



DXL2

PCoIP remote workstation card

Datasheet

teradici
PCoIP

The Amulet Hotkey DXL2 is a half-height PCIe dual video head PCoIP® remote workstation card based on Teradici's TERA2220 processor.

The DXL2 is designed for remote desktop applications that require pixel perfect video across multiple monitors. It provides a highly secure link between the host computer and the desktop, even when the two are separated by 100s of miles. It installs into a standard or low profile x1PCIe slot in the host computer and uses the existing computer graphics card as a source of digital video data.

Great User Experience

At the desktop, a secure stateless PCoIP zero client decodes the data sent from the DXL2 over a standard Ethernet connection. The DXL2 connects to the zero client using the ground breaking PCoIP protocol. PCoIP is robust, highly secure and adapts to network conditions, providing the best possible user experience using the minimum bandwidth. PCoIP uses secure AES-256 encryption on all data and provides lossless, real-time performance free from compromises.

DXL2-M model

The DXL2 is available in two versions. The standard DXL2 has an RJ45 network port. The DXL2-M has a network port designed to accept a fiber or copper SFP module (available separately; see the *SFP Modules Datasheet* for details).



DXL2 I/O full height bracket. A low profile bracket is also provided.

1 Network port (this example shows an RJ45 socket) and network LEDs (speed and connection status). 2 Status LED, shows PCoIP link status. 3 DisplayPort video input.

Features

- Half height, half length, PCIe slot (an alternative low profile bracket is also included in the kit)
- Fully compatible with PCoIP zero clients, including the Amulet Hotkey DXZ Series.
- Dual head video support (digital input only on Mini DisplayPorts)
- Display resolution up to 2560 x 1600 @ 60 Hz
- Full duplex stereo audio link
- Wide range of USB devices supported
- Very secure protocol using AES-256 encryption

Network connections:

- DXL2 RJ45 Ethernet connection 10/100/1000 Base-T
- DXL2-M: Copper or fiber SFP module, 1Gbit/s or 100Mbit/s

Easy configuration and maintenance

- Compatible with all major operating systems; no drivers or software required
- Flash programmable
- Supports Wake on LAN
- Supports remote power cycling of host computer (may require custom cabling)

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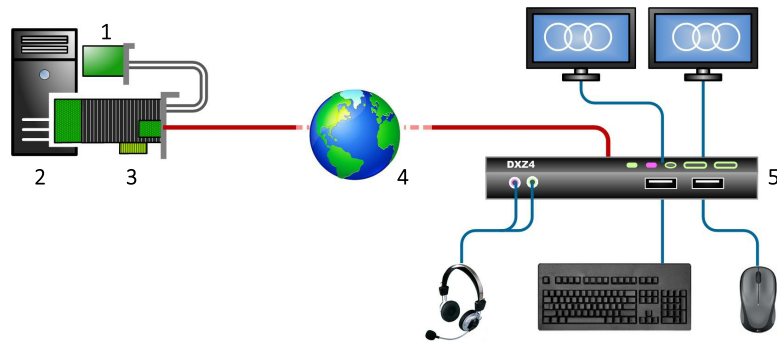
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Example quad head PCoIP system

The diagram shows a DXL2 card connected to a dual head graphics card in a workstation. (Video data for the DXL2 must come from a digital video source already installed in the host computer.) The DXL2 card presents itself to the operating system as a standard audio card and USB 2.0 host controller. It connects over a LAN or WAN to a remote PCoIP zero client such as the Amulet Hotkey DXZ series. After connecting the DXL2 to your network, you must establish a PCoIP session between the DXL2 and the zero client.



Dual head graphics card (1) on the host computer (2) connects directly to the DXL2 (3). Video cables (DisplayPort to MiniDP) are provided with the DXL2 to take output from the system graphics card to two Mini DisplayPort video inputs on the DXL2. The DXL2 connects over a LAN or WAN (4) to a remote zero client with two video heads (5).

PCoIP Processor	Teradici 2220	
Power supply	Internal from PCIe bus – maximum 15W, typically 12W	
Bus type	Single lane PCIe (x1). Compatible with x1 to x16 slots, PCIe spec 1.0 or above	
Memory	512MB DDR3 with ECC	
Video inputs	2 x Mini DisplayPort (dual mode)	
Display support	1920 x 1200 maximum (dual monitors) @ 60 Hz 2560 x 1600 maximum (single monitor) @ 60 Hz	
Audio connections	Internal from PCIe bus. Card provides standard HD Audio controller. HDA codec is on the remote zero client	
USB connections	Internal from PCIe bus. Card provides both OHCI and EHCI USB host controllers	
Flash programmable	In system via Ethernet. After upload, requires a reboot on host PC	
Network connection	DXL2	Single RJ45: 10/100/1000BaseT
	DXL2-M	Single SFP module: Fiber or copper; 1 Gbit/s or 100 Mbit/s <i>Full duplex required</i> Available modules are listed in the <i>SFP Modules Datasheet</i>
Wake-on-LAN	Via PCIe bus. Switchable to RPC cable option. Note: <i>Because of the SFP module power requirements, the DXL2-M does not support Wake-on-LAN on some PCs</i>	
Cooling	Passive heat sink	
PCIe form factor	Low profile, half-length	
Size	Single slot, 69 x 168 mm (2.7 x 6.6 inches)	
Temperature range	Operating: 0° to 55° C (32° to 131° F). <i>Refers to PC internal ambient temp.</i> Storage: -20° to 70° C (-4° to 158° F)	



Towards greener computing

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PCoIP Performance Notes: Performance is limited by network latency and bandwidth. For latencies up to around 40ms, the operation is virtually perception free. The user will notice little or no change in the performance of their workstation. For longer latencies up to 150ms, PCoIP deploys a selection of WAN optimization features which minimize the impact on performance to an acceptable level.