



DCP-2000/DCP-2K4

DIGITAL CINEMA SERVERS

SSD Flash Replacement Procedure

for SuperMicro X7SBE Motherboard fitted Units

Version 1.0

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1 Introduction

1.1 Purpose

This document presents the procedure to apply in order to replace a SSD Flash in a DCP-2000 or a DCP-2K4 unit.

The document is presented as a step-by-step procedure that must be followed as specific steps might require that previous steps were completed.

CAUTION: The procedure presented in this document must ONLY be performed by a qualified technician, that is properly grounded in accordance to the ESD rules presented in ISO 9001 (2000).

1.2 Procedure Applicability

The procedure presented in this document **ONLY applies** to DCP-2000/DCP-2K4 units fitted with the motherboard X7SBE (SuperMicro) - this motherboard usage is flagged using a "D" at the end of the unit's serial number on the rear side of the unit (e.g S/N: 201235D).

2 Parts and Tools

2.1 Part Provided by Doremi

CAUTION: Make sure you have the part listed below before starting to apply the upgrade procedure presented in this document.

The following item, required to complete this procedure, is provided by Doremi:

- SSD Flash:



Figure 1: SSD Flash

2.2 Required Tool

To be able to perform the procedure detailed in this document, one Phillips tip screwdriver is required:



Figure 2: Phillips Tip Screwdriver Example

3 Replacement Procedure

3.1 Unit Preparation

CAUTION: During the procedure presented in this document, you will have to remove screws. **Collect all removed screws**, as you will have to re-use them when putting back the concerned components at a later stage of the procedure.

For the upgrade procedure presented in this document, the server (DCP-2000 or DCP-2K4) unit must be removed from its operating location and put in a clean area (far from other devices and on **a surface fitted with an antistatic mat**) as presented below:

1. Power off the unit by selecting SHUT DOWN from the LOGOUT menu: "**Menu** → **Logout...**" and select "**Shutdown**". Any other method might DAMAGE THE RAID and result in RAID FAILURE.

2. Unplug the two power cables.

CAUTION: The unit has a dual redundant power supply. Both power cables have to be removed.

Note: Disconnect any other cables in order to put the unit in a proper place (fitted with antistatic setting) for this operation. In this case, you might want to put a label to identify each cable you remove to facilitate their re-installation at the end of the procedure (e.g. "AES cable", "GPIO Cable", ...).

3. Remove the server from its rack and place it in a location (e.g. a desk) where you have room to perform the procedure, while being grounded according to ESD rules presented in ISO 9001 (2000).
4. Remove the lid according to the steps below:

- Remove the six screws holding the lid (two on each side and two on the rear panel of the chassis) using the Phillips tip screwdriver:

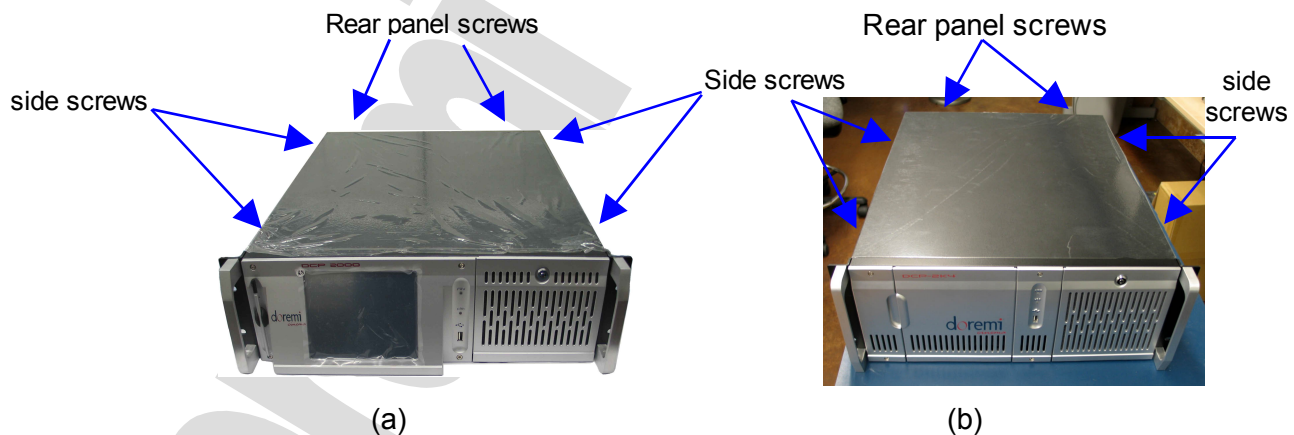


Figure 3: Lid Screws Locations – (a) DCP-2000, (b) DCP-2K4

- Slide the lid from the front side to the rear side of the unit and lift it in order to remove it from the chassis, as shown on Figure 4:

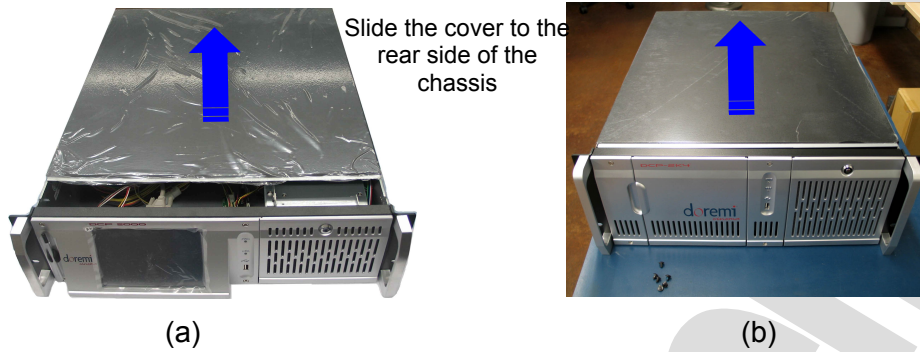


Figure 4: Lid Removal – (a) DCP-2000, (b) DCP-2K4

3.2 SSD Flash Location

The SSD flash is located on the front of the unit, beside the HDD, as presented below:

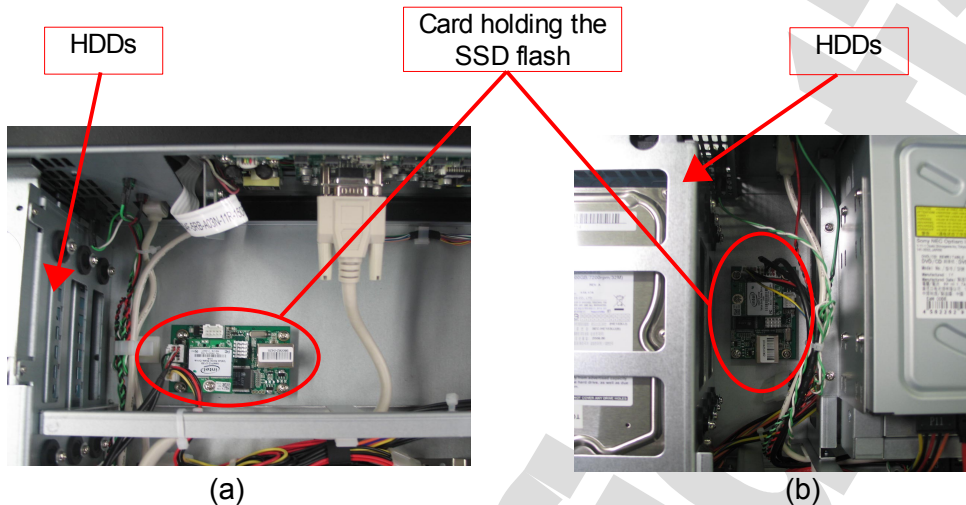


Figure 5: SSD Flash Location – (a) DCP-2000, (b) DCP-2K4

The SSD flash is located on top of the USB hub, secured with a screw and connected with its IDE-10 connector plugged into the USB hub header.

3.3 SSD Flash Removal

Unscrew the SSD flash from its holding card using a Philips tip screwdriver as presented below:



Figure 6: SSD Flash Screw Removal

Then, unplug gently the SSD flash from the card's connector by pulling on the SSD flash:

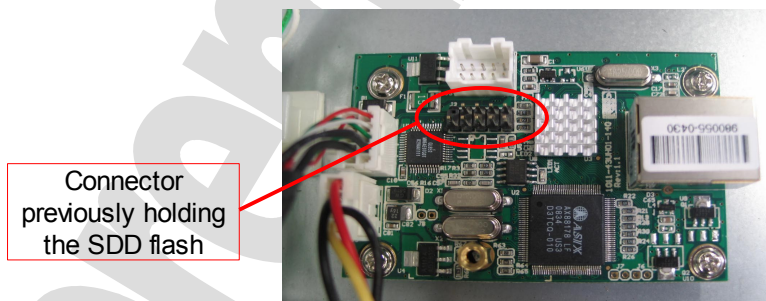


Figure 7: SSD Flash Removed

3.4 New SSD Flash Installation

Take the new SSD flash provided by Doremi and note the pin hole that is blocked – it will have to match the missing pin of the holding card's connector as presented below:

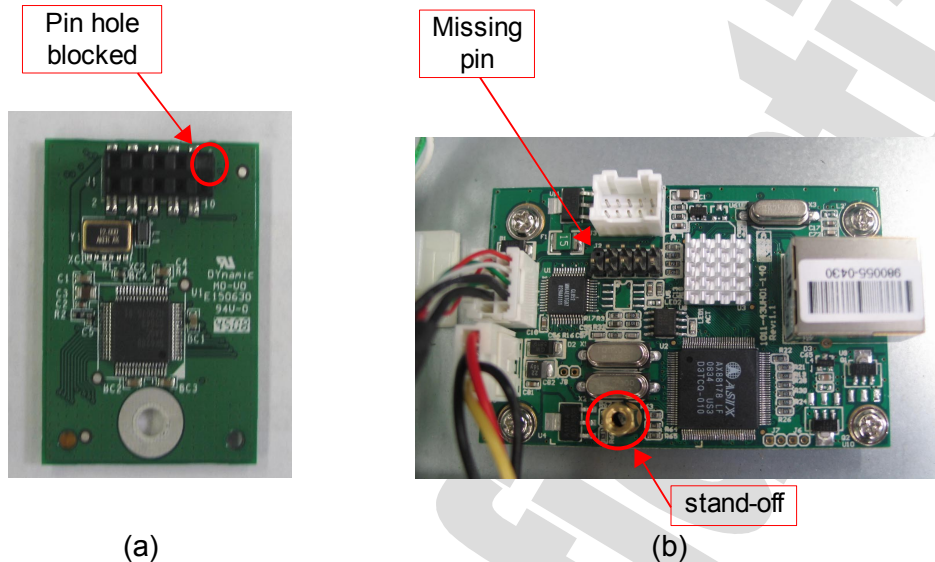


Figure 8: SSD Flash Pin Hole Blocked – Card's Connector Missing Pin

Plug the SSD flash into the card's dedicated connector by respecting the matching between the blocked pin hole and the connector missing pin. Then put back the screw holding the SSD flash to the card's stand-off as presented below:

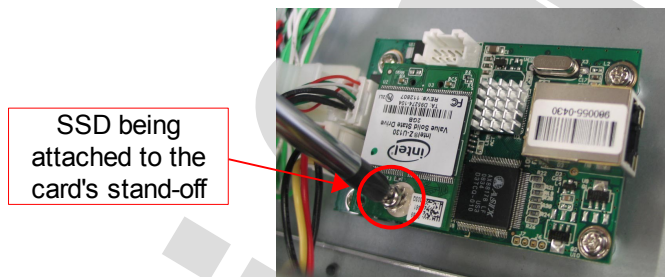


Figure 9: SSD Flash Pin Hole Blocked – Card's Connector Missing Pin

4 Lid Closing

When the previous upgrade steps are completed, the DCP-2000 lid can be closed by sliding it from the rear panel to the front side – Make sure there are no wires caught by the lid.

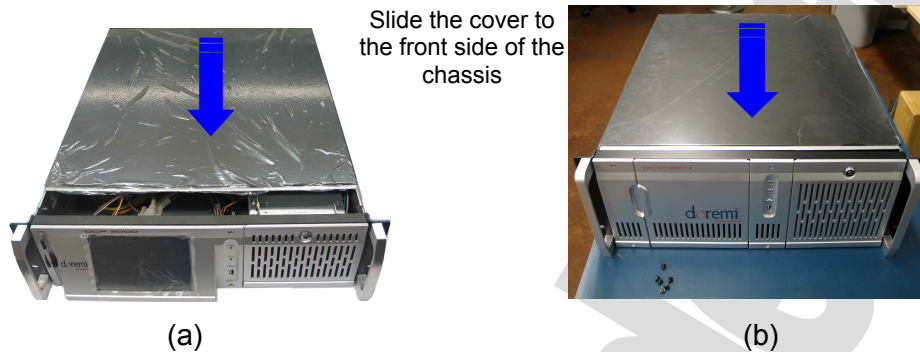


Figure 10: Lid Closing

Tighten the 6 black screws that were removed at the beginning of the procedure, as presented below:

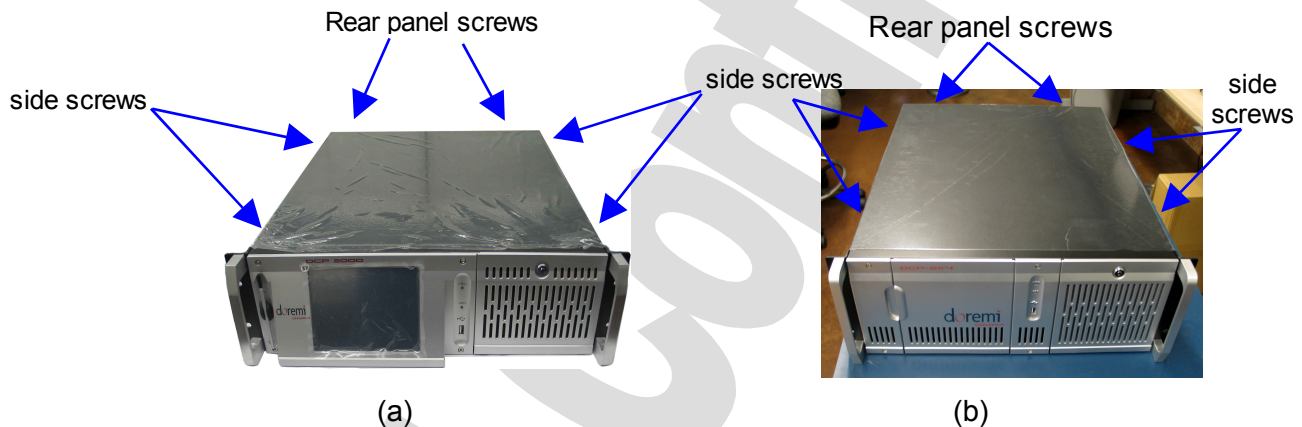


Figure 11: Lid Screws

Then the unit can be put back into its rack – if any – and connected to power.

CAUTION: In case for any reason the HDD were removed from the unit, insert them back **BEFORE** plugging the power cables.

Note: Reconnect all the cables that were disconnected at the beginning of this procedure.

5 BIOS Setup

The BIOS needs now to be checked to be sure it still has the proper boot order. Follow the steps below:

- Start with the unit powered OFF.
- Power ON the unit.
- Press the “Delete” key on the keyboard when the SuperMicro load (splash) screen appears, in order to enter into the BIOS configuration.
- In “Main” tab change the Time and Date to “GMT” time and date according to a GMT clock set to GMT +/- 1 minute.

- Set the following:

Native Mode Operation	[Serial ATA]
SATA RAID Enable	[Disabled]
SATA AHCI Enable	[Enabled]
SATA AHCI Legacy Enable	[Disabled]

- Go in “Advanced” menu, choose “Boot Features” and make sure that the following is set:

Only USB Port #6 cab boot	[Enabled]
Power Loss Control	[Last State]

- Still within the “Advanced” menu, go to “Hardware Monitor” and make sure that the following is set:

Fan Speed Control Mode	[3-pin Server]
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- In the “Boot” menu:

Press the key “3” to load Doremi boot order. You should read:

Boot Priority Order:

1. USB HDD: Intel Value SSD - (USB 1.1)

Troubleshooting tips:



If the USB HDD: Intel Value SSD – (USB 1.1) is not detected in “**Boot Priority Order**”: power the unit off, reconnect flash or check the cable and then power on the unit to check that it is now detected.

- After Boot Priority is correctly set, press **F10** and confirm by pressing <enter>.

When completed, check mark the tag attached to the DCP-2000 at the “BIOS Configuration” position, indicating that this configuration was performed and successful.

The SDD flash replacement procedure is now completed.

Please contact our Technical Support department at 1-818-562-1101 or email support@doremicinema.com if you have any questions or are in need of assistance.

Thank you.

6 Document Revision History

Date	Version	Description
05/29/2009	1.0	First version