

HIGH PERFORMANCE FOR DEMANDING WORKLOADS:

# Intel® Xeon® Solutions



## NumberSmasher® 2U Twin or 2U/3U Twin<sup>2</sup> Servers

### Greatest Density

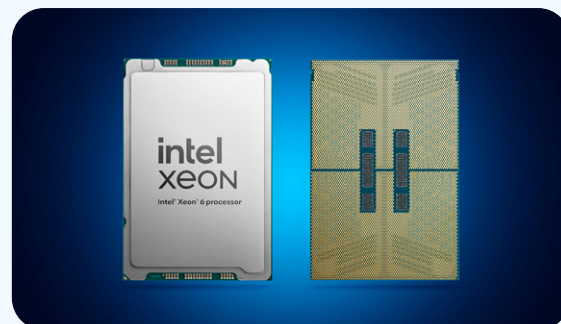
Support the greatest rack density with up to 4 nodes in 2U (liquid-cooling, P-core) or 2 nodes in 2U (air cooling, P-core). This elegant platform strikes a balance between shared & dedicated infrastructure for superior cost/performance vs 1U servers for clusters and improved rack density.



## NumberSmasher 1U, 2U, and 4U 2P Xeon Servers

### Superior Flexibility

Achieve ultimate performance in flexible configurations for any compute requirement. Available in 1U, 2U, or 4U designs. Architected with NVMe flash storage and high-bandwidth, low-latency fabric, these systems are reliable high-performance single servers or cluster nodes. Available with P-cores or E-cores.



## Intel Xeon 6 Processors: Diverse Options for Performance and Efficiency

Advanced Performance	Mainstream Series
<b>Intel Xeon 6900P (with P-cores)</b> <ul style="list-style-type: none"> <li>72-128 cores per CPU</li> <li>12ch memory, DDR5-6400 or MR DIMMs (8800MT/sec)</li> <li>1.7X -2.3X the memory BW of the previous generation</li> <li>Supports AVX-512 and HyperThreading, AMX w/ FP16</li> <li>High Performance Cores w/up to 500W TDP - HPC, AI, more</li> </ul>	<b>Intel Xeon 6700P (with P-cores)</b> <ul style="list-style-type: none"> <li>Up to 86 cores per CPU</li> <li>8ch DDR5 memory</li> <li>Supports AVX-512 and HyperThreading, AMX w/ FP16</li> <li>High Performance Cores w/up to 350W TDP - Enterprise Compute and HPC</li> </ul>
<b>Intel Xeon 6900E (with E-Cores)</b> <ul style="list-style-type: none"> <li>Up to 288 cores per CPU</li> <li>12ch DDR5 memory</li> <li>Efficiency core architecture</li> <li>High core density with up to 500W TDP- Cloud &amp; VM Density</li> </ul>	<b>Intel Xeon 6700E (with E-cores)</b> <ul style="list-style-type: none"> <li>64-144 cores per CPU</li> <li>8ch memory, DDR5-6400</li> <li>Efficiency core architecture</li> <li>High core density w/up to 350W TDP- Cloud/Storage Perf. per Watt</li> </ul>



## WhisperStation™

### Quiet Workstation Performance

Ultra-quiet workstation for standalone scientific computing use or as part of a quiet cluster. It provides up to 256 x86 cores using Xeon 6900 Processors with P-Cores, visualization or computation with NVIDIA RTX® Professional GPUs.



## NumberSmasher E3.S NVMe Servers

### 1PB in 2U

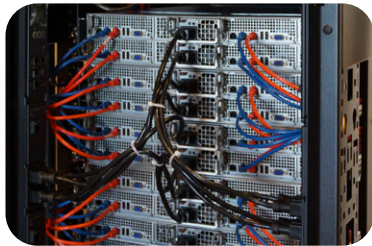
Scale up your high-performance storage with up to 1PB of NVMe in a 2U server. Supports up to 32x E3.S NVMe drives to achieve unmatched flash storage capacity and bandwidth in a 2U footprint. Built upon Xeon 6 processors with E-Cores.

## Custom Software Integration Specialists

- Linux: Rocky, Ubuntu, RHEL, SUSE, more
- Intel oneAPI & GNU Compilers
- Microway Cluster Management Software (MCMS™)
- Legendary Service and Technical Support

# Scalable Intel Xeon Clusters

**DELIVERED READY TO RUN**



## NumberSmasher Clusters

Microway's robust, Intel Xeon-based NumberSmasher clusters offer high-speed interconnects, GPUs, MCMS Cluster Management and Monitoring Tools, and software –including Intel oneAPI Compilers and Cluster Tools.

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

**Delivering Innovative HPC & AI Solutions Since 1982**



	<b>NumberSmasher Cluster Options</b>
Processor	Intel® Xeon® 6 Processors with P-cores (1, 2, 4, 8 sockets) Intel® Xeon® 6 Processors with E-cores (1, 2 sockets)
Compute Nodes	1U, 2U, 4U, 2U Twin, 2U Twin <sup>2</sup> , 3U Twin <sup>2</sup>
Accelerator Options	NVIDIA® Datacenter GPUs, Intel Gaudi
Visualization Node Option	NumberSmasher 4U GPU Compute Nodes
Memory per Node	2P: up to 8TB DDR5 ; 4P: Up to 16TB
Disk/Media Bays	1U: 12x U.3 NVMe, 16x E3.S NVMe 2U: 24x U.3 NVMe, 32x E3.S NVMe 2U Twin, 2U/3U Twin <sup>2</sup> : Varied
	Diskless compute node configurations available
Cluster Interconnect	NVIDIA Quantum-X800 (800Gb), NVIDIA Quantum-2 (NDR) or NVIDIA Quantum (HDR) InfiniBand Cornelis Omni-Path; 400G, 200G, 100G, 50/25G, 10G Ethernet
Management Interface	IPMI v 2.0, OpenBMC, or Redfish
Storage Options	Ethernet, InfiniBand Attached NFS Storage Servers; Open-E Parallel Storage: BeeGFS®, DDN EXAScaler®, Open Source Lustre®, VAST, WEKA, or VDURA
Operating Systems	Linux: Rocky, Red Hat, Ubuntu, SUSE, more; Windows® Server
Compilers	Intel oneAPI and GNU
Cluster Software	MVAPICH2, OFED, NVIDIA SHARP™ Intel MPI, OpenMPI, IBM Spectrum MPI; SLURM, PBS Professional, IBM Spectrum LSF
Monitoring & Management Software	Microway Cluster Management Software or OpenHPC MPI Link-Checker™ and InfiniScope™
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](http://www.microway.com/xeon)

Call our technical sales team at **508.746.7341**