

# PCIe-PoE425bt

4-port 2.5GBASE-T Network Adapter with IEEE 802.3bt PoE++ Capability



#### Key Features

- **Preliminary**
- Compliant with IEEE 802.3bt PoE++ PSE, provides up to 90W on a single port
- 4x IEEE 802.3bz 2.5GBASE-T Ethernet ports by Intel<sup>®</sup> I225-IT controller
- · Supports 2.5G/ 1G/ 100M/ 10M link speed
- · Available in RJ-45 connectors
- · x4, Gen2 PCI Express interface
- · Supports 9.5 kB jumbo frame, teaming and IEEE 1588
- · Per-port PoE+ power on/ off control by software API

### Introduction

Introducing one of the world's first 2.5G Ethernet card featuring IEEE 802.3bt PoE++ PSE capability! The PCIe-PoE425bt is a 4-port 2.5GBASE-T PoE++ card leveraging the cutting-edge Intel® I225 controller. It complies with IEEE 802bz standard to provide 2.5 Gbps bandwidth and is backward-compatible with 1000BASE-T, 100BASE-TX, and 10BASE-TE Ethernet.

In addition to the increase in bandwidth, the PCIe-PoE425bt also features IEEE 802.3bt PSE capability. IEEE 802.3bt, or PoE++, is the latest addition to Power over Ethernet specifications, allowing a single port to provide up to 90W of power supplied to PD over a standard CAT-5e or CAT-6 Ethernet cable. While COTS high PoE PTZ cameras and outdoor WIFI access points may require higher power than 30W, the PCIe-PoE425bt is particularly useful for directly connecting and powering these devices without an external PoE++ injector.

The PCIe-PoE425bt has four RJ-45 connectors for use with generic Ethernet cables. By incorporating 2.5GBASE-T and PoE++ technologies, the PCIe-PoE425bt is the ideal choice for machine vision and surveillance applications with advanced PoE devices, such as PTZ camera, high-performance WIFI access point and industrial NBASE-T camera.

## **Specifications**

Bus Interface	x4, Gen2 PCI Express
# of 2.5G Port	4x 2.5G Ethernet ports by four Intel® I225-IT controllers, supporting 9.5 kB jumbo frame, teaming and IEEE 1588
Network Interface	IEEE 802.3 Ethernet interface for 2500BASE-T (802.3bz), 1000BASE-T (802.3ab), 100BASE-TX (802.3u), and 10BASE-TE (802.3)
PoE Capability	In compliant with IEEE 802.3bt PoE++ Type 3 and Type 4 PSE, maximal 90W output on a single PoE++ port Compatible with 802.3at (PoE+) and 802.3af (PoE) PD
Ethernet Connector	4x RJ-45 connectors
Cable Requirement	100 meters over CAT-5e or better Ethernet cable
Power Requirement	Jumper-select 12VDC input  Maximum 5.5A@12V (66W) from PCIe gold finger connector  Maximum 12A@12V (144W) from on-board 6-pin PCIe power connector
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	167.7mm (L) x 111.2mm (H) x 18.2mm (W)

## **Ordering Information**

Model No.	Product Description
PCIe-PoE425bt	4-Port 2.5GbE 802.3bt PoE++ card with RJ45 connector