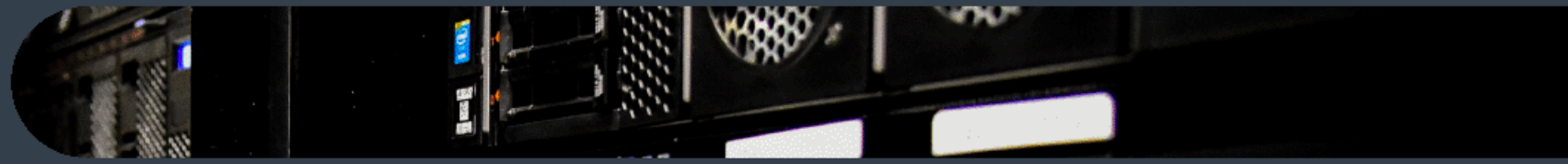


How Lenovo can help your AI

June 13, 2018 | Dave Weber, Director & CTO, Lenovo

Lenovo – AI End-to-end Strategy

DATA CENTER & CLIENT SOLUTIONS

$1.2 Billion
AI Investment

"AI has changed everything and big data analysis is what large companies depend on."

Yang Yuanqing
CEO - Lenovo

AI Research
Providing tools and expertise to accelerate AI innovation.

Enterprise AI Solutions
Empowering organizations to launch their AI initiatives.

AI Exploration
Democratizing AI for all.

100+ Data Scientist & Developers

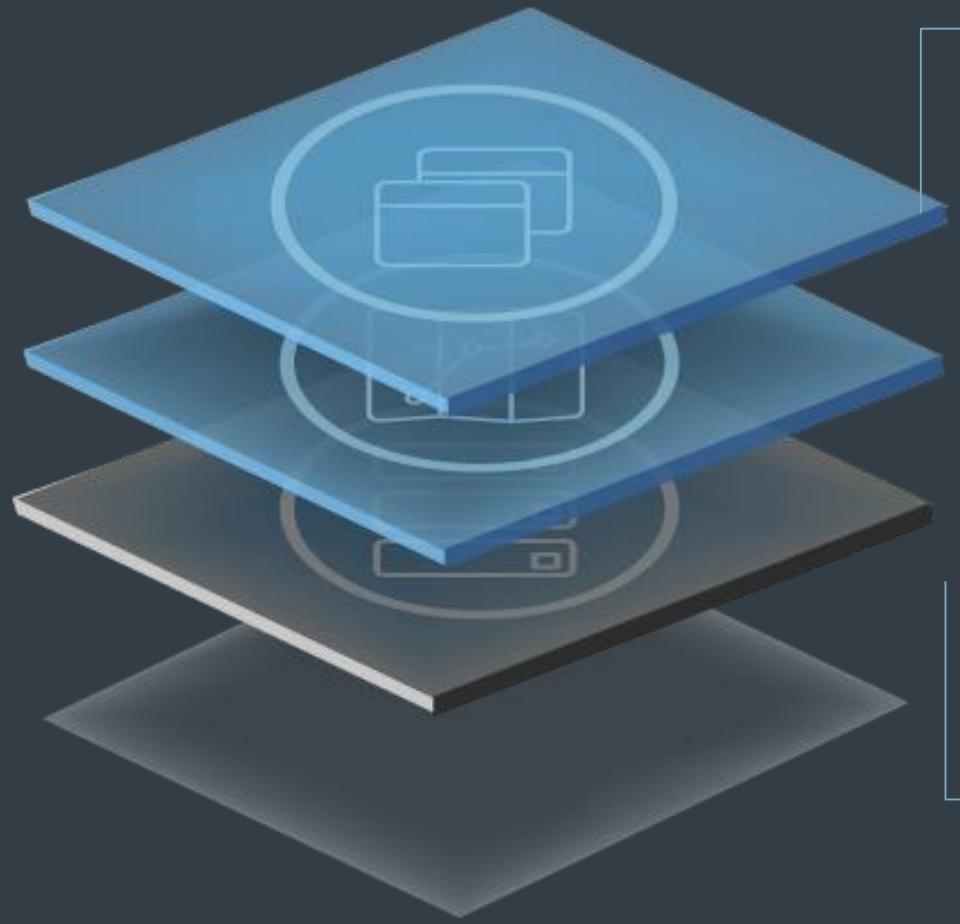
AI Research & Innovation Centers

AI HW & SW Platforms

End-to-end Solutions

LiCO - A Platform For AI Development

LiCO - Lenovo Intelligent Computing Orchestration



- Web Portal
- Pre-trained Models
- Workflow Templates
- Distributed AI Training
- AI Frameworks

TensorFlow Caffe mxnet

- Open-Source Cluster Management
- Optimized HW Libraries

intel NVIDIA

Lenovo

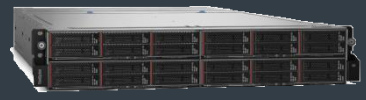
Develop On Lenovo AI Platforms

THE RIGHT RESOURCES TO GET STARTED

TRAINING PLATFORMS

ThinkSystem SR950
4U, 4-8 Intel Xeon
Big Data Platform

ThinkSystem SD530
2U, 4 x 2 Intel Xeon



ThinkSystem SD530
2U, 2 x 2 Intel Xeon,
2 x 2 NVIDIA Tesla V100

Increasing performance

INFERENCE PLATFORMS

ThinkSystem SD530
2U, 4 x 2 Intel Xeon

ThinkSystem SR650
2U, 2 Intel Xeon,
2 x NVIDIA Tesla V100

ThinkSystem SD530
2U, 2 x 2 Intel Xeon,
2 x 2 NVIDIA Tesla V100

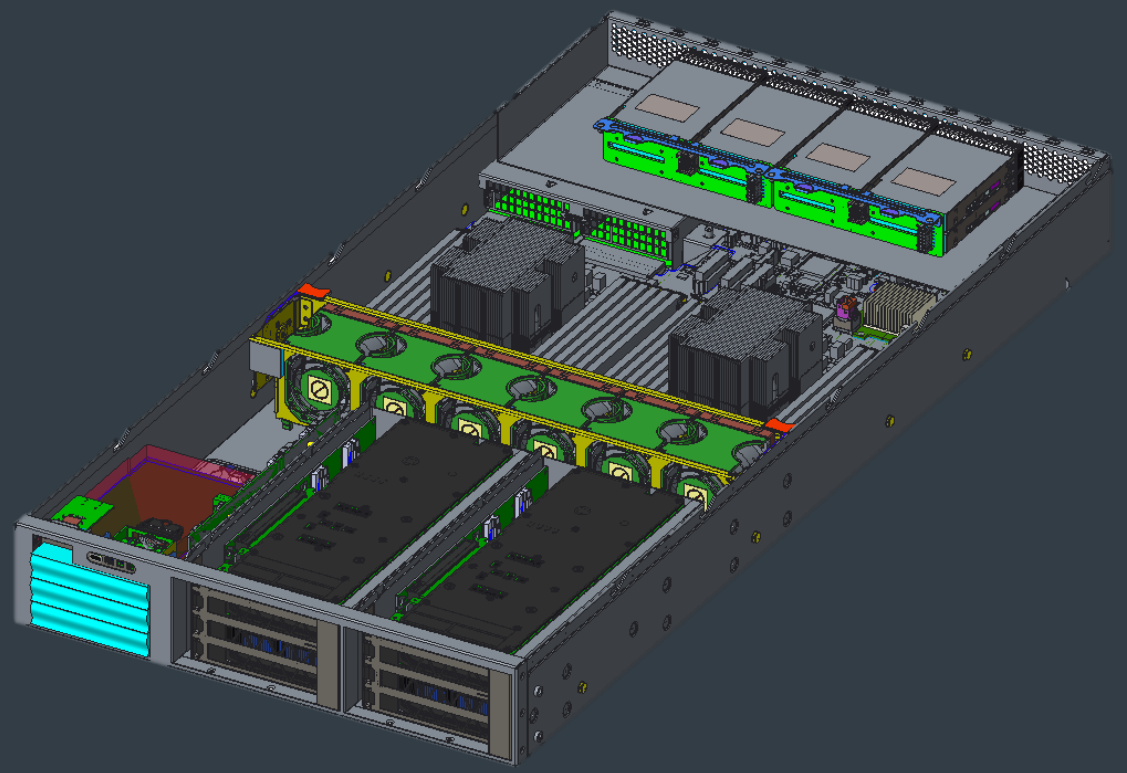
LiCO v5.1

LiCO for AI
A single software stack to efficiently manage HPC and now AI workloads

ThinkSystem

Lenovo AI/ML Preview: 2U, 2S, 4 GPU System*

- Mechanical
  - 2U, 19” Rack Server
- CPU
  - 2 Socket CPU (205W Max TDP)
- Memory
  - Up to 24 DIMMs, 16/32/64GB
- GPU
  - Up to 4 double wide passively cooled GPUs
  - Up to 8 passively cooled single wide FHHL GPUs
- Storage
  - M.2 Adapter (Single Drive or Dual Drive)
  - Up to 24 SAS/SATA HDD/SSDs (up to 8 NVMe)
- Network
  - Up to 3 PCIe Adapters
  - Dedicated GbE Management Port
- OS Support
  - Ubuntu, RHEL7.4, SLES13, Windows, VMware



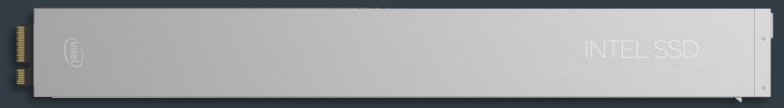
* Final features and schedules subject to change

Next Generation Flash Form Factors

EDSFF A broad industry collaboration.

Enterprise & Datacenter SSD Form Factor Working Group

Enterprise and Data Center SSD Form Factors



EDSFF 1U Long

EDSFF 1U Short

- **Capacity Scaling.**
  1U Long > u.2, 1U Short > m.2. **3-4X** number of drives
- **Performance Scaling.**
  x4, x8, x16 support
- **Future Ready.**
  PCIe* 4.0 and 5.0 ready
- **Thermal Efficiency.**
  50-300% less airflow required than U.2
- **Solution Range.**
  1U Long, 1U Short, cased, caseless designs

Optimized to deliver new value in servers and storage systems

1U Short and 1U Long Spec: https://edsffspec.org/edsff-resources/

Different is better