

DXH4

PCoIP host card

Datasheet



The Amulet Hotkey DXH4 is a half-height PCIe quad video head PCoIP® host card based on Teradici's TERA2240 processor.

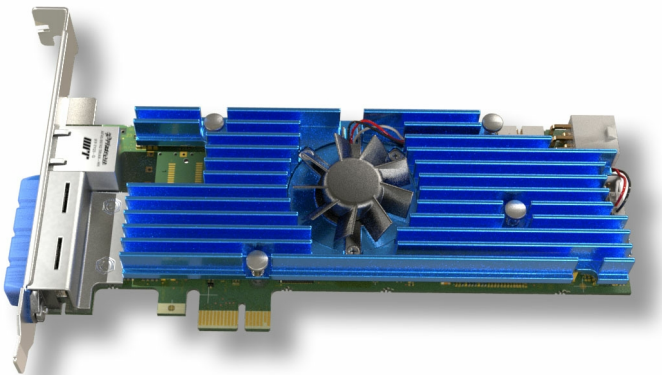
The DXH4 is designed for remote desktop applications that require pixel perfect video across multiple monitors. It provides a highly secure link between the host computer and the desktop, even when the two are separated by 100s of miles. It installs into a standard or low profile x1PCIe slot in the host 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 DXH4 over a standard Ethernet connection. The DXH4 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 of bandwidth. PCoIP uses secure AES-256 encryption on all data and provides lossless, real-time performance free from compromises.

DXH4-M model

The DXH4 is available in two versions. The standard DXH4 has an RJ45 network port. The DXH4-M has a network port designed to accept a copper or fiber SFP module (available separately; see the *SFP Modules Datasheet* for details).



DXH4: Example card fitted with full height I/O bracket and RJ45 socket

Features

- Half height, half length, PCIe slot (an alternative full height bracket is also included in the kit)
- Fully compatible with PCoIP zero clients, including the Amulet Hotkey DXZ Series.
- Quad 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:

- DXH4: RJ45 Ethernet connection 10/100/1000 Base-T
- DXH4-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)

EMEA Sales

+44 (0)20 7960 2400
emeasales@amulethotkey.com

N America Sales

+1 (212) 269 9300
ussales@amulethotkey.com

APJ Sales

+61 431 930 884
apsales@amulethotkey.com

Defence and Security

security@amulethotkey.com

Head Office

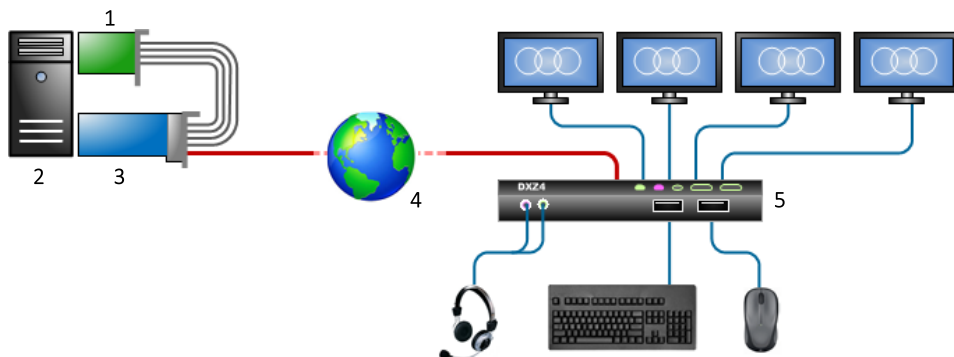
Amulet Hotkey Ltd
Cavalier Road, Heathfield Industrial Estate,
Newton Abbot, Devon TQ12 6TQ, UK
+44 (0)1626 837900

Technical Support

Europe: eurosupport@amulethotkey.com
N America: ussupport@amulethotkey.com

Example quad head PCoIP system

The diagram shows a DXH4 card connected to a quad head graphics card in a workstation. (Video data for the DXH4 must come from a digital video source already installed in the host computer.) The DXH4 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 DXH4 to your network, you must establish a PCoIP session between the DXH4 and the zero client.



Quad head graphics card (1) on the host computer (2) connects directly to the DXH4 (3). Video cables (DisplayPort to MiniDP) are provided with the DXH4 to take output from the system graphics card to four Mini DisplayPort video inputs on the DXH4. The DXH4 connects over a LAN or WAN (4) to a remote zero client with four video heads (5).

PCoIP Processor	Teradici 2240
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	4 x Mini DisplayPort (dual mode)
Display support	1920 x 1200 maximum (quad monitors) @ 60 Hz 2560 x 1600 maximum (dual monitors) @ 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	DXH4 Single RJ45: 10/100/1000BaseT DXH4-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 DXH4-M does not support Wake-on-LAN on some PCs</i>
Cooling	Dynamic fan cooling. Fan speed adjusts automatically between 0-100%, depending on load and environmental conditions
PCIe form factor	Low profile, half-length
Size	Single slot, 69 x 168 mm (2.7 x 6.6 inches)
Temperature range	Operating: 15° to 55° C (59° to 131° F). <i>Refers to PC internal ambient temp.</i> Storage: -10° to 60° C (14° to 140° F)



Towards greener computing

DXH4 Datasheet 2.6 September 2015

©2015 Amulet Hotkey Ltd. All rights reserved.

Information in this document is subject to change. No part of this document may be reproduced through any means including (but not limited to) electronic or mechanical, without express written permission from Amulet Hotkey Ltd. Amulet Hotkey Ltd may have patents, patent applications, trademarks or copyrights or other intellectual property rights covering subject matter in this document. PC-over-IP, PCoIP and the PCoIP logo are registered trademarks of Teradici Corp. Amulet Hotkey and 'solutions you can bank on' are registered trademarks of Amulet Hotkey Ltd. Other product names and company names listed within this document may be trademarks of their respective owners. Amulet Hotkey products are designed and built in the UK.

www.amulethotkey.com

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.