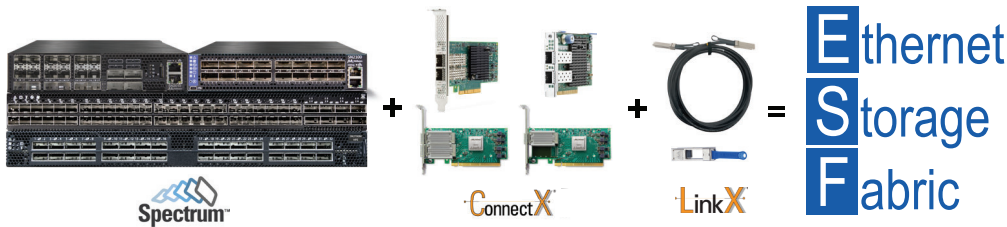


# Mellanox OEM Ethernet Reference Guide for Hewlett Packard Enterprise

Mellanox Technologies provides the **Highest Performance** Intelligent Ethernet interconnect solutions enabling Data Centers, Storage, Cloud Computing, Web2.0 and High Performance Computing applications to operate with maximum functionality at the best efficiency to maximize ROI.

## Mellanox Ethernet Overview

Mellanox provides Hewlett Packard Enterprise a full line of high bandwidth, intelligent Ethernet interconnect products and solutions. Mellanox delivers the industry's best 10/25/50/100G Ethernet solutions ranging from switches, adapters, cables and transceivers. The server market is shifting to higher bandwidth connectivity and is driving a need for a transition to faster speeds and lower latency. Crehan research predicts that by 2021 the majority of network ports will be 25, 50, and 100G speeds. Mellanox Ethernet solutions future-proof the data center allowing 10/25G deployments to scale all the way to 100G and beyond without a major hardware refresh.



Mellanox designs and manufactures advanced silicon and complete systems in house. This sets us apart from other manufacturers who rely on a handful of merchant silicon vendors to provide their feature sets and capabilities. Mellanox products have the best price/performance and we're the only end-to-end networking manufacturer which results in a seamless deployment and network management experience when deploying a complete Mellanox fabric solution. Mellanox 25/50/100G Ethernet solutions are a great choice for Cloud, NFV, Web 2.0, AI, Virtualization and VDI, vSAN ready nodes, Azure Stack, and Financial Services. In addition, Mellanox Ethernet Storage Fabric (ESF) is an ideal storage fabric for HPE Nimble Storage, HPE SimpliVity, Cohesity, Scality, Datera, WekaIO and other primary and secondary storage.

## Hewlett Packard Enterprise

### Key Features

#### Adapters

- Supports 1/10/25/50/100G
- Future-proof upgradeability from 10-100G+ with SFP/QSFP
- Highest efficiency, lowest power usage
- Lowest CPU Utilization - stateless offloads (RoCE, OVS, TCP/IP, DPDK)
- Accelerated Switch Packet Processing (ASAP<sup>2</sup>)
- Hardware offloads for NVGRE and VXLAN encapsulated traffic
- RDMA maximizes vSAN performance
- Selected by HPE for Azure Stack Reference Architecture (HPE 640SFP28)

#### M-series Switch Features

- Storage optimized for industry leading Ethernet Storage Fabric (ESF)
- Industry exclusive fair switch buffer
- Built in switch telemetry - What Just Happened
- Choice of switch OS (Onyx, Cumulus, SwitchDev, SONiC and more)

#### LinkX Features

- Up to 1000x fewer Bit Rate errors than industry standard
- Zero power consumption for DACs

## Complete HPE Mellanox OEM Ethernet Portfolio

Product Description	Data Rate	HP SKU	Mellanox SKU
<b>HPE Ethernet Server Adapters</b>			
HPE 843QSFP28 100GbE 2 port ConnectX-4 Adapter	100G	P05954-B21	N/A-Custom
HPE 842QSFP28 100GbE 1 port ConnectX-5 Adapter	100G	874253-B21	MCX515A-CCAT
HPE 640SFP28 25GbE 2p ConnectX-4Lx Adapter	25G	817753-B21	MCX4121A-ACAT
HPE 640FLR-SFP28 25GbE 2p ConnectX-4Lx Adapter	25G	817749-B21	N/A-Custom
HPE 547FLR-QSFP VPI 40/50Gb 2-port Adapter	50G	879482-B21	N/A Custom
HPE 840QSFP IB EDR/EN 100Gb 1p ConnectX-4 Adapter	100G	825110-B21	MCX455A-ECAT
HPE 840QSFP IB EDR/EN 100Gb 2p ConnectX-4 Adapter	100G	825111-B21	MCX456A-ECAT
HPE 841OCP 100Gb QSFP28 VPI	100G	P02012-B21	N/A-Custom
<b>HPE Synergy Ethernet Fabric</b>			
HPE Synergy 6410C 25/50Gb - ConnectX-4	50G	868779-B21	N/A-Custom
HPE Synergy SH2200 25/50Gb Ethernet Switch	50G	866573-B21	N/A-Custom

Product Description	Data Rate	HP SKU	Mellanox SKU
<b>HPE StoreFabric M-series Switches (HPE 1Y)</b>			
HPE StoreFabric SN2010M/SN2100M Rack Installation Kit	N/A	Q2F25A	MTEF-KIT-D
HPE StoreFabric M-Series SN2010M 25G 18SFP28 4QSFP ½ width Switch	25+100G	Q9E63A	MSN2010-CB2F
HPE StoreFabric M-Series SN2100M 100G 8QSFP28 ½ width Switch	100G	Q2F24A	MSN2100-CB2F
HPE StoreFabric M-Series SN2100M 100G 16QSFP28 ½ width Switch	100G	Q2F23A	MSN2100-CB2F
HPE StoreFabric SN2100M 100G 8 port Upgrade E-LTU	100G	Q2M94AAE	N/A-Custom
HPE StoreFabric M-Series SN2410M 25G 48SFP28 + 8QSFP Switch	25+100G	Q2F22A	MSN2410-CB2F
HPE StoreFabric M-Series SN2410M 25G 24SFP28 + 4QSFP28 Switch	25+100G	Q6M27A	MSN2410-CB2F
HPE StoreFabric SN2410M 25GbE 24p Upgrade E-LTU	25+100G	Q6J40AAE	N/A-Custom
HPE StoreFabric M-Series SN2410bM 10G 48SFP+ + 8QSFP28 Switch	10+100G	Q6M28A	MSN2410-BB2F
HPE StoreFabric M-Series SN2410bM 10G 24SFP+ + 4QSFP Switch	10+100G	Q6M29A	MSN2410-BB2F
HPE StoreFabric SN2410bM 10GbE 24p Upgrade E-LTU	10+100G	Q6J41AAE	N/A-Custom
HPE StoreFabric M-Series SN2700M 100G 32QSFP28 Switch	100G	Q2F21A	MSN2700-CS2F
HPE StoreFabric M-Series SN2700M 100G 16QSFP28 Switch	100G	Q6M26A	MSN2700-CS2F
HPE StoreFabric SN2700M 100GbE 16p Upgrade E-LTU	100G	Q6J39AAE	N/A-Custom
<b>M-series TAA Compliant SKUs (HPE 1Y)</b>			
HPE StoreFabric SN2700M 100GbE 32QSFP28 P to C TAA-compliant Switch	100G	R0P71A	N/A-Custom
HPE StoreFabric SN2700M 100GbE 32QSFP28 C to P TAA-compliant Switch	100G	R0P72A	N/A-Custom
HPE StoreFabric SN2410M 25GbE 48SFP28 8QSFP28 P to C Airflow TAA-compliant Switch	25+100G	R0P73A	N/A-Custom
HPE StoreFabric SN2410M 25GbE 48SFP28 8QSFP28 C to P Airflow TAA-compliant Switch	25+100G	R0P74A	N/A-Custom
HPE StoreFabric SN2100M 100GbE 16QSFP28 P to C Airflow ½ Width TAA-compliant Switch	100G	R0P75A	N/A-Custom
HPE StoreFabric SN2100M 100GbE 16QSFP28 C to P Airflow ½ Width TAA-compliant Switch	100G	R0P76A	N/A-Custom
HPE StoreFabric SN2010M 25GbE 18SFP28 4QSFP28 P to C Airflow ½ Width TAA Switch	25+100G	R0P77A	N/A-Custom
HPE StoreFabric SN2010M 25GbE 18SFP28 4QSFP28 C to P Airflow ½ Width TAA Switch	25+100G	R0P78A	N/A-Custom
<b>M-series ONIE SKUs - no OS (HPE 1Y)</b>			
HPE StoreFabric SN2410M 25GbE 48SFP28 8QSFP28 ONIE P to C Airflow Switch	25+100G	R0P81A	N/A-Custom
HPE StoreFabric SN2700M 100GbE 32QSFP28 ONIE C to P Airflow Switch	100G	R0P79A	N/A-Custom
HPE StoreFabric SN2700M 100GbE 32QSFP28 ONIE P to C Airflow Switch	100G	R0P80A	N/A-Custom
HPE StoreFabric SN2100M 100GbE 16QSFP28 ONIE P to C Airflow Half Width Switch	100G	R0P82A	N/A-Custom
<b>Storage Cabling (HPE 1Y)</b>			
HPE M-series 40GbE QSFP28 SR4 100m XCVR	40G	Q7F11A	MC2210411-SR4
HPE M-series 100GbE QSFP28 1310nm PSM4 500m Transceiver	100G	Q8J73A	MMS1C10-CM
HPE 100GbE QSFP28 to 4x25GbE SFP28 1m Direct Attach Copper Cable	100G	Q9S72A	MCP7F00-A001R30N
HPE M-series 100GbE QSFP28 SR4 100m XCVR	100G	Q2F19A	MMA1B00-C100D
HPE 100GbE QSFP28 to QSFP28 5m Active Optical Cable	100G	Q9S71A	MFA1A00-C005
<b>Other Ethernet Cabling</b>			
HP QSFP/SFP+ Adaptor	10G	655874-B21	MAM1Q00A-QSA
HPE BLc QSFP+ to SFP+ Adapter	10G	720193-B21	N/A-Custom
HPE 25GbE SFP28 to SFP28 1m DAC	25G	844474-B21	MCP2M00-A001
HPE 25GbE SFP28 to SFP28 3m DAC	25G	844477-B21	MCP2M00-A003
HPE QSFP28 to SFP28 Adapter	25G	845970-B21	N/A-Custom
HPE 25GbE SFP28 to SFP28 5m DAC	25G	844480-B21	MCP2M00-A005AM
HPE 25Gb SFP28 to SFP28 7m AOC	25G	844483-B21	N/A-Custom
HPE 25Gb SFP28 to SFP28 15m AOC	25G	845396-B21	MFA2P10-A015
HPE 100G QSFP28 to QSFP28 1m DAC	100G	845404-B21	MCP1600-C001
HPE 100G QSFP28 to QSFP28 3m DAC	100G	845406-B21	MCP1600-C003
HPE 100G QSFP28 to 4x25G SFP28 3m DAC	100G	845416-B21	MCP7F00-A003
HPE QSFP28 to 4x25Gb SFP28 7m AOC	100G	845420-B21	N/A-Custom
HPE QSFP28 to 4x25Gb SFP28 15m AOC	100G	845424-B21	MFA7A50-C015

### Contact Us

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Part numbers, descriptions, and portfolio subject to change.

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