Interconnect Your Future with Mellanox

Paving the Road to Exascale

Forum Teratec - June 2017

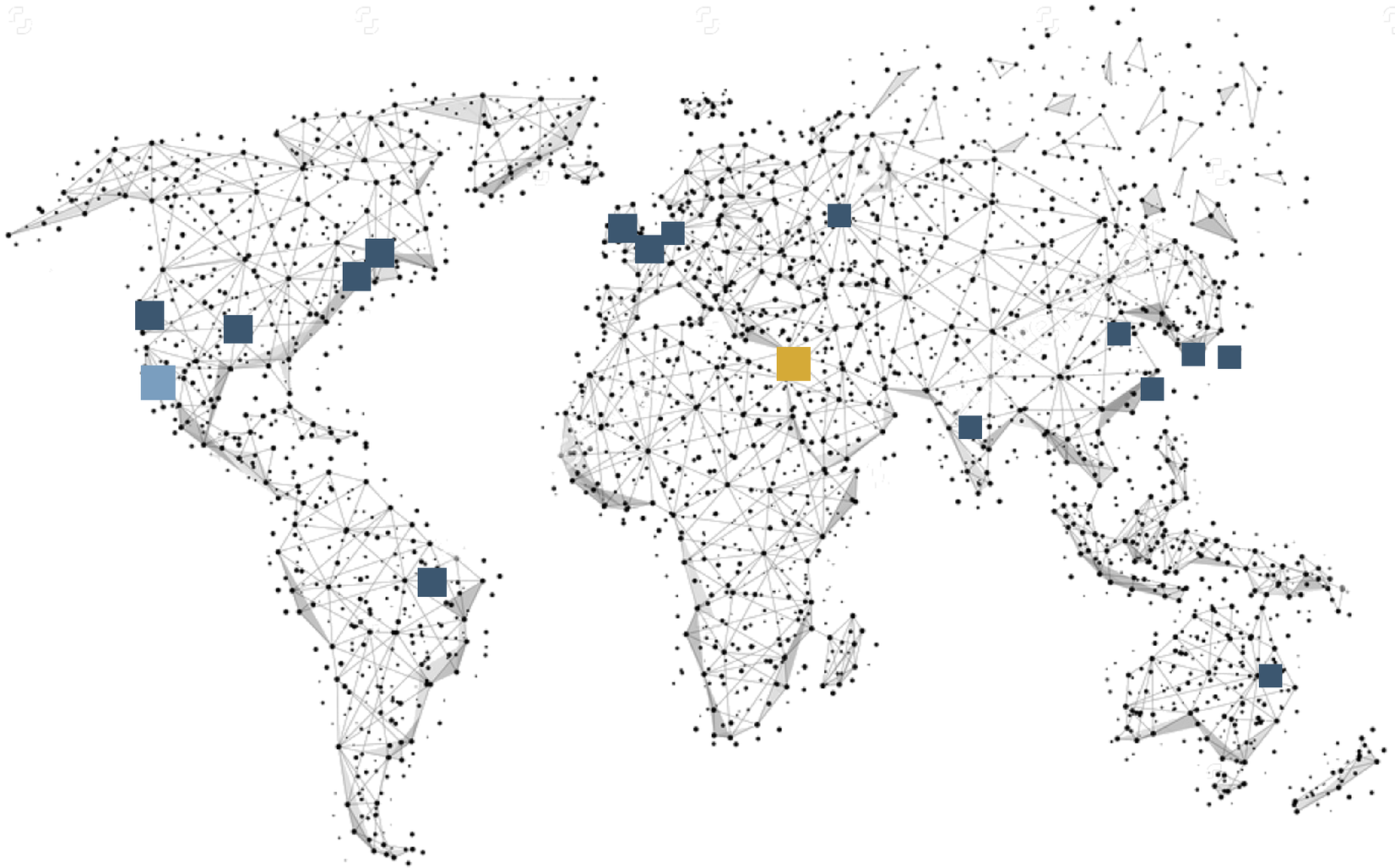
Mellanox TECHNOLOGIES

Connect. Accelerate. Outperform.™

Mellanox Overview

Company Headquarters

- Yokneam, Israel
- Sunnyvale, California
- Worldwide Offices



~2,900

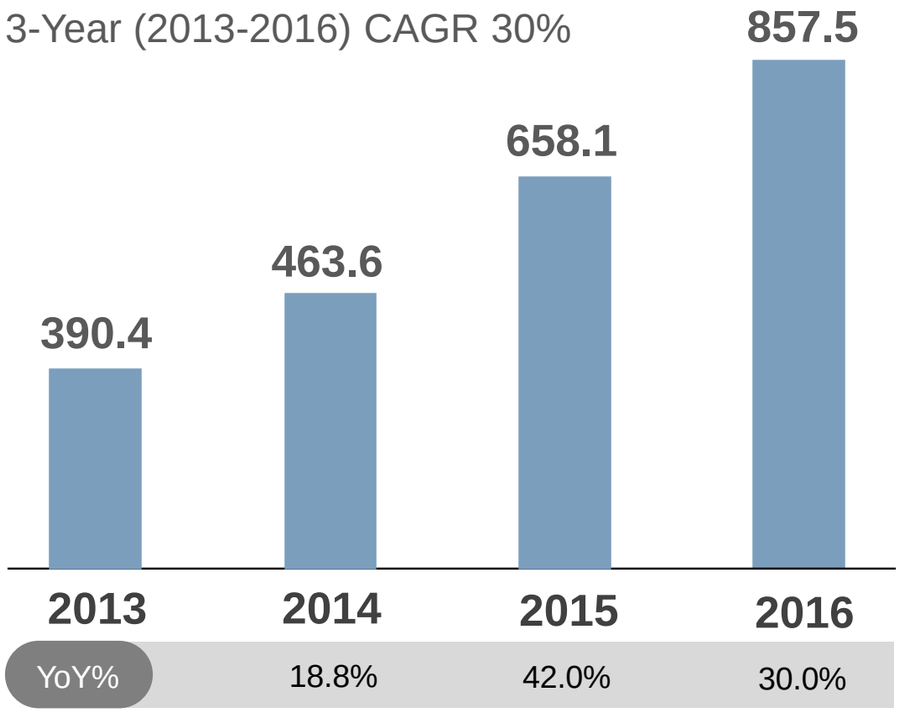
Employees worldwide

NASDAQ®

Ticker: MLNX

Approaching $1 Billion in Annual Revenues

3-Year (2013-2016) CAGR 30%

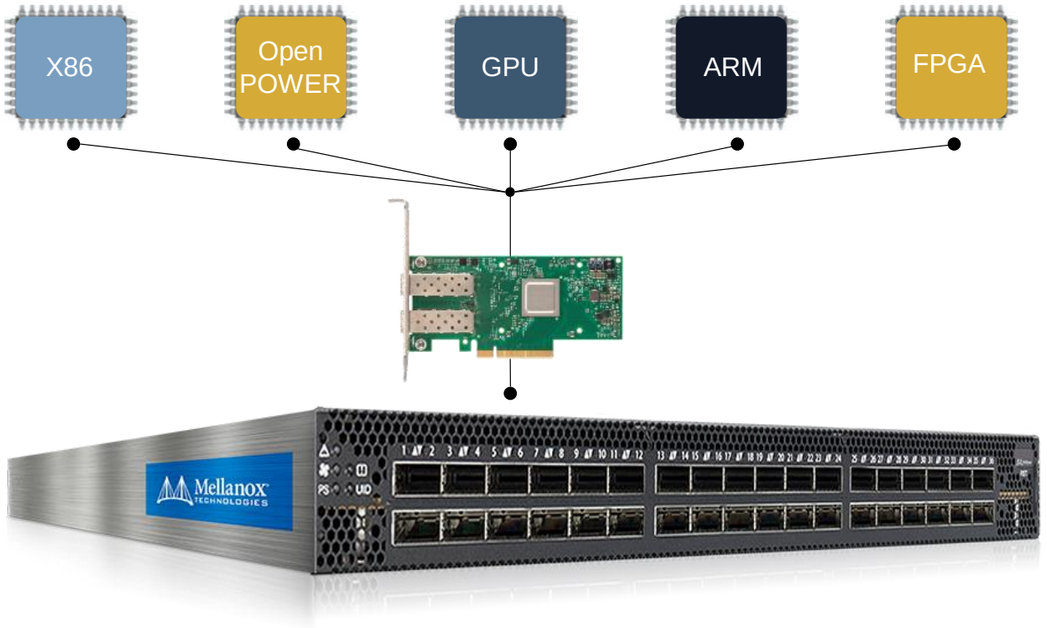


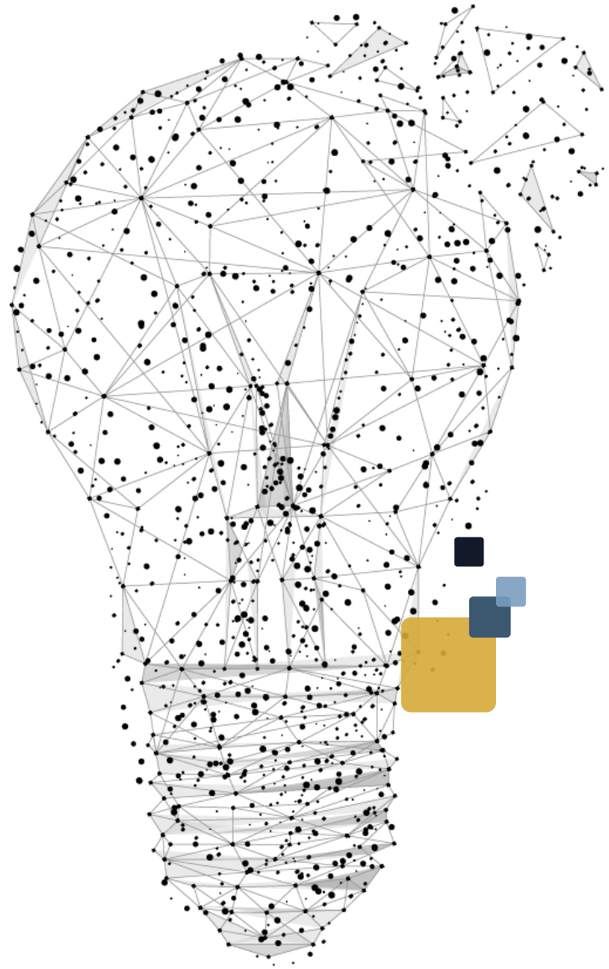
Historical Annual Revenue ($M)

Source: Company financial statements

End-to-End Solutions for All Platforms

Unleashing the Power of all Compute Architectures





Highest Performance & Scalability for

Power, x86, GPU, ARM & FPGA-based Compute and Storage Platforms

10, 20, 25, 40, 50, 100 & 200Gb/s Speeds

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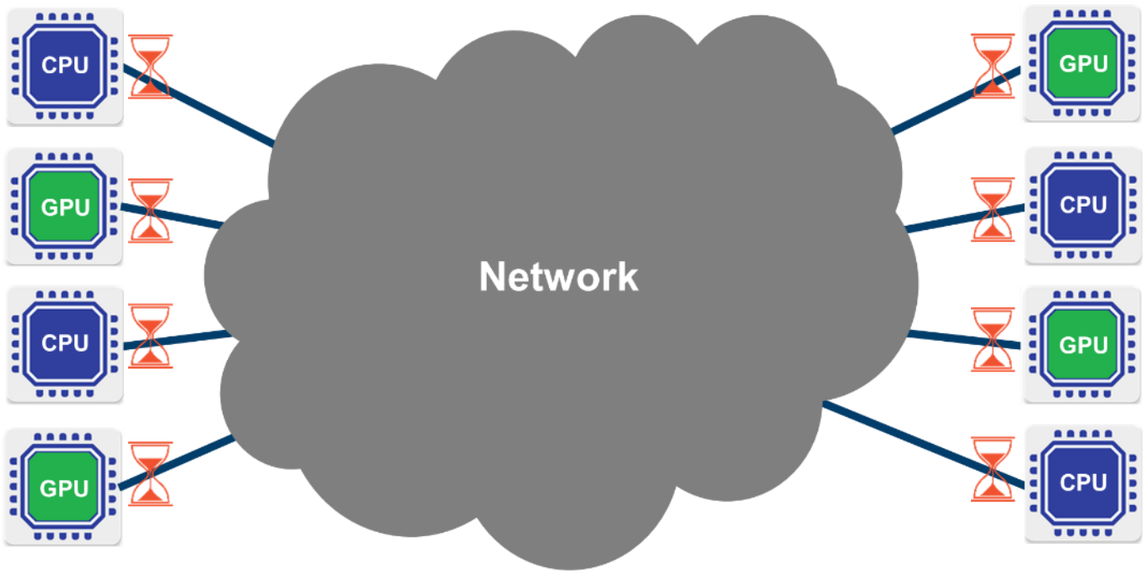
Exponential Data Growth – The Need for Intelligent and Faster Interconnect

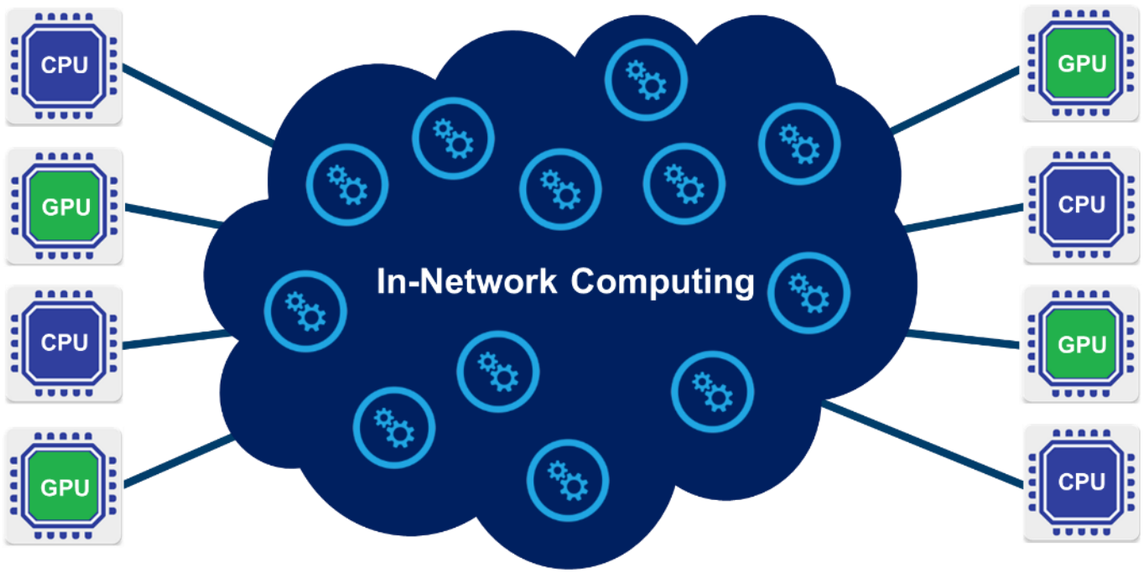
CPU-Centric (Onload)



Must Wait for the Data

Creates Performance Bottlenecks

Data-Centric (Offload)



Analyze Data as it Moves!

Faster Data Speeds and In-Network Computing Enable Higher Performance and Scale

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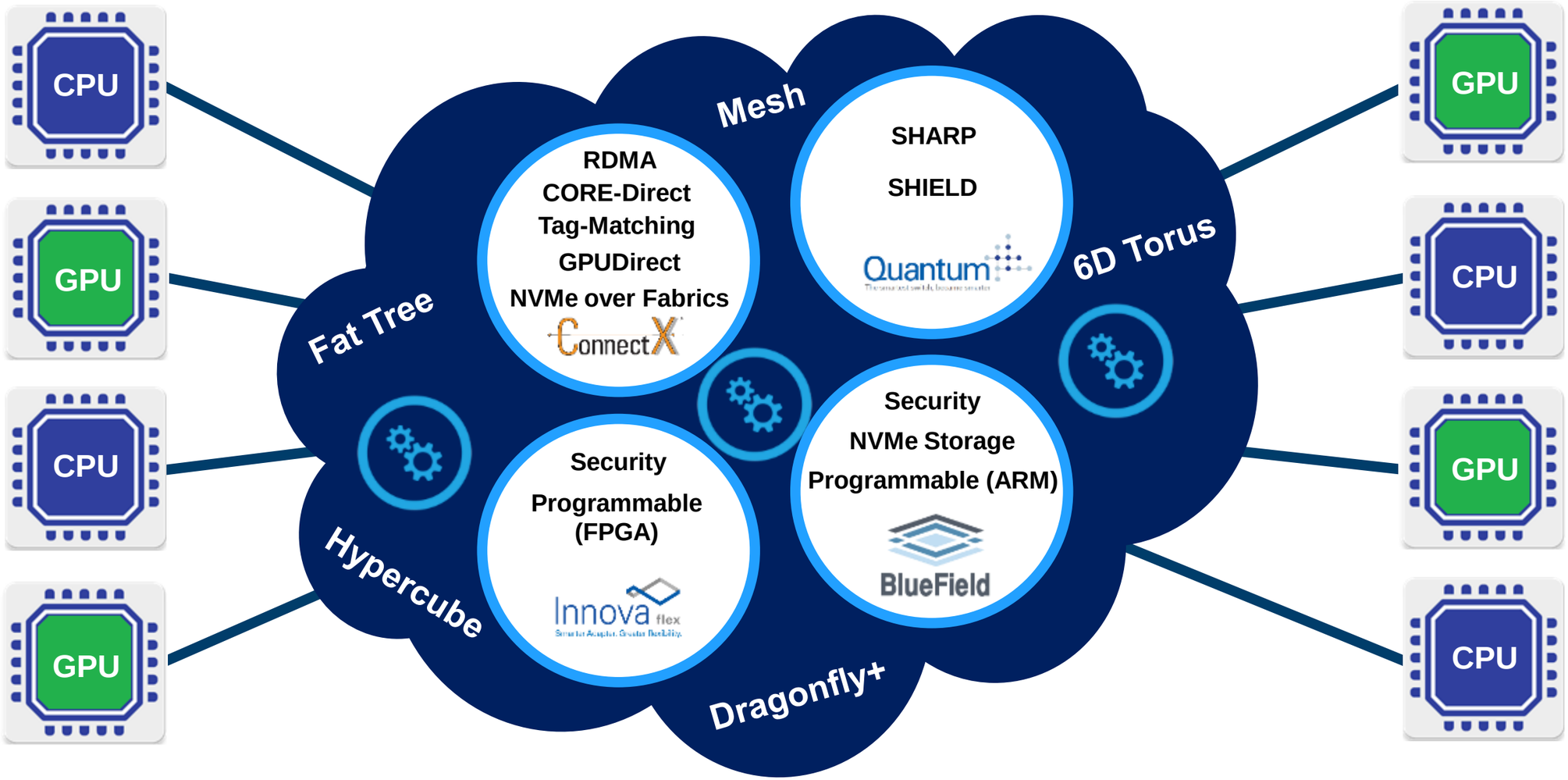
The Generation of In-Network Computing – 10X Higher Performance



In-Network Computing Key for Highest Return on Investment

InfiniBand Delivers Best Return on Investment

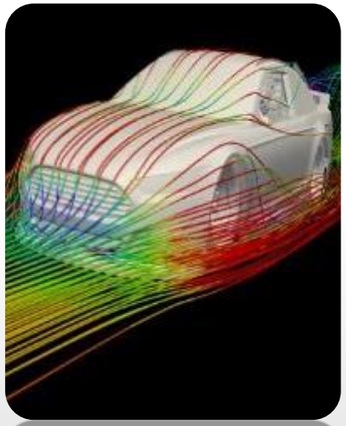
30-100% Higher Return on Investment

Up to 50% Saving on Capital and Operation Expenses

Highest Applications Performance, Scalability and Productivity

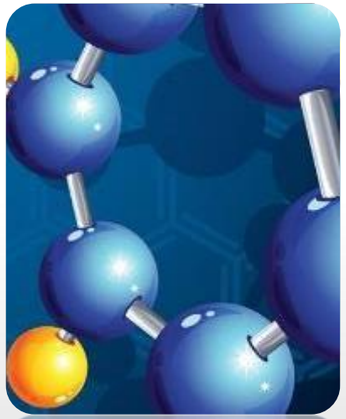
Weather

1.3X Better



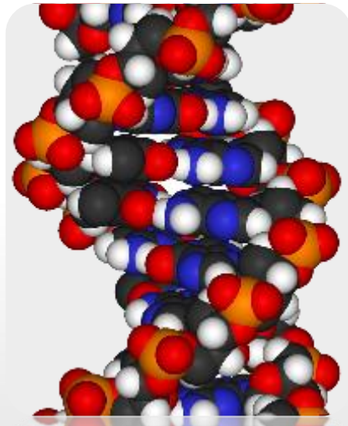
Automotive

2X Better



Chemistry

1.4X Better



Molecular Dynamics

1.7X Better

Genomics

1.3X Better

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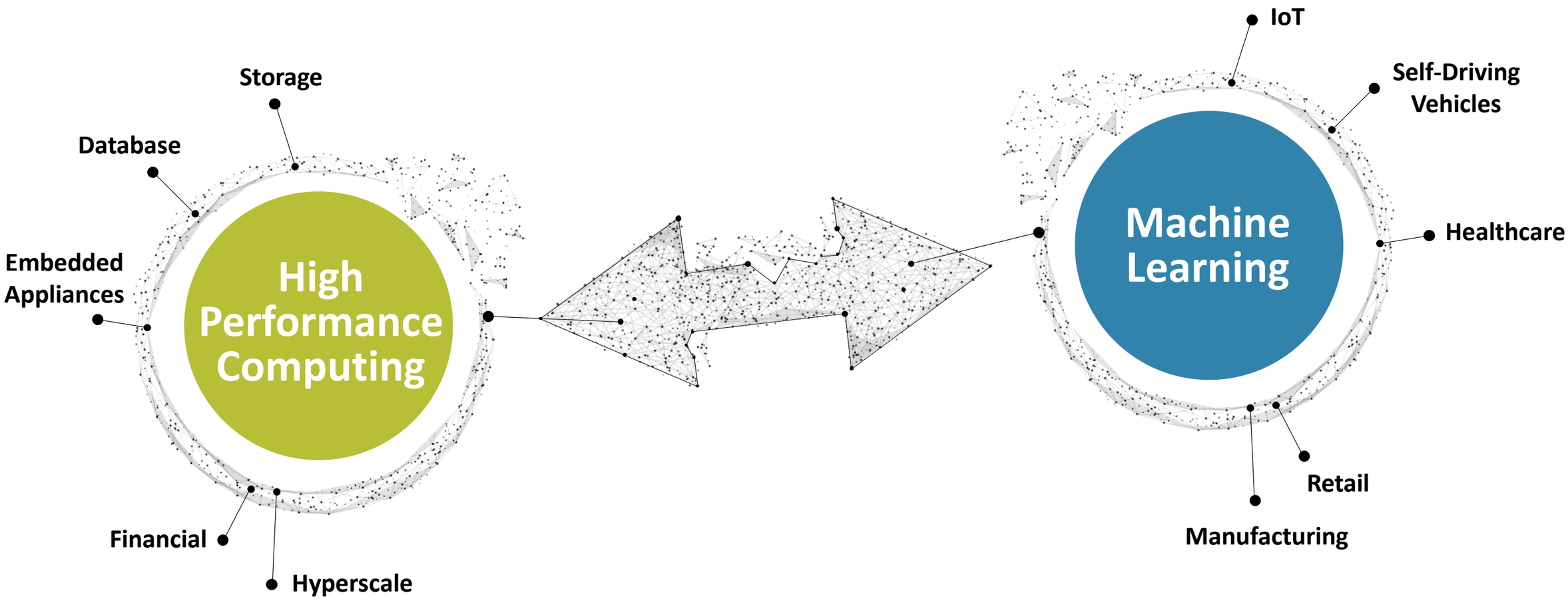
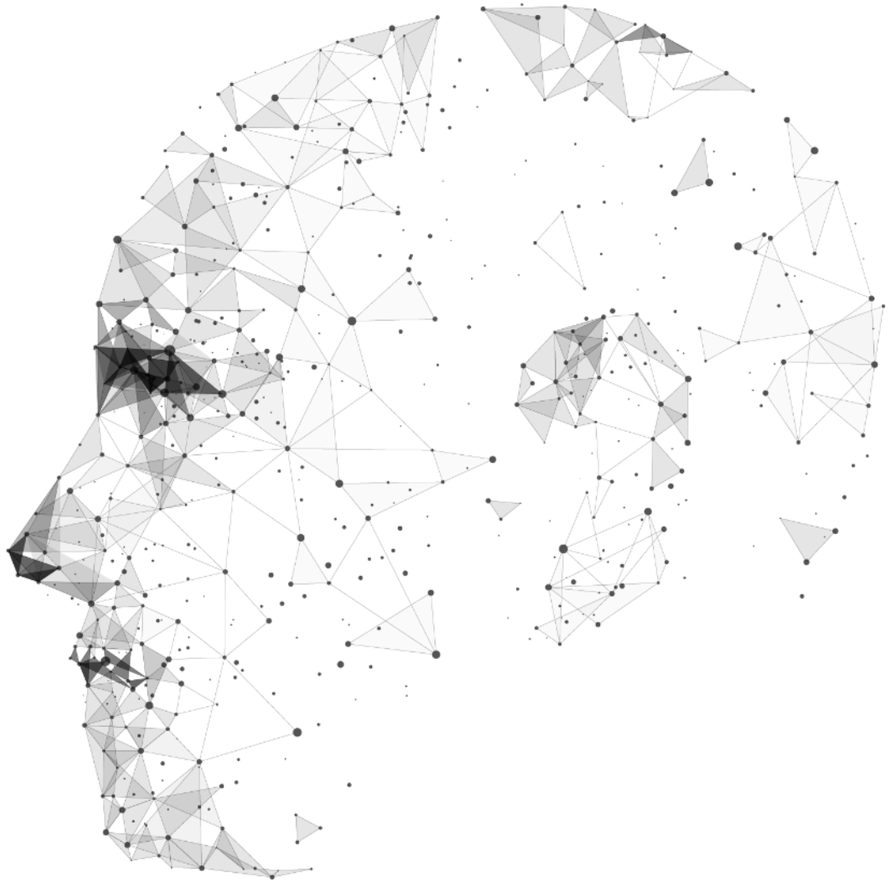
Enabling the Future of Machine Learning Applications



HPC and Machine Learning Share Same Interconnect Needs

Enabling Most Efficient Machine Learning Platforms

- OCP Big Sur Artificial Intelligence Platform
- Real Time Fraud Detection
- Machine Learning System with 400Gb/s
- 18X Speedup For Image Recognition
- 4X Speedup For Image Recognition
- Data Analytics Image Recognition
- World Record For Data Sort, 3X Faster



Allowing Machine learning to Perform Critical & Real Time Decisions

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Mellanox Accelerates Artificial Intelligence (AI) and Deep Learning

NVIDIA AI Supercomputer

#31 on the TOP500 List

Facebook AI Supercomputer

#32 on the TOP500 List

- EDR InfiniBand In-Network Computing technology key for scalable Deep Learning systems
- RDMA accelerates Deep Learning performance by 2X, becomes de-facto solution for AI

The Advantages of HDR InfiniBand Solutions

Maximum Performance and Highest Return on Investment

InfiniBand H·D·R 200

- **Higher** performance
- **Higher** efficiency
- **Higher** scalability
- **Higher** speed

World's First 200G Switch

World's First 200G Adapter

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Thank You

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