

Programm

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void I2C_init(void);
void temp_w (unsigned char adresse);
void temp_r (unsigned char adresse);
***** //main
I2C_init();
temp_w (0x90);
temp_r (0x91);
while(fertig==0);

fertig=0;
temp_w (0x92);
temp_r (0x93);
while(fertig==0);

fertig=0;
temp_w (0x94);
temp_r (0x95);
while(fertig==0);
*****
void I2C_init(void)

{

I2SCLH = 19;           //I2C-Geschwindigkeit
I2SCLL = 19;           //I2C-Geschwindigkeit
I2CON = 0x44;           //I2C-Hardware aktivieren (STO, STA, SI = 0, ACK =1)
EI2C = 1;               //I2C Interrupt freigeben
fertig =0;

}
*****
void temp_w(unsigned char adresse)
{
    Adr_Temp = adresse;  // Adresse Temperatursensor +W
    I2CON = 0x64;
}
*****
void temp_r(unsigned char adresse)
{
    Adr_Temp = adresse ; // Adresse Temperatursensor +R
    I2CON = 0x64;        // Startbedingung setzen
}
*****
void v_I2CInterrupt(void) interrupt 6
{
    switch(I2STAT)        // Auswertung des Statusregisters
    {
        case 0x08:        // Status: "START transmitted"
            I2DAT = Adr_Temp;
            I2CON = 0x44;  // (STO, STA, SI = 0, ACK =1)
            break;
        /* case 0x10:
            I2DAT = Adr_Temp;
            I2CON = 0x44;
            break;
        */
        case 0x18:        // Status: "SLA+W transmitted; ACK received"
            I2CON = 0x54;  // Stoppbedingung setzen (STO =1)
            break;
        case 0x20:        // Status: "SLA+W transmitted; NOT ACK received"
            I2CON = 0x54;  // Stoppbedingung setzen (STO =1)
            break;
    }
}

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                                Programm
case 0x40:                      // Status: "SLA+R transmitted; ACK received"
    I2CON = 0x44;              // (STO, STA, SI = 0, ACK =1)
    break;
case 0x48:                      // Status: "SLA+R transmitted; NOT ACK received"
    I2CON = 0x54;              // Stoppbedingung setzen (STO =1)
    break;
case 0x50:                      // Status: "Data byte received; ACK returned"

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    if (Adr_Temp == 0x91)
        Temp_ELW = I2DAT;
    if (Adr_Temp == 0x93)
        Temp_EG = I2DAT;
    if (Adr_Temp == 0x95)
        Temp_DG = I2DAT;

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    I2CON = 0x54; // Stoppbedingung setzen (STO =1)

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    fertig=1;
    break;

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default:

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    I2CON = 0x54; // Stoppbedingung setzen (STO =1)

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    break;

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}

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}

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