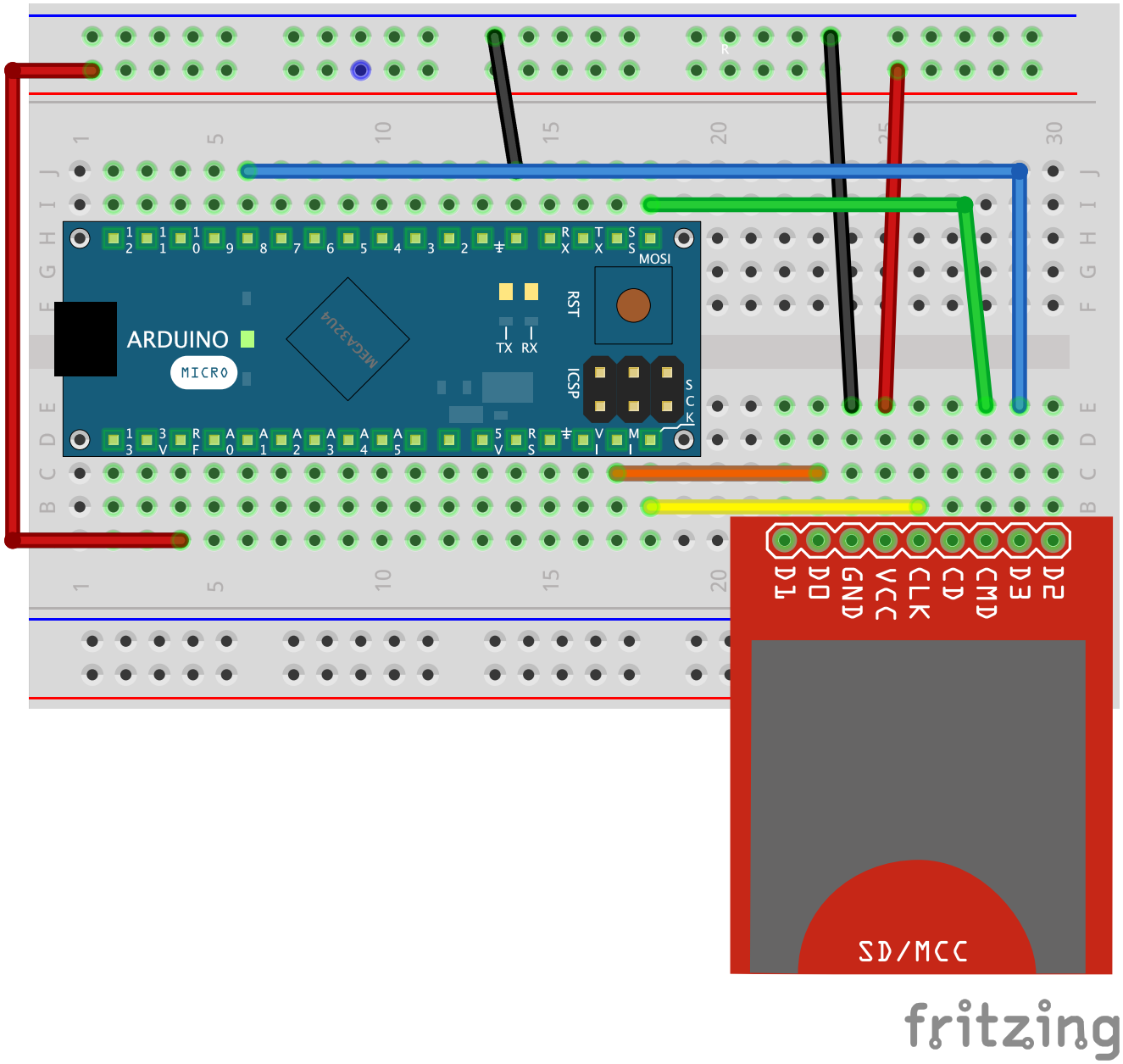
Arduino Micro: SD Card Readers

Sparkfun SD Card reader (the red one)

If you have a Sparkfun SD card reader you need to use the following wiring.

All the info you need for the reader is on the Sparkfun webpage though some details may not be obvious. Read this document carefully, your board may not always be used in examples so you might need to translate the code or wiring.



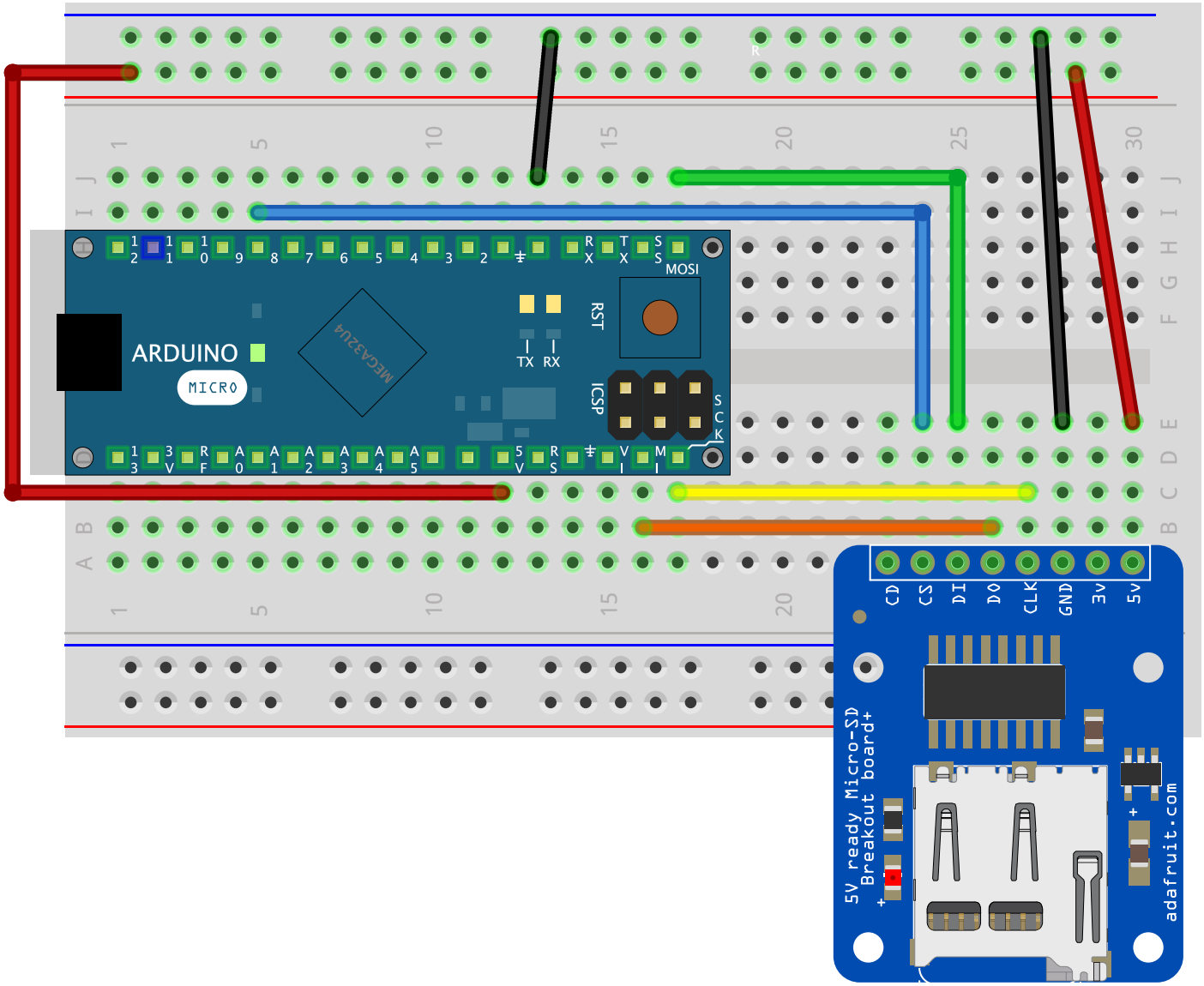
Read the documentation to find out what the WP and CD pins do!

Adafruit Micro SD Card reader (the blue one)

If you have an Adafruit SD card reader you need to use the following wiring.

All the info you need for the reader is on the Adafruit webpage for it though some details may not be obvious. Read this document carefully, your board may not always be used in examples so you might need to translate the code or wiring.

NOTE: THIS SD READER IS POWERED FROM A 5V SUPPLY. SO, MAKE SURE THAT YOU ARE NOT PLUGGING THE 5V PIN OF THE MICRO INTO THE 3V PIN OF THE READER.



fritzing

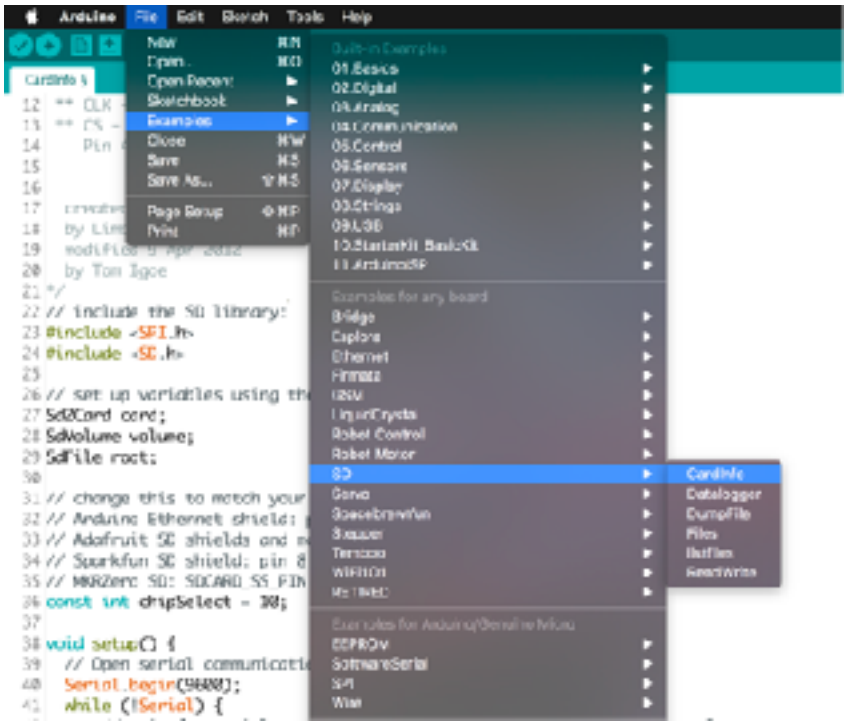
The CD pin is pretty cool, read the Adafruit documentation to find out what it does!

Coding:

The SD library is already part of the Arduino IDE. Check out the Documentation for the SD library

The only detail you should need to change for the examples is the `chipSelect` pin (the blue wire in the above examples and line 36 in the CardInfo example).

Sparkfun Chip Select: D3 pin
Adafruit Chip Select: CS pin



It works Matt, but why?

If you are not content with just hooking up the Sd card reader and want to know why it works (or did not work for you) there are a couple of things to read up on.

There are 2 standards of communication that you are likely to come Serial Peripheral Interface (SPI) and I2C . Both are just ways for us to talk to peripherals. Most of the time you should not need to worry about how they work, though you may need to take some things into consideration when using one or the other.

For the SD card readers we are using SPI, this means that we will be using the SCLK/MISO/MOSI pins. These pins change from board to board and are not necessarily labelled. For both the SD card readers, an Arduino Uno was used, and its SCLK/MISO/MOSI are 13/12/11 respectively. SCK/MISO/MOSI are variables in the Arduino IDE, so long as code has use these variables it should transfer nicely. If not, you will have to manually find each instance of the pin number and change it. Thank fully this is not the case for SD library in the Arduino IDE.

Further questions:

Any further questions about the above or just Arduino in general, feel free to get in touch

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PIN TABLE:

Sparkfun Reader	Adafruit Reader	Micro
CLK	CLK	SCK
D0	D0	MI
CMD	DI	MO
D3	CS	8
VCC	-	3V
-	5V	5V
GND	GND	GND