

WinterGreen Research, INC.

**DSL Chips: Market Shares, Strategies, and Forecasts, Worldwide,
2013 to 2018**

DSL Chips: Using Copper Wire to Carry Broadband Signals into the Home



Torrie The Cat in the Tulips

Picture by Susan Eustis

WinterGreen Research, Inc.

Lexington, Massachusetts

www.wintergreenresearch.com

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DSL Digital Subscriber Line DSL Chips Access Providers Broadband Telecom Copper plant Fiber to the Neighborhood	DSLAM End to End Optical Broadband Networks Data And Video Traffic Mixed Signal Integrated Circuit ADSL VDSL	DSL xDSL Digital Subscriber Line (DSL) Data And Video Traffic Flexible Network Interfaces FTTH Advanced Bonding
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DSL Chips: Addressing Broadband to the Home

**DSL Chips: Market Shares, Strategies, and Forecasts, Worldwide,
2013-2018**

LEXINGTON, Massachusetts (February 6, 2013) – WinterGreen Research announces that it has published a new study **DSL Chips: Market Shares, Strategy, and Forecasts, Worldwide, 2013 to 2018**. The 2013 study has 232 pages, 72 tables and figures. Worldwide DSL chip markets continue to achieve significant growth in spite of the dire predictions of market demise.

According to Susan Eustis, lead author of the study, “Deutsche Telekom, British Telecom, AT&T, Bell Canada, Century/Qwest and many other carriers have made clear they will use DSL, not fiber, for the majority of lines because it's cheaper. Increasingly, that's DSL from a neighborhood DSLAM (FTTN) with short loops that will soon be capable of 100 megabits through bonding and vectoring. There is plenty of copper wire in the telecommunications networks that can be used to provide broadband connectivity from fiber in the neighborhood, DSLAM connectivity to copper wires running into the home.”

The rapid advance of end to end optical broadband networks continues to threaten to make xDSL obsolete, but copper will never go away, fiber is too expensive to use it to replace all the copper and the copper works in many cases and does not need to be replaced. xDSL markets will be strong for some long time to come as copper remains a transport line.

Copper is everywhere in the telecommunications network. It is still the primary wireless backbone transport means, meaning it continues to be vital as new wireless systems continue to expand their markets. It predominates in the local loop, creating demand for systems that are able to support high speed signal transport over copper wire.

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Both smart phones and tablet devices depend on wire line backhaul, much of which is copper. As copper goes away, xDSL goes away, but this is certainly not happening within the forecast period. The development and growth of the broadband digital subscriber line (DSL) and communications processing markets is assured as carriers seek to leverage their investment in copper wire infrastructure. DSL is the way to do that with its support for high speed communications and video signal transport.

Vendors consider companies that have access to broadband or communications processing technology as potential competitors. Established competitors, suppliers of products based on new or emerging technologies, and customers who choose to develop their own technology.

Deutsche Telekom, British Telecom, AT&T, Bell Canada, Century/Qwest and many other carriers have made clear they will use DSL, not fiber, for the majority of lines because it's cheaper. Increasingly, that's DSL from a neighborhood DSLAM (FTTN) with short loops that will soon be capable of 100 megabits through bonding and vectoring.

Even the DSL customers have a hybrid fiber / copper connection; it is just the last mile that is copper, hence requiring DSL.

The communications consumer end points worldwide are moving to 100% wireless smart phones that can connect to the Internet. The communications infrastructure worldwide will remain wire based to connect the central office to the base stations, and to provide Internet / IP based connectivity to the home. The wire based communications infrastructure worldwide is all moving to fiber so as to handle the increased demand for bandwidth.

The copper is not efficient for the cable companies because of the demand for bandwidth to the home that the cable companies are providing. The copper is not efficient in the wireless backbone connectivity of the central office to the wireless base stations, and hence there is a priority on replacing the copper that is there first. The copper from the curb or from the neighborhood to toe home is efficient; therefore the need for DSL persists.

Worldwide tablet market revenues at \$799 million in 2011 are anticipated to reach \$1.7 billion by 2018. DSL chip markets are forecast to grow year-over-year throughout the forecast period. This is in the context of a world communications infrastructure that is changing and seeking to leverage the existing plant to hold down costs. Technology is enabling interaction, innovation, and sharing of knowledge in new ways. DSL chips promise to bring significant new broadband for Internet access capability making the Internet available for increasingly productive, efficient use.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, Bloomberg, and Thompson Financial.

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Key words: DSL, Digital Subscriber Line, DSL Chips, Access Providers, Broadband, Telecom, Copper plant, Fiber to the Neighborhood, DSLAM, End to End Optical Broadband Networks, Data And Video Traffic, Mixed Signal Integrated Circuit, ADSL, VDSL, DSL, xDSL, Digital Subscriber Line (DSL), Data And Video Traffic, Flexible Network Interfaces, FTTH, Advanced Bonding,

Companies Profiled

Market Leaders

Analog Devices
Broadcom
MediaTek / Ralink / Trendchip

Ikanos
Lantiq

Market Participants

BroadLight
Cavium
Freescale Semiconductor
Infineon Technologies
IXYS Integrated Circuits / Clare

Marvell
PMC-Sierra
Pulse
Shantou New Tideshine Electron
Shenzhen Chaoyue Electronics

Shenzhen Sky Foundation
Shenzhen Tianxiaowei Electronics

DSL Chip: Market Shares, Strategies, and Forecasts, Worldwide, 2013 to 2018

Report Methodology

This is the 543rd report in a series of primary market research reports that provide forecasts in communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and energy. Automated process and significant growth potential are priorities in topic selection. The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases.

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The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards.

Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2010. With 2010 and several years prior to that as a baseline, market projections were developed for 2011 through 2017. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective.

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The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes reference to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunications, and hardware businesses.

YOU MUST HAVE THIS STUDY

DSL Chip: Market Shares, Strategies, and Forecasts, Worldwide, 2012-2018

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DSL CHIP Executive Summary

The study is designed to give a comprehensive overview of the DSL CHIP equipment market segment. Research represents a selection from the mountains of data available of the most relevant and cogent market materials, with selections made by the most senior analysts. Commentary on every aspect of the market from independent analysts creates an independent perspective in the evaluation of the market. In this manner the study presents a comprehensive overview of what is going on in this market, assisting managers with designing market strategies likely to succeed.

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DSL CHIP Market Shares and Market Forecasts

This section selectively describes market shares, forecasts, segments, and regional revenue. Numbers are the result of primary research in all cases. Selected companies are described from an independent analyst perspective with a thumbnail sketch or analysis of their market numbers or commentary on their strengths and weaknesses. Some of the analysis is focused on looking at the topic segment by segment, including company descriptive analyses by segment and subsegment.

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DSL CHIP Product Description

This section describes selected companies and selected products. Products for this market segment are described with attention to the most significant aspect of features and functions in this category of product. The juxtaposition of a range of different product descriptions from a single market category provides a really good way to access market directions and achieve market competitive analysis. This section is arranged in three pieces: immersive products, conference room products, and end point products. Company products are described in the appropriate sections, meaning a company is mentioned several times in the chapter in different places.

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DSL CHIP Company Profiles

This section selectively describes company strategies, partners, acquisitions, and revenue by segment and regional revenue when available. Companies are described by looking at what is most interesting about that company. The descriptions collectively give a sense of market directions within the industry segment. The alphabetical listing of company thumbnail sketches provides an accessible way to find out what is going on in any particular company.

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ABOUT THE COMPANY

WinterGreen Research, research strategy relates to identifying market trends and growth through a deep understanding of change in markets and innovation. Innovation trends are understood by reading about and interviewing opinion leaders. Proprietary information is developed by interviewing companies and opinion leaders. By using analysis of SEC published materials, interview material, private research, detailed research, social network materials, blogs, and electronic analytics, the market size, shares, and trends are identified. Analysis of the published materials and interviews permits WinterGreen Research senior analysts to learn a lot more about markets. Discovering, tracking, and thinking about market trends is a high priority at WinterGreen Research. As with all research, the value proposition for competitive analysis comes from intellectual input.

WinterGreen Research, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care, Software, Internet, Energy Generation, Energy Storage, Renewable energy, Nanotechnology, and advanced computer technology.

Industry reports focus on opportunities that expand existing markets or develop major new markets. The reports access new product and service positioning strategies, new and evolving technologies, and technological impact on products, services, and markets. Innovation that drives markets is explored. Market shares are provided. Leading market participants are profiled, and their marketing strategies, acquisitions, and strategic alliances are discussed. The principals of WinterGreen Research have been involved in analysis and forecasting of international business opportunities in telecommunications and advanced computer technology markets for over 30 years.

The studies provide primary analytical insight about the market participants. By publishing material relevant to the positioning of each company, readers can look at the basis for analysis. By providing descriptions of each major participant in the market, the reader is not dependent on analyst assumptions, the information backing the assumptions is provided, permitting readers to examine the basis for the conclusions.

About The Principal Authors

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Susan Eustis, President, co-founder of WinterGreen Research, is a senior analyst. She has done research in communications, healthcare equipment, and computer markets and applications. She holds several patents in microcomputing and parallel processing. She has the original patents in electronic voting machines. She has new patent applications in format varying, multiprocessing, and electronic voting. She is the author of recent studies of the Regional Bell Operating Companies' marketing strategies, Internet equipment, biometrics, a study of Internet Equipment, Worldwide Telecommunications Equipment, Top Ten Telecommunications, Digital Loop Carrier, Web Hosting, Web Services, and Application Integration markets. Ms. Eustis is a graduate of Barnard College.

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