



# FLASHBLADE FOR GENOMICS

All-Flash Storage designed for the high concurrency genomic sequencing and analysis of today that will drive tomorrow's medical discoveries and research

## PURITY

SCALE-OUT STORAGE SERVICES WITH DIRECTFLASH



## SIMPLE TO MANAGE

Scale-out everything instantly by simply adding blades

NFS, Object/S3

Centralized cloud management and support via Pure1™



## HIGH PERFORMANCE

Up to 17 GB/s of bandwidth per chassis, and 1M IOPS

Fast metadata and IOPS operations

Consistent all-flash performance with no caching or tiering



## EXTREME SCALABILITY

Up to 10s of Petabytes

10s of Billions of files and objects

10s of Thousands of clients connected

All in an unbelievably small all-flash footprint

## HARNESS THE POWER OF DATA AT SCALE

The evolution of genomics in recent decades has seen the volume of sequencing rise dramatically as a result of lower costs. Massive growth in the quantities of data created by sequencing has greatly increased analytical challenges, and placed ever-increasing demands on compute and storage infrastructure. Researchers have leveraged high-performance computing environments and cluster computing to meet demands, but today even the fastest compute environments are constrained by the lagging performance of underlying storage.

The sequencing operation requiring the highest performance storage is Secondary Analysis, where very high IOPS and bandwidth are essential – and where currently available storage solutions, many from designs that are 15+ years old, simply cannot maintain the necessary latency, concurrency, and metadata access. Moreover, these solutions are difficult to scale, complex to manage, and expensive in both CAPEX and OPEX.

## LEAVE PERFORMANCE ISSUES BEHIND WITH FLASHBLADE

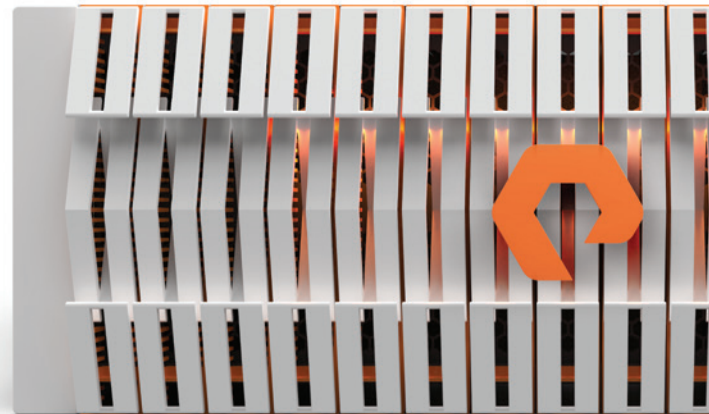
The Pure Storage FlashBlade™ product is an all-flash platform perfectly suited to the demands of today's genomic sequencing workflow. Easily deployed, scaled, and managed, FlashBlade delivers competitive advantages over existing storage architectures.

**Multi-dimensional performance:** Get high-bandwidth and high-IOPS power capable of handling a large volume of data access operations while delivering low latency, consistent performance, and metadata access for 1000s of users.

**Eliminate complexity:** Enjoy the FlashBlade platform's ease of use and cloud-based management via our simple, all-inclusive Evergreen™ Storage model.

**Lower TCO:** Reduce both initial investment and continued cost of operation with the FlashBlade product's 10x smaller footprint, and 10x lower power and cooling costs.

**Accelerate innovation:** Leverage FlashBlade to deliver the fast results that are essential to driving breakthroughs in genomic research.



# THE FLASHBLADE DIFFERENCE

## CLOUD-ERA FLASH

### EFFORTLESS

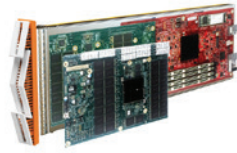
Our solutions are always-on, and always fast. They're ultra-reliable and plug-n-play simple, with cloud-based management, predictive analytics, and unrivalled support and protection.

### EFFICIENT

You save 10x on space while gaining 10x in speed. And your workloads are protected with service assurance: high mixed workload performance, and full performance even through failures and upgrades. No more tuning of anything – ever.

### EVERGREEN

The only storage that gets better with age. Tired of forklift upgrades and maintenance extortion? Buy your TBs once, never rebuy them again, and never go through a disruptive migration. Expand capacity, performance, and features independently as you get value from your storage for a decade or more.



## BLADE

### SCALE-OUT DIRECTFLASH + COMPUTE

Ultra-low latency, 8 & 52TB capacity options that can be hot-plugged into the system for expansion and performance

## PURITY

### SCALE-OUT STORAGE SOFTWARE

The heart of FlashBlade, implementing its scale-out storage capabilities, services and management

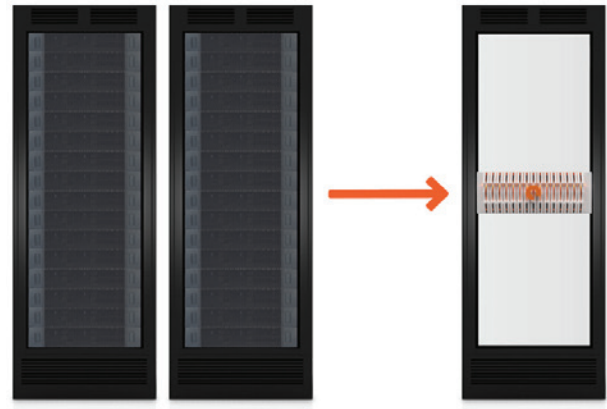
## FABRIC

### LOW-LATENCY, SOFTWARE-DEFINED NETWORKING

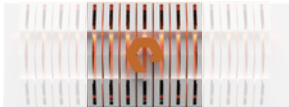
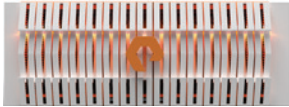
Includes a built in 40Gb Ethernet fabric providing a total network bandwidth of 320Gb/s for the chassis

## POWER, DENSITY, EFFICIENCY

FlashBlade delivers industry-leading throughput, IOPS, latency, and capacity – in 20x less space and 10x less power and cooling.



## SPECIFICATIONS

		8 TB BLADE	52 TB BLADE
7 Blades		98 TBs Usable	591 TBs Usable
15 Blades		267 TBs Usable	1607 TBs Usable

\* Usable capacity assumes 3:1 data reduction rate. Actual data reduction may vary based on use case.

### PERFORMANCE

17 GB/s bandwidth per chassis  
Up to 1M IOPS

### CONNECTIVITY

8x 40Gb/s or  
32x 10Gb/s Ethernet ports / chassis

### PHYSICAL

4U  
1,800 Watts (nominal at full configuration)