

Adtron Flashpak® A25FB SATA Flash Disk Installation Manual

Introduction

Congratulations on your purchase of the Adtron Flashpak® A25FB flash disk with the Adtron ArrayPro™ performance engine! The A25FB delivers all the advantages of solid state flash disk technology with the advances of the Serial ATA (SATA) interface in an industry standard 2.5-inch form factor.

The A25FB Flashpak flash disk uses high-quality, SLC NAND flash with state-of-the-art static wear leveling, sparing and defect management techniques for superior data integrity.

Visit www.adtron.com/products to view the complete line of Adtron SATA, SCSI and IDE flash disk drives.

Indicators	Orange/Green LED. Green indicates the media has successfully initialized. Orange indicates host access. An Orange LED, blinking in a definite pattern, indicates an internal error.
Interface	SATA interface.
Size	69.9mm [2.75"] W x 101.6mm [4.00"] D Height: 9.5mm [.375"] to 22.5mm [.888"] (based on capacity)
Weight	Based on capacity
Power	5V +/- 5% @ 2.0A (max) (based on capacity)
Specifications	For complete A25FB product specifications, refer to the A25FB Product Specification.

Table 1 Specifications

ESD Caution



Static electricity may be discharged through the A25FB. In extreme cases this may temporarily interrupt the operation or damage components. Touch a grounded device, such as a computer case, prior to handling the A25FB.

Before installing the A25FB hardware

1. Turn off the computer in which you are installing the A25FB.
2. Make sure that you are properly grounded.

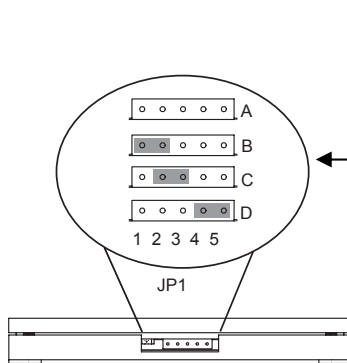


Figure 1 JP1 on the A25FB

Option A: Default; Enables all UDMA and Multiword DMA modes
Option B: Disables UDMA mode, enables Multiword DMA mode
Option C: Disables all UDMA and Multiword DMA modes
Option D: EraSure "push button" for secure erase operations only. Refer to the *Adtron EraSure Programmer's Guide*, available upon request, before attempting any secure erase operations.

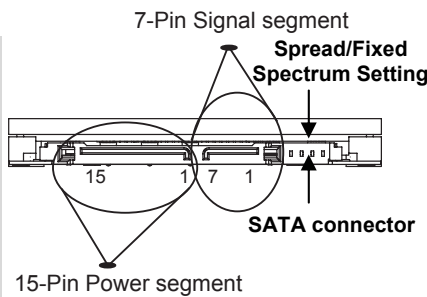


Figure 2 SATA Connections

Pin	Signal
P1	Not Used (3.3V)
P2	ERASE (3.3V)
P3	Reserved (3.3V)
P4	ERASE RTN (GND)
P5	Ground
P6	Ground
P7	5V
P8	5V
P9	5V
P10	Ground
P11	EXTERNAL_LED
P12	Ground
P13	Not Used (12V)
P14	Not Used (12V)
P15	Not Used (12V)

Table 2 15-pin Power Segment

Pin	Signal
S1	Ground
S2	Dev Rx+
S3	Dev Rx-
S4	Ground
S5	Dev Tx-
S6	Dev Tx+
S7	Ground

Table 3 7-pin Signal Segment

Setting Optional Jumper (JP1)

JP1 is an optional, 5-pin jumper on the I25FB, reserved for setting DMA and Multiword DMA modes (PIO modes are on by default in all settings). JP1 may also be used to connect a remote device for use EraSure secure erase operations. JP1 is located opposite the SATA connector on the A25FB. Refer to Figure 1 for configuration settings. Grayed pins indicate jumpers on. The A25FB is set to UDMA Multiword DMA mode by default.

Setting Spread/Fixed Spectrum (SATA connector)

By default, the A25FB is a set to Spread Spectrum frequency. To force Fixed Spectrum, install a jumper on pins 3 and 4 (pins closest to the Signal Segment) of the SATA connector. Refer to Figure 2 for the location of the SATA connector.

Using EraSure™ Data Security

Please contact Adtron Sales or Technical Support to request the Adtron EraSure™ Programmer's Guide for a complete reference of operational techniques and methods.

Install the A25FB into a drive bay

The A25FB mounts into a standard 2.5" hard disk drive application and may be mounted from the side or the bottom. **DO NOT** exceed the maximum insertion depth of 3mm [0.118"] 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. Refer to Figure 2 for mounting hole locations.

Connect the cable to the A25FB

Using a SATA cable, connect the A25FB to the SATA interface. The SATA cable provides +5V power through the 15-pin power segment in Figure 2. The A25FB does not require 12V. Refer to Tables 2 and 3 for pins and signals for the SATA interface. **DO NOT** fold the SATA cable in a 90-degree angle, which will cause the loss of data during the transmission.

Install an operating system

The A25FB 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 you choose that is compatible with SATA devices. The method of installing a specific operating system varies. Consult the operating system or SATA controller documentation for instructions.

Troubleshooting

The A25FB is simple to install and operate. Table 4 lists some common problems and possible solutions.

For more information, visit the Adtron web site at 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 the duration of the warranty period. If this product fails within the warranty period due to such a defect, Adtron will repair or replace this product.

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 A25FB.

Notice

This manual describes the features of Adtron's A25FB. 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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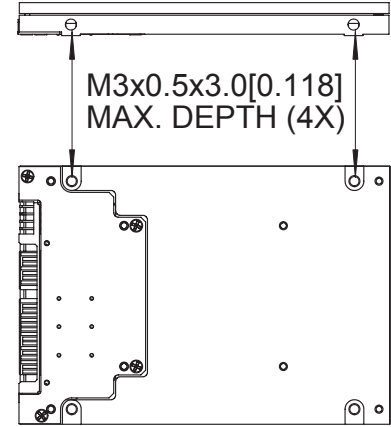


Figure 2 Mounting Holes

Problem	Possible Solution
The A25FB is not recognized by the computer and the system fails to detect the A25FB.	Check system BIOS settings for SATA devices. Change any SATA settings not enabled. Check manufacturer's manual for information on BIOS settings. Make sure the SATA cables are seated and in good condition.
LEDs are ON, yet the Host reports a No Connect. System has failed to detect the A25FB.	Verify SATA controller (Host controller) settings are set to fixed frequency or spread spectrum. By default, the A25FB is set to fixed frequency. Call Adtron Technical Support for additional information and instructions.
The A25FB drive is not recognized by the operating system.	Check Host controller drivers. Specific Host controllers need to be installed to communicate with Serial ATA devices.

Table 4 Troubleshooting



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