# PCIE-1154 PCIE-1158

## 4-port PCI Express USB Vision Frame Grabber

8-port PCI Express USB Vision Frame Grabber



### **Features**

- Four independent USB 3.0 controllers Renesas µPD720202
- PCI Express Gen2 x4 interface, up to 2.0 GB/s
- eFuse power protection
- Protective shell prevents damage to components
- Supports Microsoft Windows 10

## Introduction

Advantech's PCIE-1158 is an 8 x port PCIe x4 expansion card based on 4 x Renesas µPD720202 USB 3.0 host controllers for industrial and machine vision applications that require high transfer speeds. PCIE-1158 features 8 x USB 3.0 ports with 900-mA current to ensure stable power for external USB devices. It is a high-bandwidth industrial-grade expansion card designed for connecting USB 3.0 industrial cameras in machine vision, factory automation, and medical applications.

## **Specifications**

#### USB

| 000   |   |
|---|---|
| Interface                                       | PCI Express x4  |
| <ul> <li>Connector</li> </ul>                   | 8 x USB 3.0 Type A (PCIE-1158-AE only)  |
| <ul> <li>Host Bus</li> </ul>                    | 4-lane Gen 2.0 PCIe interface, compliant with<br>PCI Express Base Specification, Revision 2.0             |
| <ul> <li>Controller</li> </ul>                  | Renesas µPD720202, Compliant with USB 3.0<br>Specification and Intel® xHCI Specification,<br>Revision 1.0 |
| <ul> <li>Max Current</li> </ul>                 | 900 mA maximum per port   |
| <ul> <li>Data Transfer Rate</li> </ul>          | SuperSpeed; High Speed; Full Speed;<br>Low Speed  |
| <ul> <li>Power</li> </ul>                       | 5 V <sub>DC</sub> power output, max. 4.5W per port  |
| Power Requirements                              |   |
| •   | 10.V direct from DCIs slot (limited to DCIs   |
| <ul> <li>Input Voltage</li> </ul>               | 12 $V_{DC}$ direct from PCIe slot (limited to PCIe design) or AT/ATX system power input                   |
| <ul> <li>Overload Current Protection</li> </ul> | Device auto recover after eFuse tripped when rated currents > 2A  |
| Environment                                     |   |
| <ul> <li>Operating Temperature</li> </ul>       | 0 ~ 60 °C (32 ~ 140 °F)   |
| <ul> <li>Storage Temperature</li> </ul>         | -20 ~ 80 °C (-4 ~ 176 °F)   |
| <ul> <li>Operating Humidity</li> </ul>          | 5 ~ 95% RH  |
|   | 5 ··· 55 /0 mm  |
| Mechanics                                       |   |
| <ul> <li>Dimensions (W x D)</li> </ul>          | 153 x 106 mm (6.02 x 4.17 in)   |
| <ul> <li>Net Weight</li> </ul>                  | 300 g (.66 lb)  |
|   |   |
| Certification                                   |   |
| <ul> <li>Compliance</li> </ul>                  | FCC CE Class A  |
| <b>Operating Systems</b>                        |   |
| • OS  | Microsoft Windows 10  |
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## **Ordering Information**

#### **Frame Grabber**

- PCIE-1158-AE
- PCIE-1154-BE(Preliminary) 4-port PCIe USB Vision Frame Grabber

#### **Optional Cable**

- 1700025427-01
- 1700025428-01
- 170304015K
- USB 3.0 cable, 5 m, Micro B (locking) to Type A USB 3.0 cable, 3 m, Micro B (locking) to Type A
- A Cable 2\*2P-4.2/B4P-5.08\*2 15CM

8-port PCIe USB Vision Frame Grabber