

Adtron Flashpak® I25FB IDE Flash Disk Installation Manual

Introduction

Congratulations on your purchase of the Adtron Flashpak® I25FB flash solid state disk (SSD) with the Adtron ArrayPro™ performance engine! The I25FB supports flash storage in an industry standard 2.5-inch form factor and is a drop-in replacement for standard rotating hard disk drives.

The I25FB 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	Standard 44-pin IDE interface.
Size	69.9mm [2.75"] W x 100.2mm [3.95"] 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 I25FB product specifications, refer to the I25FB Product Specification.

Table 1 Specifications

ESD Caution



Static electricity may be discharged through the I25FB. 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 I25FB.

Before installing the I25FB hardware

1. Turn off the computer in which you are installing the I25FB.
2. Make sure that you are properly grounded.
3. Set the master/slave jumper. See instructions below.

Setting master/slave

The master, slave and cable select pins are located on J1, the IDE header of the I25FB. Figure 1 shows the front view of the I25FB's 44-pin connector and the location of master, slave and cable select pins on J1. Use pins shown in Figure 1 (A, B, C, D) to set master, slave or cable select. Refer to Table 2 for IDE signals. Figure 1 shows the valid setting configurations for master, slave, and cable select. Grayed pins indicate jumpers on. The I25FB is set to Master by default.

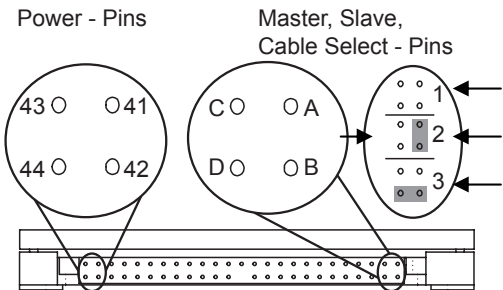


Figure 1 J1 on the I25FB

- Option 1:** Default; Master setting, no jumper
- Option 2:** Slave setting, a jumper on pins "A" and "B"
- Option 3:** Cable Select setting, a jumper on pins "D" and "B"

Pin	Signal
A	J -SLAVE
B	Low (reserved)
C	Low (reserved)
D	J CSEL -EN

Table 2 IDE signals

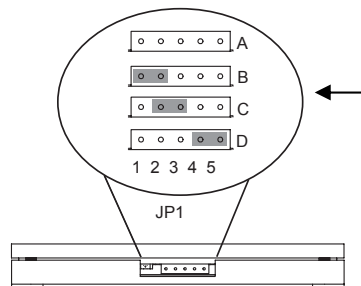


Figure 2 JP1 on the I25FB

- 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.

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 in EraSure secure erase operations. JP1 is located opposite the IDE connector on the I25FB. Refer to Figure 2 for configuration settings. Grayed pins indicate jumpers on. The I25FB is set to UDMA Multiword DMA mode by default.

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.

Installing the I25FB into a drive bay

The I25FB 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 3 for mounting hole locations.

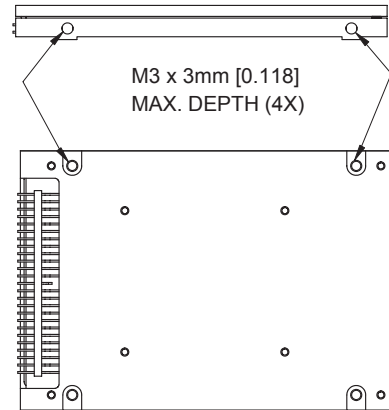


Figure 3 Mounting Holes

Connecting the cable to the I25FB

Using a 44-pin cable, connect the I25FB to the IDE controller. The 44-pin cable provides +5V power through pins 41 and 42 in Figure 1. Pin 43 is ground and pin 44 is not connected. The I25FB does not require 12V power. Refer to Figure 1 for the location of the power pins on the I25FB.

Installing an operating system

The I25FB 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 IDE devices. The method of installing a specific operating system can vary, so consult the operating system or IDE controller documentation for instructions.

Troubleshooting

The I25FB is simple to install and operate. Table 3 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.

Problem	Possible Solution
The I25FB is not recognized by the computer.	Check system BIOS for correct settings to IDE devices. Change any IDE settings not enabled. Check manufacturer's manual for information on BIOS settings. Make sure the IDE cables are seated and in good condition.
The computer recognizes one drive, but not the other.	One drive must be master and the other one slave. Check the master/slave jumper settings on both drives.
When I turn on the computer, the I25FB's LED blinks in a definite pattern.	The I25FB has detected an internal problem. Note the blinking LED pattern and color. Contact Adtron Technical Support with BIOS, system board, and operating system information.

Table 3 Troubleshooting

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 I25FB.

Notice

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