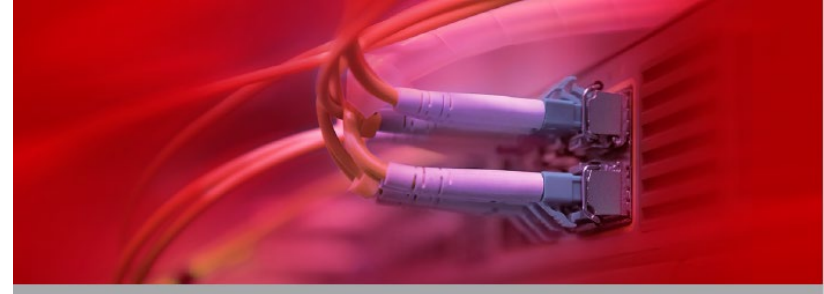**BROADCOM**® **Lenovo**™

Reference Guide

Lenovo ThinkSystem Storage Networks
The Right Network Choice for Highly Virtualized Servers and Flash Storage

Brocade® Gen 6 Fibre Channel Products

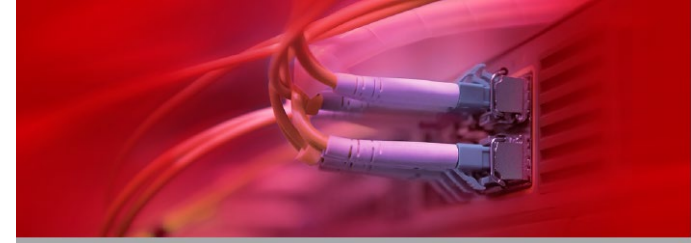| LENOVO MODEL	GEN 6 FC SWITCHES		
	LENOVO THINKSYSTEM DB630S	LENOVO THINKSYSTEM DB620S	LENOVO THINKSYSTEM DB610S
BROCADE MODEL	Brocade G630	Brocade G620	Brocade G610
LENOVO PART NUMBERS	7D1S-CTO5WW (48x32Gb/s SWL SFPs included) 7D1S-CT06WW (96x32Gb/s SWL SFPs + Ent SW Bundle)	6415-HC9 (24x16Gb/s SWL SFPs included) 6415-HC7 (24x32Gb/s SWL SFPs included) 6415-HC8 (48x32Gb/s SWL SFPs + Ent SW Bundle)	6559-HC4 (24x16Gb/s SWL SFPs + Ent SW Bundle) 6559-HC5 (8x16Gb/s SWL SFPs included) 6559-HC7 (8x32Gb/s SWL SFPs included)
PORTS	Entry: 48 ports standard, 72/96 available, up to 128 with QSFP+ Enterprise Bundle: 96 standard, up to 128 with use of QSFP+	Entry: 24 ports standard. 36 or 48 available, up to 64 with QSFP+ Enterprise Bundle: 48 standard, up to 64 with use of QSFP+	Entry: 8 ports default with 16 or 24 available Enterprise Bundle: 24 standard
SPEED & PROTOCOL	4/8/10/16/32Gb/s FC	4/8/10/16/32Gb/s FC	4/8/16/32Gb/s FC
EXPANDABILITY (PORTS ON DEMAND)	• 24-port SFP+ licenses with 24x32Gb/s SWL (4M27A37147) • 24-port SFP+ licenses with no transceivers (7S0C0016WW) • 8-port QSFP+ licenses with 4x128Gb/s SWL (4M27A37148) • 8-port QSFP+ licenses with no transceivers (7S0C0017WW)	• 12-port SFP+ licenses with 12x16Gb/s SWL (4M27A36844) • 12-port SFP+ licenses with 12x32Gb/s SWL (01KN760) • 12-port SFP+ licenses with no transceivers (7S0C000EWW) • 4-port QSFP+ licenses with 4x128Gb/s SWL V2 (4M27A08819) • 4-port QSFP+ licenses with no transceivers (7S0C000FWW)	• 8-port SFP+ licenses with no SFPs (01KP845) • 8-port license with 8x16Gb/s SWL SFPs (01KP846) • 8-port license with 8x32Gb/s SWL SFPs (4M27A64094)
BROCADE OPTICS / TRAINSCEIVERS	• 16Gb SWL SFP+; 10KM LWL SFP+; 25Km ELW SFP+ • 32Gb SWL SFP+; LWL SFP+; 25KM ELW SFP+ • 128Gb (4x32Gb/s) SWL QSFP+ • 4x16Gb SWL QSFP+ • 4x16Gb 2KM SWL QSFP+ • 10Gb FC SWL SFP+; LWL SFP+	• 16Gb SWL SFP+; 10KM LWL SFP+; 25Km ELW SFP+ • 32Gb SWL SFP+; LWL SFP+; 25KM ELW SFP+ • 128Gb (4x32Gb/s) SWL QSFP+ • 4x16Gb SWL QSFP+ • 4x16Gb 2KM SWL QSFP+ • 10Gb FC SWL SFP+; LWL SFP+	• 16Gb SWL SFP+; 10KM LWL SFP+; 25Km ELW SFP+ • 32Gb SWL SFP+; LWL SFP+; 25KM ELW SFP+
AIRFLOW	Non-port-side intake to port-side exhaust	Non-port-side intake to port-side exhaust	Non-port-side intake to port-side exhaust
POWER & COOLING	2 hot-swap, integrated power supplies and 3 hot-swap fan units standard	2 hot-swap, integrated power-supply/fan units standard	4 integrated fan units and 1 integrated power supply
HEIGHT	2 RU	1 RU	1 RU
RACK MOUNT KITS	• Fixed rack kit included • Mid-mount rack kit optional (01KN770)	• Fixed rack kit included • Mid-mount rack kit optional (01KN770)	• Fixed rack kit included • Mid-mount rack kit optional (01KP847)
ENTERPRISE BUNDLE	Optional (7S0C0019WW, standard on 3WW model) includes: Extended Fabric, ISL Trunking, Fabric Vision	Optional (7S0C000GWW, standard on HC2 model) includes: Extended Fabric, ISL Trunking, Fabric Vision	Optional (7S0C000CWW standard on HC1/HC4 model) includes: Extended Fabric, ISL Trunking; Fabric Vision
OPTIONAL LICENSED FEATURES	• Integrated Routing (7S0C0018WW) – Optional Support Ext.	• Mainframe Bundle: Above + CUP (7S0C000JWW) – Optional Support Ext. • Integrated Routing (7S0C000HWW) – Optional Support Ext.	N/A
WARRNTY	1 year Hardware and software entitlement – Recommend upgrading to 3 or 5 years		

Brocade SANnav™ Management Portal and SANnav Global View

DESCRIPTION:	Empower IT administrators to be more efficient and productive by providing comprehensive visibility into the SAN environment. SANnav Management Portal and SANnav Global View transform information about SAN behavior and performance into actionable insights, allowing administrators to quickly identify, isolate, and correct problems before they impact the business. In addition, these tools accelerate administrative tasks by simplifying workflows and automating redundant steps, making it easier for organizations to realize their goal of an autonomous SAN.
LENOVO PART NUMBERS	Brocade SANnav Management Portal: Base Edition (600 ports – switches only)—Part Numbers: 7S0C0010WW (1 Year), 7S0C0013WW (3 Year) or 7S0C001KWW (5 Year) Brocade SANnav Management Portal: Enterprise Edition (15,000 ports)—Part Numbers: 7S0C0011WW (1 Year), 7S0C0014WW (3 Year) or 7S0C001LWW (5 Year) Brocade SANnav Global View: Up to 6 SANnav Management Portal instances—Part Numbers: 7S0C0012WW (1 Year), 7S0C0015WW) (3 Year) or 7S0C001JWW (5 Year)

BROADCOM® Lenovo

Lenovo ThinkSystem Gen 7 Switches and Emulex HBAs
High Performance, Highly Reliable

Brocade Gen 7 Fibre Channel Products

LENOVO MODEL	GEN 7 FC SWITCHES
	LENOVO THINKSYSTEM DB720S
BROCADE MODEL	Brocade G720
LENOVO PART NUMBERS	7D5JCTO1WW (24x32Gb/s SWL SFPs Port side Exhaust) 7D5JCTO2WW (24x64Gb/s SWL SFPs Port side Exhaust) 7D5JCTO3WW (24x32Gb/s SWL SFPs Port side Intake) 7D5JCTO4WW (24x64Gb/s SWL SFPs Port side Intake)
PORTS	Entry: 24 ports standard; scale to 32, 40, 48, or 56 ports
SPEED & PROTOCOL	8/10/16/32/64Gb/s FC
EXPANDABILITY (PORTS ON DEMAND)	• 8-Port License with 32-Gb SWL SFPs (PN 4M27A65819) • 8-Port License with 64-Gb SWL SFPs (PN 4M27A65820)
BROCADE SECURE OPTICS / TRAINSCEIVERS	• 10Gb FC SWL SFP+ (4M27A65420) • 10Gb FC LWL SFP+ (4M27A65421) • 32Gb SWL SFP+ (4M27A65416 1-pack / 4M27A65417 8-pack) • 32Gb 10KM LWL SFP+ (4M27A65418 1-pack / 4M27A65419 8-pack) • 32Gb 25KM ELW SFP+ (4M27A65424) • 64Gb SWL SFP+ (4M27A65425 1-pack / 4M27A65426 8-pack)
AIRFLOW	Non-port-side intake to port-side exhaust Port-side air intake and non-port-side exhaust
POWER & COOLING	2 hot-swap, integrated power-supply/fan units standard
HEIGHT	1 RU
RACK MOUNT KITS	• Universal 4-post rack kit included • Mid-mount rack kit optional (01KN770)
ENTERPRISE BUNDLE	Extended Fabric, ISL Trunking, Fabric Vision (included standard)
WARRANTY	3 year Hardware and software entitlement

Sales Questions: lenovo-sales.pdl@broadcom.com

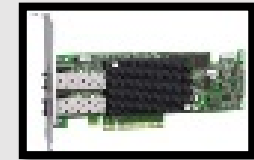| BROCADE SAN HEALTH® |
| --- |
| Allows you to create comprehensive documentation, performance graphs, and detailed topology diagrams and highlights potential problems or concerns (performance, end of service life, etc.). Supports any Brocade, McDATA®, or Cisco MDS SAN switch. Extremely easy to set up and run, giving you a comprehensive view of your SAN storage environment from hosts, OSs, HBAs, switches, and storage devices attached to the fabric. |
| A free utility is available. (Download) |

Emulex® HBA Portfolio for Lenovo ThinkSystem

Emulex Gen 7 Adapters
- Reliable and secure networking
- Faster for flash applications
- Better for virtualization

Emulex® GEN7 FIBRE CHANNEL

LENOVO MODELS	EMULEX 32GFC (GEN 7)
LENOVO PART NUMBERS	4XC7A08250 / 4XC7A76498 (1-port) 4XC7A08251 / 4XC7A76525 (2-port)
BUS	PCIe 4.0
MAX IOPS	5M
ENHANCED FEATURES	Port Aggregation, FEC, ExpressLane™, ClearLink®

Emulex Gen 6 Adapters
- Lowest price point
- Reliable and secure networking
- Exceptional performance

EMULEX Gen6 Fibre Channel

LENOVO MODELS	EMULEX 16GFC (GEN 6)
LENOVO PART NUMBERS	01CV830 (1-port), 01CV840 (2-port)
BUS	PCIe 3.0
MAX IOPS	1.6M
FORWARD ERROR CORRECTION	Yes
EXPRESSLANE	Yes
CLEARLINK	Yes