# Hadoop Acceleration

# EIDETICOM 🗶 XILINX.

# Xilinx Alveo powers NoLoad<sup>®</sup> CSP

# INTRODUCTION

Today's world of faster and more virtualized-servers, storage, and network connections, means that workloads are growing in scale and complexity. A critical application to guarantee improved Quality of Service (QoS) is the database, and a database's interactions with storage are critical to improve overall speed and user experience.

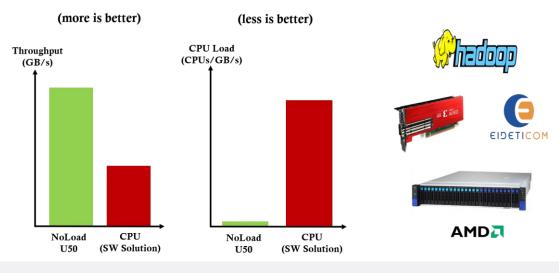
A new generation of accelerator that can optimize storage for the database is required. Eideticom's Noload Computational Storage Processor (CSP) delivers the flexibility to accelerate a range of database applications by leveraging hardwarebased computational offloads with unmatched scalability, performance and efficiency.

# **KEY BENEFITS**

- Reduced TCO/TCA: Lower Power with Reduced I/O
- **CPU Offload:** Supercharged Application Performance with dramatically improved Quality of Service (QoS)
- Plug-and-Play: NVMe Complaint, Inbox drivers for all major operating systems

# **SOLUTION OVERVIEW**

Eideticom's NoLoad<sup>®</sup> Computational Storage Processor (CSP) with the Xilinx<sup>®</sup> Alveo<sup>™</sup> U50 was used to accelerate Hadoop. The NoLoad CSP Alveo accelerates both Compression and Erasure Coding, making it the ideal solution to accelerate MapReduce workloads.





#### **SOLUTION BRIEF**



- 25x CPU Efficiency
  2.5x Job Throughput
  - 30% Lower Total Cost

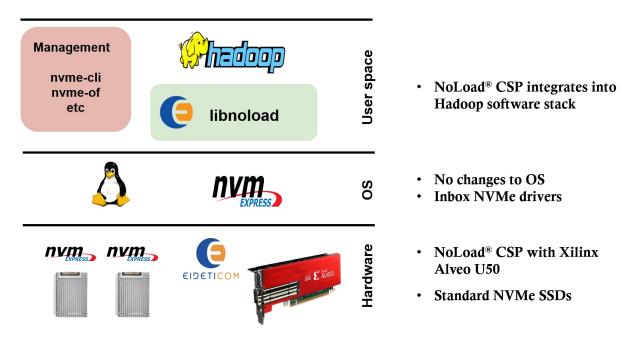
#### Adaptable. Intelligent.

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## **SOLUTION DETAILS**

Eideticom's NoLoad CSP with the Xilinx Alveo U50 solutions are ideal for database acceleration; and integrate directly into software stacks like Hadoop.



### RESULTS

Eideticom's NoLoad Computational Storage Processor (CSP) with Xilinx Alveo U50 solution resulted in significant improvements when compared to a software-only solution.

- 25x CPU Efficiency
- 2.5x Job Throughput
- 30% Lower Total Cost

Eideticom's NoLoad CSP with Xilinx Alveo U50 results in accelerating data center infrastructure, enabling greater scalability and dramatically lowering cost.

# TAKE THE NEXT STEP

Learn more about Xilinx Alveo Accelerator Cards <u>Alveo accelerators</u> For more information about Eideticom, please visit **www.eideticom.com** Contact us – **sales@eideticom.com** 



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