Endace DAG 7.4S

Endace's DAG™ 7.4S is a high-performance, dual-port data capture card, designed for use in appliances for monitoring and capturing network traffic at high-speed in SONET/SDH environment.

The DAG 7.4S is ideally suited for use in network performance monitoring, security analytics, data archival and latency measurement applications in large, complex, network environments where 100% packet capture is critical.

Based on PCI Express (PCIe) 1.1 x8, the DAG 7.4S delivers full line rate data capture for both ports, regardless of packet size, with captured packets transferred direct to host memory via direct memory access (DMA). This removes interrupt overhead from the host CPU and frees up host CPU cycles for analysis or other tasks.

In addition to interrupt free and zero copy packet capture, the DAG 7.4S provides extremely flexible memory allocation and powerful on-card, rule-based filtering, duplication and steering (directing packets to specific streams). This makes analyzing captured traffic simpler and quicker, enabling more powerful analysis and further reducing load on the host CPU.

The DAG 7.4S is designed for concatenated OC-3c/12c/48c or STM-1 VC4c, STM-4 VC4-4c, STM-16 VC4-16c and supports Packet over SONET (PoS), ATM (OC3c/12c only) and RAW SONET frame capture.

If wire-speed SONET de-channelization is a requirement Endace's DAG 9.2SX2 supports sophisticated, hardware-based, de-channelization of SONET OC192 and SDH STM64 down to OC3/STM1 in any channelization hierarchy while extracting PoS and ATM mapping or just the raw payload.

Captured traffic is available in industry-standard packet capture formats (PCAP) making it easy to use in the applications you choose for monitoring and analysis.

Multiple Endace DAG cards can be combined in a single appliance, enabling high-density deployment, saving rack-space, and further reducing the total cost-of-ownership.

Endace's DAG cards are engineered to ensure long life and reliability. They are trusted by customers around the world to deliver proven 100% accurate capture and low cost-of-ownership with best-in-class performance.

DAG 7.4S AT A GLANCE

- 2x SFP monitoring ports configurable for SONET OC3/12/48 (or STM1/4/16)
- Hardware time-stamping with synchronization from host or external time reference via a dedicated time sync port
- PCIe 1.1 x8 based card
- Linux and FreeBSD drivers

BENEFITS

Accurate

- 100% packet capture at full line rate for all packet sizes from 64 Bytes to 9600 Bytes
- Nanosecond-level time-stamping accuracy on every packet

Powerful

- Supports up to 64 classification rules for onboard filtering, duplication and steering of captured traffic in hardware at full line rate
- Relative timed replay enables precise reproduction of traffic as captured for testing, performance measurement and other purposes

Flexible

- Supports up to 32 capture streams for load balancing in multi-core host architecture
- Full packet capture or set length capture configurable for every capture stream
- Compatible with standard server architecture using PCIe 1.1 x8 bus technology

Reliable

- Engineered for high-reliability and extended mean time between failure (MTBF) rates
- Zero-fan cooling reduces failure points

DAG 7.4S – Technical Specifications

Monitoring interfaces	2x SFP+ transceivers
Network type	SONET OC3c/OC12c/OC48c SDH STM-1 VC4c SDH STM-4 VC4-4c SDH STM-16 VC4-16c
Packet encapsulations	Packet over SONET (PoS) ATM (OC-3c/12c only) 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 timestamping	7.5ns
PCI interface	x8 lane PCIe 1.1
Operating system supported	Endace software is supported on Linux and FreeBSD
Power requirements	Less than 20W
Operating temperature	0 to 50°C (32 to 131°F)
Airflow requirements	200 LFM (@50°C Ambient)
Operating humidity	5 to 95% non condensing
Physical dimensions	Half Height, Half Length Height: 64.25mm (2.53″) Length: 167.5mm (6.6″)

Companion Products

Transceivers

OC-3/STM-1 Multi-mode 1310nm optical SFP transceiver with LC-type connectors	TXR-OC3-MM
OC-3/STM-1 and OC-12/STM-4 Single-mode 1310nm optical SFP transceiver with LC-type connectors	TXR-OC3_OC12-SM
OC-48/STM-16 Single-mode 1310nm optical SFP transceiver with LC-type connectors	TXR-OC48-SM
OC-3/STM-1, OC-12/STM-4 and OC-48/STM-16 Single-mode 1550nm optical SFP transceiver with LC-type connectors	TXR-OC3_OC12_OC48-SM

Time Measurement Accessories

Trimble Acutime™ Gold GPS receiver	GPS-2
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

For more information on the Endace portfolio of products, visit: endace.com/products

For further information, email: info@endace.com

endace.com
END_ds_endacedag_7.4S_1.0_0216