

Ascend MAX Line vs. Xyplex Networks

Company Overview

In March 1997, Xyplex Networks, a division of Whittaker Corporation, announced the company will focus on access solutions (including switches, routers, access server/concentrators and xDSL products). Initially its strategy will concentrate on supplying products for the "edge" of the corporate/enterprise network.

As part of this new strategic initiative, in March 1997, Xyplex announced a new remote access product, the EdgeBlaster, for release later in the year. The EdgeBlaster is a modular standards-based system with a HTML graphical interface. The company promises its corporate customer that the EdgeBlaster will be as easy to use as a Web browser. Xyplex says their strategic intent is to offer the EdgeBlaster at a very low entry price and find a partner to provide Ethernet/Fast Ethernet connectivity. In early September, Xyplex announced a partnership agreement with PairGain to integrate PairGain HDSL modules into the EdgeBlaster.

Brief Product Descriptions

Xyplex MAXserver line

Xyplex is promoting its older LAN to LAN MAXserver async access server line as a way to "bridge the gap" between legacy applications and new technologies; from July through August 1997, Xyplex offered MAXserver promotional pricing and bundled software. It is unclear if this promotion has been extended.

In late September 1997, Xyplex introduced two small fixed-port servers targeted at small businesses and small branch offices. The company has folded its 1600 line into the MAXserver line; the new 4- and 8-port servers now join the 20- and 40-port servers previously available. The 4- and 8-port MAXservers will ship bundled with Xyplex's FocalPoint GUI configurator based on the Windows95 platform. The company says support for Kerberos, SecurID, RADIUS security and RADIUS accounting is optional.

Starting List Prices:

MAXserver – 4	\$1,195
MAXserver – 8	\$1,795
MAXserver – 20	\$3,095
MAXserver – 40	\$4,995

Prices for product bundled with software, 4Mb memory, XRemote, IPX printing and TN3270 option keys:

	US List	Promotion
MAXserver – 8	\$3,935	\$2,599
MAXserver – 20	\$5,535	\$3,599
MAXserver – 40	\$9,085	\$5,399



Xyplex EdgeBlaster

The EdgeBlaster is an “edge server” based on a stackable PCI and ISA bus architecture that will integrate IP routing and some WAN services into a single box. In September 1997, Xyplex announced a collaboration with PairGain intended to add HDSL support to the EdgeBlaster.

The first version was originally slated for release in the second half of 1997; however, the formal product release was not announced at the time of this publication (October 31, 1997). Reportedly, the initial EdgeBlaster will support 10/100-Mbps Ethernet connectivity and up to 64 analog modems with four ISDN PRI or channelized T1/E1 ports. The product uses Microcom 56K 8-port modem cards. Xyplex has announced the product will ship with “embedded virus scrubbers” and a RADIUS server; a firewall module will be optional. Xyplex will emphasize its “easy-to-use” HTML-based GUI.

Since the product has not been released, pricing is not yet available, but the EdgeBlaster chassis is expected to list between \$6,000 and \$8,000.

Ascend MAX line Competitive Advantages — “The Silver Bullets”

- High degree of scalability and flexibility: Ascend is the leader in providing scalable and flexible access concentrator solutions. The MAX™ line (including the MAX TNT™) provides scalable and flexible configurations from 8 to 672 modems and from 4 T1/PRI to T3 connections thus covering a wide array of customer needs. Ascend also provides a wide range of offerings from client site (Pipeline products) to central site (MAX, MAX TNT and GRF™ products) to facilitate full scale deployment.
- High-density modem integration and mixed analog/ISDN sessions: Ascend's MAX line can integrate up to a maximum of 72 modems (MAX 40XX) and 672 (MAX TNT) and provide up to 96 sessions (MAX 40XX) or 672 sessions (MAX TNT) concurrent analog/ISDN sessions.
- Most comprehensive set of security features including fully integrated, dynamic firewall capability and extended RADIUS dictionary (over 120 enhancements)
- Supports VPN with a variety of industry standard tunneling protocol options including PPTP, ATMP, L2TP and L2F (when standard)
- Guaranteed interoperability with a wide number of modem manufacturers and carrier networks including carriers in over 36 countries
- End-to-end network management: Ascend's NavisXtend™ is a multi-vendor solution that provides total POP management — designed specifically for ISPs, carriers and corporations to support a variety of network access services and devices.
- Proven track record and investment protection: Ascend has the largest installed base of integrated access switches and has been shipping high density access concentrators for over three years. Ascend has installed over three million digital ports and over two million digital modems worldwide. Customers can be assured of investment protection because of Ascend's commitment to developing scalable, compatible and high performance platform solutions.
- Support for a complete set of WAN access protocols: Switched 56, DDS 56, T1/FT1, E1, ISDN BRI and PRI, and Frame Relay
- MP+ and Multi-chassis MP+ support: With the introduction of MAX Stack, a feature which maximizes bandwidth availability by enabling multiple MAX WAN access switches to function together as one logical switch for Multilink PPP (MP) calls, Ascend has clearly established itself as the only remote access vendor providing comprehensive bandwidth management features. For example, a single incoming MP call that requests greater bandwidth is given additional unused channels anywhere in the stack. MAX Stack reduces the complexity and increases the simplicity of provisioning access to multiple central site WAN access switches.
- High-speed modem support today: The MAX line offers 56K and xDSL support (IDSL on the MAX 40XX platform and MultiDSL™ support on the MAX TNT) for ISPs and enterprises that want to offer their users the widest available access options and DSL upgrade paths.
- Low Price/High Value: The MAX line now includes low cost products that are bundled with leading-edge security and management capabilities to offer higher functionality at more competitive prices.

Any feedback or suggestions are most welcome. Also, please send any pertinent competitive information from the field to the attention of the Competitive Marketing group in Alameda (x72081).

List Price	MAX 20XX	MAX 40XX	Xyplex MAXserver	Xyplex EdgeBlaster*
Base Chassis	\$6,500-\$13,920	\$11,000-\$15,500	\$1,195-\$9,085	\$6,000-\$8,000*
Max.modems/box	12 to 24	8 to 72	4 to 40	64
Price/modem	\$580-\$700	\$542-\$750	not available	not available
Max.PRI/box	1	2 to 4	0	4
Concurrent sessions	24	48 to 96	4 to 40	64
Firewall Pricing	\$2,000	\$4,000	not available	not available
WAN Connectivity/Bandwidth Management				
T1	Yes	Yes	NO	Yes
E1	Yes	Yes	NO	Yes
V.34	Yes	Yes	Yes	Yes
ISDN BRI	Yes	Yes	NO	Yes
ISDN PRI	Yes	Yes	NO	Yes
PPP	Yes	Yes	Yes	Yes
Frame Relay	Yes	Yes	NO	Yes
AppleTalk Remote Access	Yes	Yes	Optional on 4-, 8- and 20-port models	Yes
Multilink Protocol (MP)	Yes	Yes	NO	NO
Multilink Protocol Plus™ (MP+)	Yes	Yes	NO	NO
Hardware Data Compression	Yes	Yes	Yes	Yes
Multi-Chassis MP	Yes	Yes	NO	NO
Multi-Chassis MP+	Yes	Yes	NO	NO
Security				
PAP/CHAP	Yes	Yes	NO	NO
TACACS and TACACS+	Yes	Yes	NO	NO
Dynamic Firewall	Yes	Yes	NO	NO
RADIUS	Yes	Yes	Yes	Yes
Extended RADIUS	Yes	Yes	NO	NO
Integrated Firewall	Yes	Yes	NO	NO
CLID	Yes	Yes	NO	NO
VPN Tunneling support	Yes	Yes	NO	NO
Encryption	Yes	Yes	NO	Yes
Network Management				
Full SNMP MIB support	Yes	Yes	Yes	Yes
Total POP (multi-device) management	Yes	Yes	NO	NO
Multi-vendor router/switch support	Yes	Yes	NO	NO
QoS Reporting	Yes	Yes	NO	NO
Complete discovery and mapping	Yes	Yes	NO	NO
Routed/Routing Protocol Support				
IP	Yes	Yes	Yes	Yes
IPX	Yes	Yes	Optional	NO
OSPF	Yes	Yes	NO	NO
RIP 2	Yes	Yes	NO	NO
Carrier Support				
Redundant Power Supply	Yes	Yes	NO	NO
Cellular Service Support	Yes	Yes	NO	NO
DSL Support	NO	IDSL	NO	HDSL
Open 56K Support	Yes	Yes	NO	Yes

*Based on preliminary announcement — subject to revision

Selling against Xyplex EdgeBlaster

Major Weaknesses of Xyplex Edgeblaster — “The knock-offs”

- No track record or investment protection: Ascend has the largest installed base of integrated access switches and has been shipping high density access concentrators for over three years. Ascend has installed over 3.5 million digital ports and over 2.0 million digital modems worldwide. Bay has a limited presence in the ISP market.
- Not a scalable product line: The EdgeBlaster is one box that will support a maximum 60 ISDN or analog channels. The MAX line offers support for 8 to 672 modems.
- Limited experience: Xyplex has no experience with integrating analog/ISDN technology into the same box; Ascend has a proven track record in the field for over 4 years and has the largest installed base of Remote Access Concentrators.
- Limited protocol support: It appears that the EdgeBlaster will not support IPX or AppleTalk, which are very important to their target customer: corporate enterprises. In addition, Xyplex does not support RIP2, which allows ISPs to support Variable Length Subnet Masks (VLSM). Without support for VLSM, customers cannot segment or concatenate Class C address subscribers. Also, it appears that the product does not support OSPF or BGP.
- Limited xDSL support: Supports HDSL only
- No Compression capability announced: Ascend supports compression today with an enormous installed base.
- Limited security: Xyplex does not have built-in (integrated) firewall and dynamic filtering capability. In addition, the products have limited RADIUS extensions.
- No VPN support – Ascend supports PPTP, ATMP, L2TP and L2F (when standard).
- No encryption support announced: Ascend supports DES/Triple DES
- No end-to-end multi-device/multi-vendor network management: limited management capabilities are single device only
- Not an industrial strength, reliable system: No redundant power supplies and NEBS compliance

The Bottom Line: EdgeBlaster offers a very limited value proposition

Worldwide and North American Headquarters

One Ascend Plaza
1701 Harbor Bay Parkway
Alameda, CA 94502, United States
Tel: 510.769.6001
Fax: 510.747.2300
North American E-mail:
info@ascend.com
International E-mail:
air-info@ascend.com
Toll Free: 800.621.9578
Fax Server: 415.688.4343
Web Site: <http://www.ascend.com>

European Headquarters

Aspen House
Barley Way
Ancells Business Park
Fleet
Hampshire GU13 8UT, United Kingdom
Tel: +44 1252.360000
Fax: +44 1252.360001

Japan Headquarters

Level 19 Shinjuku Daiichi-Seimei Bldg.
2-7-1 Nishi-Shinjuku
Shinjuku-ku, Tokyo 163-07, Japan
Tel: +81.3.5325.7397
Fax: +81.3.5325.7399
Web Site: <http://www.ascend.co.jp>

Asia-Pacific Headquarters

Suite 1908, Bank of America Tower
12 Harcourt Road
Hong Kong
Tel: +852.2844.7600
Fax: +852.2810.0298

Latin, South America and the Caribbean Headquarters

One Ascend Plaza
1701 Harbor Bay Parkway
Alameda, CA 94502, United States
Tel: 510.769.6001
Fax: 510.747.2669

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