

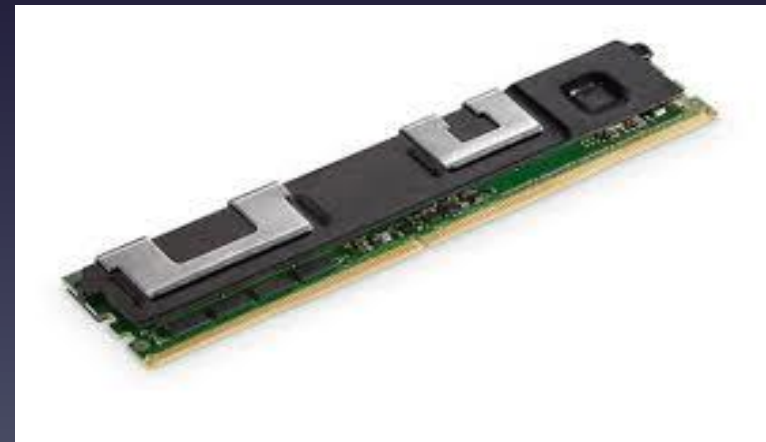
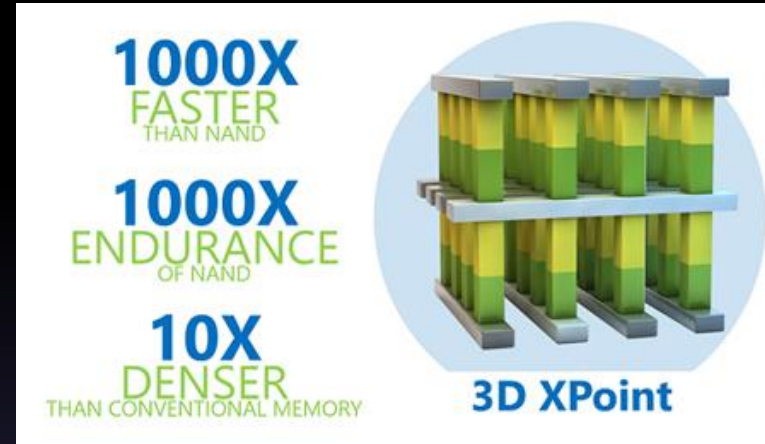


**MemVerge**

Memorize the Future

# A New Physics: 3D XPoint

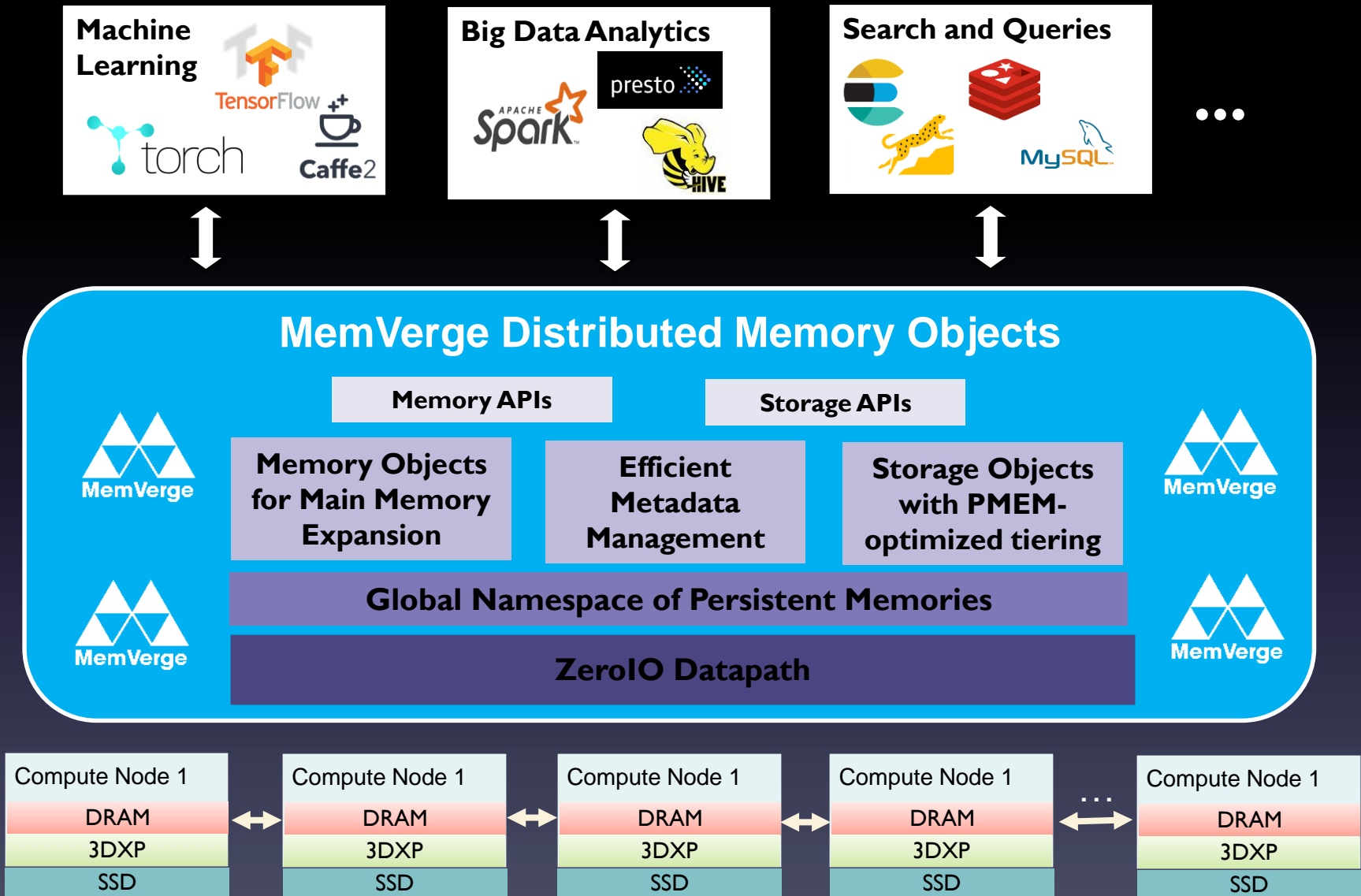
- Jointly developed by Intel and Micron
- Available as Intel Optane DC Persistent Memory in Q2 2019
  - A NEW addition to Optane SSD product available since 2017
- Volatile Memory Mode
  - Bigger capacity than DRAM (3TB/socket in 2019, 6TB/socket in 2020)
- Block Storage Mode
  - Lower latency than NVMe SSDs (100-250ns)
- App Direct Mode
  - New Persistent Memory programming model



# But...

- What distributed storage software stack shall I use?
  - Existing distributed storage software are not designed for media of this speed
- Can I expand my memory beyond the persistent memory of a single node
- Can I use it both for memory expansion and storage acceleration, without modifying my application logic?

# Memory Converged Infrastructure Platform



# Memory Converged Infrastructure

10x IO Speed

10x Memory Size

1-click App Deployment

RDBMS



Data Lake

presto







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