

PCIe-U300 Series

4/8/12-ch PCI Express x4 Gen3 USB3 Vision Top Performing Frame Grabbers

Features

- PCI Express x4 Gen3 compliant
- Host Controller, Fresco FL1100
- Compliant with USB 3.1 Gen 1 (identical to USB 3.0)
- 4/8 USB Type-A external ports (PCIe-U304/U308)
- 4 additional internal USB 3.0 ports by pin headers (PCIe-U308e only)
- Up to 18W USB power from PCIe bus (default)
- Up to 60W USB power supported by 4-pin Molex power connector
- 1500mA max. current per port
- Multiple cards, multiple cameras in a single system
- Easy-to-use API provided for software-programmable per-port power on/off



PCIe-U304



PCIe-U308

Introduction

ADLINK's PCIe-U300 Series series is a PCI Express x4 Gen3 USB3 Vision frame grabber supporting 4/8/12 USB 3.1 Gen 1 ports for multiple USB3 Vision device connections with data transfer up to 5 Gb/s per port.

The PCIe-U300 Series supports 5V and max. 1500mA current per port for external USB3 Vision industrial cameras. To guarantee industrial-grade high-bandwidth performance for each port, four independent Fresco FL1100 USB 3.1 Gen 1 host controllers with PCI Express x4 Gen3 interface allow each USB port to provide up to 5Gbps bandwidth when operating four ports simultaneously. Also supported is software-programmable per-port power on/off control for fault recovery operations.

ADLINK's PCIe-U300 Series brings maximum convenience for interfacing with USB 3.0 devices for machine vision, factory automation, quality assurance, logistics, medicine, and security and traffic surveillance applications.

Software Support

- OS Information Windows® 7/10
- Software Compatibility C#/VB.NET/VC++

Ordering Information

- PCIe-U304
 - 4-ch PCI Express x4 Gen3 USB3 Vision frame grabber
- PCIe-U308
 - 8-ch PCI Express x4 Gen3 USB3 Vision frame grabber
- PCIe-U308e
 - 12-ch PCI Express x4 Gen3 USB3 Vision frame grabber (Q2, 2020)

Optional Accessories

- CB-USB3-A/microB-3LS
 USB 3.0 cable, 3 meters with locking screws
- CB-USB5-A/microB-5LS
 USB 3.0 cable, 5 meters with locking screws

Specifications

		PCIe-U304	PCle-U308	PCIe-U308e
PCI Express Specification		PCI Express x4 Gen 3 (8 GT/s), 1 slot		
USB Port	·			
USB Ports (on bracket)		4	8	8
USB Port Connectors (on bracket)		USB Type-A Connector		
USB Ports (internal)		N/A		2x2*
USB Port Connectors (internal)		N/A USB 3.0 Mother		USB 3.0 Motherboard Header*
USB Host Controller		4x Fresco FL1100 Host Controller Compliant with USB 3.0 Specification and Intel [®] xHCl Specification, Revision 1.0		
Data Transfer Rate		SuperSpeed (5.0 Gbps), High Speed (480.0 Mbps) Full Speed (12.0 Mbps), Low Speed (1.5 Mbps)		
USB Power				
Output Voltage (at PSE)		5V ± 5%		
Current Limit (per port)		1700 mA ± 7%		
USB Power Management		Software-programmable per-port power on/off		
		Protection from voltage and current overloads and shorting		
PCBA max. Power Requirement w/o USB Power Delivery		+3.3V 2A, +12V @ 0.6A		
USB Power Delivery Capacity (at PSE)	PCIe Slot only w/o 4-pin Molex Connector	+3.3V 2A, +12V @ 2.1A Max. 18W USB Power		
	PCIe Slot w/ 4-pin Molex Connector	+3.3V 2A, +12V @ max 3.4A Max. 30W USB Power	+3.3V 2A, +12V @ max 6A Max. 60W USB Power	
Physical				
Dimensions		167.65 mm x 111.15 mm (6.59" x 4.37") (W x L)		
Operating Temperature		0° C to 60° C		
Humidity		5% to 90% RHNC		
Storage Temperature		-40° C to 85° C		
Safety Compliance		CE/FCC, Class A		

^{*}PCIe-U308e is available in Q2 of 2020.

