


Adtron SC6M Installation Manual

Introduction

The SC6M is a member of Adtron's CompactPCI® family of 6Ux4HP storage blades. The mirrored disk SC6M offers enhanced reliability compared to single disk based cPCI storage systems and integrates two disk drives in a hot swappable redundant array on a single slot 6U cPCI plug-in card.

Download the SC6M Operations Manual, available online at <http://www.adtron.com/support>, before installing the SC6M.

ESD Caution

 Before handling the SC6M, RTB, or any media associated with the SC6M, make sure that you are working in an ESD-safe environment. This includes wearing a wrist-strap that is connected to the cPCI chassis.

Another precaution is to touch the cPCI chassis before handling or installing/removing the SC6M, RTB, or media.

Before installing the SC6M

1. Set the SCSI ID before installing the SC6M in the cPCI chassis. JP1 is a set of option jumpers and used to configure the internal SCSI ID, options, and to power an external LED. Refer to Figure 1 for the location of JP1 and Table 2 for valid SCSI ID numbers and jumper combinations. Figure 2 shows JP1 pins.
2. Make sure that guide rails are installed in the chassis.
3. Make sure power is off at the chassis.
4. Make sure that you are properly grounded.

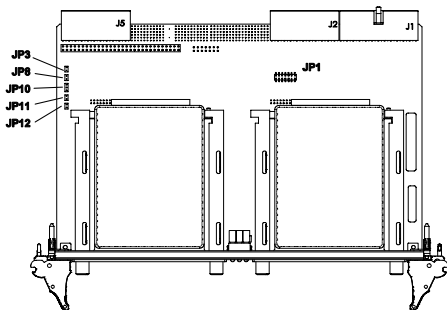


Figure 1 Jumper Locations

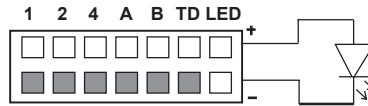


Figure 2 JP1

Do Not install a jumper on TD on JP1.

Grayed pins are ground.

Indicators	IPMI LED - the health of IPMI. Green indicates good. Solid orange indicates an error. Flashing orange indicates initializing. Activity LED – Off indicates no read/write activity to drives. Green indicates read/write activity to drives.
Interface	Optional onboard bootable SCSI host adapter and optional offboard SCSI distribution. See the SC6M Product Specification for complete interface details.
Size	6U x 4HP
Weight	581g [21 oz]
Power	3.3V @ 1.0A, 5V @ 2.0A max (startup current)

Table 1 Specifications

SCSI ID	JP1 Pin 4	JP1 Pin 2	JP1 Pin 1
0	OFF	OFF	OFF
1	OFF	OFF	ON
2	OFF	ON	OFF
3	OFF	ON	ON
4	ON	OFF	OFF
5	ON	OFF	ON
6	ON	ON	OFF
7	ON	ON	ON

Table 2 SCSI IDs

Disconnects

SCSI disconnects are controlled by the SCSI host adapter and are enabled by default. Without using the host adapter controls, disconnects can be disabled by installing a jumper on pin labeled "B" on JP1 in Figure 2.

Remote LED

The last jumper on the right of JP1 on Figure 2 is used to install a remote-mounted LED without external power or resistors. The output is active low and includes a 120 Ohm current-limiting resistor.

Setting SE and LVD Modes (configurations 02 and 03)

The JP3 jumper is used to set Single Ended or Low Voltage Differential. LVD mode is enabled by default. To enable SE mode and disable LVD mode, place a jumper on JP3. Refer to Figure 1 for the location of JP3.

Setting External SCSI Bus Multi-Mode (LVD/SE) Termination (configurations 02 and 03)

The JP8 jumper is used only for the external SCSI bus through RJ5 on the SC6RTB. External rear I/O termination is enabled by default and can be disabled by placing a jumper on JP8. Refer to Figure 1 for the location of JP8.

Setting External SCSI Bus Termination Power (configurations 02 and 03)

The JP10 jumper is only for the external SCSI bus through RJ5. To use external power from the SCSI cable, place a jumper on JP10 pins "1" and "2" (default). To use local 3.3V for external termination power, place a jumper on JP10 pins "2" and "3". JP10 is shown in Figure 1. If no jumper is used on JP8, one must be put on JP10 pins "1" and "2" or "2" and "3".

Setting Rear I/O SCSI Bus Termination Power Out (configurations 02 and 03)

The JP11 jumper is used for the external SCSI bus through RJ5 on the SC6RTB. By placing a jumper on JP11, local power connects through a 1.5A resettable fuse to termination power through J5. Refer to Figure 1 for the location of JP11. This jumper is on by default.

Auxiliary Configuration

JP12 is for auxiliary configuration and is not to be removed.

Installing the SC6M in the chassis for the first time

1. Turn the system power off.
2. Locate an empty 6U peripheral slot. (Not the system slot with red guide rails).
3. Remove the slot cover plate, if present.
4. Unlatch both handles on the SC6M by pressing in on the release button in each handle.
5. Holding the SC6M by the handles with J5 at the top, properly align the SC6M with the guide rails and slide it back until it touches the backplane connectors.
6. To engage the handles, simultaneously push the SC6M into the backplane while levering in on both handles until the handles lock into the chassis.
7. Fasten the screw located inside each handle to the chassis, if desired.
8. Apply power to the chassis.
9. Perform a rebuild before installing an operating system or application. Refer to the Operations Manual for detailed instructions.

Installing the RTB in the chassis

1. Turn the system power off.
2. Locate the empty 6U peripheral slot directly opposite the SC6M.
3. Remove the slot cover plate, if present.
4. Unlatch both handles on the RTB by pressing in on the release button within the handle.
5. Holding the RTB by the handles with RJ5 at the top, properly align the RTB with the guide rails and slide it back until it touches the backplane connectors.
6. To engage the handles, simultaneously push the RTB into the backplane while levering in on both handles until the handles lock into the chassis.
7. Fasten the screw located inside each handle to the chassis, if desired.

Installing the device drivers

The SC6M (configurations 01, 02 and 03) uses a widely supported SCSI controller and should operate in most modern operating systems.

Installing an operating system

The SC6M is ready to be loaded with most popular operating systems and any software applications required.

Troubleshooting

The SC6M is simple to install and operate. Table 3 lists some common problems and possible solutions. For more information, visit the Adtron website at <http://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 Solutions
The SC6M drives are not seen during the BIOS load and/or the SC6M will not boot the operating system from the HDD.	Verify that JP1 jumpers on the SC6M are set correctly. Verify that BIOS settings are enabled for the SCSI bus. Make sure the SC6M and the SC6RTB are in corresponding slots. If J5 is used, make sure the cable is connected correctly.
After inserting the SC6M and powering up the chassis, the IPMI LED indicator is off.	Contact Adtron technical support for a Return Material Authorization number.

Table 3 Troubleshooting

Warranty

Adtron warrants this product to be free from defects in materials and workmanship for three years. If this product fails within three years due to such a defect, Adtron will repair or replace this product at no charge.

This warranty does not apply if this product has been damaged by abuse, accident, disaster, misuse or incorrect installation.

Notice

This manual provides some basic feature information and installation instructions for the Adtron SC6M. 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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