


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.

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.

Pre-Installation

Before installing the I25FB, turn OFF the computer's power and make sure you are properly grounded. Note that because the chassis ground and the DC ground are not tied together, the I25FB metal casing is isolated and not grounded.

J1 and JP1

Before installing any jumpers on J1, it is recommended that you review the *IDE Cable Technical Bulletin* (http://www.adtron.com/pdf/IDE_Cable_Bulletin_RevA.pdf).

The I25FB contains two jumper areas: J1 and JP1. The J1 pins are used for configuring the master/slave settings and for adding an external trigger for secure erase. The JP1 pins provide options for setting data transfer modes and using an external secure erase trigger. See Figure 1 and Figure 2 for locations and settings.

Indicators	Bi-colored (red/green) status LED
Interface	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% @ 1.25A (max) (varies based on capacity)

Table 1 Specifications

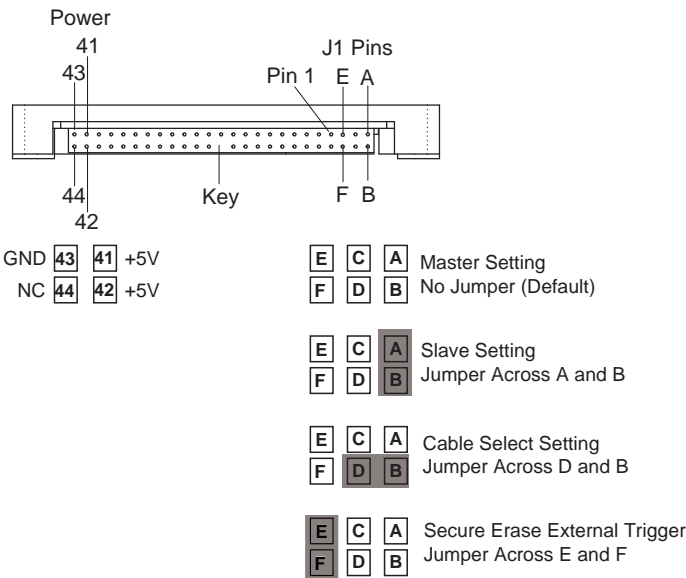


Figure 1 J1 Location and Settings

Master/Slave Setting (J1)

The I25FB is set to master by default. To change the setting to slave or cable select, place a jumper on pins A, B, C, and/or D. See Figure 1 for jumper settings and Table 2 for the associated IDE signals.

Data Transfer Mode Setting (JP1)

By default, the I25FB is set for UDMA and Multiword DMA transfer modes. To change this, place a jumper on the appropriate J1 pins (see Figure 2). The I25FB also supports PIO modes, which are enabled at all times.

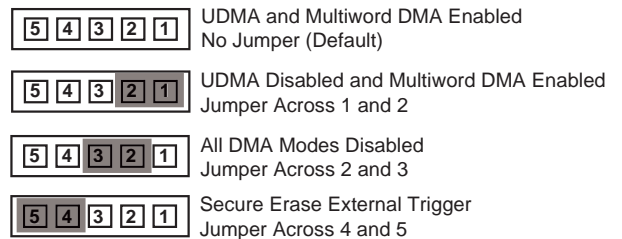
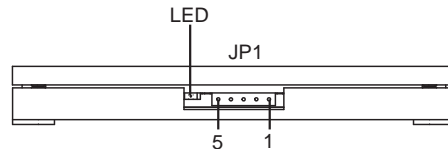


Figure 2 JP1 Location and Settings

Pin	Signal
A	J_-SLAVE
B	Low (reserved)
C	Low (reserved)
D	J_CSEL_-EN

Table 2 IDE Signals

Secure Erase External Trigger

The I25FB contains pins for a secure erase external trigger at both jumper locations. Shorting pins 4 and 5 on JP1 triggers the secure erase operation (see Figure 2). If using J1, provide a minimum of 10mA at +3.0V to +40V through pin E and a return on pin F (see Figure 1). To use the external trigger, you must enable the feature, as described in the *Adtron EraSure™ Programmer's Guide*. Please contact Adtron Sales or Technical Support to request this guide for a complete reference of operations and methods.

LED Indicators

The I25FB uses a bi-colored (green/red) onboard LED to indicate status. This LED is located next to JP1 on the front of the device. When power is first applied, the LED flashes green-red while the I25FB 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 Figure 2 and Table 3).

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

Table 3 LED Indications

Installing the I25FB

The I25FB mounts into any standard 2.5" hard disk drive bay and is mountable from the side or the bottom. Before securing the drive, consider the length of the provided screws (4mm) and the thickness of the mounting surface. **DO NOT** exceed the maximum insertion depth of 3mm [0.118"] from the drive edge (see Figure 3).

Connecting the Cable

Pins 41 and 42 on the I25FB receive +5V power from the cable (see Figure 1 for the location of the pins). Pin 43 is ground and pin 44 is not connected. The I25FB does not require 12V power.

Because the J1 pins essentially create a 50-pin configuration with the cable pins, standard 44-pin cables do not fit properly. See the *IDE Cable Notice* (http://www.adtron.com/pdf/IDE_Cable_Bulletin_RevA.pdf) for details about different connection options.

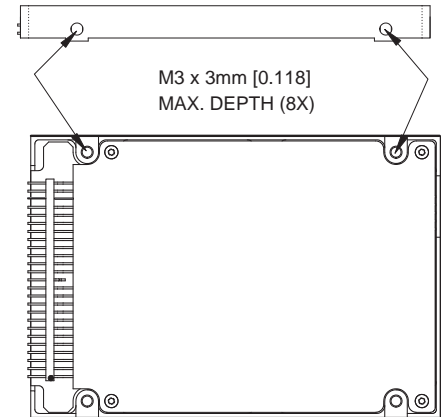


Figure 3 Mounting Holes

Installing an Operating System

You can use a disk formatting and partitioning utility to format the I25FB like any standard hard disk drive. Once formatted, you can install any operating system that is compatible with IDE devices. Because the method for installing a specific operating system may vary, it is recommended you consult the operating system or IDE controller documentation for instructions.

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 in the U.S.

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

Table 4 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

This manual describes the features of the Adtron I25FB. 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 the 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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