DPU Panel – Pliops

SDC Sep 2021

Mission

To massively accelerate performance and dramatically lower infrastructure costs for relational databases, NoSQL, in-memory databases, analytics, AI/ML, 5G, IoT, and other data intensive applications.

Team

Experts in database, flash storage, and semiconductors from industry leaders including Samsung, Intel, Kioxia, Amazon, Microsoft, VMware, Dell/EMC, Western Digital, Fusion-io, HPE, Apple, Nvidia, Cisco and Lenovo

Strategic Investors

intel Capital   NVIDIA   SoftBank Ventures Asia   WD Western Digital®   XILINX®

Industry Recognition

2021: CRN Top 10 Cool Tech Companies that Raised Funding in February

2021: Enterprise Storage Forum Top Computational Storage Companies

2020: Most Innovative Flash Memory Enterprise Business Application Product

2020: CRN Top 10 Hottest Semiconductor Startup

2019: Most Innovative Flash Memory Startup

PLiOPS
EXTREME DATA PROCESSOR

Pliops Extreme Data Processor

Performance		3-15x
Reliability		DFP 2x > RAID 0
Capacity		Up to 6x more
Efficiency		Lowest cost QLC, TLC for any workload

PLIOPS
EXTREME DATA PROCESSOR
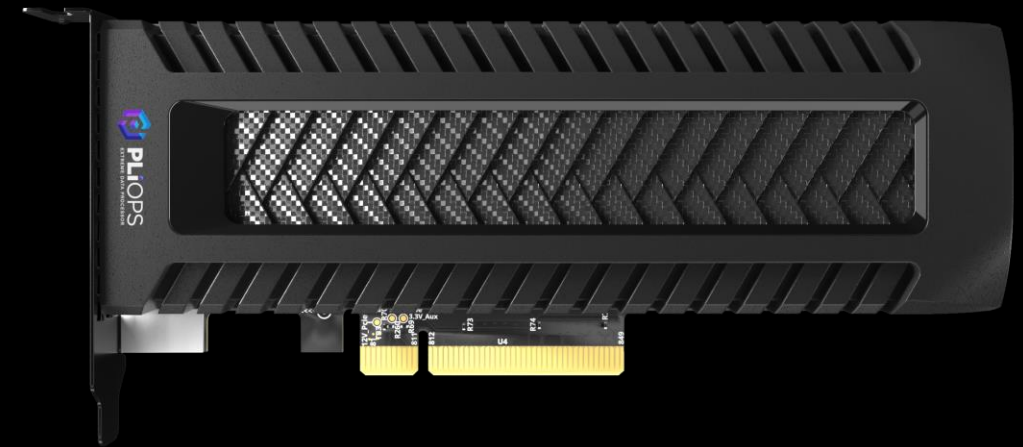
Yesterday's
COMPUTE CENTRIC

Today's
DATA CENTRIC

Future's
DATA CENTRIC

Edge
5G

Edge
5G

Yesterday's:

NETWORK

CPU
- Traffic Control
- Applications
- Storage Management

Storage

Today's:

NETWORK

CPU
- Traffic Control
- Applications
- Pliops XDP
- Storage Management

GPU
- AI/ML

SSD SSD SSD SSD

Multiplies:
- Performance
- Reliability
- Capacity
- Efficiency

Future's:

NETWORK

CPU
- DPU
- Traffic Control
- Pliops XDP
- Storage Management

CPU
- APPS

GPU
- AI/ML

SSD SSD SSD SSD

Furthers:
- Isolation
- Security
- Scaling

PLiOPS
EXTREME DATA PROCESSOR

Confidential

4

Disaggregation w/ Accelerated Storage Server

Pliops XDP

SSD Storage

Database Servers

KV or Block NVMe-oF
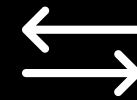
DPU

KV or Block Storage Server
w/ DPU and Pliops XDP
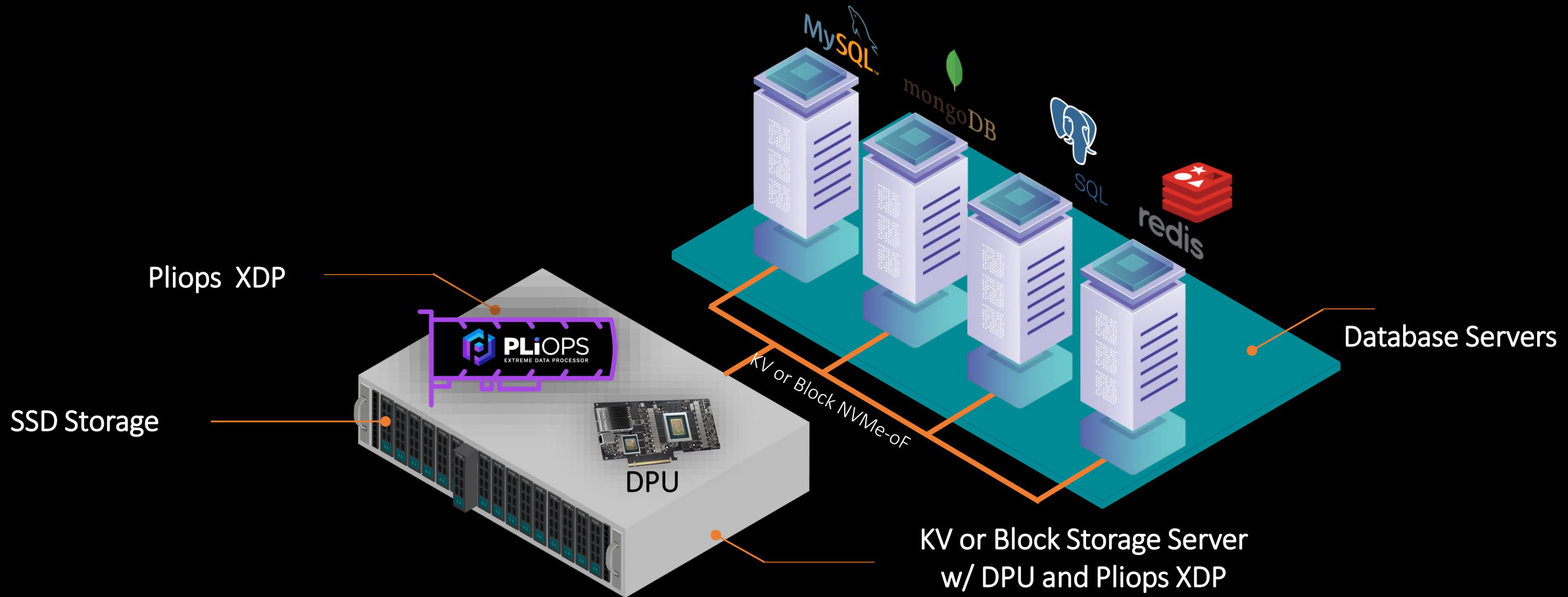
SCALE COMPUTE AND STORAGE INDEPENDENTLY

AGILITY TO RESPOND TO CHANGE AND FAILURES
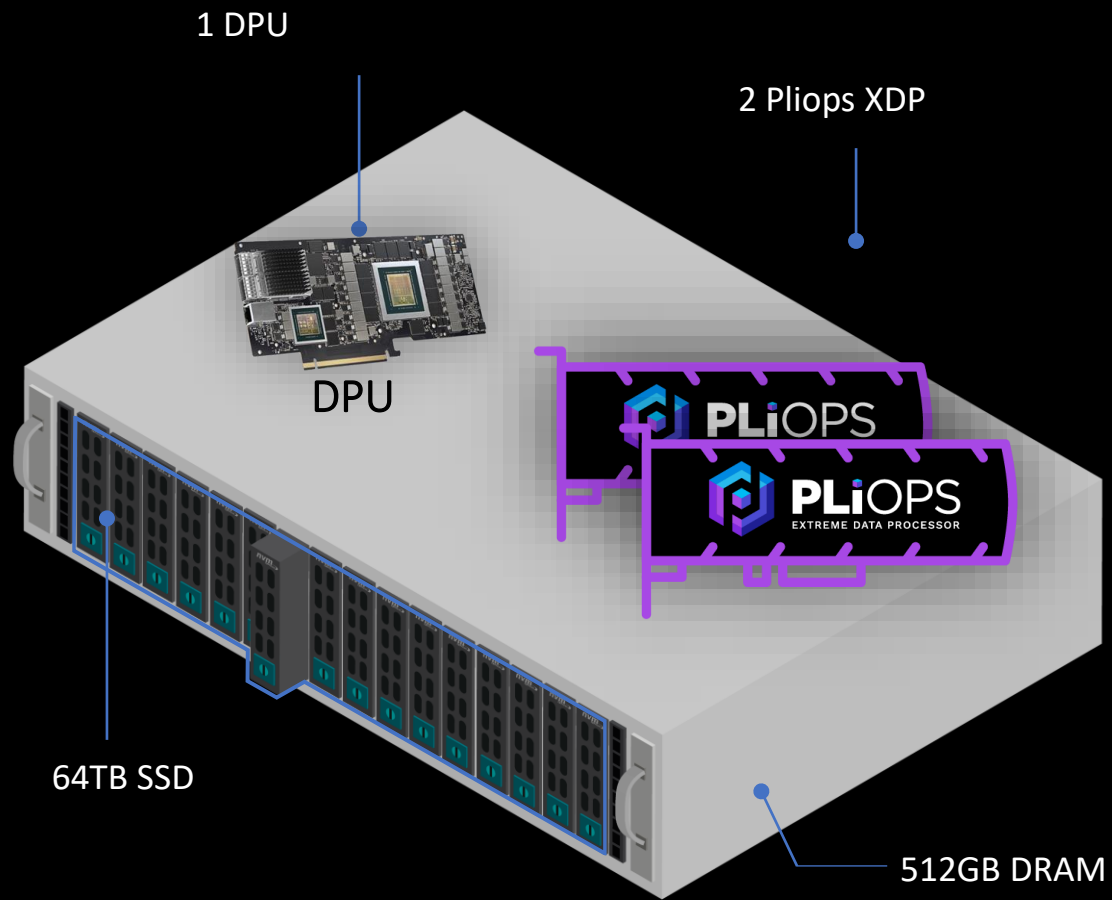
EASY TO DEPLOY IN EXISTING DATA CENTERS
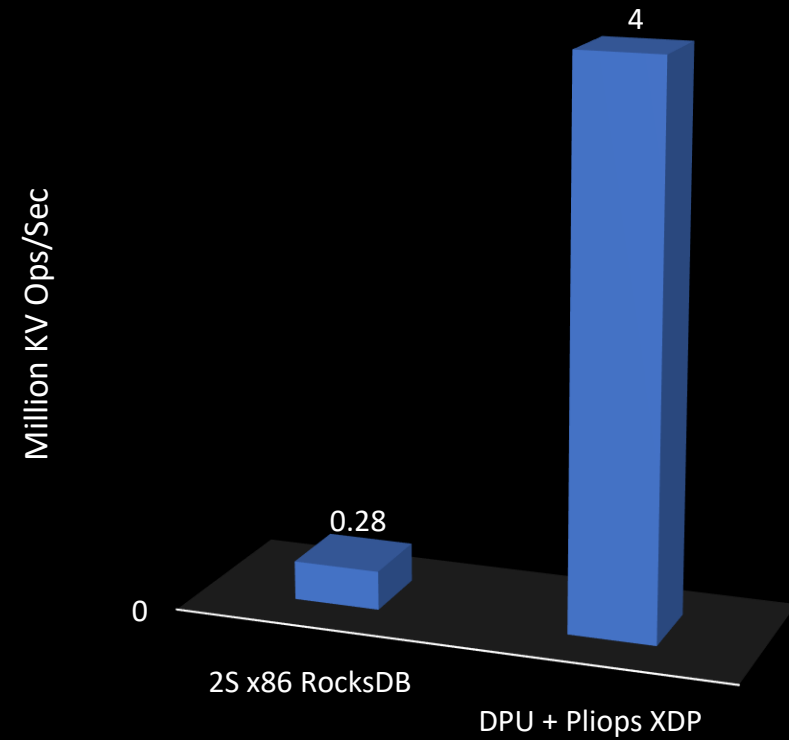
SHARE STORAGE ACROSS MANY APPLICATIONS

LOWER TOTAL COST OF OWNERSHIP

PLiOPS
EXTREME DATA PROCESSOR

Delivering New Level of Infrastructure Efficiency

1 DPU

2 Pliops XDP

DPU

PLiOPS

PLiOPS
EXTREME DATA PROCESSOR

64TB SSD

512GB DRAM

KV Storage Server powered by DPU

Million KV Ops/Sec

4

0.28

0

2S x86 RocksDB

DPU + Pliops XDP

PLiOPS
EXTREME DATA PROCESSOR