

New Intel® Xeon® Solutions



NumberSmasher® 2U Twin² Servers

224 Cores in 2U

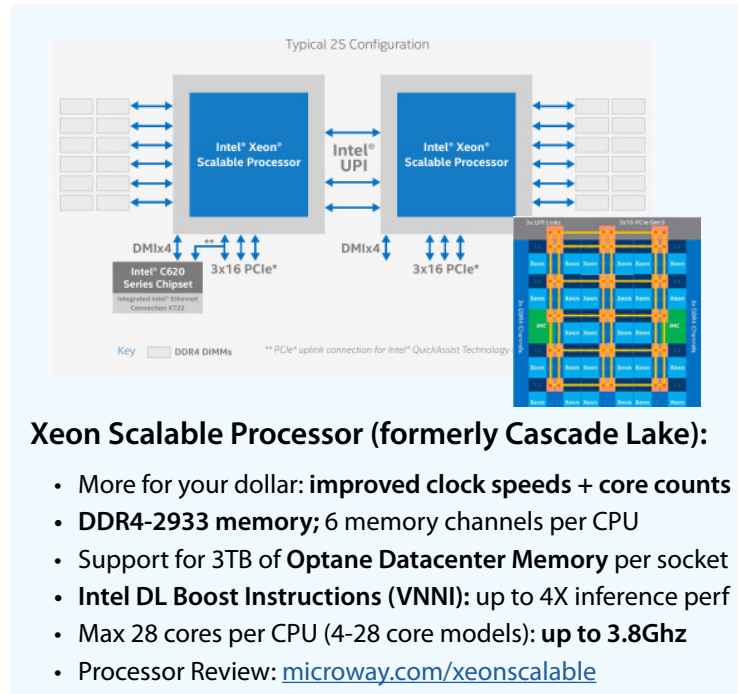
This elegant platform includes four compute nodes with hot-swap motherboard modules, hard drives and redundant power supplies. Ideal for flexible cluster design, the Twin² helps you build out dense, cost-effective, scale out HPC clusters.



NumberSmasher 2P Xeon Servers

Superior Flexibility

Achieve ultimate performance in flexible configurations for any compute requirement. Configured with optional NVMe flash storage and high-bandwidth, low-latency fabric, these systems are reliable high-performance single servers/cluster nodes.



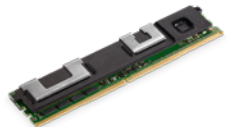
Xeon Scalable Processor (formerly Cascade Lake):

- More for your dollar: **improved clock speeds + core counts**
- **DDR4-2933 memory**; 6 memory channels per CPU
- Support for 3TB of **Optane Datacenter Memory** per socket
- **Intel DL Boost Instructions (VNNI)**: up to 4X inference perf
- Max 28 cores per CPU (4-28 core models): **up to 3.8Ghz**
- Processor Review: microway.com/xeonscalable

Intel Optane Datacenter Memory for Xeon CPUs

Deploy as memory, non-volatile memory, storage, or a mix

- **Memory Mode**: incredibly cost-effective high-capacity DIMMs for systems
- **Persistent app-direct mode**: Non-volatile memory space that survives power loss (with SW implementation)
- **Storage app-direct mode**: Ultra high-bandwidth SSD-like block storage in the DIMM socket



WhisperStation™

Quiet Performance

Ultra-quiet workstation for standalone scientific computing use or as part of a quiet cluster. It provides up to 56 x86 cores using Xeon Scalable Processors, visualization or computation with NVIDIA Quadro® GPUs.

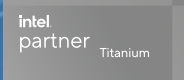


NumberSmasher QuadPuter with 4 CPUs

1 Node— 6TB, 112 cores
Harness 4 Intel Xeon Scalable processors for your large memory workloads or highly parallel OpenMP jobs. Leverage new kinds of scale—or consolidate with capability formerly available only as a cluster in a single, easy to manage server.

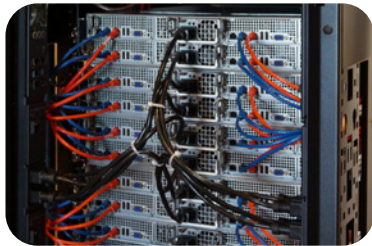
Custom Software Integration Specialists

- 64-bit Linux (CentOS, Ubuntu, Red Hat, SUSE)
- Intel, Portland Group and GNU Compilers
- OpenHPC Cluster Integration
- Microway Cluster Management Software (MCMS™)
- Legendary Service and Technical Support



Scalable Xeon Clusters

DELIVERED READY TO RUN

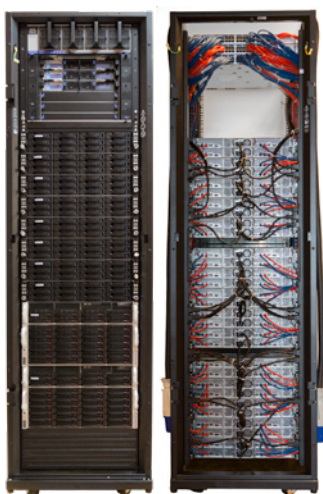


NumberSmasher Clusters

Microway's robust, Intel Xeon-based NumberSmasher clusters offer high-speed InfiniBand or Omni Path interconnects, NVIDIA GPUs, MCMS Remote Cluster Management and Monitoring Tools or the OpenHPC stack, and software including Intel Compilers and Cluster Tools.

Microway provides fully integrated Linux clusters at very competitive prices. Users worldwide pushing the limits of technology in life sciences, universities, commercial and government research count on our expertise and attention to detail.

Delivering Innovative HPC Solutions Since 1982



	NumberSmasher Cluster Options
Processor	Intel® Xeon® Scalable Processor Platinum (2, 4, 8 socket) Intel® Xeon® Scalable Processor Gold, Silver or Bronze (2P)
Processor Sockets	1P, 2P, 4P, 8P
Compute Nodes	1U, 2U, 3U, 4U, 5U, 2U Twin ²
GPU Options	NVIDIA® Datacenter GPUs
Visualization Node Option	NumberSmasher 1U, 2U, 4U GPU Compute Nodes
Memory per Node	2P: up to 6 TB DDR4 ; 2U Twin ² 2P: 6 TB DDR4, 4P: Up to 12 TB
Disk/Media Bays	1U: 4x3.5" or 10x2.5" Hard Drives, 2U Twin ² : 3x3.5" Hard Drives, or 6x2.5" Hard Drives
	Diskless compute node configurations available
Cluster Interconnect	Mellanox® ConnectX®-5 EDR and ConnectX-6 HDR InfiniBand Omni-Path, 100G, 50/25G, 10G Ethernet or Gigabit
Management Interface	IPMI v 2.0, OpenBMC, or Redfish
Storage Options	Gigabit Ethernet, InfiniBand Storage NAS, Open-E, Nexsan, IBM Spectrum Scale, LUSTRE®, BeeGFS, or Panasas®
Operating Systems	Linux: CentOS, Ubuntu, Red Hat, SUSE; Windows Server
Compilers	Intel, PGI and GNU
Cluster Software	MVAPICH2, OFED, and OpenMPI; Intel MPI, IBM Spectrum MPI; SLURM, IBM Spectrum LSF, or PBS
Monitoring & Management Software	Microway Cluster Management Software or OpenHPC MPI Link-Checker™ and InfiniScope™ Bright Cluster Manager Standard or Advanced Edition IBM Spectrum Cluster Manager
Cabinets and Infrastructure	APC® NetShelter™ Cabinets, APC PDUs and UPS Protection
Services	Optional Onsite Installation, Factory Pre-Installation Service (Including Power/Network Wiring and Rails) Optional complete-rack air-ride shipment (roll-off, power-on)
Hardware Warranty	Advanced replacement parts or return-to-factory Optional extended warranty term up to 5 years

www.microway.com/xeon

Call our technical sales team at **508.746.7341**