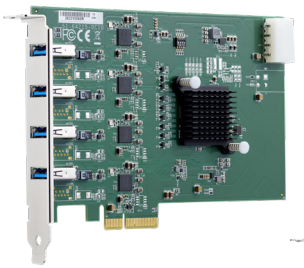
PCIe-U300 Series

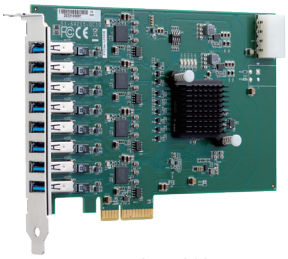
4/8-ch PCI Express x4 Gen2 USB3 Vision Top Performing Frame Grabbers

Features

- PCI Express x4 Gen2 compliant
- Compliant with USB 3.1 Gen 1 (identical to USB 3.0)
- Host Controller, Fresco FL1100
- 4/8 USB Type-A external ports (PCIe-U304/U308)
- Up to 20W USB power from PCIe bus (default)
- Up to 80W USB power supported by 4-pin Molex power connector
- Up to 2000mA max. current per port
- Multiple cards, multiple cameras in a single system
- Easy-to-use API provided for software-programmable whole-card power on/off
- CDP mode supported (compliant with BC1.2)



PCIe-U304



PCIe-U308

Introduction

ADLINK's PCIe-U300 Series is a PCI Express x4 Gen2 USB3 Vision frame grabber supporting 4/8 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 up to max. 2000mA 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 Gen2 interface allow each USB port to provide up to 5Gbps bandwidth when operating four ports simultaneously. It also supports software-programmable whole-card power on/off control for fault recovery operations.

ADLINK's PCIe-U300 Series provides excellent capability to interface 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® 10/11
- **Software Compatibility**
  C#/VB.NET/VC++

Ordering Information

- **PCIe-U304**
  4-ch PCI Express x4 Gen2 USB3 Vision frame grabber
- **PCIe-U308**
  8-ch PCI Express x4 Gen2 USB3 Vision frame grabber

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Specifications

Model		PCIe-U304	PCIe-U308
PCI Express Specification		4-lane PCI Express Gen 2.1 (5 GT/s), 1 slot	
Differential Output Peak to Peak Voltage		+0.8 V to +1.2 V	
Differential Input Peak to Peak Voltage		+0.175 V to +1.2 V	
Input voltage for PERST#, WAKE#, and SMBus		-0.75 V to +4.05 V	
USB			
USB Port Number		4	8
USB Port Connector		USB Type A Connector	
USB Host Controller		4 x Fresco FL1100 Host Controller	
		Compliant with USB 3.0 Specification and Intel® xHCI 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 Range (Per Port)		2000 mA ± 7%	
USB Power Management		Software-programmable whole-card power on/off	
		Voltage, current overload and short circuit protection	
PCBA max. Power Requirement w/o USB Power Delivery		+3.3V 2A, +12V @ 0.1A	
USB Power Delivery Capacity (at PSE)	PCIe Slot only w/o 4-pin Molex Connector	Max. 20W USB Power	
	PCIe Slot w/ 4-pin Molex Connector	Max. 40W USB Power	Max. 80W USB Power
CDP (Charging Downstream Port) Mode		Not Supported	Supported
Physical			
Dimensions (W x L)		167.65 mm x 111.15 mm (6.59” x 4.37”)	
Operating Temperature		0°C to 60°C (32°F to 140°F)	
Humidity		5% to 90% RHNC	
Storage Temperature		-40°C to 85°C (-40°F to 185°F)	
Safety Compliance		CE/FCC, Class A	

All products and company names listed are trademarks or trade names of their respective companies. Updated Jun. 02, 2026. ©2026 ADLINK Technology, Inc. All Rights Reserved. All pricing and specifications are subject to change without further notice.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000