



PCI Express USB 3.1 Type C+A Card

User Manual

P/N: MC-PCIE-ASM1142-CA



Description

ASM1142 is an ASMedia first Universal Serial Bus 3.1 host controller, compliant with Intel extensible Hot Controller Interface specification revision 1.1, bridging PCI Express interface to two ports of USB3.1, up to 10Gbps high speed bandwidth, backward compatible with legacy USB function and devices. It can configure PCI Express as Gen2x2 or Gen3x1, compliant with USB Attach SCSI Protocol revision 1.0, supporting the functions of debugport.

ASM1142 integrates ASMedia self-designed PCI Express/USB 3.1 PHY, and it also integrates two internal regulators to supply normal core power and suspend core power, supporting the driver on Windows 7, Windows 8.0, Windows 8.1 and various Linux Kernels. The application of ASM1142 includes Motherboard, Desktop PC, Notebooks, Workstations, Servers, Add-in card, PCI Express based embedded platform.

Specification

- ▶ General Feature
 - Bridge PCI Express to USB 3.1
 - Upload firmware through BIOS or external SPI ROM
 - External 20MHz differential crystal
 - Overclock capability on PCI Express bus under asynchronous mode
 - integrate Spread Spectrum controller for PCI Express and USB3.1 interface

- Integrate two regulators for normal core power supply and suspend core power supply
- Support driver on Windows 7, Windows 8, and Windows 8.1
- Support various Linux Kernels

- ▶ PCI Express Feature
 - Support PCI Express Gen2x2 or Gen3x1
 - Up to 10Gbps bandwidth performance with low latency
 - Support PCI Express Link power management
 - Compliant with PCI Express Base 3.0 Specification
 - Compliant with PCI Express card Electromechanical 2.0 specification
 - Compliant with PCI Express Mini Card Electromechanical 1.2 specification
 - Compliant with Express Card Standard Revision 2.0
 - Compliant with PCI Bus Power Management Interface Specification Revision 1.2
 - Compliant with PCI Local Bus Specification Revision 3.0
 - Support overclocking capability on PCI Express interface

- ▶ USB Feature
 - Support two port of USB3.1
 - Compliant with Universal Serial Bus 3.1 Specification Revision 1.0
 - Compliant with Universal Serial Bus Specification Revision 2.0

- Compliant with eXtensible Host Controller Interface specification Revision 1.1
- Compliant with USB Attached SCSI Protocol Revision 1.0
- Support USB3.1 and USB2.0 Link Power Management
- Support Control, Bulk, Stream, Interrupt, Isochronous transfer type
- Support independent port power control
- Support over current detection
- Support Remote/Wakeup event
- Backward compatible with Legacy USB function and device
- Support the Debugport

System Requirements

- Windows® Server2003/Vista/7/8/8.1/server2012 R2 x64 (32/64 bit)
- One available PCI Express x4 or x16 slot (Recommend PCI Express 2.0)

* ***NOT supported PCI-Express x1 slot***

Package Contents

- 1 x PCI Express USB 3.1 Type C+A Card
- 1 x Driver CD
- 1 x User Manual

Hardware Installation

1. Turn Off the power to your computer.
2. Unplug the power cord and remove your computer's cover.
3. Remove the slot bracket from an available PCIe X16 slot.
4. To install the card, carefully align the card's bus connector with the selected PCIe slot on the motherboard. Push the board down firmly.

*The PCI Express USB3.1 Card must be connected the SATA power cable to SATA power jack

5. Replace the slot bracket's holding screw to secure the card.
6. Replace the computer cover and reconnect the power cord.

Driver Installation

For Windows® Vista/Win7/Win8/Win8.1 (32/64 bit)

1. Please insert the CD driver bound with USB 3.1 Type C+A PCI Express Card into your CD-ROM Drive.
2. At the Windows desktop, click **Start, Run**.
3. Type **D:\ USB3.1 Asm1142 \Setup.exe**, click **OK**. (Change D: to match your CD-ROM drive letter)

4. Follow the on-screen instructions to complete the installation.

To Verify Driver Installation

Click on the “**Device Manager**” tab in System Properties, which you access from the Windows Control Panel. You should see a “**ASMedia XHCI 1.1 Controller**” under the “**Universal Serial Bus controllers**” item.