



NVIDIA SN2100 16-port 100Gb Ethernet Storage Switch

Article

The NVIDIA SN2100 is a half-width 16-port non-blocking 100GbE Open Ethernet Switch. It provides connectivity for a MetroCluster on Lenovo ThinkSystem DM and ThinkSystem DG and offers scale-out cluster functionality.

The SN2100 is suitable for customers who need faster access to data to support business-critical workloads and applications such as database and analytics, and have a need for seamless transition to 100GbE switching.



Figure 1. NVIDIA SN2100

Ordering information

The SN2100 is available in either rear-to-front air flow (port-side exhaust, PSE) or front-to-rear air flow (oPSE). Ordering information is listed in the following table.

Only for storage clustering: The SN2100 is offered by Lenovo only for ThinkSystem DM or ThinkSystem DG MetroCluster and scale-out cluster functionality.

Table 1. Ordering information

Model	Feature code	Description
7DBUCTO1WW	BTG2	Mellanox SN2100 16 Port, QSFP28, 100GbE Switch, Rear to Front (PSE) Exhaust
7DBUCTO2WW	BTG3	Mellanox SN2100 16 port, QSFP28, 100GbE Switch, Front to Rear (oPSE) Exhaust

The following transceivers are supported.

Table 2. Transceivers

Part number	Feature code	Description
7G17A03540	AV1E	Lenovo 100GBase-LR4 QSFP28 Transceiver
4M27A67042	BFH1	Lenovo 100Gb SR4 QSFP28 Ethernet Transceiver
7G17A03539	AV1D	Lenovo 100GBase-SR4 QSFP28 Transceiver

The following rack mount kits are offered.

Table 3. Rack Mount Kit

Part number	Feature code	Description
4XF7A85911	BTG4	Mellanox SN2100 Single Switch Rack Mount Kit (RMK)
4M27A68445	BEGH	Mellanox SN2xxx Enterprise Dual Rack Mount Kit (RMK)

Features

The SN2100 switch is an ideal spine and top of rack (ToR) solution, allowing maximum flexibility, with port speeds spanning from 10 Gb/s to 100 Gb/s per port and port density that enables full rack connectivity to any server at any speed. The uplink ports allow a variety of blocking ratios that suit any application requirement.

Powered by the Mellanox Spectrum ASIC and packed with 16 ports running at 100 GbE, the SN2100 carries a throughput of 3.2 Tb/s with a 2.38 Bpps processing capacity in a compact 1RU form factor.

Key features:

- High density, side-by-side 100GbE switching solution in 1 rack unit
- Break-out support for 10G and 25G clustering
- Runs on Cumulus Linux software, an open network operating system for the SN2100
- Supports all current OEM NetApp platforms for cluster connections
- Support is a pass-through to NVIDIA

For technical specifications of the SN2100, see the NVIDIA product brief:

<https://network.nvidia.com/files/doc-2020/pb-sn2100.pdf>

Connectivity

The following figure shows an example of connectivity:

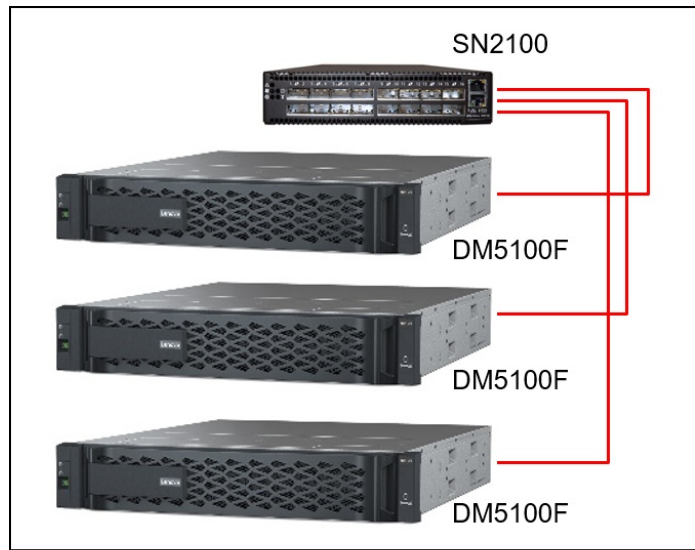


Figure 2. Connectivity example

Warranty

Warranty is 1 year in duration and is supplied by NVIDIA.

For more information

For more information, see

- SN2100 User Guide:
<https://thinksystem.lenovofiles.com/storage/help/topic/switch-nvidia-sn2100/switch-nvidia-sn2100.pdf>
- Installation Guide:
<https://docs.nvidia.com/networking/display/sn2000pub/Installation>
- Product Brief:
<https://network.nvidia.com/files/doc-2020/pb-sn2100.pdf>

Related product families

Product families related to this document are the following:

- [DM Series Storage](#)

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