



## Ultra Dual-Port 10GbE SFP+ PCIe 3.0 Server I/O Adapter Card for Stratus Technologies

The Stratus Technologies dual-port 10G Ethernet SFP+ server adapter optimizes Stratus ftServer® Gen 8 and ftScalable® Gen 3 platforms delivering unmatched message rates with low latency and jitter over standard Ethernet along with low CPU utilization, enabling the industry's best performance and scalability for enterprise data center environments.

The Stratus dual-port 10G Ethernet SFP+ server adapter card delivers the industry's lowest latency and highest message rates, accelerating trading applications, and credit and debit card authorizations that require processing in real-time, where even the smallest amount of system downtime or latency can be detrimental. The combination of the Stratus card, the ftServer platform, and ftScalable storage, delivers the industry's highest levels of availability and ultra-fast, consistent processing, and will keep trading platforms always-on and processing at the highest speeds available on the market.

### Optimized Server I/O

Featuring a full set of stateless offloads, the Stratus card reduces CPU processing loads for the most demanding network tasks. With OpenOnload®, the card bypasses kernel and networking overhead, providing unprecedented performance with seamless application compatibility and protocol compliance. OpenOnload features binary compatibility with all standard APIs and applications. The card's CPU offload, along with high performance, enables servers to provide more services to more users in high performance computing, cloud, grid, Big Data, storage, Web 2.0, VoIP, and financial services enterprise data center environments.

### Ultra-Low Latency

The Stratus card supports PCIe 3.0 with ultra-low latency features such as direct packet transfer (Tx PIO) mode and the templated send API. The card also features hardware acceleration to optimize packet delivery, such as UDP multicast replication, integrated layer 2 switching capability and VLAN insertion / removal, along with TCP segmentation offload (TSO) to reduce CPU load.

### Precision Time Protocol

A comprehensive IEEE 1588 precision time protocol (PTP) solution, the Stratus card includes a unique PTP daemon (PTPdv2) with advanced features. The card performs high-precision time stamping of all received Ethernet frames at line rates on both ports. It enables nanosecond network performance analysis, precise real-time packet capture, and accurate Service Level Agreement (SLA) measurements. Current software drivers are compatible with older Stratus cards that don't support PTP, and seamlessly interface to host software time synchronization solutions that utilize the standard Linux socket option SO\_TIMESTAMPING.

### Scalable, Hardware-Assisted Virtualization

With 10x the number of vNICs and virtual PCIe functions than the competition, the card's performance scales as the number of CPU cores increase.

Stratus 10GbE Server I/O Adapter

**Find Out More**  
For more information, or to purchase Stratus products, call 1-800-STRATUS, or visit [www.stratus.com](http://www.stratus.com).



Stratus  
Technologies  
10GbE Server I/O  
Adapter Card

## Specifications

### Standards & Compliance

IEEE 802.3ae  
IEEE 802.3ad  
IEEE 802.1Q  
IEEE 802.1p  
IEEE 802.3x  
RoHS Compliant

### Power

7.3W (typical)

### Operating Range

0° to 55° C  
100 LFM, Min.

### Physical Dimensions L:

13.4 cm (5.3 in)  
W: 6.9 cm (2.7 in)  
End bracket height:  
PCI Express standard  
12.0 cm (4.725 in)

### Order Information

Stratus P/N U116A

## Advanced Features & Benefits

### PCI Express

PCIe 3.0 x8 @ 8.0 GT/s

### SFC9120 10G Ethernet Controller

Supports high-performance 10GbE

### SFP+ Support

Supports optical SFP+ fiber modules (10G)

### Low Latency

Cut-through architecture/intelligent interrupt coalescing

### Receive Side Scaling (RSS)

Distributes IPv4, IPv6 loads across all CPU cores;  
MSI-X minimizes interrupt overhead

### Hardware Offloads

TSO, LRO, GSO; IPv4/IPv6; TCP, UDP checksums

### Adapter Bonding/Link Aggregation

LACP for redundant links & increased bandwidth  
(compatible with MLAG)

### Jumbo Frames

9216 byte MTU for performance

### Enhanced Tuning

Adaptive interrupt moderation

### IP Flow Filtering

Hardware directs packets based on IP, TCP, UDP headers

### Advanced Packet Filtering

4096 multicast filters; adaptive TCP/UDP/IP, MAC, RSS,  
RFS filtering; Accelerated Receive Flow Steering (RFS)

### Intel QuickData™

Uses host DMA engines to accelerate I/O

### Management

SNMP, ACPI v3.0

### Operating Systems

RHEL 7

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Regulatory product code: S7120

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### Find Out More

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