

## Special Mission Computing System Enabled by FabricXpress<sup>TM</sup>

### Defining Performance and Resiliency at the Edge...

Living at the Edge is not for the faint of heart, this is where Axellio<sup>TM</sup> thrives. Axellio puts itself in an ideal placement leveraging the FabricXpress<sup>TM</sup> Architecture to exploit its full power. Enabling real-time analytics on high-bandwidth big data streams such as fraud and anomaly detection, complex/stream event processing, and algorithmic trading, transforms this data into useful actionable intelligence.

Axellio brings the promise of NVMe to reality, including the first true fulfillment of unequalled sustained throughput and end-to-end low latency response. This is all achieved using dual-ported NVMe SSDs, dual-controller design, and an integrated PCIe fabric.

X-IO's Axellio is an advanced compute/storage architecture incorporating 2 dual CPU servers with up to 88 cores and up to 2TB of RAM, tightly coupled with up to 72 x 2.5" NVMe SSDs – all in a 2U form factor.

With over 500TB of capacity, Axellio is the ideal platform for ingesting, storing, and executing real-time analytics on high-bandwidth big data streams. Throughput up to 60GB/s, over 12 Million transactions per second, and latency measured in the 10s of microseconds, brings a new level of performance and resiliency to the Edge.

Axellio is the *only* solution providing throughput, compute, and storage at the *edge*, in a single 2U package



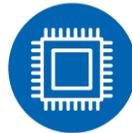
#### Extraordinary Value

Lower Size, Weight,  
and Power Per Mission  
With Incredible Life  
Cycle Cost Savings



#### Infinitely Flexible

Six Modular Slots For Any  
Mix of Flash Storage,  
CPU, or GPU to Meet  
Demanding Mission  
Requirements and Easily  
Upgrade, Expand, or  
Reconfigure



#### Unprecedented Density

Hyper-Integrated  
Compute, Storage, &  
Memory in 2U Box With  
Up to 88 CPU cores,  
552 TB storage,  
2 TB RAM



#### Lightning Fast

Novel Architecture  
Dramatically Accelerates  
Processing Speeds  
Incorporating Best-in-  
Class Hardware,  
Protocols, & Fabric

# Special Mission Computing System Enabled by FabricXpress™

## Network capabilities to match internal bandwidth

The architecture incorporates two I/O module slots per server for a total of four I/O slots for flexibility in connectivity options, slot 1 being PCIe Gen3x16 and slot 2 being PCIeGen3x8.

The I/O modules flexibly support 10, 40 or 100GbE and QDR/FDR InfiniBand. These RDMA capable I/O modules optimize network connectivity to further reduce latency and improve bandwidth capability.

The architecture optionally incorporates Non Transparent Bridge (NTB) connectivity between the dual server modules to enable the ultimate ultra-low latency, high bandwidth interconnect between server nodes within the appliance.

## Specifications

<b>Configuration Options</b>	Each system includes two server modules, specifications listed are per appliance			
<b>Compute</b>	CPU: 4 x Intel E5-2620v4 32 cores/64 threads @ 2.1GHz	CPU: 4 x Intel E5-2650v4 48 cores/96 threads @ 2.2GHz	CPU: 4 x Intel E5-2697v4 76 cores/144 threads @ 2.3GHz	CPU: 4 x Intel E5-2650v4 88 cores/176 threads @ 2.2GHz
<b>Memory</b>	32GB to 2TB RAM			
<b>Network Connections</b>	4x10 GbE or 4x40 GbE or 4x100 GbE			
<b>Storage Capability</b>	1– 6 FlashPacs Each FlashPac holds 12 Dual Ported NVMe SSDs (800, 1600, 3200 or 7680 GB) Total capacity: 9.6TB – 552TB I/O performance capacity: Over 60GB/s transfer rate, 12M+IOPS, fully populated Storage Capability, share between server modules			
<b>Form Factor</b>	2U (H 3.5" x W 17.25" x L 36.5")			
<b>System Cooling</b>	7x60mm dual stage counter rotating heavy duty fans with PWM fan speed controls			
<b>Power Supplies</b>	80 PLUS TITANIUM Grade Dual Redundant Power Supplies @100-120v: Dual 1100W Out @100-120V, 15A + Dual 1000W Out @100-120V, 10.5-12.5A, 50-60Hz @230-240v: Dual 1500W Out @230-240V, 11A, + Dual 2000W Out @230-240V, 9.8-10.0A,50-60Hz			