10G-PCIE3-8D-Q Single QSFP Port Configured as four 10GbE ports

4 x 10 Gigabit Ethernet Network Adapters for lossless Packet Capture

CSPi Myricom® 10G-PCIE3-8D-Q adapters are sold bundled with software to achieve optimum performance in specific vertical markets.

Sniffer10G for Packet Processing

Network adapters with Sniffer10G software provide enterprise and government customers and partners the ability to capture and time stamp network traffic at line rate with low host-CPU overhead. Sniffer10G serves the following market segments: network surveillance, monitoring and analysis; test, measurement and packet generation; deep packet inspection (DPI); and as a critical technology component within distributed denial-of-service (DDoS) defense appliances.

Flexible Multi-core Operation

Sniffer10G can involve all CPU cores in analyzing packets in two ways: with partitioning and/or with duplication. With partitioning, incoming TCP and UDP flows are balanced across up to 32 receive rings such that all cores (up to 32) can each analyze an equal portion of the incoming traffic. For applications that require deep packet inspection, this approach can relax the processing time constraints under high packet rate loads. With duplication, all incoming packets are made available concurrently to multiple rings such that each core can use different criteria when analyzing the same data.

Incoming traffic can be portioned to multiple cores in a number of different ways including:

- Flow Hashing – user selectable flow hashing based on Ethernet VLAN tags, IP, UDP headers, or TCP headers.

- GTP protocol hashing for mobile applications.

- Custom Hashing – software defined hashing gives complete flexibility of selective packet forwarding to the application developer.

Sniffer10G supports multiple simultaneous applications. Duplicate traffic can be provided to multiple applications running on user configurable host cores.
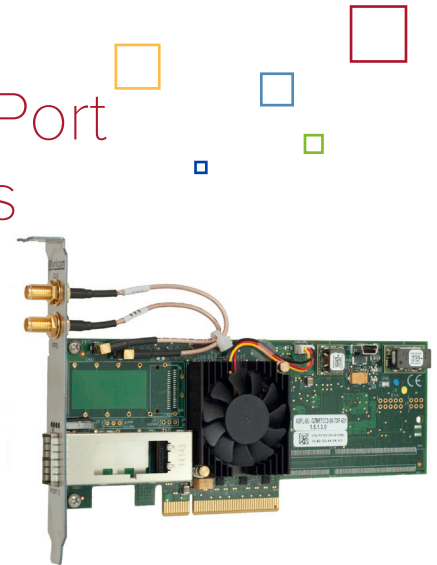
KEY FEATURES

- Sniffer10G enabled Myricom adapters provide a zero loss packet sniffing security solution

- Sniffer10G based solutions reduce CPU overhead, leaving more server cycles for the application

- Myricom adapters DMA packets directly into user space, bypassing the kernel to lower overhead

- Supports Arista Networks DANZ time stamping

- Multiple cores or applications can process the same packets without data duplication

- Supports Libpcap/WinPcap

- Flexible Multi-Core Operation

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Hardware Specifications

HOST PORT INTERFACE SPECIFICATIONS	
Bus Interface	PCI Express Gen 3, 8 lanes wide
Compliance	PCI Express Card Electromechanical Specification Rev 3.0 PCI Express Base Specification Rev 3.0
ETHERNET SPECIFICATIONS	
Throughput	Supports the maximum possible packet rate of 4 x 14.88 million packets per second.
Ethernet Frame	1500 byte or 9000 byte MTU
Compliance	IEEE 802.3an
ENVIRONMENTAL	
Operating Temperature	0°C to 50°C with 300 LFM minimum airflow
Storage Temperature	-45°C to 100°C
Relative Humidity	0 to 95% non-condensing
REGULATORY APPROVALS, COMPLIANCE	
EMI and EMC, Class A	USA, Canada, Europe, Australia/New Zealand, and Japan. Test reports are available upon request.
Compliance	RoHS (Reduction of Hazardous Substances)
Country of Origin	USA
PHYSICAL CHARACTERISTICS	
Ports	10G-PCIE3-8D-Q: Single QSFP (configured as four 10GbE ports) 10G-8D-Q-SYNC-KIT: Optional Timing Kit with coax connectors installed.
Form Factor	Low-profile PCI Express x8 add-in card (available with both standard height and low profile faceplate). Timing Kit is currently available with a standard height faceplate only.
Dimensions	68.9mm x 167mm (exclusive of the faceplate).
Total Thickness	22mm
Weight	108.9g (0.24 lb), inclusive of standard height faceplate for single QSFP port.

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High Performance Products