


Adtron Flashpak® A25FB-30N Installation Manual

Introduction

The Adtron Flashpak® A25FB-30N flash drive with the Adtron ArrayPro™ performance engine 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. This document provides instructions for installing the A25FB-30N in a host system.

ESD Caution

 Static electricity may be discharged through the A25FB-30N. 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-30N.

Pre-Installation

Before beginning the installation, turn OFF the computer power and make sure you are properly grounded. The A25FB-30N metal casing is isolated and is not tied to DC (signal) ground.

J1 and JP1

The A25FB-30N contains two jumper areas: J1 and JP1. The J1 pins are used for configuring spread spectrum/fixed frequency. The JP1 pins are used for enabling Write Protect. See Figure 1 and Figure 2 for locations and settings.

Spread Spectrum Setting (J1)

By default, the A25FB-30N is a set to spread spectrum frequency. To enable fixed frequency, install a jumper on J1 pins 3 and 4 (see Figure 1).

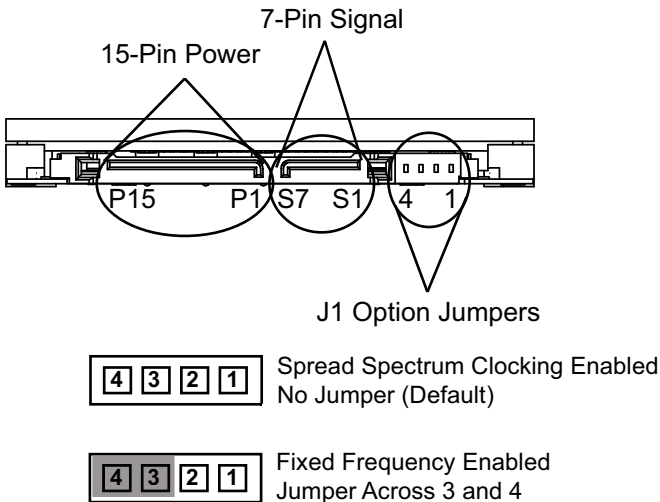
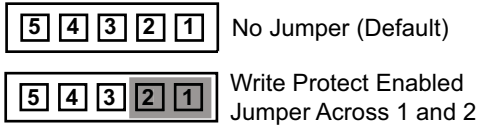
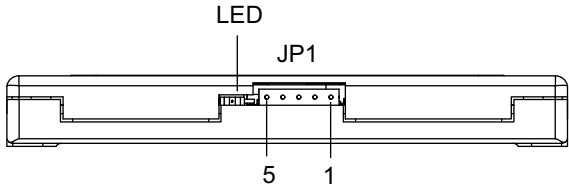


Figure 1. SATA Connections and J1 Configurations

Indicators	One bi-colored (orange/green) LED
Interface	SATA 3.0 Gbps interface
Size	69.9 mm [2.75"] W x 101.6 mm [4.00"] D x 9.5 mm [.375"] H
Weight	104.8 g [0.2310 lbs] (varies by capacity)
Power	5V +/- 5% @ 1.0 A (max)

Table 1: Specifications



All other pins are reserved.

Figure 2. JP1 Location

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

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

Write Protect Setting (JP1)

The A25FB-30N provides a jumper option for enabling Write Protect. By default, Write Protect is disabled. To enable Write Protect, place a jumper across pins 1 and 2 on JP1 (see Figure 2).

External LED

Pin P11 on the power segment supports an external LED to a +3.3 or +5 V connector (see Figure 3). If using a remote LED, select a series resistor to limit the current to 10 mA or less. When connected, the remote LED indicates activity. See the A25FB-30N Product Specification for more details.

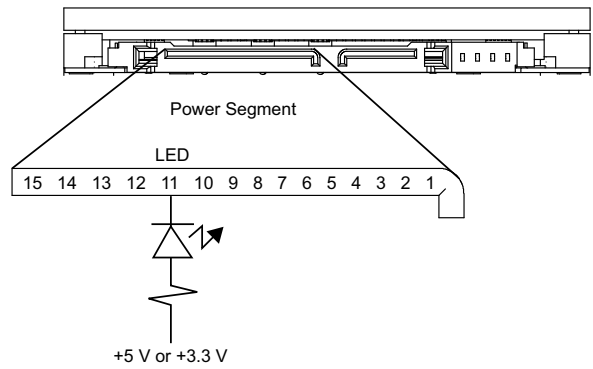


Figure 3. External LED

LED	Indicates
Solid green	Power is ON.
Orange	The host is accessing the drive.
Flashing in a pattern	The host does not recognize the drive or an error occurred.

Table 4: LED Indicators

LED Indicators

The A25FB-30N uses a bi-colored (green/orange) onboard LED to indicate status. This LED is located next to JP1. When power is first applied, the LED flashes green-orange while the A25FB-30N 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 4).

Installing the A25FB-30N

The A25FB-30N mounts from the side or the bottom into a standard 2.5" hard disk drive bay. Before securing the drive, consider the length of the provided screws (M3 x 0.5 x 4 mm) and the thickness of the mounting surface. DO NOT exceed the maximum insertion depth of 3 mm [0.118"] from the drive edge (see Figure 4).

Connecting the Cable

Using a SATA cable, connect the A25FB-30N to the SATA interface. The SATA cable provides +5 V power through the 15-pin power segment as shown in Figure 2. The A25FB-30N does not require 3.3 V or 12 V. Refer to Tables 2 and 3 for pins and signals for the SATA interface. DO NOT fold the SATA signal cable in a 90-degree angle. Doing so may cause the loss of data or data errors.

Installing an Operating System

You can use a disk formatting and partitioning utility to format the A25FB-30N like any standard hard disk drive. Once formatted, you can install any operating system that is compatible with SATA devices. Because the method for installing a specific operating system may vary, Adtron recommends you consult the operating system or SATA controller documentation for instructions.

Troubleshooting

Table 5 lists some common problems and possible solutions. For more information, visit the Adtron web site at www.adtron.com/support, send an e-mail to techsupport@adtron.com, or contact technical support at 602-735-0300 in the U.S.

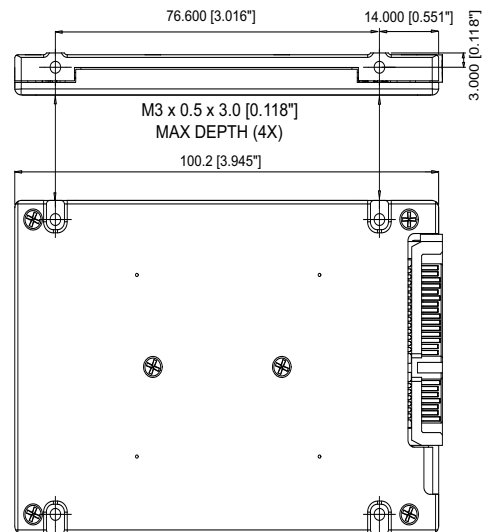


Figure 4. Mounting Holes

Problem	Possible Solution
The host computer does not recognize the A25FB-30N.	Make sure the SATA cables are seated and in good condition.
	Check the system BIOS settings for SATA devices. See the manufacturer's manual for information on BIOS settings.
The LED is lit, but the host reports a No Connect, and the system does not detect the A25FB-30N.	Verify the SATA controller (host controller) clocking settings match the drive settings. By default, the A25FB-30N is set to spread spectrum. Call Adtron Technical Support for additional information and instructions.
The operating system does not recognize the A25FB-30N.	Check the host controller drivers. A SATA host controller and an appropriate software configuration are required for communicating with the A25FB-30N.

Table 5: 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 A25FB-30N.

Notice

This manual describes the features of the Adtron A25FB-30N. 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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