Lenovo Flex System FC5022 16Gb SAN Scalable Switch

High performance switch for Flex System enterprise environments

Price/Performance

Network complexity in data centers requires a range of important decisions for any new deployment. Storage network capacity considerations include:

- Cost—current demands and future growth
- Interoperability with existing environment
- Reliability—especially crucial for SAN planning
- Scalability—grow as needed, and be able to scale to full Flex System capabilities
- Performance—exploit the 16Gb capabilities of Flash and new storage arrays

The Lenovo Flex System FC5022 SAN Scalable Switch delivers unmatched performance and scalability built on Brocade Gen5 Fibre Channel (FC) technology, purpose-built for the storage connectivity required for business critical applications. Brocade Gen 5 FC operates at 16Gb, 8Gb, and 4Gb link speeds while providing optimized, automated and integrated SAN capabilities to simplify setup, management and problem resolution. The FC5022 supports Flash and Hybrid Storage arrays such as the Lenovo S3200 at full 16Gb speeds. 16Gb connections can also increase application performance in VMware and SQL environments. Brocade ClearLink diagnostics quickly identify and isolate 16Gbps optics, port and cable problems, reducing fabric deployment and diagnostic times. The FC5022 is available in three models: a 12-port base switch for low-cost partial chassis deployments, a 24-port switch for greater connectivity, and a 24-port Enterprise switch with advanced diagnostic, monitoring Fabric Vision enterprise software bundle. Any Flex System FC5022 SAN Scalable Switch can scale non-disruptively to 48 ports with Lenovo's Feature on Demand (FOD) license options.

Simple Scalability, Unmatched Flexibility

The FC5022 provides industry-leading scalability for bladed solutions with dynamic ports-on-demand up to 48 ports. This allows customers to start with 12- or 24-port models and then order Feature On Demand license keys as compute and SAN devices are added for 36- and 48-port configurations. Clients have the flexibility to use the 20 external ports to interconnect chassis allowing scalability up to 56 switches for large enterprises, connect to external rack servers, and/or directly connect to the external storage without requiring rack switches. The FC5022 also scales up to 28 internal, server-facing ports allowing fully redundant, high-availability Flex configurations when using the Flex System 4-port 16Gb adapters in the compute nodes. Additionally, up to eight inter-switch-link ports can be trunked together for 128Gbps Inter-Switch Links to ensure optimum performance within the network. The Flex System FC5022 SAN Scalable Switch can also be deployed as an Access Gateway. Access Gateway mode utilizes N_Port ID Virtualization (NPIV) switch standards allowing servers to connect to NPIV-enabled SAN fabrics.

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Specifications

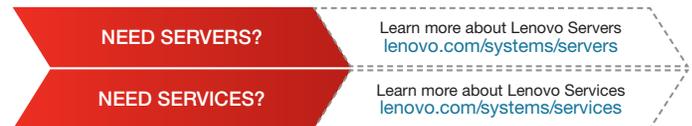|	
Part Numbers	88Y6374 (12-port), 00Y3324 (24-port model which includes two 16Gb FC transceivers) and 90Y9356 (Enterprise 24-port)
FC Port Scalability	Dynamic Ports On Demand allows efficient implementation of additional ports. Order via Lenovo FOD licenses (88Y6382) 12-port upgrade for the FC5022 12-port model (Upgrade 1), and (88Y6386) for additional 24 ports on any model (Upgrade 2)
Maximum FC Ports	48 total physical ports: 28 internal, 20 external; 48 virtual channels per port
Chassis Connectivity	Up to four switches per chassis
Optical Media Supported (External Ports)	16/8/4Gbps and 8/4/2Gbps Fibre Channel LC-style pluggable (SFP+) SWL (850 nm); data rate auto-sensing; hot pluggable; end-to-end optics and link validation
FC Port Types	D_Port (Diagnostic Port, 16 Gbps optics only), E_Port, EX_Port, F_Port, M_Port (Mirror Port); Access Gateway mode: F_Port and NPIV-enabled N_Port; self-discovery based on switch type (U_Port); optional port type control
NPIV Logins	255 N_Port logins per physical port
Warranty	FC5022 Switch assumes Flex System chassis base warranty and any ServicePac upgrade.
Interoperability	For information about switch and device interoperability, visit: http://lenovopress.com/fsig
Product Guide	http://lenovopress.com/tips0870

Investment Protection

The Flex System FC5022 SAN Scalable Switch reduces total cost of ownership and has the ports, performance, and advanced features to sustain the Flex System for the life of the chassis. 16Gb connections save cost and complexity versus 8Gb alternatives by dramatically reducing the number of ports, SFPs, and cables required in multi-chassis configurations. FOD ports-on-demand reduce the initial purchase cost and allow for pay as you grow investment. The long term Brocade technology FC5022 roadmap gives customers a secure, stable IT infrastructure into the future. And the switch interoperates with multiple vendors' Fibre Channel storage arrays and switches, supporting clients as they add and adjust storage capacity.

Why Lenovo

Lenovo is the leading provider of x86 systems for the data center. The portfolio includes rack, tower, blade, dense and converged systems, and supports enterprise class performance, reliability and security. Lenovo also offers a full range of networking, storage, software and solutions, and comprehensive services supporting business needs throughout the IT lifecycle.

For More Information

To learn more about the Flex System FC5022 16Gb SAN Scalable Switch, contact your Lenovo Business Partner or visit: **lenovo.com**/systems/servers

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