Adtron SDDS-01A/03A Installation Manual

Introduction

Congratulations on your purchase of the Adtron SDDS! The SDDS connects to the SCSI bus and allows reading and writing of PC Card ATA Flash and hard disks, CompactFlash cards, and SRAM. This manual describes how to install Adtron's SDDS.

Visit *http://www.adtron.com/products* to view the complete line of Adtron SCSI, IDE and PC Card storage devices.

Indicators	One bi-color status LED per socket (Red/Green). See below for a detailed description.
Interface	SCSI, 50-pin, 0.1" pitch
Size	101.5mm [3.995"] W x 158.8mm [6.250"] D x 25.4mm [1.00"] H
Weight	204g [7.2oz]
Power	Standard disk drive power cable: 5VDC @ 250mA (w/o card) 12VDC is not required.

Table 1 Specifications

ESD Caution

Before handling the SDDS or any media associated with the SDDS, make sure that you are working in an ESD-safe environment. Static electricity may be discharged through the PC Card into the SDDS. In extreme cases this may temporarily interrupt the operation. To prevent this, touch a grounded device, such as a computer case, prior to inserting the PC Card.

Before installing the SDDS

Before beginning the installation, Adtron recommends turning the computer's power OFF.

Set the SCSI ID

The SCSI ID is determined by installing jumpers on pins 4, 2, and 1, or no jumpers for ID 0. JP2 is a set of option jumpers used to configure the internal SCSI ID. By default, the SDDS SCSI ID is set to 2. Refer to Table 2 for jumper settings. In the table, ON is low and OFF is high.

SCSI ID	JP2 Pin 4	JP2 Pin 2	JP2 Pin 1
0	OFF	OFF	OFF
1	OFF	OFF	ON
2	OFF	ON	OFF
3	OFF	ON	ON
4	ON	OFF	OFF
5	ON	OFF	ON
6	ON	ON	OFF
7	ON	ON	ON

Table 2 SCSI IDs

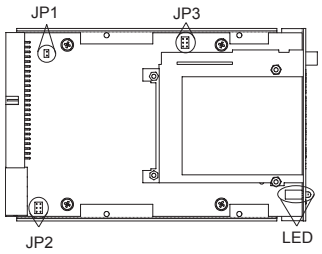

Figure 1 SDDS

Gray pins are ground

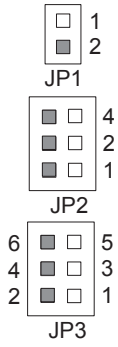

Figure 2 Jumpers

LED	Description
Solid Green	Card power is ON
Flashing Green	Error – Card is not recognized
Solid Red/Flashing Red	Host accessing

Table 3 LEDs

Figure 3 SDDS-01A Front Panel

Termination

The SDDS includes active termination that is enabled by default. Termination may be disabled by installing a jumper on JP1. If the SDDS is the last device on the bus, Termination must be enabled. Refer to Figure 1 for the location of JP1.

LED Indicators

Each slot uses a bi-color (Green/Red) LED that indicates status. When power is first applied, the SDDS will perform a self-test, where the LEDs will flash Green-Red twice. After the self-test, the LEDs will remain off until a card is inserted. After a card is inserted, refer to Table 3 for the LED indicators. Refer to Figure 3 for the location of the LED indicators on the SDDS.

Disconnects

SCSI disconnects are controlled by the SCSI host adapter. Disconnects are enabled by default on this product. Without using the host adapter controls, disconnects can be disabled by installing a jumper on pins labeled 5 and 6 on JP3. See Figure 1 for the location of JP3. Refer to Figure 3 for JP3 pins 5 and 6.

Swap Sockets (SDDS-01A Model only)

Each socket is an independent Logical Unit Number (LUN). Socket 1 is LUN 0 and socket 2 is LUN 1. Placing a jumper on pins 1 and 2 of JP3 swaps the socket so that socket 1 is LUN 1 and socket 2 is LUN 0. Refer to Figure 1 for the location of JP3 and Figure 3 for sockets 1 and 2. This option is not available on the SDDS-03A. On the SDDS-03A this jumper is configured at the factory as LUN 0 and should not be changed.

Gang Sockets (SDDS-01A Model only)

Placing a jumper on pins 3 and 4 of JP3 combines the capacity of two identical ATA flash cards into one LUN (LUN 0). In order to gang sockets on the SDDS, the media must be equal capacities. Refer to Figure 1 for the location of JP3 and Figure 3 for sockets 1 and 2.

Installing the SDDS

Locate an empty 3.5" floppy disk drive bay and slide the SDDS into it. Secure it using the included screws. If you only have 5.25" drive

bays available, a drive-bay adapter can be purchased from Adtron Sales or your local computer store. You may have to remove the computer cover to install the SDDS. Consult your computer documentation for more information.

Connecting the Cables

Connect a 50-conductor SCSI ribbon cable to the SDDS, noting that the stripe of the ribbon cable should be near the power connector. Connect the other end of the ribbon cable to the SCSI adapter or another SCSI device in the chain. Then connect a disk drive power cable to the power connector of the SDDS. Re-assemble the computer and turn it on.

Software Installation

The SDDS operates as a removable disk drive on the SCSI bus. On most platforms, it is a supported device which doesn't require additional software (except for Macintosh). On some systems, multiple LUN support may have to be enabled to support both slots. Consult your SCSI adapter or operating system documentation for details on this feature.

Using the SDDS

Most PC Cards do not need to be formatted before use. Simply insert the card into the SDDS. However, if a card requires formatting, use the format command in your operating system. The SDDS may be used as a boot device if the SCSI controller BIOS supports this feature.

Requirements

The SDDS is supported in most modern operating systems. The following platforms have been tested: *IBM PC*: MS-DOS, Windows 3.x/ 9x/ SE/ ME/ NT/ 2000/ XP, Linux Kernel with support for your SCSI host bus adapter *Macintosh* (requires driver): Mac OS 8.x/ 9.x/ X *Unix Workstations:* Solaris, Linux, Digital Unix, HP-UX, AIX.

Problem	Possible Solutions
The SDDS is installed but the system hangs while booting OR there is no access. (Windows, Macintosh, Unix)	1. Check that the SCSI In ID does not conflict with other devices. 2. Check for proper SCSI bus termination. 3. With some SCSI adapters, SCSI disconnects may have been disabled. Place a jumper on JP3, pins 5-6.
After inserting a card into the SDDS, the LED blinks once a second. (Windows, Macintosh, Unix)	1. The SDDS does not recognize or support this card. Only SRAM, CompactFlash and ATA flash and hard disks are supported. 2. The card may not be fully seated. Try reinserting the card.
The second slot is not accessible. (Windows, Unix)	Each slot of the SDDS is a separate LUN. Multiple LUN support may not be enabled. This option may be in the SCSI adapter or in the OS (e.g. Linux).
I have upgraded my system and I cannot find the drivers for the SDDS.	The SDDS does not require drivers. However, the SCSI host adapter may require drivers. Contact the manufacturer for details.
The LED indicators are flashing in a 2/3 red repeating error pattern (green flashes intermittent if power is on). This scenario is represented by 2 red flashes, followed by 3 red flashes.	The SDDS card reader power will need to be cycled or the entire system will need to be cycled.

Table 4 Troubleshooting

Troubleshooting

The SDDS is simple to install and operate. Table 4 lists some common problems and possible solutions. For more information, visit the Adtron website at *http://www.adtron.com/support*, send email to *techsupport@adtron.com*, or contact technical support at 602-735-0300 in the U.S. or at +45-4557-0754 in Europe.

Warranty

Adtron warrants this product to be free from defects in materials and workmanship for three years. If this product fails within three years due to such a defect, Adtron will repair or replace this product at no charge. This warranty does not apply if this product has been damaged by abuse, accident, disaster, misuse or incorrect installation.

Notice

This manual provides some basic feature information and installation instructions for the Adtron SDDS. Adtron reserves the right to modify, amend, or in any way change the contents and/or products described herein, at any time, without notification. The information contained in this document is provided for reference only. Adtron Corporation does not assume any liability arising out of this application or use of the products described herein. This document may contain or reference information or products protected by copyrights or patents and does not convey any license under the patent rights of Adtron Corporation, nor the rights of others.

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