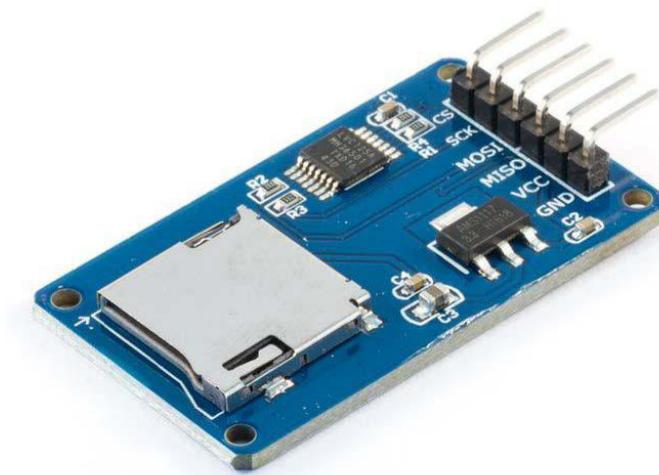


Welcome!

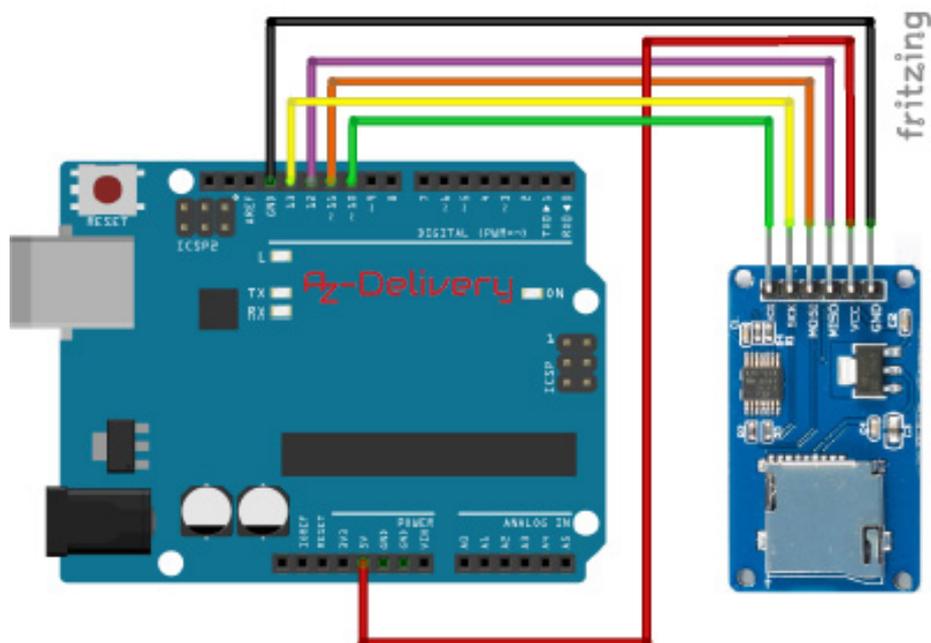
And thank you for purchasing our AZ-Delivery SPI reader micro memory card module for the Atmega328p. On the following pages, we will take you through the first steps of the installation process on the Atmega328p.

We wish you a lot of fun!



This data logger is suitable for FAT16/FAT32 formatted SD cards with up to 32GB and that can support 5V voltage supply.

Wiring the module with an Atmega328p:



+5V is connected to **5V** on the Atmega328p
GND is connected to **GND**
MOSI is connected to **D11**
MISO is connected to **D12**
SCK is connected to **D13**
CS is connected to **D10**

Red wire
Black wire
Orange wire
Purple wire
Yellow wire
Green wire

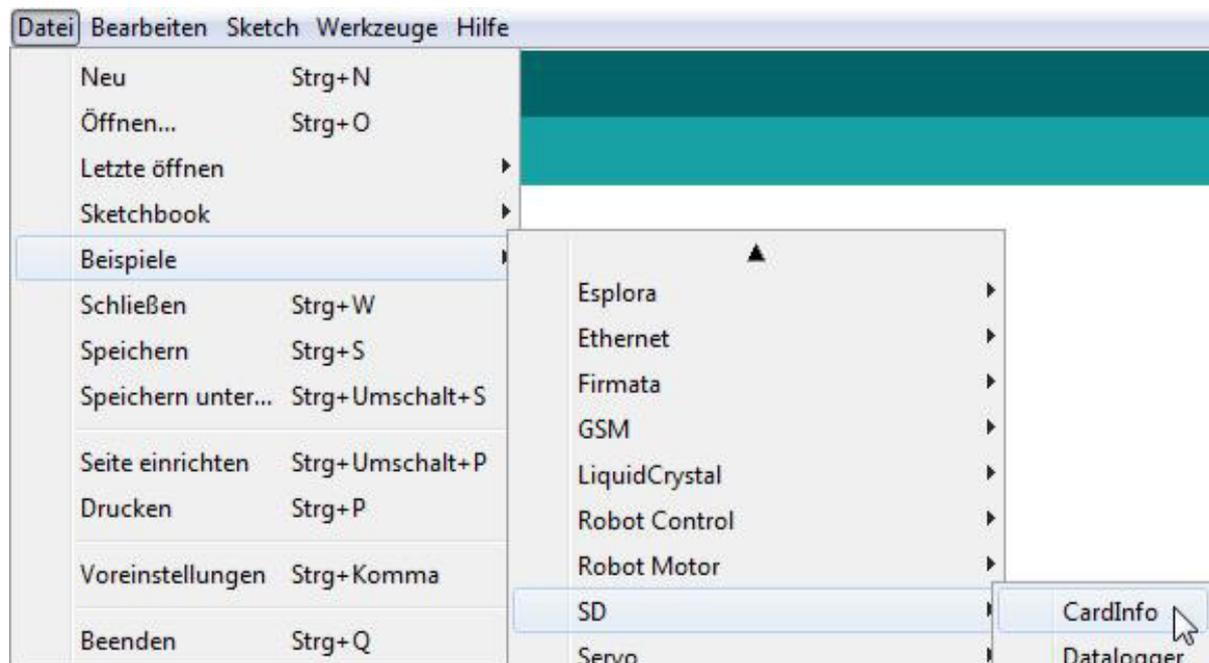
After everything has been wired, then the Atmega328p can be supplied with electric power.

„Programming“ the SD card reader:

In order to use the SD card with the Atmega328p, it has to be firstly formatted as FAT16 or FAT32. For that, we recommend the SDFormatter program:

https://www.sdcard.org/downloads/formatter_4/

Then we let the SD card information to be shown. To do this, we start:



Select under *File > Examples > SD > **CardInfo***.

Since there are different SD cards shields, we still need to indicate our Pin in the code:

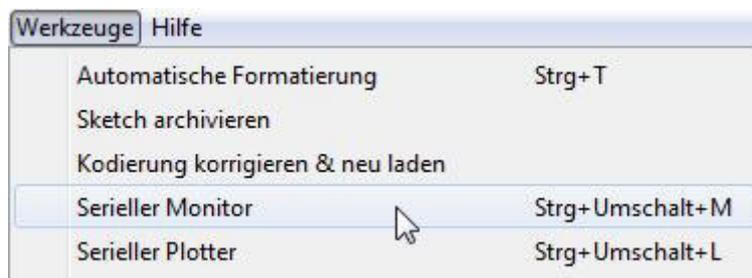
```
// change this to match your SD shield or module;  
// Atmega328p Ethernet shield: pin 4  
// Adafruit SD shields and modules: pin 10  
// Sparkfun SD shield: pin 8  
// MKRZero SD: SDCARD_SS_PIN  
const int chipSelect = 10;
```

Possibly, the baud rate can now still be adjusted.

```
Serial.println (57600);
```

Or the baud rate in the serial monitor needs to be adjusted (to 9600 Baud). Open the Serial Monitor in the Arduino-IDE software:

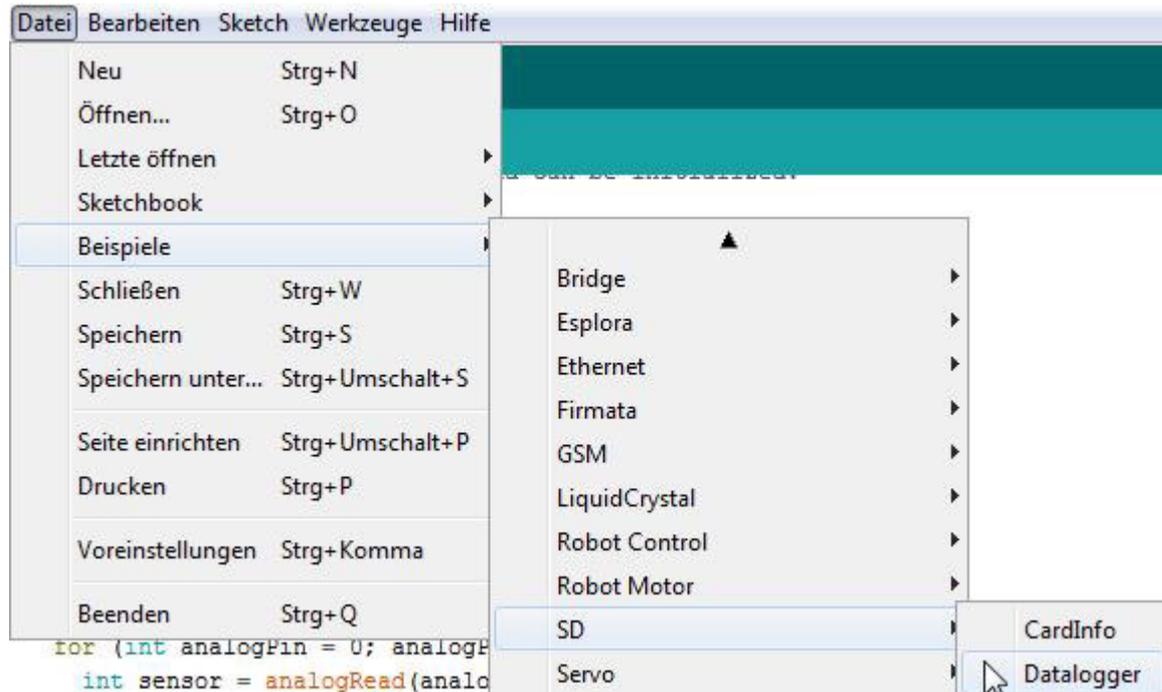
Tools > Serial Monitor



If everything has been correctly completed, then the SD card will be recognized:

```
Initializing SD card...Wiring is correct and a card is present.  
  
Card type:          SDHC  
Clusters:           122112  
Blocks x Cluster:   64  
Total Blocks:       7815168  
  
Volume type is:     FAT32  
Volume size (Kb):   3907584  
Volume size (Mb):   3816  
Volume size (Gb):   3.73  
  
Files found on the card (name, date and size in bytes):
```

Now we can also write data on the SD card. For that, there is the example DataLogger:



Here adjust again the shield:

```
const int chipSelect = 10;
```

And, if possible, also change the baud rate. After the upload, the values from the analogue input 0, 1 and 2 are written on the SD card in a file, named „datalog.txt“.

You did it! Your data logger writes test results on your μ SD card!

Now it is time to learn and actualize your own projects.

For more hardware, our online store is always at your disposal:

<https://az-delivery.de>

Enjoy!
Imprint

<https://az-delivery.de/pages/about-us>