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Research Highlights

Broadbandtrends publishes Global Market Outlook Report for DSL Port Shipments

Broadbandtrends.com recently published their global forecast for DSL port Shipments: *IP-Video and Network Transformation Guides DSLAM Market*

Major report highlights include the following:

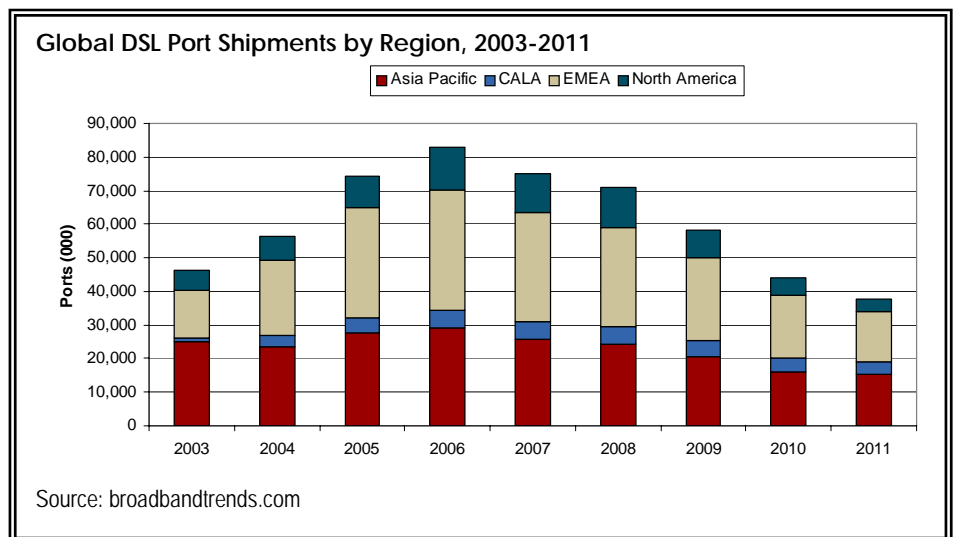
- ▶ Strong broadband subscriber growth combined with network upgrade activity will keep DSL port shipments strong through 2008
- ▶ EMEA will dominate port shipments until 2010, when Asia Pacific takes back the lead
- ▶ DSL ports shipped for Ethernet based platforms will outpace those from ATM platforms by 2007
- ▶ VDSL port shipments will steadily increase from 7 percent in 2005 to 49 percent by 2011
- ▶ RT-based DSL platforms will constitute as much as 70 percent of total port deployments by 2010, up from 29 percent in 2005

Executive Summary

The introduction of next-generation Ethernet-based access platforms, combined with new DSL technologies (such as ADSL2+ and VDSL2), bonding and advanced compression techniques, have compelled many operators to continue to make significant investments in their DSL infrastructure and forego the deployment of fiber all the way to the home for the near term.

Operators in all regions continue to leverage their copper plant to offer their consumers an increasing variety of multi-media enhanced broadband services. As such, global DSL port shipments are expected to remain strong through 2008 before beginning a decline. During 2006, Global DSL shipments from Ethernet-based platforms are forecasted to exceed ATM-based port shipments. In addition, due to aggressive Fiber-to-the-Node deployments in a number of countries, VDSL shipments will find wide scale deployment in markets outside of Asia Pacific resulting in the acceleration of Remote Terminal (RT) deployments throughout the forecast period.

This 28-page report contains (26) Figures, (5) Tables and a detailed accompanying spreadsheet. For more information on this report, please contact us at sales@broadbandtrends.com



Industry News

DSL Port Shipments Continue to Rise to New Levels in 1Q06

DSL port shipments continued to accelerate during 1Q06, as operators aggressively upgrade and rehabilitate their networks to support faster speeds and IP-based services. Quarterly global DSL port shipments reached 21.2 million, a four percent increase over 4Q05 and a 35 percent increase over 1Q05. During 1Q06, DSL ports shipped on IP/Ethernet-based platforms grew 19 percent to reach 9.7 million or 45 percent of total, up from 40 percent in 4Q05.

Vendor rankings by region are shown below.

Top Five DSL Vendors by Region, 1Q06

Global	Asia Pacific	CALA	EMEA	North America
Alcatel	Huawei	Alcatel	Alcatel	Alcatel
Huawei	ZTE	Huawei	Siemens	Lucent
Siemens	NEC	ZTE	Huawei	Adtran
Ericsson	Alcatel	Lucent	Ericsson	Tellabs
Lucent	Sumitomo	Ericsson	ECI Telecom	Calix

Source: broadbandtrends.com

FTTP Announcements Take Center Stage Ahead of Globalcomm

A number of vendors have made important announcement regarding FTTP related solutions over the last two weeks. These include the following:

- ▶ **Novera Optics Launches SpeedLIGHT WDM-PON Platform:** Based on λ -PON™ (Lambda-PON) dense wave division multiplexing (DWDM) FTTx technology, SpeedLIGHT automatically allocates a separate pair of wavelengths to each broadband subscriber and thus enables 125 Mbps or more of dedicated bandwidth to be delivered per subscriber or ONU. Novera is offering two options: SpeedLIGHT16 provides 16 point-to-point bidirectional optical links (2.0Gbps symmetrical data rate) and the SpeedLIGHT32 provides 32 point-to-point bidirectional optical links (4.0Gbps symmetrical data rate). The SpeedLIGHT32 modules have already been commercially deployed for FTTH applications by LG Nortel in the Korea Telecom Network.
- ▶ **ImmenStar joins the EPON Chip Race:** On May 31, 2006, ImmenStar came out of stealth mode to introduce the MuLan EPON Switch Chipset. Bill as the first fully integrated, high-density EPON chipset, it is currently available and shipping to five countries. ImmenStar is offering a four-port and single port OLT Chipset, as well as a low cost ONU chip. In addition, they also provide an ONU chip offering vendor interoperability.
- ▶ **Fujitsu Announces Availability of FLASHWAVE 6100 Hybrid-GPON Platform:** The FLASHWAVE 6100 GPON platform supports dual- and quad-port GPON cards within a 9U (15.75") chassis to provide broadband services to up to 10,240 homes and businesses per standard rack. In addition the platform supports all service interface cards from the widely deployed FLASHWAVE 4100 Multi-Service Provisioning Platform (MSPP). This capability gives service providers the option of deploying traditional MSPP, Ethernet, and GPON services from a single multi-service access node.
- ▶ **Zhone Announces High Capacity EFM Solution:** The EtherActive Optical Line Terminal (OLT) can support up to 10 subscribers per blade with 10/100/1000Mbps service over either copper or single/dual mode fiber. Also announced today was Zhone's Indoor/Outdoor Residential Gateway including 2/4 Ethernet Ports, 2 FXS Ports to support VoIP services and HPNAv3 over copper or coax to support IPTV services.
- ▶ **Huawei Unveils Terabit GPON Access System:** The SmartAX OFA5920 GPON solution is the industry's first GPON access platform with Terabit non-blocking switching capability and full redundancy design.
- ▶ **Occam Broadens FTTP Product Line:** The BLC 6314 10GigE Transport OLT blade adds dual 10 Gigabit Optical Ethernet and multiple 1 Gigabit Ethernet interfaces to the BLC 6000. They also introduced the ON 2300 Series of Optical Network Terminals (ONTs).

UMA Gets a boost as Europe's Largest Operators Get Ready to Deploy Technology

Both Telecom Italia and France Telecom made formal announcements in late May regarding their plans to launch Fixed-Mobile Convergence services using Unlicensed Mobile Access (UMA) technology.

- ▶ Telecom Italia announced its UNICO service which is expected to launch at the end of June 2006. UNICO will be available for 15 euros/month and requires an ADSL line. UNICO permits calls from home to all fixed-line phones and TIM mobile phones without additional costs; outside the home, "UNICO" permits calls at zero cost to two TIM number and one fixed-line number. The first handset will be the Samsung SGH P200.
- ▶ France Telecom announced its **Unik** service. Described as a 2-in-1 telephone, Unik connects automatically to the Livebox via WiFi and all calls become unlimited, 24-by-7 while at home. Outside of the home, Unik operates like a traditional mobile phone. Unik requires an Orange Broadband subscription, a Livebox, and a special terminal (starting at 99 euros). It will be available in September, 2006.

Vodafone going the opposite Direction: From Mobile to Fixed

After posting a staggering \$41 billion loss in 1Q06, Vodafone announced five key strategic objectives. These include (1) Reduce costs and stimulate revenues in Europe; (2) Deliver strong growth in emerging markets; (3) Innovate and deliver on customers' total communications needs; (4) Actively manage the portfolio to maximize returns; and (4) Align capital structure and shareholder returns policy to strategy.

As part of objective #3, Vodafone announced it would extend its' service offerings in the home and at the office to meet customers' growing voice and broadband data service needs, including the provision of DSL. As such, Vodafone Germany announced that it will launch bundled homezone products (FMC) with DSL access provided by Arcor, by the end of 2006. It also announced it would integrate mobile, PC and the internet at the application level, offering seamless interoperability of services.

Mergers, Acquisitions, Funding

- ADC Mergers with Andrew Corporation (May 31, 2006)
- Ambient Closes \$10M in Funding (May 30, 2006)
- Zeguma Systems, Inc. raises \$13.5 million (May 24, 2006)
- AudioCodes buys Nuera for \$90 million (May 16, 2006)
- TeliaSonera buys majority stake in NextGenTel (May 16, 2006)
- Qwest buys OnFiber for \$107 million (May 15, 2006)

New Reports

Become a Client! Clients get full access to our research and data as well as unlimited access to our analysts. For more information please visit: <http://www.broadbandtrends.com/services.htm>

Recently published research includes the following:

▶ **Market Outlook:** *"IP-Video and Network Transformation Guides DSLAM Market"*

Published May 31, 2006

▶ **Market Share Report:** *"DSL Port Shipments Continue to Rise to New Levels in 1Q06"*

Published May 15, 2006

▶ **Research Note:** *"North America Broadband Growth Surges in 1Q06"*

Published May 7, 2006

Upcoming reports include the following:

- ▶ 1Q06 Global BroadbandTrends Report (Subscriber Data)

Please visit the reports section for further information: <http://www.broadbandtrends.com/Reports.htm>. For pricing information, executive summaries and table of contents, please contact us.

Service Provider News Highlights (May 9, 2006 to May 31, 2006)

A full listing of news articles is available at http://www.broadbandtrends.com/news_archives.htm

- France Telecom goes Orange: Combines Services Under Single Brand (05/31/2006)
- Sling Media Launches Slingbox in United Kingdom (05/30/2006)
- Yahoo! and eBay Form Strategic Partnership (05/25/2006)
- Cavalier Launches Much Hyped MPEG 4 IPTV Service (05/22/2006)
- BT Expands "Wireless City" program (05/18/2006)
- BellSouth Partners with Samsung on Broadband Devices (05/11/2006)
- BT Awards FMC Contract to Alcatel for Enterprise Services (05/11/2006)
- Warner Bros. to work with BitTorrent (05/09/2006)

Vendor News Highlights (May 9, 2006 to May 31, 2006)

A full listing of news articles is available at http://www.broadbandtrends.com/news_archives.htm

- Entone Unveils H.264 and HD IPTV Devices (05/31/2006)
- Pace/Fujitsu Team for WiMAX based Set Top Box (05/31/2006)
- Entone Introduces Intelligent NID (iNID) for Triple Play (05/25/2006)
- Redback wins at both China Telecom and China Netcom (05/25/2006)
- Alcatel/Microsoft partner with both IBM and HP for IP-TV Deployments (05/23/2006)
- Entel Deploys National WiMAX Network with Alvarion (05/22/2006)
- Cirpack Deploys NGN in Ukraine and Estonia (05/22/2006)
- Netcentrex introduces IPCentrex-One (05/22/2006)
- AcmePacket and Italtel Renew Partnership (05/18/2006)
- Entropic Hits Another Major Milestone: 1M Chipsets Delivered (05/16/2006)
- Telio Selects Sonus for IMS-based VoIP (05/16/2006)
- Sonus and Netcentrex Team for IMS Solutions (05/16/2006)
- T-Online Hungary selects Alcatel and Microsoft for IPTV pilot (05/15/2006)
- Maxisat selects Ruckus Wireless for in-home distribution (05/15/2006)
- HanseNet selects Alcatel for triple play services (05/11/2006)

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Thanks for reading this issue of "The Voice of Broadband"!

Next issue will be published on June 15, 2006.