

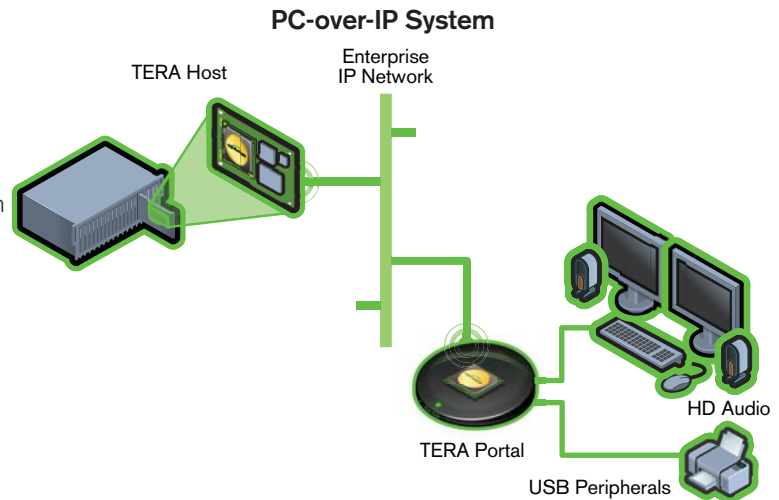
TERA1200 PC-over-IP™ Host Processor PRODUCT BRIEF



- > True, uncompromised PC experience over IP networks, supporting dual DVI at 1920x1200 resolution.
- > Transparent USB and HD audio bridging, USB device authorization and encrypted communications.
- > Hardware bridging eliminates need for drivers and enables true OS and application independence.

PC-over-IP Technology Overview

PC-over-IP technology is designed to deliver a user's desktop from a centralized host PC with an immaculate, uncompromised end user experience across standard IP networks. To enable a full-fidelity end-user experience, the PC-over-IP architecture incorporates the TERA1200 Host Processor, the TERA1100 Portal Processor, and the heart of PC-over-IP technology – the TERA Image Engine. The TERA1200 encodes the complete PC experience including the display, USB, and HD audio, then transmits the compressed signal over the enterprise IP network. At the desktop end, the TERA1100, housed in the stateless Desktop Portal device, receives and decodes these signals to provide standard PC interfaces while supporting reverse communication to the host for all PC I/O peripherals. The PC-over-IP solution offers a true computing experience for the end user while supporting the efficiency and security of centralized computing.

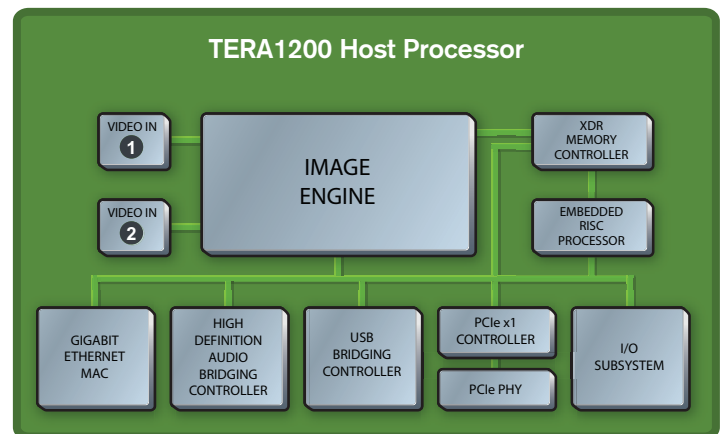


TERA1200 Host Processor

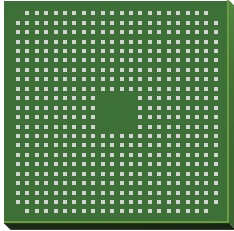
The TERA1200 Host Processor interfaces with the system graphics controller on both the host computer's Northbridge and Southbridge for the DVI signal and I/O, respectively. The TERA1200 connects over standard hardware interfaces so it can function with any operating system installed on the host computer.

There are three different ways to integrate the TERA1200 Host Processor into the host PC or workstation:

- As part of a standard PCI Express® card, the TERA1200 can be quickly and easily configured into personal workstations.
- The TERA1200 can be integrated onto a small daughter card installed in a PC Blade.
- The TERA1200 can be integrated directly onto a PC, workstation, or blade motherboard for a totally seamless implementation.



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Detailed Features

Display Data Input

- Two independent displays
- Parallel pixel data input
- Display Data Channel (DDC)
- 24-bit pixel depth
- Video signal frequency from 25 to 165 MHz

Multifunction PCI Express x1 Endpoint

- Base Specification 1.1 compliant
- Independent functions for audio controller and USB controller
- Power Management Capability Structure per function

10/100/1000 Ethernet Media Access Controller

- Dedicated for PC-over-IP traffic
- Auto-negotiation of link speed and duplex mode
- Wake On LAN
- 802.1Q VLAN tagging supports segregating PC-over-IP traffic to a separate logical network

Audio

- High Definition Audio controller interface

USB

- USB controller interface

Host Peripheral Management

- GPIO, SMBus 2.0

Memory

- 16-bit 3.2GHz XDR™ SDRAM
- Firmware Boot PROM

Security

- All Host-Portal communication encrypted with 128-bit AES
- Management communication protected by SSL

Packaging

- 0.13 micron CMOS
- 600-ball HSBGA
- RoHS compliant

Key Benefits of PC-over-IP Technology

- Supports two DVI interfaces, each with resolution up to 1920x1200.
- Supports all image content including 3D graphics, video, animation, ClearType®, Windows® Aero™ for Vista, DirectX®, and more.
- Allows PC or workstation relocation to the datacenter or computer room without compromising end-user experience or productivity.
- Built to run on standard 10/100/1000 BaseT Ethernet networks.
- Allows true, transparent USB bridging over IP networks with the same plug and play experience as traditional PCs.
- Provides flexible user authorization by allowing USB port disabling or filtering by device type or user profile.
- On-Board HD Audio controller connects to standard audio codecs to support up to 5.1 surround sound.
- Runs any operating system and application without modification or additional host drivers.
- No regular IT desktop support required and no threat of virus or intrusion.
- Management and media communication protected by secure SSL and IPsec.
- Wide range of applications from robust, multi-display personal workstations to simple kiosks.

