

CHAPTER: 14 SD CARD INTERFACING

PRACTICAL: 14A

AIM: To interfacing SD Card using Arduino.

ARDUINO CODE:

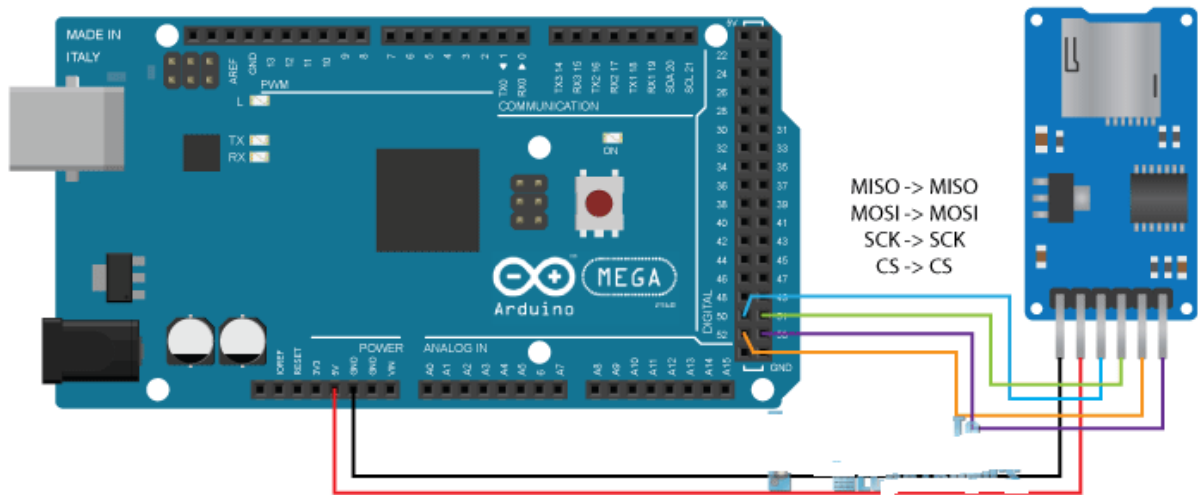
```
/*  
* Author: Shreejicharan  
* Title: To interfacing SD Card using Arduino.  
* Date: 27/05/2017  
* Time: 6:00  
* Email: shreejicharanelectronics@gmail.com  
***/  
  
/* Arduino SD Card Tutorial Example */  
  
#include <SD.h>  
#include <SPI.h>  
  
File myFile;  
  
int pinCS = 53; // Pin 10 on Arduino Uno  
  
void setup() {  
  Serial.begin(9600);  
  pinMode(pinCS, OUTPUT);  
  
  // SD Card Initialization  
  if (SD.begin())  
  {  
    Serial.println("SD card is ready to use.");  
  } else  
  {  
    Serial.println("SD card initialization failed");  
    return;  
  }  
  
  // Create/Open file  
  myFile = SD.open("test.txt", FILE_WRITE);
```

```
// if the file opened okay, write to it:
if (myFile) {
  Serial.println("Writing to file...");
  // Write to file
  myFile.println("Testing text 1, 2 ,3...");
  myFile.close(); // close the file
  Serial.println("Done.");
}
// if the file didn't open, print an error:
else {
  Serial.println("error opening test.txt");
}

// Reading the file
myFile = SD.open("test.txt");
if (myFile) {
  Serial.println("Read:");
  // Reading the whole file
  while (myFile.available()) {
    Serial.write(myFile.read());
  }
  myFile.close();
}
else {
  Serial.println("error opening test.txt");
}

}

void loop() {
  // empty
}
```

SIMULATION:

Removable Disk (H:)

TEST.TXT

TEST.TXT - Notepad

File Edit Format View Help

19:20:06,32
19:20:09,32
19:20:12,32
19:20:15,32
19:20:18,32
19:20:21,32
19:20:24,32
19:20:27,32
19:20:31,32
19:20:34,32
19:20:37,32

COM4 (Arduino/Genuino Mega or Mega 2560)

SD card is ready to use.
Writing to file...
Done.
Read:
Testing text 1, 2 ,3...
Testing text 1, 2 ,3...