

XceedUltraX2 Installation Manual

Introduction

The XceedUltraX2 flash drives with the ArrayPro™ performance engine deliver all the advantages of solid state flash drive 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 XceedUltraX2 in a host system.

ESD Caution



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

Pre-Installation

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

J1 and JP1

The drive 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 drive is set to spread spectrum frequency. To enable fixed frequency, install a jumper on J1 pins 3 and 4 (see [Figure 1](#)).

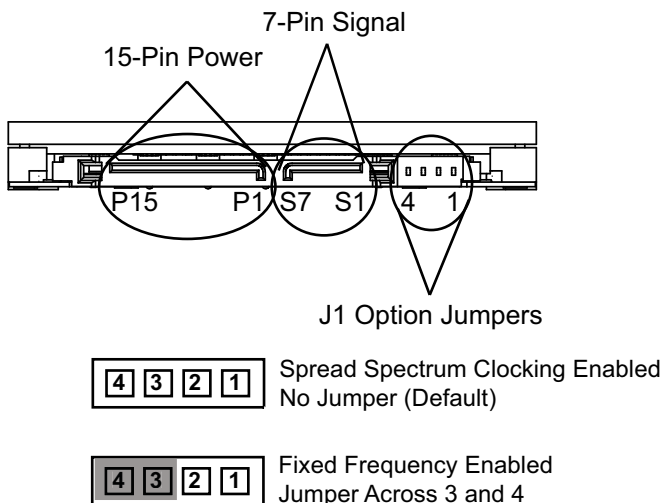
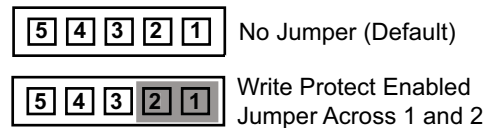
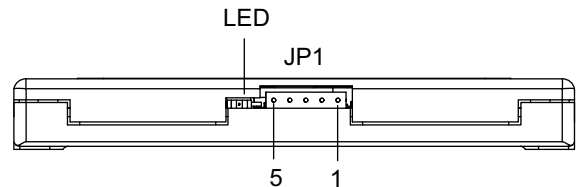


Figure 1. SATA Connections and J1 Configuration

| | |
|-------------------|---|
| 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 (max) |
| Weight | 89.6 g [0.197 lbs] for 64 GByte drive (typ) |
| Power | 5V +/- 5% @ 1.0 A (max) |

Table 1: Specifications



All other pins are reserved.

Figure 2. JP1 Location and Configuration

| 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 drive 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 appropriate product specification for more details.

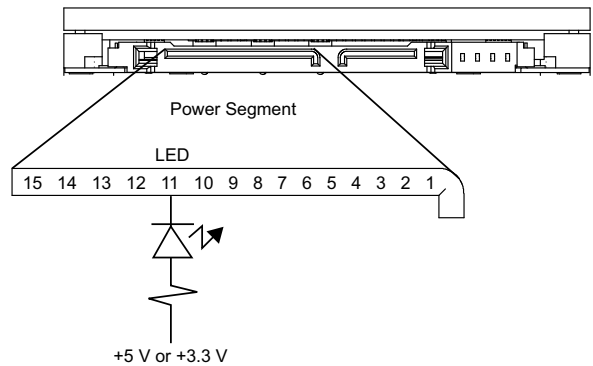


Figure 3. External LED

LED Indicators

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

| 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

Installing the XceedUltraX2

The drive 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) or exceed the maximum torque of 3.0 to 3.5 kg-cm [2.6 to 3.0 lb-in].

Connecting the Cable

Using a SATA cable, connect the drive to the SATA interface. The SATA cable provides +5 V power through the 15-pin power segment as shown in Figure 2. The drive 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 or crease the SATA signal cable. 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 drive 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.

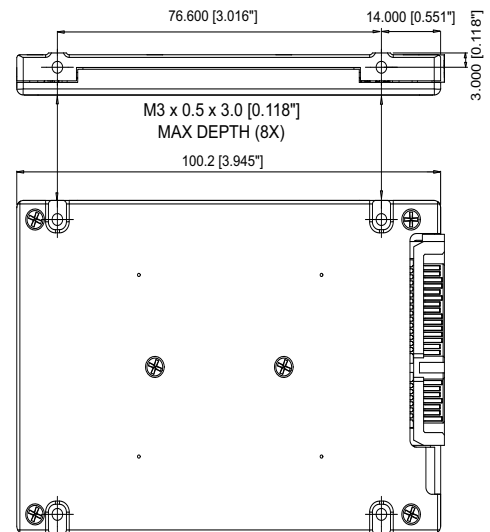


Figure 4. Mounting Holes

| Problem | Possible Solution |
|--|--|
| The host computer does not recognize the drive. | 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 drive. | Verify the SATA controller (host controller) clocking settings match the drive settings. By default, the drive is set to spread spectrum. Call Adtron Technical Support for additional information and instructions. |
| The operating system does not recognize the drive. | Check the host controller drivers. A SATA host controller and an appropriate software configuration are required for communicating with the drive. |

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 XceedUltraX2.

Notice

This manual describes the features of the XceedUltraX2. 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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