03

Multi-Service Network Interface Adaptors

The KMDS is Network processor based high-speed data processing platform. It can provide wire-speed packet capture, deep packet inspection(DPI), packet analysis and protocol processing capabilities running at server CPU. This enables customers to build functions as they needed by using MDS and Linux Server. Also, it can add precision timestamp on packet capture through GPS. Bypass module can be operated in bypass mode under specific environment.
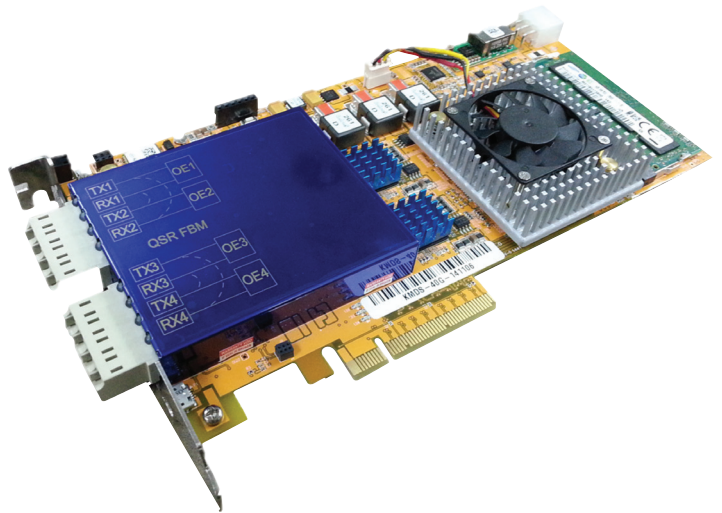
Features

- Tile Gx-36 Multi-core Processor
- Max 40Gbps packet processing
- Timestamp on packet capture through GPS
- Network Connections
  - 4x10Gbps SFP+ connections
  - 4x1Gbps SFP connections
  - Mixed 1Gbps/10Gbps connections
- Optical Bypass Capability on Power fail
- DPI performance: 10Gbps
- Wire-speed packet capture without packet loss
  - 64Byte, 30Mega-packets/s to Host CPU
- Full-line rate processing for all frames

- Low latency : 1.45us latency
- Power supplies by PCI-e on Board connector
- Ethernet FCS generation
- Temperature sensors
- Up to 40Gbps Flow-based routing
- Server Connection
  - PCI-e Gen2 8-lane
  - PCIe performance: 25Gbps
- Mini-USB for Debug and Management
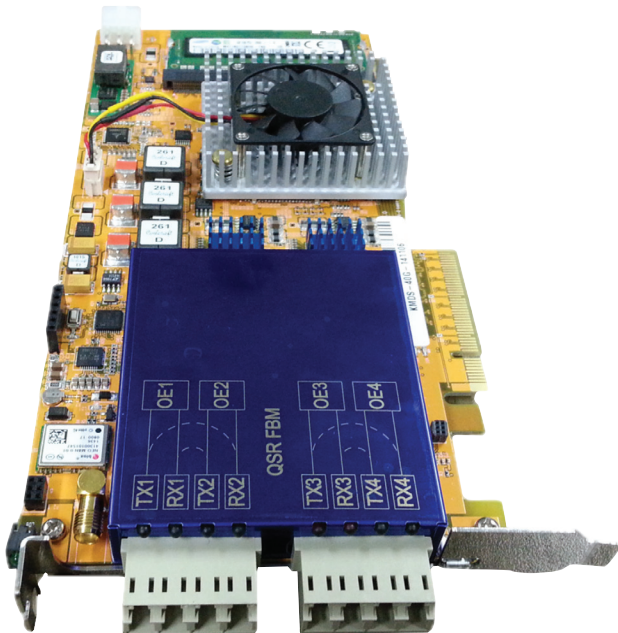- Timestamping Resolution : 5ns
- OS: linux supported

KMDS-40G

- Deep Packet Inspection
- Wire-speed packet capture
- Packet Processing
- Timestamping on packet capture
- 1G/10G compatible
  - 4x1/10Gbps SFP/SFP+ Interface
- Bypass compatible
- Power supply by PCI-e on Board connector

Specifications

- **Network Processor**
  - 36-core 1.2GHz Tile Gx36 processor
- **Memory**
  - DDR3 SoDIMM type
  - 4Gbytes to 16Gbytes on customers requests
- **Statistics**
  - Frame and byte counters per port
- **Host Interface**
  - Gen2 PCIe 8-lane
  - 32Gbps peak, 25Gbps typical
- **Network Interface**
  - 4x10Gbps/4x1Gbps Ethernet Interface
- **Supported SFP/SFP+ modules**
  - Multi-mode SR[850nm]
  - Single-mode LR[1310nm]
  - Single-mode ER[1550nm]
- **Environment**
  - 60Watts including SFP+ LR modules
  - Operating Temperature: 0°C to 45°C
  - Operating humidity: 20% to 80%
- **Mechanical Specifications**
  - 210mm x 110.5mm