SIO2MicroSD

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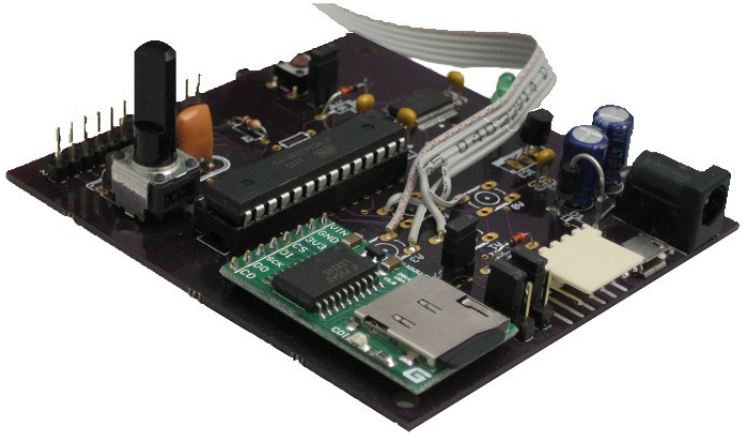


Note: This guide assumes that you understand the implications of connecting 3rd party devices to your Atari. If incorrectly done, damage could result. Please do some research and have fun.

QuickStart

- You will need a Micro SD card formatted in standard FAT.
  - Do not use NTFS
- Create a directory called ATARI in the root directory.
- Copy some of your favorite .ATR or .XEX files into that directory.
- You may create subdirectories (up to 4 deep) under the ATARI folder to organize your files.
  - Files are sorted by index not by filename. The order in which you create them will determine how they will show up on this device.
- Upon first startup, you should see a prompt that says “Config Written”
- Hit the menu button to choose “Select File” to load a disk.
  - Hit the enter button to select the menu option
  - You should now see a prompt that shows “../” and “ATARI”
  - Use your up/down buttons to browse to a file.
  - When you see the file you like, press the enter button.
  - It will prompt you to select a drive. Use the up/down to select a drive.
  - When you are at the drive number you like, press the enter button.
  - If the file is compatible, you should see a prompt showing the drive and filename
    - You will also see a Drives Offline. This is normal.
  - Now press menu to bring the device back online.
  - You should now see “D#:Filename” on the top line.
  - The bottom line will display the density and size in bytes.
- Turn on your Atari or cold-start it to boot. As long as you have a file installed in D1: it should boot your program/disk.

Menu Options

Use the up/down buttons to scroll through menu options

Select File:

- Up/Down buttons will allow you to navigate to files and sub-directories.
- Enter will select.
- Menu is used as a back out button.
- To navigate to a parent directory (go back) press enter when you see the ../ prompt
    - It will prompt you with "Parent Directory – Press Enter".
    - You must press enter to accept.
    - **Remember to then hit menu to bring the drive back online.**
    - If you choose not to hit enter, you can exit out and come back and you will be in the directory where you left off.
    - **NOTE: The ATARI directory is as far back as you can go.**
- When loading a file to a drive that already has a file associated with it, you will see this displayed when selecting a drive. Just press enter and it will load the new file. This is just a feature so that you can see what file you are replacing.

LCD Status

- Pressing Enter will toggle between 1 and 0
- 1 will give you a more detailed display
- 0 gives you a minimal display
- 0 is recommended for high speed use as timing can be critical in some use
    - If you are having some timeout issues, setting this to 0 may help.

Write Config

- Pressing enter on this option will save your configuration.
    - D1:-D4: entries
    - LCD Status
    - SIO Speed Index
    - Game Mode
- This file is saved in the root directory of you SD Card
    - If you ever mess up your config, you can always delete this file.

Unload Image

- Use up/down buttons to select D1:-D4:
- Press enter on correct drive to unload an image and free up the drive

Set SIO Index

- **Default is 9 and is the fastest speed supported.**
- 10 and 11 work and may help if you are having SIO issues
- **Choosing 4 will bring you to the stock 810/1050 drive speed of 19200**
    - This ensures highest compatibility with some software
    - I realize 4 is not the correct divisor for 19200, so I apologize for any confusion here

Game Mode

- Create a sub-directory under ATARI on your SD card called Games (do this on your PC)
    - Store games wanted under this directory
    - You can create up to 3 sub-directories under this to organize files
- Power up SIO2MicroSD
- Press and hold Enter button for 3 seconds
- Hit the reset button, or power off and power back on SIO2MicroSD
- You will now find it very easy to load games in D1 of your SIO2MicroSD device
- All other menu options are now gone.
    - **Be sure to select your wanted SIO Index mode before entering game mode.**

Exit Game Mode

- Power up SIO2MicroSD
- Press and hold Enter button for 3 seconds
- Hit the reset button, or power off and power back on SIO2MicroSD
- I suggest doing a write config now to clear up any "file not found" errors
- From here you can make proper changes and select write config

Swap Drives

- Press down button for 3 seconds
- Use up/down buttons to select 1st drive
- Hit enter and you will see a quick prompt "Swap With?"
- Use up/down buttons to select 2nd drive
- Press enter

Show Drive Inventory

- Pressing the Up button while Online will cycle through the drives to show their status

SDrive Use

- Choose "Select File" and load the SDRIVE.ATR file into D1:
- Be sure device is online
- Restart Atari
- Subdirectory limitations are the same as when using the device through standard menus

SIO2MicroSD is compatible with other SIO devices

As long as you do not have a file loaded into a drive that another SIO device is using, there will not be a conflict. If you would like to boot from Aspeq or some other software, just be sure to have D1: unloaded on your SIO2MicroSD device. If using the full board version of SIO2MicroSD, setting the jumpers correctly will allow you to use the device as an SIO2PC device simultaneously.

Troubleshooting:

Please report any problems found!

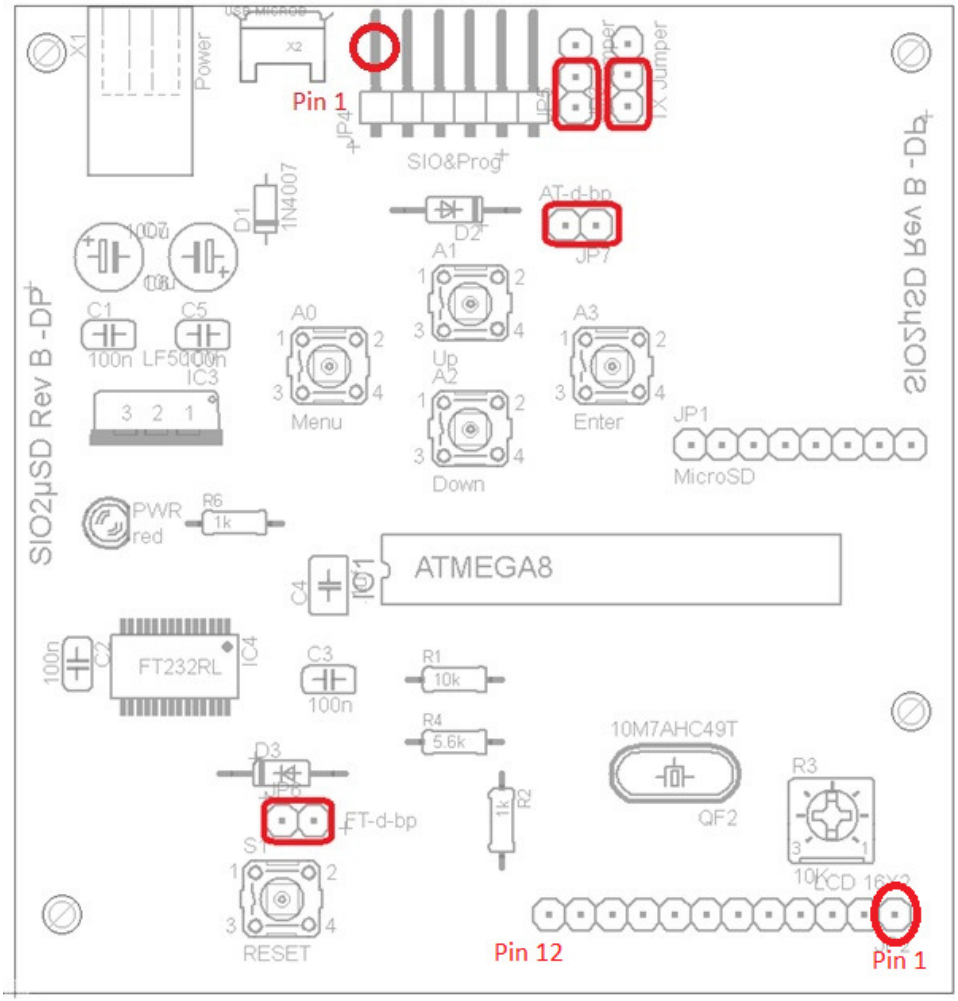
- Boot Atari but it is going into Basic or Self-Test
    - Make sure your jumpers are set correctly
    - Make sure you are Online (hit menu button until drive is displayed)
    - Try selecting 4 for your SIO Index
    - Make sure your TX and RX lines are not reversed
- SD Card Failure Showing
    - Make sure your SD Card is inserted properly
    - Make sure it is formatted correctly
    - Try another standard SD Card
- Upon starting SIO2MicroSD I see drives coming up with “File Not Found”
    - Unload all of your drives (D1:-D4). Select Write Config and restart device.
- Randomly getting timeout issues
    - Try a slower SIO Index value
    - Set LCD Mode to 0

Jumper Configuration and Pinout:
SIO2uSD 1st Run

DO NOT GET THESE WRONG. Crossing the RX and TX will not cause issues, but if you were to accidentally short a 5v line or supply 5v, you may cause damage!

SIO connector pins (JP4) :
2 – Atari RX, 3- Atari TX, 5-Atari CMD, 6-Atari GND
LCD Pins (JP2):
1 GND, 2 +5v, 3 Contrast, 4 RS, 5 GND, 6 Enable, 7 D4, 8 D5, 9 D6, 10 D7, 11 BackLight, 12 GND

Program Mode: Jumper to bypass diodes and provide proper RX/TX config.
(Tested using Arduino IDE 0022 and AVRDude from same build)



SIO2PC compatibility mode: Jumper for proper RX/TX config. No jumpers on JP6 & JP7.
(Tested with Aspeq 0.6 on Windows 7 64-bit.)