Endace DAG 9.5G4F

Endace's DAG™ 9.5G4F is a high-performance, quad-port data capture card, designed for use in appliances for monitoring and capturing network traffic at high-speed in 10/100/1000BASE-T environments.

The DAG 9.5G4F 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.

Built-in Failover

The DA9.5G4F has a built-in failover mode, removing the need for a network tap. It can operate in two modes: failover mode or non-failover mode. In failover mode, the DAG 9.5G4F can be set to either 'fail connected' or 'fail disconnected' mode, allowing the card to be used for inline monitoring of a link. In non-failover mode, the card allows provides monitoring for two individual links.

Based on PCI Express (PCIe) 3.0 x4, the DAG 9.5G4F delivers full line rate data capture for all four 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 9.5G4F 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.

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

The DAG 9.5G4F enables onboard, hardware-based processing on a host of enterprise protocols and encapsulated telecom protocols, such as General Packet Radio Service Tunneling Protocol (GTP) and Generic Routing Encapsulation (GRE), for load balancing, classification and filtering. This makes it ideally suited for deployment in edge and enterprise network environments with complex data types.

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.

DAG 9.5G4F AT A GLANCE

- 4x fixed copper monitoring ports each configurable for 10/100/1000BASE-T links
- Hardware time-stamping with synchronization from host or external time reference via a dedicated time sync port
- x4 PCIe 3.0 based card
- Linux and FreeBSD drivers
- Built-in, configurable Failover mode for inline applications

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 x4 PCIe 3.0 bus technology

Reliable

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

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 9.5G4F – Technical Specifications

Monitoring interfaces	4x Fixed Copper RJ45
Network type	IEEE 802.3
Packet encapsulations	Ethernet
Hardware packet processing	Enhanced Packet Processing v2
Time synchronization	External: - RJ45 connector for RS-422 PPS and IRIG-B signal from GPS, CDMA, other Endace DAG Cards or EndaceTDS (using adapter) - 1GbE SFP for IEEE 1588 Internal: - Host clock
Packet timestamping	6.7ns
PCI interface	x4 lane PCIe 3.0
Operating system supported	Endace software is supported on Linux and FreeBSD
Power requirements	Less than 20W
Operating temperature	0 to 50°C (32 to 122°F)
Airflow requirements	200 LFM (@50°C Ambient)
Operating humidity	5 to 95% non condensing
Physical Dimensions	Full Height, Half Length Height 110.85mm (4.36”) Length 166.65mm (6.56”)

Companion Products

Endace 24-port Time Distribution Server, accepts serial input from GPS/CDMA sources	TDS-24

If you are looking for a 1/10/40GbE 4-port packet capture card, we recommend the DAG 10X4-P or DAG 10X4-S.

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

For further information, email: info@endace.com