SCSI2SD Quick Start Guide

Warning

- ✗ The SCSI2SD is a 5V device. Do not swap 5V and 12V wires if making a DIY floppy power cable. It's best to simply never connect the 12V wire.
- ✗ Do not install the board directly on metal, as this will short the contacts on the scsi2sd.

Configuration

Configuration settings are stored on the SD card. The settings can be managed by the scsi2sd-util6 program, which connects to the board over USB. The SD card must be inserted into the SCSI2SD board for this to work.

Please download a copy of scsi2sd-util6 from http://www.codesrc.com/files/scsi2sd-v6/latest

The default options are very conservative to ensure the device works with most older SCSI hosts "out of the box".

Option	**Default value**
SCSI ID	0
Virtual disk size	2GB *Some older samplers fail with disks larger or equal to 1GB.*
Terminator	Enabled
Selection Delay	255 (auto) *Some older hosts require manually setting 0 or 1.*
Parity	Disabled It's a good idea to enable this option if supported by your system to prevent data corruption.
SCSI2 Mode	Disabled *The SCSI2 mode requires all cabling to meet the SCSI2 standards. Ensure SCSI2 is disabled when using Centronics and DB25 cables*

Termination

Both ends of the SCSI chain must be terminated. Insufficient termination, or excess termination, will cause the SCSI chain to misbehave or not work at all.

- If the SCSI2SD is the only SCSI device, then termination must be enabled (default).
- Active terminators must be used if SCSI2 mode is enabled. The SCSI2SD board has an integrated active terminator.

Power

The SCSI2SD may be powered by either the SCSI cable (ie. self-powered), floppy connector, or USB cable.

- ✗ Some systems do NOT provide power over the SCSI cable, including many musical samplers.

A good ground connection to the SCSI controller is essential. An additional ground wire may be required if:

a) Power is provided over the SCSI cable or USB, or from a different power supply to the SCSI controller (eg. external drive box), and

b) Long SCSI cables, cable adapters, or multiple devices are present.

A ground wire may be connected from the floppy power connector (inner 2 pins) to the chassis of the computer.

Firmware Updates

Updates are performed over USB using the standard Device Firmware Upgrade device class. scsi2sd-util6 provides a simple interface to dfu-util (http://dfu-util.sourceforge.net) for updating the firmware.

Microsoft Windows

The dfu-util.exe program must be in the same location as scsi2sd-util6.exe. A copy may be downloaded from the same place as scsi2sd-util6.

A driver is required for firmware updates. Please download and install from http://www.codesrc.com/files/scsi2sd-v6/latest/windows/driver.

* For those who have used the STM DfuSe software previously, the existing driver for the “STM32 BOOTLOADER” device must be uninstalled. http://zadig.akeo.ie/ can simplify the uninstallation of the old driver, and installation of the WinUSB driver.

Apple OSX

The dfu-util.exe program may be either in the same location as scsi2sd-util6.exe, on available on the $PATH. A copy is included in the scsi2sd-util .dmg file.

Linux

Please install your distributions dfu-util package.

eg. Debian/Ubuntu: `sudo aptitude install dfu-util`

Failsafe Firmware Updates

A failsafe update is only necessary if a normal update attempt fails unexpectedly (eg. the cable was removed before it was complete), or if bad development firmware was loaded onto the board. To force a firmware update the SCSI2SD needs to be reset into the bootloader mode.

1. Place a shunt over the jumper labelled “BOOTLDR”
2. Reset the device (ie. remove all sources of power then reconnect the USB cable).
3. Update firmware as usual.

Bug Reports

Please report all issues to michael@codesrc.com. Please state the brand and model/size of SD card being used, as well as the SCSI host system (eg. “Apple Mac OS 7.5.3” or “Akai S3200”).