



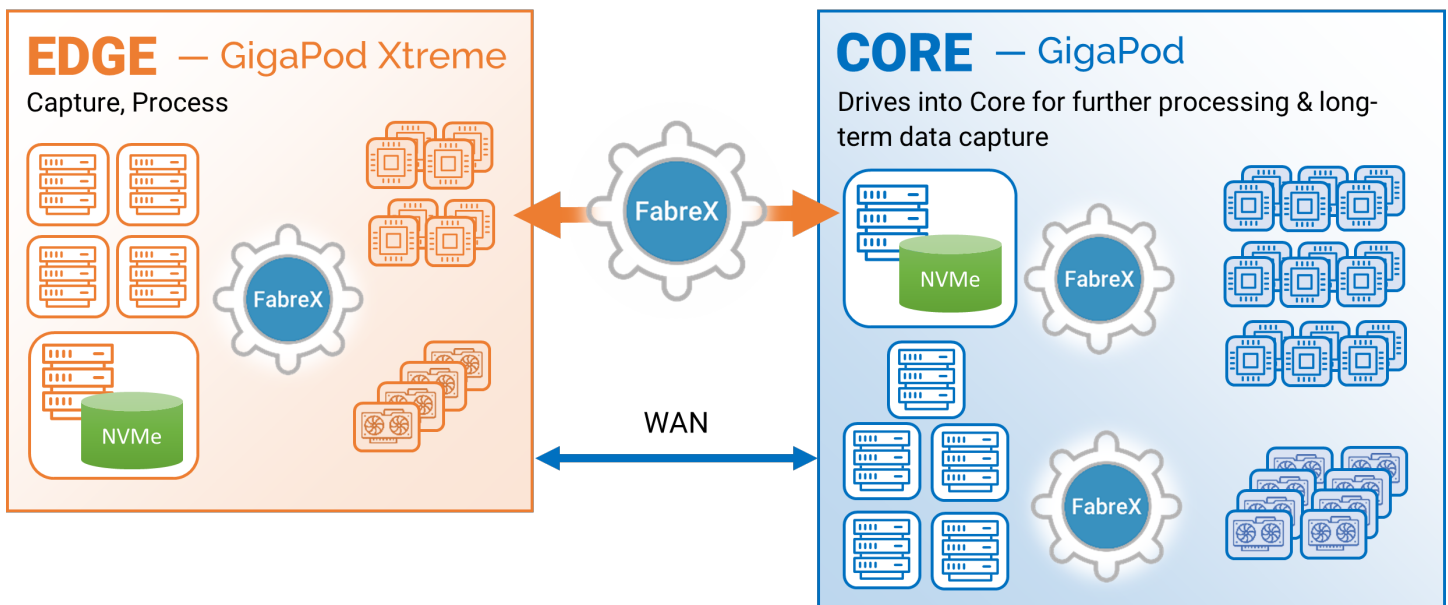
# GigaPod: Edge To Core Infrastructure Without Compromise

## SOLUTION BRIEF

FabreX™, GigaIO's universal dynamic memory fabric, unifies edge-to-core infrastructures to dynamically deploy any mission application, for actionable real-time intelligence – Anywhere.

It is true that data is generated everywhere, but this phrase has a different meaning for those tasked to protect our country against all threats. Intelligence is only as good as it is timely; data from drones, satellite images, and sensors hold the key to staying one step ahead of our adversaries. Yet the existing approach of using static infrastructure and moving data to compute is no longer effective or timely.

Current efforts to deploy infrastructure at the edge have been plagued by network inefficiencies, lack of process consistency, time lag to critical updates, and disjointed workflows. Now GigaIO's patented dynamic memory fabric technology, FabreX™, enables data processing in real-time, and facilitates actionable intelligence anywhere.

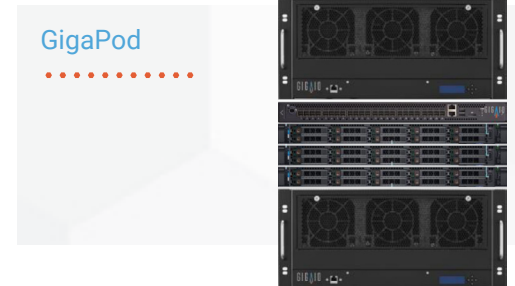


The diagram above shows at left the ruggedized GigaPod Xtreme, which can be deployed at the edge, and at right a GigaPod, located in the core datacenter. The unique value of GigaIO's FabreX dynamic memory fabric is the ability to combine these into one seamless and dynamic environment.



The GigaPod Xtreme includes disaggregated GPUs, NVMe storage, and CPU/memory, and is designed to:

- Expedite data analytics at the edge. Configurations can be optimized for each application's workload demands.
- Make the captured data and data analysis output at the edge available over GigaIO's FabreX dynamic memory fabric. Workflows are optimized where the data is located.
- Combine all resources once GigaPod Xtreme is in the same facility as GigaPod and make them dynamically available to any application. The NVMe drives in the GigaPod Xtreme become available for processes running in GigaPod without moving data.
- Move data over Ethernet from the edge to the core and vice versa if bringing the GigaPod Xtreme to the core is not an option.



Deploying the GigaIO Edge-to-Core solution reduces time to results and eliminates stagnant intelligence. When it comes to keeping adversaries at the gate, it is critical to have the very best, most time-sensitive intelligence. This is only possible when the mission's applications can run at the edge and conduct the data processing in real time in order to get actionable results. Optimize workflows by reducing the time required to get relevant intelligence in the hands of those in the field.

GigaIO has designed this solution to deliver maximum return on investment. With GigaPod Xtreme and GigaPod, numerous possibilities of server configurations are available without forklift upgrades and with a smaller footprint and lower power draw, depending on application need.



	GigaPod Xtreme	GigaPod
Cores	Up to 384 AMD CPU cores	Up to 768 AMD CPU cored
Memory	Up to 2TB of memory	Up to 24TB of memory
Storage	Optional sleds up to 120TB	Up to 900TB
Network	100GB Ethernet and PCIe	100GB Ethernet and PCIe
Composable	✓	✓
Weight	15-65 lbs	200-800 lbs
Dimensions	9" x 14" x 22"	24U Rack
GPUs	Up to 300w cards	Up to 375w cards



## Choose Your Configuration

### GigaPod

The perfect entry point and preconfigured for easy deployment.



SUPPORTS  
UP TO:



640  
CPU Cores



4.6TB  
Memory



307TB  
Storage

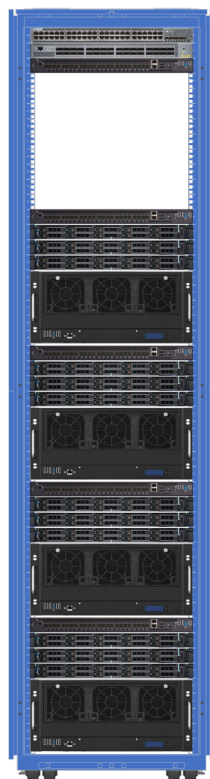


16  
Accelerators

- 1 GigaPod kit — includes FabreX™ composable switches, network adapter cards, and cables
- Up to 2 GigaIO Accelerator Pooling Appliances — each up to 8 mix-and-match GPUs
- Up to 2 storage servers — each up to 154TB
- Up to 4 compute nodes — pick the processor — dual AMD EPYC™ 7713, 75F3, or 7543 — each with up to 1TB memory and 128 cores
- Bright Cluster Manager supporting High Availability (HA) storage and Bright for Data Science

### GigaCluster

Expand your system to increase compute and storage performance.



SUPPORTS  
UP TO:



1,280  
CPU Cores



9.2TB  
Memory



614TB  
Storage

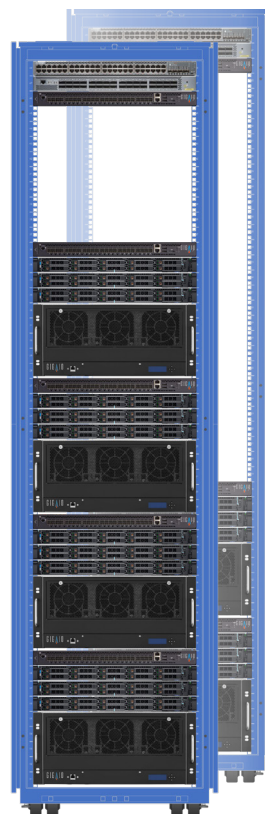


32  
Accelerators

- 1 GigaCluster kit — includes FabreX™ composable switches, network cards, cables, and expansion pack
- Up to 4 GigaIO Accelerator Pooling Appliances — each up to 8 mix-and-match GPUs
- Up to 4 storage servers — each up to 154TB
- Up to 8 compute nodes — pick the processor — dual AMD EPYC™ 7713, 75F3, or 7543 — each with up to 1TB memory and 128 cores
- Bright Cluster Manager supporting High Availability (HA) storage and Bright for Data Science

### 3Pod GigaCluster

When you need the ultimate in compute power.



SUPPORTS  
UP TO:



1,920  
CPU Cores



13.8TB  
Memory



922TB  
Storage



48  
Accelerators

- 3Pod GigaCluster kit — includes FabreX™ composable switches, network adapter cards, cables, and expansion pack
- Up to 6 GigaIO Accelerator Pooling Appliances — each up to 8 mix-and-match GPUs
- Up to 6 storage servers — each up to 154TB
- Up to 12 compute nodes — pick the processor — dual AMD EPYC™ 7713, 75F3, or 7543 — each with up to 1TB memory and 128 cores
- Bright Cluster Manager supporting High Availability (HA) storage and Bright for Data Science

GigaIO's FabreX dynamic memory fabric unifies edge-to-core infrastructures to dynamically deploy any mission application, for actionable real-time intelligence — anywhere.

Learn more at [gigaio.com/edge-core](https://gigaio.com/edge-core)

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