

Feature Summary

- Lossless Packet Capture
- Gigamon, Arista Timestamp
- Packet Merging
- Packet Parsing
- Tunneling Protocol Processing
- Packet Slicing
- Packet Steering
- DMA (Direct Memory Access)
- Multi-core DMA
- Timestamp 10 nS
- RMON1 (RFC 2819) Statistics
- Onboard Sensors



ANIC-4KL

4 X 1 GigE Application Offload & Network Monitoring Adapter

The ANIC-4KL is a state of the art low-cost 4 X 1 GigE PCI Express adapter designed for Network Monitoring applications. The product is built around Accolade's Advanced Packet Processor (APP) featuring a scalable pipelined architecture, implemented in an FPGA. The APP platform allows for seamless integration of packet processing algorithms.

The ANIC-4KL is designed to offload the Host CPU in applications that demand full 4 Gbps Packet Capture at all Packet Sizes. The ANIC-4KL performs precise Time Stamping, Packet Filtering, Packet Slicing and Classification. Presenting data in a programmable number of DMA rings, the ANIC-4KL performs load balancing to optimize Multi-Core CPU Resources.

Timing Sub-System

The ANIC-4KL is designed to interface and synchronize to precise timing input from GPS and CDMA timing sources via a RS232, RS422 or TTL input/output for precise 1 pps. The timing sub-system in the ANIC features a Temperature Controlled Crystal Oscillator (TCXO) as a stable high precision clock source. The adapter also features IEEE-1588 Timing distribution via a dedicated 10/100 Ethernet port. The ANIC supports popular timing sources such as Trimble and Endrun. A packet time stamp to a resolution of 8ns is applied to all captured packets.

Software Support

The ANIC-4KL ships with a complete software development guide that includes Diagnostics Utilities, Linux and Windows Drivers as well as a comprehensive API supporting all embedded services including Filtering, Classification, Packet Steering, Timing Sub-system configuration, and IEEE1588 Support.

Applications

- Passive and Inline Network Monitoring
- Network Latency Measurement
- Packet Generator / Playback
- Network Forensics
- Intrusion Detection
- Load Balancing

ANIC-4KL Hardware Specifications

PCI Interface	4 lanes 2.5MHz PCI Express
Ethernet Compliance	802.3 IEEE Dual SFP Modules
Time Stamping	Resolution to 8 nS
Timing Interfaces	RS232/RS422 for External 1 PPS Integrated IEEE-1588 V2 Receiver
Packet Memory	256 MB
Flash Memory	4 MB
Compliance	EMI per FCC Part 15/EN 55022/VCCI/AS/NZS Immunity per EN 55024 RoHS & CE
Power	Less than 12 Watts
Operating Temperature	0 to 50 deg C
Operating Humidity	0 to 95% non-condensing
Card Dimensions	PCI Express Full Height, Half Length