PCIE-GIENVQ

NVIDIA® Quadro® Embedded P1000/P2000-based GigE AI Frame Grabber

Features

- 4CH PCI Express® GigE Vision PoE+ Frame Grabbers
- PCI Express® Gen 3 x16 compliant
- PoE protection and automated PoE power budget control for enhanced asset protection
- Up to 20/60W PoE power from PCIe bus/4-pin Molex connector
- Support for 512/1024 CUDA cores
- 1CH Micro HDMI up to 4K@60 with audio, HDCP 2.2 support
- DirectX® 12, OpenGL 4.5, Vulkan 1.0 Shader Model 5.1
- CUDA Toolkit 8.0, CUDA Compute version 6.1 OpenCL™ 1.2, Direct Compute

NVIDIA QUADRO CERTIFIED
EMBEDDED

Introduction

ADLINK's PCIe-GIENVQ features advanced NVIDIA® Quadro® P1000/P2000 graphics cards with Pascal™ Architecture technology in a PCI Express® PoE+ frame grabber. With a 512/1024 CUDA code Pascal GPU, large onboard memory and advanced display technologies, the PCIe-GIENVQ delivers superior performance, evolving existing machine vision applications to AI-enablement right away with no need to replace existing hardware. Unique alliances with leading AI brands allow ADLINK access to valuable native support for the most advanced technology, shortest time to market, and maximum reliability.

PCIe-GIENVQ supports 4CH independent Gigabit Ethernet ports for multiple GigE Vision connections transferring up to 1 Gb/s per port. PoE+ provides up to 30W power and automatic detection for stable, reliable connections, reduced costs, simplified installation, and lightened maintenance burdens.

Software Support

- **OS Information**
  Windows® 7/8.1/10 & Linux

Ordering Information

- **PCIe-GIENVQ**
  4CH PCI Express® NVIDIA® Quadro® Embedded P1000/P2000-based GigE AI frame grabber

Specifications

	PCIE-GIENVQ
Graphic Architecture	NVIDIA® Pascal™ GP107
GPU	Quadro® P1000
Display Outputs	4x DisplayPort 1.4 digital video outputs Support for High Dynamic Range (HDR) video 4K at 120Hz or 5K at 60Hz with 10-bit color depth
CUDA Supports	512 CUDA® cores, 1.8 TFLOPS SP Peak CUDA Toolkit 8.0, CUDA Compute version 6.1 OpenCL™ 1.2, DirectX® 12, OpenGL 4.5, Vulcan 1.0
Form Factor	PCI Express® x4
Ethernet Port	4 fully-integrated Gigabit Ethernet Media Access Control (MAC) and physical layer (PHY) ports
	PoE+ (Power over Ethernet Plus), IEEE 802.3at compliant, supporting 0, 1, 2, 3, and 4, providing up to 30W
	9 kB jumbo frame support
Functions	PoE Power Management
	Link Aggregation, IEEE 1588 (PTP technology)
	Multiple cards and multiple cameras
	PoE Protection
	PoE Power Management
Operating Environment	60W PoE: 0˚C to +50˚C (32˚F to 122˚F)
	Humidity: 5% to 90% RHNC
Power Requirements	+3.3V max @ 3A (1)(2)
Dimensions	197.6mm x 106.6 mm (6.6” x 4.2”) (W x L)

Note:
(1) Max 61.6W PoE power w/ ether 4-pin (+12V@6A).
(2) Max 20W PoE power w/ PCIe slot (+12V@2.1A).