VTK-GEM640

Intelligent 4-Port M12 X-coded PoE+
GbE/GigE

Main Features

- In-train and machine vision applications
- 4-Port M12 X-coded independent GbE with PoE+ function
- 2KV isolation for LAN signal and power line
- PoE on/off and power watt monitoring per port
- Power source either from PCIe slot or extra 12VDC-IN

- Half-length PCIe card for easy and quick install
- 9K-byte jumbo frame and PTP (IEEE 1588) support
- Compliant with EN50155, CE/FCC Class A and MIL-STD-810G for anti-vibration/shock
- Tough environment with operating temp -40~85℃

Product Overview

With built-in Intel® 82580EB controller, VTK-GEM640 supports up to 4 independent GbE with 1000Mbps satisfying a uncompressing video stream at 4K resolutions in high frame-rate used on AI-aided secure surveillance, auto-inspection/machine vision applications. VTK-GEM640 is equipped with an excellent protection of OCP/OVP and up to 2KV isolation of Ethernet data and power to avoid any transient surge or damage to LOM system. To run at harsh environment is more and more important, VTK-GEM640 is compliant with military MIL-STD to sustain the vibration and shock and the operating temperature can reach up to -40~85℃.

Specifications

PCI Express
- PCIe 3.0 x 4 lane compliant
- Half-length in size

Ethernet
- 4-Port M12 X-coded independent 10/100/1000 Mbit/s
- IEEE 802.3/802.3u/802.3ab and IEEE802.3x
- 9K-byte jumbo frame
- IEEE 802.1AS/IEEE 1588 (PTP) support
- GbE controller: Intel® 82580EB

Power over Ethernet (PoE)
- IEEE 802.3af/at compliant
- 25W per port in max., 4-port total at 60W PSE
- Power supply drawing from PCIe slot in default (aROK 8110)
- PoE on/off and power watt monitoring
- 4-Pin power connector for extra power supply (12VDC-IN)

Protection
- OCP & OVP
- 2KV isolation for Ethernet

SDK for PoE Management
- Interface: USB port
- Win10, Linux 4.x

Environment & Regulation
- Operating temperatures: -40~85℃
- Storage temperatures: -40~85℃
- Damp heat test per EN60068-2-30
- Humidity: IEC60068-2-3, 40℃, 95%, 48Hrs
- CE, FCC Class A, EN50155 (pre-installed in aROK 8110)

Mechanics
- Anti-vibration
  - IEC 60068-2-64.2.5G (5~500Hz)
  - Operating: MIL-STD-810G, 514.6C Procedure 3, Category 4
  - Storage: MIL-STD-810G, 514.6E Procedure 1, Category 24
- Anti-shock
  - MIL-STD-810G, 516.6 Procedure I, trucks and semi-trailers=40g
  - Crash hazard: Procedure V, ground equipment=75g
- Dimension: 182mm x 125mm (L x H)
- Net weight: 205g

Ordering Information

- **VTK-GEM640 (P/N: 10VK00GEM00X0)**
  4 x M12 X-coded independent GbE/GigE PCIe 3.0 card, PoE+, total 60W