

```

#include <avr/io.h>

unsigned char text[] = {0xff, 0xff, 0xff, 0xff, 0xff,
.....
0x01, 0x02, 0x04, 0x08, 0x10,
.....
0x01, 0x02, 0x04, 0x08, 0x10,
.....
0x11, 0x22, 0x44, 0x88, 0x1f};

#define SER_HIGH PORTD |= (1<<5)
#define SER_LOW PORTD &= ~(1<<5)
#define SCLK_HIGH PORTD |= (1<<4)
#define SCLK_LOW PORTD &= ~(1<<4)
#define RCK_HIGH PORTD |= (1<<3)
#define RCK_LOW PORTD &= ~(1<<3)
#define EN_HIGH PORTD |= (1<<2)
#define EN_LOW PORTD &= ~(1<<2)
#define ZEN_HIGH PORTD |= (1<<6)
#define ZEN_LOW PORTD &= ~(1<<6)

int main()
{
  unsigned char x=0;
  unsigned char y=0;
  unsigned char z=0;
  volatile unsigned char t=0;
  //Ports initialisieren
  //Port B
  DDRB = 0xff;
  PORTB = 0x00;
  //Port D
  DDRD |= 0b01111111;
  PORTD = 0b00100100;

  //schieberegister initialisieren
  SER_HIGH;
  for(char x=0; x<4; x++)
  {
    SCLK_HIGH;
    SCLK_LOW;
  }

  while(1)
  {
    //Zeile
    for(x=0; x<7; x++)
    {
      //erste 0 reinschieben
      SER_LOW;
      SCLK_HIGH;
      SCLK_LOW;
      SER_HIGH;
      //Zeilentreiber abschalten
      ZEN_LOW;
      //Zeile ausgeben

```

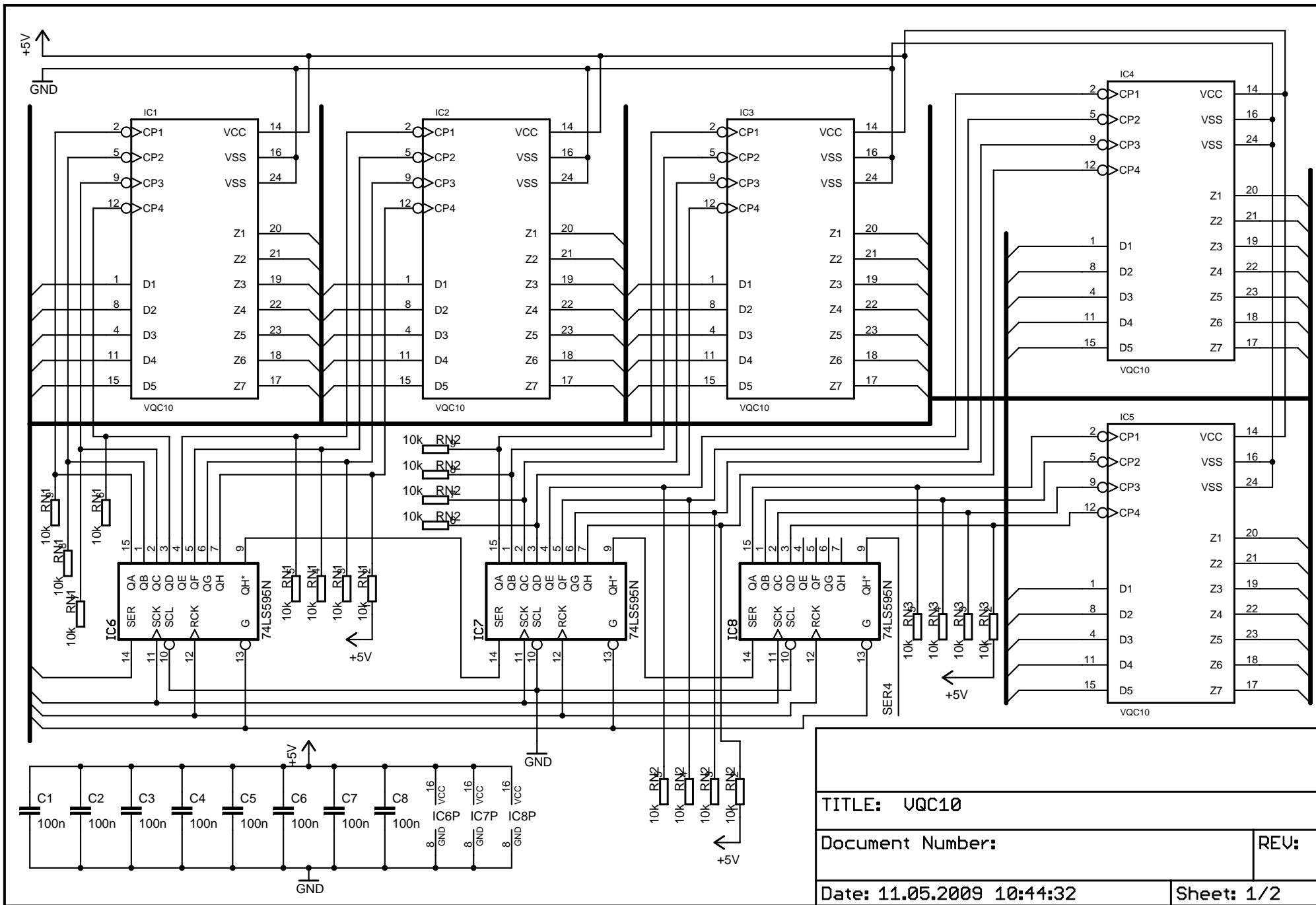
```

.....PORTB |= (x<<5);
.....//Spalte
.....for(y=0; y<4; y++)
.....{
.....    //Unterspalte
.....    for(z=0; z<5; z++)
.....    {
.....        switch(x)
.....        {
.....            case 0: {
.....                if((text[(5*y)+z]&0x01)==0x01)
.....                    PORTB |= (1<<z);
.....                else
.....                    PORTB &= ~(1<<z);
.....                break;
.....            }
.....            case 1: {
.....                if((text[(5*y)+z]&0x02)==0x02)
.....                    PORTB |= (1<<z);
.....                else
.....                    PORTB &= ~(1<<z);
.....                break;
.....            }
.....            case 2: {
.....                if((text[(5*y)+z]&0x04)==0x04)
.....                    PORTB |= (1<<z);
.....                else
.....                    PORTB &= ~(1<<z);
.....                break;
.....            }
.....            case 3: {
.....                if((text[(5*y)+z]&0x08)==0x08)
.....                    PORTB |= (1<<z);
.....                else
.....                    PORTB &= ~(1<<z);
.....                break;
.....            }
.....            case 4: {
.....                if((text[(5*y)+z]&0x10)==0x10)
.....                    PORTB |= (1<<z);
.....                else
.....                    PORTB &= ~(1<<z);
.....                break;
.....            }
.....            case 5: {
.....                if((text[(5*y)+z]&0x20)==0x20)
.....                    PORTB |= (1<<z);
.....                else
.....                    PORTB &= ~(1<<z);
.....                break;
.....            }
.....            case 6: {
.....                if((text[(5*y)+z]&0x40)==0x40)
.....                    PORTB |= (1<<z);
.....                else
.....                    PORTB &= ~(1<<z);
.....                break;
.....            }
.....        }
.....    }
.....}

```

```
.....}
.....}
.....}
.....//Daten ins Ausgangslatch übernehmen
.....RCK_HIGH;
.....RCK_LOW;
.....//Anzeige übernimmt Daten
.....EN_LOW;
.....EN_HIGH;
.....//0 einen weiter schieben
.....SCLK_HIGH;
.....SCLK_LOW;
.....}
.....//Zeilentreiber Einschalten
.....ZEN_HIGH;
.....//Pause
.....for(t=0; t<255; t++);
.....for(t=0; t<50; t++);
.....}
.....}
.....return(0);
.....}

/*
*/
```



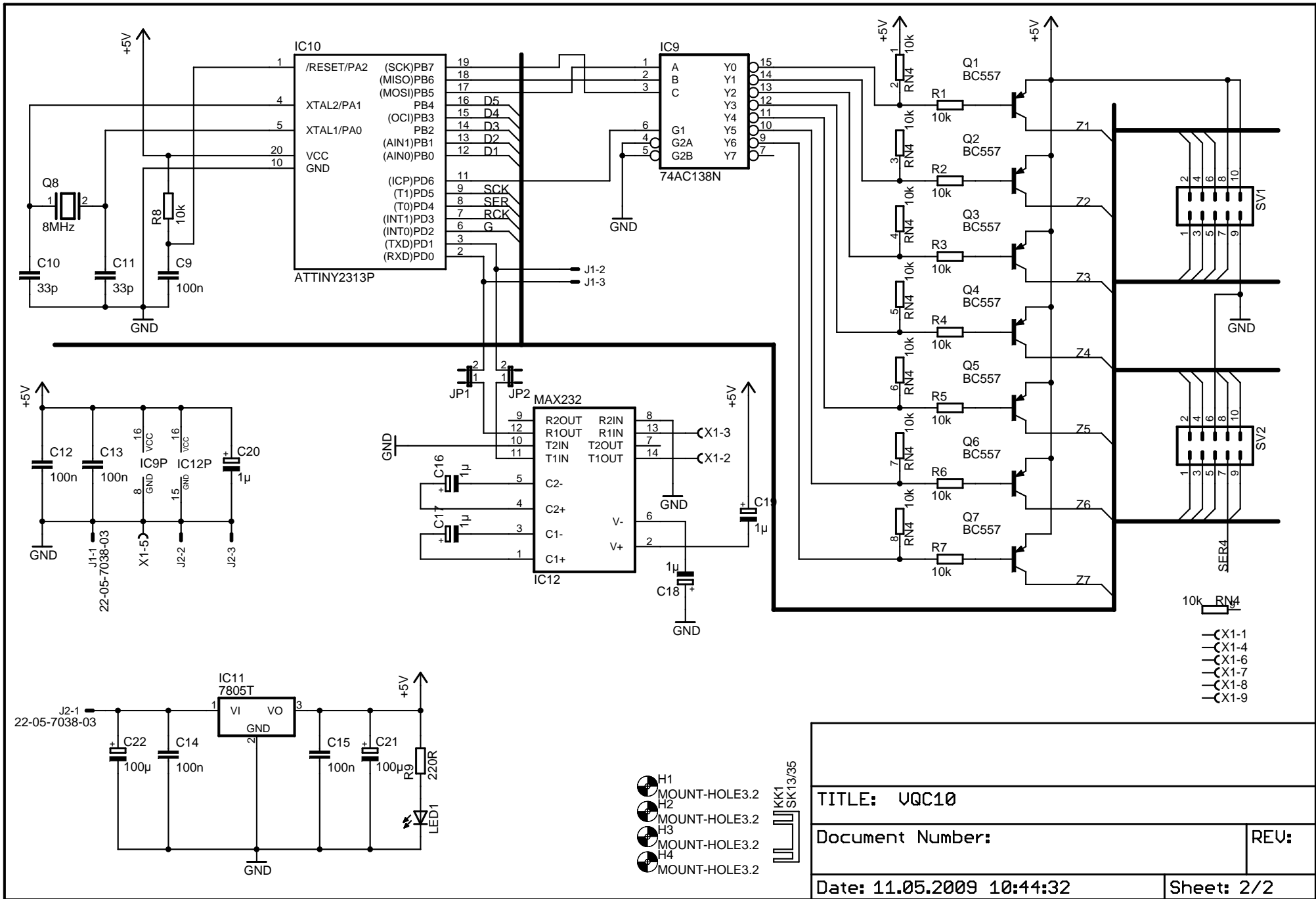
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- H2 MOUNT-HOLE3.2
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