TS-PDU3

USB 3.0 PCI-E Card

Description

This device is designed to add revolutionary new USB 3.0 ports to any desktop computer with a PCI Express slot. Its PCI Express 2.0 x1 connection interface is compatible with virtually all current motherboards, and guarantees unrestricted two-way communication between your PC and any USB devices you plug into the card.

System Requirements

- Desktop computer with an available PCIe slot.
- One of following Operating Systems:

Windows® XP

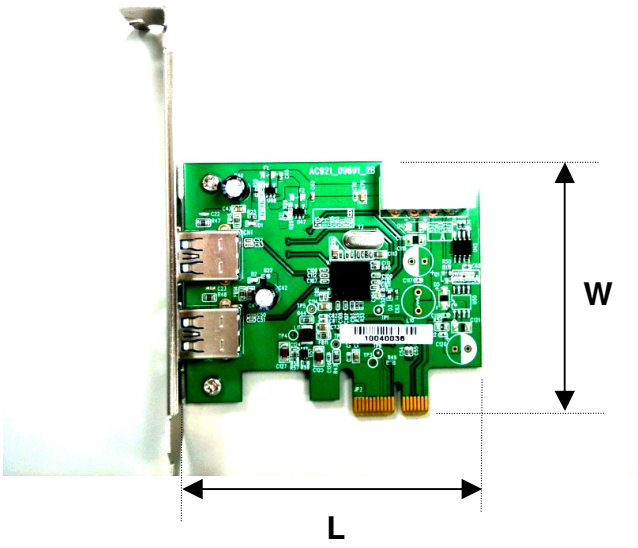
Windows® Vista

Windows® 7

Features

- Add USB 3.0 ports to any desktop computer with a PCI Express® slot
- Connection bandwidth up to 5Gbits per second (in USB 3.0 mode)
- Ultra-fast PCI Express® interface eliminates speed bottlenecks
- Installs easily in any PCIe slot, including x1 and x16 slots
- Backwards compatible with USB 2.0 and USB 1.1 devices
- Supports PCI bus power management interface rev. 1.2
- Compact size saves space and inside your PC
- Fully compatible with PCI Express® 2.0
- Two external USB 3.0 ports
- xHCI compliant

Placement



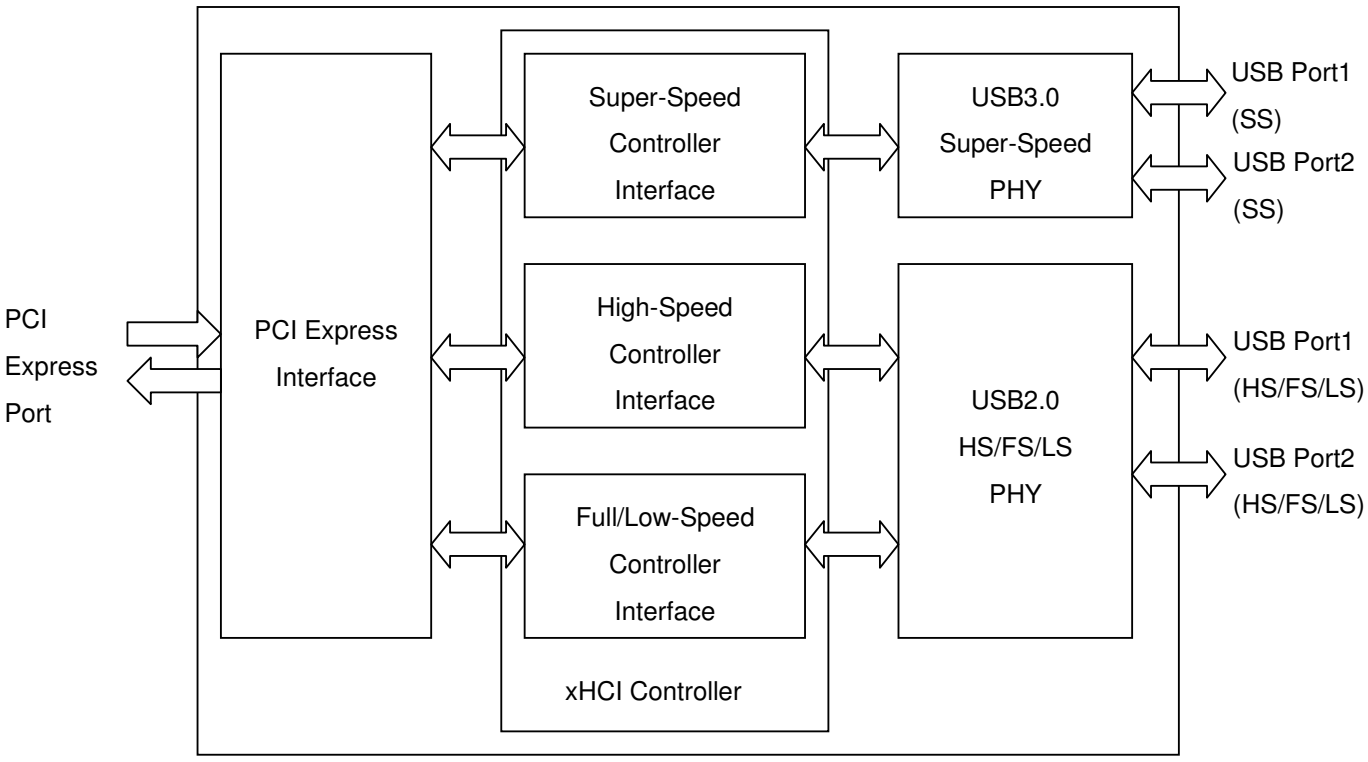
Dimensions

Side	Millimeters	Inches
L	80.00 ± 1.00	3.150 ± 0.04
W	69.00 ± 1.00	2.717 ± 0.04

Ordering Information

Device Description	Transcend P/N
USB 3.0 Expansion Card	TS-PDU3

Block Diagram



USB3.0 Pinouts

Pin No.	Pin Name
1	VBUS
2	D-
3	D+
4	ID
5	GND
6	MicB_SSTX-
7	MicB_SSTX+
8	GND_DRAIN
9	MicB+SSRX-
10	MicB+SSRX+

Pin Identification

Symbol	Function
VBUS	Power
D-	USB 2.0 differential pair
D+	
ID	OTG identification
GND	Ground for power return
MicB_SSTX-	SuperSpeed transmitter differential pair
MicB_SSTX+	
GND_DRAIN	Ground for SuperSpee signal return
MicB+SSRX-	SuperSpeed receiver differential pair
MicB+SSRX+	

PCIe Pinouts

Pin No.	Top Side		Bottom Side	
	Pin Name	Function	Pin Name	Function
1	+12V	12V power	PRSNT1	Hot-Plug presence detect
2	+12V	12V power	+12V	12V power
3	+12V	12V power	+12V	12V power
4	GND	Ground	GND	Ground
5	SMCLK	SMBus clock	JTAG2	TCK (Test Clock), clock input for JTAG interface
6	SMDAT	SMBus data	JTAG3	TDI (Test Data Input)
7	GND	Ground	JTAG4	TDO (Test Data Output)
8	+3.3V	3.3V power	JTAG5	TMS (Test Model Select)
9	JTAG1	TRST# (Test Reset) resets the JTAG interface	+3.3V	3.3V power
10	3.3Vaux	3.3V auxiliary power	+3.3V	3.3V power
11	WAKE	Signal for Link reactivation	PERST	Fundamental Reset
12	RSVD	Reserved	GND	Ground
13	GND	Ground	REFCLK+	Reference Clock (differential pair)
14	PETp0	Transmitter differential pair	REFCLK-	
15	PETn0		GND	Ground
16	GND	Ground	PERp0	Receiver differential pair
17	PRSNT2	Hot-Plug presence detect	PERn0	
18	GND	Ground	GND	Ground

Specifications

Environment	
Dimensions (PCB size)	80mm (L) × 69mm (W)
Operating Temperature	5℃ (41℉) to 35℃ (95℉)
USB Bus Power Output	5V DC, 900mA (max) per port
PC Interface	PCI Express® 2.0 single lane (x1)
USB Ports	2 external (supports USB 1.1 / 2.0 / 3.0)
Connection Bandwidth	Up to 5Gbits per second
Weight	47g
Certificates	CE, FCC, BSMI
Warranty	2-years

Above technical information is based on industry standard data and tested to be reliable. However, Transcend makes no warranty, either expressed or implied, as to its accuracy and assumes no liability in connection with the use of this product. Transcend reserves the right to make changes in specifications at any time without prior notice.