



ATM Multimode Fiber Module Installation Guide

For the CoreBuilder™ 2500 System

Module Description

This module provides a single OC-3 155 Mbps interface for multimode fiber in a high-speed slot on the CoreBuilder 2500 system. You can mix and match two high-speed modules in any configuration, including ATM and FDDI, ATM and 100BASE-T, FDDI and 100BASE-T, and FDDI and FDDI. For information on configuring the ATM module, see the *Administration Console User Guide*. This figure shows the ATM module's front panel.



The ATM module requires revision 8.1.1 or higher of LANplex® 2500 system software. A system software revision supporting this module is available from the 3Com BBS, 3Com's Internet FTP site ([ftp.3Com.com](ftp:3Com.com)), or 3ComForum on CompuServe online service.



If you combine two or more Ethernet 10BASE-FL modules with ATM modules, you must use the 10BASE-FL module, part number 3C201400A. System software release 8.1.1 or higher does not allow the system to boot if you use any of the "older" 10BASE-FL modules (3C201400) with the ATM module.

The new 3C201400A module has a label with "10BASE-FL" on the top left-hand corner of the front panel. (Earlier versions have no label.) You can also check via software through the Administration Console for the new module revision (4.0 or above). For more details, see "ATM Configurations" in this guide or call your local 3Com sales representative.

Status LEDs

The ATM module contains three status LEDs, as shown in this table:

LEDs	Label	Color	Indication
Module Status	Board Error	Yellow	An error has occurred or the module has failed a diagnostic procedure.
Port Status	Active	Green	The associated port is active.
	Error	Yellow	An error condition has occurred with the associated port or the port has been disabled from the Administration Console.

Safety Information

Electrostatic discharge (ESD) can damage components on the module. ESD, which occurs when the module is improperly handled, can cause complete or intermittent module failures. To prevent ESD-related damage:

- Keep the module in its antistatic bag until you are ready to install it.
- When you handle the module, always wear the enclosed ESD wrist strap, ensuring that it makes good skin contact and is grounded appropriately.
- Always handle the module by its edges.
- Do not touch the component's pins, leads, or solder connections.

Before You Install

Before you install your new module, follow the appropriate preinstallation instructions, depending on whether you are installing an ATM module in an empty slot or replacing an old one.

Read before installing in an empty slot

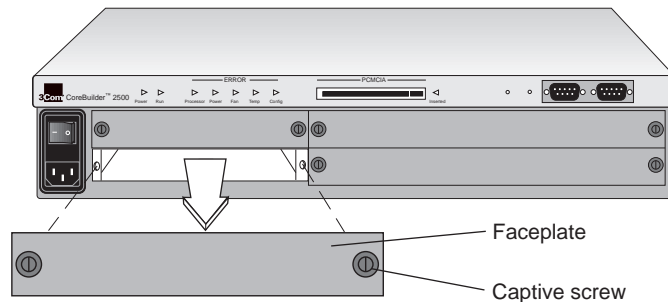
Your CoreBuilder 2500 system arrives with no modules installed and with protective faceplates covering unused slots. Remove the protective faceplate covering the selected slot before you install the module.



CAUTION: When you handle modules, 3Com recommends that you always use the enclosed wrist strap connected to a proper ground. See "Safety Information."

To remove the faceplate:

- 1 Loosen the two captive screws that secure the faceplate to the chassis.
- 2 Pull the faceplate away from the system, as shown in this figure. Save the faceplate for future use.

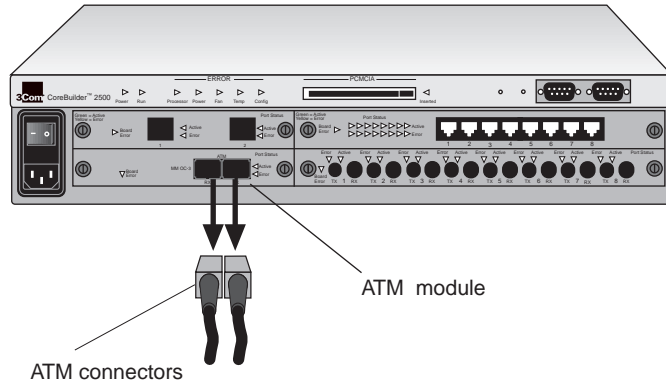


*Read before
replacing a module*

You can replace a module while the system is on. Replacing the module requires that you remove the attached cables from the module's ports before you install the new module.

To replace a module:

- 1 Record the cabling so that you can correctly recable the new module, and then disconnect the cables from the old module's ports, as shown in the next figure.
- 2 Loosen the two captive screws that secure the module to the chassis.
- 3 Carefully pull the module out of the chassis.



The CoreBuilder 2500 system automatically resets itself when you install a module with the system on.



If you physically change the configuration after you define an IP interface, the port designated for that interface may no longer be valid. You may have to redefine the interface. For information on defining an IP interface, see the Administration Console User Guide for your system.

Installing the Module

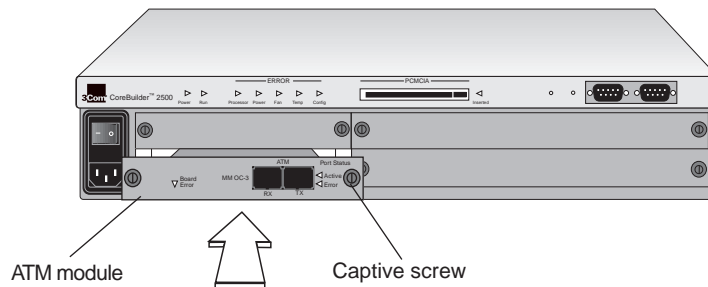
To install the ATM module, follow the appropriate instructions in “Before You Install,” and then take these steps:

- 1 Be sure that you are properly grounded. See “Safety Information.”
- 2 Remove the module from its antistatic bag. Save the bag for future storage.



WARNING: If the system is turned on when you are replacing the module, do not insert any metal objects into the open slot (for example, a screwdriver or hand with jewelry). Doing so could cause burns or other bodily harm.

- 3 Carefully place the module between the guides of the selected slot and slide the module into the chassis, as shown in this figure.



- 4 To seat the module, firmly push it inward to engage the connectors for the module and backplane. You will feel a slight resistance as the connectors engage.



CAUTION: If the resistance seems too great, the module and backplane connectors might not be aligned properly. Forcing the module inward could damage the board or backplane connectors. If necessary, remove and reinsert the module, ensuring that the connectors are properly aligned.

- 5 Tighten the captive screws to secure the module in the chassis.

Module Diagnostics

Module diagnostic software runs when you turn the system on or when you replace a module with the system on. Watch for this LED activity:

- During diagnostics, the module's Port Status **Error** LED lights yellow.
- When diagnostics are successfully completed, the Port Status **Active** LED lights green.
- If the port status **Error** LED remains yellow, the port is not operating.
- If the module's **Board Error** LED lights yellow, the module has failed a diagnostic test.

To troubleshoot module failures, see Chapter 7: *Troubleshooting the System* in your *Getting Started Guide*.

ATM Configurations

Certain restrictions apply to configurations that include ATM modules and older CoreBuilder 2500 Ethernet 10BASE-FL modules (3C201400). The older version of these Ethernet 10BASE-FL modules can, in some ATM configurations, cause the CoreBuilder system to draw excessive power, which results in system failure.



All CoreBuilder 2500 systems that operate with a single (old) Ethernet 10BASE-FL module and an ATM module are at no risk of exceeding power limitations.

Error Conditions

If your CoreBuilder chassis contains more than one older Ethernet 10BASE-FL module and either the MMF or the SMF ATM module, certain combinations of modules draw too much current and exceed the system limit of 14 amps. The next section describes the unsupported configurations in detail.

Revision 8.1.1 and greater of LANplex 2500 and CoreBuilder 2500 software detect unsupported configurations during system power-up.

- If the software detects one of these configurations, it reports a critical error condition and does not bring the system online.
- In addition, all LEDs on the system light and the configuration LED flashes to indicate the critical error.

- The following error message appears on the Administration Console screen:

```
FATAL Error .....  
Option Module Configuration Not Supported.  
Illegal Combination of Adapter Cards  
SYSTEM HALTED!
```

An error condition can also occur if a new, low-power Ethernet 10BASE-FL module is present and is not functioning properly. In this case, a message similar to the following one appears on the Administration Console:

```
An Overcurrent Condition Has Occurred For The Adapter Card In  
Slot - 3 or 4  
Please Remove This Adapter Card and Contact 3Com Technical  
Support.  
SYSTEM HALTED!
```

Configuration Limitations

Table 1 indicates which CoreBuilder 2500 system configurations are supported based on the electrical current that they draw at power-up.

Some configurations depend on the motherboard chassis revision level. Verify your system's revision level:

- Identify Revision 8 motherboards by the 3C250100A/3C250200A label on the lower-right corner of the front panel.
- Identify Revision 6 and 7 motherboards by entering the **system display** command at the top level of the Administration Console.

Table 1 Supported Configurations with ATM and Two 10BASE-FL Modules

CoreBuilder 2500 Configuration	With Rev. 8.x Motherboards	With Rev. 7.x Motherboards	With Rev. 6.x Motherboards
<ul style="list-style-type: none"> ■ 2 old 10BASE-FL modules (3C201400) ■ 1 FDDI (MMF or SMF) module ■ 1 ATM (MMF or SMF) module 	<p>NOT SUPPORTED</p> <p>Draws 15 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>	<p>NOT SUPPORTED</p> <p>Draws 14.3 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>	<p>NOT SUPPORTED</p> <p>Draws 14.45 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>
<ul style="list-style-type: none"> ■ 2 old 10BASE-FL modules (3C201400) ■ 1 TP-DDI module ■ 1 ATM (MMF or SMF) module 	<p>NOT SUPPORTED</p> <p>Draws 15.2 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>	<p>NOT SUPPORTED</p> <p>Draws 14.5 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>	<p>NOT SUPPORTED</p> <p>Draws 14.65 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>
<ul style="list-style-type: none"> ■ 2 old 10BASE-FL modules (3C201400) ■ 1 100BASE-TX module ■ 1 ATM (MMF or SMF) module 	<p>NOT SUPPORTED</p> <p>Draws 14.6 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>	<p>SUPPORTED CONFIGURATION</p>	<p>NOT SUPPORTED</p> <p>Draws 14.05 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>
<ul style="list-style-type: none"> ■ 2 old 10BASE-FL modules (3C201400) ■ 1 100BASE-FX module ■ 1 ATM (MMF or SMF) module 	<p>NOT SUPPORTED</p> <p>Draws 14.4 amps</p> <p>Requires 3C201400A for the 10BASE-FLs</p>	<p>SUPPORTED CONFIGURATION</p>	<p>SUPPORTED CONFIGURATION</p>

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The duration of the warranty for the ATM Multimode Fiber Module for the CoreBuilder™ 2500 system is 1 year.

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Network adapters	Lifetime
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Spare parts and spares kits	90 days

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