

# Adtron S25FA SCSI Flash Drive Installation Manual

## Introduction

Congratulations on your purchase of the Adtron S25FA flash disk drive! The S25FA is a solid-state SCSI hard drive based on non-volatile flash technology and is the performance and architecture upgrade to the S25F. The S25FA offers flash storage in an industry standard 2.5" SCSI disk drive form factor. When durability and environmental extremes are an issue, the S25FA is available in commercial, enhanced and industrial operating temperature ranges.

Visit [www.adtron.com/catalog.html](http://www.adtron.com/catalog.html) to view the complete line of Adtron SCSI and IDE flash disk drives.

|                   |   |
|-------------------|---|
| <b>Indicators</b> | Single-color LED indicates BUSY and ERROR conditions  |
| <b>Interface</b>  | SCSI-2 using a 50-pin, 2mm pitch, dual-row connector. Termination power is provided by the power supply, not the SCSI bus |
| <b>Size</b>       | 70.4mm [2.76"] W x 101.85mm [4.01"] D<br>Height: 13.7mm [.540"] to 20.6mm [.810"] based on capacity                       |
| <b>Weight</b>     | Contact Adtron Sales  |
| <b>Power</b>      | 5V @ 300 mA (typ)   |

Table 1 Specifications

## ESD Caution



Static electricity may be discharged through the S25FA. In extreme cases this may temporarily interrupt the operation or damage components. To prevent this, touch a grounded device, such as a computer case, prior to handling.

## Before installing the S25FA hardware

1. Turn off the computer in which you are installing the S25FA.
2. Make sure that you are properly grounded.
3. Set the SCSI ID number, termination, remote LED, and disconnect characteristics. See instructions below for the jumper settings.

## Set the SCSI ID

The SCSI ID, or address, is set remotely by pins 5, 6, and 7 on J2, or no jumpers for ID 0. These pins must be connected to ground at the controller-end of the SCSI cable in order to set the SCSI ID. Refer to Table 2 for valid SCSI ID numbers and jumper combinations. In the table, ON is low and OFF is high.

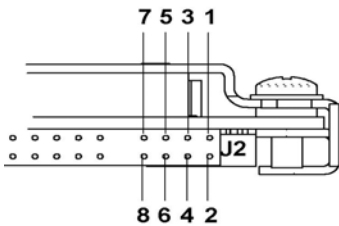


Figure 1 J2

| SCSI ID | J2 Pin 7 (ID 4) | J2 Pin 6 (ID 2) | J2 Pin 5 (ID 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

## Termination

The S25FA includes active termination that is enabled by default. Termination may be disabled by installing a jumper on JP1. The location of JP1 is shown in Figure 2.

## Remote LED

A remote LED can be connected to Pin 8 of J2 in Figure 1. The output is active high and includes a 180 ohm current-limiting resistor.

## 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 B on JP2. See Figure 2 for the location of pin B on JP2.

## Tape Rewind Behavior

Tape emulation applies only to certain models. When JP2 pins labeled A are open (no jumper), the drive finds the end of any data already on the media. When JP2 pins labeled A are shorted (jumper on), the drive rewinds to the beginning of the media. See Figure 2 for the location of pins A on JP2.

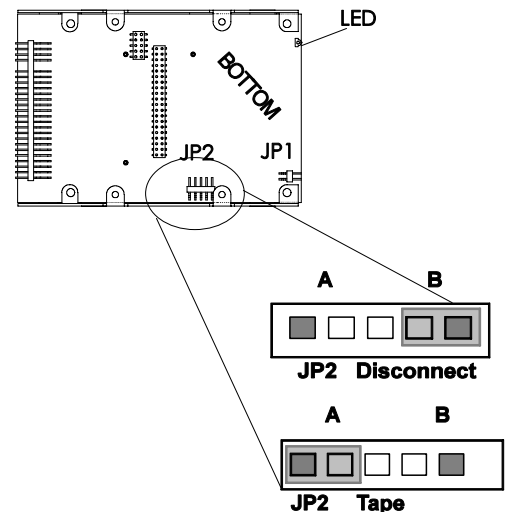


Figure 2 JP1 & JP2 Jumpers

**Install the S25FA into a drive bay**

The S25FA mounts into any standard 2.5" hard disk drive mounting application. **DO NOT** exceed the maximum insertion depth of 3mm [.118"] from drive edge. Consider the length of screw used and thickness of the mounting surface. A common screw length of 4mm is provided but may not be correct in all applications. See Figure 3.

**Connect the cables to the S25FA**

Using a 50-pin cable, connect the S25FA to the SCSI controller or another SCSI device. If the connector on the ribbon cable is not "keyed", the stripe of the cable should be nearest to Pin 1. The S25FA does not require 12V.

**Install an operating system**

The S25FA can be formatted like any standard hard disk drive – bootable for operating system function or not bootable. Any standard disk partitioning and formatting utility can be used. You can install any operating system that you choose. The method of installing a specific operating system can vary, so consult the operating system or SCSI controller documentation for instructions.

**Troubleshooting**

The S25FA is simple to install and operate. However, if you experience problems, Table 3 lists some common problems and possible solutions.

For more information, visit the Adtron web site at <http://www.adtron.com/tech.html> or send email to [techsupport@adtron.com](mailto: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. There are no user-serviceable components within the S25FA.

**Notice**

This manual describes the features of Adtron's S25FA. Adtron reserves the right to modify, amend, or in any way change the contents and/or products described herein, at any time, without notification.

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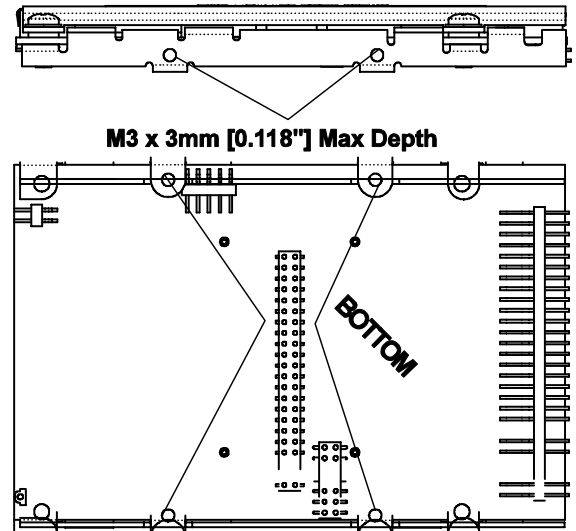


Figure 3 Mounting Holes

| Problem   | Possible Solution  |
|---|--|
| The S25FA is not detected on the SCSI bus during boot time.                       | Check that the SCSI ID does not conflict with other SCSI devices. Also, check for proper SCSI Termination. |
| With the S25FA installed, the system hangs when I boot it.                        | Check that the SCSI ID does not conflict with other SCSI devices. Also, check for proper SCSI Termination. |
| When I first turn on the system, the S25FA LED blinks ON and OFF once per second. | The S25FA has detected an internal problem. Contact Adtron Technical Support.                              |
| When I first turn on the system, the S25FA LED blinks in a pattern.               | The S25FA has detected an internal problem. Contact Adtron Technical Support.                              |

Table 3 Troubleshooting



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