Endace DAG 7.5G2

Endace's DAG™ 7.5G2 is a high-performance, two-port data capture card, designed for use in appliances for monitoring and capturing network traffic at high-speed in 10/100/1000BASE-T and optical 1GbE environments.

The DAG 7.5G2 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 x4, the DAG 7.5G2 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 7.5G2 provides on-card, rule-based steering (directing packets to specific streams) supporting eight rules. This makes analyzing captured traffic simpler and quicker, enabling more powerful analysis and further reducing load on the host CPU.

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 7.5G2 AT A GLANCE

- 2x SFP monitoring ports each configurable for 10/100/1000BASE-T or optical 1GbE links
- Hardware time-stamping with synchronization from host or external time reference via a dedicated time sync port
- x4 PCIe 1.1 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 eight classification rules for onboard steering of captured traffic in hardware at full line rate

Flexible

- Supports two capture streams for load balancing in multi-core host architecture
- Full packet capture or set length capture configurable
- Compatible with standard server architecture using x4 PCIe 1.1 bus technology

Reliable

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

Note: We recommend the DAG 10X2-S and 10X2-P for incorporating in new designs.

END_ds_endacedag_7.5G2_1.2_1018

DAG 7.5G2 – Technical Specifications

Monitoring interfaces	2x SFP+ transceivers
Network type	IEEE 802.3
Packet encapsulations	Ethernet
Hardware packet processing	Data Stream Manager
Time synchronization	External: IEEE-1394 connector for RS-422 PPS and IRIG-B signal from GPS, CDMA or TDS (Using adapter). Internal: Host PC clock Other DAG cards
Packet timestamping	7.5ns
PCI interface	x4 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

1000Base-SX optical Ethernet SFP transceiver, 850nm, Multi-mode with LC connectors	TXR-1000SX
1000Base-LX optical Ethernet SFP transceiver, 1310nm, Single-mode with LC connectors	TXR-1000LX
10/100/1000 Base-T electrical Ethernet SFP transceiver with RJ-45/8P8C connector	TXR-1000TX
1000Base-ZX optical Ethernet SFP transceiver, 1550nm, Single-mode with LC connectors	TXR-1000ZX

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

RoHS Compliant

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission [FCC] Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction document, may cause harmful interference to radio communications.

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

For further information, email: info@endace.com

END_ds_endacedag_7.5G2_1.2_1018