Hardware-at-a-Glance

- 200Gbps Lossless Packet Capture

- 16 lane, Gen 3 PCIe (supports all standard motherboards, PCIe bifurcation not required)

- 2-port QSFP28 Optics (purchased separately): 2 x 40G or 2 x 100G. 25/50G interfaces also supported

- External 1 PPS TTL serial input via front panel mini coax

Key Features

- Flexible network interface of 40G or 100G; 25G and 50G interfaces are also supported.

- Industry standard QSFP28/QSFP+ optics

- Full height, half length adapter

- Interconnection of two ANIC 200KFlex adapters via direct attached cable (DAC) allows full 200Gbps data transfer across PCIe bus

- 4ns precision timestamping

- Linux and FreeBSD drivers

ANIC-200KFlex
Flexible 25/40/50/100G QSFP28 Lossless Packet Capture Adapter

The ANIC-200KFlex is a state-of-the-art, PCIe adapter/NIC designed for demanding network monitoring and security applications. This FPGA-based adapter features dual QSFP28 (or QSFP+) interfaces that most often provide two 40G ports or two 100G ports and is designed for NEBS compliance. Ports can also be mixed and matched to support for example, one 40G and one 100G port on the same adapter. In addition, the architecture will also support 25G or 50G ports. It is for this reason we refer to this is a "flexible" or "flex" product.

The ANIC-200KFlex comes complete with an array of packet processing features such as precise timestamping (4nS precision), packet merging, tunnel decapsulation, packet slicing, packet filtering, deduplication, packet steering, direct memory access (DMA), and more.

For applications requiring full 200Gbps lossless data transfer across the PCIe bus into the host CPU (host packet buffers), two separate ANIC-200KFlex adapters can be interconnected via a direct attached cable (DAC). The DAC connection between the ANIC-200KFlex adapters enables an aggregate 200Gbps of received traffic to be load balanced between the cards and transferred across the PCIe bus for processing by the CPUs. The two ANIC adapters can be in the same physical appliance or in different appliances as illustrated in the following diagram.
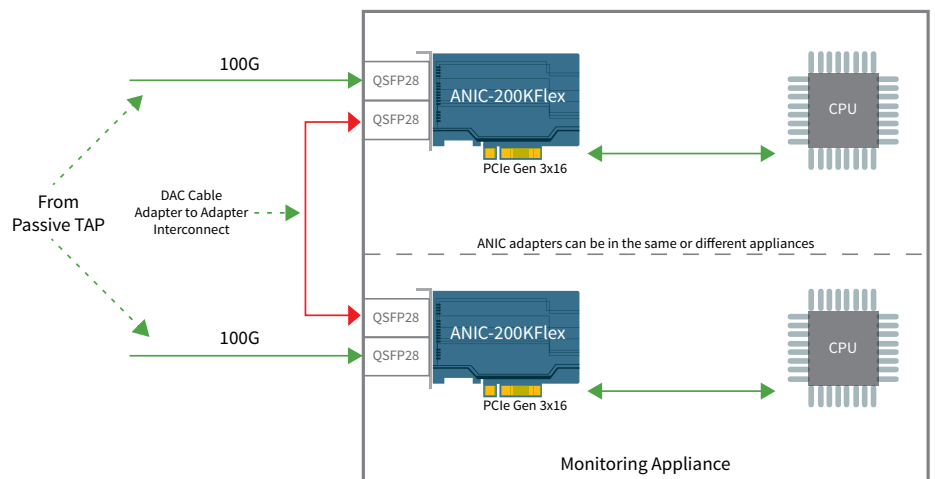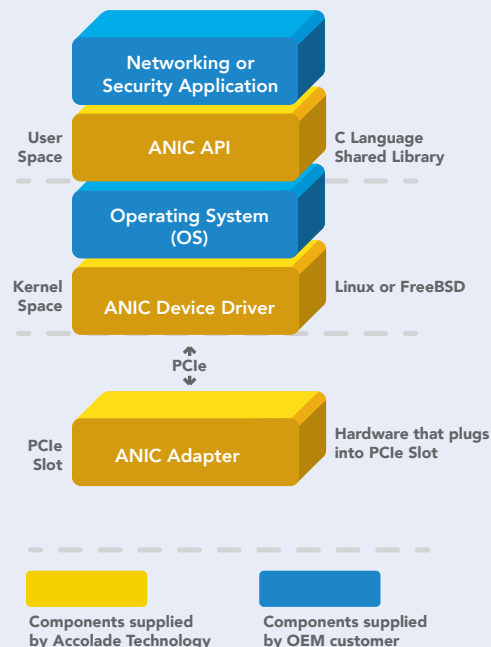
Applications

- Passive and Inline Network Monitoring

- Network Security and Forensics

- In-Line Deep Packet Inspection (DPI)

- Network Test and Measurement

- Network Probes

- Video Stream Monitoring

- High Frequency Trading (HFT)

- Application Performance Monitoring (APM)

- High Performance Computing (HPC)

Software Support

The ANIC-200KFlex comes with a software development guide and world class technical support.

A lightweight, C language API is linked to the network monitoring or security application as a shared library. Various API calls are then made to communicate with and control the ANIC-200KFlex.

A Linux or FreeBSD device driver is loaded into the network appliance as an extension to the host kernel. As with conventional device drivers the ANIC driver facilitates communication to the ANIC adapter (via the host kernel) for common operations such as adapter setup, turning ports on and off or reading port status.

Networking or Security Application

User Space — ANIC API — C Language Shared Library

Operating System (OS)

Kernel Space — ANIC Device Driver — Linux or FreeBSD

PCIe

PCIe Slot — ANIC Adapter — Hardware that plugs into PCIe Slot

Components supplied by Accolade Technology

Components supplied by OEM customer

Specifications

Hardware
- PCI Interface: 16 lanes Gen 3 PCI Express
- 40G Connector: QSFP+ per QSFP MSA 40GBASE-SR4, 40GBASE-LR4 & 40GBASE-SR-BiDi
- 100G Connector: QSFP28 per QSFP MSA 100GBASE-SR4 & 100GBASE-LR4
- Timing Interface: TTL external 1 PPS input via mini-coax and repeater output

Memory
- Packet Memory: 8GB
- Flash Memory: 512MB

Environmental
- Operating Temperature: 0° to 50°C (32° to 122°F)
- Operating Humidity: 0 to 95%, non-condensing

Power
- 60 watts (without optics)
- Each QSFP+/QSFP28 optic adds ~4 watts

Dimensions
- 4.25 (H) x 6.9 (L) inches (107 x 175 mm)
- Full Height, 1/2 Length

Compliance
- EMI per FCC Part 15/EN 55022/VCCI/AS/NZS Immunity per EN 55024
- Ethernet: IEEE 802.ba 100GBASE-SR4 & LR4
- NEBS level 3 per GR-63 & GR-1089
- PCI-SIG®, RoHS, REACH
- Designed for compliance with NEBS Level 3 per GR63 and GR1089

RoHS Compliant   REACH COMPLIANT

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