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600 Technology Park Drive
Billerica, MA 01821-4130

Installing a CPU Memory Upgrade



NORTEL

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This is to certify that the Nortel Networks 8000 Series chassis and components installed within the chassis were evaluated to the international regulatory standards for electromagnetic compliance (EMC) and safety and were found to have met the requirements for the following international standards:

- EMC - Electromagnetic Emissions – CISPR 22, Class A
- EMC - Electromagnetic Immunity – CISPR 24
- Electrical Safety – IEC 60950, with CB member national deviations

Further, the equipment has been certified as compliant with the national standards as detailed below.

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FCC statement (USA only)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance

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This digital apparatus (8000 Series chassis and installed components) does not exceed the Class A limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (8000 Series chassis) respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.

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EN 55 022 statements

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Warning: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take appropriate measures.

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Attention: Ceci est un produit de Classe A. Dans un environnement domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilisateur de prendre les mesures spécifiques appropriées.

EN 55 024 statement

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EC Declaration of Conformity

This product conforms to the provisions of the R&TTE Directive 1999/5/EC.

VCCI statement (Japan/Nippon only)

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI) for information technology equipment. If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

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National safety statements of compliance

CE marking statement (Europe only)

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Importer:	Nortel Networks de México, S.A. de C.V. Avenida Insurgentes Sur #1605

	Piso 30, Oficina Col. San Jose Insurgentes Deleg-Benito Juarez México D.F. 03900
Tel:	52 5 480 2100
Fax:	52 5 480 2199
Input:	(8003 Chassis only) 100 to 240 VAC, 50 to 60 Hz, 9 A max. per power supply single supply, or + one redundant supply configurations
Input:	(8006 and 8010 Chassis only) 100 to 240 VAC, 50 to 60 Hz, 12 A max. per power supply -48 to -60 VDC, 29 A max. per power supply single supply, two supplies, or two supplies + one redundant supply configurations

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Tel:	52 5 480 2100
Fax:	52 5 480 2199
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Introduction

This document describes how to install a CPU memory upgrade to the Passport 8600 Switches (Release 3.5, and earlier) and the Metro Ethernet Passport 8600 Switches (Release 3.5, and later).

This section includes the following topics:

- [“CPU memory upgrade for Passport 8600 Switches \(Release 3.5, and earlier\)”](#), next
- [“CPU memory upgrade Metro Ethernet Passport 8600 Switches \(Release 3.5, and later\)”](#) on page 8
- [“Memory upgrade kit components”](#) on page 9

CPU memory upgrade for Passport 8600 Switches (Release 3.5, and earlier)

If you are upgrading your Passport 8600 Switch to support release 3.5.0.0, and you are operating your Passport 8600 chassis with the 8190M CPU or the 8690SF CPU, upgrade these CPUs to 256M for proper operation with release 3.5.0.0 software.



Note: Although it is not required with Passport 8600 Switches (Release 3.5, and earlier), Nortel Networks recommends that you upgrade the 8691SF to 256MB to accommodate future capabilities.

Before proceeding with the CPU memory upgrade, check to see that your memory upgrade kit (Order No. DS1411016) contains all of the items you need to perform the CPU memory upgrade (refer to [“Memory upgrade kit components”](#) on page 9).

CPU memory upgrade Metro Ethernet Passport 8600 Switches (Release 3.5, and later)

If you are planning to upgrade an existing Passport 8600 Switch to the new Metro Ethernet Passport 8600 Switch (Release 3.5, or later) and you are operating your system with an 8691SF CPU or the 8690SF CPU, you must upgrade the 8691SF CPU or the 8690SF CPU to 256MB.

The addition of the memory upgrade allows the 8691SF CPU and the 8690SF CPU to properly operate the new Metro Ethernet Passport Release 3.5 (or later) operating system.

Before proceeding with the CPU memory upgrade, check to see that your memory upgrade kit (Order No. DS1411016) contains all of the items you need to perform the CPU memory upgrade (refer to [“Memory upgrade kit components”](#), next).

Memory upgrade kit components

The 256MB memory upgrade kit (Order No. DS1411016) contains the following:

- 256 MB dual inline memory module (DIMM).
- 256 MB label to apply to the faceplate of the CPU module
- 3 CPU part number labels to identify the appropriate label to apply to your CPU module pan (see [Table 1 on page 18](#)).



Note: Nortel Networks only supports the 256 DIMM contained in this memory upgrade kit (Order No. DS1411016). Installing a 256MB DIMM other than the one enclosed in this memory upgrade kit will void any warranty or maintenance contract on the module.

Installing the CPU memory upgrade

This section describes how to install the CPU memory upgrade to your system.



Caution: Electrostatic discharge can damage hardware. Follow the procedures in this section to protect your equipment from damage.

The 8000 Series modules are sensitive to static electricity. Be aware that electrostatic discharge from your clothing or other fixtures around you, even at levels that do not create a spark, can cause damage to the module components.

To prevent static discharge damage:

- Whenever you handle 8000 Series modules, always place each module on a grounded antistatic mat until you are ready to perform the upgrade or leave the module in the sealed ESD bag.
- Always wear a static discharge leash, or an anti-static wrist strap to free yourself of electrostatic charges before you touch a module.

This section includes the following sections:

- [“Removing the Passport CPU module”](#), next
- [“Removing the DIMM from the Passport CPU module”](#) on page 13
- [“Installing the new memory upgrade DIMM”](#) on page 15
- [“Attaching identification labels”](#) on page 18
- [“Replacing the Passport CPU module in the chassis”](#)

Removing the Passport CPU module

Before you begin the Passport CPU memory upgrade, do the following:



IMPORTANT ! Ensure to power down shelf before removing the CPU from the Passport 8600 on Communication Server 1000 networks.

- 1 Remove a single, or a dual Passport CPU Module(s) from the Passport 8000 Series chassis:

- a Single Passport CPU Module



Caution: If your system chassis has a single Passport CPU Module installed, and you remove the CPU, network services will be disrupted. Plan ahead to notify the appropriate personnel about the loss of network services, before performing the upgrade.

- b Dual Passport CPU Modules

If your system chassis has dual (two) Passport CPU Modules, you can remove a single CPU without disrupting network services:

- Remove the Backup CPU and perform the CPU memory upgrade on that unit first, then reinstall the Backup unit.
- Remove the Master CPU (causing the Backup to failover to the Master CPU mode), then perform the CPU memory upgrade on the removed Master.

See the appropriate chassis installation manual for instructions on how to remove a module (refer to the section titled “Installing 8600 Modules,” in that manual, and then follow the instructions for removing a module).

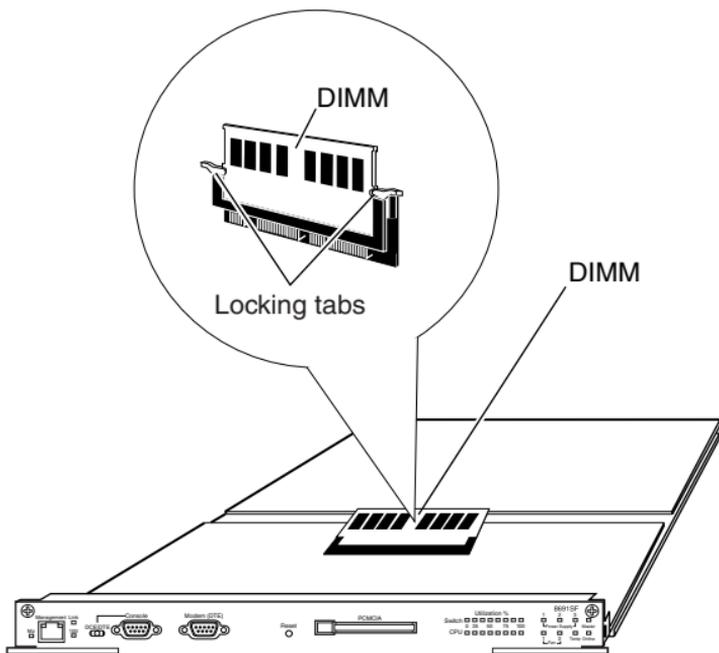
- 2 Proceed to [“Removing the DIMM from the Passport CPU module”](#), next.

Removing the DIMM from the Passport CPU module

To remove the installed DIMM from the Passport CPU module:

- 1 Locate the DIMM on the Passport CPU module (Figure 1).

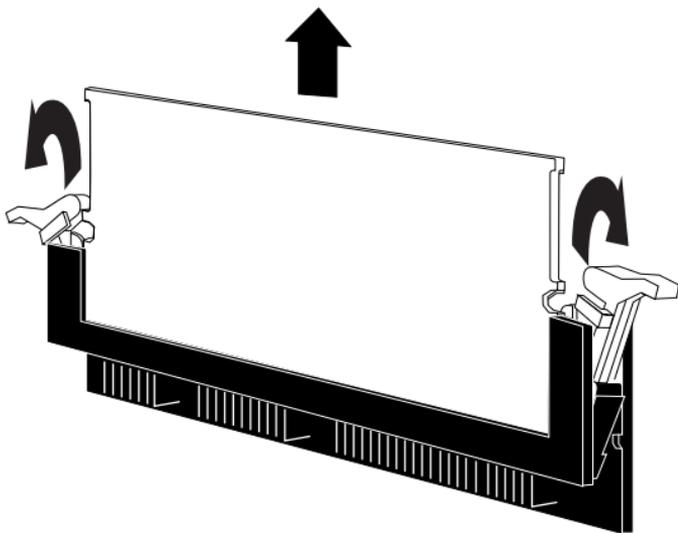
Figure 1 Location of DIMM on the Passport CPU module



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- 2 Pull the locking tabs on each side of the DIMM outward to unseat the DIMM ([Figure 2](#)).

Figure 2 Removing a DIMM from the DIMM Connector



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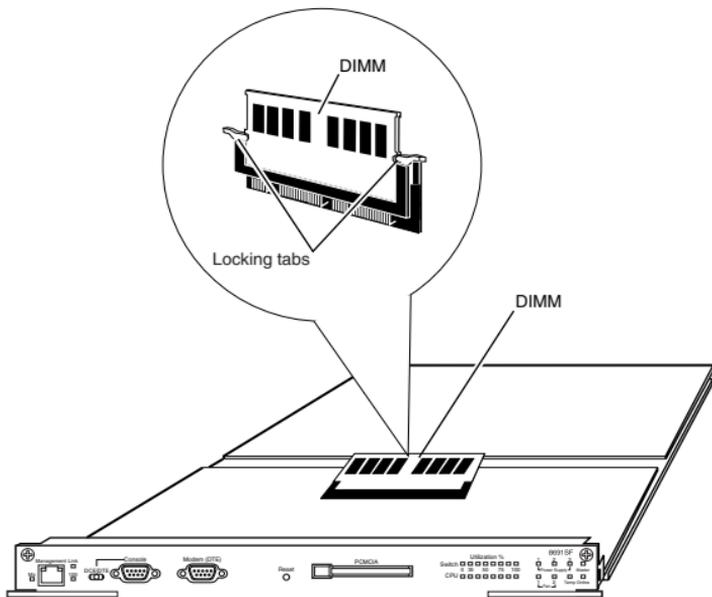
- 3 Grasp the top corners of the DIMM and pull it out and away from the connector.
- 4 Proceed to [“Installing the new memory upgrade DIMM”](#), next.

Installing the new memory upgrade DIMM

After you remove the old DIMM from the appropriate socket (as described in the previous section), install the new 256 MB DIMM as follows:

- 1 Remove the 256 MB DIMM from the upgrade kit.
- 2 Holding the 256 MB DIMM by its top corners (opposite the connector edge), align the notches on the DIMM with the keys in the DIMM socket (Figure 3).

Figure 3 Positioning the DIMM



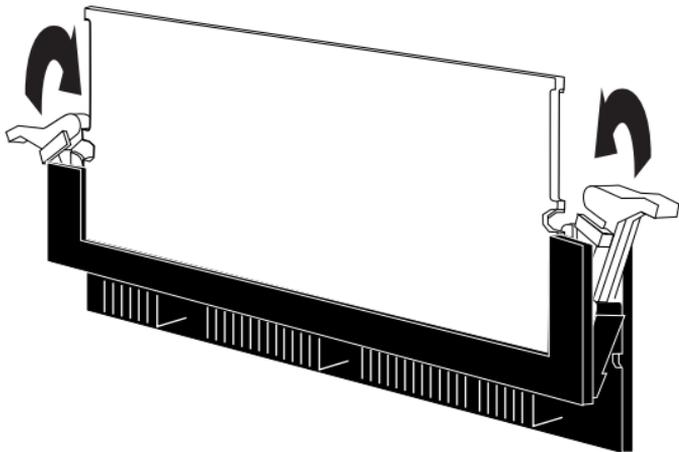
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- 3 Insert the 256 MB DIMM into the Passport CPU connector socket and press firmly to seat the DIMM in the socket.
- 4 Press the locking tabs in, one at a time, to secure the DIMM in its locked position (Figure 4).



Caution: Although it is normal to feel a slight resistance as the DIMM comes to its locked position, be careful not to use too much force. You may damage the DIMM socket by forcing the DIMM into the locked position.

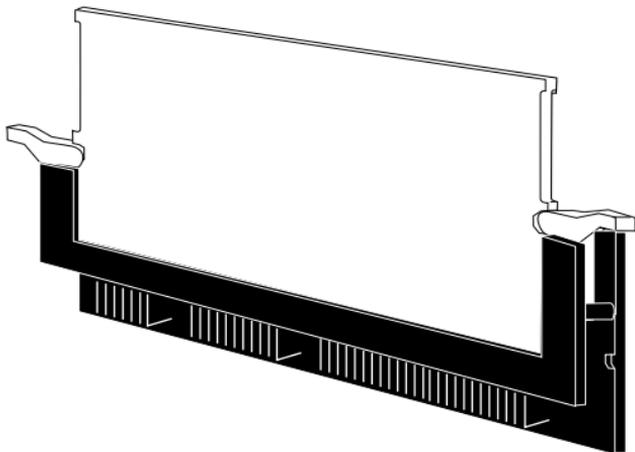
Figure 4 Inserting the DIMM



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5 [Figure 5](#) shows the DIMM in the locked position.

Figure 5 DIMM in locked position



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6 Proceed to [“Attaching identification labels”](#), next.

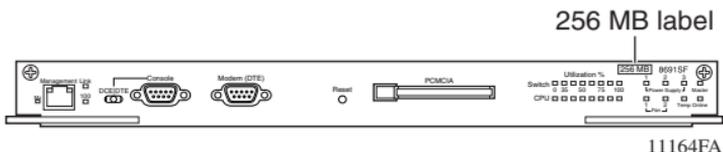
Attaching identification labels

Your memory upgrade kit contains one 256MB label and 3 CPU part number labels, which must be attached to the CPU module faceplate. The labels provide future reference to the memory upgrade on this CPU module

If you need to return your module to Nortel Networks, to ensure prompt servicing please follow these steps to attach the labels:

- 1 Remove the paper backing from the 256MB label.
- 2 Attach the 256 MB label to the CPU module faceplate next to the module model number as shown in [Figure 6](#).

Figure 6 Location of 256 MB label on CPU module faceplate



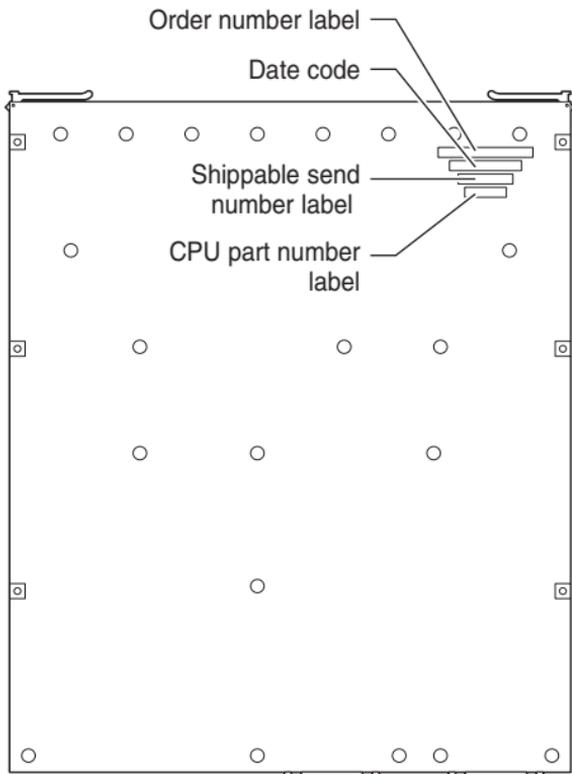
- 3 Locate the appropriate part number label for your CPU ([Table 1](#)).

Table 1 CPU module part number label

CPU Module type	Label part number
8690SF	DS1404089
8691SF	DS1404090
8190SF	DS1404091

- 4 Remove the paper backing from the appropriate CPU part number label.
- 5 Attach the appropriate CPU part number label to the bottom of the CPU module as shown in [Figure 7](#).

Figure 7 CPU part number label (bottom of CPU module)



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- 6 Proceed to “[Replacing the Passport CPU module in the chassis](#)”, next.

Replacing the Passport CPU module in the chassis

To replace the Passport CPU module, refer to *Installing 8600 Modules* and follow the instructions for installing a module.

What to do if you need help

This section describes products, services, and support systems that can be accessed online.

If you purchased a service contract for your Nortel Networks product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller for assistance.

If you purchased a Nortel Networks service program, contact Nortel Networks Technical Support. To obtain contact information online, go to the www.nortel.com/cgi-bin/comments/comments.cgi URL, then click on Technical Support.

From the Technical Support page, you can open a Customer Service Request online or find the telephone number for the nearest Technical Solutions Center.

If you are not connected to the Internet, you can call 1-800-4NORTEL (1-800-466-7835) to learn the telephone number for the nearest Technical Solutions Center.

An Express Routing Code (ERC) is available for many Nortel Networks products and services. When you use an ERC, your call is routed to a technical support person who specializes in supporting that product or service. To locate an ERC for your product or service, go to the <http://www.nortel.com/help/contact/erc/index.html> URL.

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