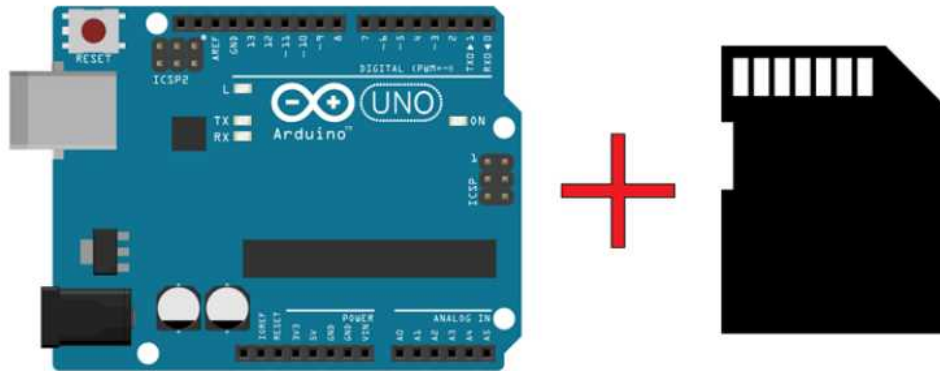


Guide to SD Card Module with Arduino

In this post we're going to show you how to use an SD card module with Arduino to read and write files on an SD card.



Introducing the SD Card module

The SD card module is specially useful for projects that require data logging.

The Arduino can create a file on an SD card to write and save data using the **SD** library.

There are different models from different suppliers, but they all work in a similar way, using the SPI communication protocol.

Pin wiring

The table below shows how you should wire the SD card module to your Arduino.

SD card module	Wiring to Arduino Uno	Wiring to Arduino Mega
VCC	3.3V or 5V (check module's datasheet)	3.3V or 5V (check module's datasheet)
CS	4	53
MOSI	11	51
CLK	13	52
MISO	12	50
GND	GND	GND

Note: different Arduino boards have different SPI pins. If you're using another Arduino board, check the Arduino official documentation.

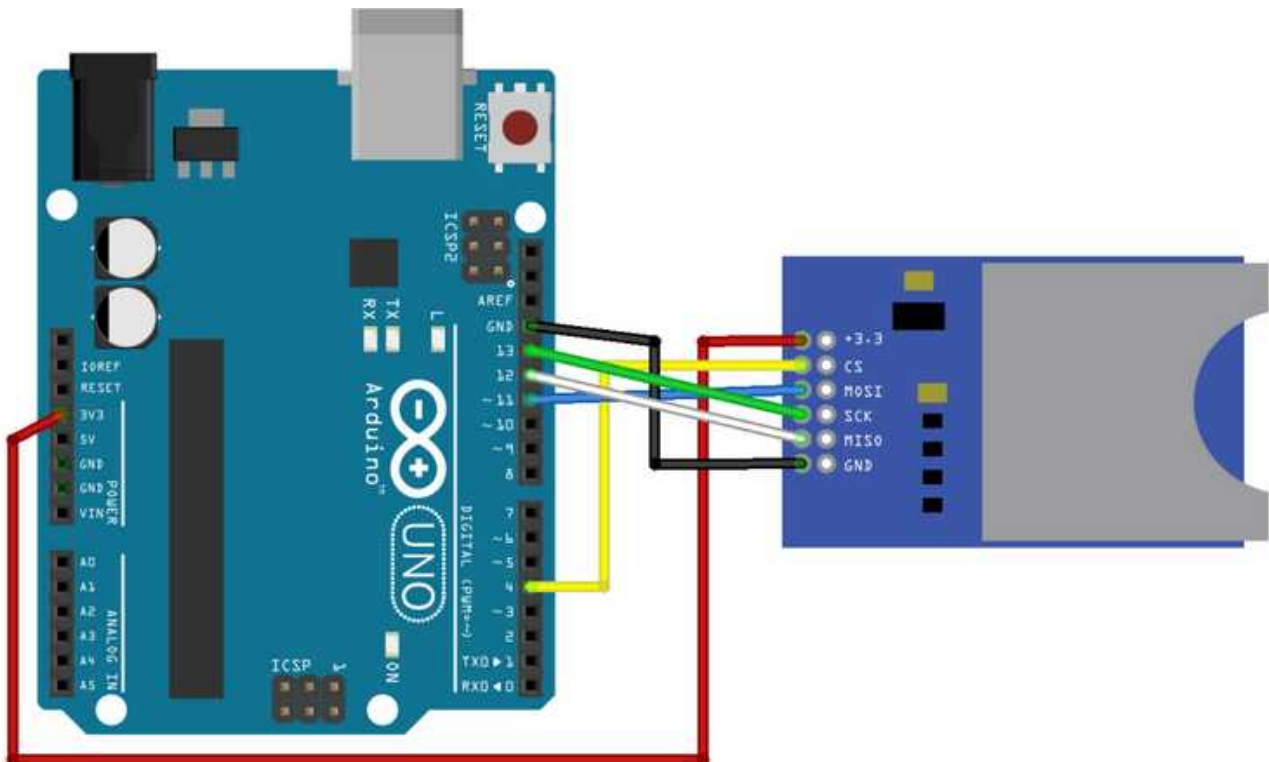
Preparing the SD card

To use the SD card with a SD card module, the SD card needs to be formatted as FAT16 or FAT32. Check If the SD card is formatted.

Testing the SD card module

Insert the formatted SD card in the SD card module.

Connect the SD card module to the Arduino as shown in the circuit schematics below or check **Pin Wiring** in previous section.



Code – CardInfo

To make sure everything is wired correctly and the SD card is working properly, in the Arduino IDE window go to **File> Examples > SD > CardInfo**.

If everything is working properly you'll see a similar message on the serial monitor.

```
13:25:02.879 -> Initializing SD card...Wiring is correct and a card is present.
13:25:02.946 ->
13:25:02.946 -> Card type:          SDHC
13:25:02.979 -> Clusters:          1917888
13:25:03.012 -> Blocks x Cluster:    16
13:25:03.012 -> Total Blocks:       30686208
13:25:03.045 ->
13:25:03.045 -> Volume type is:      FAT32
13:25:03.078 -> Volume size (Kb):    15343104
13:25:03.111 -> Volume size (Mb):    14983
13:25:03.145 -> Volume size (Gb):    14.63
```

Read and write to the SD card

For a complete sketch on how to read and write, in your Arduino IDE go to **File> Examples > SD > ReadWrite**.

Source:

<https://randomnerdtutorials.com/guide-to-sd-card-module-with-arduino/>