

Installation Instructions – Chassis Mount Method

Microsemi® Adaptec® Flash Backup Module AFM-700 for SAS/SATA RAID Controllers

Using the appropriate static protection, remove the controller from your computer.

- 1 Insert screws through the back of the controller board, as shown in Figure 1. Then, attach the (threaded) spacers to the screws with a Phillips screwdriver.
- 2 Attach the AFM-700 daughterboard to the controller by mating the black connectors. Insert screws through the daughterboard and attach to the spacers with a Phillips screwdriver, as shown in Figure 2.

⚠ Caution: The torque should be less than 0.45Nm to avoid deformation. Be sure that the controller is not bent after attaching the daughterboard to the controller card.

- 3 Attach the AFM-700 supercapacitor module to the controller by inserting the connector into the socket on the AFM-700 daughterboard, as shown in Figure 3. Use the included extender cable if you need extra length to complete Step 4.
- 4 Choose a location on the chassis or in the system to fix the tethered supercapacitor module using the included mounting clip and cable-ties such that (i) the cable (~25" with extender) reaches the mating location on the controller when it is installed in the expansion slot; (ii) wiring is routed and secured so that it does not contact any moving parts (fans, for instance); and (iii) the supercapacitor module is protected from heat.

- 5 Insert the supercapacitor module into the mounting clip with the large friction clip at the bottom. Thread the cable-ties through the slots on the mounting clip and fix to the selected location on the computer chassis, as shown in Figure 4. The cable-ties should completely encircle the supercapacitor module and mounting clip to ensure that they are held in place securely. Be careful not to restrict air-flow in your system.

- 6 Reinstall the controller and restart your computer. The supercapacitor should reach full charge in 5-6 minutes.

⚠ Warning: (i) Do NOT remove or insert a fully charged supercapacitor module. Always discharge the unit first to avoid damage to the controller or flash backup module. The factory ships with discharged units, so they are safe to install when you receive them. To ensure that an installed unit is discharged, switch the system OFF, then wait 5 minutes. After a dirty shutdown, wait 3 minutes after backup is complete, then remove the unit. (ii) The operating temperature of the Microsemi Adaptec controller with AFM-700 flash backup is 0°C–50°C 200 LFM.

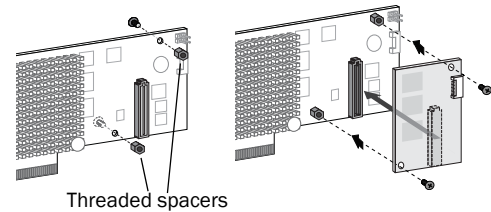


Figure 1

Figure 2

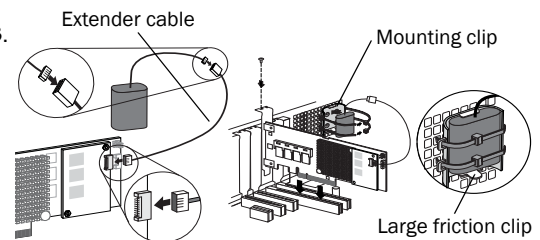


Figure 3

Figure 4



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Installation Instructions – Mounting Plate Method

Microsemi® Adaptec® Flash Backup Module AFM-700 for SAS/SATA RAID Controllers

Using the appropriate static protection, remove the controller from your computer.

- 1 Attach the AFM-700 daughterboard to the controller, as described in Step 1 and Step 2 of the Chassis Mount method. Reinstall the controller next to an *empty* slot in the backplane, ideally, a short.
- 2 Attach the full-height bracket and mounting clip to the mounting plate, as shown in Figure 1. The full-height bracket is installed on the front side of the mounting plate (the side with the bents), with the mounting screws inserted from the back. (Be sure to attach the mounting plate to the bracket with recessed side at the bottom!) Attach the mounting clip to the front of the mounting plate with four (4) Phillips screws. The large friction clip should face the front of the mounting plate.
- 3 Insert the supercapacitor module into the mounting clip. The supercapacitor module snaps securely into place between the large and small friction clips, as shown in Figure 2. Be sure to orient the supercapacitor module such that the connecting cable faces the rear of the mounting plate.
- 4 Attach the supercapacitor module to the controller by inserting the connector into the socket on the AFM-700 daughterboard, as shown in Figure 3. Use the included extender cable if you need extra length to reach the daughterboard.
- 5 Install the mounting plate in the empty slot next to the controller, as shown in Figure 4. After securing the mounting plate to the card cage, verify that the supercapacitor module and mounting plate sit above (and do not touch) the PCIe slot.
- 6 Restart your computer. The supercapacitor should reach full charge in 5-6 minutes.

⚠ Warning: (i) Do NOT remove or insert a fully charged supercapacitor module. Always discharge the unit first to avoid damage to the controller or flash backup module. The factory ships with discharged units, so they are safe to install when you receive them. To ensure that an installed unit is discharged, switch the system OFF, then wait 5 minutes. After a dirty shutdown, wait 3 minutes after backup is complete, then remove the unit. (ii) The operating temperature of the Microsemi Adaptec controller with AFM-700 flash backup is 0°C–50°C 200 LFM.

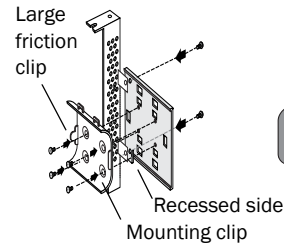


Figure 1

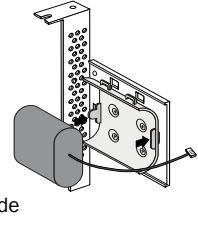


Figure 2

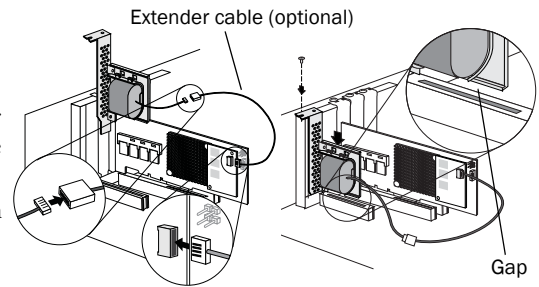


Figure 3

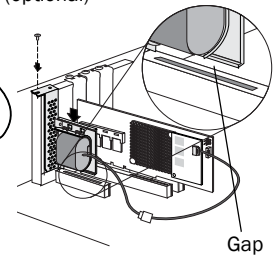


Figure 4



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