

Adtron S35FA-20N SCSI Flash Drive Installation Manual

Introduction

Congratulations on your purchase of the Adtron S35FA-20N flash disk drive! The S35FA-20N offers durable flash storage in an industry standard 3.5" form factor and is RoHS compliant.

ESD Caution



Before handling the S35FA-20N, make sure you are working in an ESD-safe environment. Static electricity may be discharged through the S35FA-20N. 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 the drive.

Pre-Installation

Before installing the S35FA-20N, turn OFF the computer's power.

Jumper Sets

The S35FA-20N contains two jumper sets: JP6 and JP1. JP6 is reserved for future options and does not affect functionality. JP1 is used for setting the SCSI ID, disconnect, and termination and for connecting an external LED. See Figures 1 and 2 for JP6 and JP1 locations.

SCSI ID

Jumpers on pins 4, 2, and 1 of JP1 determine the SCSI ID (no jumpers indicate ID 0). Refer to Table 2 for jumper settings.

| | |
|-------------------|--|
| Indicators | Bi-colored (green/red) status LED |
| Interface | SCSI-2 using a 50-pin, 0.1" pitch, dual-row connector (the power supply, not the SCSI bus, provides termination power) |
| Size | 101.5mm [3.995"] W x 146.1mm [5.750"] D x 14.6mm [0.574"] H |
| Weight | 300 gr [10.55 oz] (Based on the 32 GByte model) |
| Power | 5V |

Table 1 Specifications

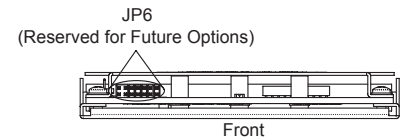
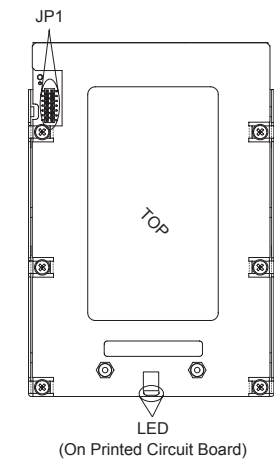


Figure 1 JP6 Location



Gray pins are ground.

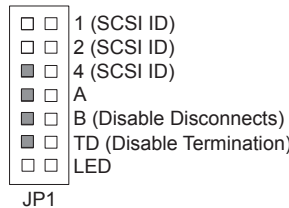


Figure 3 JP1 Pins

| SCSI ID | JP1 Pin 4 | JP1 Pin 2 | JP1 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 ID Settings

| LED | Indicates |
|-------------------------|------------------------------|
| Solid Green | Power is ON. |
| Red | Host is accessing the drive. |
| Flashing Red in Pattern | There is an error. |

Table 3 LED Indications

Termination

By default, the S35FA-20N active termination is enabled. To disable termination, install a jumper on pins labeled TD on JP1 (see Figures 2 and 3). If the S35FA-20N is the last device on the bus, termination must be enabled (default).

Remote LED

The last jumper on JP1, labeled LED, is used for an external remote-mounted LED, such as the Chicago Miniature Light (CML) 3990A series LED (visit <http://www.cml-it.com>). The cathode output is active low and includes a 100 ohm, current-limiting resistor.

To use a single-colored or bi-colored LED, connect the wires based on the diagram shown in Figure 4. It is important to note that single-colored LEDs support only one indicator (power or activity), which is dependent upon the wire orientation. When configured for power, the LED stays lit and blinks only when the host is accessing the drive. When configured for activity, the LED stays dark and lights only when the host is accessing the drive.

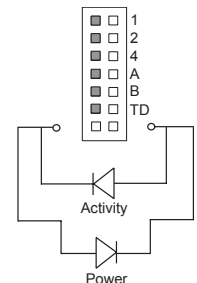


Figure 4 External LED

Disconnects

By default, disconnects are enabled on the S35FA-20N. The drive, however, only disconnects when appropriate if the host controller grants the privilege. To disable disconnects, install a jumper on pins labeled *B* on JP1 (see Figures 2 and 3). When disabled, the S35FA-20N does not disconnect, regardless of the host controller privileges. Disabling disconnects may resolve host protocol conflicts.

LED Indicators

The S35FA-20N uses a bi-colored (green/red) onboard LED to indicate status. This LED is located on the printed circuit board, opposite the SCSI connectors. When power is first applied, the LED flashes green-red while the S35FA-20N performs a self-test. After the self-test, the LED remains green unless the host is accessing the drive or an error condition is encountered (see Table 3 and Figure 2).

Installing the S35FA-20N

Slide the S35FA-20N into any standard 3.5" hard disk drive bay. Before securing the drive, consider the length of the provided screws (3/16") and the thickness of the mounting surface. **DO NOT** exceed the maximum insertion depth of 3.8mm [.150"] from the drive edge (see Figure 5).

Connecting the Cables

Using a 50-pin cable, connect the S35FA-20N to the SCSI controller or another SCSI device. If the connector on the ribbon cable is not keyed, make sure pin 1 is nearest the power connector. Plug a power cable from the computer's power supply into the S35FA-20N power connector. The S35FA-20N does not require 12V.

Installing an Operating System

You can format the S35FA-20N like any other standard hard disk drive using a disk partitioning and formatting utility. Once formatted, you can install any operating system. Because the method for installing a specific operating system can vary, it is recommended you consult the operating system or SCSI controller documentation for instructions.

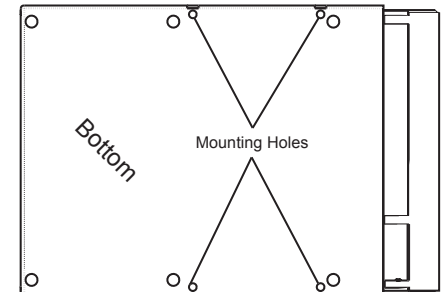
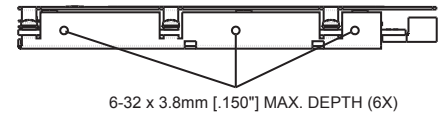


Figure 5 Mounting Holes

Troubleshooting

Table 4 lists some common problems and possible solutions. For more information, visit <http://www.adtron.com/support>, send an e-mail to techsupport@adtron.com, or contact technical support at 602-735-0300 (U.S.).

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 S35FA-20N.

| Problem | Possible Solution |
|--|---|
| The S35FA-20N is not detected on the SCSI bus during the boot process. | 1. Make sure the SCSI ID does not conflict with other SCSI devices. 2. Check for proper SCSI termination. 3. Verify the SCSI disconnect settings. |
| I installed the S35FA-20N, but now the system hangs while booting. | |
| When I first turn on the system, the LED blinks red once per second. | The S35FA-20N has detected an internal problem. Contact Adtron Technical Support for assistance. |
| The LED indicator is flashing in a repeating pattern of 2 red flashes, followed by 3 red flashes. Green appears to flash intermittently. | Cycle power on the S35FA-20N or on the entire system. If this does not resolve the issue, contact Adtron Technical Support. |

Table 4 Troubleshooting

Notice

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