

## SOLUTION BRIEF

# Pure FlashBlade™ for EDA Workloads

Drive next-generation chip designs with storage designed for the high-concurrency semiconductor/EDA workloads.

Modern electronic design automation (EDA) applications produce ever-increasing volumes of data and computing requirements. Traditional storage architectures have struggled to keep up with I/O needs of today's EDA workloads: The systems either saturate or scale poorly under the high concurrency demands. Designed from the ground up for high-concurrency and high-performance environments, Pure Storage® FlashBlade™ is the ideal storage solution for EDA workloads. FlashBlade's simplicity, performance, and scalability enable reduction of job run time, the No. 1 challenge for EDA environments.

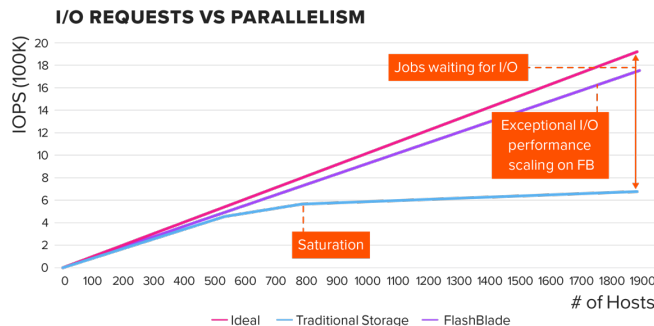
## Harness the Power of Data at Scale

New sophisticated semiconductor/EDA applications leverage thousands of powerful servers and extremely fast networks to access data for chip development. The result is demand for fast, simple, and efficient storage, which legacy architectures are no longer capable of providing. What's needed is a new and innovative storage solution to support EDA workflows while providing best-of-breed performance in all dimensions of concurrency—including throughput, IOPS, latency, data deletion, and capacity. You need a storage solution that's as simple as it is powerful.

## EDA Challenges

Semiconductor EDA workloads are very complex, involve high levels of concurrency, and are extremely I/O intensive. The workloads tend to be not only small-file and metadata intensive, but also require

### Data Stalls



### Unmatched Simplicity

- Centralized cloud management and support via Pure1™.
- Support for NFSv3/v4, SMB, S3, and HTTP protocols.



### High Performance

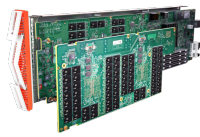
- Consistent all-flash performance without caching or tiering.
- Scale up to 75GB/s and 7.5M NFS IOPs with fast metadata and IOPS operations.



### Efficient Scalability

- Scale from 7 to 75 blades by adding non-disruptively.
- Support thousands of clients and billions of files and objects in a smaller footprint.

high bandwidth, particularly during tapeout. In all cases, they require high performance read, write, and delete capabilities to reduce EDA job run time.



## BLADE

### Scale-Out Directflash + Compute

Ultra-low latency, 17TB and 52TB capacity options that you can hot plug into the system for expansion and performance.



## PURITY

### Scale-Out Storage Software

The heart of FlashBlade, Purity implements its scale-out storage capabilities, services, and management.



## FABRIC

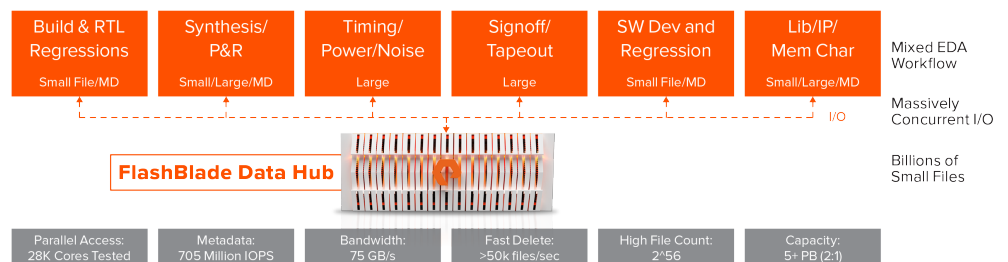
### Low-Latency, Software-Defined Networking

Includes built-in 40Gb Ethernet fabric for total network bandwidth of 320Gb/s for single-chassis and 1600Gb/s for multi-chassis configuration.

## The FlashBlade Difference

[FlashBlade](#) is the all-flash storage designed to meet the high-concurrency requirements of semiconductor/EDA workloads that will drive next-generation chip designs. FlashBlade is the storage solution of the future, delivering industry-leading throughput, IOPS, latency, and capacity, all while being more space and energy-efficient. Key benefits of FlashBlade for EDA include:

- Accelerated EDA application performance
- Lower licensing costs through improved efficiency and resource utilization
- Advanced analytics capabilities to eliminate bottlenecks
- Improved productivity with RapidFile Toolkit (up to 60x improvement over existing Linux distro)



“Our SW developers are seeing workloads finish greater than 5x faster than status quo with FlashBlade and we are benefiting from 2.5:1 data reduction through compression.”

CIO, Major Semiconductor Manufacturer

[purestorage.com](https://purestorage.com)

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