

Two-Port 10-Gigabit Ethernet Network Adapters Optimized for Applications Requiring Extreme Performance



TARGET MARKETS

Myricom 10G-PCIE2-8C2-2S network adapters are designed for applications where lossless packet sniffing and injection at line rate and cutting edge latencies are required. These adapters are sold bundled with software to achieve optimum performance in specific vertical markets:

Sniffer10G[™] for Cybersecurity (optional)

Myricom

10G-PCIE2-8C2-2S adapters with Sniffer10G™ software provide the lossless packet capture and packet replay performance that is critical for cybersecurity and network monitoring applications. Myricom's solution provides a cost effective, high performance solution for even the most demanding installations.

DBL[™] for High Frequency Trading (optional)

With DBL™ software running on 10G-PCIE2-8C2-2S network adapters, end users can expect unmatched networking performance for UDP multicast and TCP order execution, all over industry-standard 10-Gigabit Ethernet. Users can achieve extreme performance without rewriting their applications or resorting to specialty networks.

MVA[™] for Industrial Imaging (optional)

10G-PCIE2-8C2-2S adapters with MVA^{↑M} software provide up to 10Gigabit per second throughput performance to support ultra-high performance GigE Vision compatible cameras.

• Myri10GE for Content Creation/Post Production

10G-PCIE2-8C2-2S adapters with the Myri10GE software meet the critical requirements for high throughput video editing. By delivering best in class throughput performance not only for OS X but also Windows and Linux, the Content Creation networking solution is ideally suited for Non-Linear Editing of high resolution formats including 4K.

FEATURES

- Wire-speed performance from both network ports concurrently
- Firmware-controlled stateless offloads
- 2 million hour MTBF (500 FIT)

BENEFITS

- Latency reduction of 300ns over Myricom's previous lowest latency products
- Increased throughput performance and low host-CPU utilization achieved with stateless offloads
- SFP+ sockets for 10GBase-SR, LR and LRM modules, as well as cost-effective Direct Attach copper* and EOE cables.

*Myricom-certified DAC cables are supported.

CSPI

CSP, Inc. (CSPI) recently acquired Myricom, a technology leader in extreme-performance 10GbE solutions specialized for vertical markets. Myricom products deliver wire-speed UDP and TCP throughput, with optional firmware-accelerated offloads for financial trading, packet capture and injection, video streaming and IPTV, and other performance-sensitive applications.

HOST PORT INTERFACE SPECIFICATIONS

Bus Interface

• PCI Express Gen2 (5 GT/s) x8

Optional PCI Express capabilities supported

Advanced Error Reporting, Function-Level Reset, Device Serial Number, up to 16 outstanding read requests, up to 2KB MaxPayloadSize for all packet types, MSI and MSI/X, SMBus access.

Compliance

- PCI Express Card Electromechanical Specification Rev. 2.0
- PCI Express Base Specification Rev. 2.0 at 5GT/s or 2.5 GT/s

ETHERNET SPECIFICATIONS

Throughput

 ~9.9 Gb/s with a 9KB MTU or ~9.5 Gb/s with a 1500B MTU per port

Ethernet Frame

1500 byte or 9000 byte MTU

Compliance

• IEEE 802.3x

Stateless offloads

- IP and TCP checksum offload, send and receive
- TSO (TCP Segmentation Offload, also known as Large Send Offload)
- LRO (Large Receive Offload)
- RSS (Receive-Side Scaling)
- Interrupt Coalescing
- Multicast filtering

MYRICOM SOFTWARE

- Myri10GE for Content Creation and high throughput video editing (included)
- Sniffer10G™ for lossless packet capture and injection at line rate in cybersecurity (optional)
- DBL[™] for extremely low UDP and TCP communication latency in financial trading (optional)
- VideoPump™ for IPTV and video streaming (optional)
- MVA[™] for machine vision cameras (optional)

PHYSICAL CHARACTERISTICS

Ports

• 10G-PCIE2-8C2-2S; dual 10Gb/s Ethernet

Form Factor

- Low-profile PCI Express x8 add-in card
- 68.9mm x 167mm exclusive of the PCI faceplate
- Total thickness: 22mm
- Weight: 101.6g (0.224lb), inclusive of standard PCI faceplate

POWER

	Typical	Maximum
Direct Attach	14.5W	16.0W
SFP+ SR/LR	14.7W	16.2W
SFP+ LRM	16.2W	17.7W

ENVIRONMENTAL SPECIFICATIONS

Temperature

- Operating: 0°C to 55°C (32°F to 131°F) up to 10,000 foot altitude with 100LFM minimum airflow
- Storage: -40°C to 70°C (-40°F to 158°F)

Humidity

- Relative humidity (non-condensing): 15% to 80% @ 50°C
- Storage: Relative humidity 90% @ 65°C

Maximum Cable Distances

- SFP+ Direct Attach cables up to 7m
- SR, LR, and LRM length per IEEE specification

REGULATORY APPROVALS, COMPLIANCE

EMI and EMC (Class A)

• USA, Canada, Europe, Australia/New Zealand, Japan

Compliance

- TAA
- Reduction of Hazardous Substances (RoHS)

Laser Safety

 Class 1 when used with 10GBase-SR, 10GBase-LR or 10GBase LRM SFP+ transceivers

COUNTRY OF ORIGIN

• USA

ORDERING INFORMATION/ PRODUCT CODES

10G-PCIE2-8C2-2S (dual port)

- Ships with standard-height PCI faceplate; low-profile faceplate included
- Does not include an SFP+ fiber transceiver or SFP+-terminated "Direct Attach" twinax copper cables

For additional information, please visit www.myricom.com