

AGS+ Spares

This chapter provides product numbers for AGS+ spares. These spares offer you the ability to enhance the capabilities of installed systems.

The information in this chapter is organized into the following sections:

- Card Slot Assignments
- Card and Port Limits
- Controller Cards
- ciscoBus Interface Cards
- Multibus Interface Cards
- Appliques
 - Console
 - Ethernet
 - FDDI
 - Token Ring
 - HSSI
 - Serial
- Connector Plates
- Connector Plate Limits
- Cables
- Power Cords
- Software
- Recommended Microcode

Note Documentation for the AGS+ is available in two forms: on a CD-ROM called Cisco Connection Documentation, Enterprise Series (formerly called UniverCD) and printed books. You can request a free copy of the documentation CD when you place an order and have the option of subscribing to a CD update service. A user guide ships with each switch.

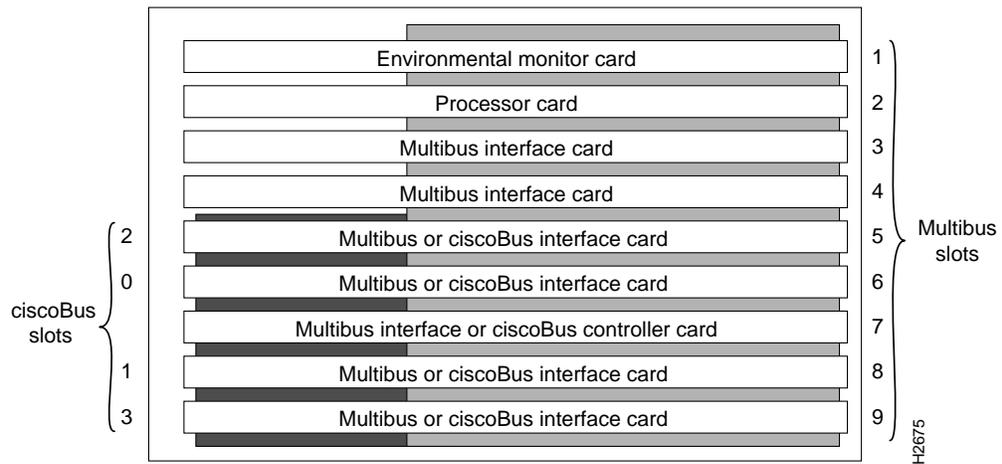
You can also access Cisco technical documentation on the World Wide Web URL <http://www.cisco.com>. For more information, see the chapter “Documentation” at the end of the catalog.

Card Slot Assignments

The AGS+ has nine slots, five of which are part of the ciscoBus (see Figure 161).

The ciscoBus controller card (CSC-CCTL2) is required only when an FDDI, Ethernet (C2MEC), HSSI, or four-port Token Ring card is installed. If a ciscoBus controller is not used, up to seven slots can be used for Ethernet, Ethernet/serial, Token Ring, and serial interface cards.

Figure 161 AGS+ Card Slot Assignments



Card and Port Limits

Table 341 lists the AGS+ card and port limits.

Table 341 AGS+ Card and Port Limits

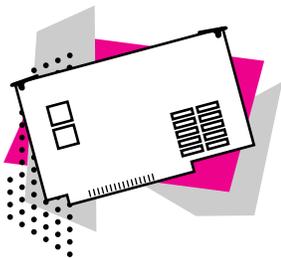
Card Type	Interface Type	Maximum Number of Cards	Maximum Number of Ports
Ethernet	MEC (ciscoBus) cards	4	24
	Multibus cards	7	14
Token Ring	CTR (ciscoBus) cards	4	16
FDDI	–	4	4
HSSI	–	4	4
Serial	EIA/TIA-232	7	28
	EIA/TIA-449	7	16
	V.35	7	28
	X.21	7	28
	G.703	7	28

Controller Cards

The ciscoBus controller card (CSC-CCTL2) is required only when a high-speed Ethernet (MEC), four-port Token Ring (CTR), FDDI, or HSSI card is installed.

The CCTL2 controller card has the following features:

- Required for operation of the ciscoBus
- Required for operation of four-port Token Ring (CSC-C2CTR) or FDDI with translational bridging (CSC-C2FCIT) interface cards
- Interconnects the Multibus and ciscoBus
- 16-million instructions per second (mips) CPU provides high-speed autonomous packet switching
- Onboard CPU performs packet-switching functions across the ciscoBus
- Available as a spare (CSC-CCTL2=) or with the system order (CSC-CCTL2)
- Available as an upgrade (CSC-CCTL2U)



ciscoBus Interface Cards

The ciscoBus can support the following card types:

- Ethernet

Ethernet is represented in the card name by *MEC*. MEC cards provide multiple Ethernet ports. The number of ports supported per card varies as indicated in the card name. For example, the CSC-C2MEC2 is an Ethernet card that provides two ports.

- Token Ring

The Token Ring card (CSC-C2CTR) supports four Token Ring ports (requires two APP-LTR2 appliques to support all four ports).

- FDDI

The FDDI card (CSC-C2FCIT) provides one FDDI port with translational bridging capability.

HSSI

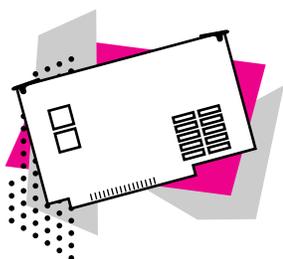
HSSI is represented in the card name by *HSCI*. HSCI cards provide one high-speed serial port.

Table 342 lists the AGS+ ciscoBus interface cards. ciscoBus cards require the CSC-CCTL2 controller card.

Table 342 AGS+ ciscoBus Interface Cards

Cards	Ports
Ethernet¹	
CSC-C2MEC2	2
CSC-C2MEC4	4
CSC-C2MEC6	6
Token Ring	
CSC-C2CTR	4 ²
FDDI	
CSC-C2FCIT	1
HSSI	
CSC-C2HSCI	1

1. When you order any Ethernet card, appropriate Ethernet attachment unit interface (AUI) appliques are included at no additional charge. 10BaseT appliques are optionally available for an additional charge.
2. Provides two ports with one APP-LTR2 applique and four ports with two APP-LTR2 appliques.



Multibus Interface Cards

The Multibus can support the following card types:

- Ethernet

Ethernet is represented in the card name by *E*. The number of ports supported per card varies and is also indicated in the card name. For example, the CSC-2E is an Ethernet card that provides two ports.

- Ethernet/synchronous serial

Many cards support several media. For example, the CSC-2E2T supports two Ethernet and two high-speed serial ports.

- Synchronous serial

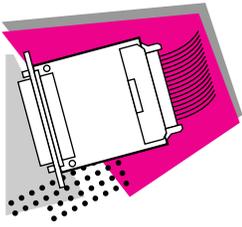
A low-speed (up to 64 kbps) serial card is indicated by *S*. A high-speed (up to 4 Mbps) serial card is indicated by *T*.

The number of ports supported per card varies and is also indicated in the card name. For example, the CSC-1S is a serial card that provides one low-speed port.

Table 343 AGS+ Multibus Cards

Cards	Ports
Ethernet¹	
CSC-1E	1
CSC-2E	2
Ethernet/synchronous serial	
CSC-1E1S	1 Ethernet, 1 low-speed serial
CSC-1E1T	1 Ethernet, 1 high-speed serial
CSC-2E2S	2 Ethernet, 2 low-speed serial
CSC-2E2T	2 Ethernet, 2 high-speed serial
Synchronous serial	
CSC-1S	1 low-speed
CSC-3S	3 full/half duplex serial interfaces(<64 kbps)
CSC-4S	4 low-speed
CSC-1T	1 high-speed
CSC-2T	2 high-speed
CSC-4T	4 high-speed

1. When you order either of these cards, an Ethernet AUI applique is included at no additional charge.



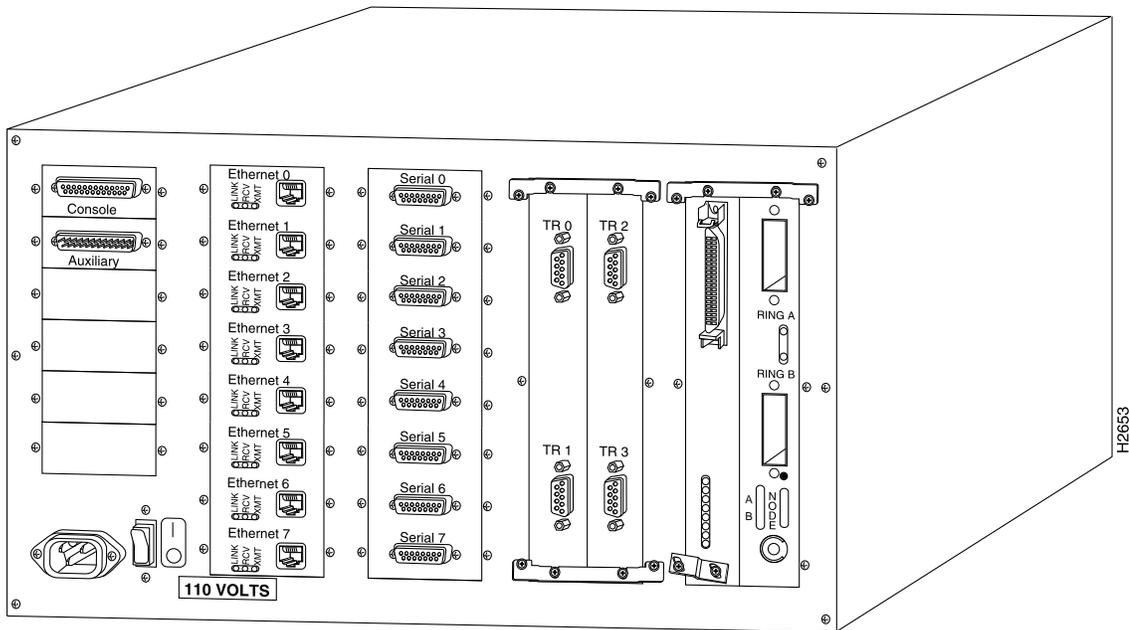
Appliques

The AGS+ provides one console connection, five individual applique plates, and four large applique plates as shown in Figure 162. An applique consists of a network connector, a ribbon cable that connects the media interface card to network connector, and a plate.

The following types of appliques are supported:

- Console
- Ethernet
- Token Ring
- FDDI
- HSSI
- Serial

Figure 162 AGS+ Rear Panel



The AGS+ appliques are listed in Table 344. The following nomenclature applies:

- Appliques that can be ordered as spares only include an equal sign (=) at the end of the product number. Appliques that can be ordered with the system or as a spare do not include an equal sign at the end of the product number.
- Appliques that begin with *APP-L* are large connector plate appliques. *APP-J* indicates an individual applique.
- The number at the end of the applique product number indicates how many connections the applique provides (the only exception being the auxiliary console port applique [APP-JC2], which provides only one port). For example, the APP-LE2 provides two Ethernet AUI connections.

Table 344 AGS+ Appliques

Media	Appliques
Console	
Local	APP-JC1
Auxiliary	APP-JC2
Ethernet	
AUI ¹ 10BaseT	APP-JE1=, APP-LE2=, APP-LE4=, APP-LE6=, APP-LE8= APP-JT1, APP-LT2, APP-LT4, APP-LT6, APP-LT8
Token Ring	
CSC-C2CTR	APP-LTR2
FDDI	
	APP-LMM ² , APP-LMS ³ , APP-LSM ⁴ , APP-LSS ⁵
HSSI	
	APP-LHS
Serial	
EIA/TIA-232	DTE: APP-JR1, APP-LR2, APP-LR4, APP-LR6, APP-LR8 DCE: APP-JS1, APP-LS2, APP-LS4, APP-LS6, or APP-LS8
EIA/TIA-232 SDLC	APP-JNZ1, APP-LNZ2, APP-LNZ4, APP-LNZ6, APP-LNZ8
V.35 SDLC	APP-JVNZ1, APP-LVNZ4, APP-LVNZ6, APP-LVNZ8
EIA/TIA-449	DTE: APP-LF1, APP-LF2, APP-LF4 DCE: APP-LG1, APP-LG2, APP-LG4
V.35	APP-JX1, APP-LX2, APP-LX4, APP-LX6, APP-LX8
X.21	APP-JI1, APP-LI2, APP-LI4, APP-LI6, APP-LI8
G.703	APP-JG71, APP-LG72, APP-LG74, APP-LG76, APP-LG78

1. Ethernet AUI appliques are available at no additional charge when ordered with an Ethernet interface card.

2. Multimode to multimode.

3. Multimode to single-mode.

4. Single-mode to multimode.

5. Single-mode to single-mode.

Console

The AGS+ provides a choice of two appliques for its console port. The APP-JC1 provides a local console connection, while the APP-JC2 provides an auxiliary console connection. An LED with cable (APP-LEDM=) is available.

Ethernet

There are two types of Ethernet appliques, AUI and 10BaseT.

AUI

AUI appliques have the following characteristics:

- Require an external transceiver.
- Include standard AUI 15-pin connectors with slide latches.
- Jackscrews are available as an option for the slide latches.
- With appropriate transceivers, support different types of cable media, including thick Ethernet (10Base5), thin Ethernet (10Base2), twisted-pair (10BaseT), and fiber (FOIRL).
- If no 10BaseT appliques are purchased, one AUI applique will be provided at no additional charge for every port ordered on Ethernet interface cards.

10BaseT

10BaseT appliques have built-in transceivers and RJ-45 connectors.

Token Ring

The AGS+ supports the CSC-C2CTR card appliques. These appliques have the following characteristics:

- Standard female DB-9 (PC-type) Token Ring attachment
- Requires a Token Ring adapter cable

The CSC-C2CTR does not include appliques, which must be purchased separately.

FDDI

FDDI appliques support a single Class A FDDI dual attachment station (DAS) interface that can be connected as a DAS, a single attachment station (SAS), or a dual homing device.

HSSI

The HSSI applique supports one high-speed serial connection at speeds ranging from 2 to 52 Mbps.

Serial

The AGS+ supports six types of synchronous serial appliques:

- EIA/TIA-232
- EIA/TIA-232 Synchronous Data Link Control (SDLC)
- EIA/TIA-449
- V.35 (standard and SDLC)
- X.21
- G.703 (network certified for United Kingdom only)

EIA/TIA-232 DTE and DCE

EIA/TIA-232 appliques have the following characteristics:

- DTE connections have a male 25-pin D-connector.
- DCE connections have a female 25-pin D-connector.
- Used for data rates up to 64 kbps.
- Subset of the full EIA/TIA-232 signaling set (sufficient to control most modems and hardware flow-control schemes).
- Typically used to connect routers to the basic telephone service, which refers to 1200-, 2400-, 9600-, and 19200-bps modem-type telephone connections.
- Six signals per line: Group, Transmit Data (output), Receive Data (input), Ring Indicate (input), Data Terminal Ready (output), and Clear To Send (input).

EIA/TIA-232 SDLC

EIA/TIA-232 SDLC appliques have the following characteristics:

- SDLC signaling
- Female 25-pin, D-type connector (DB-25 female)

The default setting is DCE and NRZI. A hardware jumper change is required for NRZ or DTE operation.

EIA/TIA-449 DTE and DCE

EIA/TIA-449 appliques have the following characteristics:

- 37-pin, D-type connector (DB-37)
- 2-Mbps maximum data rate
- 6V signal maximum
- 200-foot (61-meter) maximum cable length
- Can be used for high-speed T1-type servers (up to 1.544 Mbps)

V.35

V.35 appliques have the following characteristics:

- Dual-mode applique supports both DTE and DCE. (The mode is determined by the cable connected to the applique.)
- 4-Mbps maximum data rate.
- 26-pin, D-type connector (dual-mode only).
- Used for connecting 56- and 64-kbps direct-dial services (DDS), T1/E1, and DS0 services.
- T1/E1 service supports transmission rates of 1.544 Mbps in the United States and Asian Pacific countries, and 2.048 Mbps in Europe and other parts of the world.
- Requires a 10-foot (3-meter) cable with one connector going to a high-density applique and the other providing the industry-standard HD-35 connection.

X.21

X.21 appliques have the following characteristics:

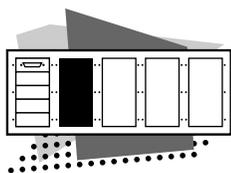
- 4-Mbps maximum data rate
- 200-foot (61-meter) maximum cable length
- 15-pin, D-type connector (DB-15)

G.703

G.703 appliques have the following characteristics:

- 2-Mbps serial channels
- Two BNC connectors (TX and RX)
- DTE only

Note The G.703 applique is certified for network homologation in the United Kingdom.



Connector Plates

Ethernet, Token Ring, EIA/TIA-232, EIA/TIA-449, and V.35 connector plates are available as spares. The following tables list product numbers.

Table 345 AGS+ Connector Plates

Plate Type	Cutouts for Connectors	Product Number
Ethernet	1	PLT-IE1=
	2	PLT-LE2=
	4	PLT-LE4=
	6	PLT-LE6=
	8	PLT-LE8=
Token Ring	2	PLT-LB2=
	4	PLT-LB4=

Table 346 AGS+ EIA/TIA-232 Serial Connector Plates

Cutouts for Connectors	Product Number
1	PLT-IR1=
2	PLT-LR2=
4	PLT-LR4=
6	PLT-LR6=
8	PLT-LR8=

Table 347 AGS+ EIA/TIA-449 Serial Connector Plates

Cutouts for Connectors	Product Number
1	PLT-LF1=
2	PLT-LF2=
4	PLT-LF4=

Table 348 AGS+ V.35 Connector Plates

Cutouts for Connectors	Product Number
1	PLT-IW1=
1	PLT-LV1= ¹
2	PLT-LV2= ¹
4	PLT-LV4= ¹
2	PLT-LW2=
4	PLT-LW4=
6	PLT-LW6=
8	PLT-LW8=

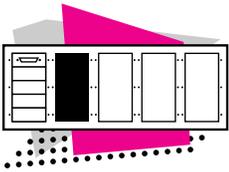
1. For old-style V.35 connection.

Connector Plate Limits

The AGS+ connector plate applique limits are listed in Table 349.

Table 349 AGS+ Connector Plate Applique Limits

Applique	Individual	Large Plate 1	Large Plate 2	Large Plate 3	Large Plate 4
Console	1 or 2	–	–	–	–
Ethernet/10BaseT	5	8	8	8	8
Token Ring	5	4	4	4	4
FDDI	–	–	–	2	2
HSSI	–	–	–	2	2
EIA/TIA-232	4	6	8	8	8
EIA/TIA-449	–	2	4	4	4
V.35 (high-density)	4	6	8	8	8
X.21	4	6	8	8	8
G.703	4	6	8	8	8
UltraNet	–	–	–	2	2



Cables

For cable part numbers and illustrations, refer to the chapter “Cables and Transceivers.”

Power Cords

For power cords, refer to the chapter “Power Cords.”

Software

Cisco IOS software for the AGS+ is included in the basic price of the system. For example, the Cisco IOS Release 10.0 software product (for example, SW-GA-10.0.8) includes a feature license for standard software (for example, FR-SA-10.0.X). Specific protocols and features are provided through software feature license agreements, which include bridging and packet switching. For example, Frame Relay is covered by a packet-switching feature license. For APPN, you must purchase Enterprise with APPN.

Table 350 provides spare software options for the AGS+, and Table 351 describes software features.

Note Cisco Internetworking Operating System (Cisco IOS) Release 11.0 is the last software release offered for the AGS+.

Table 350 AGS+ Software Product Numbers

Description	Product Numbers Cisco IOS Release 11.0	Product Numbers Cisco IOS Release 10.3	Product Numbers Cisco IOS Release 10.0
Router software	SW-GA-11.0.x=	SW-GA-10.3.x=	SW-GA-10.0.x=
Router software with APPN	SW-GAN-11.0.1	–	–
Bridging	FR-BA-11.0.X	FR-BA-10.3.X	FR-BA-10.0.X
Packet switching ¹	FR-XA-11.0.X	FR-XA-10.3.X	FR-XA-10.0.X
Standard feature	FR-SA-11.0.x=	FR-SA-10.3.x=	FR-SA-10.0.X=
APPN feature	FR-NA-11.0.1	–	–

1. Includes the DDN X.25 option for use in the Defense Data Network (DDN) environment, which is included in the packet-switching option beginning with Software Release 9.1.

Table 351 Cisco IOS Release 11.0 Software Features for the AGS+

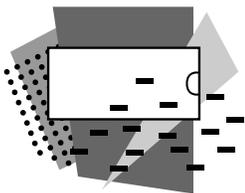
Category	Protocols/Features	Feature License
LAN support	IP, LAN extension host software, Novell IPX, AppleTalk I and II, DECnet IV and V, OSI, XNS, Banyan VINES, Apollo Domain	Standard
	Transparent and translational bridging, multiring	Bridging option
WAN services	HDLC, PPP ¹ , ISDN ² , IPXWAN 2.0	Standard
	X.25, Frame Relay, SMDS	Packet-switching option
WAN optimization	Header and link compression, dial-on-demand, dial backup, bandwidth-on-demand, custom and priority queuing, access lists, access security, snapshot routing	Standard
IP routing	RIP, IGRP, Enhanced IGRP, OSPF, BGP, EGP, ES-IS, IS-IS, PIM, NHRP	Standard
Other routing	IPX RIP, NLSP, RTMP, AURP, SRTP	Standard
IBM support	SRB/RSRB, SRT, DLSw+ ³ , SNA and NetBIOS WAN optimization via local acknowledgment, caching and filtering, SDLC Integration, SDLC-to-LAN conversion (SDLLC), SDLC transport (STUN), TG/COS, Downstream PU concentration (DSPU)	Bridging
	QLLC and Frame Relay SNA support (RFC 1490)	Bridging and packet-switching options
	APPN ⁴	APPN
Management	AutoInstall, SNMP, Telnet	Standard

1. PPP includes support for LAN protocols, PAP and CHAP authentication, and PPP compression.

2. ISDN support includes calling line identification (ANI), X.25 over the B channel, ISDN subaddressing, and applicable WAN optimization features.

3. DLSw+ was first supported in Cisco IOS Release 10.3(2).

4. APPN was introduced with Cisco IOS Release 11.0.



Recommended Microcode

Microcode is card-specific firmware that can be replaced with programmable read-only memory. As new software and hardware features are introduced, the microcode for affected cards must be updated in order to implement new features or to operate with new software.

Recommended microcode levels are dependent on the card and software release level. The most current Microcode Release Note is available on the Cisco Connection Documentation, Enterprise Series CD and CCO. The Microcode Release Note contains the following information:

- Newest microcode versions for each card
- Microcode compatibility
- Minimum required versions for early software releases
- Minimum microcode for Cisco IOS Software Releases 10.0 and later



AGS+ Worksheet

This section helps you enhance an existing AGS+ by adding interface cards. Refer to the “AGS+ Product Considerations” and then fill out the AGS+ Worksheet to determine when to upgrade microcode, how to verify power requirements, and how to optimize card and connector capacity. Note that the section “AGS+ Product Considerations” contains some products that are no longer offered for sale.

To determine the AGS+ components you need, complete these steps:

- 1 Fill in your current chassis configuration (including cards, appliques, power, software release, and microcode levels) in the “Current AGS+ System” section of the worksheet.
- 2 Enter the new products (cards, software, and appliques) you are ordering in the “Upgraded AGS+ System” section of the worksheet.
- 3 Use the information in the section “AGS+ Product Considerations” for power requirements. Enter any power changes in the “Upgraded AGS+ System” section of the worksheet.
- 4 Use the information in the *Microcode Release Note* (available on the Cisco Connection Documentation, Enterprise Series CD) to determine correct microcode versions. Enter any microcode changes in the “Upgraded AGS+ System” section of the worksheet.
- 5 Fill in the type and number of appliques for the current and upgraded AGS+ in the “Back Panel” sections of the worksheet. Verify that the number of port connections you need is possible given the type of appliques and connector plate space available.

In the AGS+ sample worksheet, a customer made the following upgrades:

- Upgraded to Cisco IOS Release 10.0
- Added a CSC-C2CTR Token Ring card
- Added the APP-LTR2 applique for the Token Ring card
- Upgraded from a CSC-FCI card to a CSC-C2FCIT card

After checking the information in the section “AGS+ Product Considerations,” the following requirements were noted in the “Upgraded AGS+ System” section of the sample worksheet:

- The CSC-C2CTR Token Ring card requires a new controller, the CSC-CCTL2.
- Microcode changes are noted:
 - The CSC-C2FCIT card uses MC-C2FCIT-V10.3 microcode version.
 - The CSC-MEC card requires an MC-MEC5.1-V10.3 microcode upgrade.
- Power changes are included:
 - The new controller, CSC-CCTL2, requires 34W.
 - The new CSC-C2CTR card requires 30W.
 - The new CSC-C2FCIT card requires 36W.

The APP-LTR2 is added with a card cage as shown in the “Back Panel” section of the sample worksheet. The APP-LTR2 could also be placed in the same card cage as the APP-LMM.

AGS+ Product Considerations

Power Budget¹

Card	Power (Watts)
CSC/3	31
CSC/4	35
CSC-ENVM	10
CSC-MC+	3
CSC-MCI	28
CSC-SCI	20
CSC-R16M	34
CSC-1R or CSC-2R	30
CSC-CCTL	29
CSC-CCTL2	34
CSCFCI (CSC-C2FCI)	50
CSC-C2FCIT	36
CSC-MEC (CSC-C2MEC)	22
CSC-HSCI (CSC-C2HSCI)	48
CSC-C2CTR with 1 applique (2 ports)	30
CSC-C2CTR with 2 appliques (4 ports)	42
External Ethernet transceiver	4

¹ For AGS+ systems shipped before 10/1/91 (with a 5A circuit breaker), the power limitation is 260W. For systems shipped after 10/1/91 (with a 7.5A circuit breaker), it is 300W.

Microcode Compatibility

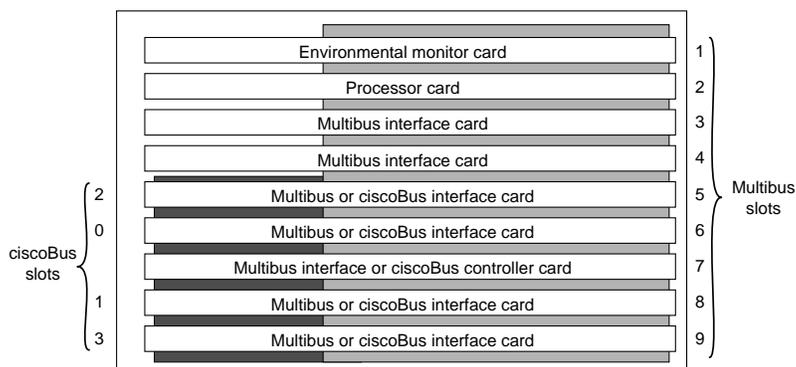
Specific interface cards are compatible with either the CSC-CCTL or CSC-CCTL2 controller card as shown below.

CSC-CCTL	CSC-CCTL2	Description
CSC-FCI	CSC-C2FCI CSC-C2FCIT	FDDI FDDI with translation bridging
CSC-HSCI	CSC-C2HSCI CSC-C2CTR	HSSI Token Ring
CSC-MEC	CSC-C2MEC	Multiport Ethernet

Microcode Revision Levels

For a list of microcode requirements, see the latest version of the Microcode Release Note on UniverCD.

ciscoBus Priorities



The card in ciscoBus slot 0 is given the highest priority, while the card in slot 3 is allocated lowest priority. Interface cards (by type) should be placed in the ciscoBus in the following order:

1. CSC-MEC and CSC-C2MEC
2. CSC-C2CTR
3. CSC-HSCI and C2HSCI with an APP-HSA applique (HSSI interface)
4. CSC-FCI and CSC-C2FCI
5. CSC-C2FCIT
6. CSC-HSCI and C2HSCI with an APP-ULA applique (UltraNet interface)

For example, place any CSC-MEC card in the lowest-numbered ciscoBus slot, such as slot 0 or slot 1.

Note: This sheet was designed to help you upgrade an existing system and contains products that can no longer be ordered.

AGS+ Sample Worksheet

Upgraded AGS+ System

Current AGS+ System

Slot	Card	Microcode	Power	Appique
	Memory <i>CSC-MC</i>	—	—	—
1	<i>CSC-ENVM</i>	2.0	10 watts	—
2	<i>CSC/4</i>	—	35 watts	—
3	<i>CSC-2E2T</i>	1.9	28 watts	<i>APP-LE2 APP-DX1</i> <i>APP-JH1</i>
4	—	—	—	—
5	<i>CSC-C2CTR</i>	—	30 watts	<i>APP-LTR2</i>
6	<i>CSC-C2MEC</i>	<i>MEC 5.1-1/10.3</i>	22 watts	<i>APP-LE6</i>
7	<i>CSC-CCTL2</i>	—	34 watts	—
8	<i>CSC-C2FCIT</i>	<i>MC-C2-FIT-1/10.3</i>	36 watts	<i>APP-LMM</i>
9	—	—	—	—

Power total = 195 watts

Slot	Card	Microcode	Power	Appique
	Memory <i>CSC-MC</i>	—	—	—
1	<i>CSC-ENVM</i>	2.0	10 watts	—
2	<i>CSC/4</i>	—	35 watts	—
3	<i>CSC-2E2T</i>	1.9	28 watts	<i>APP-LE2 APP-DX1</i> <i>APP-JH1</i>
4	—	—	—	—
5	—	—	—	<i>APP-LE6</i>
6	<i>CSC-MEC</i>	1.7	22 watts	—
7	<i>CSC-CCTL</i>	2.0	29 watts	—
8	<i>CSC-FCI</i>	1.0	50 watts	<i>APP-LMM</i>
9	—	—	—	—

Power total = 174 watts

Software Release 10.0

Software Release 8.3

BACK PANEL

Media: *Fiber* Media: *Taken Ring* Media: *Fiber*
 APP- LE2 APP- LTR2 APP- LMM
 APP- LE2 APP- LTR2 APP- LMM

APP- LE2 (V.35) (X.21) 1 2 3 4 5 6 7 8

Media: *Ethernet* Media: *10BaseT* Media: *10BaseT*
 APP- LE6 APP- L12 APP- L12
 APP- LE6 APP- L12 APP- L12

Media: *Ethernet* Media: *10BaseT* Media: *10BaseT*
 APP- LE6 APP- L12 APP- L12
 APP- LE6 APP- L12 APP- L12

Media: *Ethernet* Media: *10BaseT* Media: *10BaseT*
 APP- LE6 APP- L12 APP- L12
 APP- LE6 APP- L12 APP- L12

Card cage? Card cage?

BACK PANEL

Media: *Fiber* Media: *10BaseT* Media: *Fiber*
 APP- LE6 APP- L12 APP- LMM
 APP- LE6 APP- L12 APP- LMM

APP- LE6 (V.35) (X.21) 1 2 3 4 5 6 7 8

Media: *Ethernet* Media: *10BaseT* Media: *10BaseT*
 APP- LE6 APP- L12 APP- L12
 APP- LE6 APP- L12 APP- L12

Media: *Ethernet* Media: *10BaseT* Media: *10BaseT*
 APP- LE6 APP- L12 APP- L12
 APP- LE6 APP- L12 APP- L12

Media: *Ethernet* Media: *10BaseT* Media: *10BaseT*
 APP- LE6 APP- L12 APP- L12
 APP- LE6 APP- L12 APP- L12

Card cage? Card cage?

5 individual appique plates

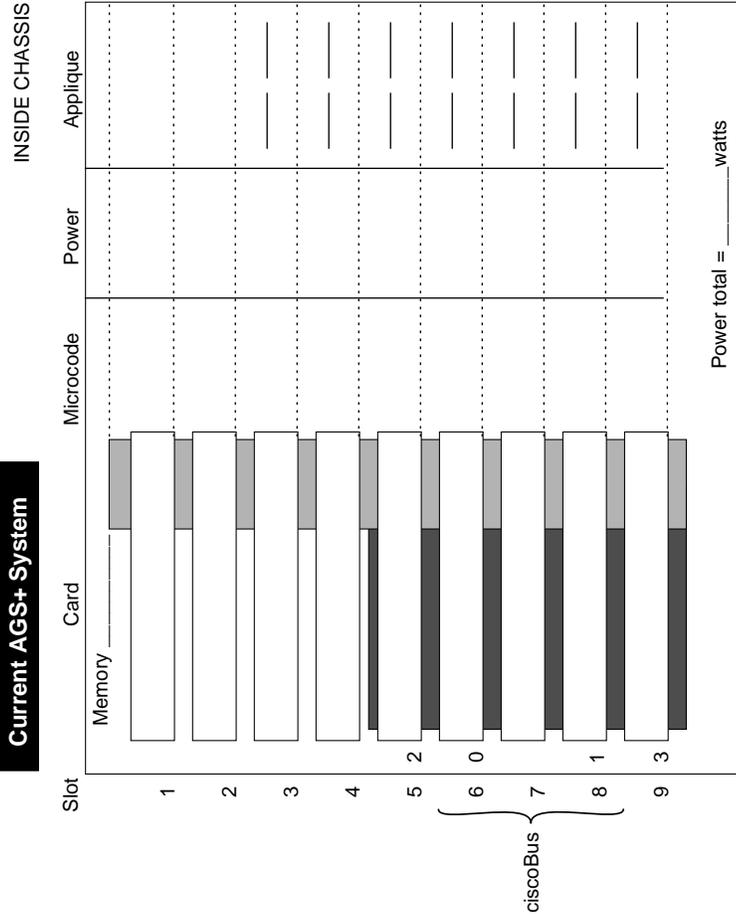
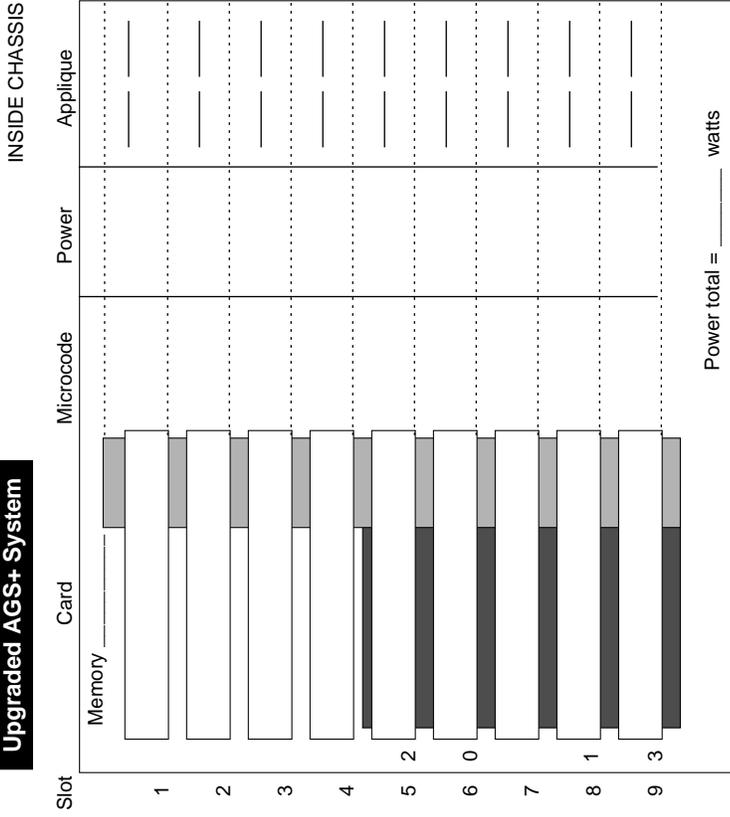
P1091

System Serial Number G0890F838

AGS+ Worksheet

Upgraded AGS+ System

Current AGS+ System



Software release _____

BACK PANEL

APP- 1 2 3 4 5	Media: APP- 1 2 3 4 5 6 7 8	Media: APP- 1 2 3 4 5 6 7 8	Media: APP- 1 2 3 4 5 6 7 8
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Card cage? Card cage?

Software release _____

BACK PANEL

APP- 1 2 3 4 5	Media: APP- 1 2 3 4 5 6 7 8	Media: APP- 1 2 3 4 5 6 7 8	Media: APP- 1 2 3 4 5 6 7 8
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Card cage? Card cage?

5 individual appique plates

4 large appique plates

System Serial Number _____