



## FlacheStreams- High Performance Solid State Drive Servers

At a time when the digitization of data is ever so critical for business applications, EchoStreams continues to deliver innovative storage solutions that solve the many industry challenges for managing and delivering data effortlessly.

Our FlacheStreams line provides the fastest and highest density rackmount servers available on the market today. Each model has been designed to provide uncompromising performance and has been tested to promise reliability. With an impressive 20GB/s throughput and 3.5 Million IOPS, your information is available faster than ever. Ranging from 20 bays to 52 bays, the Flachestream line is built to scale your SSD storage with your business. EchoStreams’s flash storage servers also support the latest processor innovations from AMD EPYC technology. Our Value-Added Services provide a level of configuration and adaptation that no other provider can match.

### KEY ECHOSTREAMS BENEFITS:

#### HIGH PERFORMANCE AND DENSITY

Our FlacheStreams product family is designed with the solid-state technology in mind. By unleashing the major performance benefits from SATA, SAS, and NVMe drives, the FlacheStreams product family can achieve above industry standards with performance benchmarks up to 60GB/s and 8 Million IOPS.

#### BALANCE ARCHITECTURE

Like all of our server products, FlacheStreams is designed around the belief of a balanced architecture. The FlacheStreams product family is designed to ensure that all SSD / NVMe performance boosts are equally distributed throughout the network by implementing throughput with Infiniband, Omnipath, 100G NIC, and Fibre Channels.






#### SATA, SAS3, NVME TECHNOLOGY

The FlacheStreams product family supports a variety of storage protocols such as cost effective SATA SSDs, durable 12G SAS SSDs, and high performance NVMe SSDs. This is relatively important for use cases that range from budget conscious application, mission critical applications, and extreme performance All Flash Array Storage applications.

#### PATENTED DESIGN

The FlacheStreams product family comes with a patented design that features high-density options and double the storage capacity of some of our competitors. This innovative feature allows system integrator technicians, IT administrators, and Service Technicians the ability to save on installation and service times, which ultimately helps with lowering the overall total cost of ownership (TCO).

### KEY APPLICATIONS:

				
Content Delivery Networks	Public and Private Cloud	Software Defined Storage	Web 2.0	Military

COMPLETE LINE OF STORAGE OPTIONS ALSO AVAILABLE :



Server & Storage Product Briefs:

- Flash Storage Server- FlacheStreams
- High Availability Servers- DuraStreams
- General Purpose Servers- OmniStreams
- High Density Servers- ScaleStreams







### INTEL® EMPOWERING TRANSFORMATION IN A DIGITAL WORLD

As IT / enterprise infrastructures expand and begin virtualizing their data into the cloud, data centers are faced with the challenges of managing complex customer workloads and being hyper-efficient with every IT dollar spent. Especially for many data-intensive applications today, a key value for data management is the ability to evaluate and architect solutions that deliver both a balance of high performance compute and also scalable memory bandwidth through its I/O's.

Intel competitively situates itself in the needs of existing and emerging data center workloads. The Intel® Xeon® Scalable processor provides the foundation for a powerful data center platform that creates an evolutionary leap in agility and scalability.

Disruptive by design, this innovative processor sets a new level of platform convergence and capabilities across compute, storage, memory, network, and security. Enterprises, cloud, and communications service providers can now drive forward their most ambitious digital initiatives with a feature-rich, highly versatile platform that includes:

- Up to 28 high-performance cores, six memory channels, and 48 lanes of PCIe\* 3.0
- Intel Advanced Vector Extensions 512
- Integrated Intel Omni-Path Architecture Host Fabric Interface
- Support for Intel® Optane™ SSDs and Intel® 3D NAND SSDs
- Up to three Intel UPI channels
- Enhanced Intel® Run Sure Technology

FlacheStreams	FlacheStreams FlacheSAN1L-U5		FlacheStreams FlacheSAN1L-D5		FlacheStreams FlacheSAN2V-D5		FlacheStreams FlacheSAN2N24U-D5	FlacheStreams FlacheSAN2N12C-D5
	1U 20 BAYS 2.5" 12G SAS INTEL UP SKYLAKE SP 500W HRP		1U 20 BAYS 2.5" 12G SAS INTEL DP SKYLAKE SP 500W HRP		2U 48 BAYS 2.5" 12G SAS INTEL DP SKYLAKE SP 800W HRP		2U 24 BAYS U.2 NVMe INTEL DP SKYLAKE SP 1200W HRP	2U 12 Add-in-Card NVMe INTEL DP SKYLAKE SP 1200W HRP
								
Ordering P/N	BB1202FU5SM14-A	BB1202FU5SM14E-A	BB1202FD5TY14-A	BB1202FD5TY14E-A	BB2482FD5TY16-A	BB2482FD5IT16-A	BB224NUD5TY18-A	BB212NCD5TY18-A
CPU	1x Intel Xeon SP		2x Intel Xeon SP		2x Intel Xeon SP		2x Intel Xeon SP	
Memory	6x DDR4 slots (Max 768GB)		16x DDR4 slots (Max 2TB)		12x DDR4 slots (Max 1.5TB)		16x DDR4 slots (Max 2TB)	
Drive Bays	20x 2.5" 7mm 12G SAS/ SATA SSD (Hot-Swap) 2x2.5" (internal)		20x 2.5" 7mm 12G SAS/ SATA SSD (Hot-Swap) 2x2.5" (internal)		48x 2.5" 7mm SATA SSD (Hot-Swap) 2x2.5" (internal)		24x U.2 NVMe 15mm (Hot-Swap) 2x rear SATA 2.5" 7mm (Hot-Swap)	
Storage Expander	N/A		12Gb/s Expander		N/A		12Gb/s Expander	
Onboard Network	2x10GbE		2xGbE, 1xOCP2.0 x16 Mezz.		2xGbE		2xGbE	
Expansion Slots	2x Gen3x16 (FH) 1x Gen3x8 (LP)		2x Gen3x16 (FH), 1x OCP2.0 x16 Storage mezz.		2x Gen3x16 (LP) 5x Gen3x8 (LP)		9781 Version: 4x Gen3x16 (FH) 9797 Version: 6x Gen3x16 (FH)	
IPMI	✓		✓		✓		✓	