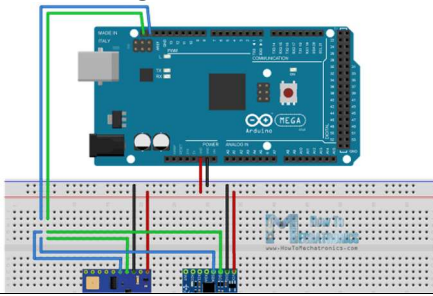
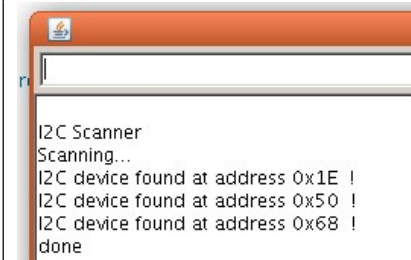


Beschreibung:

Mit diesem Programm werden die angeschlossenen I2C-Module getestet und die entsprechende Adresse ausgegeben.

Beschaltung:**Bild:****Sketch:**

```
#include <Wire.h>
void setup()
{
  Wire.begin();
  Serial.begin(9600);
  while (!Serial); // Leonardo: wait for serial monitor
  Serial.println("\nI2C Scanner");
}
void loop()
{
  byte error, address;
  int nDevices;
  Serial.println("Scanning...");
  nDevices = 0;
  for(address = 1; address < 127; address++)
  {
    // The i2c_scanner uses the return value of the Write.endTransmission to see if
    // a device did acknowledge to the address.
    Wire.beginTransmission(address);
    error = Wire.endTransmission();
    if (error == 0)
    {
      Serial.print("I2C device found at address 0x");
      if (address<16)
        Serial.print("0");
      Serial.print(address,HEX);
      Serial.println(" !");
      nDevices++;
    }
    else if (error==4)
    {
      Serial.print("Unknown error at address 0x");
      if (address<16)
        Serial.print("0");
      Serial.println(address,HEX);
    }
  }
  if (nDevices == 0)
    Serial.println("No I2C devices found\n");
  else
    Serial.println("done\n");
  delay(5000); // wait 5 seconds for next scan
}
```