

WINTERGREEN RESEARCH, INC.

**Backplane Transceiver Market Opportunities, Strategies,  
and Forecasts, 2004 to 2009**

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**Backplane Transceiver**

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*Picture by Susie Eustis*

**MOUNTAINS OF OPPORTUNITY**

**WinterGreen Research, Inc.  
Lexington, Massachusetts**

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**CHECK OUT THESE KEY TOPICS**

*BACKPLANE TRANSCEIVER MARKET SHARES*  
*WORLDWIDE BACKPLANE TRANSCEIVER MARKET FORECASTS*  
*BACKPLANE TRANSCEIVER DRIVING FORCES*

Increasingly Sophisticated Systems

Communications IC Opportunity

Gigabit Ethernet (GbE) Transition

*CHANGING BACKPLANES*

*STORAGE AND SERIAL BACKPLANE PRODUCTS*

*INTEL PCI EXPRESS ARCHITECTURE*

*STAR TOPOLOGY*

*MESH BACKPLANE*

*MULTI-POINT BACKPLANE*

*FAST BACKPLANE*

*BACKPLANE TRANSCEIVERS*

*ETHERNET IC MARKET FORECASTS*

*SYSTEM MODELING*

**OPPORTUNITY ABOUNDS**

WinterGreen Research, Inc.

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## **Backplane Transceiver Market Opportunities, Strategies, and Forecasts, 2004 to 2009**

**Demand for Internet services, need for improved copper line conditions need to extend reach of copper lines, and increases in network traffic are major backplane transceiver market driving forces.**

**Switch fabric, crosspoint switch, and backplane transceiver markets impact the entire network architecture for communications. These markets are looked as one entity because they address the same issue, how to move packets across the backplane. Two significant market shifts are occurring. The old circuit switch architecture depended on one clock in Denver to create simultaneity for all the logic in all the proprietary circuit switch hardware.**

**With the Internet cloud architecture, the one clock is gone and all the switches that move packets have different clocks. The shift in architecture puts more stress on the components that create switching capability in the network. These units have to operate at higher speeds and with more flexibility to handle the traffic that is being generated by the Internet. Combined voice, video, and data traffic is moving across the same switches at the same time, creating demand for new types of switch IC. The transfer of information from the line card or motherboard to the backplane is moving from a parallel to serial architecture. This in turn gives rise to demand for new types of IC.**

**Blade servers are replacing to old circuit switches and the proprietary PBX hardware. Clustered blade servers with carrier grade Linux operating systems create computer industry hardware that can be used with proprietary software.**

**Switch fabric, crosspoint switch, and backplane transceiver markets at \$101.2 million in 2003 are expected to reach \$579.6 million by 2009.**

**Market growth is expected to be spurred by demand for storage and video capable networks. Higher speeds complement existing infrastructure. Gigabit Ethernet IC markets will drive demand for high-speed communications. Asynchronous IC communications capability provided by crosspoint switches permits design flexibility. Different protocols are supported.**

**Different solutions address the same issue, how to move packets across the backplane. Backplane transceivers are a significant aspect of the issue. Significant market shifts are occurring. The old circuit switch architecture depended on one clock in Denver to create simultaneity for all the logic in all the proprietary circuit switch hardware.**

**With the Internet cloud architecture, the one clock is gone and all the switches that move packets have different clocks. The shift in architecture puts more stress on the components that create switching capability in the network.**

**These units have to operate at higher speeds and with more flexibility to handle the traffic that is being generated by the Internet. Combined voice, video, and data traffic is moving across the same switches at the same time, creating demand for new types of switch IC.**

**In addition, the transfer of information from the line card or motherboard to the backplane is moving from a parallel to serial architecture. This in turn gives rise to demand for new types of IC.**

**Backplane transceiver markets in dollars at \$8.8 million in 2003 are expected to reach \$22 million by 2009.**

## Companies Profiled

### Market Leaders

**Worldwide Crosspoint Switch, Switch Fabric, and Backplane Transceiver**  
Applied MicroCircuit Corporation(AMCC)/IBM Vitesse  
Agere Mindspeed

### Backplane Transceiver

Accelerant Technologies Agere  
Analog Devices Applied MicroCircuit Corporation(AMCC)/IBM

### Other Market Participants

Mindspeed	Fairchild Semiconductor
Vitesse	Infineon Technologies
Aeluros	Intel
Broadcom	Marvel Technology
Conexant Systems	Maxim Integrated Products
Dune Networks	National Semiconductor
Erlang Technology	ON Semiconductor
Exar	Teadyne
TriQuint Semiconductor	

# Backplane Transceiver Market Strategies and Forecasts, 2004-2009

## REPORT METHODOLOGY

THIS IS THE *TWO-HUNDRED AND SEVENTH* REPORT IN A SERIES OF MARKET RESEARCH REPORTS THAT PROVIDE FORECASTS IN COMMUNICATIONS, TELECOMMUNICATIONS, THE INTERNET, COMPUTER, SOFTWARE, AND TELEPHONE EQUIPMENT. 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. 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 PARTICIPATION 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.

**YOU MUST HAVE THIS STUDY**

# Backplane Transceiver Market Opportunities, Strategies, and Forecasts, 2004 to 2009

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## **ABOUT THE COMPANY**

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