ENDPT0 U1STATbi ts. ENDPT0
#define _ENDPT1 U1STATbi ts. ENDPT1
#define _ENDPT2 U1STATbi ts. ENDPT2
#define _ENDPT3 U1STATbi ts. ENDPT3
#define _ENDPT U1STATbi ts. ENDPT

/* U1CON */
#define _USBEN U1CONbi ts. USBEN
#define _PPBRST U1CONbi ts. PPBRST
#define _RESUME U1CONbi ts. RESUME
#define _HOSTEN U1CONbi ts. HOSTEN
#define _RESET U1CONbi ts. RESET
#define _PKTDIS U1CONbi ts. PKTDIS
#define _SEO U1CONbi ts. SEO
#define _JSTATE U1CONbi ts. JSTATE
#define _SOFEN U1CONbi ts. SOFEN
#define _USBRST U1CONbi ts. USBRST
#define _TOKBUSY U1CONbi ts. TOKBUSY

/* U1ADDR */
/* Bitname _ADDR0 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR1 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR2 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR3 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR4 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR5 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR6 cannot be defined because it is used by more than one SFR */
#define _LSPDEN U1ADDRbi ts. LSPDEN
#define _DEVADDR0 U1ADDRbi ts. DEVADDR0
#define _DEVADDR1 U1ADDRbi ts. DEVADDR1
#define _DEVADDR2 U1ADDRbi ts. DEVADDR2
#define _DEVADDR3 U1ADDRbi ts. DEVADDR3
#define _DEVADDR4 U1ADDRbi ts. DEVADDR4
#define _DEVADDR5 U1ADDRbi ts. DEVADDR5
#define _DEVADDR6 U1ADDRbi ts. DEVADDR6
#define _LOWSPDEN U1ADDRbi ts. LOWSPDEN
#define _DEVADDR U1ADDRbi ts. DEVADDR

```

```

/* U1BDTP1 */
#define _BDTPTRL U1BDTP1bits.BDTPTRL

/* U1FRML */
#define _FRM0 U1FRMLbits.FRM0
#define _FRM1 U1FRMLbits.FRM1
#define _FRM2 U1FRMLbits.FRM2
#define _FRM3 U1FRMLbits.FRM3
#define _FRM4 U1FRMLbits.FRM4
#define _FRM5 U1FRMLbits.FRM5
#define _FRM6 U1FRMLbits.FRM6
#define _FRM7 U1FRMLbits.FRM7

/* U1FRMH */
#define _FRM8 U1FRMHbits.FRM8
#define _FRM9 U1FRMHbits.FRM9
#define _FRM10 U1FRMHbits.FRM10
#define _FRM11 U1FRMHbits.FRM11
#define _FRM12 U1FRMHbits.FRM12
#define _FRM13 U1FRMHbits.FRM13
#define _FRM14 U1FRMHbits.FRM14
#define _FRM15 U1FRMHbits.FRM15

/* U1TOK */
#define _EPO U1TOKbits.EPO
#define _EP1 U1TOKbits.EP1
#define _EP2 U1TOKbits.EP2
#define _EP3 U1TOKbits.EP3
#define _PID0 U1TOKbits.PID0
#define _PID1 U1TOKbits.PID1
#define _PID2 U1TOKbits.PID2
#define _PID3 U1TOKbits.PID3
#define _EP U1TOKbits.EP
#define _PID U1TOKbits.PID

/* U1SOF */
#define _CNT U1SOFbits.CNT

/* U1CNFG1 */
#define _PPB0 U1CNFG1bits.PPB0
#define _PPB1 U1CNFG1bits.PPB1
#define _USBSIDL U1CNFG1bits.USBSIDL
#define _UOEMON U1CNFG1bits.UOEMON
#define _UTEYE U1CNFG1bits.UTEYE
#define _PPB U1CNFG1bits.PPB

/* U1CNFG2 */
#define _UTRDIS U1CNFG2bits.UTRDIS
#define _UVCMPDIS U1CNFG2bits.UVCMPDIS
#define _UVBUSDIS U1CNFG2bits.UVBUSDIS
#define _EXTI2CEN U1CNFG2bits.EXTI2CEN

/* U1EPO */
/* Bitname _EPHSHK cannot be defined because it is used by more than one SFR */
/* Bitname _EPSTALL cannot be defined because it is used by more than one SFR */
/* Bitname _EPTXEN cannot be defined because it is used by more than one SFR */
/* Bitname _EPRXEN cannot be defined because it is used by more than one SFR */
/* Bitname _EPCONDIS cannot be defined because it is used by more than one SFR */
/*
#define _RETRYDIS U1EPObits.RETRYDIS
#define _LSPD U1EPObits.LSPD
/* Bitname _EPINEN cannot be defined because it is used by more than one SFR */
/* Bitname _EPOUTEN cannot be defined because it is used by more than one SFR */
#define _LOWSPD U1EPObits.LOWSPD

/* U1EP1 */
/* Bitname _EPHSHK cannot be defined because it is used by more than one SFR */

```



```

/* Bitname _EPOUTEN cannot be defined because it is used by more than one SFR */

/* U1EP15 */
/* Bitname _EPHSHK cannot be defined because it is used by more than one SFR */
/* Bitname _EPSTALL cannot be defined because it is used by more than one SFR */
/* Bitname _EPTXEN cannot be defined because it is used by more than one SFR */
/* Bitname _EPRXEN cannot be defined because it is used by more than one SFR */
/* Bitname _EPCONDIS cannot be defined because it is used by more than one SFR */
*/
/* Bitname _EPINEN cannot be defined because it is used by more than one SFR */
/* Bitname _EPOUTEN cannot be defined because it is used by more than one SFR */

/* U1PWMRRS */
#define _PER0 U1PWMRRSbits.PER0
#define _PER1 U1PWMRRSbits.PER1
#define _PER2 U1PWMRRSbits.PER2
#define _PER3 U1PWMRRSbits.PER3
#define _PER4 U1PWMRRSbits.PER4
#define _PER5 U1PWMRRSbits.PER5
#define _PER6 U1PWMRRSbits.PER6
#define _PER7 U1PWMRRSbits.PER7
#define _DC0 U1PWMRRSbits.DC0
#define _DC1 U1PWMRRSbits.DC1
#define _DC2 U1PWMRRSbits.DC2
#define _DC3 U1PWMRRSbits.DC3
#define _DC4 U1PWMRRSbits.DC4
#define _DC5 U1PWMRRSbits.DC5
#define _DC6 U1PWMRRSbits.DC6
#define _DC7 U1PWMRRSbits.DC7
#define _USBRS0 U1PWMRRSbits.USBRS0
#define _USBRS1 U1PWMRRSbits.USBRS1
#define _USBRS2 U1PWMRRSbits.USBRS2
#define _USBRS3 U1PWMRRSbits.USBRS3
#define _USBRS4 U1PWMRRSbits.USBRS4
#define _USBRS5 U1PWMRRSbits.USBRS5
#define _USBRS6 U1PWMRRSbits.USBRS6
#define _USBRS7 U1PWMRRSbits.USBRS7
#define _USBR0 U1PWMRRSbits.USBR0
#define _USBR1 U1PWMRRSbits.USBR1
#define _USBR2 U1PWMRRSbits.USBR2
#define _USBR3 U1PWMRRSbits.USBR3
#define _USBR4 U1PWMRRSbits.USBR4
#define _USBR5 U1PWMRRSbits.USBR5
#define _USBR6 U1PWMRRSbits.USBR6
#define _USBR7 U1PWMRRSbits.USBR7
#define _USBRS U1PWMRRSbits.USBRS
#define _USBR U1PWMRRSbits.USBR
#define _PER U1PWMRRSbits.PER
/* Bitname _DC cannot be defined because it is used by more than one SFR */

/* U1PWMCON */
#define _CNTEN U1PWMCONbits.CNTEN
#define _PWMPOL U1PWMCONbits.PWMPOL
#define _USBTSEL U1PWMCONbits.USBTSEL
#define _PWMEN U1PWMCONbits.PWMEN
#define _USBTSELO U1PWMCONbits.USBTSELO
#define _USBTSEL1 U1PWMCONbits.USBTSEL1
#define _USBTSEL2 U1PWMCONbits.USBTSEL2

/* PMCON */
#define _RDSP PMCONbits.RDSP
#define _WRSP PMCONbits.WRSP
#define _BEP PMCONbits.BEP
#define _CS1P PMCONbits.CS1P
#define _CS2P PMCONbits.CS2P
#define _ALP PMCONbits.ALP
#define _CSF PMCONbits.CSF
#define _PTRDEN PMCONbits.PTRDEN

```

```

#define _PTWREN PMCONbits.PTWREN
#define _PTBEEN PMCONbits.PTBEEN
#define _ADRMUX PMCONbits.ADRMUX
#define _PSIDL PMCONbits.PSIDL
#define _PMPEN PMCONbits.PMPEN
#define _CSF0 PMCONbits.CSF0
#define _CSF1 PMCONbits.CSF1
#define _ADRMUX0 PMCONbits.ADRMUX0
#define _ADRMUX1 PMCONbits.ADRMUX1

/* PMMODE */
#define _WAITE PMMODEbits.WAITE
#define _WAITM PMMODEbits.WAITM
#define _WAITB PMMODEbits.WAITB
#define _MODE0 PMMODEbits.MODE0
#define _MODE1 PMMODEbits.MODE1
/* Bitname _MODE16 cannot be defined because it is used by more than one SFR */
#define _INCM PMMODEbits.INCM
#define _IRQM PMMODEbits.IRQM
#define _BUSY PMMODEbits.BUSY
#define _WAITE0 PMMODEbits.WAITE0
#define _WAITE1 PMMODEbits.WAITE1
#define _WAITM0 PMMODEbits.WAITM0
#define _WAITM1 PMMODEbits.WAITM1
#define _WAITM2 PMMODEbits.WAITM2
#define _WAITM3 PMMODEbits.WAITM3
#define _WAITB0 PMMODEbits.WAITB0
#define _WAITB1 PMMODEbits.WAITB1
#define _MODE PMMODEbits.MODE
#define _INCM0 PMMODEbits.INCM0
#define _INCM1 PMMODEbits.INCM1
#define _IRQM0 PMMODEbits.IRQM0
#define _IRQM1 PMMODEbits.IRQM1

/* PMADDR */
#define _ADDR PMADDRbits.ADDR
#define _CS PMADDRbits.CS
/* Bitname _ADDR0 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR1 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR2 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR3 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR4 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR5 cannot be defined because it is used by more than one SFR */
/* Bitname _ADDR6 cannot be defined because it is used by more than one SFR */
#define _ADDR7 PMADDRbits.ADDR7
#define _ADDR8 PMADDRbits.ADDR8
#define _ADDR9 PMADDRbits.ADDR9
#define _ADDR10 PMADDRbits.ADDR10
#define _ADDR11 PMADDRbits.ADDR11
#define _ADDR12 PMADDRbits.ADDR12
#define _ADDR13 PMADDRbits.ADDR13
#define _CS1 PMADDRbits.CS1
#define _CS2 PMADDRbits.CS2

/* PMAEN */
#define _PTEN0 PMAENbits.PTEN0
#define _PTEN1 PMAENbits.PTEN1
#define _PTEN2 PMAENbits.PTEN2
#define _PTEN3 PMAENbits.PTEN3
#define _PTEN4 PMAENbits.PTEN4
#define _PTEN5 PMAENbits.PTEN5
#define _PTEN6 PMAENbits.PTEN6
#define _PTEN7 PMAENbits.PTEN7
#define _PTEN8 PMAENbits.PTEN8
#define _PTEN9 PMAENbits.PTEN9
#define _PTEN10 PMAENbits.PTEN10
#define _PTEN11 PMAENbits.PTEN11
#define _PTEN12 PMAENbits.PTEN12

```

```
#define _PTEN13 PMAENbits.PTEN13
#define _PTEN14 PMAENbits.PTEN14
#define _PTEN15 PMAENbits.PTEN15
```

```
/* PMSTAT */
#define _OBOE PMSTATbits.OBOE
#define _OB1E PMSTATbits.OB1E
#define _OB2E PMSTATbits.OB2E
#define _OB3E PMSTATbits.OB3E
#define _OBUF PMSTATbits.OBUF
#define _OBE PMSTATbits.OBE
#define _IB0F PMSTATbits.IB0F
#define _IB1F PMSTATbits.IB1F
#define _IB2F PMSTATbits.IB2F
#define _IB3F PMSTATbits.IB3F
#define _IBOV PMSTATbits.IBOV
#define _IBF PMSTATbits.IBF
```

```
/* ALCFGRPT */
#define _ARPT ALCFGRPTbits.ARPT
#define _ALRMPTR ALCFGRPTbits.ALRMPTR
#define _AMASK ALCFGRPTbits.AMASK
#define _CHIME ALCFGRPTbits.CHIME
#define _ALRMEN ALCFGRPTbits.ALRMEN
#define _ARPT0 ALCFGRPTbits.ARPT0
#define _ARPT1 ALCFGRPTbits.ARPT1
#define _ARPT2 ALCFGRPTbits.ARPT2
#define _ARPT3 ALCFGRPTbits.ARPT3
#define _ARPT4 ALCFGRPTbits.ARPT4
#define _ARPT5 ALCFGRPTbits.ARPT5
#define _ARPT6 ALCFGRPTbits.ARPT6
#define _ARPT7 ALCFGRPTbits.ARPT7
#define _ALRMPTR0 ALCFGRPTbits.ALRMPTR0
#define _ALRMPTR1 ALCFGRPTbits.ALRMPTR1
#define _AMASK0 ALCFGRPTbits.AMASK0
#define _AMASK1 ALCFGRPTbits.AMASK1
#define _AMASK2 ALCFGRPTbits.AMASK2
#define _AMASK3 ALCFGRPTbits.AMASK3
```

```
/* RCFGCAL */
#define _CAL RCFGCALbits.CAL
#define _RTCPTR RCFGCALbits.RTCPTR
#define _RTCOE RCFGCALbits.RTCOE
#define _HALFSEC RCFGCALbits.HALFSEC
#define _RTCSYNC RCFGCALbits.RTCSYNC
#define _RTCWREN RCFGCALbits.RTCWREN
#define _RTCEN RCFGCALbits.RTCEN
#define _CAL0 RCFGCALbits.CAL0
#define _CAL1 RCFGCALbits.CAL1
#define _CAL2 RCFGCALbits.CAL2
#define _CAL3 RCFGCALbits.CAL3
#define _CAL4 RCFGCALbits.CAL4
#define _CAL5 RCFGCALbits.CAL5
#define _CAL6 RCFGCALbits.CAL6
#define _CAL7 RCFGCALbits.CAL7
#define _RTCPTR0 RCFGCALbits.RTCPTR0
#define _RTCPTR1 RCFGCALbits.RTCPTR1
```

```
/* CMSTAT */
#define _C1OUT CMSTATbits.C1OUT
#define _C2OUT CMSTATbits.C2OUT
#define _C3OUT CMSTATbits.C3OUT
#define _C4OUT CMSTATbits.C4OUT
#define _C5OUT CMSTATbits.C5OUT
#define _C6OUT CMSTATbits.C6OUT
#define _C1EVT CMSTATbits.C1EVT
#define _C2EVT CMSTATbits.C2EVT
#define _C3EVT CMSTATbits.C3EVT
```

```
#define _C4EVT CMSTATbits.C4EVT
#define _C5EVT CMSTATbits.C5EVT
#define _C6EVT CMSTATbits.C6EVT
#define _CMI DL CMSTATbits.CMI DL
```

```
/* CVRCON */
#define _CVR CVRCONbits.CVR
#define _CVRSS CVRCONbits.CVRSS
#define _CVRR CVRCONbits.CVRR
#define _CVROE CVRCONbits.CVROE
#define _CVREN CVRCONbits.CVREN
#define _CVRO CVRCONbits.CVRO
#define _CVR1 CVRCONbits.CVR1
#define _CVR2 CVRCONbits.CVR2
#define _CVR3 CVRCONbits.CVR3
```

```
/* CM1CON */
/* Bitname _CCHO cannot be defined because it is used by more than one SFR */
/* Bitname _CCH1 cannot be defined because it is used by more than one SFR */
/* Bitname _CREF cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL0 cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL1 cannot be defined because it is used by more than one SFR */
/* Bitname _COUT cannot be defined because it is used by more than one SFR */
/* Bitname _CEVT cannot be defined because it is used by more than one SFR */
/* Bitname _CPOL cannot be defined because it is used by more than one SFR */
/* Bitname _COE cannot be defined because it is used by more than one SFR */
/* Bitname _CON cannot be defined because it is used by more than one SFR */
/* Bitname _CCH cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL cannot be defined because it is used by more than one SFR */
/* Bitname _CEN cannot be defined because it is used by more than one SFR */
```

```
/* CM2CON */
/* Bitname _CCHO cannot be defined because it is used by more than one SFR */
/* Bitname _CCH1 cannot be defined because it is used by more than one SFR */
/* Bitname _CREF cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL0 cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL1 cannot be defined because it is used by more than one SFR */
/* Bitname _COUT cannot be defined because it is used by more than one SFR */
/* Bitname _CEVT cannot be defined because it is used by more than one SFR */
/* Bitname _CPOL cannot be defined because it is used by more than one SFR */
/* Bitname _COE cannot be defined because it is used by more than one SFR */
/* Bitname _CON cannot be defined because it is used by more than one SFR */
/* Bitname _CCH cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL cannot be defined because it is used by more than one SFR */
/* Bitname _CEN cannot be defined because it is used by more than one SFR */
```

```
/* CM3CON */
/* Bitname _CCHO cannot be defined because it is used by more than one SFR */
/* Bitname _CCH1 cannot be defined because it is used by more than one SFR */
/* Bitname _CREF cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL0 cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL1 cannot be defined because it is used by more than one SFR */
/* Bitname _COUT cannot be defined because it is used by more than one SFR */
/* Bitname _CEVT cannot be defined because it is used by more than one SFR */
/* Bitname _CPOL cannot be defined because it is used by more than one SFR */
/* Bitname _COE cannot be defined because it is used by more than one SFR */
/* Bitname _CON cannot be defined because it is used by more than one SFR */
/* Bitname _CCH cannot be defined because it is used by more than one SFR */
/* Bitname _EVPOL cannot be defined because it is used by more than one SFR */
/* Bitname _CEN cannot be defined because it is used by more than one SFR */
```

```
/* CRCCON */
#define _PLEN CRCCONbits.PLEN
#define _CRCGO CRCCONbits.CRCGO
#define _CRCMPT CRCCONbits.CRCMPT
#define _CRCFUL CRCCONbits.CRCFUL
#define _VWORD CRCCONbits.VWORD
#define _CSI DL CRCCONbits.CSI DL
```



```
#define _PLEN0 CRCCONbits.PLEN0
#define _PLEN1 CRCCONbits.PLEN1
#define _PLEN2 CRCCONbits.PLEN2
#define _PLEN3 CRCCONbits.PLEN3
#define _VWORD0 CRCCONbits.VWORD0
#define _VWORD1 CRCCONbits.VWORD1
#define _VWORD2 CRCCONbits.VWORD2
#define _VWORD3 CRCCONbits.VWORD3
#define _VWORD4 CRCCONbits.VWORD4
```

```
/* CRCXOR */
```

```
#define _X1 CRCXORbits.X1
#define _X2 CRCXORbits.X2
#define _X3 CRCXORbits.X3
#define _X4 CRCXORbits.X4
#define _X5 CRCXORbits.X5
#define _X6 CRCXORbits.X6
#define _X7 CRCXORbits.X7
#define _X8 CRCXORbits.X8
#define _X9 CRCXORbits.X9
#define _X10 CRCXORbits.X10
#define _X11 CRCXORbits.X11
#define _X12 CRCXORbits.X12
#define _X13 CRCXORbits.X13
#define _X14 CRCXORbits.X14
#define _X15 CRCXORbits.X15
```

```
/* RPI NR0 */
```

```
#define _INT1R RPI NR0bits.INT1R
#define _INT1R0 RPI NR0bits.INT1R0
#define _INT1R1 RPI NR0bits.INT1R1
#define _INT1R2 RPI NR0bits.INT1R2
#define _INT1R3 RPI NR0bits.INT1R3
#define _INT1R4 RPI NR0bits.INT1R4
#define _INT1R5 RPI NR0bits.INT1R5
```

```
/* RPI NR1 */
```

```
#define _INT2R RPI NR1bits.INT2R
#define _INT3R RPI NR1bits.INT3R
#define _INT2R0 RPI NR1bits.INT2R0
#define _INT2R1 RPI NR1bits.INT2R1
#define _INT2R2 RPI NR1bits.INT2R2
#define _INT2R3 RPI NR1bits.INT2R3
#define _INT2R4 RPI NR1bits.INT2R4
#define _INT2R5 RPI NR1bits.INT2R5
#define _INT3R0 RPI NR1bits.INT3R0
#define _INT3R1 RPI NR1bits.INT3R1
#define _INT3R2 RPI NR1bits.INT3R2
#define _INT3R3 RPI NR1bits.INT3R3
#define _INT3R4 RPI NR1bits.INT3R4
#define _INT3R5 RPI NR1bits.INT3R5
```

```
/* RPI NR2 */
```

```
#define _INT4R RPI NR2bits.INT4R
#define _T1CKR RPI NR2bits.T1CKR
#define _INT4R0 RPI NR2bits.INT4R0
#define _INT4R1 RPI NR2bits.INT4R1
#define _INT4R2 RPI NR2bits.INT4R2
#define _INT4R3 RPI NR2bits.INT4R3
#define _INT4R4 RPI NR2bits.INT4R4
#define _INT4R5 RPI NR2bits.INT4R5
#define _T1CKR0 RPI NR2bits.T1CKR0
#define _T1CKR1 RPI NR2bits.T1CKR1
#define _T1CKR2 RPI NR2bits.T1CKR2
#define _T1CKR3 RPI NR2bits.T1CKR3
#define _T1CKR4 RPI NR2bits.T1CKR4
#define _T1CKR5 RPI NR2bits.T1CKR5
```

```

/* RPI NR3 */
#define _T2CKR RPI NR3bi ts. T2CKR
#define _T3CKR RPI NR3bi ts. T3CKR
#define _T2CKR0 RPI NR3bi ts. T2CKR0
#define _T2CKR1 RPI NR3bi ts. T2CKR1
#define _T2CKR2 RPI NR3bi ts. T2CKR2
#define _T2CKR3 RPI NR3bi ts. T2CKR3
#define _T2CKR4 RPI NR3bi ts. T2CKR4
#define _T2CKR5 RPI NR3bi ts. T2CKR5
#define _T3CKR0 RPI NR3bi ts. T3CKR0
#define _T3CKR1 RPI NR3bi ts. T3CKR1
#define _T3CKR2 RPI NR3bi ts. T3CKR2
#define _T3CKR3 RPI NR3bi ts. T3CKR3
#define _T3CKR4 RPI NR3bi ts. T3CKR4
#define _T3CKR5 RPI NR3bi ts. T3CKR5

```

```

/* RPI NR4 */
#define _T4CKR RPI NR4bi ts. T4CKR
#define _T5CKR RPI NR4bi ts. T5CKR
#define _T4CKR0 RPI NR4bi ts. T4CKR0
#define _T4CKR1 RPI NR4bi ts. T4CKR1
#define _T4CKR2 RPI NR4bi ts. T4CKR2
#define _T4CKR3 RPI NR4bi ts. T4CKR3
#define _T4CKR4 RPI NR4bi ts. T4CKR4
#define _T4CKR5 RPI NR4bi ts. T4CKR5
#define _T5CKR0 RPI NR4bi ts. T5CKR0
#define _T5CKR1 RPI NR4bi ts. T5CKR1
#define _T5CKR2 RPI NR4bi ts. T5CKR2
#define _T5CKR3 RPI NR4bi ts. T5CKR3
#define _T5CKR4 RPI NR4bi ts. T5CKR4
#define _T5CKR5 RPI NR4bi ts. T5CKR5

```

```

/* RPI NR7 */
#define _IC1R RPI NR7bi ts. IC1R
#define _IC2R RPI NR7bi ts. IC2R
#define _IC1R0 RPI NR7bi ts. IC1R0
#define _IC1R1 RPI NR7bi ts. IC1R1
#define _IC1R2 RPI NR7bi ts. IC1R2
#define _IC1R3 RPI NR7bi ts. IC1R3
#define _IC1R4 RPI NR7bi ts. IC1R4
#define _IC1R5 RPI NR7bi ts. IC1R5
#define _IC2R0 RPI NR7bi ts. IC2R0
#define _IC2R1 RPI NR7bi ts. IC2R1
#define _IC2R2 RPI NR7bi ts. IC2R2
#define _IC2R3 RPI NR7bi ts. IC2R3
#define _IC2R4 RPI NR7bi ts. IC2R4
#define _IC2R5 RPI NR7bi ts. IC2R5

```

```

/* RPI NR8 */
#define _IC3R RPI NR8bi ts. IC3R
#define _IC4R RPI NR8bi ts. IC4R
#define _IC3R0 RPI NR8bi ts. IC3R0
#define _IC3R1 RPI NR8bi ts. IC3R1
#define _IC3R2 RPI NR8bi ts. IC3R2
#define _IC3R3 RPI NR8bi ts. IC3R3
#define _IC3R4 RPI NR8bi ts. IC3R4
#define _IC3R5 RPI NR8bi ts. IC3R5
#define _IC4R0 RPI NR8bi ts. IC4R0
#define _IC4R1 RPI NR8bi ts. IC4R1
#define _IC4R2 RPI NR8bi ts. IC4R2
#define _IC4R3 RPI NR8bi ts. IC4R3
#define _IC4R4 RPI NR8bi ts. IC4R4
#define _IC4R5 RPI NR8bi ts. IC4R5

```

```

/* RPI NR9 */
#define _IC5R RPI NR9bi ts. IC5R
#define _IC6R RPI NR9bi ts. IC6R
#define _IC5R0 RPI NR9bi ts. IC5R0

```

```

#define _I_C5R1 RPI NR9bi ts. IC5R1
#define _I_C5R2 RPI NR9bi ts. IC5R2
#define _I_C5R3 RPI NR9bi ts. IC5R3
#define _I_C5R4 RPI NR9bi ts. IC5R4
#define _I_C5R5 RPI NR9bi ts. IC5R5
#define _I_C6R0 RPI NR9bi ts. IC6R0
#define _I_C6R1 RPI NR9bi ts. IC6R1
#define _I_C6R2 RPI NR9bi ts. IC6R2
#define _I_C6R3 RPI NR9bi ts. IC6R3
#define _I_C6R4 RPI NR9bi ts. IC6R4
#define _I_C6R5 RPI NR9bi ts. IC6R5

/* RPI NR10 */
#define _I_C7R RPI NR10bi ts. IC7R
#define _I_C8R RPI NR10bi ts. IC8R
#define _I_C7R0 RPI NR10bi ts. IC7R0
#define _I_C7R1 RPI NR10bi ts. IC7R1
#define _I_C7R2 RPI NR10bi ts. IC7R2
#define _I_C7R3 RPI NR10bi ts. IC7R3
#define _I_C7R4 RPI NR10bi ts. IC7R4
#define _I_C7R5 RPI NR10bi ts. IC7R5
#define _I_C8R0 RPI NR10bi ts. IC8R0
#define _I_C8R1 RPI NR10bi ts. IC8R1
#define _I_C8R2 RPI NR10bi ts. IC8R2
#define _I_C8R3 RPI NR10bi ts. IC8R3
#define _I_C8R4 RPI NR10bi ts. IC8R4
#define _I_C8R5 RPI NR10bi ts. IC8R5

/* RPI NR11 */
#define _OCFAR RPI NR11bi ts. OCFAR
#define _OCFBR RPI NR11bi ts. OCFBR
#define _OCFAR0 RPI NR11bi ts. OCFAR0
#define _OCFAR1 RPI NR11bi ts. OCFAR1
#define _OCFAR2 RPI NR11bi ts. OCFAR2
#define _OCFAR3 RPI NR11bi ts. OCFAR3
#define _OCFAR4 RPI NR11bi ts. OCFAR4
#define _OCFAR5 RPI NR11bi ts. OCFAR5
#define _OCFBR0 RPI NR11bi ts. OCFBR0
#define _OCFBR1 RPI NR11bi ts. OCFBR1
#define _OCFBR2 RPI NR11bi ts. OCFBR2
#define _OCFBR3 RPI NR11bi ts. OCFBR3
#define _OCFBR4 RPI NR11bi ts. OCFBR4
#define _OCFBR5 RPI NR11bi ts. OCFBR5

/* RPI NR15 */
#define _I_C9R RPI NR15bi ts. IC9R
#define _I_C9R0 RPI NR15bi ts. IC9R0
#define _I_C9R1 RPI NR15bi ts. IC9R1
#define _I_C9R2 RPI NR15bi ts. IC9R2
#define _I_C9R3 RPI NR15bi ts. IC9R3
#define _I_C9R4 RPI NR15bi ts. IC9R4
#define _I_C9R5 RPI NR15bi ts. IC9R5

/* RPI NR17 */
#define _U3RXR RPI NR17bi ts. U3RXR
#define _U3RXR0 RPI NR17bi ts. U3RXR0
#define _U3RXR1 RPI NR17bi ts. U3RXR1
#define _U3RXR2 RPI NR17bi ts. U3RXR2
#define _U3RXR3 RPI NR17bi ts. U3RXR3
#define _U3RXR4 RPI NR17bi ts. U3RXR4
#define _U3RXR5 RPI NR17bi ts. U3RXR5

/* RPI NR18 */
#define _U1RXR RPI NR18bi ts. U1RXR
#define _U1CTSR RPI NR18bi ts. U1CTSR
#define _U1RXR0 RPI NR18bi ts. U1RXR0
#define _U1RXR1 RPI NR18bi ts. U1RXR1
#define _U1RXR2 RPI NR18bi ts. U1RXR2

```

```

#define _U1RXR3 RPI NR18bi ts. U1RXR3
#define _U1RXR4 RPI NR18bi ts. U1RXR4
#define _U1RXR5 RPI NR18bi ts. U1RXR5
#define _U1CTSR0 RPI NR18bi ts. U1CTSR0
#define _U1CTSR1 RPI NR18bi ts. U1CTSR1
#define _U1CTSR2 RPI NR18bi ts. U1CTSR2
#define _U1CTSR3 RPI NR18bi ts. U1CTSR3
#define _U1CTSR4 RPI NR18bi ts. U1CTSR4
#define _U1CTSR5 RPI NR18bi ts. U1CTSR5

```

```
/* RPI NR19 */
```

```

#define _U2RXR RPI NR19bi ts. U2RXR
#define _U2CTSR RPI NR19bi ts. U2CTSR
#define _U2RXR0 RPI NR19bi ts. U2RXR0
#define _U2RXR1 RPI NR19bi ts. U2RXR1
#define _U2RXR2 RPI NR19bi ts. U2RXR2
#define _U2RXR3 RPI NR19bi ts. U2RXR3
#define _U2RXR4 RPI NR19bi ts. U2RXR4
#define _U2RXR5 RPI NR19bi ts. U2RXR5
#define _U2CTSR0 RPI NR19bi ts. U2CTSR0
#define _U2CTSR1 RPI NR19bi ts. U2CTSR1
#define _U2CTSR2 RPI NR19bi ts. U2CTSR2
#define _U2CTSR3 RPI NR19bi ts. U2CTSR3
#define _U2CTSR4 RPI NR19bi ts. U2CTSR4
#define _U2CTSR5 RPI NR19bi ts. U2CTSR5

```

```
/* RPI NR20 */
```

```

#define _SDI1R RPI NR20bi ts. SDI1R
#define _SCK1R RPI NR20bi ts. SCK1R
#define _SDI1R0 RPI NR20bi ts. SDI1R0
#define _SDI1R1 RPI NR20bi ts. SDI1R1
#define _SDI1R2 RPI NR20bi ts. SDI1R2
#define _SDI1R3 RPI NR20bi ts. SDI1R3
#define _SDI1R4 RPI NR20bi ts. SDI1R4
#define _SDI1R5 RPI NR20bi ts. SDI1R5
#define _SCK1R0 RPI NR20bi ts. SCK1R0
#define _SCK1R1 RPI NR20bi ts. SCK1R1
#define _SCK1R2 RPI NR20bi ts. SCK1R2
#define _SCK1R3 RPI NR20bi ts. SCK1R3
#define _SCK1R4 RPI NR20bi ts. SCK1R4
#define _SCK1R5 RPI NR20bi ts. SCK1R5

```

```
/* RPI NR21 */
```

```

#define _SS1R RPI NR21bi ts. SS1R
#define _U3CTSR RPI NR21bi ts. U3CTSR
#define _SS1R0 RPI NR21bi ts. SS1R0
#define _SS1R1 RPI NR21bi ts. SS1R1
#define _SS1R2 RPI NR21bi ts. SS1R2
#define _SS1R3 RPI NR21bi ts. SS1R3
#define _SS1R4 RPI NR21bi ts. SS1R4
#define _SS1R5 RPI NR21bi ts. SS1R5
#define _U3CTSR0 RPI NR21bi ts. U3CTSR0
#define _U3CTSR1 RPI NR21bi ts. U3CTSR1
#define _U3CTSR2 RPI NR21bi ts. U3CTSR2
#define _U3CTSR3 RPI NR21bi ts. U3CTSR3
#define _U3CTSR4 RPI NR21bi ts. U3CTSR4
#define _U3CTSR5 RPI NR21bi ts. U3CTSR5

```

```
/* RPI NR22 */
```

```

#define _SDI2R RPI NR22bi ts. SDI2R
#define _SCK2R RPI NR22bi ts. SCK2R
#define _SDI2R0 RPI NR22bi ts. SDI2R0
#define _SDI2R1 RPI NR22bi ts. SDI2R1
#define _SDI2R2 RPI NR22bi ts. SDI2R2
#define _SDI2R3 RPI NR22bi ts. SDI2R3
#define _SDI2R4 RPI NR22bi ts. SDI2R4
#define _SDI2R5 RPI NR22bi ts. SDI2R5
#define _SCK2R0 RPI NR22bi ts. SCK2R0

```

```
#define _SCK2R1 RPI NR22bi ts. SCK2R1
#define _SCK2R2 RPI NR22bi ts. SCK2R2
#define _SCK2R3 RPI NR22bi ts. SCK2R3
#define _SCK2R4 RPI NR22bi ts. SCK2R4
#define _SCK2R5 RPI NR22bi ts. SCK2R5
```

```
/* RPI NR23 */
```

```
#define _SS2R RPI NR23bi ts. SS2R
#define _SS2R0 RPI NR23bi ts. SS2R0
#define _SS2R1 RPI NR23bi ts. SS2R1
#define _SS2R2 RPI NR23bi ts. SS2R2
#define _SS2R3 RPI NR23bi ts. SS2R3
#define _SS2R4 RPI NR23bi ts. SS2R4
#define _SS2R5 RPI NR23bi ts. SS2R5
```

```
/* RPI NR27 */
```

```
#define _U4RXR RPI NR27bi ts. U4RXR
#define _U4CTSR RPI NR27bi ts. U4CTSR
#define _U4RXR0 RPI NR27bi ts. U4RXR0
#define _U4RXR1 RPI NR27bi ts. U4RXR1
#define _U4RXR2 RPI NR27bi ts. U4RXR2
#define _U4RXR3 RPI NR27bi ts. U4RXR3
#define _U4RXR4 RPI NR27bi ts. U4RXR4
#define _U4RXR5 RPI NR27bi ts. U4RXR5
#define _U4CTSR0 RPI NR27bi ts. U4CTSR0
#define _U4CTSR1 RPI NR27bi ts. U4CTSR1
#define _U4CTSR2 RPI NR27bi ts. U4CTSR2
#define _U4CTSR3 RPI NR27bi ts. U4CTSR3
#define _U4CTSR4 RPI NR27bi ts. U4CTSR4
#define _U4CTSR5 RPI NR27bi ts. U4CTSR5
```

```
/* RPI NR28 */
```

```
#define _SDI3R RPI NR28bi ts. SDI3R
#define _SCK3R RPI NR28bi ts. SCK3R
#define _SDI3R0 RPI NR28bi ts. SDI3R0
#define _SDI3R1 RPI NR28bi ts. SDI3R1
#define _SDI3R2 RPI NR28bi ts. SDI3R2
#define _SDI3R3 RPI NR28bi ts. SDI3R3
#define _SDI3R4 RPI NR28bi ts. SDI3R4
#define _SDI3R5 RPI NR28bi ts. SDI3R5
#define _SCK3R0 RPI NR28bi ts. SCK3R0
#define _SCK3R1 RPI NR28bi ts. SCK3R1
#define _SCK3R2 RPI NR28bi ts. SCK3R2
#define _SCK3R3 RPI NR28bi ts. SCK3R3
#define _SCK3R4 RPI NR28bi ts. SCK3R4
#define _SCK3R5 RPI NR28bi ts. SCK3R5
```

```
/* RPI NR29 */
```

```
#define _SS3R RPI NR29bi ts. SS3R
#define _SS3R0 RPI NR29bi ts. SS3R0
#define _SS3R1 RPI NR29bi ts. SS3R1
#define _SS3R2 RPI NR29bi ts. SS3R2
#define _SS3R3 RPI NR29bi ts. SS3R3
#define _SS3R4 RPI NR29bi ts. SS3R4
#define _SS3R5 RPI NR29bi ts. SS3R5
```

```
/* RPOR0 */
```

```
#define _RPOR RPOR0bi ts. RPOR
#define _RP1R RPOR0bi ts. RP1R
#define _RPOR0 RPOR0bi ts. RPOR0
#define _RPOR1 RPOR0bi ts. RPOR1
#define _RPOR2 RPOR0bi ts. RPOR2
#define _RPOR3 RPOR0bi ts. RPOR3
#define _RPOR4 RPOR0bi ts. RPOR4
#define _RPOR5 RPOR0bi ts. RPOR5
#define _RP1R0 RPOR0bi ts. RP1R0
#define _RP1R1 RPOR0bi ts. RP1R1
#define _RP1R2 RPOR0bi ts. RP1R2
```

```
#define _RP1R3 RPOR0bits.RP1R3
#define _RP1R4 RPOR0bits.RP1R4
#define _RP1R5 RPOR0bits.RP1R5
```

```
/* RPOR1 */
#define _RP2R RPOR1bits.RP2R
#define _RP3R RPOR1bits.RP3R
#define _RP2R0 RPOR1bits.RP2R0
#define _RP2R1 RPOR1bits.RP2R1
#define _RP2R2 RPOR1bits.RP2R2
#define _RP2R3 RPOR1bits.RP2R3
#define _RP2R4 RPOR1bits.RP2R4
#define _RP2R5 RPOR1bits.RP2R5
#define _RP3R0 RPOR1bits.RP3R0
#define _RP3R1 RPOR1bits.RP3R1
#define _RP3R2 RPOR1bits.RP3R2
#define _RP3R3 RPOR1bits.RP3R3
#define _RP3R4 RPOR1bits.RP3R4
#define _RP3R5 RPOR1bits.RP3R5
```

```
/* RPOR2 */
#define _RP4R RPOR2bits.RP4R
#define _RP5R RPOR2bits.RP5R
#define _RP4R0 RPOR2bits.RP4R0
#define _RP4R1 RPOR2bits.RP4R1
#define _RP4R2 RPOR2bits.RP4R2
#define _RP4R3 RPOR2bits.RP4R3
#define _RP4R4 RPOR2bits.RP4R4
#define _RP4R5 RPOR2bits.RP4R5
#define _RP5R0 RPOR2bits.RP5R0
#define _RP5R1 RPOR2bits.RP5R1
#define _RP5R2 RPOR2bits.RP5R2
#define _RP5R3 RPOR2bits.RP5R3
#define _RP5R4 RPOR2bits.RP5R4
#define _RP5R5 RPOR2bits.RP5R5
```

```
/* RPOR3 */
#define _RP6R RPOR3bits.RP6R
#define _RP7R RPOR3bits.RP7R
#define _RP6R0 RPOR3bits.RP6R0
#define _RP6R1 RPOR3bits.RP6R1
#define _RP6R2 RPOR3bits.RP6R2
#define _RP6R3 RPOR3bits.RP6R3
#define _RP6R4 RPOR3bits.RP6R4
#define _RP6R5 RPOR3bits.RP6R5
#define _RP7R0 RPOR3bits.RP7R0
#define _RP7R1 RPOR3bits.RP7R1
#define _RP7R2 RPOR3bits.RP7R2
#define _RP7R3 RPOR3bits.RP7R3
#define _RP7R4 RPOR3bits.RP7R4
#define _RP7R5 RPOR3bits.RP7R5
```

```
/* RPOR4 */
#define _RP8R RPOR4bits.RP8R
#define _RP9R RPOR4bits.RP9R
#define _RP8R0 RPOR4bits.RP8R0
#define _RP8R1 RPOR4bits.RP8R1
#define _RP8R2 RPOR4bits.RP8R2
#define _RP8R3 RPOR4bits.RP8R3
#define _RP8R4 RPOR4bits.RP8R4
#define _RP8R5 RPOR4bits.RP8R5
#define _RP9R0 RPOR4bits.RP9R0
#define _RP9R1 RPOR4bits.RP9R1
#define _RP9R2 RPOR4bits.RP9R2
#define _RP9R3 RPOR4bits.RP9R3
#define _RP9R4 RPOR4bits.RP9R4
#define _RP9R5 RPOR4bits.RP9R5
```

```
/* RPOR5 */
#define _RP10R RPOR5bi ts. RP10R
#define _RP11R RPOR5bi ts. RP11R
#define _RP10R0 RPOR5bi ts. RP10R0
#define _RP10R1 RPOR5bi ts. RP10R1
#define _RP10R2 RPOR5bi ts. RP10R2
#define _RP10R3 RPOR5bi ts. RP10R3
#define _RP10R4 RPOR5bi ts. RP10R4
#define _RP10R5 RPOR5bi ts. RP10R5
#define _RP11R0 RPOR5bi ts. RP11R0
#define _RP11R1 RPOR5bi ts. RP11R1
#define _RP11R2 RPOR5bi ts. RP11R2
#define _RP11R3 RPOR5bi ts. RP11R3
#define _RP11R4 RPOR5bi ts. RP11R4
#define _RP11R5 RPOR5bi ts. RP11R5
```

```
/* RPOR6 */
#define _RP12R RPOR6bi ts. RP12R
#define _RP13R RPOR6bi ts. RP13R
#define _RP12R0 RPOR6bi ts. RP12R0
#define _RP12R1 RPOR6bi ts. RP12R1
#define _RP12R2 RPOR6bi ts. RP12R2
#define _RP12R3 RPOR6bi ts. RP12R3
#define _RP12R4 RPOR6bi ts. RP12R4
#define _RP12R5 RPOR6bi ts. RP12R5
#define _RP13R0 RPOR6bi ts. RP13R0
#define _RP13R1 RPOR6bi ts. RP13R1
#define _RP13R2 RPOR6bi ts. RP13R2
#define _RP13R3 RPOR6bi ts. RP13R3
#define _RP13R4 RPOR6bi ts. RP13R4
#define _RP13R5 RPOR6bi ts. RP13R5
```

```
/* RPOR7 */
#define _RP14R RPOR7bi ts. RP14R
#define _RP15R RPOR7bi ts. RP15R
#define _RP14R0 RPOR7bi ts. RP14R0
#define _RP14R1 RPOR7bi ts. RP14R1
#define _RP14R2 RPOR7bi ts. RP14R2
#define _RP14R3 RPOR7bi ts. RP14R3
#define _RP14R4 RPOR7bi ts. RP14R4
#define _RP14R5 RPOR7bi ts. RP14R5
#define _RP15R0 RPOR7bi ts. RP15R0
#define _RP15R1 RPOR7bi ts. RP15R1
#define _RP15R2 RPOR7bi ts. RP15R2
#define _RP15R3 RPOR7bi ts. RP15R3
#define _RP15R4 RPOR7bi ts. RP15R4
#define _RP15R5 RPOR7bi ts. RP15R5
```

```
/* RPOR8 */
#define _RP16R RPOR8bi ts. RP16R
#define _RP17R RPOR8bi ts. RP17R
#define _RP16R0 RPOR8bi ts. RP16R0
#define _RP16R1 RPOR8bi ts. RP16R1
#define _RP16R2 RPOR8bi ts. RP16R2
#define _RP16R3 RPOR8bi ts. RP16R3
#define _RP16R4 RPOR8bi ts. RP16R4
#define _RP16R5 RPOR8bi ts. RP16R5
#define _RP17R0 RPOR8bi ts. RP17R0
#define _RP17R1 RPOR8bi ts. RP17R1
#define _RP17R2 RPOR8bi ts. RP17R2
#define _RP17R3 RPOR8bi ts. RP17R3
#define _RP17R4 RPOR8bi ts. RP17R4
#define _RP17R5 RPOR8bi ts. RP17R5
```

```
/* RPOR9 */
#define _RP18R RPOR9bi ts. RP18R
#define _RP19R RPOR9bi ts. RP19R
#define _RP18R0 RPOR9bi ts. RP18R0
```

```
#define _RP18R1 RPOR9bits.RP18R1
#define _RP18R2 RPOR9bits.RP18R2
#define _RP18R3 RPOR9bits.RP18R3
#define _RP18R4 RPOR9bits.RP18R4
#define _RP18R5 RPOR9bits.RP18R5
#define _RP19R0 RPOR9bits.RP19R0
#define _RP19R1 RPOR9bits.RP19R1
#define _RP19R2 RPOR9bits.RP19R2
#define _RP19R3 RPOR9bits.RP19R3
#define _RP19R4 RPOR9bits.RP19R4
#define _RP19R5 RPOR9bits.RP19R5

/* RPOR10 */
#define _RP20R RPOR10bits.RP20R
#define _RP21R RPOR10bits.RP21R
#define _RP20R0 RPOR10bits.RP20R0
#define _RP20R1 RPOR10bits.RP20R1
#define _RP20R2 RPOR10bits.RP20R2
#define _RP20R3 RPOR10bits.RP20R3
#define _RP20R4 RPOR10bits.RP20R4
#define _RP20R5 RPOR10bits.RP20R5
#define _RP21R0 RPOR10bits.RP21R0
#define _RP21R1 RPOR10bits.RP21R1
#define _RP21R2 RPOR10bits.RP21R2
#define _RP21R3 RPOR10bits.RP21R3
#define _RP21R4 RPOR10bits.RP21R4
#define _RP21R5 RPOR10bits.RP21R5

/* RPOR11 */
#define _RP22R RPOR11bits.RP22R
#define _RP23R RPOR11bits.RP23R
#define _RP22R0 RPOR11bits.RP22R0
#define _RP22R1 RPOR11bits.RP22R1
#define _RP22R2 RPOR11bits.RP22R2
#define _RP22R3 RPOR11bits.RP22R3
#define _RP22R4 RPOR11bits.RP22R4
#define _RP22R5 RPOR11bits.RP22R5
#define _RP23R0 RPOR11bits.RP23R0
#define _RP23R1 RPOR11bits.RP23R1
#define _RP23R2 RPOR11bits.RP23R2
#define _RP23R3 RPOR11bits.RP23R3
#define _RP23R4 RPOR11bits.RP23R4
#define _RP23R5 RPOR11bits.RP23R5

/* RPOR12 */
#define _RP24R RPOR12bits.RP24R
#define _RP25R RPOR12bits.RP25R
#define _RP24R0 RPOR12bits.RP24R0
#define _RP24R1 RPOR12bits.RP24R1
#define _RP24R2 RPOR12bits.RP24R2
#define _RP24R3 RPOR12bits.RP24R3
#define _RP24R4 RPOR12bits.RP24R4
#define _RP24R5 RPOR12bits.RP24R5
#define _RP25R0 RPOR12bits.RP25R0
#define _RP25R1 RPOR12bits.RP25R1
#define _RP25R2 RPOR12bits.RP25R2
#define _RP25R3 RPOR12bits.RP25R3
#define _RP25R4 RPOR12bits.RP25R4
#define _RP25R5 RPOR12bits.RP25R5

/* RPOR13 */
#define _RP26R RPOR13bits.RP26R
#define _RP27R RPOR13bits.RP27R
#define _RP26R0 RPOR13bits.RP26R0
#define _RP26R1 RPOR13bits.RP26R1
#define _RP26R2 RPOR13bits.RP26R2
#define _RP26R3 RPOR13bits.RP26R3
#define _RP26R4 RPOR13bits.RP26R4
```



```

#define _RP26R5 RPOR13bi ts. RP26R5
#define _RP27R0 RPOR13bi ts. RP27R0
#define _RP27R1 RPOR13bi ts. RP27R1
#define _RP27R2 RPOR13bi ts. RP27R2
#define _RP27R3 RPOR13bi ts. RP27R3
#define _RP27R4 RPOR13bi ts. RP27R4
#define _RP27R5 RPOR13bi ts. RP27R5

```

```
/* RPOR14 */
```

```

#define _RP28R RPOR14bi ts. RP28R
#define _RP29R RPOR14bi ts. RP29R
#define _RP28R0 RPOR14bi ts. RP28R0
#define _RP28R1 RPOR14bi ts. RP28R1
#define _RP28R2 RPOR14bi ts. RP28R2
#define _RP28R3 RPOR14bi ts. RP28R3
#define _RP28R4 RPOR14bi ts. RP28R4
#define _RP28R5 RPOR14bi ts. RP28R5
#define _RP29R0 RPOR14bi ts. RP29R0
#define _RP29R1 RPOR14bi ts. RP29R1
#define _RP29R2 RPOR14bi ts. RP29R2
#define _RP29R3 RPOR14bi ts. RP29R3
#define _RP29R4 RPOR14bi ts. RP29R4
#define _RP29R5 RPOR14bi ts. RP29R5

```

```
/* RPOR15 */
```

```

#define _RP30R RPOR15bi ts. RP30R
#define _RP31R RPOR15bi ts. RP31R
#define _RP30R0 RPOR15bi ts. RP30R0
#define _RP30R1 RPOR15bi ts. RP30R1
#define _RP30R2 RPOR15bi ts. RP30R2
#define _RP30R3 RPOR15bi ts. RP30R3
#define _RP30R4 RPOR15bi ts. RP30R4
#define _RP30R5 RPOR15bi ts. RP30R5
#define _RP31R0 RPOR15bi ts. RP31R0
#define _RP31R1 RPOR15bi ts. RP31R1
#define _RP31R2 RPOR15bi ts. RP31R2
#define _RP31R3 RPOR15bi ts. RP31R3
#define _RP31R4 RPOR15bi ts. RP31R4
#define _RP31R5 RPOR15bi ts. RP31R5

```

```
/* RCON */
```

```

#define _POR RCONbi ts. POR
#define _BOR RCONbi ts. BOR
#define _IDLE RCONbi ts. IDLE
#define _SLEEP RCONbi ts. SLEEP
#define _WDTO RCONbi ts. WDTO
#define _SWDTEN RCONbi ts. SWDTEN
#define _SWR RCONbi ts. SWR
#define _EXTR RCONbi ts. EXTR
#define _VREGS RCONbi ts. VREGS
#define _CM RCONbi ts. CM
#define _IOPUWR RCONbi ts. IOPUWR
#define _TRAPR RCONbi ts. TRAPR
#define _PMSLP RCONbi ts. PMSLP

```

```
/* OSCCON */
```

```

#define _OSWEN OSCCONbi ts. OSWEN
#define _SOSCEN OSCCONbi ts. SOSCEN
#define _POSCEN OSCCONbi ts. POSCEN
#define _CF OSCCONbi ts. CF
#define _LOCK OSCCONbi ts. LOCK
#define _IOLOCK OSCCONbi ts. IOLOCK
#define _CLKLOCK OSCCONbi ts. CLKLOCK
#define _NOSC OSCCONbi ts. NOSC
#define _COSC OSCCONbi ts. COSC
#define _LPOSCEN OSCCONbi ts. LPOSCEN
#define _NOSCO OSCCONbi ts. NOSCO
#define _NOSC1 OSCCONbi ts. NOSC1

```

```

#define _NOSC2 OSCCONbi ts. NOSC2
#define _COSC0 OSCCONbi ts. COSC0
#define _COSC1 OSCCONbi ts. COSC1
#define _COSC2 OSCCONbi ts. COSC2

/* CLKDIV */
#define _CPDIV CLKDIVbi ts. CPDIV
#define _RCDIV CLKDIVbi ts. RCDIV
#define _DOZEN CLKDIVbi ts. DOZEN
#define _DOZE CLKDIVbi ts. DOZE
#define _ROI CLKDIVbi ts. ROI
#define _CPDIV0 CLKDIVbi ts. CPDIV0
#define _CPDIV1 CLKDIVbi ts. CPDIV1
#define _RCDIV0 CLKDIVbi ts. RCDIV0
#define _RCDIV1 CLKDIVbi ts. RCDIV1
#define _RCDIV2 CLKDIVbi ts. RCDIV2
#define _DOZE0 CLKDIVbi ts. DOZE0
#define _DOZE1 CLKDIVbi ts. DOZE1
#define _DOZE2 CLKDIVbi ts. DOZE2
#define _USBDOZE0 CLKDIVbi ts. USBDOZE0
#define _USBDOZE1 CLKDIVbi ts. USBDOZE1
#define _USBDOZE CLKDIVbi ts. USBDOZE

/* OSCTUN */
#define _TUN OSCTUNbi ts. TUN
#define _TUN0 OSCTUNbi ts. TUN0
#define _TUN1 OSCTUNbi ts. TUN1
#define _TUN2 OSCTUNbi ts. TUN2
#define _TUN3 OSCTUNbi ts. TUN3
#define _TUN4 OSCTUNbi ts. TUN4
#define _TUN5 OSCTUNbi ts. TUN5

/* REFOCON */
#define _RODIV REFOCONbi ts. RODIV
#define _ROSEL REFOCONbi ts. ROSEL
#define _ROSSLP REFOCONbi ts. ROSSLP
#define _RODIV0 REFOCONbi ts. RODIV0
#define _RODIV1 REFOCONbi ts. RODIV1
#define _RODIV2 REFOCONbi ts. RODIV2
#define _RODIV3 REFOCONbi ts. RODIV3
#define _ROON REFOCONbi ts. ROON

/* NVMCON */
#define _NVMOP NVMCONbi ts. NVMOP
#define _ERASE NVMCONbi ts. ERASE
#define _WRERR NVMCONbi ts. WRERR
#define _WREN NVMCONbi ts. WREN
#define _WR NVMCONbi ts. WR
#define _NVMOP0 NVMCONbi ts. NVMOP0
#define _NVMOP1 NVMCONbi ts. NVMOP1
#define _NVMOP2 NVMCONbi ts. NVMOP2
#define _NVMOP3 NVMCONbi ts. NVMOP3
#define _PROGOP0 NVMCONbi ts. PROGOP0
#define _PROGOP1 NVMCONbi ts. PROGOP1
#define _PROGOP2 NVMCONbi ts. PROGOP2
#define _PROGOP3 NVMCONbi ts. PROGOP3
#define _PROGOP NVMCONbi ts. PROGOP

/* PMD1 */
#define _ADC1MD PMD1bi ts. ADC1MD
#define _SPI1MD PMD1bi ts. SPI1MD
#define _SPI2MD PMD1bi ts. SPI2MD
#define _U1MD PMD1bi ts. U1MD
#define _U2MD PMD1bi ts. U2MD
#define _I2C1MD PMD1bi ts. I2C1MD
#define _T1MD PMD1bi ts. T1MD
#define _T2MD PMD1bi ts. T2MD
#define _T3MD PMD1bi ts. T3MD

```

```

#define _T4MD PMD1bits.T4MD
#define _T5MD PMD1bits.T5MD

/* PMD2 */
#define _OC1MD PMD2bits.OC1MD
#define _OC2MD PMD2bits.OC2MD
#define _OC3MD PMD2bits.OC3MD
#define _OC4MD PMD2bits.OC4MD
#define _OC5MD PMD2bits.OC5MD
#define _OC6MD PMD2bits.OC6MD
#define _OC7MD PMD2bits.OC7MD
#define _OC8MD PMD2bits.OC8MD
#define _IC1MD PMD2bits.IC1MD
#define _IC2MD PMD2bits.IC2MD
#define _IC3MD PMD2bits.IC3MD
#define _IC4MD PMD2bits.IC4MD
#define _IC5MD PMD2bits.IC5MD
#define _IC6MD PMD2bits.IC6MD
#define _IC7MD PMD2bits.IC7MD
#define _IC8MD PMD2bits.IC8MD

/* PMD3 */
#define _I2C2MD PMD3bits.I2C2MD
#define _I2C3MD PMD3bits.I2C3MD
#define _U3MD PMD3bits.U3MD
#define _CRCMD PMD3bits.CRCMD
#define _PMPMD PMD3bits.PMPMD
#define _RTCCMD PMD3bits.RTCCMD
#define _CMPMD PMD3bits.CMPMD
#define _CRCPMD PMD3bits.CRCPMD

/* PMD4 */
#define _USB1MD PMD4bits.USB1MD
#define _LVDMD PMD4bits.LVDMD
#define _CTUMD PMD4bits.CTMUMD
#define _REFOMD PMD4bits.REFOMD
#define _U4MD PMD4bits.U4MD
#define _UPWMMD PMD4bits.UPWMMD

/* PMD5 */
#define _OC9MD PMD5bits.OC9MD
#define _IC9MD PMD5bits.IC9MD

/* PMD6 */
#define _SPI3MD PMD6bits.SPI3MD

/* ----- */
/* Some useful macros for inline assembler instructions */
/* ----- */

#define Nop() __builtin_nop()
#define ClrWdt() {__asm__ volatile ("clrwdt");}
#define Sleep() {__asm__ volatile ("pwrsav #0");}
#define Idle() {__asm__ volatile ("pwrsav #1");}

/* ----- */
/* Some useful macros for allocating data memory */
/* ----- */

/* The following macros require an argument N that specifies */
/* alignment. N must a power of two, minimum value = 2. */
/* For example, to declare an uninitialized array that is */
/* aligned to a 32 byte address: */
/* */
/* int _BSS(32) buf[16]; */
/* */
/* To declare an initialized array without special */

```

```

/* alignment: */
/* */
/* int _DATA(2) table1[] = {0, 1, 1, 2, 3, 5, 8, 13, 21}; */
/* */
#define _BSS(N)    __attribute__((aligned(N)))
#define _DATA(N)  __attribute__((aligned(N)))

/* The following macros do not require an argument. They can */
/* be used to locate a variable in persistent data memory or */
/* in near data memory. For example, to declare two variables */
/* that retain their values across a device reset: */
/* */
/* int _PERSISTENT var1, var2; */
/* */
#define _PERSISTENT __attribute__((persistent))
#define _NEAR       __attribute__((near))

/* ----- */
/* Some useful macros for declaring functions */
/* ----- */

/* The following macros can be used to declare interrupt */
/* service routines (ISRs). For example, to declare an ISR */
/* for the timer1 interrupt: */
/* */
/* void _ISR _T1Interrupt(void); */
/* */
/* To declare an ISR for the SPI1 interrupt with fast */
/* context save: */
/* */
/* void _ISRFast _SPI1Interrupt(void); */
/* */
/* Note: ISRs will be installed into the interrupt vector */
/* tables automatically if the reserved names listed in the */
/* MPLAB C30 Compiler User's Guide (DS51284) are used. */
/* */
#define _ISR __attribute__((interrupt))
#define _ISRFast __attribute__((interrupt, shadow))

/* ----- */
/* Some useful macros for changing the CPU IPL */
/* ----- */

/* The following macros can be used to modify the current CPU */
/* IPL. The definition of the macro may vary from device to */
/* device. */
/* */
/* To safely set the CPU IPL, use SET_CPU_IPL(ipl); the */
/* valid range of ipl is 0-7, it may be any expression. */
/* */
/* SET_CPU_IPL(7); */
/* */
/* To preserve the current IPL and save it use */
/* SET_AND_SAVE_CPU_IPL(save_to, ipl); the valid range of ipl */
/* is 0-7 and may be any expression, save_to should denote */
/* some temporary storage. */
/* */
/* int old_ipl; */
/* */
/* SET_AND_SAVE_CPU_IPL(old_ipl, 7); */
/* */
/* The IPL can be restored with RESTORE_CPU_IPL(saved_to) */
/* */
/* RESTORE_CPU_IPL(old_ipl); */

#define SET_CPU_IPL(ipl) { \
    int DISI_save; \
}

```

```

DISI_save = DISICNT; \
asm volatile ("disi #0x3FFF"); \
SRbits.IPL = ipl; \
DISICNT = DISI_save; } (void) 0;

#define SET_AND_SAVE_CPU_IPL(save_to, ipl) { \
    save_to = SRbits.IPL; \
    SET_CPU_IPL(ipl); } (void) 0;

#define RESTORE_CPU_IPL(saved_to) SET_CPU_IPL(saved_to)

/* ----- */
/* Macros for setting device configuration registers */
/* ----- */

/* Register CONFIG3 (0x2abfa) */

extern __attribute__((space(prog))) int _CONFIG3;
#define _CONFIG3(x) __attribute__((section("__CONFIG3.sec"), space(prog))) int \
_CONFIG3 = (x);

/*
** Only one invocation of CONFIG3 should appear in a project,
** at the top of a C source file (outside of any function).
**
** The following constants can be used to set CONFIG3.
** Multiple options may be combined, as shown:
**
** _CONFIG3( OPT1_ON & OPT2_OFF & OPT3_PLL )
**
** Write Protection Flash Page Segment Boundary:
**
** WPFPP_WPFPP0 Page 0 (0x00)
** WPFPP_WPFPP1 Page 1 (0x400)
** WPFPP_WPFPP2 Page 2 (0x800)
** WPFPP_WPFPP3 Page 3 (0xC00)
** WPFPP_WPFPP4 Page 4 (0x1000)
** WPFPP_WPFPP5 Page 5 (0x1400)
** WPFPP_WPFPP6 Page 6 (0x1800)
** WPFPP_WPFPP7 Page 7 (0x1C00)
** WPFPP_WPFPP8 Page 8 (0x2000)
** WPFPP_WPFPP9 Page 9 (0x2400)
** WPFPP_WPFPP10 Page 10 (0x2800)
** WPFPP_WPFPP11 Page 11 (0x2C00)
** WPFPP_WPFPP12 Page 12 (0x3000)
** WPFPP_WPFPP13 Page 13 (0x3400)
** WPFPP_WPFPP14 Page 14 (0x3800)
** WPFPP_WPFPP15 Page 15 (0x3C00)
** WPFPP_WPFPP16 Page 16 (0x4000)
** WPFPP_WPFPP17 Page 17 (0x4400)
** WPFPP_WPFPP18 Page 18 (0x4800)
** WPFPP_WPFPP19 Page 19 (0x4C00)
** WPFPP_WPFPP20 Page 20 (0x5000)
** WPFPP_WPFPP21 Page 21 (0x5400)
** WPFPP_WPFPP22 Page 22 (0x5800)
** WPFPP_WPFPP23 Page 23 (0x5C00)
** WPFPP_WPFPP24 Page 24 (0x6000)
** WPFPP_WPFPP25 Page 25 (0x6400)
** WPFPP_WPFPP26 Page 26 (0x6800)
** WPFPP_WPFPP27 Page 27 (0x6C00)
** WPFPP_WPFPP28 Page 28 (0x7000)
** WPFPP_WPFPP29 Page 29 (0x7400)
** WPFPP_WPFPP30 Page 30 (0x7800)
** WPFPP_WPFPP31 Page 31 (0x7C00)
** WPFPP_WPFPP32 Page 32 (0x8000)
** WPFPP_WPFPP33 Page 33 (0x8400)
** WPFPP_WPFPP34 Page 34 (0x8800)

```

**	WPFP_WPFP35	Page 35 (0x8C00)
**	WPFP_WPFP36	Page 36 (0x9000)
**	WPFP_WPFP37	Page 37 (0x9400)
**	WPFP_WPFP38	Page 38 (0x9800)
**	WPFP_WPFP39	Page 39 (0x9C00)
**	WPFP_WPFP40	Page 40 (0xA000)
**	WPFP_WPFP41	Page 41 (0xA400)
**	WPFP_WPFP42	Page 42 (0xA800)
**	WPFP_WPFP43	Page 43 (0xAC00)
**	WPFP_WPFP44	Page 44 (0xB000)
**	WPFP_WPFP45	Page 45 (0xB400)
**	WPFP_WPFP46	Page 46 (0xB800)
**	WPFP_WPFP47	Page 47 (0xBC00)
**	WPFP_WPFP48	Page 48 (0xC000)
**	WPFP_WPFP49	Page 49 (0xC400)
**	WPFP_WPFP50	Page 50 (0xC800)
**	WPFP_WPFP51	Page 51 (0xCC00)
**	WPFP_WPFP52	Page 52 (0xD000)
**	WPFP_WPFP53	Page 53 (0xD400)
**	WPFP_WPFP54	Page 54 (0xD800)
**	WPFP_WPFP55	Page 55 (0xDC00)
**	WPFP_WPFP56	Page 56 (0xE000)
**	WPFP_WPFP57	Page 57 (0xE400)
**	WPFP_WPFP58	Page 58 (0xE800)
**	WPFP_WPFP59	Page 59 (0xEC00)
**	WPFP_WPFP60	Page 60 (0xF000)
**	WPFP_WPFP61	Page 61 (0xF400)
**	WPFP_WPFP62	Page 62 (0xF800)
**	WPFP_WPFP63	Page 63 (0xFC00)
**	WPFP_WPFP64	Page 64 (0x10000)
**	WPFP_WPFP65	Page 65 (0x10400)
**	WPFP_WPFP66	Page 66 (0x10800)
**	WPFP_WPFP67	Page 67 (0x10C00)
**	WPFP_WPFP68	Page 68 (0x11000)
**	WPFP_WPFP69	Page 69 (0x11400)
**	WPFP_WPFP70	Page 70 (0x11800)
**	WPFP_WPFP71	Page 71 (0x11C00)
**	WPFP_WPFP72	Page 72 (0x12000)
**	WPFP_WPFP73	Page 73 (0x12400)
**	WPFP_WPFP74	Page 74 (0x12800)
**	WPFP_WPFP75	Page 75 (0x12C00)
**	WPFP_WPFP76	Page 76 (0x13000)
**	WPFP_WPFP77	Page 77 (0x13400)
**	WPFP_WPFP78	Page 78 (0x13800)
**	WPFP_WPFP79	Page 79 (0x13C00)
**	WPFP_WPFP80	Page 80 (0x14000)
**	WPFP_WPFP81	Page 81 (0x14400)
**	WPFP_WPFP82	Page 82 (0x14800)
**	WPFP_WPFP83	Page 83 (0x14C00)
**	WPFP_WPFP84	Page 84 (0x15000)
**	WPFP_WPFP85	Page 85 (0x15400)
**	WPFP_WPFP86	Page 86 (0x15800)
**	WPFP_WPFP87	Page 87 (0x15C00)
**	WPFP_WPFP88	Page 88 (0x16000)
**	WPFP_WPFP89	Page 89 (0x16400)
**	WPFP_WPFP90	Page 90 (0x16800)
**	WPFP_WPFP91	Page 91 (0x16C00)
**	WPFP_WPFP92	Page 92 (0x17000)
**	WPFP_WPFP93	Page 93 (0x17400)
**	WPFP_WPFP94	Page 94 (0x17800)
**	WPFP_WPFP95	Page 95 (0x17C00)
**	WPFP_WPFP96	Page 96 (0x18000)
**	WPFP_WPFP97	Page 97 (0x18400)
**	WPFP_WPFP98	Page 98 (0x18800)
**	WPFP_WPFP99	Page 99 (0x18C00)
**	WPFP_WPFP100	Page 100 (0x19000)
**	WPFP_WPFP101	Page 101 (0x19400)
**	WPFP_WPFP102	Page 102 (0x19800)

**	WPFP_WPFP103	Page 103	(0x19C00)
**	WPFP_WPFP104	Page 104	(0x1A000)
**	WPFP_WPFP105	Page 105	(0x1A400)
**	WPFP_WPFP106	Page 106	(0x1A800)
**	WPFP_WPFP107	Page 107	(0x1AC00)
**	WPFP_WPFP108	Page 108	(0x1B000)
**	WPFP_WPFP109	Page 109	(0x1B400)
**	WPFP_WPFP110	Page 110	(0x1B800)
**	WPFP_WPFP111	Page 111	(0x1BC00)
**	WPFP_WPFP112	Page 112	(0x1C000)
**	WPFP_WPFP113	Page 113	(0x1C400)
**	WPFP_WPFP114	Page 114	(0x1C800)
**	WPFP_WPFP115	Page 115	(0x1CC00)
**	WPFP_WPFP116	Page 116	(0x1D000)
**	WPFP_WPFP117	Page 117	(0x1D400)
**	WPFP_WPFP118	Page 118	(0x1D800)
**	WPFP_WPFP119	Page 119	(0x1DC00)
**	WPFP_WPFP120	Page 120	(0x1E000)
**	WPFP_WPFP121	Page 121	(0x1E400)
**	WPFP_WPFP122	Page 122	(0x1E800)
**	WPFP_WPFP123	Page 123	(0x1EC00)
**	WPFP_WPFP124	Page 124	(0x1F000)
**	WPFP_WPFP125	Page 125	(0x1F400)
**	WPFP_WPFP126	Page 126	(0x1F800)
**	WPFP_WPFP127	Page 127	(0x1FC00)
**	WPFP_WPFP128	Page 128	(0x20000)
**	WPFP_WPFP129	Page 129	(0x20400)
**	WPFP_WPFP130	Page 130	(0x20800)
**	WPFP_WPFP131	Page 131	(0x20C00)
**	WPFP_WPFP132	Page 132	(0x21000)
**	WPFP_WPFP133	Page 133	(0x21400)
**	WPFP_WPFP134	Page 134	(0x21800)
**	WPFP_WPFP135	Page 135	(0x21C00)
**	WPFP_WPFP136	Page 136	(0x22000)
**	WPFP_WPFP137	Page 137	(0x22400)
**	WPFP_WPFP138	Page 138	(0x22800)
**	WPFP_WPFP139	Page 139	(0x22C00)
**	WPFP_WPFP140	Page 140	(0x23000)
**	WPFP_WPFP141	Page 141	(0x23400)
**	WPFP_WPFP142	Page 142	(0x23800)
**	WPFP_WPFP143	Page 143	(0x23C00)
**	WPFP_WPFP144	Page 144	(0x24000)
**	WPFP_WPFP145	Page 145	(0x24400)
**	WPFP_WPFP146	Page 146	(0x24800)
**	WPFP_WPFP147	Page 147	(0x24C00)
**	WPFP_WPFP148	Page 148	(0x25000)
**	WPFP_WPFP149	Page 149	(0x25400)
**	WPFP_WPFP150	Page 150	(0x25800)
**	WPFP_WPFP151	Page 151	(0x25C00)
**	WPFP_WPFP152	Page 152	(0x26000)
**	WPFP_WPFP153	Page 153	(0x26400)
**	WPFP_WPFP154	Page 154	(0x26800)
**	WPFP_WPFP155	Page 155	(0x26C00)
**	WPFP_WPFP156	Page 156	(0x27000)
**	WPFP_WPFP157	Page 157	(0x27400)
**	WPFP_WPFP158	Page 158	(0x27800)
**	WPFP_WPFP159	Page 159	(0x27C00)
**	WPFP_WPFP160	Page 160	(0x28000)
**	WPFP_WPFP161	Page 161	(0x28400)
**	WPFP_WPFP162	Page 162	(0x28800)
**	WPFP_WPFP163	Page 163	(0x28C00)
**	WPFP_WPFP164	Page 164	(0x29000)
**	WPFP_WPFP165	Page 165	(0x29400)
**	WPFP_WPFP166	Page 166	(0x29800)
**	WPFP_WPFP167	Page 167	(0x29C00)
**	WPFP_WPFP168	Page 168	(0x2A000)
**	WPFP_WPFP169	Page 169	(0x2A400)
**	WPFP_WPFP170	Page 170	(0x2A800)

```

**      WPPF_WPPF511          Highest Page (same as page 170)
**
**      Segment Write Protection Disable bit:
**      WPDIS_WPEN            Segmented code protection enabled
**      WPDIS_WPDIS          Segmented code protection disabled
**
**      Configuration Word Code Page Protection Select bit:
**      WPCFG_WPCFGEN        Last page and Flash configuration words are
code-protected
**      WPCFG_WPCFGDIS       Last page(at the top of program memory) and Flash
configuration words are not protected
**
**      Segment Write Protection End Page Select bit:
**      WPEND_WPSTARTMEM     Write Protect from page 0 to WPPF
**      WPEND_WPENDMEM       Write Protect from WPPF to the last page of memory
**
*/

```

```

#define WPPF_WPPF0          0xFE00
#define WPPF_WPPF1          0xFE01
#define WPPF_WPPF2          0xFE02
#define WPPF_WPPF3          0xFE03
#define WPPF_WPPF4          0xFE04
#define WPPF_WPPF5          0xFE05
#define WPPF_WPPF6          0xFE06
#define WPPF_WPPF7          0xFE07
#define WPPF_WPPF8          0xFE08
#define WPPF_WPPF9          0xFE09
#define WPPF_WPPF10         0xFE0A
#define WPPF_WPPF11         0xFE0B
#define WPPF_WPPF12         0xFE0C
#define WPPF_WPPF13         0xFE0D
#define WPPF_WPPF14         0xFE0E
#define WPPF_WPPF15         0xFE0F
#define WPPF_WPPF16         0xFE10
#define WPPF_WPPF17         0xFE11
#define WPPF_WPPF18         0xFE12
#define WPPF_WPPF19         0xFE13
#define WPPF_WPPF20         0xFE14
#define WPPF_WPPF21         0xFE15
#define WPPF_WPPF22         0xFE16
#define WPPF_WPPF23         0xFE17
#define WPPF_WPPF24         0xFE18
#define WPPF_WPPF25         0xFE19
#define WPPF_WPPF26         0xFE1A
#define WPPF_WPPF27         0xFE1B
#define WPPF_WPPF28         0xFE1C
#define WPPF_WPPF29         0xFE1D
#define WPPF_WPPF30         0xFE1E
#define WPPF_WPPF31         0xFE1F
#define WPPF_WPPF32         0xFE20
#define WPPF_WPPF33         0xFE21
#define WPPF_WPPF34         0xFE22
#define WPPF_WPPF35         0xFE23
#define WPPF_WPPF36         0xFE24
#define WPPF_WPPF37         0xFE25
#define WPPF_WPPF38         0xFE26
#define WPPF_WPPF39         0xFE27
#define WPPF_WPPF40         0xFE28
#define WPPF_WPPF41         0xFE29
#define WPPF_WPPF42         0xFE2A
#define WPPF_WPPF43         0xFE2B
#define WPPF_WPPF44         0xFE2C
#define WPPF_WPPF45         0xFE2D
#define WPPF_WPPF46         0xFE2E
#define WPPF_WPPF47         0xFE2F
#define WPPF_WPPF48         0xFE30
#define WPPF_WPPF49         0xFE31

```



```
#define WFPF_WFPF50 0xFE32
#define WFPF_WFPF51 0xFE33
#define WFPF_WFPF52 0xFE34
#define WFPF_WFPF53 0xFE35
#define WFPF_WFPF54 0xFE36
#define WFPF_WFPF55 0xFE37
#define WFPF_WFPF56 0xFE38
#define WFPF_WFPF57 0xFE39
#define WFPF_WFPF58 0xFE3A
#define WFPF_WFPF59 0xFE3B
#define WFPF_WFPF60 0xFE3C
#define WFPF_WFPF61 0xFE3D
#define WFPF_WFPF62 0xFE3E
#define WFPF_WFPF63 0xFE3F
#define WFPF_WFPF64 0xFE40
#define WFPF_WFPF65 0xFE41
#define WFPF_WFPF66 0xFE42
#define WFPF_WFPF67 0xFE43
#define WFPF_WFPF68 0xFE44
#define WFPF_WFPF69 0xFE45
#define WFPF_WFPF70 0xFE46
#define WFPF_WFPF71 0xFE47
#define WFPF_WFPF72 0xFE48
#define WFPF_WFPF73 0xFE49
#define WFPF_WFPF74 0xFE4A
#define WFPF_WFPF75 0xFE4B
#define WFPF_WFPF76 0xFE4C
#define WFPF_WFPF77 0xFE4D
#define WFPF_WFPF78 0xFE4E
#define WFPF_WFPF79 0xFE4F
#define WFPF_WFPF80 0xFE50
#define WFPF_WFPF81 0xFE51
#define WFPF_WFPF82 0xFE52
#define WFPF_WFPF83 0xFE53
#define WFPF_WFPF84 0xFE54
#define WFPF_WFPF85 0xFE55
#define WFPF_WFPF86 0xFE56
#define WFPF_WFPF87 0xFE57
#define WFPF_WFPF88 0xFE58
#define WFPF_WFPF89 0xFE59
#define WFPF_WFPF90 0xFE5A
#define WFPF_WFPF91 0xFE5B
#define WFPF_WFPF92 0xFE5C
#define WFPF_WFPF93 0xFE5D
#define WFPF_WFPF94 0xFE5E
#define WFPF_WFPF95 0xFE5F
#define WFPF_WFPF96 0xFE60
#define WFPF_WFPF97 0xFE61
#define WFPF_WFPF98 0xFE62
#define WFPF_WFPF99 0xFE63
#define WFPF_WFPF100 0xFE64
#define WFPF_WFPF101 0xFE65
#define WFPF_WFPF102 0xFE66
#define WFPF_WFPF103 0xFE67
#define WFPF_WFPF104 0xFE68
#define WFPF_WFPF105 0xFE69
#define WFPF_WFPF106 0xFE6A
#define WFPF_WFPF107 0xFE6B
#define WFPF_WFPF108 0xFE6C
#define WFPF_WFPF109 0xFE6D
#define WFPF_WFPF110 0xFE6E
#define WFPF_WFPF111 0xFE6F
#define WFPF_WFPF112 0xFE70
#define WFPF_WFPF113 0xFE71
#define WFPF_WFPF114 0xFE72
#define WFPF_WFPF115 0xFE73
#define WFPF_WFPF116 0xFE74
#define WFPF_WFPF117 0xFE75
```

```

#define WFPF_WFPF118 0xFE76
#define WFPF_WFPF119 0xFE77
#define WFPF_WFPF120 0xFE78
#define WFPF_WFPF121 0xFE79
#define WFPF_WFPF122 0xFE7A
#define WFPF_WFPF123 0xFE7B
#define WFPF_WFPF124 0xFE7C
#define WFPF_WFPF125 0xFE7D
#define WFPF_WFPF126 0xFE7E
#define WFPF_WFPF127 0xFE7F
#define WFPF_WFPF128 0xFE80
#define WFPF_WFPF129 0xFE81
#define WFPF_WFPF130 0xFE82
#define WFPF_WFPF131 0xFE83
#define WFPF_WFPF132 0xFE84
#define WFPF_WFPF133 0xFE85
#define WFPF_WFPF134 0xFE86
#define WFPF_WFPF135 0xFE87
#define WFPF_WFPF136 0xFE88
#define WFPF_WFPF137 0xFE89
#define WFPF_WFPF138 0xFE8A
#define WFPF_WFPF139 0xFE8B
#define WFPF_WFPF140 0xFE8C
#define WFPF_WFPF141 0xFE8D
#define WFPF_WFPF142 0xFE8E
#define WFPF_WFPF143 0xFE8F
#define WFPF_WFPF144 0xFE90
#define WFPF_WFPF145 0xFE91
#define WFPF_WFPF146 0xFE92
#define WFPF_WFPF147 0xFE93
#define WFPF_WFPF148 0xFE94
#define WFPF_WFPF149 0xFE95
#define WFPF_WFPF150 0xFE96
#define WFPF_WFPF151 0xFE97
#define WFPF_WFPF152 0xFE98
#define WFPF_WFPF153 0xFE99
#define WFPF_WFPF154 0xFE9A
#define WFPF_WFPF155 0xFE9B
#define WFPF_WFPF156 0xFE9C
#define WFPF_WFPF157 0xFE9D
#define WFPF_WFPF158 0xFE9E
#define WFPF_WFPF159 0xFE9F
#define WFPF_WFPF160 0xFEA0
#define WFPF_WFPF161 0xFEA1
#define WFPF_WFPF162 0xFEA2
#define WFPF_WFPF163 0xFEA3
#define WFPF_WFPF164 0xFEA4
#define WFPF_WFPF165 0xFEA5
#define WFPF_WFPF166 0xFEA6
#define WFPF_WFPF167 0xFEA7
#define WFPF_WFPF168 0xFEA8
#define WFPF_WFPF169 0xFEA9
#define WFPF_WFPF170 0xFEAA
#define WFPF_WFPF511 0xFFFF

#define WPDIS_WPEN 0xDFFF
#define WPDIS_WPDIS 0xFFFF

#define WPCFG_WPCFGEN 0xBFFF
#define WPCFG_WPCFGDIS 0xFFFF

#define WPEND_WPSTARTMEM 0x7FFF
#define WPEND_WPENDMEM 0xFFFF

```

```
/* Register CONFIG2 (0x2abfc)
```

```
*/
```

```
extern __attribute__((space(prog))) int _CONFIG2;
#define _CONFIG2(x) __attribute__((section("__CONFIG2.sec"), space(prog))) int
```

```
_CONFIG2 = (x);
```

```
/*
** Only one invocation of CONFIG2 should appear in a project,
** at the top of a C source file (outside of any function).
**
** The following constants can be used to set CONFIG2.
** Multiple options may be combined, as shown:
**
** _CONFIG2( OPT1_ON & OPT2_OFF & OPT3_PLL )
**
** Primary Oscillator Select:
**   POSCMOD_EC           EC oscillator mode selected
**   POSCMOD_XT           XT oscillator mode selected
**   POSCMOD_HS           HS oscillator mode selected
**   POSCMOD_NONE         Primary oscillator disabled
**
** Internal USB 3.3V Regulator Disable bit:
**   DISUVREG_ON          Regulator is enabled
**   DISUVREG_OFF         Regulator is disabled
**
** IOLock One-Way Set Enable bit:
**   IOL1WAY_OFF          Unlimited Writes To RP Registers
**   IOL1WAY_ON           Write RP Registers Once
**
** Primary Oscillator Output Function:
**   OSCIOFNC_ON           OSCO functions as port I/O (RC15)
**   OSCIOFNC_OFF          OSCO functions as CLK0 (FOSC/2)
**
** Clock Switching and Monitor:
**   FCKSM_CSECME         Both Clock switching and Fail-safe Clock Monitor are
enabl ed
**   FCKSM_CSECMD         Clock switching is enabled, Fail-safe Clock Monitor
is di sabl ed
**   FCKSM_CSDCMD         Both Clock Switching and Fail-safe Clock Monitor are
di sabl ed
**
** Oscillator Select:
**   FNOOSC_FRC           Fast RC Oscillator (FRC)
**   FNOOSC_FRCPLL        Fast RC oscillator with Postscaler and PLL module
(FRCPLL)
**   FNOOSC_PRI           Primary oscillator (XT, HS, EC)
**   FNOOSC_PRI_PLL       Primary oscillator (XT, HS, EC) with PLL module
(XTPLL, HSPLL, ECPLL)
**   FNOOSC_SOSC          Secondary oscillator (SOSC)
**   FNOOSC_LPRC          Low-Power RC oscillator (LPRC)
**   FNOOSC_FRCDIV        Fast RC oscillator with Postscaler (FRCDIV)
**
** 96MHz PLL Disable:
**   PLL_96MHZ_ON         Enabled
**
** USB 96 MHz PLL Prescaler Select bits:
**   PLLDIV_NODIV         Oscillator input used directly (4MHz input)
**   PLLDIV_DIV2          Oscillator input divided by 2 (8MHz input)
**   PLLDIV_DIV3          Oscillator input divided by 3 (12MHz input)
**   PLLDIV_DIV4          Oscillator input divided by 4 (16MHz input)
**   PLLDIV_DIV5          Oscillator input divided by 5 (20MHz input)
**   PLLDIV_DIV6          Oscillator input divided by 6 (24MHz input)
**   PLLDIV_DIV10         Oscillator input divided by 10 (40MHz input)
**   PLLDIV_DIV12         Oscillator input divided by 12 (48MHz input)
**
** Internal External Switch Over Mode:
**   IESO_OFF             IESO mode (Two-speed start-up) disabled
**   IESO_ON              IESO mode (Two-speed start-up) enabled
**
*/
```

```
#define POSCMOD_EC           0xF7FC
```

```

#define POSCMOD_XT          0xF7FD
#define POSCMOD_HS          0xF7FE
#define POSCMOD_NONE        0xF7FF

#define DI_SUVREG_ON         0xF7F7
#define DI_SUVREG_OFF        0xF7FF

#define IOL1WAY_OFF         0xF7EF
#define IOL1WAY_ON          0xF7FF

#define OSCIOFNC_ON         0xF7DF
#define OSCIOFNC_OFF        0xF7FF

#define FCKSM_CSECME        0xF73F
#define FCKSM_CSECMD        0xF77F
#define FCKSM_CSDCMD        0xF7BF

#define FNOSC_FRC           0xF0FF
#define FNOSC_FRCPLL        0xF1FF
#define FNOSC_PRI           0xF2FF
#define FNOSC_PRIPLL        0xF3FF
#define FNOSC_SOSC          0xF4FF
#define FNOSC_LPRC          0xF5FF
#define FNOSC_FRCDIV        0xF7FF

#define PLL_96MHZ_ON        0xF7FF

#define PLLDIV_NODIV        0x87FF
#define PLLDIV_DIV2          0x97FF
#define PLLDIV_DIV3          0xA7FF
#define PLLDIV_DIV4          0xB7FF
#define PLLDIV_DIV5          0xC7FF
#define PLLDIV_DIV6          0xD7FF
#define PLLDIV_DIV10         0xE7FF
#define PLLDIV_DIV12         0xF7FF

#define IESO_OFF            0x77FF
#define IESO_ON              0xF7FF

/* Register CONFIG1 (0x2abfe) */

extern __attribute__((space(prog))) int _CONFIG1;
#define _CONFIG1(x) __attribute__((section("__CONFIG1.sec"), space(prog))) int
_CONFIG1 = (x);

/*
** Only one invocation of CONFIG1 should appear in a project,
** at the top of a C source file (outside of any function).
**
** The following constants can be used to set CONFIG1.
** Multiple options may be combined, as shown:
**
** _CONFIG1( OPT1_ON & OPT2_OFF & OPT3_PLL )
**
** Watchdog Timer Postscaler:
**   WDTPS_PS1          1: 1
**   WDTPS_PS2          1: 2
**   WDTPS_PS4          1: 4
**   WDTPS_PS8          1: 8
**   WDTPS_PS16         1: 16
**   WDTPS_PS32         1: 32
**   WDTPS_PS64         1: 64
**   WDTPS_PS128        1: 128
**   WDTPS_PS256        1: 256
**   WDTPS_PS512        1: 512
**   WDTPS_PS1024       1: 1,024
**   WDTPS_PS2048       1: 2,048
**   WDTPS_PS4096       1: 4,096

```

```

**      WDTPS_PS8192          1: 8, 192
**      WDTPS_PS16384        1: 16, 384
**      WDTPS_PS32768        1: 32, 768
**
**      WDT Prescaler:
**      FWPSA_PR32           Prescaler ratio of 1: 32
**      FWPSA_PR128          Prescaler ratio of 1: 128
**
**      Watchdog Timer Window:
**      WINDIS_ON            Windowed Watchdog Timer enabled; FWDTEN must be 1
**      WINDIS_OFF           Standard Watchdog Timer enabled, (Windowed-mode is
disabl ed)
**
**      Watchdog Timer Enable:
**      FWDTEN_OFF           Watchdog Timer is disabl ed
**      FWDTEN_ON            Watchdog Timer is enabled
**
**      Comm Channel Select:
**      ICS_PGx3             Emulator functions are shared with PGEC3/PGED3
**      ICS_PGx2             Emulator functions are shared with PGEC2/PGED2
**      ICS_PGx1             Emulator functions are shared with PGEC1/PGED1
**
**      Set Clip On Emulation Mode:
**      COE_ON               Enabled
**      COE_OFF              Di sabl ed
**
**      Background Debug:
**      BKBUG_ON             Device resets into Debug mode
**      BKBUG_OFF           Device resets into Operational mode
**
**      General Code Segment Write Protect:
**      GWRP_ON              Writes to program memory are disabl ed
**      GWRP_OFF            Writes to program memory are allowed
**
**      General Code Segment Code Protect:
**      GCP_ON               Code protection is enabled for the entire program
memory space
**      GCP_OFF              Code protection is disabl ed
**
**      JTAG Port Enable:
**      JTAGEN_OFF           JTAG port is disabl ed
**      JTAGEN_ON            JTAG port is enabled
**
*/

```

```

#define WDTPS_PS1             0x7FF0
#define WDTPS_PS2             0x7FF1
#define WDTPS_PS4             0x7FF2
#define WDTPS_PS8             0x7FF3
#define WDTPS_PS16            0x7FF4
#define WDTPS_PS32            0x7FF5
#define WDTPS_PS64            0x7FF6
#define WDTPS_PS128           0x7FF7
#define WDTPS_PS256           0x7FF8
#define WDTPS_PS512           0x7FF9
#define WDTPS_PS1024          0x7FFA
#define WDTPS_PS2048          0x7FFB
#define WDTPS_PS4096          0x7FFC
#define WDTPS_PS8192          0x7FFD
#define WDTPS_PS16384         0x7FFE
#define WDTPS_PS32768         0x7FFF

#define FWPSA_PR32            0x7FEF
#define FWPSA_PR128          0x7FFF

#define WINDIS_ON             0x7FBF
#define WINDIS_OFF            0x7FFF

```

```
#define FWDTEN_OFF 0x7F7F
#define FWDTEN_ON 0x7FFF

#define ICS_PGx3 0x7DFF
#define ICS_PGx2 0x7EFF
#define ICS_PGx1 0x7FFF

#define COE_ON 0x7FFF
#define COE_OFF 0x7FFF

#define BKBUG_ON 0x7FFF
#define BKBUG_OFF 0x7FFF

#define GWRP_ON 0x6FFF
#define GWRP_OFF 0x7FFF

#define GCP_ON 0x5FFF
#define GCP_OFF 0x7FFF

#define JTAGEN_OFF 0x3FFF
#define JTAGEN_ON 0x7FFF

#endif
```