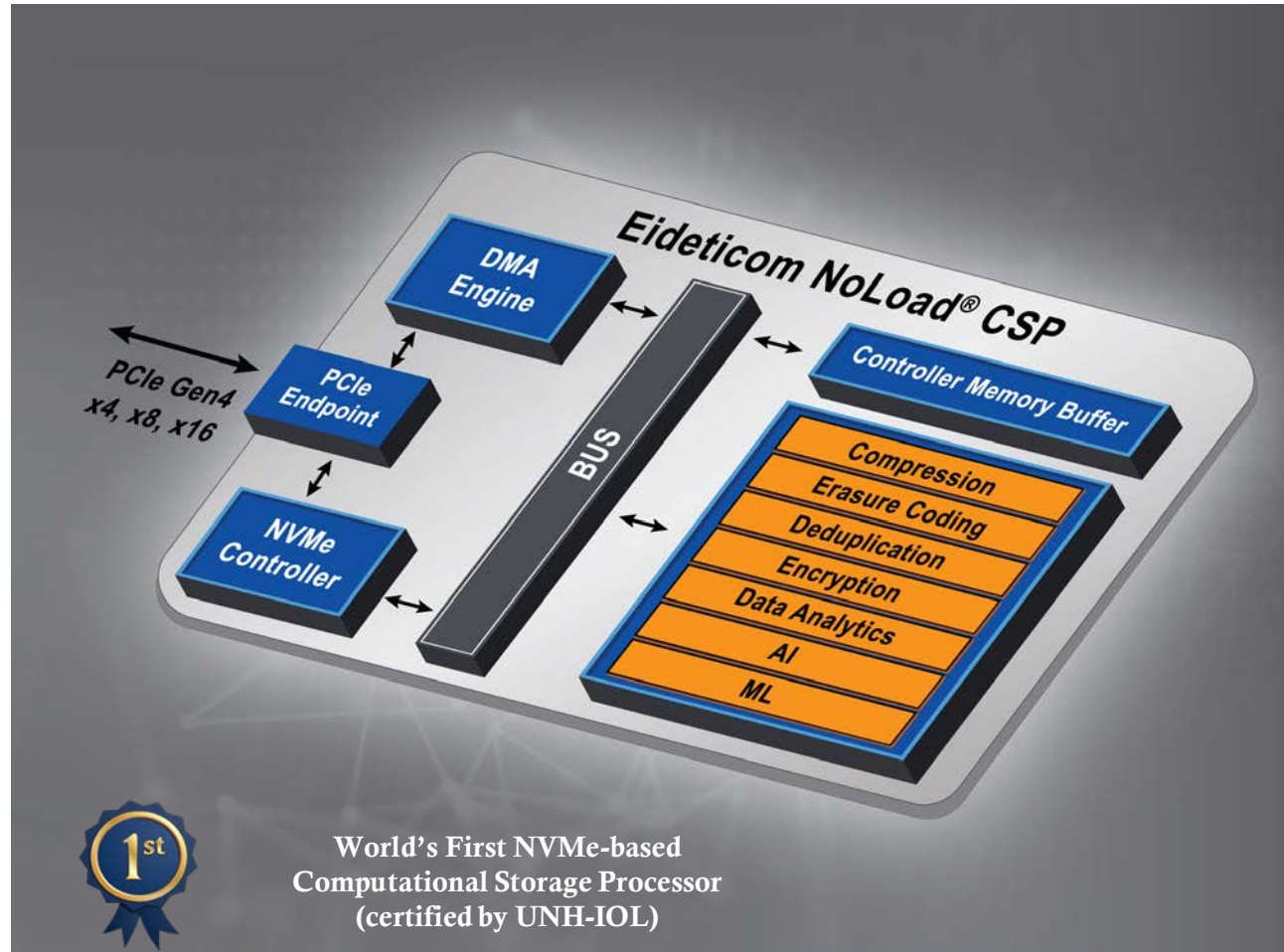




Accelerate Everything

EDSFF for NVMe Computational Storage Processors

Flash Memory Summit 2019



Best-In-Class Storage and Analytic Acceleration delivered via an NVMe-based Computational Storage Processor.

Available Now

NoLoad[®] CSP U.2

- Standard U.2 NVMe form-factor: Utilizing SFF-8639 connector
- BittWare 250-U2



NoLoad[®] CSP Alveo

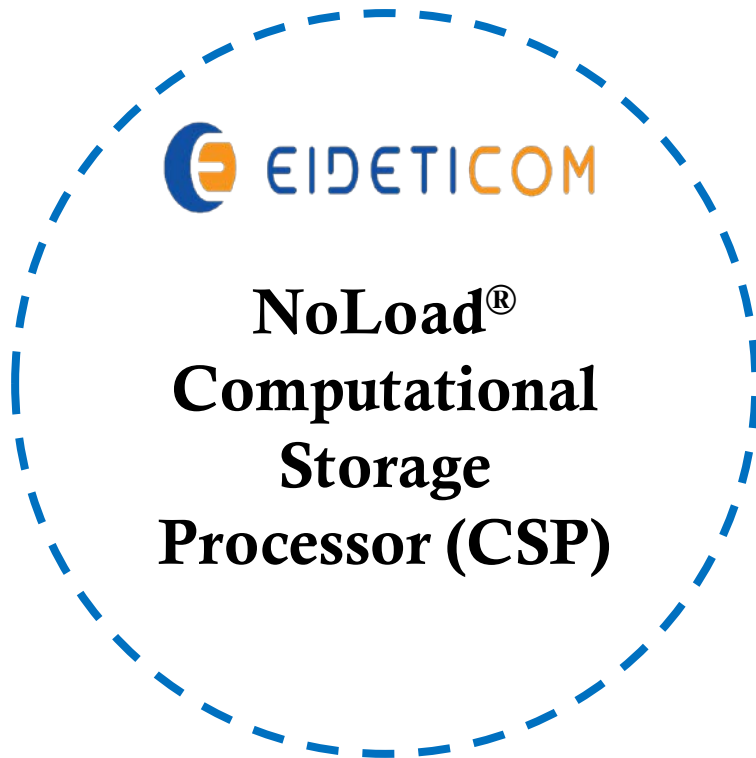
- Standard GPU form-factor: x16 PCIe
- Deployed on Xilinx Alveo U200, 250 or U280



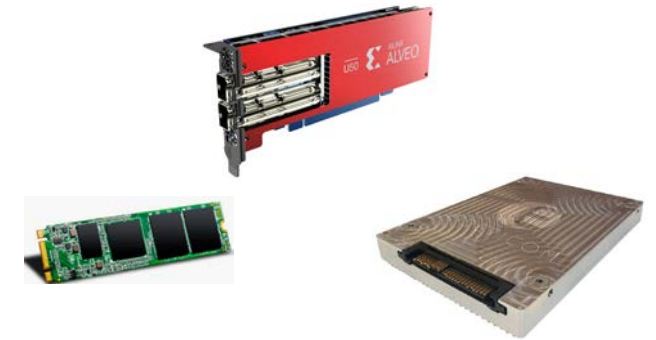
Ecosystem

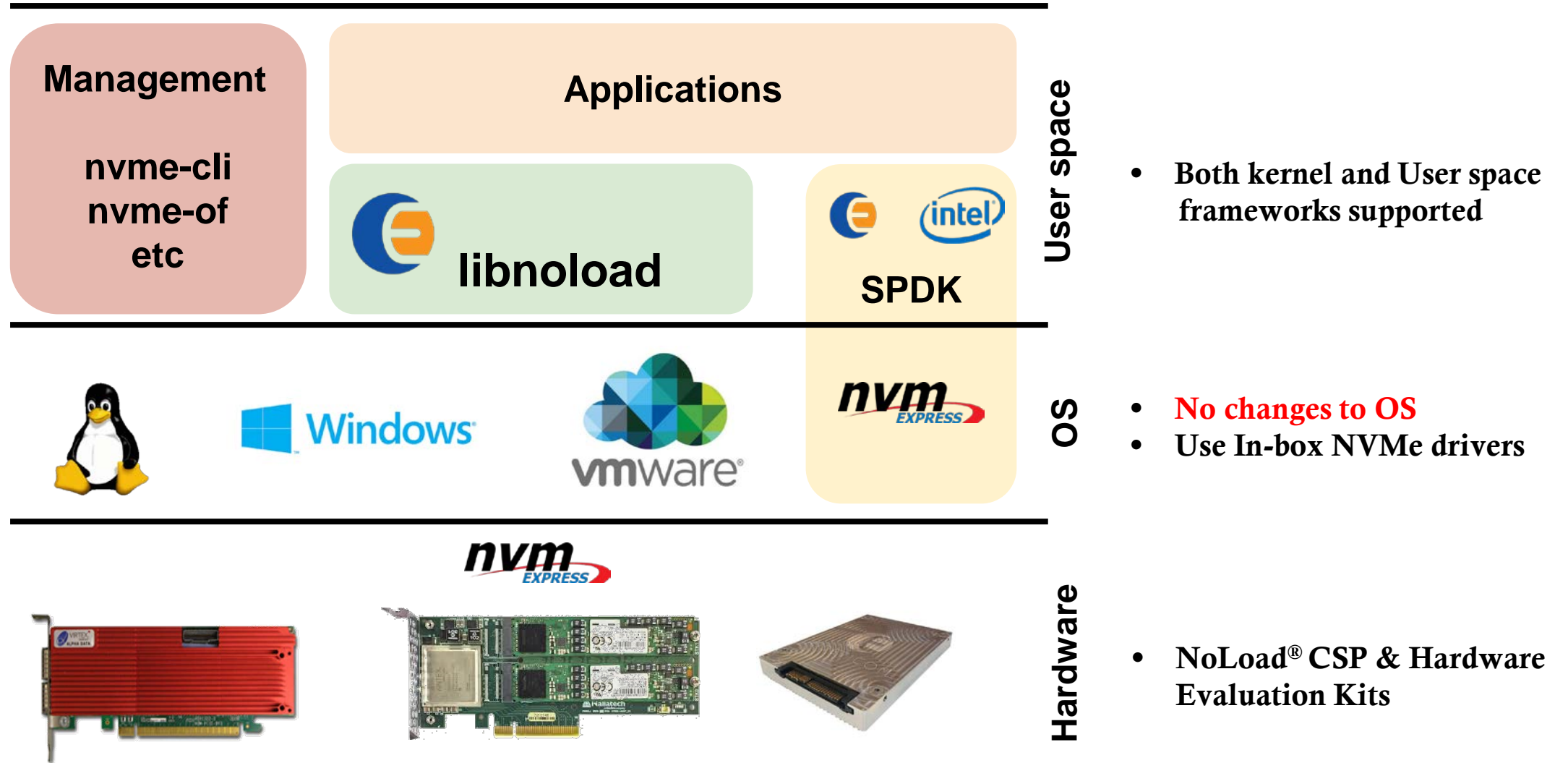


Applications



Boards

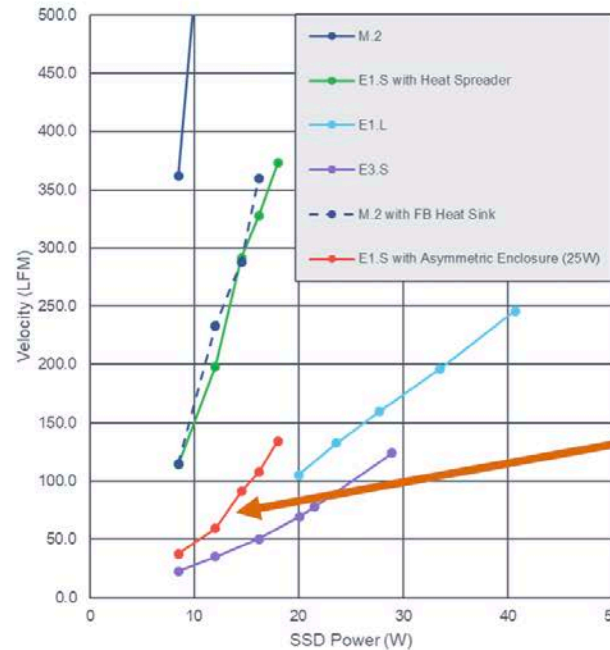




Form-Factor Requirements

- Physically large enough to fit interesting processors (including FPGAs). This makes M.2 unviable.
- Good power and thermal envelope (ideally 15W-40W).
- PCIe 4.0 and 5.0 for NVM Express interface.
- **E1.S is a great choice!**

2019: Industry Form Factor – Power/ Thermal Landscape



- 2019 Form Factor Conclusion
 - E1.S 25W Asymmetrical Case Significantly Improves LFM
 - Promising for:
 - Storage Devices
 - Front and Rear of compute box placement
 - Generic PCI Devices

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NoLoad[®] CSP E1.S EDSFF

- Standard E1.S NVMe form-factor
- BittWare 250-E1.S Hardware

nvm
EXPRESS[®]

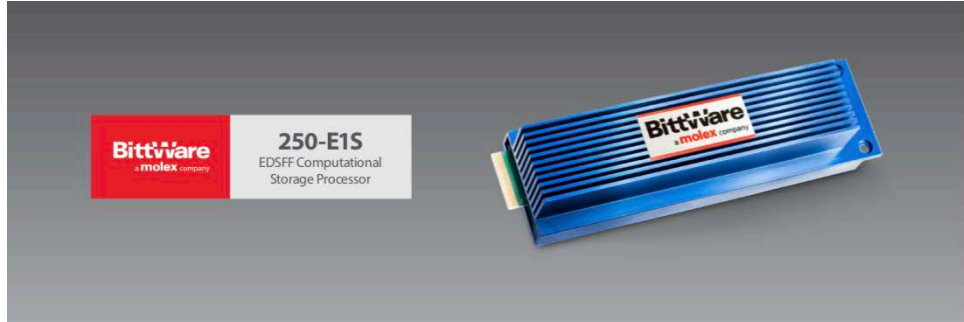


nvm
EXPRESS[®]



nvm
EXPRESS[®]





BittWare
a molex company

250-E1S
EDSFF Computational Storage Processor



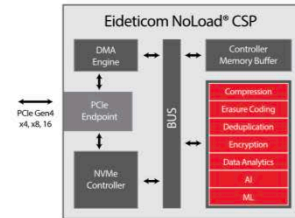
Eideticom NoLoad CSP on 250-E1S EDSFF

Enterprise-class Computational Storage Processor

Eideticom's NoLoad[®], preconfigured on BittWare's 250-E1S, is a Computational Storage Processor (CSP) conforming to the E1S SFF-TA-1006 EDSFF specification. This energy-efficient, flexible compute node is intended to be deployed within EDSFF NVMe storage platforms delivering accelerated instances of:

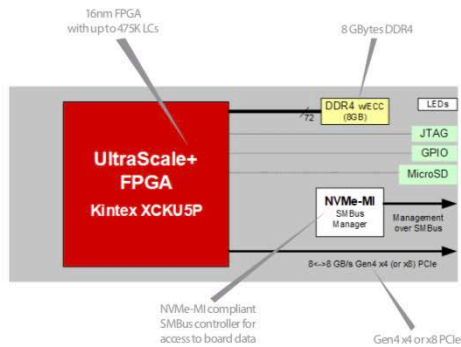
- Erasure Coding and Deduplication
- Compression, Encryption, and Hashing
- String/Image Search and Database Sort/Join/Filter
- Machine Learning Inference

The 250-E1S is front-serviceable in a 1U chassis and can be mixed in with storage units in the same server, allowing users to mix-and-match storage and acceleration.



key features

- Ideal for NVMe EDSFF storage servers and arrays
- Peer-to-Peer CPU memory bypass
- Composability via NVMe-oF



Order your 250-E1S pre-configured with Eideticom's NoLoad:

- Plug-and-play solution
- NVMe compatible and standards-based with no OS changes
- Reduced TCO/TCA - lower power and reduced IO
- CPU offload improves QoS up to 40x
- Disaggregates compute and storage into independently scalable resources
- CPU agnostic
- Reconfigurable accelerators, enabling scalable compute architectures

Learn more at www.eideticom.com

Come see it in Eideticom booth (#XXX) and Molex booth (#XXX)!!



Eideticom HQ
3553 31st NW,
Calgary, AB,
Canada T2L 2K7

Eideticom (Bay Area)
168 South Park,
San Francisco, CA 94107
USA

www.eideticom.com

Contact: sales@eideticom.com
