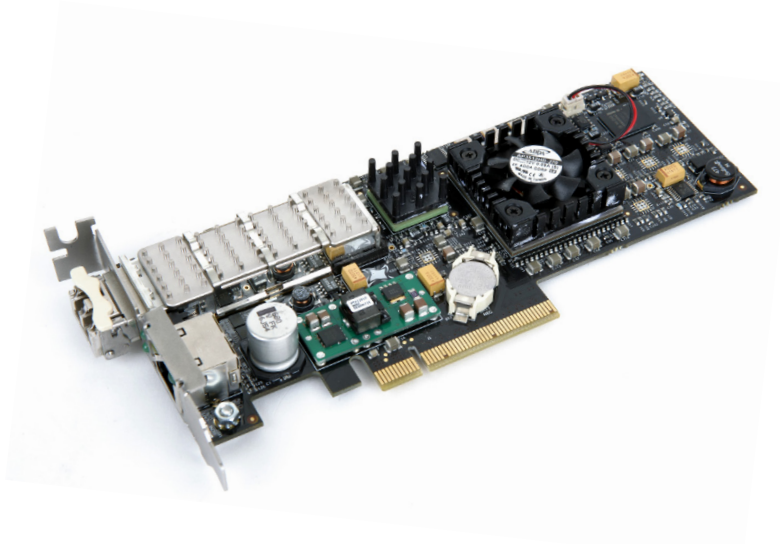


## DAG 8.1SX



The Endace DAG® 8.1SX network monitoring card has been optimized for 10Gb/s Ethernet and Packet-over-SONET OC-192c / SDH STM-64c networks. It provides line rate network traffic capture and sustained 10Gb/s data transfer to the host server.

The 8.1SX lightens the packet processing load by supporting a range of programmable hardware-based features that enable applications to efficiently:

- Filter to drop unnecessary network traffic.
- Direct network traffic to specific memory buffers based upon their classification.
- Clone a single packet to multiple memory buffers.
- Evenly load-balance 10 Gb/s of network traffic to a maximum of 32 memory buffers.

In addition to interrupt-free and zero-copy DMA, Endace-developed Enhanced Packet Processing (EPP) functionality increases packet processing performance via hardware-based filtering and load-balancing techniques. EPP effectively accelerates application performance by offloading common features into hardware and ultimately freeing up more CPU resources for packet processing applications.

On high-speed 10Gb/s Ethernet and Packet-over-SONET OC-192c / SDH STM-64c networks, the DAG 8.1SX delivers the **power to see all** to your applications.

### KEY FEATURES

Single port network monitoring card utilizing small form factor (XFP) optical transceivers supporting:

- Concatenated OC 192c (STM64 VC4-64c) and 10Gbps IEEE 802.3ae Ethernet supporting LAN and WAN configurations
- 100% packet capture into host memory at full line rate for all packets from 48 to 9600 bytes (including jumbo frames)
- Support for up to 32 memory buffers for load balancing in multi-core host architecture
- Support for 64 hardware-based classification rules for on-board steering and duplication
- Precise packet timestamping and clock synchronization from the host or external time reference
- Easy integration into existing server hardware with 8-lane PCIe Gen1 bus technology
- Relative timed data replay option enables precise reproduction of traffic conditions.



## DAG 8.1SX – Technical Specifications

Monitoring interfaces	1x XFP transceiver
Network type	IEEE 802.3ae LAN IEEE 802.3ae WAN SONET OC 192c SDH STM64 VC4-64c
Packet encapsulations	Ethernet Packet over SONET [PoS] Raw Frames
Hardware packet processing	Enhanced Packet Processing v2
Time synchronization	External: RJ45 connector for RS-422 PPS and IRIG-B signal from GPS, CDMA or TDS Internal: Host PC clock Other DAG cards
Packet time stamping	7.5ns
PCI interface	x8 lane PCI Express Gen 1.1
Operating system supported	Endace software is supported on the following operating systems: Linux, FreeBSD, Windows Server 2003, and 2008
Power requirements	Less than 20W
Operating temperature	32 to 131°F (0 to 55°C)
Airflow requirements	200 LFM (@50°C Ambient)
Operating humidity	5 to 95% non-condensing
Physical dimensions	Half-height, Half-Length Height: 2.53" (64.25mm) Length: 6.6" (167.5mm)

## Companion Products

The following products are compatible with the DAG 8.1SX:

### Transceivers

10GBase-SR optical XFP transceiver, 850nm Multi-mode with LC connectors	TXR-10G 850 MM
10GBase-LR optical XFP transceiver, 1310nm Single-mode with LC connectors	TXR-10G 1310 SM
10GBase-ER optical XFP transceiver, 1550nm Single-mode with LC connectors	TXR-10G 1550 SM
10GBase-ER optical high sensitivity XFP transceiver, 1550nm Single-mode with LC connectors	TXR-10G 1550 SM HS

### Time Measurement Accessories

Trimble Acutime™ Gold GPS receiver	GPS-2
EndRun Technologies Præcis Ct™ CDMA receiver	CDMA-1
Endace 2-port Time Distribution Server, accepts serial input from GPS/CDMA sources	TDS-2
Endace 6-port expansion module for TDS-2, shares common reference time source	TDS-6
Endace 24-port Time Distribution Server, accepts serial input from GPS/CDMA sources	TDS-24
Endace 24-port Time Distribution Server, accepts serial input from GPS/CDMA sources	TDS-24

For information about Taps, Switches, and Cables visit [endace.com/accessories](http://endace.com/accessories)

For more information on Endace products visit: [endace.com](http://endace.com)  
For enquiries email: [enquiries@endace.com](mailto:enquiries@endace.com)