

# NoLoad® Transparent Compression

## Plug-and-Play Hardware Compression

Transparent Compression is a Computational Storage Service (CSS) for NoLoad CSPs. Running on a range of modules and add-in-cards, Transparent Compression provides data compression services for the host without requiring the target application to be modified.

**40x Faster**

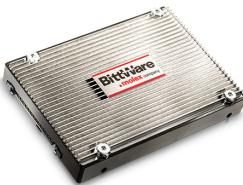
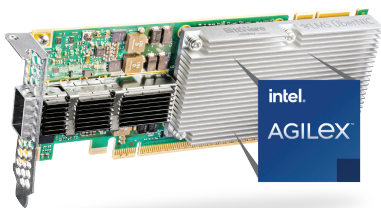
Write to storage 40x faster while keeping the same compression ratio as software

**Low CPU Usage**

By accelerating in hardware, CPU usage is cut by 96%

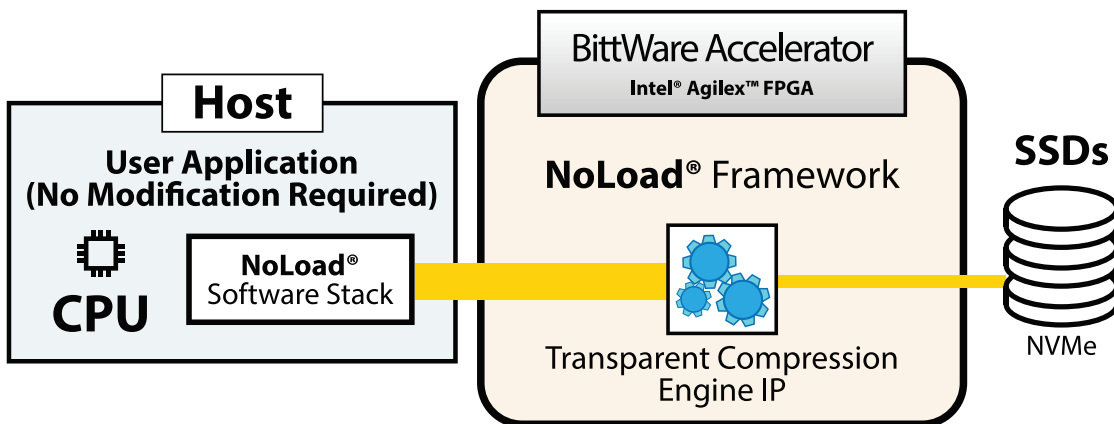
**Easy + Simple**

Plug in a card or module and instantly your application is using hardware compressed storage



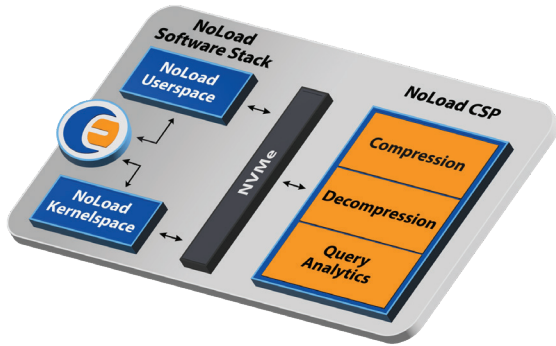
Available as a Plug-and-Play Add-In Card or U.2 Module

**Compression That's Simple to Add to Your Application with No Software Changes**



# Transparent Compression

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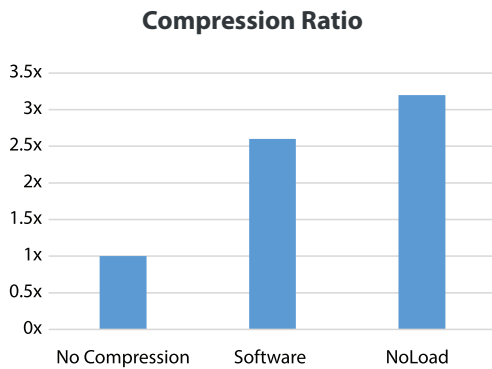
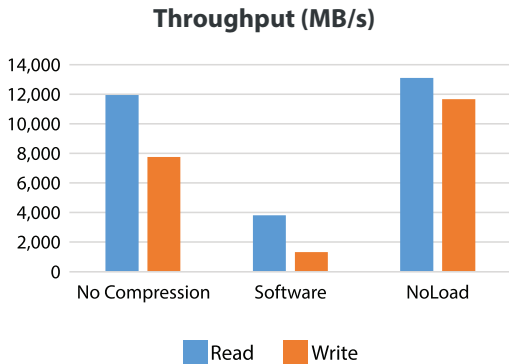


## What is NoLoad?

NoLoad is a Computational Storage Processor (CSP) with Computational Storage Services (CSS) such as Transparent Compression. NoLoad can be consumed in Userspace with zero operating system changes, or in Kernelspace with zero application changes.

## Performance Comparison

NoLoad Transparent Compression is compared to software (CPU-based) compression and no compression.



The dataset used was Big Data (TeraGen), and the server utilized two IA-220-U2 acceleration modules. Compression was GZIP.

To learn more, visit [www.BittWare.com](http://www.BittWare.com)

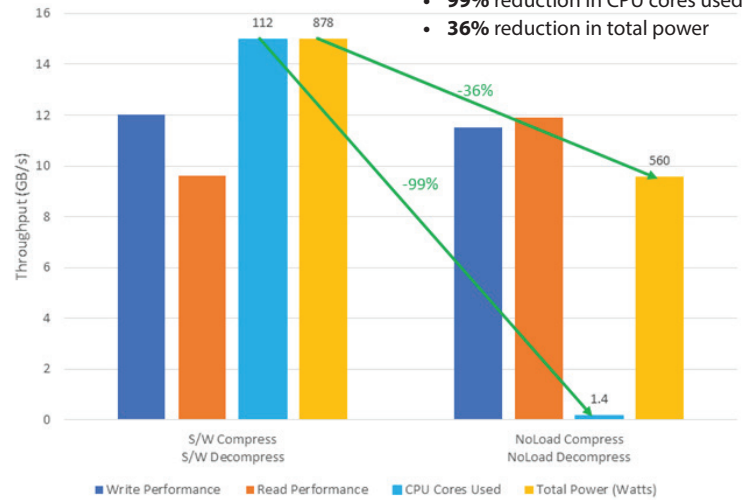
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## Takeaway

- 99% reduction in CPU cores used
- 36% reduction in total power



Benchmark results for Eideticom NoLoad solution on 4th Gen Intel Xeon Scalable processors and Intel Agilex 7 FPGA accelerator cards. Data sourced from Eideticom.

## Deployment Hardware

- [IA-220-U2](#)
- [IA-440i](#)

Looking for a different card? Ask us about other compatible card options

## Sales Part Numbers

These part numbers order the configuration with NoLoad® pre-installed.

IA-440i-0017	BittWare <a href="#">IA-440i</a> low-profile PCIe card
IA-220-U2-0002	BittWare <a href="#">IA-220-U2</a> U.2 module

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