

# PCIe-USB381F

8-Port USB 3.1 Gen1 Host Adapter Card with 4x Independent USB Controllers



CE FC

## Key Features

- x4 PCI Express® Gen2 interface (2GB/s total bandwidth)
- 8x USB 3.1 Gen1 ports by 4x Fresco FL1100SX xHCI controllers
- Onboard 5VDC regulated power supply, no external power needed
- User-configurable 900mA and 1800mA current limit
- Software-programmable per-port power on/off control
- Supports Windows XP/7/8/10 and Linux operating systems

## Introduction

Neosys PCIe-USB381F is an industrial-grade 8-port USB 3.1 Gen1 (formerly USB 3.0) host adapter card for machine vision applications. Featuring x4 PCI Express Gen2 interface and four Fresco FL1100SX xHCI controllers, PCIe-USB381F can provide up to 400MB/s sustained data transfer rate per port with four USB3 cameras operating simultaneously, or provide a total bandwidth of 1600MB/s when eight cameras are plugged in.

All eight USB ports of PCIe-USB381F are accessible on the faceplate for easy cabling. Each port can deliver standard 900mA regulated 5V output to power USB3 cameras or user-configurable 1800mA output via onboard jumpers for devices that require higher power consumption. It also supports software-programmable per-port power on/off control to reset cameras or other devices for fault recovery.

The steady 400 MB/s data throughput satisfies the bandwidth requirement of most off-the-shelf industrial USB3 cameras. Pairing reliable 5 VDC power output and per-port on/off control, PCIe-USB381F can benefit a variety of vision-related applications such as machine vision, factory automation and medical imaging.

## Specifications

<b>USB Ports</b>	8x USB 3.1 Gen1 ports, compatible with USB 2.0/ 1.1/ 1.0
<b>USB Connectors</b>	8x panel-accessible Type-A USB3 connectors
<b>Bus Interface</b>	4-lanes, Gen2 PCI Express interface, compliant with PCI Express Base Specification Revision 2.0
<b>USB3 Host Controller</b>	4x Fresco FL1100SX host controllers, compliant with Intel® xHCI Specification Revision 1.0
<b>Per-Port Current Limit</b>	User-configurable 900mA/ 1800mA per-port current limit
<b>Power Requirement</b>	Maximal 2.0 A@3.3V from PCI Express bus Maximal 5.5 A@12V from PCI Express bus for all connected USB devices
<b>Operating Temperature</b>	0 – 60°C with ambient airflow
<b>Dimension</b>	117.7 mm (W) x 111.2 mm (H)

## Ordering Information

Model No.	Product Description
PCIe-USB381F	8-Port USB 3.1 Gen1 host adapter card with 4x independent USB3 controllers