Myri-10G PCI Express NIC with one 10GBase-CX4 network port

**Highlights**

- Low-profile PCI Express x8 add-in card
- Dual-protocol network port, 10-Gigabit Ethernet or 10-Gigabit Myrinet
- Wire-speed performance at very low host-CPU load
- Firmware-controlled offloads
- RoHS-compliant lead-free (RoHS-6)
- 5.1 Watts typical
- Unique in the 10-Gigabit Ethernet NIC market in being internally programmable
- Driver support for Linux, Windows, Solaris, Mac OS X, FreeBSD, and VMware ESX
- MX (Myrinet Express) for MPI and Sockets communication, and for cluster file systems
- Video Pump™ for UDP streaming of IPTV video
- Sniffer10G™ for wire-speed 10-Gigabit Ethernet packet capture at high packet rates
- DBL (Datagram Bypass Layer) for low-latency UDP/IP communication

**Performance and Latency**

Myricom’s family of Myri-10G 10Gbit Ethernet cards is designed to meet all requirements of today’s Data Center and High Performance Computing (HPC) networks. These NICs deliver wire-speed performance at very low host-CPU load, and are the best choice for general 10Gbit Ethernet networking, High Performance Computing (HPC), database, video, virtualization, and storage applications.

**Best Solution for Virtualization**

The fast growth of virtualized environments is leading to real network performance bottlenecks. More Virtual Machines are running on physical server platforms increasing the demand of network resources dramatically. Myricom’s 10Gbit Ethernet cards are addressing such bottlenecks and providing more performance for network intensive applications. Myricom is furthermore supporting the most recently used virtualization platforms in the market.

**Total Cost of Ownership (TCO)**

Myricom’s single port 10Gbit Ethernet cards lower the Total Costs of Ownership by providing a simpler management, lower power consumption and the same performance as ten single port 1Gbit Ethernet cards. It further provides the ability to combine your SAN and LAN into one unified network stack.

**Optional Software**

Myricom offers a wide range of optional Software which was designed to optimize application processing for High Performance Computing, IPTV video streaming, low latency financial trading applications and wire-speed packet capture at high packet rates. These Software features are very powerful and provide the best performance, latency and very low CPU load for your applications.

**iSCSI Support**

All 10Gbit Ethernet cards from Myricom are provided with support of native OS iSCSI Initiators. The excellent performance and low CPU utilization is achieved without usage of “TCP Offload Engines (TOEs)”, which necessary break the protocol stack.

**Operating System Support**

Myricom supports a wide range of Operating Systems including Linux, Windows, Solaris, Mac OS X, FreeBSD and VMware ESX.

**Multi-Core Processing**

Myricom’s 10Gbit Ethernet cards are provided with support of Multi-Core CPUs. This feature allows distributing network traffic across multiple Cores.
### General

- **Product code**: 10G-PCIE-88-C
- **Product Type**: 1 CX4 network port
- **Connector Type**: 1 CX4 connector
- **Supported cable Types**: 10GBase-CX4 copper cables (SFF-8470)
- **Form factor**: Low profile PCI Express add-in card

### Adapter Product Features

- Ships with full height bracket installed
- Low profile bracket added in package
- Plug and Play support: Yes
- Direct Cache Access (DCA): Yes
- Wire speed performance: Yes

### Supported Operating Systems

<table>
<thead>
<tr>
<th>Operating System</th>
<th>x86, x64</th>
<th>x86, x64, WHQL certified</th>
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<tbody>
<tr>
<td>Microsoft Windows Server</td>
<td>2000</td>
<td></td>
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<tr>
<td>Microsoft Windows XP, 2003</td>
<td>x86, x64, WHQL certified</td>
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<td>Microsoft Windows Vista, 2008, 7</td>
<td>x86, x64, WHQL certified</td>
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<td>Red Hat Linux</td>
<td>x86, x86_64, ppc64, and sparc64</td>
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<td>VMware ESX</td>
<td>X86 spm</td>
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<td>VMware ESXi/ESXi</td>
<td>4.0 Driver CD</td>
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<tr>
<td>Solaris 10 U1 and newer</td>
<td>X86_64, sparcv9</td>
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<tr>
<td>Mac OS X 10.4.x, 10.5.x</td>
<td>For G5 and Intel</td>
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<td>Mac OS X 10.6.x</td>
<td>For Intel, 32-bit, 64-bit</td>
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<td>FreeBSD</td>
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### Technical Features

- **Data rate supported**: 10 Gb/s
- **Bus type**: PCI Express "Gen1" (2.5 GT/s)
- **Bus width**: x8 lane PCI Express, operable in x8 or x16 slots
- **Bus speed**: 2 GBytes/s (250 Mbytes/s per lane) each direction
- **Compliance**: PCI Express Card Electromechanical 2.0, PCI Express Base 2.0
- **Operating temperature**: 0°C to 55°C (32°F to 131°F) with 100 LFM min airflow
- **Operating humidity**: 15% to 80% @ 50°C, non-condensing
- **Storage temperature**: -40°C to 70°C
- **Storage humidity**: 90% @ 45°C
- **Power consumption**: 5.1 W typical, 5.4 W maximum
- **Altitude**: Up to 10,000 foot
- **LEDs Indicator**: 2

### Advanced Software Features

- IP and TCP checksum offload: Yes
- Interrupt Coalescing: Yes
- TCP Segmentation Offload (TSO): Yes
- RSS (Receive-Side scaling): Yes
- LRO (Large Receive Offload): Yes
- Multicast filtering: Yes
- Jumbo Frame support: Yes
- Load Balancing (MPIO) a. Failover: Yes

### Optional Software

- MX (Myrinet Express): MPI, Socket communication, cluster file systems
- Video Pump™: For UDP streaming of IPTV video
- Sniffer10G™: For wire-speed 10 Gbit Ethernet packet capture
- DBL (Datagram Bypass Layer): For low-latency UDP/IP communication

### Standards

- IEEE 802.3ak: Yes
- IEEE 802.3x Flow Control: Yes
- IEEE 802.3p Priority: Yes
- IEEE 802.3Q VLAN Tagging: Yes
- SFF-8470: Yes
- IPv4 / IPv6: Yes

### Certifications

- **Red. of Hazardous Substances**: RoHS Compliant (RoHS-6)

### Support

- Warranty: 3 Years
- Optional Support: Advanced Exchange

### Physicals

- **Height**: 69mm
- **Length**: 99mm
- **Thickness**: 22mm
- **Weight**: 54.4g

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