

Larch Network NVMe-oF platform brings the full power of Marvell Fabric to create unique NVMe over Ethernet solutions for the modern high-speed storage markets.



## Product Highlights

- Adopted in the cloud data center and enterprise markets.
- Supports up to 24 NVMe U.2 SSD modules
- Dual 25Gbit RDMA network ports per SSD
- Dual 6 x 100G uplink ports and dual 24 x 25G downlink ports to SSDs

Larch Networks has developed an ASIC based 25G/100G Ethernet NVMe-oF JBOF (Just a Bunch Of Flash) Prototype System, which utilizes a hardware NVMe-oF bridge and 25G/100G Ethernet switch fabrics, achieving native NVMe (PCIe3.0) SSD performance over Ethernet. Designed for scale-out, the new JBOF system significantly simplifies the deployment of high-performance storage systems in data centers.

This JBOF system is a standard 19-inch 2U chassis and supports up to 24 NVMe-oF SSD modules. The NVMe-oF SSD module adopted the interposer solution, jointly developed by Marvell and Toshiba Memory Corporation. The interposer is based on the Marvell Fabric 88SN2400 NVMe-oF SSD converter controller, enabling dual 25Gbit RDMA network ports and NVMe-oF bridging per each SSD drive. The built-in dual-star switch matrix provides dual 6 x 100G uplink ports and dual 24 x 25G downlink ports to SSDs for non-blocking access. The prototype system achieves 16 million IOPS (4KB random read), while maintaining extremely low power consumption. The JBOF chassis has also integrated the BMC system for chassis configuration, health monitoring and remote management, which is ready for carrier grade deployment.