The Dell EMC Networking MX7116n Fabric Expander Module is a key component in the MX Scalable Fabric Architecture. This module transparently extends the networking capabilities of the MX9116n Fabric Switching Engine to multiple PowerEdge™ MX7000 chassis, providing high performance networking at a low TCO.

**Maximum Scalability**

The MX7116n extends the capabilities of the MX9116n Fabric Switching Engine to a total of ten MX7000 chassis and 80 PowerEdge MX compute sleds.

In addition to 16 internal 25GbE ports, the MX7116n provides two QSFP28-Double Density uplink ports. Each QSFP28-DD port provides capacity for eight 25GbE connections from PowerEdge MX compute sleds for a total of 200GbE of bandwidth per QSFP28-DD cable, and 400GbE bandwidth per MX7116n.

**Performance and Latency**

The non-blocking switching architecture in the MX9116n Fabric Switching Engine provides line-rate 25GbE L2 and L3 forwarding capacity to all connected servers. The MX7116n extends that capability to additional MX7000 chassis, adding less than 75ns of latency for a total of less than 600ns latency between any two compute sleds in a Scalable Fabric.

The design of the MX Scalable Fabric Architecture also allows for zero oversubscription between any two compute sleds in the fabric.

**Zero touch management**

The MX7116n does not run an operating system or have firmware that requires frequent updating to keep “in sync” with the Fabric Switching Engine. It is transparently managed by the MX7000 infrastructure and does not require user configuration.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MX7116n Fabric Expander Module</td>
<td>QSFP28-DD to QSFP28-DD, active optical, passive DAC</td>
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</table>

*DELL EMC NETWORKING MX7116n FABRIC EXPANDER MODULE*

Low latency 25 Gigabit Ethernet fabric expansion for the PowerEdge MX platform.
Technical specifications

Physical
25Gbe Fabric Expander in PowerEdge MX Fabric A/B I/O sled form factor
Indicators:
- Power/Health LED
- ID LED
- Supported Optic LED
- Compute sled link/activity LEDs
Size: 1.18"h x 17.11"w x 10.94"d
Weight: 6.83lbs (3.1kg)
Max. power consumption: 21.9 Watts
Typ. power consumption: 16.0 Watts
Max. operating specifications:
- Standard Operating Temperature 10°C to 35°C (50°F to 95°F)
- Operating Relative Humidity 5% to 85%, non-condensing
- Max. non-operating specifications:
- Storage temperature: -40°C to 65°C (-40°F to 149°F)
- Storage humidity: 5 to 95% (RH), non-condensing
Expanded Operating Temperature, Continuous Operation: 5°C to 40°C at 5% to 85% RH with 29°C dew point
Note: Outside the standard operating temperature, the system can operate continuously in temperatures as low as 5°C and as high as 40°C. For temperature between 35°C to 40°C, de-rate maximum allowable temperature by 1°C per 175m above 950m (1°F per 319 ft)
Fresh Air Compliant to 45°C

Redundancy
Redundant Power and Cooling provided by Dell EMC PowerEdge MX7000 Chassis

Performance
Latency: Sub 75ns

Regulatory compliance
Safety
UL/CSA 60950-1, Second Edition
EN 60950-1, Second Edition
IEC 60950-1, Second Edition Including all National Deviations and Group Differences
EN 60825-1 Safety of Laser Products Part 1: Equipment Classification Requirements and User’s Guide
FDA Regulation 21 CFR 1040.10 and 1040.11

Emissions
Australia/New Zealand: AS/NZS CISPR 32:2015, Class A
Canada: ICES-3/NMB-3, Class A
Europe: EN 55024:2010 (CISPR 24:2010), Class A
Japan: VCCI V-3/2010.04 Class A
USA: FCC CFR 47 Part 15, Subpart B 2011, Class A

Immunity
- EN 300 386 V1.6.1 EMC for Network Equipment
- EN 55024:2010
- EN 61000-3-2: Harmonic Current Emissions
- EN 61000-3-3: Voltage Fluctuations and Flicker
- EN 61000-4-2: ESD
- EN 61000-4-3: Radiated Immunity
- EN 61000-4-4: EFT
- EN 61000-4-5: Surge
- EN 61000-4-6: Low Frequency Conducted Immunity

RoHS
EN 50581:2012 All S9999 components are EU RoHS compliant

Learn more at DellEMC.com/Networking