

G-fast Chips: Market Shares, Strategies, and Forecasts, Worldwide, 2014-2020

<https://marketpublishers.com/r/G5E4A02F857EN.html>

Date: October 2014

Pages: 258

Price: US\$ 3,900.00 (Single User License)

ID: G5E4A02F857EN

Abstracts

LEXINGTON, Massachusetts (November 1, 2014) – WinterGreen Research announces that it has published a new study G.fast Chips: Market Shares, Strategy, and Forecasts, Worldwide, 2014 to 2020. The 2014 study has 256 pages, 109 tables and figures. Worldwide G.fast Chip markets are increasingly diversified, poised to achieve significant growth as broadband is used in every industry segment.

End to end broadband networks leverage a combination of optical infrastructure in the long haul and copper infrastructure in the last few meters from the distribution box to the home. Fiber has had rapid advance but does not work in the end, it is too expensive to the home. FTTH is too expensive and DSL continues to be a viable alternative, with DSL set to be replaced at the high end initially by G.fast. Copper based broadband technologies promise to last for a long long time. Though for many years FTTH has threatened to make xDSL obsolete, this has not proven to be the case.

Broadband Internet is used in all corners of the world. It is set to be used by everyone by 2025. There is a lot left to be done. Networking services company Akamai says the second quarter of 2014 marks the first time the global average broadband speed jumped over the 4-megabit mark.

South Korea occupies the top broadband user category in both average bandwidth (24.6 megabits) and proportion of the population on a broadband connection (95 percent, tied with Bulgaria). Smaller islands, the Philippines, countries with lots of rural areas, like India, are struggling to deliver useful speeds.

The U.S. falls behind East Asia, ranking somewhere in the middle, with the Nordic countries, in terms of broadband speed and penetration. Inside the U.S., Delaware

appears well equipped with broadband —the Mid-Atlantic state ranked first in every category: average speed, peak speed, connectivity and even "4K readiness," referring to the 15 megabit speed that can handle ultra high-def broadcasts. The slowest US state is Arkansas.

Copper represents an installed infrastructure worth trillions and too expensive to just replace. Fiber is too expensive to use it to replace all the copper. FTTH DSL and G.fast, 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.

G.fast leverages copper infrastructure that is everywhere in the telecommunications network. Copper provide connectivity to all residences. Copper 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.

Copper based broadband is and will remain for the foreseeable future, the dominant broadband access technology across the globe. Broadband service providers who rely on copper loops for broadband access have to improve broadband performance and extend its life. Choices between DSL technologies and G.fast are based on cost. Fiber technologies are used to come to the curb. DSL and G.fast represent a hybrid rooted in a network planning.

According to Susan Eustis, lead author of the WinterGreen Research team that prepared the study, "The opportunity to participate in G.fast Chips markets is compelling. G.fast provides the ability to leverage outdated copper infrastructure to breathe new life into existing investment. This market is evolving as new G.fast technology and vectoring are implemented. Growth in this market based on technical breakthroughs and innovation. Technology platforms are rapidly evolving."

Consideration of G.fast chips market forecasts indicates that markets at \$31 million in 2014 will reach \$2.9 billion by 2020. Growth comes as every industry achieves leveraging broadband to make social media and smart phones work to grow the business. G.fast is able to make the benefits of broadband available to consumers and support network flexibility for consumers, data centers, and cell tower backbone communications. G.fast networks are flexible and support broadband that is able to reach.

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, electronics.ca, Bloomberg, and Thompson Financial. WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises.

The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

Contents

G.FAST CHIPS EXECUTIVE SUMMARY

G.fast Implements Broadband Internet
End To End Broadband Networks
DSL Set To Give Way To G.Fast
Vendor G.Fast Positioning
Data And Video Traffic Surpass Voice Traffic
G.fast Chip Market Forecasts

1. G.FAST CHIP MARKET DYNAMICS AND MARKET DESCRIPTION

1.1 G.fast Chips
1.1.1 Demand for Broadband Services and Market Opportunities for Service Providers
1.1.2 High-Performance Communications Processing
1.1.3 Key Benefits of G.fast Technology
1.1.4 Improving Time-To-Market With Programmable Systems-Level Products
1.1.5 G.fast Provides Cost-Effective, High-Performance Transmission Over Existing Copper Lines
1.1.6 End-to-End DSL Products
1.2 G.fast Design Wins
1.2.1 Carrier Networking
1.2.2 Enterprise Networking
1.2.3 Cloud Computing
1.2.4 Increasing Demands for 'Next-Generation Networking' Integrated Circuits
1.3 Communications Strategy
DSL And G.fast Chips:
1.4 Internet And Wireless Dominate Communications Technology
1.4.1 Optical Networks
1.4.2 Data And Video Traffic Being Added In Abundance To Voice Traffic
1.4.3 Semiconductor Companies Design G.fast
1.4.4 Network Access Last Mile Of Telecommunications Network
1.4.5 Metropolitan Area Networks
1.4.6 Internet
1.5 Signal Processing
1.6 Product Positioning

2. G.FAST CHIPS MARKET SHARES AND MARKET FORECASTS

- 2.1 G.FAST At Hundreds Of Meg Demoed By British Telecom & Huawei
 - 3.1.1 France Telecom Wants Fiber To The Basement, Not All The Way Home
 - 3.1.2 Broadcast / G.Fast Interference
 - 3.1.3 Vectoring Costs From \$300 (Dense) To \$1500 (Fiber To The Farm)
- 2.2 Broadband Networks: End To End
 - 2.2.1 DSL Set To Give Way To G.Fast
 - 2.2.2 Vendor G.Fast Positioning
 - 2.2.3 Data And Video Traffic Surpass Voice Traffic
- 2.3 DSL Chip Market Shares
 - 2.3.1 Sckipio G.Fast Gigabit Ultra Broadband
 - 2.3.2 Broadcom
- 2.4 G.Fast Chip Market Forecasts
 - 2.4.1 G.fast Modem Chipsets
 - 2.4.2 G.fast and Digital Subscriber Line (DSL) Market Forecasts
- DSL And G.fast Chips:
 - 2.4.3 Broadband DSL and G.fast Market Forecasts, Low End, Mid Range, and High End Units and Dollars
 - 2.4.4 Broadband DSL and G.fast Chip Market Forecasts, Low End, Mid-Range, and High End
 - 2.4.5 Broadband Subscriber Analysis
 - 2.4.6 U.S. Broadband Connections
 - 2.4.7 US's Providers AT&T and Verizon Begin Retracting From The DSL Market and Moving to G.fast
 - 2.4.8 Impact of Fiber on DSL
 - 2.4.9 Ethernet
- 2.5 Research and Development
- 2.6 G.fast and DSL Chip Applications
- 2.7 DSL Chip Regional Market
 - 2.7.1 DSL Regional Market Analysis
 - 2.7.2 xDSL and G.fast Connections
 - 2.7.3 Video Industry Is Undergoing Fundamental Changes
 - 2.7.4 DSL Component Shipments by Vendor by Region
 - 2.7.5 China

3. G.FAST CHIPS: PRODUCT DESCRIPTION

- 3.1 Sckipio G.Fast
 - 3.1.1 G.fast Chipsets Sckipio Creates New Era of Affordable Gigabit Ultra Broadband

3.1.2 FTTH vs. G.Fast Costs for Services Providers

3.1.3 Sckipio G.fast Devices

DSL And G.fast Chips:

3.1.4 Lantiq Residential Gateway Reference Design Based on Sckipio G.fast Solution

3.1.5 Sckipio 16-Port G.fast Demonstration

3.2 Lantiq

3.1.6 Lantiq Residential Gateway Reference Design Based on Sckipio G.fast Solution

3.3 Chicony / XAVi

3.4 Zinwell

3.4.1 Zinwell Uses Sckipio Technologies Chip to Achieve Consumer Self-Installation

3.5 Broadcom

3.6 Triductor Technology

3.7 Huawei Key Technologies in G.fast

3.7.1 Huawei Progress of G.fast

3.8 Alcatel Lucent

3.9 Ikanos

3.10 Google

3.10.1 Google Developing Method For Operating A Vectored VDSL Line Group

3.10.2 Google Addresses DSL Vectoring

4. DSL CHIP TECHNOLOGY

4.1 Google Vectoring Memory Efficiency

4.1.1 Google Approach to Vectoring Mitigation Of Crosstalk Inherent In Twisted-Pair DSL Networks

4.1.2 Google Approach to Changing DSL Characteristics and Operating Conditions

DSL And G.fast Chips:

4.1.3 Google DSL Non-Uniform Symbol Usage Distribution

4.2 Gigabit (or 1,000 Mbps) FTTP Deployments

4.3 VDSL G.Fast and Vectoring 2.0

4.3.1 G.fast – Uses 106mhz Of Phone Wire Spectrum To Deliver Gigabit Broadband

4.3.2 G.fast – Uses 106mhz Of Wire Spectrum To Deliver Gigabit Broadband

4.4 Copper Pair Bonding

4.4.1 DSL Vectoring

4.4.2 G.Fast & FTTdp Model From Lantiq

4.4.3 Germany Puts Off Vectoring Another Six Months

4.4.4 G.FAST At Hundreds Of Meg Demoed By British Telecom & Huawei

3.1.7 France Telecom Wants Fiber To The Basement, Not All The Way Home

3.1.8 Broadcast / G.Fast Interference

- 3.1.9 Vectoring Costs From \$300 (Dense) To \$1500 (Fiber To The Farm)
- 4.5 Cost Dynamics Of Deploying Fiber
 - 4.5.1 xDSL REPEATERS
 - 4.5.2 G.fast
 - 4.5.3 Production-Ready G.hn/G.now
- 4.6 Delivering Video-Intensive Services
- 4.7 VDSL vs. Cable
- 4.8 Ikanos Technologies
 - 4.8.1 Advanced Bonding Capabilities
 - 4.8.2 Flexible Network Interfaces
- DSL And G.fast Chips:
- 4.9 Ikanos NodeScale Vectoring
 - 4.9.1 Ikanos Quality Video (iQV) technology
- 4.10 Telecommunications and DSL Standards Organizations
 - 4.10.1 ATIS
 - 4.10.2 Broadband Forum
 - 4.10.3 ETSI
 - 4.10.4 FSAN
 - 4.10.5 Home Gateway Initiative
 - 4.10.6 The International Telecommunications Union
 - 4.10.7 TTC
 - 4.10.8 UNH-IOL
 - 4.10.9 The FTTH Council Europe
 - 4.10.10 The FTTH Council Asia-Pacific
 - 4.10.11 The Broadband Forum
 - 4.10.12 Home Gateway Initiative
 - 4.10.13 Communications Standards Bodies:

5 DSL CHIP COMPANY PROFILES

- 5.1 Analog Devices
 - 5.1.1 Analog Devices Focus On Key Strategic Markets
 - 5.1.2 Analog Devices Broad Line Of High-Performance ICs
 - 5.1.3 Analog Devices Digital Signal Processing Products
 - 5.1.4 Analog Devices Revenue
 - 5.1.5 Analog Devices Revenue Trends by End Market
 - 5.1.6 Analog Devices Industrial –
 - 5.1.7 Analog Devices Automotive –
- DSL And G.fast Chips:

- 5.1.8 Analog Devices Consumer –
- 5.1.9 Analog Devices Communications –
- 5.1.10 Analog Devices Markets and Applications
- 5.1.11 Analog Devices Industrial and Instrumentation Segments
- 5.1.12 Analog Devices Defense/Aerospace Segment
- 5.1.13 Analog Devices Energy Management Segment
- 5.1.14 Analog Devices Healthcare Segment
- 5.1.15 Analog Devices Automotive Segment
- 5.1.16 Analog Devices Consumer Segment
- 5.1.17 Analog Devices Communications Segment
- 5.1.18 Analog Devices Segment Financial Information and Geographic Information
- 5.1.19 Analog Devices Revenue Trends by Product Type
- 5.1.20 Analog Devices Revenue Trends by Geographic Region
- 5.2 Arris
 - 5.2.1 Arris Revenue
- 5.3 Broadcom
 - 5.3.1 Broadcom Broadband Communications Solutions
 - 5.3.2 Broadcom Mobile & Wireless (Solutions for the Hand)
 - 5.3.3 Broadcom Infrastructure & Networking (Solutions for Infrastructure)
 - 5.3.4 Broadcom Customers and Strategic Relationships
- 5.4 BroadLight
- 5.5 Cavium
 - 5.5.1 Cavium Customers and Target Markets
- DSL And G.fast Chips:
- 5.6 Chicony
 - 5.6.1 XAVi Technologies Corporation
- 5.7 Freescale Semiconductor
 - 5.7.1 Freescale Embedded Innovation
- 5.8 Ikanos
 - 5.8.1 Ikanos Outsourcing and Value Chain
 - 5.8.2 Ikanos Net Loss
 - 5.8.3 Service Provider Platform Deployments
 - 5.8.4 Ikanos Revenue
 - 5.8.5 Ikanos Acquired from Conexant Systems, its Broadband Access Product Line
 - 5.8.6 Ikanos Product Lines
 - 5.8.7 Ikanos Solution
 - 5.8.8 Key Features of Ikanos Technology
 - 5.8.9 Ikanos Major Service Provider Customers
 - 5.8.10 Ikanos Service and Support for Customers and Service Providers

- 5.8.11 Sales, Business Development and Product Marketing
- 5.8.12 Ikanos Go to Market Strategy
- 5.8.13 Ikanos / Aricent
- 5.8.14 Ikanos / ASSIA, Inc.
- 5.8.15 Ikanos / Atheros
- 5.8.16 Ikanos / DSP Group
- 5.8.17 Ikanos / D2 Technologies
- 5.8.18 Ikanos / Gatespace
- 5.8.19 Ikanos / Jungo
- DSL And G.fast Chips:
 - 5.8.20 Ikanos / picoChip
 - 5.8.21 Ikanos / Ralink
 - 5.8.22 Ikanos / SoftAtHome
 - 5.8.23 Ikanos / Sunrise Telecom
 - 5.8.24 Ikanos / Wintegra
- 5.9 Infineon Technologies
 - 5.9.1 Infineon Technologies Revenue
- 5.10 IXYS Integrated Circuits Division
 - 5.10.1 IXYS Integrated Circuits Distribution Channels
 - 5.10.2 IXYS Integrated Circuits / Clare
- 5.11 Lantiq
- 5.12 Marvell
- 5.13 MediaTek / Ralink Technology
 - 5.13.1 MediaTek / Ralink / Trendchip xDSL
 - 5.13.2 MediaTek xDSL(Ralink)
- 5.14 PMC-Sierra
- 5.15 Pulse
- 5.15 Scipio
- 5.16 Shantou New Tideshine Electron
- 5.17 Shenzhen Chaoyue Electronics Co., Ltd.
- 5.18 Shenzhen Sky Foundation
- 5.19 Shenzhen Tianxiaowei Electronics Co., Ltd.
- 5.20 Zinwell
- 5.21 ZTE
 - 5.21.1 ZTE Revenue
- DSL And G.fast Chips:
 - 5.22 Other xDSL Chip Based Products and Market Participants

List Of Tables

LIST OF TABLES AND FIGURES

Table ES-1 G.Fast Chip Market Driving Forces

Table ES-2 Vendor G.Fast Competitive Positioning Factors

Figure ES-3 Global Voice vs. Data Traffic

Figure ES-4 DSL and G.Fast Chip Market Shipments Forecasts Dollars, Worldwide, 2014-2020

Figure 1-1 DSL / FTTx Speeds

Table 1-2 Highly-Integrated Chip Solutions

Table 1-3 Digital DSL Product Positioning

Table 1-4 Digital G.fast Advantages

Table 2-1 DSL G.Fast Chip Market Driving Forces

Table 2-2 Vendor G.Fast Competitive Positioning Factors

Figure 2-3 Global Voice vs. Data Traffic

Figure 2-4 DSL And G.fast Chips: DSL Chip Market Shares, Dollars, 2013

Table 2-5 DSL Component Shipments Dollars, Worldwide, 2013

Figure 2-6 G.fast Chip Market Shipments Forecasts Dollars, Worldwide, 2014-2020

Figure 2-7 G.fast Chip Unit Forecasts, Number, Worldwide, 2014-2020

Table 2-8 Broadband DSL and G.fast Copper Broadband Infrastructure Market Forecasts, Units Worldwide, 2014-2020

Figure 2-9 DSL and G.Fast Chip Market Shipments Forecasts Dollars, Worldwide, 2014-2020

Table 2-10 Broadband DSL and G.fast Chip Market Forecasts, Dollars Worldwide, 2014-2020

Table 2-11 Broadband DSL and G.fast Market Forecasts, Low End, Mid Range, and High End Units and Dollars Worldwide, 2014-2020

Table 2-12 Broadband DSL and G.fast Market Forecasts, Low End, Mid Range, and High End Units Worldwide, 2014-2020

Table 2-13 Broadband DSL and G.fast Chip Market Forecasts, Low End, Mid-Range, and High End Units Worldwide, 2014-2020

Table 2-14 DSL And G.fast Chips: Broadband DSL and G.fast Market Forecasts, Low End, Mid Range, and High End Units and Dollars Worldwide, 2014-2020

Table 2-15 Broadband DSL and G.fast Market Forecasts, Low End, Mid Range, and High End Units and Dollars Percent of Total Shipments Worldwide, 2014-2020

Table 2-16 Broadband DSL and G.fast Market Forecasts, Low End, Mid-Range, and High-End Units and Dollars Percent of Total Shipments Worldwide, 2014-2020

Figure 2-17 DSL and G.fast Copper Infrastructure Subscriber Forecasts, Number,

Worldwide, 2014-2020

Figure 2-18 G.fast Copper Infrastructure Subscriber Forecasts, Number, Worldwide, 2014-2020

Table 2-19 Broadband G.fast, DSL, Cable Modem, Wireless Device, and Fiber to the Home Subscribers Worldwide, 2014-2020

Table 2-20 Ethernet Market Aspects

Figure 2-21 Explosion of Protocols

Figure 2-22 Broadband Services Typical Speed in Mbps

Table 2-23 Broadband Fiber Cost Per Household to Build Out

Table 2-24 DSL Chip Applications

Figure 2-25 DSL And G.fast Chips: DSL Regional Market Segments, 2013

Table 2-26 DSL Regional Market Segments, 2013

Table 2-27 DSL Component Shipments by Vendor by Region Dollars, Worldwide, 2013

Figure 3-1 FTTH vs. G.Fast Costs for Services Providers

Figure 3-2 Lantiq G.fast

Table 3- Key Features of the Lantiq EASY330 G.Fast Reference Board

Table 3- Broadcom BCM65200/900 Family Key Features

Figure 3- Simulation of G.fast Rates Over 100-Meter Lines Gives 1.3 Gbit/s by Controlling Ccrosstalk

Figure 3-12 Ikanos 496pix_Velocity_Chipset2

Table 3-33 Google Addresses DSL Vectoring

Figure 4-1 Network Configurations

Figure 4-2 Innovation In Copper Supports Fiber to Curb Rollout Leveraging Endpoints Using G.fast

Figure 4-3 G.fast Vectoring DSL And G.fast Chips:

Figure 4-4 Fiber to the Distribution Point Architecture

Figure 4-5 Typical DSL Downstream Broadband Capability

Figure 4-6 G.fast Copper Network Solution

Figure 4-7 Broadband Services Typical Speed in Mbps

Table 4-8 Ikanos NodeScale Vectoring Product Key Features

Table 4-9 Ikanos Quality Video (iQV) technology Key Features

Table 5-1 Analog Devices Embedded In Electronic Equipment

Table 5-2 Analog Devices Industrial And Instrumentation Market Applications

Table 5-3 Analog Devices Defense/Aerospace Products

Table 5-4 Analog Devices Energy Management Segment Products

Table 5-5 Analog Devices Healthcare Segment Innovative Technologies

Table 5-6 Analog Devices Green Automotive Segment

Table 5-7 Analog Devices Safety Automotive Segment DSL And G.fast Chips:

Table 5-8 Analog Devices Comfort Automotive Segment

Table 5-9 Analog Devices Consumer Segment Products
Table 5-10 Analog Devices Communications Segment Systems
Table 5-11 Analog Devices Revenue by Region
Table 5-12 Broadcom Broadband Communications Solutions
Figure 5- Broadcom Communications Positioning
Table 5-13 Broadcom Customers and Strategic Relationships
Table 5-14 Ikanos Product Lines
Table 5-15 Ikanos Works Directly With Various Major Service Providers
Figure 5-16 MediaTek Revenue
Table 5-17 MediaTek Industry Leadership
Figure 5-18 MediaTek Product Portfolio
Table 5-19 MediaTek Product Advantages DSL And G.fast Chips:
Table 5-20 MediaTek / Ralink Comprehensive Product Portfolio

I would like to order

Product name: G-fast Chips: Market Shares, Strategies, and Forecasts, Worldwide, 2014-2020

Product link: <https://marketpublishers.com/r/G5E4A02F857EN.html>

Price: US\$ 3,900.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G5E4A02F857EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970