

AnyMedia® Access System (24 Channel) Ordering Guide

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Technical support

Technical support is available for AnyMedia Access System indoor/outdoor applications and for AnyMedia Element Manager (Element Manager).

AnyMedia service is complemented by a full range of services available to support planning, maintaining and operating your system. Applications testing, network integration, and upgrade conversion support is available.

Alcatel-Lucent service personnel will troubleshoot field problems 24 h a day over the phone and on site (if necessary) based on Alcatel-Lucent service contracts by Local/Regional Customer Support (LCS/RCS) and by Remote Technical Support (RTS).

Contacting your Alcatel-Lucent support: For Europe call the International Customer Management Center (ICMC): +353 1692 4579 or call the toll free number: 00 800 00 58 2368. For Asia Pacific, Caribbean and Latin America Region, Saudi Arabia, Middle East and Africa call the local Alcatel-Lucent Customer Technical Support Team.

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About this information product

Purpose

This guide provides the ordering information for the *AnyMedia* Access System. It reflects the currently orderable items at the time of printing. For the most recent ordering information, consult your account team.

This guide reflects the AnyMedia Access System product set, which presently includes:

- A basic remote terminal (RT) application with POTS, ATM xDSL, IP-based services, coin, ISDN, and two-wire special services for providing either an integrated or a universal *AnyMedia* DLC system
- A central office terminal (COT) application that supports a universal system configuration to a subtending *AnyMedia* RT or public utilities bulletin (PUB) 43801 bank
- An optional MDS2 shelf for providing additional special service capabilities at either an RT or COT
- An IAT host application that supports a generic D4 interface capability (PUB 43801) from an RT.

The RT application is available in two mounting configurations:

- Front and rear access system—An AnyMedia Access System that is positioned so
 that you can reach the front and the back. A front and rear access system is not
 equipped with dangler cables.
- Front-only access—An *AnyMedia* Access System that can only be accessed from the front and includes dangler cables.

As well as ATM xDSL and IP-based capabilities, the RT offers the following telephony capabilities:

- TR-08, GR-303, and INA interfaces to a D4 bank
- VF and special service growth, as well as unbundling applications.

The RT application offers these choices of cabinets:

- Commscope 82A cabinet
- Commscope 52B cabinet

- Commscope 52-E type cabinet
- Commscope 92C cabinet.

See your Commscope sales representative for more information.

The COT application is only available for use in bays, which provide both front and rear access, and offers the following capabilities:

- Supports a full range of telephony services in conjunction with an AnyMedia RT
- TR-08, GR-303, and INA interfaces to the RT or to a D4 bank
- Intended for VF and special service growth as well as unbundling applications.

Reason for reissue

This is Issue 27 of the *Ordering Guide* for the *AnyMedia*® Access System.

The Ordering Guide has been reissued to include ordering information about the following:

New software for AOS-BB R1.33.

Intended audience

The intended audience of this Ordering Guide primarily consists of people who are responsible for the ordering.

Conventions used

The following conventions are used throughout this *Ordering Guide*:

Keyword blocks

This document contains so-called keyword blocks to facilitate the location of specific text passages. The keyword blocks are placed to the left of the main text and indicate the contents of a paragraph or group of paragraphs.

Abbreviations

Abbreviations used in this document can be found in the "Glossary" unless it can be assumed that the reader is familiar with the abbreviation.

Trademarks

Trademarks of Alcatel-Lucent and other companies are in italics. They are identified with the registered mark (®) or trademark (TM) symbol the first time the trademarks are used in the text (for example Alcatel-Lucent *AnyMedia*® Access System).

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Related documentation

Refer to the supplementary documentation listed below for information on complete pre-engineered shelf and bay applications:

- AnyMedia Access System Applications and Planning Guide, 363-211-101
- AnyMedia Access System Applications and Planning Guide, 363-211-587
- AnyMedia Access System Installation Manual, 363-211-102
- MDS2 Feature Supplement, 363-211-106
- COT Feature Supplement, 363-211-128
- IAT Feature Supplement, 363-211-127
- DDM-2000 FiberReach Multiplexer Applications, Planning, and Ordering Guide, 363-206-300.

The Commands and Procedures are provided as on on-line document in HTML format included in the *AnyMedia*® Access System Documentation CD-ROM.

Drawing numbers

For up-to-date, detailed information on this equipment, please refer to the most current issue of the following:

- J1C282A-1, framework assembly and equipment for one *AnyMedia* Access System 7-foot RT bay with three fan-cooled J1C282AA-1, L2 shelves
- J1C282AB-1, or J1C282AC-1 FAST shelf
 - J1C282AB-1 shelf includes a replaceable FCM with duplicated power feeds (OR-ing diodes switch to support both "halves" of the shelf in the event of the loss of one input feed) and reversible mounting brackets for an RT or CO (flush mount) configuration
 - J1C282AC-1 shelf includes a replaceable FCM with direct power feeds (two separate feeds; in the event of a loss of one feeder, half of the application packs will lose power) and reversible mounting brackets for an RT or CO (flush mount) configuration
 - The J1C282AC-1 FAST shelf replaces the J1C282AA-1 FAST shelf.
- J1C286AA-1, MDS2 shelf
- SD7C228-01, bay application schematic for J1C282AA-1 FAST shelves
- SD7C253-01, RT bay with J1C282AB-1 or J1C282AC-1 FAST shelves
- SD7C246-01, shelf schematic for J1C282AB-1 or J1C282AC-1 FAST shelves
- SD7C239-01, MDS2 shelf application schematic
- ED7C837-30, Ringing Filter Unit
- ED7C723-36, PGTC cable
- ED7C723-37, MDS2 cables

- ED7C827-32, ED7C827-31, and ED7C827-30 cables to interface with the MDS2 shelf
- ED7C829-32, data interface cables
- ED8C800-50, 7-foot bay
- ED7C818-32, DS1 feeder cable assembly, office clock, TAP interface, miscellaneous alarm input, ringing voltage, power, fan alarm, LAN interface cables, FAST and MDS2 shelf cables, and office alarm interface cables.

How to order

For ordering information products or to request placement on the standing order list, send or call in an order as follows.

For ordering, a purchase order number, or charge card number is required with all orders. A charge card number cannot be accepted from outside USA.

Mail Order	Telephone/Fax Order/Email	Web Orders
Alcatel-Lucent	Within USA:	Commercial customers:
Attention: Order Entry	Phone:	http://www.lucentdocs.com or
2855 N. Franklin Road	1-888-LUCENT8	http://www.lucent8.com
USA-Indianapolis, IN	(1-888-582-3688)	Lucent Associates:
46219	FAX from USA and Canada:	http://www.cic.lucent.com
	+1-800-566-9568	
	Outside USA:	
	Phone:	
	+1-317-322-6836	
	FAX Outside USA:	
	+1-317-322-6699	
	E-mail:	
	intlorders@lucent.com	

Methods of payment for Commercial Customers:

- Credit card is required for orders totaling \$1000 or less. Visa, MasterCard, and American Express are accepted. Prepayment by check is not acceptable.
- Orders totaling over \$1000 may be paid for using credit card, or invoice upon receipt of a purchase order. Purchase orders may be faxed or mailed using the information provided above.

Methods of payment for Alcatel-Lucent Associates:

• Orders placed by Alcatel-Lucent associates are billed using a cost center number.

One-time orders include the contents for the current document issue in effect at the time of order.

You may request an update on the standing order list for all later reissues of any document. The standing order list for each document provides automatic distribution for all reissues of the document.

How to comment

To comment on this information product, go to the Online Comment Form (http://www.lucent-info.com/comments/enus/) or e-mail your comments to the Comments Hotline (comments@alcatel-lucent.com).

1 Typical Application

Overview

An AnyMedia Access System RT or COT consists of the following:

- A FAST shelf
- An MDS2 shelf (optional) for added two- and four-wire special services capabilities
- Fans or baffles
- Cables to interface the shelves with feeder networks and to the customer lines and ancillary equipment
- Circuit and application packs (APs) to provide various customer services
- System software, including the Management Interface and operating system software
- Digital test access (DTA) (optional).

The system components are described in detail in the Applications and Planning Guide, Chapter 5, Product Descriptions.

- Shelves, baffles, and fans are listed in Chapter 2, "Shelves"
- Cables, including those used to support alarms, LAN, and test access are listed in Chapter 3, "Cables"
- Circuit packs and APs are listed in Chapter 4, "Circuit Packs"
- System software is listed in Chapter 5, "Software".

Some applications of the *AnyMedia* Access System are described on the following pages. They are:

- Typical RT FAST shelf application (telephony only)
- Typical RT FAST shelf application (ATM xDSL only) with simplex AFM
- Typical RT FAST shelf application (ATM xDSL only) with duplex AFMs
- Typical RT FAST shelf application (telephony and ATM xDSL) with simplex AFM
- Typical RT FAST shelf application (IAT only)
- Typical RT FAST shelf application (telephony and MDS2)
- Typical COT FAST shelf application (telephony only and MDS2)

Typical Application Overview

Note: Ordering may be done using HECI codes instead of full CLEI codes. The HECI code is the first 7 digits and/or letters of the CLEI code.

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Typical RT FAST shelf application (telephony only)

A typical *AnyMedia* RT FAST shelf using duplicated power, a 6B fan assembly, DS1 cables going to a DSX crossconnect, and sixteen POTS APs providing 512 POTS lines for telephony service, requires

Description	Quantity	Part #/Drawing #/Comments
FAST Shelf Assembly	1	Drawing # J1C282AB-1. CLEI Code SLM1SW0CRA. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).)
6B Fan Assembly	1	Comcode 109107839. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).) ¹
Power Cable — Duplicate Power	2	Drawing # ED7C818-32. Two from G13 (25 ft. each). (See "Power and ringing cables" (p. 3-1).)
DS1 Cable Assemblies	4	Drawing # ED7C818-32. Two cables from G1; two from G2. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "DS1 transport cables" (p. 3-2).)
VF Cable Assembly	16	Drawing # ED7C818-30. 16 from G1. Length (50, 100, 200, 300, 600 ft.) depends on distances in application. (See "Voice frequency cables" (p. 3-1).)
TAP Cable Assembly	1	Drawing # ED7C818-32. One cable from G4. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)
Miscellaneous Alarm Cable Assembly	1	Drawing #ED7C818-32. One from G5. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Alarm cables" (p. 3-3).)
Ringing Power Cable	1	Drawing # ED7C818-32. One from G6. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Power and ringing cables" (p. 3-1).)
RTU Cable	1	Drawing # ED7C818-32. One from G10. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)

Description	Quantity	Part #/Drawing #/Comments
LAN Interface Cable	1	Drawing # ED7C818-32. One from G9. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
COMDAC COM101B	2	CLEI Code SLC1CG2CAB. Provides central control and transmission fabric. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
CTU DTP104	1	CLEI Code SLTSHK0EAA
IODS1 FAC100	6	CLEI Code SLC1EJ0CAB. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
POTS32 LPA300D	16	CLEI Code SLCI433DAC. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)

Notes:

 A 6B fan assembly is always required when the shelf is equipped with any of these APs: ADSL16p LPA419, ADSL32p LPA432, P32A8 LPA810, P32A32 LPA832, P32A32 LPA833.

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Typical RT FAST shelf application (ATM xDSL only) with simplex AFM

A typical *AnyMedia* RT FAST shelf using duplicated power, a baffle, an AFMDS3 with daisy-chaining to one other shelf, and fifteen LPA419 APs providing 120 ATM xDSL services, requires.

Description	Quantity	Part #/Drawing #/Comments
FAST Shelf Assembly	1	CLEI Code SLM1SW0CRA. Drawing # J1C282AB-1. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).)
6B Fan Assembly	1	Comcode 109107839. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).) ¹
Power Cable—Duplicate Power	2	Drawing # ED7C818-32. Two from G13 (25 ft. each). (See "Power and ringing cables" (p. 3-1).)
VF Cable Assembly	15	Drawing # ED7C818-30. 15 from G1. Length (50, 100, 200, 300, 600 ft.) depends on distances in application. (See "Voice frequency cables" (p. 3-1).)
LAN Interface Cable	1	Drawing # ED7C818-32. One from G9. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
AFMDS3 interface cables to ATM switch	2	Drawing # ED7C829-32. Two cables from G1, G2, or G3. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
AFMDS3 daisy-chaining coaxial cables to additional AFMDS3 circuit packs	2	Drawing # ED7C829-31. Two cables from G1 or G10. Length (5, 8, 12, 20, 1.5 ft.) depends on distances between shelves. (See "Data transport cables" (p. 3-5).)
AFMDS3 LPA901	1	CLEI Code SLL3SUOFAA. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
ADSL16P LPA419	15	CLEI Code SLC2JM0BAD. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)

Notes:

 A 6B fan assembly is always required when the shelf is equipped with any of these APs: ADSL16p LPA419, ADSL32p LPA432, P32A8 LPA810, P32A32 LPA832, P32A32 LPA833.

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Typical RT FAST shelf application (ATM xDSL only) with duplex AFM

A typical *AnyMedia* RT FAST shelf in duplex AFM configuration (pack protection). The shelf uses duplicated power, a 6B fan assembly, two AFMDS3s with daisy-chaining to one other shelf, and fourteen LPA419 APs providing ATM xDSL services. The shelf requires:

Description	Quantity	Part #/Drawing #/Comments
FAST Shelf Assembly	1	CLEI Code SLM1SW0CRA. Drawing # J1C282AB-1. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).)
6B Fan Assembly	1	Comcode 109107839. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).) ¹
Power Cable—Duplicate Power	2	Drawing # ED7C818-32. Two from G13 (25 ft. each). (See "Power and ringing cables" (p. 3-1).)
VF Cable Assembly	14	Drawing # ED7C818-30. 14 from G1. Length (50, 100, 200, 300, 600 ft.) depends on distances in application. (See "Voice frequency cables" (p. 3-1).)
LAN Interface Cable	1	Drawing # ED7C818-32. One from G9. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
AFMDS3 interface cables to ATM switch	2	Drawing # ED7C829-32. Two cables from G1, G2, or G3. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
AFMDS3 daisy-chaining coaxial cables from FAST shelf AFMDS3s to first downstream splitter/combiners	4	Drawing # ED7C829-31. Four cables from G1D. Length 1.5 ft. (See "Data transport cables" (p. 3-5).)

Description	Quantity	Part #/Drawing #/Comments
AFMDS3 daisy-chaining coaxial cables from first downstream splitter/combiners to splitter/combiners leading to AFMDS3s on daisy-chained shelf.	4	Drawing # ED7C829-31. Four cables from G10. Length (2, 5, 9, 17 ft.) depends on distances in application (See "Data transport cables" (p. 3-5).)
DS3 splitter/combiners	6	Comcode 406333849. (See "Data transport cables" (p. 3-5).)
AFMDS3 LPA901	2	CLEI Code SLL3SUOFAA. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
ADSL16P LPA419	14	CLEI Code SLC2JM0BAD. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)

A 6B fan assembly is always required when the shelf is equipped with any of these APs: ADSL16p LPA419, ADSL32p LPA432, P32A8 LPA810, P32A32 LPA832, P32A32 LPA833.

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Typical RT FAST shelf application (telephony and ATM xDSL) with simplex AFM

A typical *AnyMedia* RT FAST shelf using duplicated power, a 6B fan assembly, an AFMDS3 with daisy-chaining to one other shelf, and providing 224 POTS lines and 64 ATM xDSL plus POTS lines, requires

Description	Quantity	Part #/Drawing #/Comments
FAST Shelf Assembly	1	Drawing # J1C282AB-1. CLEI Code SLM1SW0CRA. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).)
6B Fan Assembly	1	Comcode 109107839. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).) ¹
Power Cable—Duplicate Power	2	Drawing # ED7C818-32. Two from G13 (25 ft. each). (See "Power and ringing cables" (p. 3-1).)
VF Cable Assembly	15	Drawing # ED7C818-30. 15 from G1. Length (50, 100, 200, 300, 600 ft.) depends on distances in application. (See "Voice frequency cables" (p. 3-1).)
DS1 Cable Assemblies	4	Drawing # ED7C818-32. Two cables from G1; two from G2. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "DS1 transport cables" (p. 3-2).)
TAP Cable Assembly	1	Drawing # ED7C818-32. One cable from G4. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)
Miscellaneous Alarm Cable Assembly	1	Drawing #ED7C818-32. One from G5. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Alarm cables" (p. 3-3))
Ringing Power Cable	1	Drawing # ED7C818-32. One from G6. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Power and ringing cables" (p. 3-1).)

Description	Quantity	Part #/Drawing #/Comments
RTU Cable	1	Drawing # ED7C818-32. One from G10. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)
LAN Interface Cable	1	Drawing # ED7C818-32. One from G9. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
AFMDS3 interface cables to ATM switch	2	Drawing # ED7C829-32. Two cables from G1, G2, or G3. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
AFMDS3 daisy-chaining cables to additional AFMDS3 circuit packs	2	Drawing # ED7C829-31. Two cables from G1 or G10. Length (5, 8, 12, 20, 1.5 ft.) depends on distances between shelves. (See "Data transport cables" (p. 3-5).)
COMDAC COM101B	2	CLEI Code SLC1CG2CAB. Provides central control and transmission fabric. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
CTU DTP104	1	CLEI Code SLTSHK0EAA. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
IODS1 FAC100	6	CLEI Code SLC1EJ0CAB. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
AFMDS3 LPA901	1	CLEI Code SLL3SUOFAA. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
POTS32 LPA300D	7	CLEI Code SLCI433DAC. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
ADSL16p LPA419	8	CLEI Code SLC2JM0BAD. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)

 A 6B fan assembly is always required when the shelf is equipped with any of these APs: ADSL16p LPA419, ADSL32p LPA432, P32A8 LPA810, P32A32 LPA832, P32A32 LPA833.

Typical RT FAST shelf application (IAT only)

An AnyMedia RT FAST shelf using a baffle, and 16 LPS105 IAT interface cards to serve 80 IATs, requires

Description	Quantity	Part #/Drawing #/Comments
FAST Shelf Assembly	1	Drawing # J1C282AB-1. CLEI Code SLM1SW0CRA. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).)
FAST Baffle	1	Comcode 848244745. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).)
Power Cable—Duplicate Power	2	Drawing # ED7C818-32. Two from G13 (25 ft. each). (See "Power and ringing cables" (p. 3-1).)
DS1 Cable Assemblies	48	Drawing # ED7C818-32. 16 cables from G1; 32 from G2. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "DS1 transport cables" (p. 3-2).)
Miscellaneous Alarm Cable Assembly	1	Drawing #ED7C818-32. One from G5. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Alarm cables" (p. 3-3).)
RTU Cable	1	Drawing # ED7C818-32. One from G10. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)
LAN Interface Cable	1	Drawing # ED7C818-32. One from G9. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
IAT Server Cables (Y cables)	16	Drawing # ED7C839-31. 16 from G3 Required in an RT equipped with DS1 IATS5 Server cards. Length (50, 100, 200, 300, 600 ft.) depends on distances in application. (See "DS1 cables for IATS" (p. 3-2).)
IATS5 LPS105	16	CLEI Code SLCPH0NAAA. Comcode 108738006. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)

Description	Quantity	Part #/Drawing #/Comments
COMDAC COM102B	2	CLEI Code SLC4GGHFAA. Provides central control and transmission fabric. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
CTU DTP104	1	CLEI Code SLTSHK0EAA. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
IODS1 FAC100	6	CLEI Code SLC1EJ0CAB. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)

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Typical RT FAST shelf application (telephony and MDS2)

A typical *AnyMedia* RT FAST shelf using a 6B fan assembly, providing 448 lines of telephony service using POTS32 LPA300D APs, and interfacing two halves of an MDS2 shelf with front and rear access, requires the equipment in the first table below. The MDS2 shelf has 24 CU slots. It can provide up to 96 lines of special services, and is typically located directly above the FAST shelf. It requires the equipment in the second table below.

Description	Quantity	Part #/Drawing #/Comments
FAST Shelf Assembly	1	CLEI Code SLM1SW0CRA. Drawing # J1C282AB-1. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).)
6B Fan Assembly	1	Comcode 109107839. (See "FAST shelf/LAG 2300 Shelf for RT applications" (p. 2-1).) Each shelf requires one fan or baffle. ¹
Power Cable—Duplicate Power	2	Drawing # ED7C818-32. Two from G13 (25 ft. each). (See "Power and ringing cables" (p. 3-1).)
VF Cable Assembly	14	Drawing # ED7C818-30. 14 from G1. Length (50, 100, 200, 300, 600 ft.) depends on distances in application. (See "Voice frequency cables" (p. 3-1).)
DS1 Cable Assemblies	4	Drawing # ED7C818-32. Two cables from G1; two from G2. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "DS1 transport cables" (p. 3-2).)
TAP Cable Assembly	1	Drawing # ED7C818-32. One cable from G4. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)
Miscellaneous Alarm Cable Assembly	1	Drawing #ED7C818-32. One from G5. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Alarm cables" (p. 3-3).)
Ringing Power Cable	1	Drawing # ED7C818-32. One from G6. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Power and ringing cables" (p. 3-1).)

Description	Quantity	Part #/Drawing #/Comments
RTU Cable	1	Drawing # ED7C818-32. One from G10. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)
LAN Interface Cable	1	Drawing # ED7C818-32. One from G9. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
COMDAC COM101B	2	CLEI Code SLC1CG2CAB. Provides central control and transmission fabric. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
CTU DTP104	1	CLEI Code SLTSHK0EAA. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
IODS1 FAC100	6	CLEI Code SLC1EJ0CAB. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
MDSU MSU100B	2	CLEI code SLC2KPB0BAA. Comcode 109150938. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
POTS32 LPA300D	14	CLEI code SLCI433DAC. Comcode 109232777. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)

A 6B fan assembly is always required when the shelf is equipped with any of these APs: ADSL16p LPA419, ADSL32p LPA432, P32A8 LPA810, P32A32 LPA832, P32A32 LPA833.

The MDS2 shelf served by the above FAST shelf uses 24 APs to provide up to 96 lines of special services. It requires

Description	Quantity	Part #/Drawing #/Comments
MDS2 Shelf	1	CLEI code SAM2BE0BRA. Drawing # J1C286AA-1, L4. (See "MDS2 shelf for RT applications" (p. 2-2).)
MDS2 Shelf Baffle	1	Comcode 848244778. (See "MDS2 shelf for RT applications" (p. 2-2).)

Description	Quantity	Part #/Drawing #/Comments
MDS2 VF Cable	1	Drawing # ED7C723-37. One cable from G4, G5, G6, or G22. Length (75, 150, variable length, 250 ft.) depends on distances in application. (See "MDS2 cables" (p. 3-11).)
MDS2 Ringing Power Cable	1	Drawing # ED7C818-32. One cable from G6. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Power and ringing cables" (p. 3-1).)
Power and Test Unit (PTU) BDJ200B	2	CLEI code SAPQACWBAD. Comcode 107831208. Apparatus code BDJ2008. (See "MDS2 Circuit Pack and Channel Unit Ordering Information" (p. 4-6).)
Metallic Shelf Controller (MSC) MSC100	2	CLEI code SACPHMKBAA. Comcode 108661901. (See "MDS2 Circuit Pack and Channel Unit Ordering Information" (p. 4-6) .)
MDSU CUs	24	As required by services (See CU list in "MDS2 Circuit Pack and Channel Unit Ordering Information" (p. 4-6).)

Typical COT FAST shelf application (telephony only and MDS2)

A typical *AnyMedia* COT FAST shelf with rear-only access, direct power, and that provides remote telemetry, 480 lines of telephony service using PRCOINCS LPA150 APs or COIN_FXO_UC LPA151 APs, and that interfaces two halves of an MDS2 shelf, requires

Description	Quantity	Part #/Drawing #/Comments
FAST Shelf Assembly	1	CLEI Code SLM1SX0CRA. Drawing # J1C282AC-1. (See "FAST shelf/LAG 2300 Shelf for COT applications" (p. 2-2).)
6B Shelf Fan Assembly	1	Comcode 109107839. Each shelf requires one fan. ¹
Power Cable — Direct Power	1	Drawing # ED7C818-32. One cable from G8. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Power and ringing cables" (p. 3-1).)
Fan and Power Alarm Interface Cable	1	Comcode 848571790. (See "Alarm cables" (p. 3-3).)
VF Cable Assembly	14	Drawing # ED7C818-30. 14 from G1. Length (50, 100, 200, 300, 600 ft.) depends on distances in application. (See "Voice frequency cables" (p. 3-1).)
DS1 Cable Assemblies	4	Drawing # ED7C818-32. Two cables from G1; two from G2. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "DS1 transport cables" (p. 3-2).)
LAN Interface Cable	1	Drawing # ED7C818-32. One cable from G9. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Data transport cables" (p. 3-5).)
COMDAC COM101B	2	CLEI Code SLC1CG2CAB. Provides central control and transmission fabric. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)
CTU DTP104	1	CLEI Code SLTSHK0EAA. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)

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Description	Quantity	Part #/Drawing #/Comments	
IODS1 FAC100	6	CLEI Code SLC1EJ0CAB. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)	
Clock Cable Assembly	1	Drawing # ED7C818-32. One cable from G18. (See "Composite office clock/BITS clock cables" (p. 3-12).)	
Composite Clock Kit	1	Drawing # ED7C818-34. One from G1. Needed for timing input. (See "Composite office clock/BITS clock cables" (p. 3-12).)	
Audible/Visible Office Alarm Cable	1	Drawing # ED7C818-32. One from G16. (See "Alarm cables" (p. 3-3).)	
ATU Telemetry Cable	1	Drawing # ED7C723-37. One cable from G19, G20, G21. Length (70, 150 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)	
PGTC Cable	1	Drawing # ED3D861-20. One cable from G19 or G20. Length (50, 100 ft.) depends on distances in application. (See "Cables for testing" (p. 3-4).)	
MDSU MSU100B	2	CLEI code SLC2KPB0BAA. Comcode 109150938. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)	
COIN_FXO_UC LPA151	14	CLEI code SLL6PJOFAA. Comcode 109504399. (See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1).)	

 A 6B fan assembly is always required when the shelf is equipped with any of these APs: ADSL16p LPA419, ADSL32p LPA432, P32A8 LPA810, P32A32 LPA832, P32A32 LPA833.

The MDS2 shelf served by the above *AnyMedia* COT FAST shelf provides 24 lines of telephony service using 24 CUs (customer provides CUs on an as-required basis). The MDS2 shelf requires

Description	Quantity	Part #/Drawing #/Comments	
MDS2 Shelf	1	CLEI code SAM2BE0BRA. Drawing # J1C286AA-1, L4. (See "MDS2 shelf for RT applications" (p. 2-2).)	

Description	Quantity	Part #/Drawing #/Comments
MDS2 Shelf Baffle	1	Comcode 848244778. (See "MDS2 shelf for RT applications" (p. 2-2).)
MDS2 Power Cable	1	Drawing # ED7C827-32. One cable from G1 (25 ft.). (See "Power and ringing cables" (p. 3-1).)
MDS2 VF Cable	1	Drawing # ED7C723-37. One cable from G4, G5, G6, or G22. Length (75, 150, variable length, 250 ft.) depends on distances in application. (See "MDS2 cables" (p. 3-11).)
MDS2 Ringing Power Cable	1	Drawing # ED7C818-32. One cable from G6. Length (50, 100, 200, 300 ft.) depends on distances in application. (See "Power and ringing cables" (p. 3-1).) Although the J1C286AA-1, L4 MDS2 shelf has a dangler that can connect directly to the FAST shelf without other cabling, the MDS2 shelf may not always be located closely enough to the FAST shelf to allow this.
Power and Test Unit (PTU) BDJ200B	2	CLEI code SAPQACWBAD. Comcode 107831208. (See "MDS2 Circuit Pack and Channel Unit Ordering Information" (p. 4-6)
Metallic Shelf Controller (MSC) MSC100	2	CLEI code SACPHMKBAA. Comcode 108661901. (See "MDS2 Circuit Pack and Channel Unit Ordering Information" (p. 4-6) .)
MDSU CUs	24	As required by services (See CU list in "MDS2 Circuit Pack and Channel Unit Ordering Information" (p. 4-6).)

2 Shelves

Equipment for Systems with Front and Rear Access

FAST shelf/LAG 2300 Shelf for RT applications

The following tables list the equipment used in RT and COT applications with both front and rear access. Quantity listings are associated with a 7-foot bay.

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code	Quantity
Bay	7-foot framework	ED8C800-50	G5	Not Applicable	1
FAST Shelf with duplicated power	FAST Shelf with duplicated power and replaceable FCM (adaptable to flush mount)	J1C282AB-1	L1	SLM1SW0CRA	1-4 per bay
FAST Shelf with direct power	FAST Shelf with direct power and replaceable FCM (adaptable to flush mount)	J1C282AC-1	L1	SLM1SX0CRA	1-4 per bay
FAST Shelf Fan Assembly ¹ . This is a replacement for the 6A Fan Assembly.	6B Fan Assembly (adaptable for flush mount)	Not Applicable	109107839	Not Applicable	1-4 per bay ¹
FAST Shelf Baffle ²	(adaptable for flush mount)	Not Applicable	848244745	Not Applicable	1-3 per bay ²
LAG 2300 Shelf with duplicated power	LAG 2300 Shelf with duplicated power	J1C300AB-1	L1	SLMHA00ARA	1-4 per bay
LAG 2300 Shelf with direct power	LAG 2300 Shelf with direct power	J1C300AC-1	L1	SLMHC00ARA	1-4 per bay
LAG 2300 Shelf Fan Assembly ³	6C Fan Assembly (adaptable for flush mount)	Not Applicable	408881050	Not Applicable	1 per LAG 2300 Shelf ³

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code	Quantity
Air filter for LAG 2300 Shelf with pull tabs	One air filter is shipped loosely with each LAG 2300 Shelf	Not Applicable	848983185	Not Applicable	1 per LAG 2300 Shelf

- 1. Each FAST shelf must have a fan or baffle.
- 2. A fourth baffle may be added to the top of the bay to protect shelf components.
- 3. Each LAG 2300 Shelf must have a fan.

MDS2 shelf for RT applications

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code	Quantity
MDS2 Shelf (front and rear access)	MDS2 Shelf	J1C286AA-1	L4	SAM2BE0BRA	1 per FAST shelf (if needed)
Baffle is required for MDS2 Shelf (adaptable for all mountings)		Not Applicable	848244778	Not Applicable	1 per MDS2 shelf

FAST shelf/LAG 2300 Shelf for COT applications

Quantities listed are for use in 7-foot, 9-foot, or 11-foot 6-inch bays. The LAG 2300 Shelf is determined for use in 7-foot bays only.

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code	Quantity
FAST Shelf with duplicated power	FAST Shelf with duplicated power (equipped with ED7C836-30, G1 replaceable FCM) (adaptable to flush mount)	J1C282AB-1	L1	SLM1SW0CRA	1 to 4 per 9- or 11-foot bay. 1 to 3 in 7-foot bay.
FAST Shelf with direct power	FAST Shelf with direct power (equipped with ED7C836-30, G2 replaceable FCM) (adaptable to flush mount)	J1C282AC-1	L1	SLM1SX0CRA	1 to 4 per 9- or 11-foot bay. 1 to 3 in 7-foot bay.

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code	Quantity
FAST Shelf Fan Assembly (adaptable for flush mount) ¹ . This is a replacement for the 6A Fan Assembly.	6B Fan Assembly	Not Applicable	109107839	Not Applicable	1 per FAST shelf ¹
LAG 2300 Shelf with duplicated power	LAG 2300 Shelf with duplicated power	J1C300AB-1	L1	SLMHA00ARA	1-4
LAG 2300 Shelf with direct power	LAG 2300 Shelf with direct power	J1C300AC-1	L1	SLMHC00ARA	1-4
LAG 2300 Shelf Fan Assembly ²	6C Fan Assembly (adaptable for flush mount)	Not Applicable	408881050	Not Applicable	1-4 ²
Air filter for LAG 2300 Shelf with pull tabs	One air filter is shipped loosely with each LAG 2300 Shelf	Not Applicable	848983185	Not Applicable	1 per LAG 2300 Shelf

- 1. A fan is required for each FAST shelf or LAG 2300 Shelf. See Applications and Planning Guide, Chapter 4, COT Arrangements for more information.
- 2. A fan is required for each LAG 2300 Shelf.

MDS2 shelf for COT applications

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code	Quantity
MDS2 Shelf	For COT bay flush mounting, duplicated or direct power, J1C282AB, L1 or J1C282AC, L1	J1C286AA-1	L4	SAM2BE0BRA	One per FAST shelf. As needed.
Baffle ¹ (adaptable for flush mount)		Not Applicable	848244745	Not Applicable	1 per MDS2 shelf

Notes:

1. A baffle is required for each MDS2 shelf. See *AnyMedia*® Access System Applications and Planning Guide, Chapter 4, COT Arrangements for more information. See the *AnyMedia* Access System Installation Manual, Chapter 8, for more information on COT layouts

Equipment for Systems with Front-Only Access (RT Applications Only)

Overview

The following table lists components for systems where front-only access is available. Quantities listed are for 7-foot bays.

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code	Quantity
Bay	7-foot framework	ED8C800-50	G5	Not Applicable	1
FAST Shelf	FAST Shelf with duplicated power and replaceable FCM (adaptable to flush mount)	J1C282AB-1	L2	SLM1TW0CRA	1 to 4
FAST Shelf	FAST Shelf with direct power and replaceable FCM (adaptable to flush mount)	J1C282AC-1	L2	SLM1TX0CRA	1 to 4
FAST Shelf Fan Assembly (adaptable for flush mount) ¹ . The 6B Fan Assembly is a replacement for the 6A Fan Assembly.	6B Fan Assembly	Not Applicable	109107839	Not Applicable	1 to 4 ¹
FAST Shelf Baffle ² (adaptable for flush mount)		Not Applicable	848244745	Not Applicable	1 to 3 ²
LAG 2300 Shelf	LAG 2300 Shelf with duplicated power	J1C300AB-1	L2	SLMHB00ARA	1 to 3
LAG 2300 Shelf	LAG 2300 Shelf with <i>direct</i> power	J1C300AC-1	L2	SLMHD00ARA	1 to 3
LAG 2300 Shelf Fan Assembly ³ (adaptable for flush mount)	6C Fan Assembly	Not Applicable	408881050	Not Applicable	1 to 3 ³
Air filter for LAG 2300 Shelf with pull tabs	One air filter is shipped loosely with each LAG 2300 Shelf	Not Applicable	848983185	Not Applicable	1 per LAG 2300 Shelf

- 1. Each FAST shelf must have a fan or baffle. See Applications and Planning Guide, Chapter 4, Single Shelf Arrangement.
- 2. A fourth baffle may be added to the top of the bay to protect shelf components.
- 3. Each LAG 2300 Shelf must have a fan.

MDS2 shelf

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code	Quantity
MDS2 Shelf (adaptable for flush mount)	MDS2 Shelf with reversible mounting bracket for CO or RT mount	J1C286AA-1	L4	SAM2BB0BRA	1 per FAST shelf (as needed).
Baffle is required for MDS2 Shelf (adaptable for flush mount)		Not Applicable	848244778	Not Applicable	1 per MDS2 shelf.

LAG 2300 Shelf for cabinet applications

Overview

The following table shows the LAG 2300 Shelf for customer-specific cabinet applications and the required fan unit.

Equipment	Configuration/ Components	Drawing	List/Group/ Comcode	CLEI Code
LAG 2300 Shelf	LAG 2300 Shelf with direct power	J1C300AC-1	L3	SLMHE00ARA
LAG 2300 Shelf Fan Assembly (adaptable for flush mount)	6C Fan Assembly	Not Applicable	408881050	Not Applicable
Air filter for LAG 2300 Shelf with pull tabs	One air filter is shipped loosely with each LAG 2300 Shelf	Not Applicable	848983185	Not Applicable

Notes:

1. Each LAG 2300 Shelf must have a fan.

3 Cables

AnyMedia Access System Cables

Overview

The following tables list cables for use in the *AnyMedia* Access System. Refer to the *AnyMedia* Access System Installation Manual, 363-211-102 for more detailed information on cabling.

Voice frequency cables

The table below lists the voice frequency cables that can be used with the *AnyMedia* Access System:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
FAST Shelf Voice	Voice Frequency Cable, External	50	26	ED7C818-30	G1	16 (one per AP)
Frequency Cables (To MDF		100	26	ED7C818-30	G1A	Not needed for FAST shelf configured as IAT host using IATS LPS100 or IATS5
Crossconnect or		200	26	ED7C818-30	G1B	
Protectors) Select necessary cable		300	26	ED7C818-30	G1C	
length		600	26	ED7C818-30	G1D	LPS105

Power and ringing cables

The table below lists the power and ringing cables that can be used with the *AnyMedia* Access System:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
FAST Shelf	Ringing Cable, -20 Hz	50		ED7C818-32	G6	0-1
Ringing Power Cable		100		ED7C818-32	G6A	Optional for COT. Recommended for COT with optional MDS2.
Select necessary		200		ED7C818-32	G6B	
cable length		300		ED7C818-32	G6C	

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
J1C282AA-1 and J1C282AC-1 FAST Shelf Power Cable To power distribution panel or battery distribution fuse (BDF) bay	FAST Shelf Input Power Cable, -48 VDC (direct power)	25		ED7C818-32	G7	1
J1C282AB-1 FAST Shelf Power Cable To power distribution panel or battery distribution fuse (BDF) bay	Power Cable, -48V DC, Power to Shelf (duplicated power)	25	8	ED7C818-32	G13	2
External ringing	Ringing Cable,	10		ED7C818-32	G19	0-1
shelf input to FAST shelf	external J1C182BC-1 ringing shelf to FAST shelf FCM (two cables)	25		ED7C818-32	G19A	RT only Replaces ED7C818-32 G6
Select necessary		50		ED7C818-32	G19B	
cable length.		100		ED7C818-32	G19C	

DS1 transport cables

The table below lists the DS1 transport cables that can be used with the *AnyMedia* Access System:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
FAST Shelf DS1	External 100 200 e cable gineered oecific on (one G1[x] ne pair	50	26	ED7C818-32	G1	0 or 2
Cables To DSX		100	26	ED7C818-32	G1A	One needed for transmit, one for
Crossconnect		200	26	ED7C818-32	G1B	receive; 0 needed for
Select one cable length engineered		300	26	ED7C818-32	G1C System	ATM xDSL-only RT system
for the specific application (one		50	26	ED7C818-32	G2	0 or 2
pair from G1[x]		100	26	ED7C818-32	G2A	One needed for transmit, one for receive; 0 needed for
set and one pair from G2[x] set).		200	26	ED7C818-32	G2B	
		300	26	ED7C818-32	G2C	ATM xDSL-only RT system

DS1 cables for IATS

The table below lists the DS1 transport cables for IATS:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
IAT Extension Interface Cables (used with IATS5	Y-Cable (connects to LPS105)	4	26	ED7C839-31	G3	1-16 One per IAT Server
LPS105)	Extension	50	26	ED7C839-31	G4	2-32
Select necessary cable length.	3	100	26	ED7C839-31	G4A	Two per IAT Server
		200	26	ED7C839-31	G4B	
		300	26	ED7C839-31	G4C	
		600	22	ED7C839-31	G4D	
DSX-1 Cables (for	MX-DSX Cable	50	22	ED7C839-31	G1	0-1 per
IATs)		100	22	ED7C839-31	G1A	ConnectReach/ ConnectReach Plus
		200	22	ED7C839-31	G1B	
		300	22	ED7C839-31	G1C	

Alarm cables

The table below lists alarm cables for the AnyMedia Access System:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
FAST Shelf Miscellaneous Miscellaneous Alarms		50	26	ED7C818-32	G5	0-1 Not required for
Alarms Cable one per RT Bay		100	26	ED7C818-32	G5A	COT
To Misc Cross-connect.		200	26	ED7C818-32	G5B	
Select necessary cable length		300	26	ED7C818-32	G5C	
1C282AB-1 and Power Alarm 1C282AC-1 FAST Cable, FCM to	50	26	ED7C818-32	G12	0-1 Optional for COT.	
shelf Power/ Alarm Cable	Customer Crossconnect	100	26	ED7C818-32	G12A	See FAST Shelf Fan and Power Alarm Interface Cable for COTs.
To Misc Crossconnect		200	26	ED7C818-32	G12B	
Select one cable length per RT.		300	26	ED7C818-32	G12C	
FAST Shelf Fan	Fan Alarm Cable	50	24	ED7C818-32	G8	0-1
Alarm Cable To Misc		100	24	ED7C818-32	G8A	Optional for COT. See FAST Shelf Fan and Power Alarm Interface Cable for COTs.
Crossconnect		200	24	ED7C818-32	G8B	
Select one cable length per fan.		300	24	ED7C818-32	G8C	

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
FAST Shelf Fan and Power Alarm Interface Cable for COTs (Used in lieu of ED7C818-32	Which do not require alarm multiples between shelves (typical)				848571790	0-1 For COT only.
G12() and ED7C818-32 G8() FAST shelf Power/ Alarm Cable and FAST Shelf Fan Alarm Cable to provide a direct connection to the FAST shelf inputs).	Which require alarm multiple between FAST shelves and/or the Miscellaneous Alarm Input Cable G5()				848600920	0-1 Primarily for COT, but can be used in an RT.
Audible Visible Office Alarms	Audible/Visible Office Alarm	50	26	ED7C818-32	G16	0-1 RT only
To office alarm	Cable, 50	100	26	ED7C818-32	G16A	
system Select necessary		200	26	ED7C818-32	G16B	
cable length		300	26	ED7C818-32	G16C	
Remote Telemetry Office Alarms	Remote Telemetry Office Alarms, J110	50	26	ED7C818-32	G17	0-1 Nonstandard for
(To Telemetry System) If remote		100	26	ED7C818-32	G17A	COT see ATU Telemetry
telemetry is needed		200	26	ED7C818-32	G17B	Cable.
Select necessary cable length		300	26	ED7C818-32	G17C	

Cables for testing

The table below lists the cables that can be used for testing in the *AnyMedia* Access System:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
PairGain Test Cable for COT Applications	PairGain Test Cable for COT applications	50		ED3C861-20	G19	0-1 COT only
One per bay To PGTC test multiple		100		ED3C861-20	G20	

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
FAST Shelf RTU Link Cable	RTU Link Cable	50		ED7C818-32	G10	0-1 RT only
To RTU		100		ED7C818-32	G10A	K1 only
Select one cable length engineered		200		ED7C818-32	G10B	
for the specific application.		300		ED7C818-32	G10C	
FAST Shelf TAP Cable one per RT	TAP Cable, External	50	26	ED7C818-32	G4	0-1
Bay	External	100	26	ED7C818-32	G4A	Not required for COT.
To Misc Crossconnect		200	26	ED7C818-32	G4B	
Select necessary cable length.		300	26	ED7C818-32	G4C	

COT-specific cables

The table below lists the cables that are specific to the COT in the *AnyMedia* Access System:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
PairGain Test Cable for COT Applications	PairGain Test Cable for COT applications	50		ED3C861-20	G19	0-1 COT only
One per bay To PGTC test multiple		100		ED3C861-20	G20	

Data transport cables

The table below lists the data cables that can be used in the AnyMedia Access System:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
Daisy chain Cables	Coaxial	5		ED7C829-31	G1	0 for 1 shelf, 2 for 2
(AFMDS3 cables) Cable to connect	daisy-chaining cable with	8		ED7C829-31	G1A	shelves, 4 for 3 shelves, and 6 for 4
multiple data or	right-angle connectors at	12		ED7C829-31	G1B	shelves.
mixed data and telephony shelves	both ends. G1	20		ED7C829-31	G1C	RT only 2 or 4 RT only 0 for 1 shelf, 2 for 2 shelves, 4 for 3 shelves, and 6 for 4 shelves.
together for daisy-chaining. Select necessary	cables are for simplex. G10 are for duplex.	1.8		ED7C829-31	G1D	
cable length.		2		ED7C829-31	G10	
		5		ED7C829-31	G10A	
		9		ED7C829-31	G10B	
		17		ED7C829-31	G10C	

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
Data I/O Cables	I/O Cable, Right	50	26	ED7C829-32	G1	0, 2, or 4 as needed
(to connect the AFMDS3 LPA901	angle connectors both ends, 735A	100		ED7C829-32	G1A	for ATM xDSL application. RT only.
to the ATM network) Select necessary cable length.	coaxial cable	200		ED7C829-32	G1B	
	I/O Cable, Right angle connectors both ends, 734A coaxial cable	300	20	ED7C829-32	G2	
	I/O Cable, Right angle connector on AFMDS3 end, straight through (180 degree) connector on panel, 735A coaxial cable	50	26	ED7C829-32	G3	
	I/O Cable, Right angle connector on AFMDS3 end, straight through (180 degree) connector on panel, 735A coaxial cable	100	26	ED7C829-32	G3A	
	I/O Cable, Right angle connector on AFMDS3 end, straight through (180 degree) connector on panel, 735A coaxial cable	200	26	ED7C829-32	G3B	
	I/O Cable,	300	20	ED7C829-32	G4	
	Straight through (180 degree)	50		ED7C829-32	G30	
	connector on AFMDS3 end	100		ED7C829-32	G30A	
	and on panel,	200		ED7C829-32	G30B	
	734A coaxial cable	300		ED7C829-32	G40	_
DS3 Splitter/Combiner, AFMDS3 to upstream ATM network or between daisy-chained shelves.		3		Commercially available from Mini-Circuits, part # ZFSC-2-1-75	Comcode 406333849	1 for each AFMDS3 LPA901. RT only. Duplex only.

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
"Y" Dangler Cable (to connect to faceplate of AFMDS1 LPA942 to separate transmit and receive pairs)	I/O Cable. Single right angle connector on AFMDS1 end. Two straight-through (180 degree) connections to G11 cables.	3		ED7C849-30	G10A	1 for each AFMDS1 LPA942. RT only.
AFMDS1 LPA942	Two	50		ED7C849-30	G11	2 for each AFMDS1
Cable Extensions (to connect the	straight-through (180 degree)	100		ED7C849-30	G11A	LPA942. RT only.
two ends of "Y"	connections from	200		ED7C849-30	G11B	
dangler cables to DSX-1 panel)	"Y" danglers.	300		ED7C849-30	G11C	
1		650		ED7C849-30	G11D	

Cables used for IP-based services

The following table lists cables used to support IP-based services in *FAST* or LAG 2300 Shelves:

Equipment	Configuration/ Components	Length (feet)	Drawing	List/Group Comcode	Comments/Quantity per Shelf
ICAP Cables Connect E1/DS1	ICAP E1/DS1 simplex cables	8.5	ED7C873-31	G6	1 per pack RT only
downlink feeders	ICAP E1/DS1 Y cable	8.5	ED7C873-31	G5	1 per pair RT only. Duplex only
ICAP Cable ICAP crossover cable for connecting ICAP to ICAP	ICAP crossover cable for 1:1 protection	2.2	ED7C873-31	G7	1 per pair RT only. Duplex only

Equipment	Configuration/ Components	Length (feet)	Drawing	List/Group Comcode	Comments/Quantity per Shelf
Shielded a/b cables (2×32 pairs)	a/b cables for 64 port APs, e.g. VoIP	1	ED7C873-31	G3	1 per pack RT only. Duplex only
Connectorized on both ends with	AP LPZ602	2		G3A	
special AP		3		G3B	
connectors; No external ferrite		4		G3C	
kits required		5		G3D	
		6		G3E	
		7		G3F	
		8		G3G	
		9		G3H	
		10		G3J	
		11		G3K	
		12		G3L	
		13		G3M	
		14		G3N	
		15		G3P	
		16		G3R	
		17		G3S	
		18		G3T	
		19		G3U	
		20		G3V	
		22		G3W	
		24		G3X	
		26		G3Y	
		28		G3Z	
		30		G3AA	
		60		G3BB	
Shielded ADSL2+ cable for	ADSL2+ cable on the subscriber side (uplink)	50	ED7C873-31	G9	1 per pack RT only.
IPADSL2_32p (LPA633)		100	ED7C873-31	G9A	
Connect IPADSL2_32p		200	ED7C873-31	G9B	
(LPA633) to subscribers		300	ED7C873-31	G9C	

Equipment	Configuration/ Components	Length (feet)	Drawing	List/Group Comcode	Comments/Quantity per Shelf
Adapter Cable Adapter cable to CONSOLE port ¹	Adapter cable with USB-A connector (DB9-to-USB RS232)	5.6	ED7C873-31	G8	RT only

Notes:

1. Applicable for ICAP and IPADSL2_32 AP.

LAN cables

The following table lists LAN cables:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
FAST Shelf LAN Interface Cables	LAN interface cable, LAN drop to FAST shelf	1.5		ED7C829-31	G1D	2 or 4 RT only
To LAN Hub Select necessary	to 17151 shell	2		ED7C829-31	G10	0 for 1 shelf, 2 for 2
cable length.		5		ED7C829-31	G10A	shelves, 4 for 3 shelves, and 6 for 4
		9		ED7C829-31	G10B	shelves.
		17		ED7C829-31	G10C	
		50		ED7C818-32	G9	0-1
		100		ED7C818-32	G9A	
		200		ED7C818-32	G9B	
		300		ED7C818-32	G9C	
LAN Interface Cable, FAST shelf backplane to FCM	LAN Interface Cable, FAST shelf backplane to FCM			ED7C818-32	11	
10Base-T Adaptor/RJ-45 Modular Splitter, Duplex AFMs to LAN	Allows 4 RJ-45 jacks to be connected to one RJ-45 plug.			Commercially available (e.g., from Black Box Corporation #178562)		0-1 RT only. Duplex only.
Crossover 10Base-T Cable AFM to COMDAC	Allows communication with COMDAC through ATM operations channel.	6		ED7C829-32	G6A	0-1 RT only.

MDS2 cables

The table below lists the cables that can be used with the MDS2 in the *AnyMedia* Access System.

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
MDS2 Power Cables	–48 VDC Power Cable	25		ED7C827-32	G1	1 if not powered from FAST shelf
MDS2 Power Cable Extensions	Power Cable -48V DC, Power	6		ED7C818-32	G14	1 (Needed only if
	to MDS2, Extension	15		ED7C818-32	G14A	MDS2 is not directly above FAST shelf, or
		2		ED7C818-32	G14B	if flush mount.) Select extension length needed.
MDS2 Ringing	Ringing Cable	50		ED7C818-32	G6	1 if not supplied
Cables Select necessary		100		ED7C818-32	G6A	from FAST shelf. RT only
cable length.		200		ED7C818-32	G6B	K1 Only
		300		ED7C818-32	G6C	
MDS2 Ringing Cable Extensions	Ringing Cable, -20 Hz, Ringing	6		ED7C818-32	G15	1 (Needed only if
	to MDS2, Extension	15		ED7C818-32	G15A	MDS2 is not directly above FAST shelf, or if flush mount.)
		2		ED7C818-32	G15B	Select extension length needed.
MDS2 VF Cables Select necessary	Voice Frequency Cable Pairs, for	75		ED7C723-37	G4	1 per shelf. Each cable assembly
cable length.	MDS2 with front and rear access	150		ED7C723-37	G5	has four 25-pair connectors,
		x (specify length)		ED7C723-37	G6	supporting all 96 lines. Mates directly to the MDS2 backplane for front and rear access applications.
		250		ED7C723-37	G22	
MDS2 VF Cables	clect one cable ngth engineered or the specific Cable Pairs for MDS2 with front access only	50		ED7C827-30	G1	3 per shelf.
Select one cable length engineered		100		ED7C827-30	G1A	This cable mates with the
application.		200		ED7C827-30	G1B	ED7C827-31, Group 1 cable that attaches
		300		ED7C827-30	G1C	to the MDS2 shelf backplane. RT only

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Comments/Quantity per Shelf
MDSU Server Interface Cable Extensions Select one cable	G3A are used with	PCM link 2 for an MDS	or 5 and 8 ft 2 shelf to do	extensions, responsible only 48 lines an	ectively.	extension, buy either a
length as needed for application	Interface Cable	5		ED7C827-30	G2 and G3	0-1
Extender	Extender	8		ED7C827-30	G2A and G3A	0-1
MDS2 Composite	Composite Clock	50		ED7C827-32	G2	0-1
Office Clock Cables	Cable	100		ED7C827-32	G2A	Required for Dataport, DDS, and
Select one cable		200		ED7C827-32	G2B	ISDN service
length engineered for the specific		300		ED7C827-32	G2C	
application.		15		ED7C827-32	G18	For use with the ED7C818-34 G1 kit. The kit is optionally provided with the FAST shelf.
E & M Signaling	E & M Cable to	75		ED7C827-32	G3	As needed.
Cables	MDS2 Backplane Interface	150		ED7C827-32	G3A	_

Composite office clock/BITS clock cables

The table below lists the composite clock/BITS clock cables used in the *AnyMedia* Access System:

Equipment	Configuration/ Components	Length (feet)	Drawing	List/Group Comcode	Comments/Quantity per Shelf
FAST shelf	Composite Office	10	ED7C818-32	G18	0-1
Composite Office Clock/BITS Clock	Clock	50	ED7C818-32	G3	
Cables To office clock on		100	ED7C818-32	G3A	
BITS clock source		200	ED7C818-32	G3B	
Select necessary cable length.		300	ED7C818-32	G3C	
Composite Office Clock/BITS Clock To connector J112	4 feet, 8 inches	ED7C873-30	G7	One per LAG 2300 Shelf	
Cables for the LAG 2300 Shelf (dangler cables)	To connector J113	4 feet, 8 inches	ED7C873-30	G7A	One per LAG 2300 Shelf

Equipment	Configuration/ Components	Length (feet)	Drawing	List/Group Comcode	Comments/Quantity per Shelf
LAG 2300 Shelf Composite Office	Clock 0 Cable Assembly	10	ED7C818-32	G23	11
Clock/BITS Clock Cables	Clock 1 Cable Assembly		ED7C818-32	G24	11
To office clock on BITS clock source Select necessary	Clock 0 Cable Assembly	50	ED7C818-32	G23A	11
cable length.	Clock 1 Cable Assembly		ED7C818-32	G24A	11
	Clock 0 Cable Assembly	100	ED7C818-32	G23B	11
	Clock 1 Cable Assembly		ED7C818-32	G24B	11
	Clock 0 Cable Assembly	200	ED7C818-32	G23C	11
	Clock 1 Cable Assembly		ED7C818-32	G24C	11
	Clock 0 Cable Assembly	300	ED7C818-32	G23D	11
	Clock 1 Cable Assembly		ED7C818-32	G24D	11

Notes:

1. One group 23 and one group 24 cable, of appropriate length, are required for each shelf to bring in the external office clock

Duplex DS3 cabling kit

The table below lists the components that make up the duplex DS3 cabling kit:

Equipment	Configuration/Components	Drawing/Comcode	Group
Duplex DS3 cabling kit	1 Mounting plate	Comcode 848777272	Not Applicable
Comcode for kit 848800611	2 Splitter/combiners (already mounted on plate)	Comcode 406333849	Not Applicable
	8 Coaxial cables	ED7C829-31	G1D
	Coaxial terminators for unused ports	Comcode 408626273	Not Applicable
	Instruction sheet	Comcode 848800587	Not Applicable

Miscellaneous cable equipment

The table below lists miscellaneous cable equipment that can be used in the *AnyMedia* Access System:

Equipment	Configuration/ Components	Length (feet)	AWG	Drawing	List/Group Comcode	Quantity per Shelf
ATM xDSL Patchcord (Allows fast upgrade to ATM	XDSLP7A-03 ATM xDSL patchcord	3		N/A	108 276 536	1 per xDSL circuit or as needed RT only
xDSL services in	XDSLP7A-06	6		N/A	108 276 544	
remote DSL systems)	XDSLP7A-012	12		N/A	108 276 551	

Optical fiber cables

The table on the following page lists the optical fiber cables that can be used in the *AnyMedia* Access System:

Equipment	Configuration/ Components	Length (feet)	Description	List/Group Comcode	Comments/Quantity per Shelf
Optical fiber cable	Single fiber, SC to	4	LS1SC-SC-04	106908254	2 per AFMO circuit
The AFMO circuit pack requires optical	SC, cable type 9000A3	5	LS1SC-SC-05	106908262	pack
fiber jumpers with SC		10	LS1SC-SC-10	106908270	
connectors. Two jumpers, a transmit		15	LS1SC-SC-15	106908288	
and receive, are		20	LS1SC-SC-16	106908296	
needed for each port.		25	LS1SC-SC-25	106908304	
		30	LS1SC-SC-30	106908312	
		35	LS1SC-SC-35	106908320	
		40	LS1SC-SC-40	106908338	
		50	LS1SC-SC-50	106908346	
		60	LS1SC-SC-60	107668790	
		70	LS1SC-SC-70	107668816	
		80	LS1SC-SC-80	107668824	
		90	LS1SC-SC-90	107668840	
		100	LS1SC-SC-100	106908395	

Equipment	Configuration/ Components	Length (feet)	Description	List/Group Comcode	Comments/Quantity per Shelf
Optical fiber cable	Duplex Fiber	4	LS2SC-SC-04		1 per AFMO circuit
The AFMO circuit		5	LS2SC-SC-5		pack
pack requires optical fiber jumpers with SC		10	LS2SC-SC-10		
connectors.		15	LS2SC-SC-15		
		16	LS2SC-SC-16		
		20	LS2SC-SC-20		
		25	LS2SC-SC-25		
		30	LS2SC-SC-30		
		35	LS2SC-SC-35		
		40	LS2SC-SC-40		
		50	LS2SC-SC-50		
		70	LS2SC-SC-70		
		100	LS2SC-SC-100		

Equipment	Configuration/ Components	Length (feet)	Description	List/Group Comcode	Comments/Quantity per Shelf
Fiber Jumper Cables (10 Meter with protective spiral wrap on one end) Litra part # FOSMSF10MSCSC		10 meters		408267532	as needed
LS1SC-SC-04 Single fiber jumper w/SC connectors		4		106908254	
LS1SC-SC-05 Single fiber jumper w/SC connectors		5		106908262	
LS1SC-SC-10 Single fiber jumper w/SC connectors		10		106908270	
LS1SC-SC-15 Single fiber jumper w/SC connectors		15		106908288	
LS1SC-SC-20 Single fiber jumper w/SC connectors		20		106908296	
LS1SC-SC-25 Single fiber jumper w/SC connectors		25		106908304	
LS1SC-SC-30 Single fiber jumper w/SC connectors		30		106908312	
LS1SC-SC-35 Single fiber jumper w/SC connectors.		35		106908320	
LS1SC-SC-40 Single fiber jumper w/SC connectors		40		106908338	
LS1SC-SC-50 Single fiber jumper w/SC connectors		50		106908346	
LS1SC-SC-60 Single fiber jumper w/SC connectors		60		107668790	
LS1SC-SC-70 Single fiber jumper w/SC connectors		70		107668816	

Equipment	Configuration/ Components	Length (feet)	Description	List/Group Comcode	Comments/Quantity per Shelf
LS1SC-SC-80 Single fiber jumper w/SC connectors		80		107668824	as needed
LS1SC-SC-90 Single fiber jumper w/SC connectors		90		107668840	
LS1SC-SC-100 Single fiber jumper w/SC connectors		100		106908395	

Lightguide buildout (LBO)

An interconnection and attenuation network device between optical line interface units (OLIUs) is used to guarantee the proper signal level at the receiver of each OLIU. These devices are optimized for wavelength and single mode or multimode fiber type.

The AFMO circuit pack must use optical fiber cables equipped with SC type connectors. A lightguide buildout (LBO) is required and it must be ordered separately. Lightguide buildouts, including FiberReach lightguide buildouts, are listed in the following two tables.

Note: The A3003 base is required if you use one of the ASCS() caps listed below or one of the A3060() caps listed below to make a complete LBO. Also, a 15 dB LBO is required to loop the AFMO circuit pack back on itself.

Lightguide Buildout (LBO)	Base and Cap Code	Comcode	Connector Type
Base	A3003	106750763	SC
3.0 dB	ASCS3	108314463	SC
3.5 dB	ASCS3.5	108314477	SC
4.0 dB	ASCS4	108314485	SC
4.5 dB	ASCS4.5	108314493	SC
5.0 dB	ASCS5	108314501	SC
5.5 dB	ASCS5.5	108314519	SC
6.0 dB	ASCS6	108314527	SC
6.5 dB	ASCS6.5	108314535	SC
7.0 dB	ASCS7	108314543	SC
7.5 dB	ASCS7.5	108314550	SC
8.0 dB	ASCS8	108314568	SC

Lightguide Buildout (LBO)	Base and Cap Code	Comcode	Connector Type
8.5 dB	ASCS8.5	108314576	SC
9.0 dB	ASCS9	108314584	SC
9.5 dB	ASCS9.5	108314592	SC
10 dB	ASCS10	108314600	SC
11 dB	ASCS11	108440496	SC
12 dB	ASCS12	108440504	SC
13 dB	ASCS13	108440512	SC
14 dB	ASCS14	108440520	SC
15 dB	ASCS15	108440538	SC
16 dB	ASCS16	108440546	SC
18 dB	ASCS18	108440553	SC
20 dB	ASCS20	108440561	SC

Note: The primary difference between the LBOs listed above and the FiberReach LBOs listed below is reflectance.

Lightguide Buildout (LBO)	Code	Connection	Comcode	Connector Type
0 dB	A3060	SM-SM	106708951	SC
5 dB	A3060B1	SM-SM	107406142	SC
10 dB	A3060D1	SM-SM	107406159	SC
15 dB	A3060F1	SM-SM	107406167	SC
20 dB	A3060H1	SM-SM	107406175	SC

4 Circuit Packs

Circuit Pack Ordering Information

Overview

The following tables list the circuit packs available to configure your *AnyMedia* Access System according to the functions and features to be provided. For further information on the circuit packs, refer to the Data Sheet Book, 363-211-254.

When nothing specific is mentioned, the circuit packs can be used in each *AnyMedia* Mainshelf type, regardless whether it is an *FAST* Shelf or a LAG Shelf.

For information on the number and type of *FAST* Shelf circuit packs or APs see Applications and Planning Guide, Chapter 10, System Planning and Engineering For Traditional DLC Services, and Chapter 11, System Planning and Engineering For ATM xDSL Services.

Circuit pack information per AnyMedia Mainshelf type

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity per Shelf/Comments
Common Packs				
TDM COMDAC COM101B (Standard line size)	SLC1CG2CAB	COM101B	109275438	1-2
TDM COMDAC COM102B (Large line size)	SLC4GGHFAA	COM102B	109275420	1-2. RT only. Provides central control and transmission fabric.
TDM COMDAC COM103	SLPQ0JEAAA	COM103	109204750	1-2. For RT and COT. Provides central control and transmission fabric; required for GR-303 aggregation.
TDM COMDAC COM103B	SLPQ0J5ATA	COM103B	109633826	1-2. For RT and COT. Provides central control and transmission fabric; required for GR-303 aggregation. Functionally identical with COM 103.

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity per Shelf/Comments
IODS1 FAC100	SLC1EJ0CAD	FAC100	107968042	1-6. Provides four independent DSX-1 cross-connect-compatible electrical interfaces.
CTU DTP102	SLTSAF0EAA	DTP102	108489758	0-1. RT only. Supports operations-related functions, including digital test access.
CTU DTP104	SLTSHK0EAA	DTP104	108919267	0-1. RT only. Supports operations-related functions, including digital test access and TDR testing. (Requires software release 1.7.2.)
AFMDS3 LPA901	SLL3SU7FAC	LPA901	108875097	0-2. RT only. Simplex or duplex. Provides a DS3 ATM 44.736 Mbps feeder facility interface.
AFMO LPA920B ¹	SLC2LSHBAA	LPA920B	109263830	0-2. RT only. Provides optical OC-3c ATM 155.52 Mbps feeder facility interface.
AFMO LPA920C	SLC2LSMBAA	LPA920C	109606020	0-2. RT only. Provides optical OC-3c ATM 155.52 Mbps feeder facility interface.
995A CROSS COUPLE	SLPQ0HYAAA		108765587	0-1. RT only. Connects active and protection AFMO packs in duplex mode.
AFMDS1 LPA942	SLL4LMOBAD	LPA942	108778275	0-1. RT only. Provides DS1 ATM feeder facility interface with up to 8 DS1s.
MDSU MSU100B	SLC2KP0BAA	MSU100B	109150938	0-2. Server interface between MDS2 shelf and FAST shelf. One per each half of an MDS2 shelf.
IAT04 LPS104	SLL3R69FAA	LPS104	109203265	1-16. RT and CO. DS1 - 4-port. Provides interface between IAT and RT.
IATS5 LPS105	SLCPH0NAAA	LPS105	108738006	1-16. RT only. DS1 - 5-port. Provides interface between IAT and RT.
IPFM LPI904	SLDMAADAAA	LPI904	109581231	1-2 for RT LAG 2300 Shelf only (for a selection of GBIC modules see "GBIC Modules for IPFMs" (p. 4-5))
IP-AFM LPI960	SLDMBB0AAA	LPI960	109555466	1-2 for RT ² .
RGU100	SLPOF00AAA	RGU100	109587055	1-2 for RT .
Application Packs				
POTS32 LPA300D	SLCI433DAC	LPA300D	109232777	1-16. RT only. Supports 32 two-wire loop-start lines.
PROG2W LPA380D	SLC4CCGFAC	LPA380D	109232785	1-16. Supports 32 two-wire loop-start and ground start current lines with coin, DPO signaling, and transmission only signaling.

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity per Shelf/Comments
DPT32CS LPA356	SLTRFEOCAB	LPA356	109166371	1-16. RT only. Supports 32 two-wire DID current sink lines.
TST TAP100	E5PQA0BAAC	TAP100	108045360	0-1. Local testing interface. For use in FAST shelf with COM101 or COM102.
PRCOIN LPA350	E5ISFAAAAA	LPA350	108375502	1-16. Supports 16 two-wire loop-start and ground start current feed lines and 16 coin, loop-start and ground-start feed lines.
PRCOINCS LPA150	SLC3AAAAAA	LPA150	108461815	1-16. COT only. Provides 32 current sink line interfaces to the COT.
COIN_FXO_UC LPA151	SLL6PJOFAA	LPA151	109504399	1-16. COT only. Provides 32 current sink line interfaces to the COT.
ISDN LPU116	E5PQAYKAAC	LPU116	107743536	1-16. RT only. Supports 16 subscriber tip/ring appearances for ISDN service.
POTSZF LPZ110	E51C2S0AAA	LPZ110	108886821	1-16; Supports 32 two-wire loop start lines.
EBSI16 LPA329	SLI4SY0BAA	EBSI16	109181925	1-16. Supports 16 lines of enhanced business service for use with Nortel switch.
ADSL16P LPA419 ⁴	SLC2JM0BAB	LPA419	109026567	1-15. ³ (1-14 if duplex.) RT only. Provides 16 lines of ADSL services, and, with a POTS AP, 16 lines of POTS services.TDR testing compatible.
P32A8 LPA810 ⁵	SLL3Z90FAA	LPA810	108725854	1-15. ³ (1-14 if duplex.) RT only. Provides 24 POTS-only lines and 8 combined POTS/ADSL lines in one unit.
SHDSL16 LPS702	SLL4SY0BBA	LPS702	108902719	1-15 ³ (14 if duplex). Provides 16 SHDSL lines.
ADSL2_16p LPA420	SLC2JNFBAA	LPA420	109026575	1-15 ³ (14 if duplex). Provides 16 lines for ADSL2+ service; includes splitters; Annex A
ADSL32p LPA432 ⁴	E5IC1SXAAB	LPA432	108867573	1-15 ³ (14 if duplex). Provides 32 lines ADSL service. May be used with LPZ110 for 32 lines ADSL + 32 lines POTS.
P32A32 LPA832 ⁴ ⁵	SLL44X1BAA	LPA832	109296178	1-15 ³ (14 if duplex). P32A32 AP, provides 32 lines of ADSL and POTS services. As well as POTS only or ADSL only ports.
P32A32 LPA833 ⁴ ⁵	SLL49X1BAA	LPA833	109531475	1-15 ³ (14 if duplex). P32A32 AP, provides 32 lines of ADSL and POTS services. As well as POTS only or ADSL only ports; supports future new ADSL2 and ADSL2+ standards.

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity per Shelf/Comments
ICAP	SLL6UT0FAA	LPI600	849034426	8 DS1 ports ⁶ .
VoIP AP	SLL6NKOFAA	LPZ602	109570739	VoIP AP with 64 ports, usable in LAG 2300 shelves

Notes:

- 1. Will be replaced by the LPA920C.
- 2. Small form factor pluggables (SFPs) are required on each uplink and downlink port. The orderable SFPs are listed below.
- 3. For ADSL services, slot 16 is occupied by AFM.
- 4. The ATM xDSL APs require a 6B fan assembly in the FAST shelf.
- 5. If the LPA432, LPA810, the LPA832 or LPA833 will be deployed in an Commscope 52 type or 92C cabinet, see your account executive for power engineering rules.
- 6. Not yet orderable at the issue date of this information product.

Small form factor pluggables

SFP	Fiber type	Comcode
SFP for 1000Base-LX	2 Single mode fibers with LC connectors	408978971
SFP for 1000Base-SX	2 Multimode fibers with LC connectors	408979011
SFP for 1000Base-TX	Electrical cable with RJ45 connector	408979029
SFP for 100Base-FX	2 Multimode fibers with LC connectors	408979037
SFP for 100Base-BX	1 Single mode fiber with an LC connector (industrial temperature)	408980431
SFP for 100Base-BX	1 Single mode fiber with an LC connector (commercial temperature)	408979003

GBIC Modules for IPFMs

GBIC modules

The GBIC modules will be attached to the faceplate of the IPFM. One GBIC module is required per GbE uplink of an IPFM (max. 2 per IPFM). The following GBIC modules are orderable:

GBIC Module Description	Comcode
1000Base-LX for single-mode and for multi-mode fiber interfaces	408879898
Max. distances:	
275 m with 62.5 μm multi-mode fiber	
550 m with 50 µm multi-mode fiber	
10 km with single-mode fiber	
1000Base-SX	408925873
Max. distances:	
275 m with 62.5 μm multi-mode fiber	
550 m with 50 μm multi-mode fiber	

Radius clip

As the bending radius of the fiber may fall below the permissible value when the shelf doors are closed, the following radius clip has to be added to the fiber at the faceplate end:

Description	Comcode
Metal radius clip	408937746

MDS2 Circuit Pack and Channel Unit Ordering Information

Overview

The following table lists the CPs and CUs available for use in the MDS2 shelf.

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity/Comments
Circuit Packs				
Power and Test Unit (PTU) BDJ200B	SAPQADHBAA	BDJ200B	108067240	1-2. Supplies DC power and ringing voltage to CUs.
Metallic Shelf Controller MSC100	SACPHMKBAA	MSC100	108661901	1-2. Controller interface between CUs on the MDS2 shelf and the MDSU on the FAST shelf.

Nonprovisionable Channel Units for MDS2 Shelf

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity/Comments
Circuit Packs				
Enhanced Business Service (EBS) (Tollgrade ¹) SPQ328	SAC1AJ0AAA	SPQ328	Not Applicable	COT only. Provides EBS to customers served by a DMS-100 switch.
Quad EBS P-Phone (Tollgrade) SPQ429	SAC1AK0AAA	SPQ429	Not Applicable	RT only. Provides EBS to customers served by a DMS-100 switch.

Notes:

1. Tollgrade is a registered trademark of Tollgrade Communications, Inc.

Manually Provisionable Channel Units for MDS2 Shelf

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity/Comments
Circuit Packs				
Dual Ringing Repeater AUA45B	5SCUUJ5AAB	AUA45B	105717987	Provides two-wire, private line, point-to-point manual ring service.
Private Line Automatic Ring (PLAR) AUA75	5SC1FF2AAA	AUA75	108229758	Provides two-wire, private line, point-to-point automatic ring service.

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Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity/Comments
Circuit Packs				
2-Wire Switched 56-Kb/s DPX AUA200	5SCTB0DAAA	AUA200	107392243	RT only. Used in a two-wire end-link of a switched 56 kbps digital data service.
RS-232 DSU Dataport AUA232	5SCTCB0AAA	AUA232	107050445	RT only. Used in an end-link of a DDS private line data service.
Metallic Channel Unit (Tollgrade) MCU-5205	5SC26TVAAA	MCU-5205	Not Applicable	Enables a variety of DC and AC alarm and telemetry services.
Digital Bypass Pair (Tollgrade) MCU-5405	5SC26T02AB	MCU-5405	Not Applicable	Provides a LoopCare compatible digital bypass pair when metallic bypass pair is not available.
ISDN BRITE Teltrend AUA293I2	5SC4BK8EAA	Teltrend AUA293I2	Not Applicable	Provides one ANSI standard U-DSL over a non-loaded two-wire loop.
ADTRAN Total Reach DDS Dataport (DDS-DP)	Not Applicable	Not Applicable	Not Applicable	RT only. Provides interface between DS0 timeslot and the two-wire metallic loop to the customer premises.

Notes:

1. MCU is a registered trademark of Tollgrade Communications, Inc.

Electronically Provisionable Channel Units for MDS2 Shelf

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity/Comments
Circuit Packs				
Dual DS0 DP SPQ334	58C3240AAA	SPQ334	107590127	COT only. Used in an end-link of a DDS private line data service.
E SPOTS CU CS SPQ442	SCA1AH0AAA	SPQ442	107100562	Provides transmission treatment for two-wire special service circuits.
Two-wire current feed SPQ443	SAC1AEHAAB	SPQ443	107098873	COT only. Provides transmission treatment for two-wire special service circuits.
4-Wire CS (FXO/TDM) SPQ444	SAC1BF0AAB	SPQ444	107226730	A current sink pack that provides four-wire VF special services.
Dual OCU Dataport SPQ452	5SCTFFHAAB	SPQ452	107967085	Used as an end-link of a DDS private line data service.

Configuration/ Components	Group No/CLEI Code	Drawing/Apparatus Code	Comcode	Quantity/Comments
Circuit Packs				
4-Wire E&M/PLR SPQ454	SAC1BG0AAB	SPQ454	107226748	Requires E&M cabling. CU 1-12: P201 CU 13-24: P201 & P202 MDS2 shelves that are intended to support E&M or PLR service require the installation of additional cables (P201, P202) for the added signaling leads.
4-Wire CF (FXS/ETO/DX) AUA41B	5SC3HJEAAA	AUA41B	106988082	As needed. A current feed unit used primarily in non-locally switched loop- and ground-start special services, nonswitched private lines, and PBX tie trunks.

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Recommended sparing

The following table is a guideline for stocking spare packs on a per shelf basis for the FAST Shelf and MDS2 Shelf, as applicable for your system application. Sparing recommendations are 10% each of the total deployed packs. See "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1) and "MDS2 Circuit Pack and Channel Unit Ordering Information" (p. 4-6) for the ordering codes.

Configuration/Components	Quantity			
Circuit Packs				
IODS1 FAC100	1			
COMDACs (as configured)	1			
CTU (as configured)	1			
AFM (as configured)	1			
MDSU MSU100B	1			
IATS5 LPS105	1			
PTU BDJ200	1			
PTU BDJ200B	1			
MSC MSC100	1			
Application Packs				
As configured (see "Circuit pack information per AnyMedia Mainshelf type" (p. 4-1))	10%			
Channel Units				
As configured (see "MDS2 Circuit Pack and Channel Unit Ordering Information" (p. 4-6))	10%			

5 Software

System software overview

Overview

The software products listed below are available for the *AnyMedia* Access System. (See also Appendix A, "Release Compatibilities" for information on which controllers, APs, and AMI [GSI] releases are compatible with which software releases. The "Narrowband/Broadband Compatibility" (p. A-1), indicates the high-level compatibilities between NB and BB software releases.)

Note: **NB** refers to **COMDAC** (telephony) releases; **BB** refers to **AFM** (data) releases.

A right-to-use license is required for each shelf or PC on which an *AnyMedia* Access System software product is used.

Each *AnyMedia* Access System software product is provided on a CD-ROM. You may purchase as many CD-ROMs as necessary to support your operations. For example, you may use the CD-ROM to load on more than one system, or establish a server to provide access to the software. Individual right-to-use fees (RTUs) are required on a per-shelf basis. These fees consist of an Operating System RTU (...L-M1R) and an Application RTU (...L-PxR) for narrowband software, and/or for ATM xDSL software and/or for software for IP-based services.

Customers who wish to upgrade their existing *AnyMedia* Access System to a later release may purchase an upgrade license (...L-PxS) for each shelf to be system upgraded. The upgrade license includes both an Operating System RTU and an Application RTU.

Operations software and licensing for telephony services

Overview

AnyMedia Operations Software for Narrowband Services (AOS-NB) is the software product that resides on the COMDAC and controls the telephony services for the AnyMedia Access System. All COMDACs are delivered with this software product pre-installed.

Customers purchasing a TDM COMDAC need to order J1C282XA-1, List X (see below for list numbers) for software in the unlikely event that a recovery process is required. In addition, customers also need to order the J1C282XA-1 List M1R and J1C282XA-1 List PXR for the right-to-use licenses (see below for values for X). Both right-to-use licenses are required for every *AnyMedia* Access System shelf that runs this software.

R1.2.2.5.4 operations software for telephony services (DID/DPT)

Customers requiring basic RT services including DID/DPT application features need to order J1C282XA-1, List 6 for software, and J1C282XA-1, List M1R and List P6R for right-to-use licenses. Both right-to-use licenses are required for every *AnyMedia* Access System shelf that runs software. Customers purchasing a COMDAC upgrade from R1.2.2 to R1.2.2.5.4 need to order J1C282XA-1 List 6 for software and List P6S for the right-to-use licenses.

Release 1.2.2.5.4 AOS-NB Software			
Release	Description	Ordering Information	
R1.2.2.5.4	AnyMedia Operations Software for Narrowband Services (AOS-NB), R1.2.2.5.4 CD-ROM	J1C282XA-1, List 6	
All R1.X	AOS-NB Right-to-Use License, TDM COMDAC Operating System	J1C282XA-1, List M1R	
R1.2.2.5.4	AOS-NB Right-to-Use License, Narrowband Telephony R1.2.2.5.4	J1C282XA-1, List P6R	
R1.2.2.5.4	AOS-NB Right-to-Use License, Narrowband Telephony Upgrade R1.2.2 to R1.2.2.5.4	J1C282XA-1, List P6S	

R1.2.3.4 operations software for telephony services

Customers requiring COT application features need to order J1C282XA-1, List 5 for software, and J1C282XA-1, List M1R and J1C282XA-1, List P5R for the right-to-use licenses. Both right-to-use licenses are required for every *AnyMedia* Access System shelf that runs this software.

Release 1.2.3.4 AOS-NB Software			
Release	Description	Ordering Information	
R1.2.3.4	AnyMedia Operations Software for Narrowband Services (AOS-NB), R1.2.3.4 CD-ROM	J1C282XA-1, List 5	
All R1.X	AOS-NB Right-to-Use License, TDM COMDAC Operating System	J1C282XA-1, List M1R	
R1.2.3.4	AOS-NB Right-to-Use License, Narrowband Telephony R1.2.3.4	J1C282XA-1, List P5R	

R1.7.2.3 operations software for telephony services

Release 1.7.2.3 offers IAT hosting, large line size capabilities with the COM102 and IATS5 LPS105 (DS1 5-port), and allows the *AnyMedia* Access System software to support 3 GR-303 VRTs.

Release 1.7.2.3 AOS-NB Software			
Release	Description	Ordering Information	
R1.7.2.3	Operations Software for Narrowband Services (AOS-NB), R1.7.2.3 CD-ROM	J1C282XA-1, List 10	
All R1.X	AOS-NB Right-to-Use License, TDM COMDAC Operating System	J1C282XA-1, List M1R	
R1.7.2.3	AOS-NB Right-to-Use License, Narrowband Telephony R1.7.2.3	J1C282XA-1, List P10R	
R1.7.2.3	AOS-NB Right-to-Use License, Narrowband Telephony Upgrade R1.2.2.5.4 or R1.7.0, R1.7.1.1 to R1.7.2.3	J1C282XA-1, List P10S	

R1.9.2.2 operations software for telephony services

Release 1.9.2.2 allows the *AnyMedia* Access System software to support an ONU shelf (ONU is no longer supported).

Release	Description	Ordering Information
R1.9.2.2	Operations Software for Narrowband Services (AOS-NB), R1.9.2.2 CD-ROM	J1C282XA-1, List 11
All R1.X	AOS-NB Right-to-Use License, TDM COMDAC Operating System	J1C282XA-1, List M1R
R1.9.2.2	AOS-NB Right-to-Use License, Narrowband Telephony R1.9.2.2	J1C282XA-1, List P11R
R1.9.2.2	AOS-NB Right-to-Use License, Narrowband Telephony Upgrade R1.2.2.5.4 or R1.7.0, R1.7.1.1 to R1.9.2.2	J1C282XA-1, List P11S

R1.10 operations software for telephony services

Release 1.10 allows the *AnyMedia* Access System software to support enhanced business service with the EBSI16 LPA329 application pack.

Release	Description	Ordering Information
R1.10	Operations Software for Narrowband Services (AOS-NB), R1.10 CD-ROM	J1C282XA-1, List 14
All R1.X	AOS-NB Right-to-Use License, TDM COMDAC Operating System	J1C282XA-1, List M1R
R1.10	AOS-NB Right-to-Use License, Narrowband Telephony R1.10	J1C282XA-1, List P14R
R1.10	AOS-NB Right-to-Use License, Narrowband Telephony Upgrade R1.2.2.5.4 or R1.7.0, R1.7.1.1, R1.9.2.2 to R1.10	J1C282XA-1, List P14S

R1.18 operations software for telephony services

Release 1.18 allows the *AnyMedia* Access System software to support the LPA832 combination AP.

Release	Description	Ordering Information
R1.18	Operations Software for Narrowband Services (AOS-NB), R1.18 CD-ROM	J1C282XA-1, List 15
All R1.X	AOS-NB Right-to-Use License, TDM COMDAC Operating System	J1C282XA-1, List M1R
R1.18	AOS-NB Right-to-Use License, Narrowband Telephony	J1C282XA-1, List P15R
R1.18	AOS-NB Right-to-Use License, Narrowband Telephony Upgrade R1.2.2.5.4 or R1.7.0, R1.7.1.1, R1.9.2.2, R1.10 to R1.18	J1C282XA-1, List P15S

R1.22 operations software for telephony services

Release 1.22 allows the *AnyMedia* Access System software to support GR303 Aggregation, ROC concentration and two-step SW download to COMDAC.

Customer Ordering Code	Short Description
J1C282XL-1, List 2	AnyMedia Access System AOS-NB Software R1.22.30 LAG2300 CD-ROM
J1C282XL-1, List M1R	AnyMedia Access System AOS-NB Software R1.22.x RTU LAG2300 Operating System
J1C282XL-1, List P2R	AnyMedia Access System AOS-NB Software R1.22.30 LAG2300 Application RTU License
J1C282XL-1, List P2S	AnyMedia Access System AOS-NB Software R1.22.30 LAG2300 Upgrade RTU License

R1.28 operations software for telephony services

Release 1.28 allows the *AnyMedia* Access System software to support IP-based Services.

Customer Ordering Code	Short Description	
J1C282XS-1 List 3	AnyMedia Access System AOS-NB Software R1.28.20 FAST CD-ROM for COM101B and COM102B	
J1C282XS-1, List M1R	AnyMedia Access System AOS-NB Software R1.28.x RTU FAST Operating System	
J1C282XS-1, List P3R	AnyMedia Access System AOS-NB Software R1.28.20 FAST Application RTU License for COM101B and COM102B	
J1C282XS-1, List P3S	AnyMedia Access System AOS-NB Software R1.28.20 FAST Upgrade RTU License for COM101B and COM102B	
J1C282XL-1 List 3	AnyMedia Access System AOS-NB Software R1.28.30 LAG2300 CD-ROM for COM103	
J1C282XL-1, List M1R	AnyMedia Access System AOS-NB Software R1.28.x RTU LAG2300 Operating System	
J1C282XL-1, List P3R	AnyMedia Access System AOS-NB Software R1.28.30 LAG2300 Application RTU License for COM103	
J1C282XL-1, List P3S	AnyMedia Access System AOS-NB Software R1.28.30 LAG2300 Upgrade RTU License for COM103	

R1.32 operations software for telephony services

Release 1.32 allows the *AnyMedia* Access System software to support IP-based Services in Release 3.2.

Customer Ordering Code	Short Description	
J1C282XS-1 List 4	AnyMedia Access System AOS-NB Software R1.32.20 FAST CD-ROM for COM101B and COM102B	
J1C282XS-1, List M1R	AnyMedia Access System AOS-NB Software R1.32.x RTU FAST Operating System	
J1C282XS-1, List P4R	AnyMedia Access System AOS-NB Software R1.32.20 FAST Application RTU License for COM101B and COM102B	

Customer Ordering Code	Short Description
J1C282XS-1, List P4S	AnyMedia Access System AOS-NB Software R1.32.20 FAST Upgrade RTU License for COM101B and COM102B
J1C282XL-1 List 4	AnyMedia Access System AOS-NB Software R1.32.30 CD-ROM for COM103
J1C282XL-1, List M1R	AnyMedia Access System AOS-NB Software R1.32.x RTU Operating System
J1C282XL-1, List P4R	AnyMedia Access System AOS-NB Software R1.32.30 Application RTU License for COM103
J1C282XL-1, List P4S	AnyMedia Access System AOS-NB Software R1.32.30 Upgrade RTU License for COM103

R1.36 operations software for telephony services

Release 1.36 allows the *AnyMedia* Access System software to support IP-based Services in Release 3.3. The software now supports COM103B and RGU100.

Customer Ordering Code	Short Description
J1C282XS-1 List 5	AnyMedia Access System AOS-NB Software R1.36.20 FAST CD-ROM for COM101B and COM102B
J1C282XS-1, List M1R	AnyMedia Access System AOS-NB Software R1.36.x RTU FAST Operating System
J1C282XS-1, List P5R	AnyMedia Access System AOS-NB Software R1.36.20 FAST Application RTU License for COM101B and COM102B
J1C282XS-1, List P5S	AnyMedia Access System AOS-NB Software R1.36.20 FAST Upgrade RTU License for COM101B and COM102B
J1C282XL-1 List 5	AnyMedia Access System AOS-NB Software R1.36.30 CD-ROM for COM103 and COM103B
J1C282XL-1, List M1R	AnyMedia Access System AOS-NB Software R1.36.x RTU Operating System
J1C282XL-1, List P5R	AnyMedia Access System AOS-NB Software R1.36.30 Application RTU License for COM103 and COM103B
J1C282XL-1, List P5S	AnyMedia Access System AOS-NB Software R1.36.30 Upgrade RTU License for COM103 and COM103B

Operations software and licensing for data (broadband) services

Overview

Operations Software for Broadband Services (AOS-BB) is the software product that resides on the AFM and controls the ATM xDSL services for the *AnyMedia* Access System. All AFM circuit packs are delivered with a specified release of software pre-installed.

With the purchase of an *AnyMedia* shelf, a Right-to-Use license for the operational software for broadband services, along with the Application Software Right-to-Use fee must be purchased. The Operational software comes loaded on the *AnyMedia* AFM application pack. CD-ROMs may be purchased, but are only required when software is upgraded to a current release or in the unlikely event that a recovery process is required.

R1.17.1 Update 3 operations software for data (broadband) services

Release 1.17.1 Update 3 AOS-BB Software		
Release	Description	Ordering Information
R1.17.1 Update 3(Data)	Operation Software for Broadband Services (AOS-BB), R1.17 CD-ROM	J1C284XB-1, List 11
ALL	AOS-BB Right-to-Use License, Operating System	J1C282XB-1, List M1R
R1.17.1 Update 3 (Data)	AOS-BB Right-to-Use License, Application Software	J1C284XB-1, List P11R

R1.21 operations software for data (broadband) services

Release 1.21 AOS-BB Software		
Release	Description	Ordering Information
R1.21 (Data)	Operation Software for Broadband Services (AOS-BB), R1.21 CD-ROM	J1C284XB-1, List 13
ALL	AOS-BB Right-to-Use License, Operating System	J1C282XB-1, List M1R
R1.21 (Data)	AOS-BB Right-to-Use License, Application Software	J1C284XB-1, List P13S

R1.23 operations software for data (broadband) services

Release 1.23 AOS-BB Software		
Release	Description	Ordering Information
R1.23 (Data)	Operation Software for Broadband Services (AOS-BB), R1.23 CD-ROM	J1C284XB-1, List 16
ALL	AOS-BB Right-to-Use License, Operating System	J1C282XB-1, List M1R
R1.23 (Data)	AOS-BB Right-to-Use License, Application Software	J1C284XB-1, List P16R

R1.25 operations software for data (broadband) services

Release R1.25 allows *AnyMedia* Access System software to support the *AnyMedia* Line Access Gateway (LAG) 2300 with a high-speed backplane and the new combination pack version LPA833 (32 x 32 ADSL/POTS AP), which is prepared to support future new ADSL2 and ADSL2+ standards.

Release 1.25 AOS-BB Software			
Release	Description	Ordering Information	
R1.25 (Data)	Operation Software for Broadband Services (AOS-BB), R1.25 CD-ROM	J1C284XB-1, List 17	
ALL	AOS-BB Right-to-Use License, Operating System	J1C282XB-1, List M1R	
R1.25 (Data)	AOS-BB Right-to-Use License, Application Software	J1C284XB-1, List P17R	

R1.27 operations software for data (broadband) services

Release R1.27 allows *AnyMedia* Access System software to support the new ADSL2 and ADSL2+ standards.

Release 1.27 AOS-BB Software		
Customer Ordering Code Short Description		
J1C284XL-1, List 1	AnyMedia Access System AOS-BB Software R1.27 CD-ROM	
J1C284XL-1, List M1R	AnyMedia Access System AOS-BB Software Operation System RTU	

Release 1.27 AOS-BB Software		
Customer Ordering Code	Short Description	
J1C284XL-1, List P1R	AnyMedia Access System AOS-BB Software R1.27 RTU for Application	
J1C284XL-1, List P1S	AnyMedia Access System AOS-BB Software R1.27 RTU for Upgrade	

R1.29 operations software for data (broadband) services

Release R1.29 allows *AnyMedia* Access System software to support the new ADSL2 and ADSL2+ standards.

Release 1.29 AOS-BB Software		
Customer Ordering Code Short Description		
J1C284XL-1, List 2	AnyMedia Access System AOS-BB Software R1.29 CD-ROM	
J1C284XL-1, List M1R	AnyMedia Access System AOS-BB Software Operation System RTU	
J1C284XL-1, List P2R	AnyMedia Access System AOS-BB Software R1.29 RTU for Application	
J1C284XL-1, List P2S	AnyMedia Access System AOS-BB Software R1.29 RTU for Upgrade	

R1.29.1/R1.29.2 operations software for data (broadband) services

Beginning with Release R1.29.1 AOS-BB Software is available for the AFM, while the R1.29.2 Software applies to the IP-AFM only.

Release 1.29.1/R1.29.2 AOS-BB Software		
Customer Ordering Code Short Description		
J1C284XL-1, List 6	AnyMedia Access System AOS-BB Software R1.29.1U2 CD-ROM for AFM	
J1C284XL-1, List M1R	AnyMedia Access System AOS-BB Software Operation System RTU	
J1C284XL-1, List P6R	AnyMedia Access System AOS-BB Software R1.29.1U2 RTU for Application (AFM)	

Release 1.29.1/R1.29.2 AOS-BB Software		
Customer Ordering Code Short Description		
J1C284XL-1, List P6S	AnyMedia Access System AOS-BB Software R1.29.1U2 RTU for Upgrade (AFM)	
J1C284XL-1, List 6A	AnyMedia Access System AOS-BB Software R1.29.2U1 CD-ROM for IP-AFM	
J1C284XL-1, List P6AR	AnyMedia Access System AOS-BB Software R1.29.2U1 RTU for Application (IP-AFM)	
J1C284XL-1, List P6AS	AnyMedia Access System AOS-BB Software R1.29.2U1 RTU for Upgrade (IP-AFM)	

R1.31/R1.31.1 operations software for data (broadband) services

AOS-BB Software is available for the AFM, and for the IP-AFM.

Release 1.31 AOS-BB Software		
Customer Ordering Code Short Description		
J1C284XL-1, List 5	AnyMedia Access System AOS-BB Software R1.31 CD-ROM for AFM	
J1C284XL-1, List P5R	AnyMedia Access System AOS-BB Software R1.31 RTU for Application (AFM)	
J1C284XL-1, List P5S	AnyMedia Access System AOS-BB Software R1.31 RTU for Upgrade (AFM)	
J1C284XL-1, List 5A	AnyMedia Access System AOS-BB Software R1.31 CD-ROM for IP-AFM	
J1C284XL-1, List P5AR	AnyMedia Access System AOS-BB Software R1.31 RTU for Application (IP-AFM)	
J1C284XL-1, List P5AS	AnyMedia Access System AOS-BB Software R1.31 RTU for Upgrade (IP-AFM)	
J1C284XL-1, List 8	AnyMedia Access System AOS-BB Software R1.31.1 CD-ROM for AFM	
J1C284XL-1, List P8R	AnyMedia Access System AOS-BB Software R1.31.1 RTU for Application (AFM)	
J1C284XL-1, List P8S	AnyMedia Access System AOS-BB Software R1.31.1 RTU for Upgrade (AFM)	
J1C284XL-1, List P8A	AnyMedia Access System AOS-BB Software R1.31.1 CD-ROM for IP-AFM	

Release 1.31 AOS-BB Software		
Customer Ordering Code Short Description		
J1C284XL-1, List P8AR	AnyMedia Access System AOS-BB Software R1.31.1 RTU for Application (IP-AFM)	
J1C284XL-1, List P8AS	AnyMedia Access System AOS-BB Software R1.31.1 RTU for Upgrade (IP-AFM)	
J1C284XL-1, List M1R	AnyMedia Access System AOS-BB Software Operation System RTU	

R1.33 operations software for data (broadband) services

AOS-BB Software is available for the AFM, and for the IP-AFM.

Release 1.33 AOS-BB Software		
Customer Ordering Code Short Description		
J1C284XL-1, List 10	AnyMedia Access System AOS-BB Software R1.33 CD-ROM for AFM	
J1C284XL-1, List P10R	AnyMedia Access System AOS-BB Software R1.33 RTU for Application (AFM)	
J1C284XL-1, List P10S	AnyMedia Access System AOS-BB Software R1.33 RTU for Upgrade (AFM)	
J1C284XL-1, List 10A	AnyMedia Access System AOS-BB Software R1.33 CD-ROM for IP-AFM	
J1C284XL-1, List P10AR	AnyMedia Access System AOS-BB Software R1.33 RTU for Application (IP-AFM)	
J1C284XL-1, List P10AS	AnyMedia Access System AOS-BB Software R1.33 RTU for Upgrade (IP-AFM)	
J1C284XL-1, List M1R	AnyMedia Access System AOS-BB Software Operation System RTU	

Upgrades for data software

Customers may opt to purchase upgrades for additional AnyMedia applications.

Upgrades in software and licenses must be purchased for broadband services. Customers can upgrade from a specific release of software. Use the ordering information from the following table to upgrade to the release desired.

Upgrades for AOS-BB software		
To Release	Description	Ordering Information
R1.17.1 Update 3	AOS-BB Right-to-Use License, Application Software Upgrade	J1C284XB-1, List P11S
R1.21	AOS-BB Right-to-Use License, Application Software Upgrade	J1C284XB-1, List P13S
R1.23	AOS-BB Right-to-Use License, Application Software Upgrade	J1C284XB-1, List P14S
R1.23 Update 3	AOS-BB Right-to-Use License, Application Software Upgrade	J1C284XB-1, List P16S
R1.25	AOS-BB Right-to-Use License, Application Software Upgrade	J1C284XB-1, List P17S
R1.27	AOS-BB Right-to-Use License, Application Software Upgrade	J1C284XL-1, List P1S
R1.29	AOS-BB Right-to-Use License, Application Software Upgrade for AFM	J1C284XL-1, List P2S
R1.29.1U2	AOS-BB Right-to-Use License, Application Software Upgrade for AFM	J1C284XL-1, List P6S
R1.29.2U1	AOS-BB Right-to-Use License, Application Software Upgrade for IP-AFM	J1C284XL-1, List P6AS
R1.31	AOS-BB Right-to-Use License, Application Software Upgrade for AFM	J1C284XL-1, List P5S
R1.31	AOS-BB Right-to-Use License, Application Software Upgrade for IP-AFM	J1C284XL-1, List P5AS
R1.31.1	AOS-BB Right-to-Use License, Application Software Upgrade for AFM	J1C284XL-1, List P8S
R1.31.1	AOS-BB Right-to-Use License, Application Software Upgrade for IP-AFM	J1C284XL-1, List P8AS
R1.33	AOS-BB Right-to-Use License, Application Software Upgrade for AFM	J1C284XL-1, List P10S
R1.33	AOS-BB Right-to-Use License, Application Software Upgrade for IP-AFM	J1C284XL-1, List P10AS

Operations software for IP-based services

Overview

Operations SW for IP-based services includes:

- Software that resides on the IPFM and controls the IP-based services for the *AnyMedia* Access System (AOS-IP)
 All IPFMs are delivered with this software product pre-installed. CD-ROMs are only required for software upgrades or in the unlikely event that a recovery process is required.
- Software for stand-alone IP application packs.
 By default, stand-alone packs come configured in IPFM controlled mode. When required, the IPFM controlled mode has to be changed to stand-alone mode during system turn-up.

The J1C283XP-1, List M1R right-to-use license must be ordered for every NE that supports IP-based services.

Orderable items

Operations software for IP-based services

Description	Ordering Information
Software for IPFM controlled mode	
AOS-IP CD-ROM, Release 3.1.3 Software with System Release Description (SRD)	J1C283XP-1 List 4 ¹
AOS-IP - Release 3.1.3 Software, Application Right to Use License	J1C283XP-1, List P4CR ¹
AOS-IP - Release 3.1.3 Software, Upgrade Right to Use License	J1C283XP-1, List P4CS ³
AOS-IP CD-ROM, Release 3.2 Software with System Release Description (SRD)	J1C283XP-1 List 5 ¹
AOS-IP - Release 3.2 Software, Application Right to Use License	J1C283XP-1, List P5CR ¹
AOS-IP - Release 3.2 Software, Upgrade Right to Use License	J1C283XP-1, List P5CS ³
AOS-IP CD-ROM, Release 3.3 Software with System Release Description (SRD)	J1C283XP-1 List 6 ¹
AOS-IP - Release 3.3 Software, Application Right to Use License	J1C283XP-1, List P6CR ¹

Description	Ordering Information
AOS-IP - Release 3.3 Software, Upgrade Right to Use License	J1C283XP-1, List P6CS ³
AOS-IP - Right to Use License, per NE (AnyMedia shelf equipped with one or two IPFMs)	J1C283XP-1 List M1R ¹ , ²

Notes:

- 1. Order this for any LAG shelf that will have an IPFM inserted.
- 2. If IP APs will operate in the shelf in stand-alone mode, contact your Alcatel-Lucent Sales Account regarding RTU fees.
- 3. Order this for any system that will have an IPFM and any IP packs as an upgrade.

AnyMedia Management Interface software

Overview

The *AnyMedia* Management Interface is used to provision a single network element (NE) at a time through the GSI, while simultaneously monitoring alarms of multiple NEs through its Network Maintenance Manager. The Management interface is made up of the following:

- GSI The GSI for the *AnyMedia* Access System is a software tool that provides a graphical interface to support the OAM&P functions of the system.
- Network Maintenance Manager The Network Maintenance Manager is a software tool used to monitor alarms over multiple NEs. The Network Maintenance Manager allows a technician to choose which NEs to monitor, to filter viewed alarms, and to manage the display of these alarms.

The Network Maintenance Manager is accessed remotely by choosing it through the Management Interface, or through a button or pull-down menu on the GSI. In this way, a technician may go back and forth from multiple to single NEs as needed to check and administer the alarms.

AMI Release 4.2

The *AnyMedia* Management Interface software is the software product that must be loaded onto your PC to interface with the *AnyMedia* Access System.

Ordering Information	Short Description
J1C282XJ-1, List 7	AnyMedia Management Interface Software R4.2 CD-ROM for up to R1.28, R1.29 and R3.1.3
J1C282XJ-1, List P7R	AnyMedia Management Interface
	Right-to-Use License - Application (up to R1.28, R1.29 and R3.1.3)
J1C282XJ-1, List M1R	AnyMedia Management Interface
	Right-to-Use License - Operating System (for all Releases)

Customers must purchase for every PC on which the software product is loaded:

- AnyMedia Management Interface Software and
- Right-to-Use License Application
- Right-to-Use License Operating System.

Navis AnyMedia Element Management System (NAM)

General information

The Navis *AnyMedia* EMS software provides remote and centralized OAM&P support for a network of *AnyMedia* Access Systems. Each managed system is defined as a network element (NE) and consists of the *AnyMedia* main shelf, the MDS2 shelf and subtending integrated access devices (IADs).

User documentation is included in electronic format on the CD-ROM of the software.

The Navis *AnyMedia* EMS server software is deployed on Sun platform (purchased separately, see minimum requirements below), and the Navis *AnyMedia* clients software is deployed on Sun workstation or Intel based Personal Computer (purchased separately, see minimum requirements below). The server and client machines on which the Navis *AnyMedia* EMS software is deployed requires a license, which is provided with the purchase of server and client software. There can be multiple Navis *AnyMedia* clients connecting to the Navis *AnyMedia* EMS server. Additionally, each *AnyMedia* Access System to be managed by Navis *AnyMedia* EMS requires a Right-To-Use (RTU) license. The Navis *AnyMedia* EMS also offers an optional North Bound Interface (NBI), which can be used to integrate Navis *AnyMedia* to higher OSS systems.

NOTE: When ordering Navis *AnyMedia* EMS Software, Third Party Software RTUs may also be required, although they are not included here.

Navis *AnyMedia* EMS server and client SW for R3.2 (NAR version)

A copy of the Navis *AnyMedia* EMS software is required for each Hardware Server it is installed on. The client licenses, which determine the maximum number of concurrent users accessing a Server, are required for each machine that runs the Navis *AnyMedia* EMS Server software.

Description	Network Management Division Product Code	Ordering Information
Navis <i>AnyMedia</i> R3.2 EMS Software (including the RTU for one client)	ANC-ANYM-32-SOL- NAR	300811528
Navis <i>AnyMedia</i> EMS R 3.2, GUI Client RTU for Sun Solaris Workstation	ANC-ANYM-32-SOL- WS-NAR	300811536
Navis <i>AnyMedia</i> EMS R 3.2, GUI Client RTU for Windows NT	ANC-ANYM-32-NT- WS-NAR	300811544

Navis AnyMedia EMS server and client SW for R4.0 (NAR version)

A copy of the Navis *AnyMedia* EMS software is required for each Hardware Server it is installed on. The client licenses, which determine the maximum number of concurrent users accessing a Server, are required for each machine that runs the Navis *AnyMedia* EMS Server software.

Description	Network Management Division Product Code	Ordering Information
Navis <i>AnyMedia</i> R4.0 EMS Software (including the RTU for one client)	ANC-ANYM-40-SOL- NAR	300854106
Navis <i>AnyMedia</i> EMS R 4.0, GUI Client RTU for Sun Solaris Workstation	ANC-ANYM-40-SOL- WS-NAR	300854114
Navis <i>AnyMedia</i> EMS R 4.0, GUI Client RTU for Windows NT	ANC-ANYM-40-NT- WS-NAR	300854122

Navis AnyMedia EMS server and client SW for R4.1 (NAR version)

A copy of the Navis *AnyMedia* EMS software is required for each Hardware Server it is installed on. The client licenses, which determine the maximum number of concurrent users accessing a Server, are required for each machine that runs the Navis *AnyMedia* EMS Server software.

Description	Network Management Division Product Code	Ordering Information
Navis <i>AnyMedia</i> R4.1 EMS Software (including the RTU for one client)	ANC-ANYM-41-SOL- NAR	300853900
Navis AnyMedia EMS R 4.1, GUI Client RTU for Sun Solaris Workstation	ANC-ANYM-41-SOL- WS-NAR	300854031
Navis <i>AnyMedia</i> EMS R 4.1, GUI Client RTU for Windows NT	ANC-ANYM-41-NT- WS-NAR	300854049

Navis AnyMedia EMS server and client SW for R4.2 (NAR version)

A copy of the Navis *AnyMedia* EMS software is required for each Hardware Server it is installed on. The client licenses, which determine the maximum number of concurrent users accessing a Server, are required for each machine that runs the Navis *AnyMedia* EMS Server software.

Description	Network Management Division Product Code	Ordering Information
Navis <i>AnyMedia</i> R4.2 EMS Software (including the RTU for one client)	ANC-ANYM-42-SOL- NAR	300904083
Navis <i>AnyMedia</i> EMS R 4.2, GUI Client RTU for Sun Solaris Workstation	ANC-ANYM-42-SOL- WS-NAR	300904091
Navis <i>AnyMedia</i> EMS R 4.2, GUI Client RTU for Windows NT	ANC-ANYM-42-NT- WS-NAR	300904109

Navis AnyMedia EMS server and client SW for R4.3 (NAR version)

A copy of the Navis *AnyMedia* EMS software is required for each Hardware Server it is installed on. The client licenses, which determine the maximum number of concurrent users accessing a Server, are required for each machine that runs the Navis *AnyMedia* EMS Server software.

Description	Network Management Division Product Code	Ordering Information
Navis <i>AnyMedia</i> R4.3 EMS Software (including the RTU for one client)	ANC-ANYM-43-SOL- NAR	300962511
Navis <i>AnyMedia</i> EMS R 4.3, GUI Client RTU for Sun Solaris Workstation	ANC-ANYM-43-SOL- WS-NAR	300962560
Navis <i>AnyMedia</i> EMS R 4.3, GUI Client RTU for Windows NT	ANC-ANYM-43-NT- WS-NAR	300962578

Navis AnyMedia EMS RTU per managed AnyMedia Access System

The Navis *AnyMedia* EMS Network Support is a license to manage the device. One Network Support Option is required per *AnyMedia* device to be managed.

Description	Network Management Division Product Code	Ordering Information
Navis AnyMedia EMS Network Support license for AnyMedia Access System	ANYM-SO-ANC	300318573
Navis AnyMedia EMS Network Support license for AnyMedia LAG 2300 Shelf	ANYM-SO-ANC-2300	300797230
Navis AnyMedia EMS Network Support license for AnyMedia 800 Access System	ANYM-AMAS-800-SO- ANC	300443165

Navis AnyMedia EMS optional Northbound Interface (NBI) (NAR version)

NBI CORBA + SNMP includes Navis *AnyMedia* EMS API RTU, CORBA/IDL specification, runtime software, and SNMP Fault Management documentation and runtime software.

Description	Network Management Division Product Code	Ordering Information
Navis <i>AnyMedia</i> EMS release 3.2 software API for Northbound Interface (NBI) (CORBA + SNMP)	ANC-ANYM-32-OSS- NAR	300811569
Navis <i>AnyMedia</i> EMS release 4.0 software API for Northbound Interface (NBI) (CORBA + SNMP)	ANC-ANYM-40-OSS- NAR	300854148
Navis <i>AnyMedia</i> EMS release 4.1 software API for Northbound Interface (NBI) (CORBA + SNMP)	ANC-ANYM-41-OSS- NAR	300854064
Navis AnyMedia EMS release 4.2 software API for Northbound Interface (NBI) (CORBA + SNMP)	ANC-ANYM-42-OSS- NAR	300904125
Navis AnyMedia EMS release 4.3 software API for Northbound Interface (NBI) (CORBA + SNMP)	ANC-ANYM-43-OSS- NAR	300962537

Description	Network Management Division Product Code	Ordering Information
Navis AnyMedia EMS feature license for API to a managed AnyMedia Access System (one per device)	ANYM-SO-ANC-OSS	300318649
Navis <i>AnyMedia</i> EMS feature license for API to a managed <i>AnyMedia</i> LAG 2300 Shelf (one per device)	ANYM-2300-SO-ANC- OSS	300797248
Navis AnyMedia EMS feature license for API to a managed AnyMedia 800 Access System (one per device)	ANYM-800-SO-ANC- OSS	300659919

Note that also third party RTUs may be required, although they are not included here.

Hardware requirements for NAM

Hardware must be provided by customer. Customer must purchase Sun server hardware, Operating System (OS) software, and Sun or Windows NT/2000 client with appropriate OS software.

Navis AnyMedia Element Manager R4.1 24CH is currently supported on hosts running Solaris 8 and Solaris 9 (Solaris 10 is not supported), depending on the hardware platform being used. The Navis AnyMedia server application R4.1 24CH is supported in the platforms stated in the table below. Already existing customers not planning to use the enhanced capacity (number of NEs) of NAM R4.1 24CH can continue using the already deployed platforms.

Below are estimates of the required Sun platform configurations for the Navis *AnyMedia* server applications:

Description	Customer Characteristics	Hardware configuration
Sun Server Requirement		

Description	Customer Characteristics	Hardware configuration
Minimum platform configuration:	Aimed at customers with small/medium deployments, no strong performance requirements, slow network growth and limited (NB/BB/IP) service mix offering per shelf.	Configuration: Sun Fire V480/V880 Server Regressors Can GB For swap memory A Processors Can GB Disk Drives Note: V480 and V880 server have reached end of life and it is no longer orderable. Recommended for new deployments: Sun Fire V490/V890 Server Regressors Can GB or 2×146 GB disk drives for V490 server and 4×147 GB disk drives for the V890 server. Note: Solaris 8 cannot be ordered with V490/V890 server.
Recommended platform configuration:	The standard configuration for customer with large deployment, standard service mix (NB/BB/IP) offering per shelf and normal performance requirements. product testing and performance modelling is executed on this platform.	Configuration: Sun Fire V480/V880 Server, 16 GB RAM 8 GB for swap memory 4 Processors 2×36 GB disk drives Note: V480 and V880 server have reached end of life and it is no longer orderable. Recommended for new deployments: Sun Fire V490/V890 Server 16 GB RAM 8 GB for swap memory 2 Processors 2×73 GB or 2×146 GB disk drives for V490 server and 4×147 GB disk drives for the V890 server. Note: Solaris 8 cannot be ordered with V490/V890 server.

Description	Customer Characteristics	Hardware configuration
High-end platform configuration:	Aimed at customers that use hardware intensive NAM features (e.g. bulk collection of network data, bulk network line testing, etc) and use more than one management system connected to NAM for automated provisioning or data collection. High rate of service mix (NB/BB/IP) offering per shelf. Strong performance requirements.	 Recommended configuration: Sun Fire V490/V890 Server 32 GB RAM 16 GB for swap memory 4 Processors 2×73 GB or 2×146 GB disk drives for V490 server and 4×147 GB disk drives for the V890 server. Note: Solaris 8 cannot be ordered with V490/V890 server.

For more accurate decision of what hardware platform better fits the deployment needs or for small networks, please contact the *Lucent NAM Product Manager* for a final recommendation.

The Navis *AnyMedia* client applications, which must be installed on a machine different from the server, are supported by the following platforms:

Description	Hardware configuration	
Unix platforms		
Minimum platform configuration:	Configuration: SUN Ultra 10 WS 10 S12 Mb RAM 440 MHz 11 GB HD graphic card with at least 1280 x 1024 pixel resolution 19 inch monitor supporting this resolution.	
Recommended Platform:	Configuration: SUN Blade 150 WS (or better) 512 Mb RAM 650 MHz 80 GB HD graphic card with at least 1280 x 1024 pixel resolution 21 inch monitor supporting this resolution.	
Windows platforms		

Description	Hardware configuration
Minimum platform configuration:	Configuration:
	Pentium IV PC
	• 256 Mb RAM
	• 2,4 GHz
	• 200 Mb free on HD
	• graphic card with at least 1280 x 1024 pixel resolution
	• 19 inch monitor supporting this resolution (1280 x 1024 pixel).
Recommended platform	Configuration:
configuration:	Pentium IV PC
	• 512 Mb RAM
	• 2,4 GHz
	• 200 Mb free on HD
	• graphic card with at least 1280 x 1024 pixel resolution
	• 19 inch monitor supporting this resolution (1280 x 1024 pixel).

For more accurate decision of what hardware platform better fits the deployment needs or for small networks, please contact the *Lucent NAM Product Manager* for a final recommendation.

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6 Outside Plant Ordering Information

Cabinet Ordering Information

Overview

The *AnyMedia* Access System RT is available in fully equipped, Type 82A or Type 52B or E outside plant cabinets. Also available is the 92C type indoor electronics cabinet. The 82A, 52B, 52E, and 92C cabinets are described below.

Commscope 82A cabinet details

Ordering details for this cabinet equipped with *AnyMedia* Access Systems and associated equipment are found in Alcatel-Lucent Document 631-600-290, 82-Type Outdoor Electronics Cabinets. Additional cabinet and cabinet configurations may be available. Account representatives can be contacted with specific requests.

The cabinet will support the following:

- From one to three *AnyMedia* FAST Shelves, which will support up to 1536 lines in the cabinet
- An optional MDS2 shelf supporting up to 96 special service circuits
- A bulk power and ringing system, including a fuse and alarm panel, a battery circuit breaker panel, and batteries
- A choice of DDM-2000 or other multiplexers
- An optional DDM Plus T-1 carrier extension shelf
- Choices of protector groups, DSX cross-connects, T1 cross-connects, and fiber terminating equipment.

Commscope 52B cabinet details

Ordering details for this cabinet equipped with *AnyMedia* Access Systems and associated equipment are found in Alcatel-Lucent Document 631-600-293, 52B and 52E Outdoor Electronics Cabinets.

The cabinet will support the following:

- One FAST shelf supporting up to 512 VF lines (or up to 256 ISDN lines)
- A DDM-2000 SONET multiplexer
- A DSX panel supporting up to 68 DS1 terminations
- A CPS 2000 power plant, which supplies power and ringing. Type 12IR125, IR30, or IR40 batteries may be used. Note that the batteries must be ordered directly from the outside vendor. Optionally a CPS4000 or a Yukon 650 may be used for power supply.
- A fan unit
- An optional MDS2 shelf supporting up to 96 special service circuits
- An optional DDM-Plus (T1 extension) shelf
- Six 100-pair 307 type protector blocks
- An alarm interface panel.

Commscope 52E-type cabinet

Ordering details for this cabinet equipped with *AnyMedia* Access Systems and associated equipment are found in Alcatel-Lucent Document 631-600-293, 52B and 52E Outdoor Electronics Cabinets.

This cabinet is similar to the 52B-Type cabinet, with the addition of the following:

- A second FAST shelf
- Seven additional 100-pair 307 type protector blocks.

Commscope 92C cabinet details

The 92C type indoor electronics cabinet is described in Alcatel-Lucent Document 640-250-307, 92-Type Indoor Electronics Cabinets Description, Installation, and Operations.

- One AnyMedia FAST shelf that supports 512 lines (or up to 256 ISDN pairs)
- A DDM-2000 OC-3 SONET multiplexer
- A CPS 2000 power shelf with a ringing supply. Optionally a CPS4000 or a Yukon 650 may be used for power supply.
- 8-hour battery backup
- Splice areas for both fiber optic and copper cable
- A fuse and alarm panel
- Fans
- DSX-1 cross-connects
- Optional single MDS2 shelf or optional DDM-Plus shelf (only one). The optional MDS2 shelf supports up to 96 special service circuits.

7 Documentation

AnyMedia Access System documentation

The following documents support the *AnyMedia* Access System. (When documents are ordered, the most recent issue will be sent.

Document Title	9-Digit Document Code	Comcode
AnyMedia® Access System Applications and Planning Guide	363-211-101	108298639
AnyMedia® Access System Applications and Planning Guide for IP-based Services	363-211-587	109562769
AnyMedia® Access System Commands and Procedures for IP-based Services	363-211-555	109024737
AnyMedia® Access System Feature Supplement, MDS2 Shelf Configuration	363-211-106	108864521
AnyMedia® Access System Feature Supplement, Integrated Access Terminal	363-211-127	Not Applicable
AnyMedia® Access System Feature Supplement, Central Office Terminal	363-211-128	Not Applicable
AnyMedia® Access System Installation Manual	363-211-102	108298654
AnyMedia® Access System Data Sheet Book	363-211-254	Not Applicable

Document Title	9-Digit Document Code	Comcode
AnyMedia® Access System Documentation CD-ROM. Includes:	363-211-103	108361155
Commands and Procedures in on-line format (HTML)		
 Adobe pdf format versions of: Installation Manual Applications and Planning Guide Applications and Planning Guide for IP-based Services Commands and Procedures for IP-based Services AnyMedia Access System Feature 		
Supplements - AnyMedia Access System Data Sheet Book		
AnyMedia® Access System Floor Plan Data Sheet	FPD 801-450-111-1	Not Applicable

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AnyMedia Access System software release descriptions (SRD)

Document Title	Release Number	9-Digit Document Code
Narrowband Services		
AnyMedia® Access System Software Release Description (SRD) R1.2.1, Issue 1, May 1999	1.2.1	363-211-124
AnyMedia® Access System Software Release Description (SRD) R1.2.2.2, Issue 1 (COM101 Update), December 1999	1.2.2.2	363-211-132
AnyMedia ® Access System Operations Software Release Description (SRD) R1.2.2.3, Issue 1, January 2000	1.2.2.3	363-211-160
AnyMedia ® Access System Operations Software Release Description (SRD) R1.2.2.5, Issue 1, January 2000	1.2.2.5	363-211-162
AnyMedia ® Access System Operations Software Release Description (SRD) R1.2.2.5.1, Issue 1, May 2000	1.2.2.5.1	363-211-163
AnyMedia® Access System Software Release Description (SRD) R1.2.2.5.2, Issue 1, May 2000	1.2.2.5.2	363-211-166
AnyMedia® Access System Software Release Description (SRD) 1.2.2.5.3, Issue 1, December 2000	1.2.2.5.3	363-211-176
AnyMedia ® Access System Operations Software Release Description (SRD) R1.2.3, Issue 1, January 2000	1.2.3	363-211-161
AnyMedia® Access System Software Release Description (SRD) R1.2.3.1, Issue 1, July 2000	1.2.3.1	363-211-168
AnyMedia ® Access System Operations Software Release Description (SRD) R1.2.3.2, Issue 1, October 2000	1.2.3.2	363-211-173
AnyMedia® Access System Software Release Description (SRD) 1.7.0 (IATS), December 1999	1.7.0	363-211-131
AnyMedia® Access System Software Release Description (SRD) 1.7.1, June 2000	1.7.1	363-211-165
AnyMedia® Access System Software Release Description (SRD) 1.7.1.1, Issue 1, September 2000	1.7.1.1	363-211-170
AnyMedia® Access System Software Release Description (SRD) 1.7.1.2, Issue 1, March 2001	1.7.1.2	363-211-179
AnyMedia® Access System Software Release Description (SRD) R1.7.2, Issue 1, September 2000	1.7.2	363-211-171

Document Title	Release Number	9-Digit Document Code	
AnyMedia® Access System: System Release Description for Software (SRD) 1.7.2.1, Issue 1, March 2001	1.7.2.1	363-211-177	
AnyMedia® Access System Software Release Description (SRD) 1.9.1, August 2001	1.9.1	363-211-153	
AnyMedia® Access System Software Release Description (SRD) 1.10.0.1, Issue 1, October 2001	1.10.0.1	363-211-253	
AnyMedia® Access System Software Release Description (SRD) 1.18, Issue 1, September 2003	1.18	363-211-257	
AnyMedia® Access System Software Release Description (SRD) 1.20, Issue 1, July 2004	1.20	363-211-556	
AnyMedia® Access System Software Release Description (SRD) 1.22.20, Issue 1, March 2005	1.22.20	363-211-614	
AnyMedia® Access System Software Release Description (SRD) 1.22.30, Issue 1, March 2005	1.22.30	363-211-602	
AnyMedia® Access System Software Release Description (SRD) 1.28.20, Issue 1, December 2005	1.28.20	363-211-633	
AnyMedia® Access System Software Release Description (SRD) 1.28.30, Issue 1, December 2005	1.28.30	363-211-634	
AnyMedia® Access System Software Release Description (SRD) 1.32.20, Issue 1, September 2006	1.32.20	363-211-248R1.32.20	
AnyMedia® Access System Software Release Description (SRD) 1.32.30, Issue 1, September 2006	1.32.30	363-211-249R1.32.30	
AnyMedia® Access System Software Release Description (SRD) 1.36.20	1.36.20	363-211-273R36.20	
AnyMedia® Access System Software Release Description (SRD) 1.36.30	1.36.30	363-211-274R36.30	
Broadband Services			
AnyMedia ® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.1.2, Issue 1	1.1.2	363-211-105	
AnyMedia ® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.1.2-20, Issue 1, July 2000	1.1.2-20	363-211-169	
AnyMedia® Access System Software Release Description (SRD) R1.7.3.3 (Data), Issue 1, June 2000	R1.7.3.3 (Data)	363-211-167	

Document Title	Release Number	9-Digit Document Code	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.7.3.2 (Data), Issue 1, November 2000	R1.7.3.2 (Data)	363-211-172	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.7.3.3.3-010 (Data), Issue 1, November 2000	R1.7.3.3010 (Data)	363-211-175	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.13.0.3 (Data), Issue 2, October 2001	R1.13.0.3 (Data)	363-211-200	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.15 (Data), Issue 1, December 2001	R1.15. (Data)	363-211-203	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.17.1 Update 3 (Data), Issue 6, March 2003	R1.17.1 Update 3 (Data)	363-211-211	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.21 (Data), Issue 1, June 2003	R1.21 (Data)	363-211-540	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.23 (Data), Issue 1, November 2003	R1.23 (Data)	363-211-226	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.25 (Data), Issue 1, November 2004	R1.25 (Data)	363-211-562	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.27 (Data), Issue 1, February 2005	R1.27 (Data)	363-211-599	
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) Software Release Description (SRD) R1.29 (Data), Issue 1, December 2005	R1.29 (Data)	363-211-238	

Document Title	Release Number	9-Digit Document Code
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) for AFM Software Release Description (SRD) R1.29.1/R1.29.2 (Data), March/August 2006	R1.29.1 (Data) R1.29.2 (Data)	363-211-238
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) for IP-AFM Software Release Description (SRD) R1.29.1/R1.29.2 (Data), March/August 2006		363-211-239
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) for AFM Software Release Description (SRD) R1.31 (Data), September 2006	R1.31 (Data) R1.31.1 (Data)	363-211-240R1.31
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) for IP-AFM Software Release Description (SRD) R1.31 (Data), September 2006		363-211-241R1.31
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) for AFM Software Release Description (SRD) R1.33 (Data)	R1.33 (Data)	363-211-275R1.33
AnyMedia® Access System Operations Software for Broadband Services (AOS-BB) for IP-AFM Software Release Description (SRD) R1.33 (Data), September 2006		363-211-276R1.33
IP-based Services		
AnyMedia® Access System Operations Software for IP-based Services Software Release Description (SRD) R3.1.3, July 2006	3.1.3	363-211-627
AnyMedia® Access System Operations Software for IP-based Services Software Release Description (SRD) R3.2, September 2006	3.2	363-211-247R3.2
AnyMedia® Access System Operations Software for IP-based Services Software Release Description (SRD) R3.3	3.3	363-211-271R3.3

DDM-2000 customer documentation

Document Title	9-Digit Document Code	Comcode
DDM-2000 FiberReach Multiplexer Applications, Planning, and Ordering Guide	363-206-300	108646563
DDM-2000 FiberReach Multiplexer, Wideband/Narrowband Shelf TARP Release 3, User/Service Manual	363-206-305	108865700
DDM-2000 FiberReach Multiplexer Installation Manual	363-206-310	108091620

8 Power and Ringing Supplies

Components for Power and Ringing Supplies

General

External sources are required to provide DC power and superimposed AC ringing voltages to the RT Bay. COT applications will normally be powered from the CO power system via a BDFB panel. Typical examples for remote terminal applications are the Tyco Power Plant Cabinet Power Systems (J85500R-1 and J85582R-2) and the power shelves that were designed for SLC Series 5 Digital Loop Carrier. See the *AnyMedia*® Access System Applications and Planning Guide, Chapter 10 for more information about power and ringing.

Power shelf and CPS

The Tyco Electronics J855500R-1 power shelf can be used to supply power to the *AnyMedia* Access System shelf. It should be equipped with three or four ES660 type rectifiers and two ES621 type ringing generators. This J85582R-2 CPS Shelf should be equipped with three ES460 type rectifiers and two ES421 type ringing generators.

Power and ringing shelves

The following equipment is required for the Tyco Electronics J85500R-1 CPS shelf.

Qty	Code	Description
1	J85500R-1	CPS Shelf
2	ES621	Ringing Generator (100 VA)
1	ES646B	Monitor & Control Unit
3 or 4	ES660	Rectifier (12.5 Amp)

The following apparatus	and equipment	t is required for	r the Tyco	Electronics J85582R-2
CPS2000 shelf.				

Qty	Code	Description
1	J85582R-2	CPS2000 Shelf
2	ES421	Ringing Generator (50 VA)
1	ES446	Monitor & Control Unit
3	ES460	Rectifier (7.2 Amp)

The Tyco Electronics J1C182BC-1 Ringing Shelf, equipped with 3C ringing generator(s) and AUG3 ringing control unit(s) can be ordered to furnish the -20 Hz ringing voltage to the *AnyMedia* Access System RT shelf. The J1C182BD-1 bulk power shelf, equipped with 336A1 rectifiers, 3H1 ringing generators, AUG3 ringing control unit, and AUG4B battery interface unit, is not part of the *AnyMedia* Access System but can be used to furnish -48 VDC power and -20 Hz ringing to the remote terminal. The following ringing generator equipment is required for the J1C182BC-1 shelf.

Qty	Code	Description
1	J1C182BC-1	Ring Shelf
2 or 4	3C1	Ringing Generator (1 Amp)
1 or 2	AUG3	Ringing Control Unit

To connect the J1C182BC-1 ringing shelf to the FAST shelf ringing input, use cable ED7C818-32, Group 19 (10 feet), 19A (25 feet), 19C (50 feet), or 19C (100 feet).

Ringing

At least two external ringing supplies in a protected system should be provided, each supplying superimposed -20Hz ringing current to the *AnyMedia* Access System shelf.

The J85582R-2 cabinet power system (CPS2000) can power one FAST Shelf only.

Fuses

The following fuses are used in the fuse and alarm panel for the FAST shelf and the MDS2 shelf.

Description	COMCODE
15A fuse for -48V DC inputs at FAST shelf (F1/F2)	408026243

Description	COMCODE
10A fuse for -48VDC (M1/M2) (J1C282AB-1 shelf)	408107480
2A fuse for the fan at FAST shelf	408026250
1A fuse for the -20 Hz ringing supply at FAST shelf	408026268
5A fuse for -48V DC inputs at MDS2 shelf	408026276
0.5A fuse for -20 Hz ringing supply at MDS2 shelf	408026284

Ringing generators

Ringing generators should be selected according to the number of customer lines (see Applications and Planning Guide, Chapter 10, FAST Shelf Powering).

- For a 50 VA requirement, use Tyco Electronics ringing generator ES620 or equivalent.
- For a 100 VA requirement, use Tyco Electronics ringing generator ES621 or equivalent.

Ringing filter

If the ringing supply to the FAST shelf is not in the same bay or an immediately adjacent bay, a ringing filter is recommended to provide lightning protection. The ringing filter is always required for a COT application.

Qty	COMCODE	Description
1	108504994	Ringing Filter Assembly

Bulk power shelf

The following components are required for the Tyco Electronics J1C182BD-1 bulk power shelf.

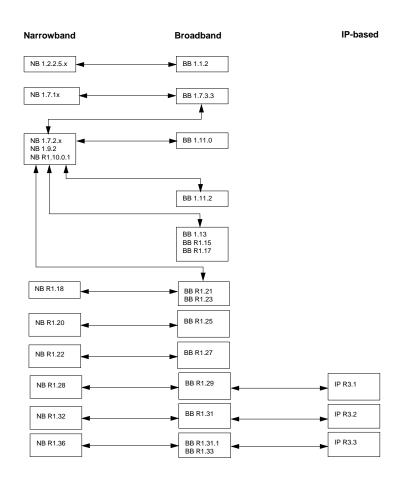
Qty	COMCODE	Description
1	J1C182BD-1	Power Shelf
2	3H1	Ringing Generator (1 Amp)
1	AUG3	Ringing Control Unit
1	AUG4B	Battery Interface Unit
5	336A1	Rectifier (5.75 Amp)

Appendix A: Release Compatibilities

Narrowband/Broadband Compatibility

Overview

The following graph indicates the high-level compatibilities between Narrowband (NB), Broadband (BB) and IP-based software releases.



Compatibility Tables

Overview

The tables below list the compatibilities among the following items for the individual narrowband and broadband releases:

- Software loads
- Controllers supported
- Application packs
- GSI software.

Narrowband compatibilities

Software Release	Controllers Supported ¹	APs ¹	AMI (GSI) Software Version
1.2.2.5.x	COM101 COM101B COM102B	DTP100, DTP101 ² , DTP102 ² FAC100, LPA300, LPA300C. LPA350, LPA356, LPA380, LPA380C, LPA404B, LPU116	2.0.0
1.2.3.4	COM101 COM101B COM102B	DTP101 ² LPA150, LPA380, MSU100	AMI 2.2.1
1.7.2.3	COM101 COM101B COM102 COM102B	DTP101 ² DTP102 ² , DTP104 FAC100, LPA300, LPA300C, LPA350, LPA356, LPA380, LPA380C, LPA404B, LPA408, LPA414, LPA416, LPA810, LPS100, LPS104, LPS105, LPS716, LPU116, MSU100	AMI R2.2.1 Build 58

Software Release	Controllers Supported ¹	APs ¹	AMI (GSI) Software Version
1.9.1	COM101	DTP101 ²	AMI
	COM101B	DTP102 ² , DTP104	R2.2.1-105
	COM102 COM102B	FAC100, LPA300, LPA300C, LPA350, LPA356, LPA380, LPA380C, LPA404B, LPA408, LPA414, LPA416, LPA417, LPA419, LPA810, LPS100, LPS104, LPS105, LPS716, LPU116, MSU100,	
1 10 0 1	COMINI	LPF500B, CPF500 DTP101 ²	ANG
1.10.0.1	COM101		AMI
	COM101B COM102 COM102B	DTP102 ² , DTP104 FAC100, LPA300, LPA300C, LPA329, LPA350, LPA356, LPA380, LPA380C, LPA404B, LPA408, LPA414, LPA416, LPA417, LPA419, LPA810, LPS100, LPS104, LPS105, LPS716, LPU116, MSU100, LPF500B, CPF500	R3.0

Software Release	Controllers Supported ¹	APs ¹	AMI (GSI) Software Version
1.18	COM101	DTP101 ²	AMI
	COM101B	DTP102 ² , DTP104	R4.0
	COM102	FAC100, LPA300,	
	COM102B	LPA300C, LPA329,	
		LPA350, LPA356, LPA380, LPA380C,	
		LPA404B, LPA408,	
		LPA414, LPA416,	
		LPA417, LPA419,	
		LPA810, LPA832,	
		LPS100, LPS104, LPS105, LPS716,	
		LPU116, MSU100,	
		LPF500B, CPF500	
1.20	COM101	DTP101 ²	AMI
	COM101B	DTP102 ² , DTP104	R4.0
	COM102	FAC100, LPA300,	
	COM102B	LPA300C, LPA329,	
		LPA350, LPA356, LPA380, LPA380C,	
		LPA404B, LPA408,	
		LPA414, LPA416,	
		LPA417, LPA419,	
		LPA810, LPA832, LPA833, LPS100,	
		LPS104, LPS105,	
		LPS716, LPU116,	
		MSU100, LPF500B,	
		CPF500	

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Software Release	Controllers Supported ¹	APs ¹	AMI (GSI) Software Version
1.22	COM101 ²	DTP101, ²	AMI
	COM101B	DTP102 ² , DTP104,	R4.0
	COM102 ²	FAC100	
	COM102B	LPA300 ²	
	COM103	LPA300C ²	
		LPA300D, LPA329, LPA350, LPA356, LPA380, ²	
		LPA380C ²	
		LPA380D	
		LPA404B ²	
		LPA408 ²	
		LPA414, LPA416, LPA419, LPA810, LPA832, LPA833,	
		LPS100 ²	
		LPS104, LPS105, LPS702, LPS716 ² , LPU116	
		MSU100 ²	
		MSU100B, LPF500B, CPF500	

Software Release	Controllers Supported ¹	APs ¹	AMI (GSI) Software Version
1.28	COM101 ²	DTP101, ²	AMI
1.32	COM101B COM102 ²	DTP102 ² , DTP104, FAC100	R4.2
	COM102B	LPA300 ²	
	COM103	LPA300C ²	
		LPA300D, LPA329, LPA350, LPA356, LPA380, ²	
		LPA380C ²	
		LPA380D	
		LPA404B ²	
		LPA408 ²	
		LPA414, LPA416, LPA419, LPA810, LPA832, LPA833,	
		LPS100 ²	
		LPS104, LPS105, LPS702, LPS716 ² , LPU116	
		MSU100 ²	
		MSU100B, LPF500B, CPF500	

Software Release	Controllers Supported ¹	APs ¹	AMI (GSI) Software Version
1.36	COM101 ²	DTP101, ²	AMI
	COM101B	DTP102 ² , DTP104,	R4.2
	COM102 ²	FAC100	
	COM102B	RGU100	
	COM103	LPA300 ²	
	COM103B	LPA300C ²	
		LPA300D, LPA329, LPA350, LPA356, LPA380, ²	
		LPA380C ²	
		LPA380D	
		LPA404B ²	
		LPA408 ²	
		LPA414, LPA416, LPA419, LPA810, LPA832, LPA833,	
		LPS100 ²	
		LPS104, LPS105, LPS702, LPS716 ² , LPU116	
		MSU100 ²	
		MSU100B, LPF500B, CPF500	

Notes:

- 1. Unless otherwise noted, each release supports only the controllers and APs listed in the same row.
- 2. Discontinued availability.

Broadband compatibilities

Software Release	Controllers Supported	APs Supported	GSI Software Version
1.1.2	LPA900 (DS3) ¹	LPA400 ¹	GSI Broadband
		LPA400B ¹	2-15
		LPA404B	
1.7.3.3	LPA900 (DS3) ¹	LPA400 ¹	AMI 2.2.1 Build
		LPA400B ¹	34
		LPA400C ¹	
		LPA404B, LPA408, LPS716	
1.11.0.2	LPA900 (DS3) ¹	LPA404B, LPA408	NAR: AMI
	LPA901 (DS3)	LPA416 ¹	2.2.1
		LPA419, LPS716	
1.11.2	LPA901 (DS3)	LPA400 ¹	AMI 2.2.1
	LPA942 (DS1 IMA)	LPA400B ¹	
	LPA920 (OC-3c)	LPA400C ¹	
		LPA404B, LPA408,	
		LPA416, LPA419,	
		LPA810, LPS716, LPS702	
1.13.0.2	LPA901 (DS3)	LPA400 ¹	AMI 2.2.1
	LPA942 (DS1 IMA)	LPA400B ¹	
	LPA920 (OC-3c)	LPA400C ¹	
		LPA404B ¹	
		LPA408, LPA416,	
		LPA 410, LPA 716	
		LPA419, LPA716	

Software Release	Controllers Supported	APs Supported	GSI Software Version
1.15	LPA901 (DS3)	LPA400 ¹	AMI 2.2.1
	LPA942 (DS1 IMA)	LPA400B ¹	
	LPA920 (OC-3c)	LPA400C ¹	
		LPA404B ¹	
		LPA408, LPA416, LPA810, LPA417, LPA419, LPA716, LPZ110, LPA432, LPS702	
1.17	LPA901 (DS3)	LPA400 ¹	AMI 2.2.1
	LPA942 (DS1 IMA)	LPA400B ¹	
	LPA920 (OC-3c)	LPA400C ¹	
		LPA404B ¹	
		LPA408, LPA416, LPA810, LPA417, LPA419, LPA716, LPZ110, LPA432, LPS702	
1.21	LPA901 (DS3)	LPA400 ¹	AMI 4.0
	LPA942 (DS1 IMA)	LPA400B ¹	
	LPA920 (OC-3c)	LPA400C ¹	
		LPA404B ¹	
		LPA408, LPA416, LPA810, LPA417, LPA419, LPA832, LPA716, LPZ110, LPA432, LPS702	

Software Release	Controllers Supported	APs Supported	GSI Software Version
1.23	LPA901 (DS3)	LPA400 ¹	AMI 4.0
	LPA942 (DS1 IMA)	LPA400B ¹	
	LPA920 (OC-3c)	LPA400C ¹	
		LPA404B ¹	
		LPA408, LPA416, LPA432, LPA810, LPA832, LPA417, LPA419, LPA716, LPZ110, LPA432, LPS702	
1.25	LPA901 (DS3)	LPA400 ¹	AMI 4.0
	LPA942 (DS1 IMA)	LPA400B ¹	
	LPA920 (OC-3c)	LPA400C ¹	
		LPA404B ¹	
		LPA408, LPA416, LPA432, LPA810, LPA832, LPA833, LPA417, LPA419, LPA716, LPZ110, LPA432, LPS702	
1.27	LPA901 (DS3)	LPA400 ¹	AMI 4.0
	LPA942 (DS1 IMA)	LPA400B ¹	
	LPA920 $(OC-3c)^{1}$	LPA400C ¹	
	LPA920B (OC-3c)	LPA404B ¹	
		LPA408 ¹	
		LPA416, LPA432, LPA810, LPA832, LPA833, LPA419, LPZ110, LPA432, LPS702	

Software Release	Controllers Supported	APs Supported	GSI Software Version
1.29	LPA901 (DS3)	LPA400 ¹	AMI
	LPA942 (DS1 IMA)	LPA400B ¹	R4.2
	LPA920 (OC-3c) ¹	LPA400C ¹	
	LPA920B (OC-3c)	LPA404B ¹	
	LPI960	LPA408 ¹	
		LPA416, LPA420, LPA432, LPA810, LPA832, LPA833, LPA419, LPZ110, LPS702	
1.31	LPA901 (DS3)	LPA400 ¹	AMI
1.31.1	LPA942 (DS1 IMA)	LPA400B ¹	R4.2
R1.33	LPA920 (OC-3c) ¹	LPA400C ¹	
	LPA920B (OC-3c)	LPA404B ¹	
	LPA920C (OC-3c)	LPA408 ¹	
	LPI960	LPA416, LPA420, LPA432, LPA810, LPA832, LPA833, LPA419, LPZ110, LPS702	

Notes:

1. Discontinued availability.

IP subsystem compatibilities

The following table lists the IP software releases and the supported controllers and APs:

Software Release	Controllers Supported	APs/Circuit Packs Supported	GSI Software Version
R3.1	LPI904 ¹	LPI600	AMI
	LPI960		R4.0
R3.1.3	LPI904 ¹	LPI600	AMI
	LPI960	LPA633	R4.2

Software Release	Controllers Supported	APs/Circuit Packs Supported	GSI Software Version
R3.2	LPI904 ¹	LPI600	AMI
R3.3	LPI960	LPA633	R4.2

Notes:

1. For use in *AnyMedia*® LAG 2300 Shelf only.

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