

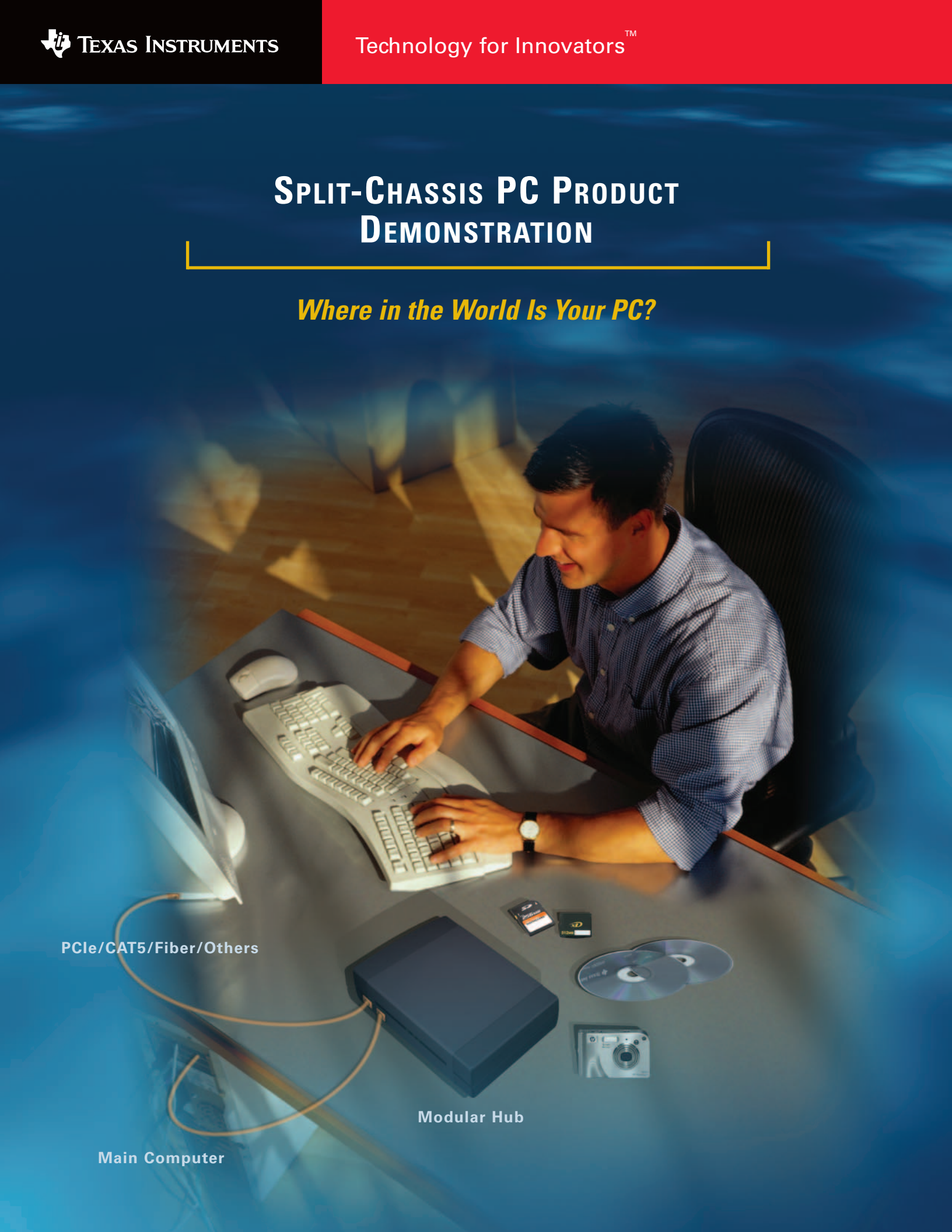
# SPLIT-CHASSIS PC PRODUCT DEMONSTRATION

*Where in the World Is Your PC?*

PCIe/CAT5/Fiber/Others

Modular Hub

Main Computer



## PCI EXPRESS MODULAR I/O HUB

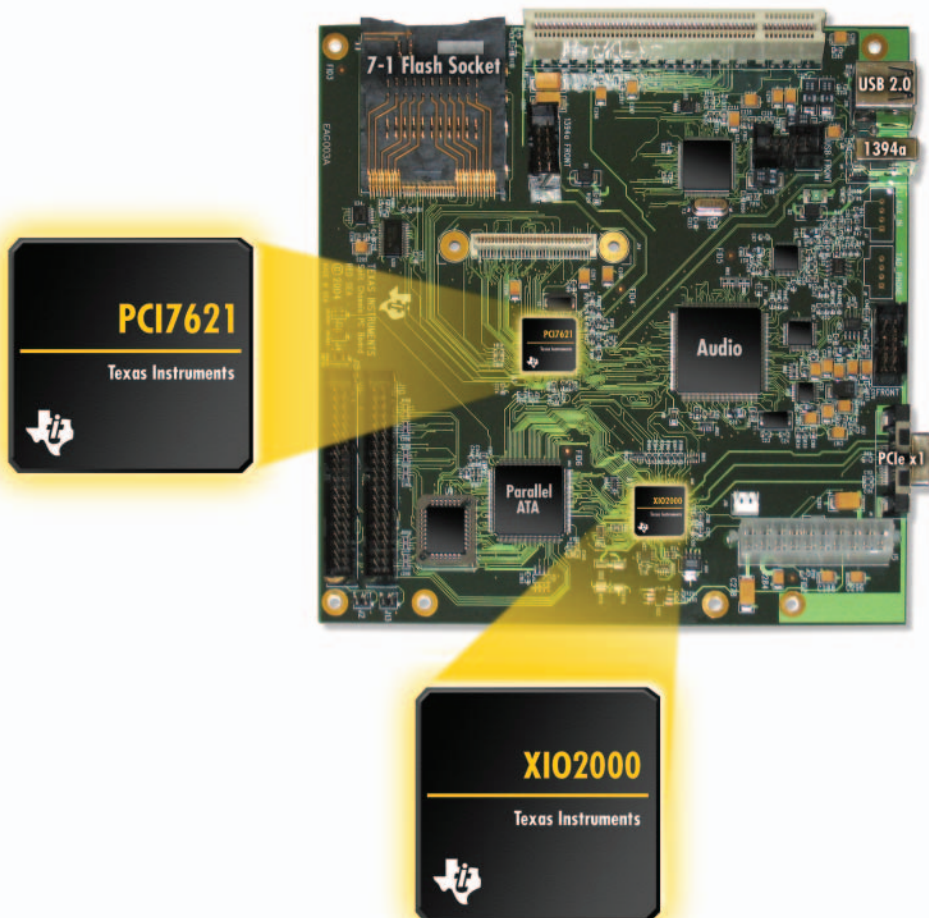
*Delivers Connectivity of a Desktop at Your Fingertips*



The TI split-chassis PC product demonstration includes a standard PCI Express-enabled desktop PC with a x1 PCI Express cable connector. The I/O hub (shown to the left) is connected to the desktop via a standard PCI Express x1 cable (under definition by the PCI-SIG) and provides 2.5 Gbps of data throughput in both the upstream and downstream directions, providing an aggregate bandwidth of 500MBps.

### Modular I/O Hub Description

The I/O hub box is a standard mini-ITX chassis that measures 2 x 7 x 10 inches and includes the x1 PCI Express connector at the back. The DVD tray extends from the front panel which also includes two USB 2.0 ports, one 1394a port and jacks for headphone/speaker and microphone input. The Flash media and CardBus sockets extend from the side, and secondary HDD is also integrated along with an internal PCI slot (for demonstration purposes only). The I/O hub utilizes TI's XIO2000, PCI Express-to-PCI bridge. Behind the XIO2000, on the PCI bus, is TI's PCI7621 UltraMedia™ controller, a USB host controller, an audio sound controller and a parallel ATA controller.



### Product Demonstration

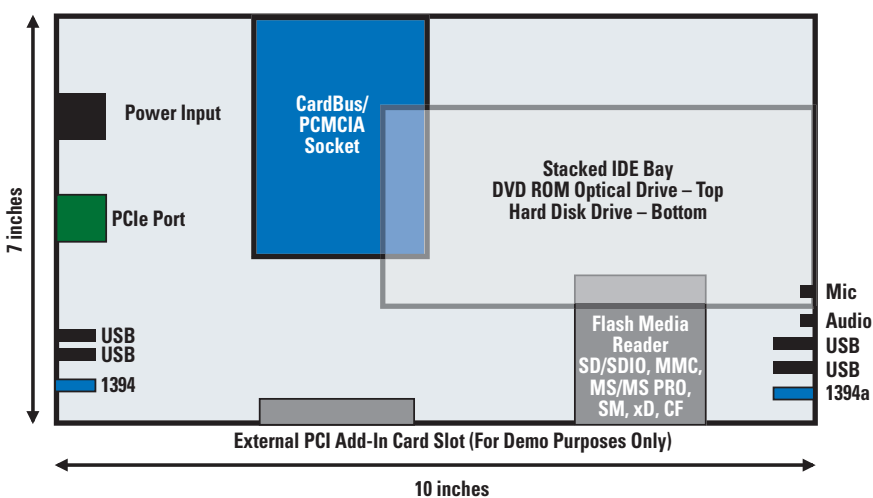
The demonstration supports data transfers to the secondary HDD via the high-bandwidth PCI Express cable to the PC. In addition, four simultaneous video streams are actively streaming data over the PCI Express cable from the DVD-ROM movie playback drive, the A/V file playback from the 7-in-1 Flash media card, the A/V file playback from a high-speed USB Flash drive, and a 1394a 400-Mbps video camera. The system keyboard and mouse are connected to USB ports on the I/O hub and a CardBus LAN card provides a 10/100-Mbps network connection that is used to provide live Internet access.

The bandwidth possible across the PCI Express cable provides a user experience that is compelling.

#### Supported Functions in the Demo I/O Hub

- DVD-ROM
- 40-GB HDD
- 7-in-1 Flash media reader (SD/SDIO, MMC, MS/MS PRO, SM and xD)
- Four high-speed USB 2.0 ports (two front/two back)
- Two 1394a ports (one front/one back)
- One CardBus/PCMCIA slot
- Headphone/speaker line out and microphone input

#### Modular I/O Hub Functional Diagram





**End-Applications for XIO2000 I/O Hub**

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