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DATASHEET GRAB-D-PCIe1-USB3-4X1X

4-port USB 3.0 to PCI Express x1 Gen 2 Host Card.



Highlights

- Host Bus: PCIe x1 Gen 2 (5 Gb/s)
 - Compliant with PCI Express Base Specification Revision 2.1
- 4-port USB 3.0 Host Controller (Fresco FL1100, USB IF TID 380000026)
 - Compliant with Intel's eXtensible Host Controller Interface (xHCI) specification Revision 1.0
 - Compliant with Universal Serial Bus 3.0 specification Revision 1.0
 - Supports UASP (USB Attached SCSI Protocol)
- USB 3.0 Cable Ports (A-type Receptacle, USB IF TID 360000003)
 - Provides USB 3.0 cable port lock mechanism (IOI Standard: One Screwlock)
- GoXtream™ Architecture
 - Switching fabric to sustain full bandwidth simultaneously for each USB3.0 port
 - No firmware necessary
- WHQL certified driver support for Windows 8, Windows 7, Windows Vista and Windows XP
- Linux xHCI support under Linux kernel version 2.6.31 and after

Introduction

The GRAB-D-PCIe1-USB3-4X1X is USB 3.0 to PCI Express x1 Gen 2 host card. It fully integrates an Extensible host Controller Interface (xHCI) engine, a 4-port 5Gbps USB 3.0 transceiver, a PCI Express endpoint controller and a 5Gbps PCI Express transceiver. GRAB-D-PCIe1-USB3-4X1X implements the Universal Serial Bus 3.0 Specification Revision 1.0 and the Extensible Host Controller Interface (xHCI) Specification Revision 1.0, and complies with the PCI Express Rev 2.1 Specification at 5Gbps data rate, and the PCI Local Bus Specification Revision 2.2. GRAB-D-PCIe1-USB3-4X1X is backward compatible for operation with USB 2.0 and USB 1.1 devices.

The GRAB-D-PCIe1-USB3-4X1X features GoXtream™ xHCI Accelerator Engine, which maps the xHCI standard directly into a set of parallel functional units, providing acceleration of all xHCI operations while maintaining compatibility with existing software driver models..

Technical Specifications

PCIe Host Bus	<ul style="list-style-type: none"> • Single (x1) PCI Express Lane • Supports PCI Express Specification Revision 2.1 at 5GT/s • Supports PCI Bus Power Management Interface Specification revision 1.2 • Support for Latency Tolerance Reporting (PCIe)
USB Features	<ul style="list-style-type: none"> • Compliant with USB 3.0 Specification Revision 1.0 • Compliant with Extensible Host Controller Interface (xHCI) Specification revision 1.0 • 4 downstream USB ports support SS/HS/FS/LS data rates (5Gbps/ 480Mbps/ 12Mbps/ 1.5Mbps) • Supports UASP (USB Attached SCSI Protocol) • Supports xHCI debug capability • Support for Ultra High-performance isochronous applications • Support for Latency Tolerance Tolerance Messaging (USB)
Advanced Power Saving	<ul style="list-style-type: none"> • Support all USB 3.0 Power States: U0, U1, U2 and U3 • Support USB 2.0 Link Power management (LPM) <ul style="list-style-type: none"> ◦ USB-IF LPM PDK Standard • PCIe Active State Power Management (ASPM) L0s and L1
USB3 cable Lock	<ul style="list-style-type: none"> • Provides the threaded holes for the jack-screws of USB 3.0 A Plug w/Jackscrew lock Cable
USB Bus Power Input	<ul style="list-style-type: none"> • U3-PCIE1XG211: Power Supply to the USB bus power may from the following source (A or B): <ul style="list-style-type: none"> ◦ A. From PCIe 12V (Step-Down) or 3.3Vaux (Step-Up) ◦ B. From Power Connector 5V only <ul style="list-style-type: none"> ▪ From Big IDE 4-pin DC Power Connector ▪ From SATA 15pin Power Connector • U3-PCIE1XG211-13: Power Supply to the USB bus power may from the following source (A or B): <ul style="list-style-type: none"> ◦ A. From PCIe 12V (Step-Down) ◦ B. From Power Connector 5V only <ul style="list-style-type: none"> ▪ From Big IDE 4-pin DC Power Connector ▪ From SATA 15pin Power Connector
Battery Charging protocols	<ul style="list-style-type: none"> • Supports USB Battery Charging Specification Revision 1.2 for Charging Downstream Ports (CDP). • Supports USB Battery Charging via Chinese Telecom Standard YD/T 1591-2009. • Supports Apple™ Charge
Dimensions	<ul style="list-style-type: none"> • 98mm(W) x 101mm[120mm](H) • NW: 76.1g (Unit Package:147.6 g)
Certifications	<ul style="list-style-type: none"> • CE • UKCA • FCC • VCCI • RCM

Mechanical drawing

Not Available