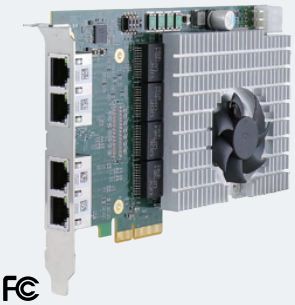
Machine Vision

NEOUSYS TECHNOLOGY

PCIe-PoE454 Series

4-port 5GBASE-T Ethernet 802.3at PoE+ Frame Grabber Card

Preliminary



Key Features

- **4x IEEE 802.3bz 5GBASE-T Ethernet ports by four Marvel AQC111C controllers**
- **Compliant with IEEE 802.3at to deliver up to 25.5 W for each port**
- **Supports 5G/ 2.5G/ 1G/ 100M link speed**
- **x4, Gen3 PCI Express interface offering 4GB/s total bandwidth**
- **Per-port PoE+ power on/ off control**
- **Compatible with COTS NBASE-T industrial cameras**

Get Quote | Contact Neousys

Introduction

PCIe-PoE454at is an industrial-grade 4-port 5GBASE-T frame grabber card with 802.3at PoE+ capability for advanced machine vision applications. It leverages Marvel AQC111C 5GBASE-T Ethernet controller to offer dedicated 5 Gb/s Ethernet bandwidth for each port. Furthermore, it is backward compatible with 2.5G, 1G, 100M link speeds to support legacy Ethernet devices and can transmit data utilizing economical Cat 5e Ethernet cables up to 100 meters without bandwidth degradation.

5GBASE-T, or NBASE-T, is an emerging technology, especially for the machine vision market. Cameras with a 5GBASE-T Ethernet interface have up to 5 times the Ethernet bandwidth compared to Gigabit Ethernet, thus supporting higher resolution and frame rate. PCIe-PoE454at provides high port density to provide four 5GbE ports in a standard half-size PCIe card form factor. In addition, it comes with IEEE 802.3at PoE+ PSE function so you can simply power the NBASE-T camera using a single Ethernet cable.

For machine vision systems requiring multiple high-resolution 5GBASE-T cameras, PCIe-PoE454at is the ideal frame grabber that provides high port density, 24/7 reliable operation, and excellent throughput performance without frame loss.

Specifications

Bus Interface	4-lanes, Gen3 PCI Express interface, compliant with PCI Express Base Specification Revision 3.0
# of 5G Port	4x 5GBASE-T Ethernet ports by four Marvel AQC111C 5G controllers, supporting 5G, 2.5G, 1G, 100M link speed
PoE Capability	In compliance with IEEE 802.3at-2009 (PoE+), each port delivers up to 25.5 W of power
Ethernet Connector	4x RJ-45 connectors
Cable Requirement	CAT-5e or CAT-6 cable, 100 meters maximum
Power Requirement	Maximum 5.5 A@12V (66W) from PCIe gold finger connector Maximum 8.5 A@12V (102W) with onboard 6-pin PCIe power connector connected
EMC	CE Class A, according to EN 55032/55035 FCC Class A, according to FCC Part 15, Subpart B
Operating Temperature	0°C ~ 55°C with airflow
Dimension	167.7 mm (W) x 111.2 mm (H)

Ordering Information

Model No.	*Product Description*
PCIe-PoE454at	4-port 5GBASE-T Ethernet 802.3at PoE+ Machine Vision Frame Grabber Card

All rights reserved. Copyright © 2020 Neousys Technology Inc.

www.neousys-tech.com

Last updated: 17 - Nov, 2021

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508
Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050
Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28
Business Registration Number: 07699660