

### Applications

- High Density Hash Based Flow Classification
- Application Aware Flow Management
- Passive and Aggregation Tap Based Monitoring
- Span and Mirror Port Monitoring
- In-Line Monitoring
- Network Latency Measurement
- Packet Generator / Playback
- Network Forensics
- Intrusion Detection
- Host CPU Load Balancing

## ANIC-40K3

### Quad 10GE PCI Express Gen 3 Advanced Packet Analyzer

The ANIC-40K3 is a state of the art Quad 10GE PCI Express Gen 3 adapter designed for demanding Network Monitoring and Application Offload applications. The ANIC-40K3 features Quad SFP+ Interfaces which support both Copper twin-ax and Optical Modules supporting SR, LRE and LRM Modules.

The ANIC-40K3 is based on Accolade's next Generation distributed Advanced Packet Processor, implemented in a state of the art FPGA supported by a 8 GB high performance DDR3 Memory sub-system. Ideal for demanding host CPU offload applications, the ANIC-40K3 is designed for lossless packet capture and transfer at 40 Gbps across the PCIE bus.

Advanced host CPU offload functions include Hash based Classification of up to 48 million Flows, Application Aware Flow Management, Traffic Management and Packet De-duplication. The ANIC-40K3's DMA Memory sub-system is designed for efficient burst transfers of data across the 8 lane Gen 3 PCI Express Bus. The ANIC-40K3 presents data in a programmable organization of Buffer Rings which enable load balancing and optimized use of Multi-Core CPU Resources.

### Timing Sub-System

The timing sub-system in the ANIC-40K3 features a Temperature Controlled Crystal Oscillator (TCXO) as a stable high precision clock source. The ANIC-40K3 features a flexible timing sub-system which may be synchronized to NTP, IEEE-1588 through a serial interface to external GPS, GSM and CDMA timing sources.

### Software Support

The ANIC-40K3 is available with a software development package that includes Linux and Windows Drivers and a comprehensive API that supports access to Hardware Health (PHY Status, Onboard Temperature, Voltages) and embedded functions such as Filtering, Classification, Host Buffer Management and Time Stamping Sub-system control/configuration.



### Feature Summary

- 8-lane PCI Express Gen 3
- Four SFP+ 10GE Ports
- Card-to-Card Bus Support
- SFP+ Optical supports SR, LRE and LRM SFP Modules
- LRM mode supports 300m of Multimode Fiber (MMF)
- Optical Light level Measurement Support
- SFP+ Copper twin-ax up to 15 m
- Multi-rate Support for 1GE and 10GE
- Supports Passive Taps and SPAN Ports
- Full 40 Gbps Packet Capture, Processing & Transfer across PCIE Bus
- Programmable Packet Slicing, Filtering and Classification
- Performance Statistics
- 1pps RS422 and TTL serial input
- Card to Card Bus enabling Packet Re-Ordering between Multiple Adapters
- Field Upgradable Firmware
- Temperature and Voltage Sensors
- Linux and Windows Drivers

### Hardware Specifications

<b>PCI Interface</b>	8 lanes Gen 3 PCI Express
<b>Ethernet Compliance</b>	802.3aq for 10 GbE and 1000Base-X for 1 GbE
<b>Time Stamping</b>	Resolution to 5.7 nS
<b>Timing Interface</b>	1 PPS Interface
<b>Packet Memory</b>	4 GB DDR3 Capture Buffer
<b>Flash Memory</b>	32 MB
<b>Compliance</b>	EMI per FCC Part 15/EN 55022/VCCI/AS/NZS Immunity per EN 55024 RoHS
<b>Power</b>	Max 42 Watts without SFP Modules Installed Max 46 Watts with LR SFP Modules Installed
<b>Operating Temperature</b>	0 to 50 deg C
<b>Operating Humidity</b>	0 to 95 % non-condensing
<b>MTBF</b>	200,000 hrs. based on RIAC-HDBK-217+ Model
<b>Card Dimensions</b>	4.25 x 6.5 inches / 107 x 165 mm