



Accelerate Everything™

Query Processing Unit (QPU)

FMS 2022

Eideticom's NoLoad[®]

Purpose built for acceleration of storage and compute-intensive workloads

1) NoLoad Software Stack

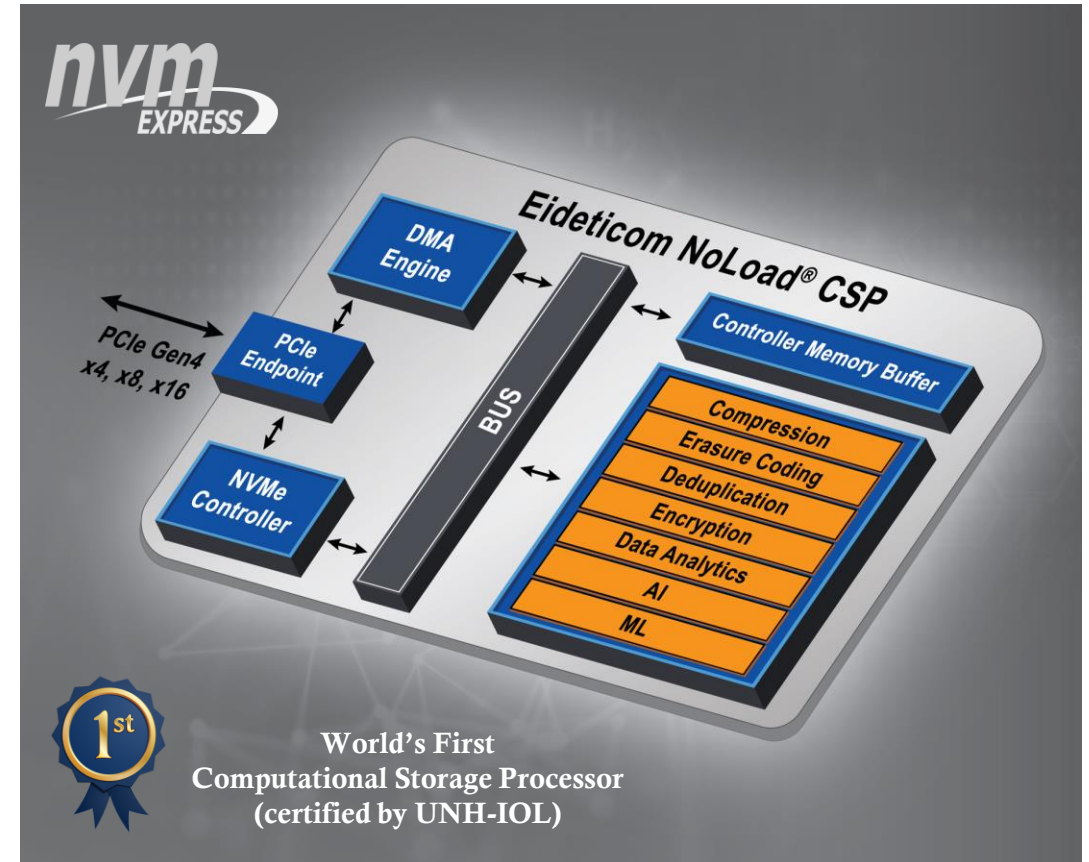
- End-to-end computational storage solution providing transparent computational offload
- Complete Software and IP core stack

2) NoLoad NVMe Front End

- NVMe compliant, standards-based interface
- High performance interface tuned for computation

3) NoLoad Computational Accelerators

- **Storage:** Compression, Encryption, Erasure Coding, Deduplication
- **Compute:** Query Processing Unit (QPU)



Production Solutions using NoLoad®

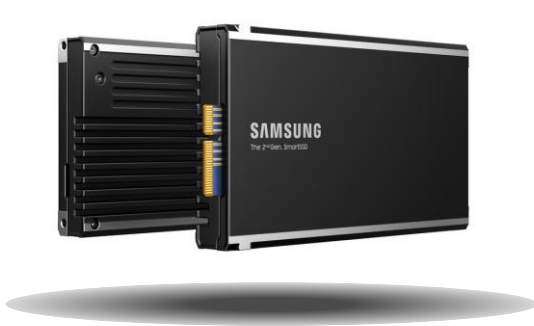
DEPLOY ON



BittWare IA-420F

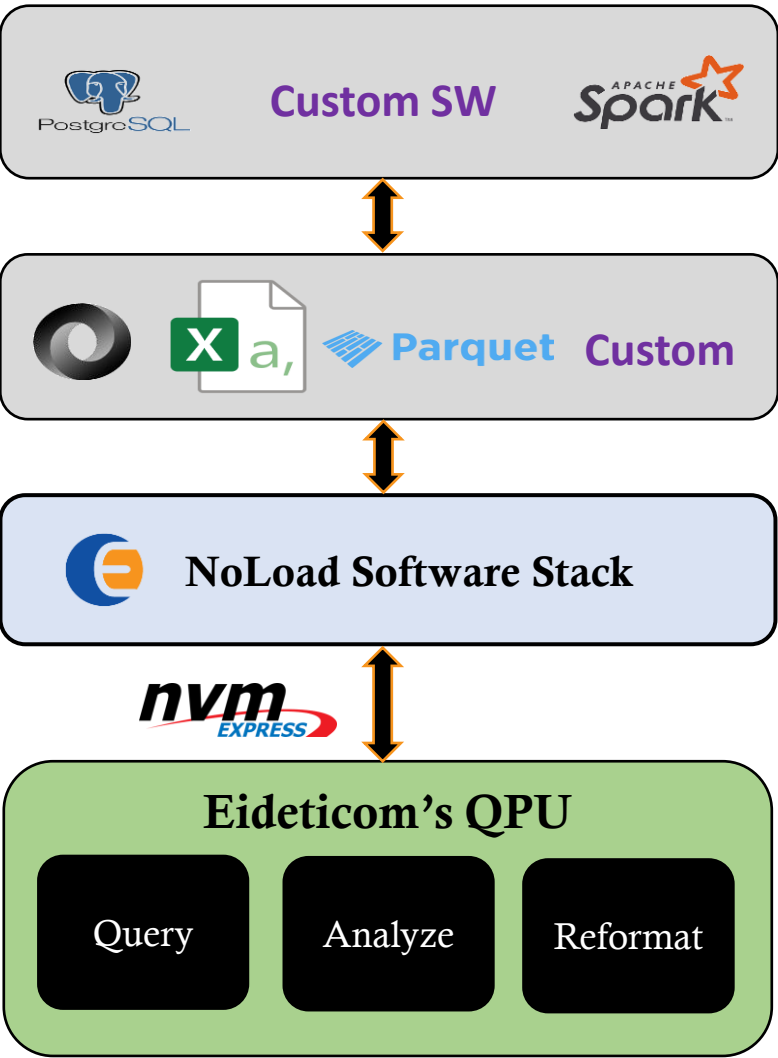


Xilinx Alveo U50



Samsung SmartSSD

Solution / Use Case	Value Prop
Transparent Compression	3-10x Increased Storage Capacity
Query Processing Unit (QPU)	40x more CPU efficient



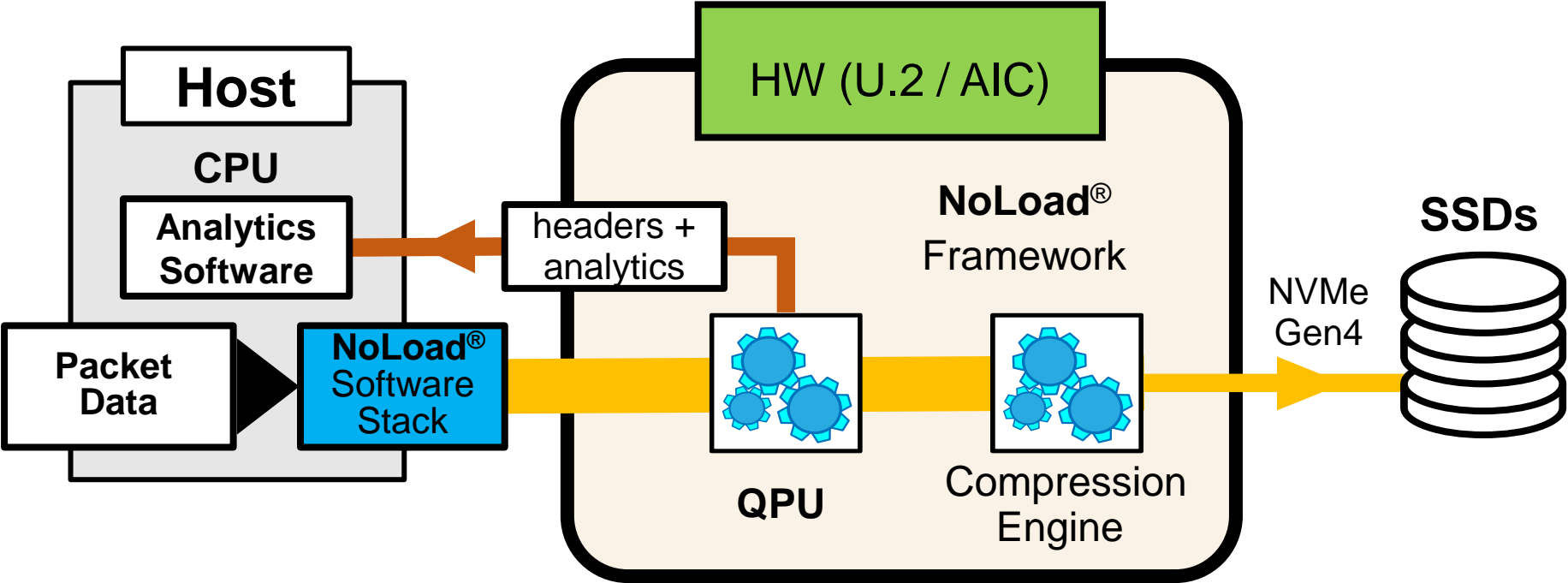
Data from user space applications is stored using many different formats

NoLoad SW Stack connects NoLoad Accelerators to end-user applications

QPU Value Prop:

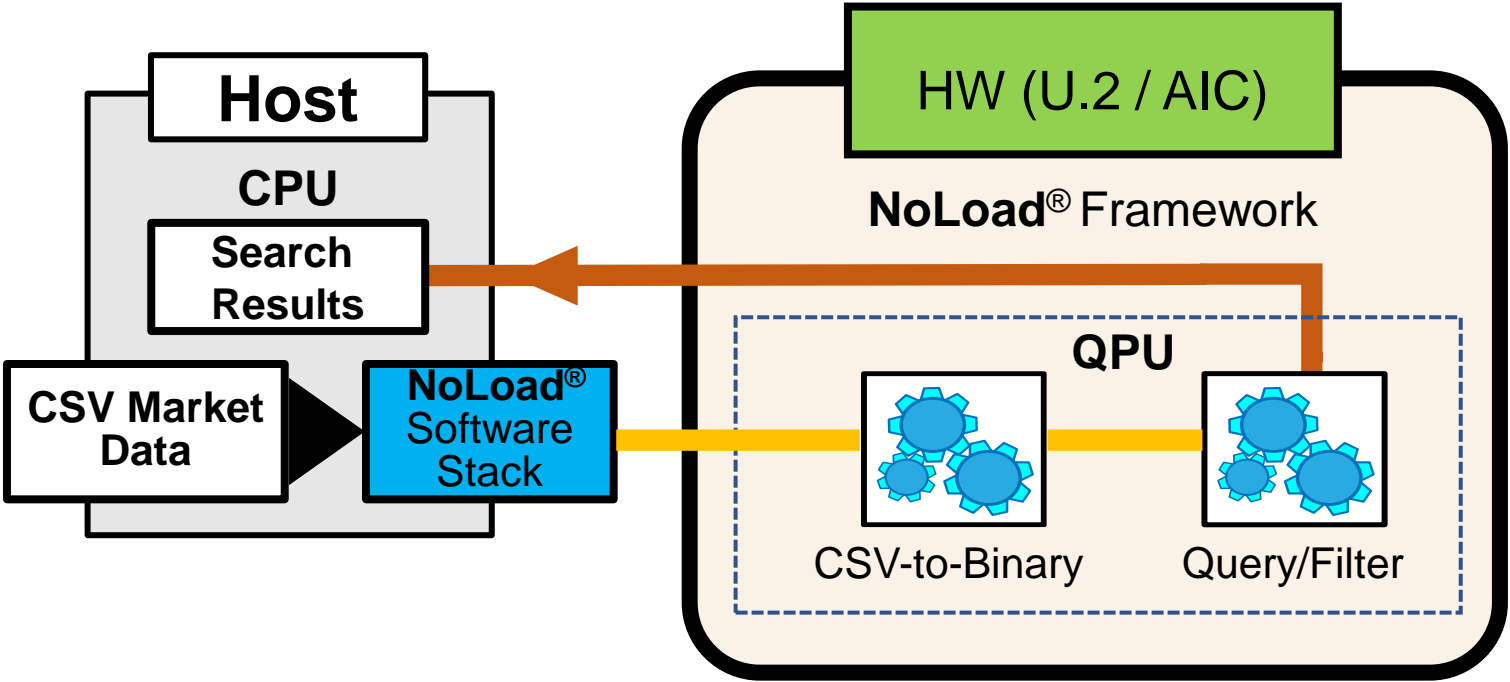
- ✓ User Programmable (C/C++)
- ✓ High Throughput
- ✓ Low Latency
- ✓ CPU Offload

“5-15x Increased Throughput Performance at 30% CPU Utilization with up to 4x Increased Storage Capacity”



- Fintech companies can monitor and analyze network traffic for market data; with **real-time PCAP Header Analytics & Compression @ 100 Gb/s**

“40x more CPU efficient with 12 GB/s Throughput”



- Fintech companies can **Query, Analyze and Reformat** market data
- Customize workloads using our C/C++ **software programmable engines**

	Software ¹	Eideticom NoLoad® (Gen4x8)
Throughput (MB/s)	300	11700
Efficiency (MB/s/CPU core)	150	5850

¹ Using 2 CPU cores since Eideticom’s NoLoad® Query Engine requires 2 CPU cores to saturate Gen4x8



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“The Future of Storage is NoLoad”