Supermicro + SuSE = Open Source Solution Nirvana

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Supermicro Strong History

Founded in 1993; focused on X86 Servers
3X R&D Resource in the past 3 years
5X Capacity Growth in the past 7 years

24 Years of non-stop Revenue Growth and Profitability
Supermicro Progression

Innovation

Subsystems
- Motherboards
- Chassis and server building blocks

Server Systems
- BigTwin, NVMe / Simply Double, SuperBlade, BBP, GPU / co-processor solutions

Market

Channel: Distributors/VARs

Presence

Domestic

EMEA

Asia Pacific

Verticals:
- Cloud, Enterprise, Accelerated Computing

Targets:
- Enterprise
- Brand Recognition

Total Solutions
- Management software, Global service
- Optimized offerings for every refresh cycle
- World class quality
What Does “Workload-Optimized” Mean To You?

- The industry’s largest portfolio of servers & storage
- With design points favoring one or more characteristics
- Enables choice to match a workload to a server within your deployment parameters
- Supermicro uniquely offers the right no-compromise, workload-optimized system for your exact needs
Why Upgrade To 2nd Gen Intel® Xeon® Scalable?

A faster chip, with more features, for the same price
- 35% faster (or more) – at the same price
- Or, lower price for the same performance
- Enables Intel® Optane™ DC persistent memory
- Intel® Deep Learning Boost (VNNI) for faster AI processing
- Hardware-enhanced security & side-channel mitigation

An entirely new tier of memory
- Affordable large memory, in 128GB/256GB/512GB DIMMs
- Less expensive than DRAM
- Far faster than SSDs
- With persistence that provides increased application performance and availability

The Result: Better & Faster Business Outcomes
Memory Hierarchy in Human Terms

<table>
<thead>
<tr>
<th>Storage Type</th>
<th>Access Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Cache On-Die</td>
<td>5ns</td>
</tr>
<tr>
<td>DRAM DDR 30ns</td>
<td>&lt;100ns</td>
</tr>
<tr>
<td>Block-Mode NVDIMM</td>
<td>&lt;10µs</td>
</tr>
<tr>
<td>3D XPoint™ NAND</td>
<td>&lt;10µs</td>
</tr>
<tr>
<td>NVMe SSD 25µs</td>
<td></td>
</tr>
<tr>
<td>SATA SSD 300µs</td>
<td></td>
</tr>
<tr>
<td>SAS HDD 10K RPM</td>
<td>6ms</td>
</tr>
<tr>
<td>All Flash Array</td>
<td>12ms</td>
</tr>
<tr>
<td>Hybrid Array SAN</td>
<td>30ms</td>
</tr>
<tr>
<td>Hybrid SAN</td>
<td>7.2K 10K 15K</td>
</tr>
</tbody>
</table>

Volatile | Non-Volatile

- DRAM
- NVDIMM
- 3D XPoint™
- NVMe SSD
- Hybrid SAN

1 Second | 6 Seconds | 20 Seconds | 30 Minutes | 90 Min | 16 Hrs | 2 Weeks | 1 Month | 2.5 Months
All-Flash For All Tiers Of Storage

**Tier-1 High Performance Storage**
- **1U Ultra SuperServer**
  - Dual Socket Platinum Xeons®
  - 20 Hot-Pluggable NVMe Drives

**Tier-2 Capacity Storage**
- **1U U.2 NVMe**
  - Dual Socket Petascale Storage
  - 32 Hot-Pluggable U.2 Drives

**HCI Multi-Node Storage**
- **2U BigTwin™**
  - Four Dual Socket Nodes
  - 6 NVMe Drives per Node
- **1U Ultra SuperServer**
  - Dual Socket Platinum Xeons®
  - 10 Hot-Pluggable NVMe Drives
- **1U NF1**
  - Dual Socket Petascale Storage
  - 32 Hot-Pluggable NF1 Drives
Designing For Internet-Scale While Reducing TCO

High efficiency & high density systems optimized for maximum per-node performance

Systems optimized for high core count & core/$

- **2U BigTwin™**: Four Dual Socket Nodes
  - Shared Power & Cooling

- **SuperBlade®**: Density Up to 14 Nodes in 6U
  - Disaggregated Architecture

- **2U 4-Way MP**
  - Up to 112 Cores in 2U

- **SuperBlade®**
  - Up to 1120 Cores in 8U
  - Density Up to 10 4-Socket Nodes
Increase Business Velocity With AI

Flexible training systems supporting the most powerful GPUs

10U GPU SuperServer
Up to 16 NVIDIA® V100 GPUs
NVLink™ & NVSwitch™ Connectivity

4U GPU SuperServer
Up to 8 NVIDIA® V100 GPUs
NVLink™ Connectivity

With a portfolio of inferencing systems for every need

1U GPU SuperServer
Up to 4 NVIDIA® T4 GPUs

2U GPU SuperServer
Up to 6 NVIDIA® T4 GPUs

4U GPU SuperServer
Up to 8 NVIDIA® T4 GPUs

6U GPU SuperServer
Up to 20 NVIDIA® T4 GPUs
Harnessing 5G To Increase Service Value & Delivery

**Devices/Things**

- **1U Single/Dual Socket Systems**
  - Front I/O or Rear I/O
  - Short-Depth

- **Embedded Servers**
  - Xeon® D-2100
  - 32 LANs in 4 AIOMs

- **1U U.2 NVMe**
  - Dual Socket Petascale Storage
  - 32 Hot-Pluggable U.2 Drives

**Intelligent Edge**

**Core/Cloud**

- **2U BigTwin™**
  - Four Dual Socket Nodes
  - 6 NVMe Drives per Node

- **2U Ultra SuperServer**
  - Dual Socket
  - 24 NVMe Drives

- **Four Dual Socket Nodes**
  - 6 NVMe Drives per Node

**The INTERNET of THINGS**
Thank You

For more information, visit www.supermicro.com or contact marketing@supermicro.com
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