

TUNDRA EXTREME SCALE FOR HPC

SCALE UP WITH OCP TECHNOLOGY DESIGNED FOR HPC BY HPC EXPERTS

Overview

The Penguin Computing® Tundra® Extreme Scale platform combines high-performance computing (HPC) design and Open Compute Project (OCP) value so well that 16 OCP-based Tundra supercomputers -- running complex nuclear testing simulations, among other tasks -- were ranked in the Top 500*.

With a complete OCP-based ecosystem, the dense but flexible Tundra platform offers more room for high-value technology such as GPUs and other computing architectures, lower total cost of ownership, and more room for innovation.

This design innovation is possible thanks to HPC expertise developed by Penguin Computing over two decades of Linux and cluster development (recognized by Penguin Computing Chief Technology Officer Phillip Pokorny being selected as the HPC representative of the OCP Incubation Committee) and our simultaneous depth of experience with OCP, which we've been involved with since its inception.



Features & Benefits

- Supports an exceptionally diverse array of computing architectures, including graphics processing units (GPUs), while still providing the benefits of an OCP form factor
- Includes server formats from 10U-40U with a capacity for over 100 nodes per rack for unmatched power and density
- Built with the latest AMD EPYC™ processors or Intel® Xeon® Scalable processors, high-speed software-defined networking (SDN), and localized storage for flexibility and performance
- Comes with the Tundra Extreme Scale Rack for greater flexibility, operability and efficiency. Choose from:
 - 220U, 400U, or 440U
 - Air or liquid-cooling
- Available with an array of pre-tested options for maximum configurability

Compute Technology Options

The Tundra platform supports the widest variety of central processing unit (CPU) and GPU options to ensure your environment is tailored to your needs. Choose from:

- Intel® Xeon® Scalable processor
- AMD EPYC™ processor
- NVIDIA® Tesla® V100
- NVIDIA® Tesla® T4

Networking Technology Options

The Tundra platform supports multiple networking options to ensure your system operates at scale, while minimizing bottlenecks and maximizing results. Choose from:

- The Penguin Computing® Arctica® Ethernet switch
- Mellanox® InfiniBand fabric
- Intel® Omni-Path Architecture (OPA)

Learn More

Customize your Tundra design at www.penguincomputing.com/tundra. For pricing on your specific configuration, contact a representative by email at sales@penguincomputing.com or call 1-888-PENGUIN (736-4846).

System Administration and Managed Hosting Capabilities

Increase the effectiveness of your HPC system and reduce your expenses with expert, professional services, including remote, SysAdmin-as-a-Service. Learn more at www.penguincomputing.com/prof-serv.

Access Tundra Via the Cloud

Create a hybrid environment based on the Tundra platform or enable remote usage via the Penguin Computing® On-Demand™ (POD™) platform. Learn more at www.penguincomputing.com/pod.

Purchase with Financing

Finance products, services, even soft costs, with Penguin Computing Capital. Choose from options such as no money down, flexible billing choices, extended repayment timelines, and a variety of end-of-term alternatives.

About Penguin Computing

For 20 years, the Penguin Computing team of artificial intelligence (AI), engineering, and computer science experts has reimagined how startups, Fortune 500, government, and academic organizations solve complex technology challenges and achieve their organizational goals. We specialize in computing infrastructure based on open platforms, including the Open Compute Project (OCP). Our focus is leading-edge design and implementation of innovative high-performance computing (HPC) on-premise and in the cloud, AI, storage, and networking technologies coupled with hosting, professional, and managed services (including sys-admin and storage-as-a-service) and highly rated customer support. Visit us at www.penguincomputing.com.