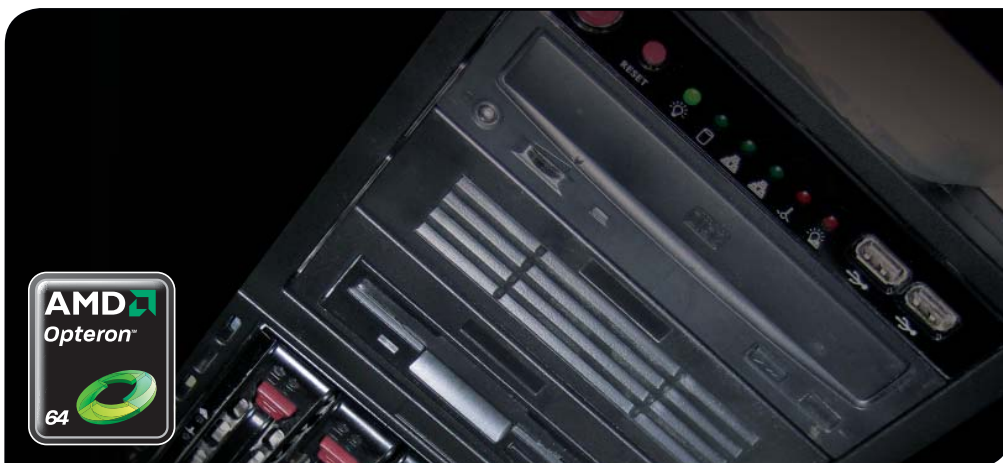


E&P 7600

VISUALIZATION SERVER



FEATURES AT A GLANCE

- 4U Rackmount or Pedestal Chassis
- Four AMD Opteron™ Dual-Core 8218 Processors
- 128GB ECC Registered Memory
- NVIDIA® Quadro® FX5600G and FX5600 Graphics Cards
- Two Removable 500GB SATA Hard Drives

PRODUCT OVERVIEW

The E&P 7600 Visualization Server from Verari Systems® is the ideal high performance compute solution for industries whose applications require substantially large memory models. With up to four AMD Opteron™ processors and 128GB of memory, the E&P 7600 server is specifically engineered for complex, highly technical computing and high performance parallel applications. Support for the latest NVIDIA video cards running in SLI configurations allow the E&P 7600 Visualization Server to excel in graphics intensive applications such as visualization simulations and rendering.

The E&P 7600 Visualization Server delivers outstanding performance, dependability and value to digital content creation, MCAD, electronic design automation and seismic processing. With support for upcoming AMD Quad-Core Opteron processors, the E&P 7600 Visualization Server uses the AMD64 Direct Connect Architecture to its full potential, providing new possibilities in customization and unparalleled bandwidth access.

The AMD Opteron processor features HyperTransport technology. HyperTransport technology acts as a link and provides scalable bandwidth interconnect between processors, memory and the I/O subsystems. AMD HyperTransport technology provides up to 8GB/s bandwidth per link and is scalable upwards with future revisions.

CONFIGURATION AND PRICING

Verari Systems supports multiple configurations and

pricing varies per solution. If you have questions about configuring a high performance enterprise or supercomputing solution, please contact us today at (888) 942-3800 and ask to speak with a Verari Systems Account Manager.

ABOUT VERARI SYSTEMS

Verari Systems, Inc. is the premier developer of scale-out blade-based computing and storage platforms for Cloud, Web 2.0, and the global enterprise. Verari provides scale-out solutions for the world's largest data centers that reduce power and cooling demands while achieving the best density, availability, and energy efficiency for the highest total value of ownership. Organizations such as Virgin America, Morgan Stanley, Wachovia, Akamai, Microsoft, Qualcomm, Johns Hopkins, EMC, CGGVeritas, Petrobras, Harris, Lockheed Martin, Northrop Grumman, and Sony Imageworks, as well as top universities and research institutions worldwide, are among the customers who have chosen Verari Systems' award-winning containerized data centers and high density blade-based platforms.



Through innovation, Verari Systems has developed and implemented equipment and procedures to get more by using less. Verari has made environmental responsibility a manufacturing priority by increasing the overall energy effectiveness of all our product lines while keeping the vision of the green data center in mind. Verari Systems, through voluntary action, is committed to the reduction of e-waste and the reduction of hazardous materials utilized in the production of computers and other technological devices.



A flexible solution for your memory and graphics intensive applications

The E&P 7600 Visualization Server from Verari Systems® is the ideal enterprise computing solution for industries whose applications require substantially large memory models. With up to four AMD Opteron™ Dual-Core processors and 128GB of memory, the E&P 7600 server is specifically engineered for complex, highly technical computing and high performance parallel applications. Support for the latest NVIDIA® video cards running in SLI configurations, and optional support for the new NVIDIA Quadro Plex 1000 allow the E&P 7600 Visualization Server to excel in graphics intensive applications such as visualization simulations and rendering.

The E&P 7600 Visualization Server delivers outstanding performance, dependability and value to digital content creation, MCAD, electronic design automation and seismic processing. Its revolutionary design uses the AMD64 Direct Connect Architecture to its full potential, providing new possibilities in customization and unparalleled bandwidth access.

The AMD Opteron processor features Hyper Transport™ technology. HyperTransport technology acts as a link and provides scalable bandwidth interconnect between processors, memory and the I/O subsystems. AMD HyperTransport technology provides up to 8GB/s bandwidth per link and is scalable upwards with future revisions.

Certified with GeoProbe®

Verari Systems is the only GeoProbe® certified hardware provider. GeoProbe is the industry's leading 3D multi-volume interpretation and visualization software solution developed by Landmark. Geoscientists use GeoProbe software to investigate regional data sets, highlight large scale trends and uncover information missed by other mainstream solutions. Adding GeoProbe software to your arsenal accelerates oil and gas reservoir location and replacement, prospect generation and well-planning workflows.

GeoProbe technology can scale from the desktop to the largest immersive visualization environments. Whether you are evaluating a targeted data volume on your desktop, or analyzing a regional survey with a team in an immersive visualization center, interpreters can simultaneously view multi-attribute/multi-volume seismic, well and cultural data and reservoir models instantly.

Integrated with SeisWorks® and OpenWorks® software, GeoProbe technology delivers new, enhanced interpretation capabilities along with options for remote execution and collaboration allowing for interactive interpretation at the speed of thought. These new capabilities are designed to dramatically reduce cycle-time and increase accuracy in E&P workflows.

Interpretation at the Speed of Thought

GeoProbe software's parallel processing algorithms deliver high performance calculations for tracking attributes, computations and interactive volume visualization. The dynamic 3D volume visualization environment lets geoscientists see their data in ways that were not even possible in the past. GeoProbe's patent pending real-time multi-attribute co-rendering technique enables interpreters to graphically merge two volumes into a single 3D probe, where unique shaded displays provide unprecedented insights into the geological world. The result is faster interpretation cycle-time compared to traditional "line-by-line" methodologies.

Interpretation Accuracy

Revolutionary volume co-rendering technology improves fault and stratigraphic feature imaging. These powerful volume visualization techniques enhance visual pattern recognition, making identification of geologic structures and potential hydrocarbon trends much more obvious and intuitive. Interactive auto trackers enable precise structural framework construction. The result is quickly defined, accurate and optimized drilling targets.

Scalable to Any Dataset Size

GeoProbe technology is designed to support efficient workflows on "real world" data volumes. Seismic volume size is limited only by the amount of available computer memory, and with the Verari Systems E&P 7600, that's a huge dataset. GeoProbe users have interactively viewed and interpreted 3D volumes covering areas as large as 16,000 square kilometers. This capability enables interpreters to build an earth model at the prospect level in context with the regional framework. Interpreters now have complete flexibility to choose solutions from large scale UNIX systems to PC desktops.

Full 3D Visualization

GeoProbe provides many visualization features designed to enhance productivity:

- Geobody and volume rendering
- Simultaneous multiple volume viewing
- Interactive well path builder and dynamic links to Landmark's Wellbore Planner™
- Well logs, tops and cultural data display
- Volume sequencer
- Orthographic and perspective views
- Real-time scanning through massive datasets using probes, planes, random lines and opacity volumes
- Display of reservoir models via Rescue import
- Image file and culture display
- Real-time shading and lighting

Advanced Attribute Analysis

GeoProbe has been designed from the start as a multi-volume interpretation system, enabling interpreters to maximize the value of seismic data. Key features include:

- A comprehensive suite of volume attribute calculations
- Volume calculations computed by using multiple CPU's
- Calculation and display of horizon-based attributes
- Tight links to 3rd party attribute generation tools for advanced computations

Well Planning

Integration with Landmark's well planning applications facilitates "real-time" workflows; enabling collaboration between geoscience and engineering disciplines, leading to optimized drilling targets.

Support for Linux 64-bit

GeoProbe 3.1.1 and beyond were the first solutions in the industry to use AMD and Intel® x86 64-bit chips. Systems based on these chips are dramatically cheaper than current Unix offerings. Other benefits of the 64-bit solution include the ability to work with data volumes that exceed the 2GB volume limit of current 32-bit PC technology, while retaining the ability to run applications built on older 32-bit operating systems. GeoProbe on Linux 64-bit enables interpreters to manipulate and interpret large data sets at a fraction of the cost of traditional systems.

Unparalleled Scalability

GeoProbe offers unparalleled scalability and the flexibility to choose the right solution, from the desktop to large scale visualization centers.

NVIDIA Quadro® Plex 1000

The Verari Systems E&P 7600 comes standard with one NVIDIA Quadro FX5600 and one Quadro FX5600G (contains the GSync board). However, the option to use the new NVIDIA Quadro Plex 1000 makes your visualization server extremely scalable.

With the introduction of the NVIDIA Quadro® Plex 1000 visual computing system (VCS), NVIDIA delivers a quantum leap in visual compute density, enabling breakthrough levels of productivity and capability.

Professionals ranging from manufacturing designers and stylists to earth scientists and digital content creators can solve their most complex, graphics-intensive problems using an unconstrained dedicated

visual computing system based on proven, industry standard architectures. NVIDIA Quadro Plex systems enable geoscientists to interpret data at its highest resolution without losing sight of the regional context.

Massive Levels of Visual Compute Density

NVIDIA Quadro Plex 1000 represents a 20x leap in visual compute density and graphics computation per cubic inch. Its compact, ultra-quiet design can be quickly deployed in any desktop workspace or can be easily transformed to fit into any standard 19" rack environment.

Utilized as a single VCS node (two NVIDIA Quadro Plex VCS nodes connected to a single certified SLI-capable system) the power of up to eight GPUs can be scaled in 3Us of rack space to deliver the power and capability required by even the most demanding applications. Visual compute density can further be scaled by clustering multiple VCS nodes together via NVIDIA Quadro G-Sync.

Configure To Meet Your Application Needs and Scale To Meet Your Performance Requirements.

Available in three distinct models, NVIDIA Quadro Plex 1000 is designed to deliver absolute maximum performance, the highest image quality and ultimate display resolution so professionals can visualize the largest seismic datasets, create photorealistic, interactive designs or natively drive a digital 4k projection system.

For the most demanding clustered applications, NVIDIA Quadro GSync enables frame synchronization, genlock and frame lock to further scale performance, quality and resolution to near infinite levels. Professionals can now drive massive clusters of synchronized channel outputs to create truly immersive reality environments, visualize large scale scientific models and simulate astonishing virtual environments.

Verari Systems Support

Verari Systems' service and support team is dedicated to meeting our customer's needs, and ensuring the success of their installations throughout the world. Our first-line technical support, field engineers and professional service experts are among the most knowledgeable in the industry. Our support model means you'll be working with a veteran system administrator from the outset, significantly reducing the time needed to resolve inquiries.

Features

Verari Systems support offers worldwide warranty service agreements on its entire product line, including the E&P 7600. Our warranty service offerings include real-time access to service call management programs, customized service reports sent to your email automatically, an account technician assigned to your account, equipment pre-configured before it is shipped for on-site repair, onsite service 24 hours a day, 7 days a week, depot repair services, tracking of IT fixed assets to include defective part retrieval and certified help desk technicians.

Benefits

Our world-wide warranty service offerings provide the highest quality of customer support. As an added benefit Verari Systems support includes real-time access to calls which gives our clients timely information on support calls. Our account technicians become intimately familiar with their accounts eliminating re-explaining account backgrounds to different technicians. Hardware maintenance contracts allow our clients to accurately predict system maintenance costs, and our pre-ship exchange program reduces any downtime.

Processor

- Four AMD Dual-Core Opteron™ 8218 Processors (2.6GHz)

Chipset

- NVIDIA® nForce® Pro 2200 Chipset
- NVIDIA nForce Pro 2050 HyperTransport™ Tunnel
- AMD 8132 PCI-X Tunnel
- LSI 1068 SAS Controller
- Renesas H8 BMC Chip (IPMI 2.0)

Memory

- 128GB DDR2-667 ECC Registered Memory (4GB modules)

Storage

- Two 500GB SATA 7200 RPM RE Hard Drives

Power

- 1+1 Redundant 1000W HE Power Supply with PFC

Operating Systems

- Red Hat® Enterprise Linux AS 3.0 Update 7

Optical Drive

- DVD-ROM Drive

Networking

- Two 10/100/1000 Ethernet Connections
- Broadcom 5721 GbE LAN Controller

Mounting Options

- Convertible Pedestal
- 19" Rackmount Chassis (4U)

Front Panel

Indicators

- Two LAN Activity LEDs
- HDD and Power LEDs
- System Overheat LED
- Power Fail LED
- Power and System Reset Buttons

Front I/O Ports

- Two USB 2.0 Ports

Rear Panel

- Two USB 2.0 Ports
- One 15-pin VGA Port
- Two RJ-45 Gigabit Ethernet Ports
- One 9-pin UART Serial Port
- Two PS/2 Ports

PCI Express Graphics

- One NVIDIA Quadro® FX5600G Video Card with G-Sync Board
- One NVIDIA Quadro FX5600 Video Card

Expansion Slots

- Two x16 PCI-E Slots with x16 Signal (SLI Capable)
- One x8 PCI-E Slot (Non or x8 when 1st x16 slot is configured as x8 mode)
- One x8 PCI-E slot (x4 Signal)
- Two PCI-X 133 64bit Slots

Dimensions and Weight

- Height: 7.0" (178mm)
- Width: 19" (483mm)
- Depth: 29.4" (747mm)
- Weight: 95 lbs (43kg)

Environmental

- Operating Temperature
5°C to 30°C (41°F to 86°F)
- Storage Temperature
0°C to 60°C (32°F to 140°F)

Front View**Internal View****Rear View**