ORIGINALPROGRAMM von Piezosystem Jena

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#include <bios.h>
#include <conio.h>
#include <stdio.h>
#include <stdlib.h>

#define COM 1
#define start_byte 0xff
#define rech_betr 0x80
#define hand_betr 0x40
int main(void)
{
  int status, key, outs1, outs1h, outs1l, outs2, outs2h, outs2l, outs3, outs3h
  char i;
  float  kwertw, kwerts, spank1, spank2, spank3, diffs1, diffs2, diffs3;
  char eingsp[8],*endptr;
  char *p;
  double span;
  eingsp[0] = 7;
  span=0;spank1=0; spank2=0; spank3=0; diffs1=0;
  diffs2=0; diffs3=0; kwertw=0.046875, kwerts=0.0390625, ende=0;
  bioscom(0, 0xe7, COM);                  /*COM Schnitstelle einstellen */

   status = bioscom(1, start_byte, COM); /*Startbyte fr Netzteilschnst.*/
   status = bioscom(1, rech_betr, COM);  /*Umschaltung Kanal 1 */
   status = bioscom(1, 0x00, COM);
   status = bioscom(1, rech_betr, COM);  /*Umschaltung Kanal 2 */
   status = bioscom(1, 0x00, COM);
   status = bioscom(1, rech_betr, COM);  /*Umschaltung Kanal 3 */
   status = bioscom(1, 0x00, COM);

/*********************** - Men ausgeben - *********************************/

   clrscr();
   cprintf("F1 = Eingabe F2 = Ausgabe F3 = Spannung +/- ESC = Programmende");
   gotoxy(10, 5);
   cprintf("Programm zur Ansteuerung des Netzteils  150/S");
   gotoxy(5,8);
   cprintf("Kanal 1");
   gotoxy(7,9);
   cprintf("Weg in[Ìm]    : ");
   gotoxy(7,10);
   cprintf("Wegdiff.      : ");
   gotoxy(5,12);
   cprintf("Kanal 2");
   gotoxy(7,13);
   cprintf("Spannung      : ");
   gotoxy(7,14);
   cprintf("Spannungsdiff.: ");
   gotoxy(5,16);

/*************************Eingabe der Spannungswerte***********************/
while(ende==0)
{
 _setcursortype(_NOCURSOR);
 gotoxy(10,23);
 printf("Bitte die gewnschte Funktion auswhlen");
 key=bioskey(0) ;
 switch(key)
 {
 case 283:  ende=1;break;
/***Kanal1***/
 case 15104:{
             gotoxy(10,23);
             printf("F1 Eingabe                                    ");
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          gotoxy(23,9);
          _setcursortype (_NORMALCURSOR);
          p = cgets(eingsp);
          span = strtod(p, &endptr);
          while((span <0)||(span>180))
           {
            gotoxy(23,9);
            cprintf("%6.2f",spank1);
            gotoxy(23,9);
            p = cgets(eingsp);
            span = strtod(p, &endptr);
           };
          spank1=span;
          gotoxy(23,9);
          cprintf("%6.2f",spank1);
          gotoxy(23,10);

          p = cgets(eingsp);
          span = strtod(p, &endptr);
          while((span <-10)||(span>150))
           {
            gotoxy(23,10);
            cprintf("%6.2f",diffs1);
            gotoxy(23,10);
            p = cgets(eingsp);
            span = strtod(p, &endptr);
           };
         diffs1=span;
         gotoxy(23,10);
         cprintf("%6.2f",diffs1);
         gotoxy(23,13);


 /****Kanal 2****/
      p = cgets(eingsp);
      span = strtod(p, &endptr);
      while((span <-10)||(span>150))
       {
        gotoxy(23,13);
        cprintf("%6.2f",spank3);
        gotoxy(23,13);
        p = cgets(eingsp);
        span = strtod(p, &endptr);
       };
      spank3=span;
      gotoxy(23,13);
      cprintf("%6.2f",spank3);
      gotoxy(23,14);

      p = cgets(eingsp);
      span = strtod(p, &endptr);
      while((span <-10)||(span>150))
       {
        gotoxy(23,14);
        cprintf("%6.2f",diffs3);
        gotoxy(23,14);
        p = cgets(eingsp);
        span = strtod(p, &endptr);
       };
     diffs3=span;
     gotoxy(23,14);
     cprintf("%6.2f",diffs3);
    };break;
case 15360:{
```

```
                gotoxy(10,23);
                printf("F2 Ausgabe                                        ");
                outs1=(spank1/kwertw)+255;
                outs1h=(outs1 >> 8);
                outs1l=(outs1 & 0x00ff);
                //outs2=((spank2+10)/kwerts)-1;
                //outs2h=(outs2 >> 8);
                //outs2l=(outs2 & 0x00ff);
                outs3=((spank3+10)/kwerts)-1;
                outs3h=(outs3 >> 8);
                outs3l=(outs3 & 0x00ff);
                status = bioscom(1, start_byte, COM); /*Startbyte fr Netzteilsch
                status = bioscom(1, outs1h, COM);  /*Ausgabe Kanal 1 */
                status = bioscom(1, outs1l, COM);
                status = bioscom(1, 0x00, COM);  /*Ausgabe Kanal 2 */
                status = bioscom(1, 0x00, COM);
                status = bioscom(1, outs3h, COM);  /*Ausgabe Kanal 3 */
                status = bioscom(1, outs3l, COM);
               };break;
  case 15616:{
                key=bioskey(0) ;
                //if(key==18432)
                //  spank1=spank1+
                outs1=((spank1+10)/kwertw)-1;
                outs1h=(outs1 >> 8);
                outs1l=(outs1 & 0x00ff);
                outs2=(spank2+10)/kwerts;
                outs2h=(outs2 >> 8);
                outs2l=(outs2 & 0x00ff);
                outs3=(spank3+10)/kwerts;
                outs3h=(outs3 >> 8);
                outs3l=(outs3 & 0x00ff);
                status = bioscom(1, start_byte, COM); /*Startbyte fr Netzteilsch
                status = bioscom(1, outs1h, COM);  /*Ausgabe Kanal 1 */
                status = bioscom(1, outs1l, COM);
                status = bioscom(1, outs2h, COM);  /*Ausgabe Kanal 2 */
                status = bioscom(1, outs2l, COM);
                status = bioscom(1, outs3h, COM);  /*Ausgabe Kanal 3 */
                status = bioscom(1, outs3l, COM);
               };break;


  }
  status = bioscom(1, start_byte, COM); /*Startbyte fr Netzteilschnst.*/
  status = bioscom(1, hand_betr, COM);  /*Umschaltung Kanal 1 */
  status = bioscom(1, 0x00, COM);
  status = bioscom(1, hand_betr, COM);  /*Umschaltung Kanal 2 */
  status = bioscom(1, 0x00, COM);
  status = bioscom(1, hand_betr, COM);  /*Umschaltung Kanal 3 */
  status = bioscom(1, 0x00, COM);
}
```