Board Specification

NVIDIA Quadro Plex Interface Card (x8)

July 2007
BD-03267-001_v01

Document Change History

Version	Date	Reason for Change
01	July 5, 2007	Initial release

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NVIDIA Quadro Plex Interface Card (×8) Overview

The NVIDIA Quadro® Plex interface card is a PCI Express desktop add-in card used to expand a workstation server ×8 slot to a ×8 PCI Express cable connection.

Key Features

Board

❑ Low Profile

❑ Physical dimensions: 2.713 inches × 6.60 inches

❑ PCI Express ×8

❑ Power: Draws 1 A from 12 V and 0.2 A from 3.3 V through PCI express slot.

❑ Power: 11 W

❑ Mean time between failures (MTBF): 1618214.9929 hours at 35 °C

Connectors

❑ Very high density cable interconnect (VHDCI) connectors dual stacked for PCI Express cable

❑ USB mini B connector

Mechanical Specifications

The NVIDIA Quadro Plex interface card (×8) is a 2.713 inches by 6.60 inches. PCI Express card.

Figures 1 shows the NVIDIA Quadro Plex interface card (×8) with the low profile bracket. The card comes equipped with a standard bracket as well.

Figure 1. NVIDIA Quadro Plex Interface Card with Low Profile Bracket

Interconnect Cable Bracket

The NVIDIA Quadro Plex Interface Card (×8) comes equipped with the interconnect cable bracket (Figure 3). The interconnect cable bracket allows for only one interconnect cable connector to connect to the interface card.
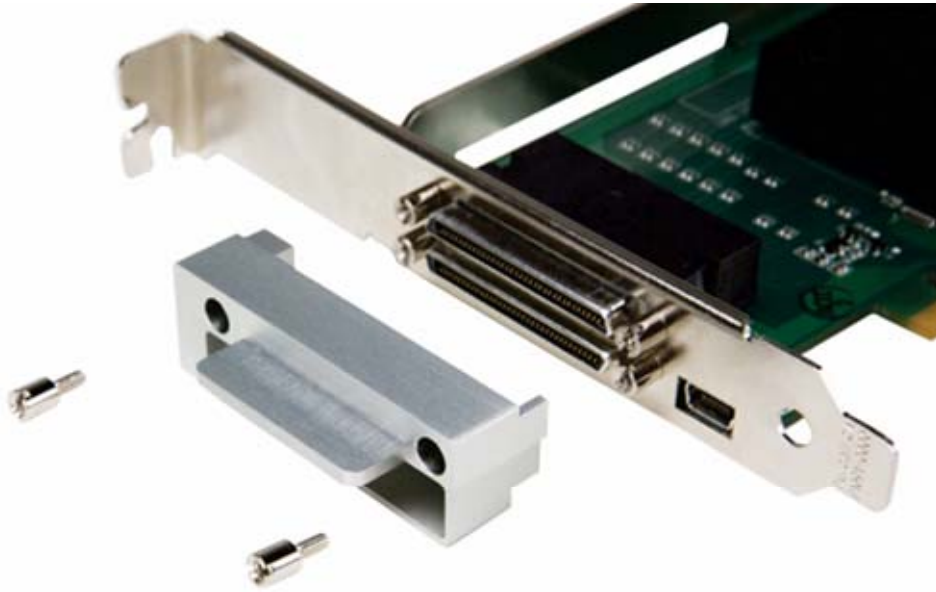

Figure 2.   Interconnect Cable Bracket

Placement of Standard I/O Connectors

Figure 3 shows the standard locations for the connectors on the bracket. For this example, the low profile bracket was used. It would be the same for a standard bracket.
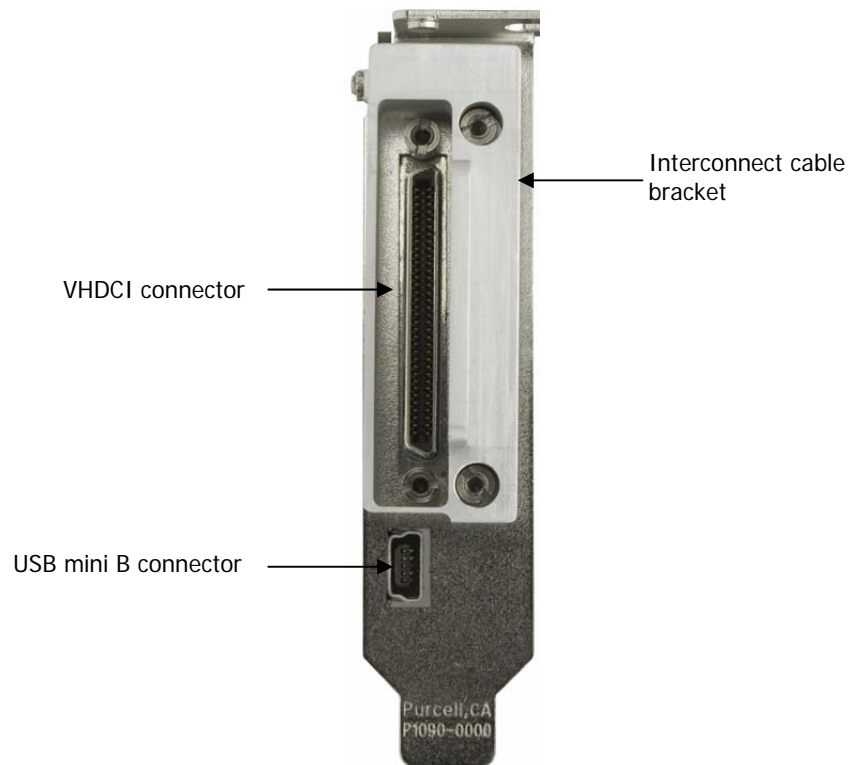

Figure 3. Standard Connector Placement (Low Profile Bracket)

Component Information

The NVIDIA Quadro Plex interface card supports the following connectors.

❑ VHDCI connectors dual stacked for PCI Express cable

❑ USB mini B for USB hub

VHDCI Cable Connectors

The NVIDIA Quadro Plex interface card supports a VHDCI cable connector (Figure 4) interface as one 16 lane interface.
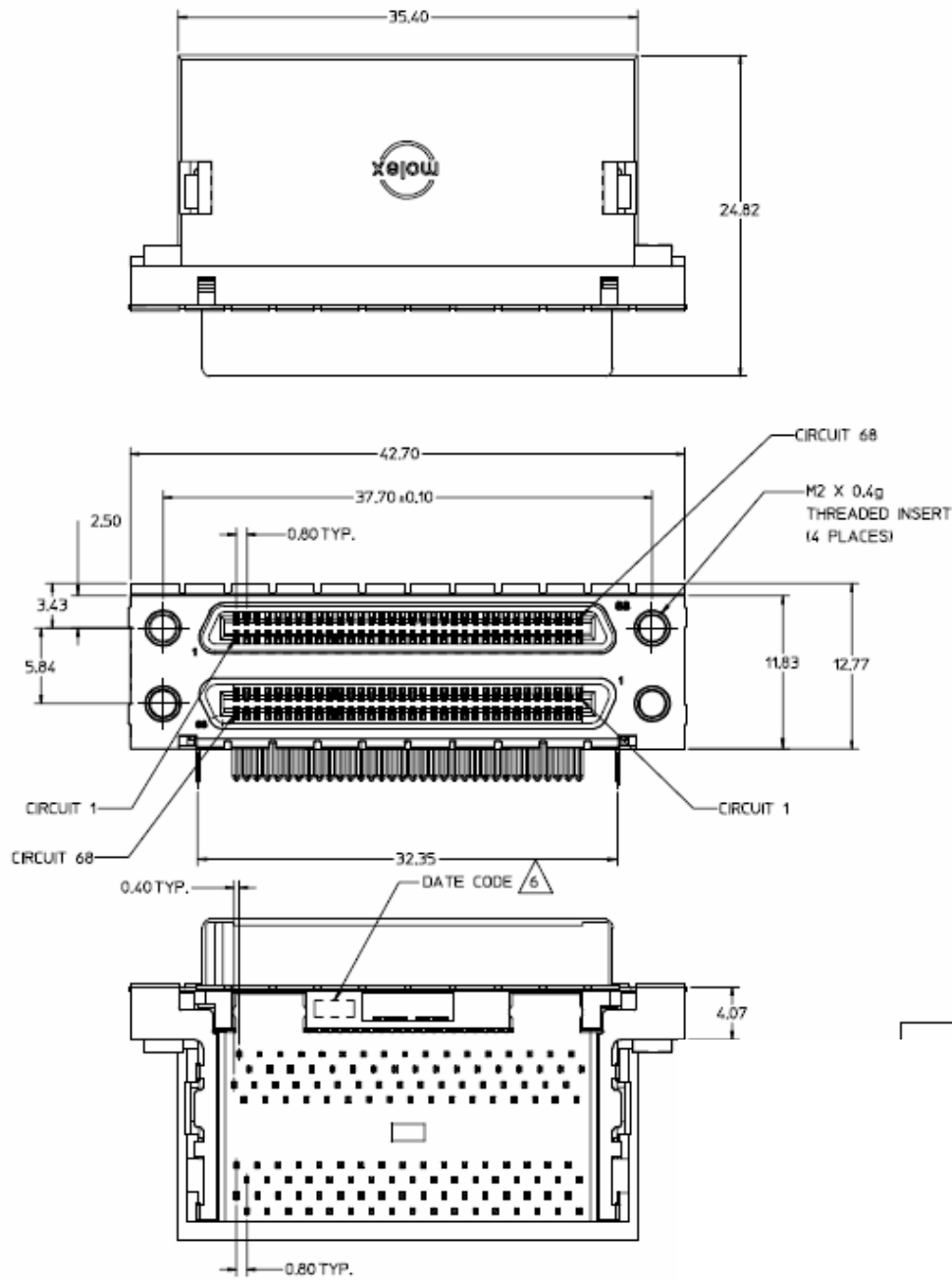
Figure 4. VHDCI Connector Cable

USB Mini B Connector

The NVIDIA Quadro Plex interface card uses a USB connector (Figure 5) with a mini B plug on the card, to help enable full speed USB functionality on the NVIDIA Quadro Plex system. Table 1 lists the pinout of the USB mini B connector.
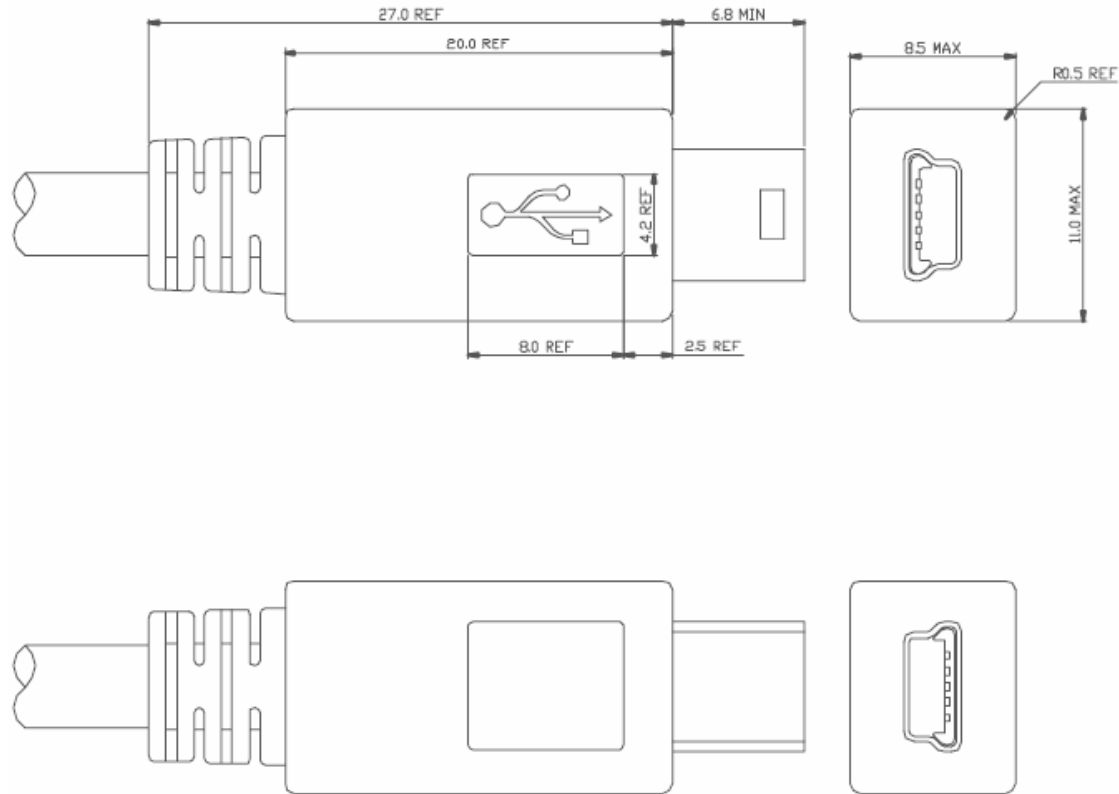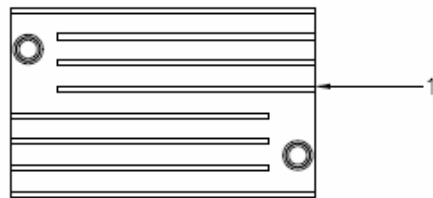

Figure 5. USB Mini B Connector

Table 1. USB Mini B Connector Pinout

Pin	Signal
1	VBUS
2	D-
3	D+
4	ID
5	GND

Cooling Solution

NVIDIA will utilize a passive heat sink for cooling (Figure 6). The heat sink includes an extruded heat sink, interface material and push pin fasteners.

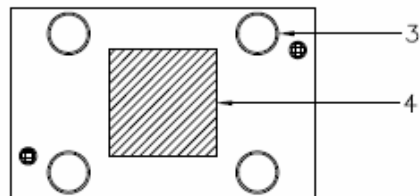| No.	Description
1	Heat sink
2	Push pin
3	Bumper
4	T725

Figure 6. Passive Heat Sink

The thermal cooling system uses thermally enhanced polymers designed to minimize the thermal resistance between power dissipating electronic components and their associated heat sinks.

Some of the key features and benefits are:

❑ Low thermal impedance, .049 °C-In ^2/W at 10 psi

❑ Electrically non-conductive

❑ Interface material is self adhering allowing for "peel and stick" installation

❑ Operating temperature range: 0 °C to 55 °C

Support Information

Certificates and Agencies

Certifications

Windows Hardware Quality Lab (WHQL): Certified Windows XP and Windows 2000.

Note:	Windows XP is the only operating system that Microsoft requires to ship with a digital signature. Legacy operating systems can be submitted and tested on WHQL's DCT test.

Agencies

❑ Bureau of Standards, Metrology, and Inspection (BSMI)

❑ C-Tick

❑ Conformité Européenne (CE)

❑ Federal Communications Commission (FCC)

❑ Interference-Causing Equipment Standard (ICES)

❑ Ministry of Information and Communication (MIC)

❑ Underwriters Laboratories (UL)

❑ Voluntary Control Council for Interference (VCCI)

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