Installing the ARE 32-MB Memory Upgrade Kit

Part No. 112831 Rev. B
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Bay Networks

Bay Networks

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Electromagnetic Emissions

Meets requirements of:

FCC Part 15, Class A
EN 55 022 (CISPR 22:1985), Class A and Class B
VCCI Class 1 ITE

Canada Requirements Only

Canada CS-03 Rules and Regulations

Note: The Canadian Department of Communications label identifies certified equipment. The certification means that the equipment meets certain telecommunications network protective operations and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent the degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

Canada CS-03 — Règles et règlements

Note: L’étiquette du ministère des Communications du Canada indique que l’appareillage est certifié, c’est-à-dire qu’il respecte certaines exigences de sécurité et de fonctionnement visant les réseaux de télécommunications.Le ministère ne garantit pas que l’appareillage fonctionnera à la satisfaction de l’utilisateur.

Avant d’installer l’appareillage, s’assurer qu’il peut être branché aux installations du service de télécommunications local. L’appareillage doit aussi être raccordé selon des méthodes acceptées. Dans certains cas, le câblage interne du service de télécommunications utilisé pour une ligne individuelle peut être allongé au moyen d’un connecteur certifié (prolongateur téléphonique). Le client doit toutefois prendre note qu’une telle installation n’assure pas un service parfait en tout temps.

Les réparations de l’appareillage certifié devraient être confiées à un service d’entretien canadien désigné par le fournisseur. En cas de réparation ou de modification effectuées par l’utilisateur ou de mauvais fonctionnement de l’appareillage, le service de télécommunications peut demander le débranchment de l’appareillage.

Pour leur propre sécurité, les utilisateurs devraient s’assurer que les mises à la terre des lignes de distribution d’électricité, des lignes téléphoniques et de la tuyauterie métallique interne sont raccordées ensemble. Cette mesure de sécurité est particulièrement importante en milieu rural.

Attention: Les utilisateurs ne doivent pas procéder à ces raccordements eux-mêmes mais doivent plutôt faire appel aux pouvoirs de réglementation en cause ou à un électricien, selon le cas.

Canada Requirements Only *(continued)*

D. O. C. Explanatory Notes: Equipment Attachment Limitations

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Notes explicatives du ministère des Communications: limites visant les accessoires

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Canada Requirements Only *(continued)*

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (Access Feeder Node, Access Link Node, Access Node, Access Stack Node, Backbone Concentrator Node, Backbone Concentrator Node Switch, Backbone Link Node, Backbone Link Node Switch, Concentrator Node, Feeder Node, Link Node) 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.

Réglement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (Access Feeder Node, Access Link Node, Access Node, Access Stack Node, Backbone Concentrator Node, Backbone Concentrator Node Switch, Backbone Link Node, Backbone Link Node Switch, Concentrator Node, Feeder Node, Link Node) respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Réglement sur le brouillage radioélectrique du ministère des Communications du Canada.

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Installing the ARE 32-MB Memory Upgrade Modules

This document describes how to install the 32-MB memory upgrade modules on an ATM Routing Engine (ARE) processor module. The memory upgrade is supported by Router Software Version 9.01 and later. To install the memory upgrade modules, you must

- Remove the existing Virtual Buffer Memory (VBM) module, if one is installed
- Install the new VBM module
- Remove the existing Single Inline Memory Modules (SIMMs)
- Install the new SIMMs

This document describes each of these tasks.

Required Tools

You need the following tools to install the memory upgrade modules:

- Phillips screwdriver
- Antistatic wrist strap, which comes with the upgrade kit

Shipment Contents

Table 1 lists the contents of the 32-MB memory upgrade kit (Order No. AG1311008). If any parts are damaged or missing, contact the Bay Networks Technical Response Center in your area.

Table 1. Shipment Contents

Item	Quantity
Virtual Buffer Memory (VBM) module	1
Single Inline Memory Modules (SIMMs)	2
Phillips screws	4
Antistatic wrist strap	1

How to Get Help

For additional information or advice, contact the Bay Networks Technical Response Center in your area:

United States	1-800-2LAN-WAN
Valbonne, France	(33) 92-966-968
Sydney, Australia	(61) 2-903-5800
Tokyo, Japan	(81) 3-328-005

Removing the VBM Module

If you are upgrading your ARE processor module from 16 MB to 32 MB, you must first remove the existing VBM module, before you can install the new one.

If you are upgrading from 8 MB to 32 MB, there is no VMB module to remove. In this case, proceed to the next section, “Installing the VBM Module.”

To remove the existing VBM module, you must first remove the ARE processor module from the router. Refer to *Installing and Maintaining BN Routers* and use the same instructions as for replacing a FRE®/FRE-2 module.

When you remove the ARE processor module from the router, be sure to place it on a clean, nonconductive surface.

Caution: *Electrostatic discharge can damage hardware. You must wear an antistatic wrist strap whenever you remove, install, or handle electronic components. For additional information on how to use an antistatic wrist strap, refer to* Installing and Maintaining BN Routers.

To remove the VBM module:

1. **Remove the Phillips screws from each of the four mounting holes in the VBM module (Figure 1).**

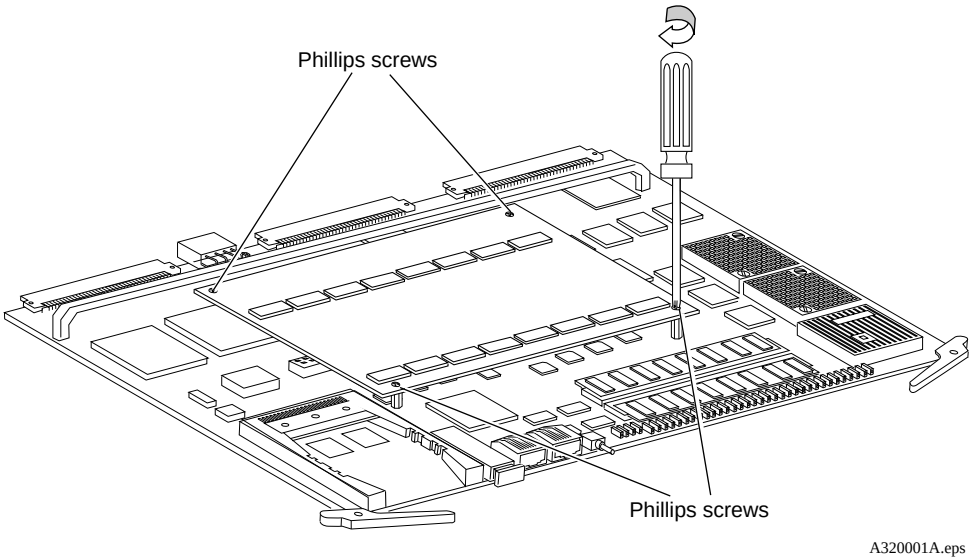

Figure 1. Removing the Mounting Screws

2. **Grasp the VBM module by the edges and lift it to remove it from the ARE processor module.**

   Store the VBM module in an antistatic bag.

3. **Follow the steps in the next section to install the new VBM module.**

Installing the VBM Module

If you have not already done so, remove the ARE processor module from the router. Refer to *Installing and Maintaining BN Routers* and use the same instructions as for replacing a FRE/FRE-2 module.

When you remove the ARE processor module from the router, be sure to place it on a clean, nonconductive surface.

Caution: *Electrostatic discharge can damage hardware. You must wear an antistatic wrist strap whenever you remove, install, or handle electronic components. For additional information on how to use an antistatic wrist strap, refer to* Installing and Maintaining BN Routers.

To install the VBM module:

1. **Align the two connectors on the VBM module with the connectors on the ARE processor module (Figure 2). Also, align the mounting holes on the VBM module with the standoffs on the ARE processor module. Then press the upgrade module into place.**

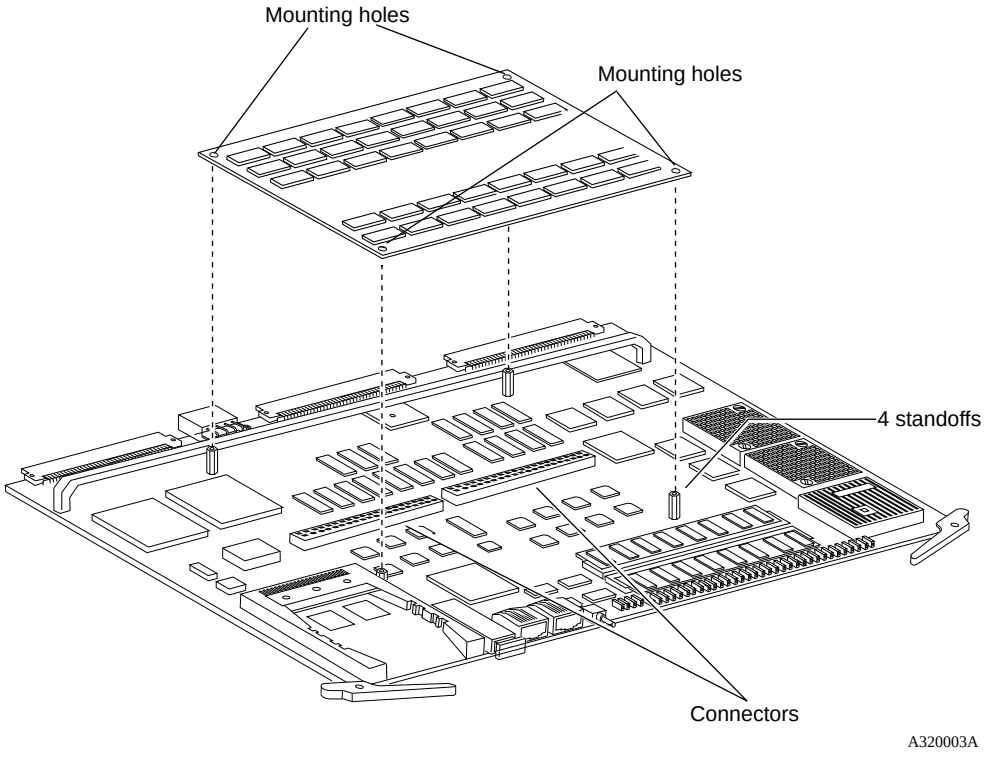

Figure 2. Aligning the VBM Module

2. **In each of the four mounting holes on the VBM module, insert a Phillips screw. Use a Phillips screwdriver to tighten each screw.**
3. **Follow the steps in the next section to remove existing SIMMs so that you can install the memory upgrade SIMMs.**

Removing SIMMs from the ARE Processor Module

1. **Using Figure 3 as a reference, locate SIMM sockets U7 and U14 on your ARE processor module.**

   There will be a SIMM in each of these sockets.

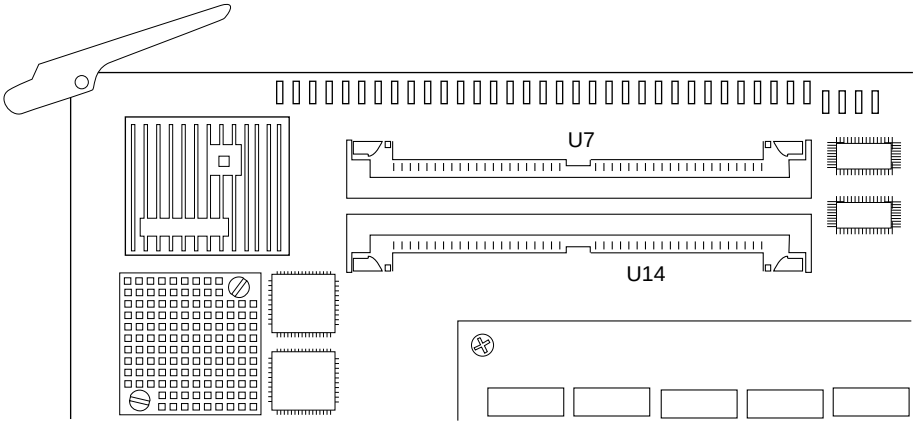

Figure 3. Locating the SIMM Sockets

2. **To remove the SIMMs currently populating sockets U7 and U14:**
   a. **Pull back on the retainers grasping the edges of the SIMM to release it.**
   b. **Gently lift up and pull out the SIMM.**

Installing the Memory Upgrade SIMMs

This procedure assumes you have already removed the SIMMs from the appropriate sockets as described in the previous section.

Your upgrade kit contains two identical SIMMs. To install them:

1. **Grasp one of the SIMM by the edges, and turn it so the notch at the center of the SIMM faces the center of socket U7 (Figure 4).**

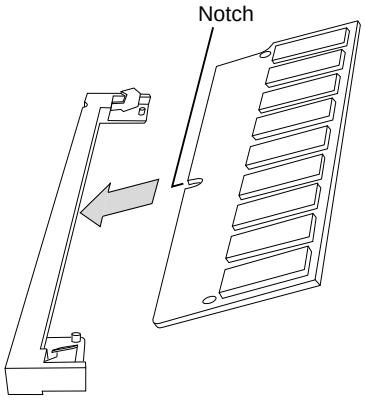

Figure 4. Inserting a SIMM into a Socket

2. **Insert the SIMM into the socket at an angle of about 30 degrees from the vertical.**
3. **Gently push down on the module so that the retainers grasp the SIMM, locking it into place (Figure 5).**

When the SIMM is properly inserted, the two tiny vertical black poles on the SIMM socket should line up with the two holes in the SIMM.

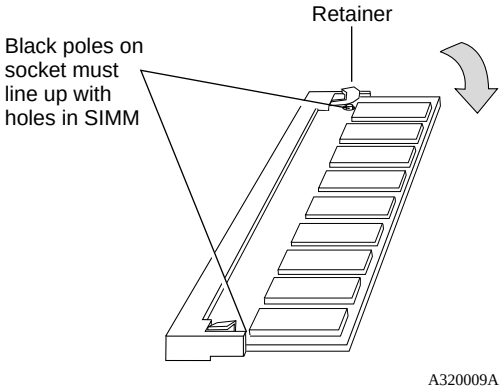

Figure 5. Locking a SIMM in Place

4. **Repeat Steps 1 through 3 to install the other SIMM in socket U14.**
5. **Install the ARE processor module in the BN®.**

   Again, refer to *Installing and Maintaining BN Routers* and use the same instructions as for replacing a FRE/FRE-2 module.