GIGΛIO

DATA SHEET

# FabreX OS and Software, The Fundamental Building Block of the FabreX Hyper-Performance Network

The FabreX™ Operating System is the software engine that drives the performance and dynamic composability of GigaIO software-defined infrastructure (SDI) for enterprise data centers and high-performance computing environments. This Linux-based, resource-efficient software layers onto FabreX hardware for easy-to-use composing of computing clusters on-the-fly.

Connections between compute, storage and application accelerator resources in the GigaIO™ FabreX network are implemented with industry-standard PCI Express. DMTF open-source Redfish® APIs provide unprecedented integration with a range of third-party applications for fabric automation and orchestration.

The flexibility of the FabreX interconnect breaks the constraints of old architectures, opening up possibilities for new configurations that maximize utilization of all elements within your advanced scale computing systems. Choose from a variety of software packages to build the cluster configurations you need.

## Composer Pack

Single-Host Expansion
Includes: FabreX OS + Management Module + GigaIO CLI + Composition Module

The Composer Pack features full disaggregation and dynamic composability for deep and wide IO tree configurations. Multiple FabreX switch configurations enable flexible IO expansion including super servers, cascading, and resource partitioning. FabreX OS also supports GPUDirect for direct access to third-party memory using the standard features of PCIe.

## Leader Pack

Multi-host Clusters
Includes: Everything in Composition Pack + Cluster Module

The Cluster Module provides true multi-host to host communication in single-switch systems. The Leader Pack adds more power for parallel processing and fast access to distributed memory by integrating MPI, NVMe-oF, and TCP/IP.

## Maestro Pack

Large Multi-Rack Systems
Includes: Everything in Leader Pack + Network Pack

For true composability in large computing systems where you need more clusters and multiple racks, add the Network Pack. You'll have all the benefits of the Leader Pack but also the ability to manage multiple Leader-configured switches, for quick scaling of your system to meet your largest workloads.



FabreX™ Management

Software Packs

Composer Pack
Leader Pack
Maestro Pack