




## Mellanox and Lenovo Joint Solutions

Mellanox Technologies is a leading supplier of end-to-end Ethernet and InfiniBand intelligent interconnect solutions and services for servers, storage, and hyper-converged infrastructure. Mellanox intelligent interconnect solutions increase data center efficiency by providing the highest throughput and lowest latency, delivering data faster to applications and unlocking system performance. Mellanox offers a choice of high-performance solutions: network and multicore processors, network adapters, switches, cables, software and silicon, that accelerate application runtime and maximize business results for a wide range of markets including high performance computing, enterprise data centers, Web 2.0, cloud, storage, network security, telecom and financial services. More information is available at: <http://www.mellanox.com>

**Table 1: Switches, Switch Accessories and Flex Systems Products**



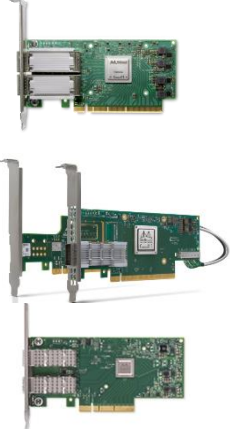

Product	Description	Related Mellanox PN	Lenovo MTM/OPN	FC	Ref
 <b>Top of Rack Switches (HDR)</b>	Mellanox QM8700 HDR IB Managed Switch (PSE) (Order AirDuct Separately)	MQM8700-HS2F	0724-HD7	B4RH	1
	Mellanox QM8700 HDR IB Managed Switch (oPSE) (Order RMK Separately)	MQM8700-HS2R	0724-HD8	B4RJ	1
	Mellanox QM8790 HDR IB Unmanaged Switch (PSE) (Order AirDuct Separately)	MQM8790-HS2F	0724-HD9	B4RK	1
	Mellanox QM8790 HDR IB Unmanaged Switch (oPSE) (Order RMK Separately)	MQM8790-HS2R	0724-HEA	B4RL	1
	Mellanox QM87xx Enterprise RMK w/Air Duct (Required for PSE HDR Switches)	N/A *	4M27A16331	B5RV	
	Mellanox QM87xx Enterprise RMK (Required for oPSE HDR Switches)	MTEF-KIT-F	4M27A16332	B5RW	
 <b>Top of Rack Switches (EDR)</b>	Mellanox SB7800 EDR Switch-IB2 Managed Switch (PSE)	MSB7800-ES2F	0724-HD3	AUPK	1
	Mellanox SB7800 EDR Switch-IB2 Managed Switch (oPSE)	MSB7800-ES2R	0724-HD4	AUPL	1
	Mellanox SB7890 EDR Switch-IB2 Unmanaged Switch (PSE)	MSB7890-ES2F	0724-HD5	AUPM	1
	Mellanox SB7890 EDR Switch-IB2 Unmanaged Switch (oPSE)	MSB7890-ES2R	0724-HD6	AUPN	1
 <b>Flex System</b>	Flex System IB6131 InfiniBand Switch	Switch-X2 IB *	90Y3450	A1EK	2
	Flex System IB6131 InfiniBand Switch (FDR Upgrade)	FDR SW License*	90Y3462	A1QX	2
	Flex System EN6131 40Gb Ethernet Switch	Switch-X2 40GbE*	90Y9346	A3HJ	3
	Flex System IB6132 2-port FDR InfiniBand Adapter	ConnectX-3 Flex Mezz*	90Y3454	A1QZ	4
	Flex System EN4132 2-port 10Gb Ethernet Adapter	ConnectX-3 Flex Mezz*	90Y3466	A1QY	5
	Flex System EN6132 2-port 40Gb Ethernet Adapter	ConnectX-3 Flex Mezz*	90Y3482	A3HK	6
	Lenovo ThinkSystem ConnectX-3 Mezz 40Gb 2-Port Ethernet Adapter	ConnectX-3 Flex Mezz*	7ZT7A00502	AVCU	6
	Lenovo ThinkSystem ConnectX-3 Mezz FDR 2-Port InfiniBand Adapter	ConnectX-3 Flex Mezz*	7ZT7A00508	AUKV	4

**Notes:** \* Custom product for Lenovo, closest Mellanox equivalent PN shown.

Products in red are currently in Last Time Buy phase.

- Lenovo Reference: (For Server and OS Compatibility info)**
- 1) <https://lenovopress.com/lp0900-lenovo-scalable-infrastructure-lesi-solutions>
  - 2) <https://lenovopress.com/tips0871-flex-system-ib6131-infiniband-switch>
  - 3) <https://lenovopress.com/tips0911-flex-system-en6131-40gb-ethernet-switch>
  - 4) <https://lenovopress.com/tips0872-flex-system-ib6132-connectx3-infiniband>
  - 5) <https://lenovopress.com/tips0873-flex-system-en4132-2-port-10gb-ethernet-adapter>
  - 6) <https://lenovopress.com/tips0912-flex-system-en6132-connectx3-40gb-ethernet>

**Table 2: Adapters**








Product	Description	Related Mellanox PN	Lenovo MTM/OPN	FC	Ref
<b>ML2 Adapters</b> 	ThinkSystem Mellanox ConnectX-4 Lx ML2 25Gb 2-Port SFP28 Ethernet Adapter	ConnectX-4 Lx ML2 Mezz *	7ZT7A00507	AUKU	7
	Mellanox ConnectX-4 Lx ML2 1x25GbE SFP28 Adapter	ConnectX-4 Lx ML2 Mezz *	00MN990	ATZR	7
	Lenovo ThinkSystem ConnectX-3 Pro ML2 FDR 2-Port QSFP VPI Adapter	ConnectX-3 pro ML2 Mezz *	7ZT7A00501	AUKR	8
	<b>Mellanox ConnectX-3 Pro ML2 2x40GbE/FDR VPI Adapter</b>	<b>ConnectX-3 pro ML2 Mezz *</b>	<b>00FP650</b>	<b>A5RK</b>	<b>8</b>
<b>OCP Adapter:</b> 	ThinkSystem Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port OCP Ethernet Adapter	MCX4621A-ACAB	4XC7A08246	B5T2	7
	ThinkSystem Mellanox ConnectX-5 EN 10/25GbE SFP28 2-port OCP Ethernet Adapter	MCX542B-ACAN			
<b>Standard PCIe Adapters</b> 	ThinkSystem Mellanox ConnectX-6 HDR100/100GbE QSFP56 1-port PCIe VPI Adapter	MCX653105A-ECAT	4C57A14177	B4R9	1 & 12
	ThinkSystem Mellanox ConnectX-6 HDR100/100GbE QSFP56 2-port PCIe VPI Adapter	MCX653106A-ECAT	4C57A14178	B4RA	1 & 12
	ThinkSystem Mellanox ConnectX-6 HDR/200GbE QSFP56 1-port PCIe 4 VPI Adapter	MCX653105A-HDAT	4C57A15326	B4RC	1 &
		MTMK0012	SC57A40946	B4RB	11
	ThinkSystem Mellanox Innova-2 ConnectX-5 FPGA 25GbE 2-port PCIe Adapter	MNV303212A-ADLT	4XC7A16683	B5XZ	10
	ThinkSystem Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port PCIe Ethernet Adapter	MCX4121A-ACAT	4XC7A08249	B653	7
	ThinkSystem Mellanox ConnectX-5 Ex 25/40GbE 2-port Low-Latency Adapter	MCX516A-BDAT	4XC7A08229	B31C	9
	Mellanox ConnectX-4 EDR IB VPI Single-port x16 PCIe 3.0 HCA	MCX455A-ECAT	00KH924	ASWQ	1 & 7
	Mellanox ConnectX-4 2x100GbE / EDR IB QSFP28 VPI Adapter	MCX456A-ECAT	00MM960	ATRP	1 & 7
	ThinkSystem Mellanox ConnectX-4 PCIe FDR 1-Port QSFP VPI Adapter	MCX453A-FCAT	7XC7A05524	B0WX	7
	ThinkSystem Mellanox ConnectX-4 PCIe FDR 2-Port QSFP VPI Adapter	MCX454A-FCAT	7ZT7A00500	AUVG	7
	Mellanox ConnectX-4 Lx 2x25GbE SFP28 Adapter	MCX4121A-ACAT	01GR250	AUAJ	7
	Mellanox ConnectX-4 Lx 1x40GbE QSFP+ Adapter	MCX4131A-BCAT	00MM950	ATRN	7
	<b>Scalable Infrastructure Adapters</b> 	Mellanox ConnectX-5 EDR IB/100GbE VPI Single-port x16 PCIe 3.0 HCA	MCX555A-ECAT	4C57A08979	B0RL
Mellanox ConnectX-5 EDR IB/100GbE VPI Dual-port x16 PCIe 3.0 HCA		MCX556A-ECAT	4C57A08980	B0RM	1
Mellanox ConnectX-5 Socket Direct EDR IB/100GbE Kit		MCX556M-ECAT-S25	4C57A09506	B1DD	1
Lenovo ThinkSystem SharedIO ConnectX-5 adapter (2-port)		MCX556M-ECAT-S25	SBB7A09823	B3RZ	1
<b>Water-Cooled Adapters</b>	ThinkSystem Mellanox ConnectX-6 HDR/200GbE QSFP56 1-port PCIe VPI Adapter SharedIO SD650	MCX653105A-HDAT*	CTO Only	B4RG	1 & 11
	Mellanox ConnectX-5 EDR Single port PCIe Adapter WCT TLA	MCX555A-ECAT*	SBB7A07155	B1C2	1
<b>Adapter Accessories</b>	Mellanox HDR Auxiliary x16 PCIe 3.0 Connection Card Kit	MTMK0012	4C57A14179	B4RB	1 & 11
	Mellanox Low-profile Single-port HDR100 PCIe Bracket (ConnectX-6)	MEC017512		B4QN	
	Mellanox Low-profile dual-port HDR100 PCIe Bracket (ConnectX-6)	MEC017175		B4QP	
	Mellanox Low-profile Single-port HDR PCIe Bracket (ConnectX-6)	MEC016921		B6YZ	
	Mellanox Low-profile Dual-port SFP28 PCIe Bracket (Innova-2)	MEC016038		B5KC	
	Mellanox Low-profile Single-port QSFP28 PCIe Bracket (ConnectX-4/5)	MTM010192		ATRQ	
	Mellanox Low-profile dual-port QSFP28 PCIe Bracket (ConnectX-4/5)	MTM010153		ATRR	
Mellanox Low-profile dual-port SFP28 PCIe Bracket (ConnectX-4 Lx)	MTM010642		AUAK		

**Notes:** \* Custom product for Lenovo, closest Mellanox equivalent PN shown.





Products in red are currently in Last Time Buy phase.

- Lenovo Reference: (For Server and OS Compatibility info)**
- <https://lenovopress.com/lp0900-lenovo-scalable-infrastructure-lesi-solutions>
  - <https://lenovopress.com/lp0098-mellanox-connectx-4> (ConnectX-4 and ConnectX-4 Lx Adapters)
  - <https://lenovopress.com/tips0897-mellanox-connectx-3> (ConnectX-3 and ConnectX-3 Pro Adapters)
  - <https://lenovopress.com/lp0901-mellanox-connectx5-ex-25-40gbe-adapter>
  - <https://lenovopress.com/lp1169-thinksystem-mellanox-innova-2-connectx-5-fpga-25gbe-2-port-adapter>
  - <https://lenovopress.com/lp1195-mellanox-connectx-6-hdr-adapters#server-support>
  - <https://lenovopress.com/lp1170-mellanox-connectx-6-hdr100-adapters>

**Table 3: InfiniBand Interconnect Products**

Product	Description	Related Mellanox PN	Lenovo MTM/OPN	FC
<b>Passive HDR Cables (DAC)</b> 	0.5m Mellanox HDR IB Passive Copper QSFP56 Cable	MCP1650-H00AE30	4Z57A14182	B4QQ
	1m Mellanox HDR IB Passive Copper QSFP56 Cable	MCP1650-H001E30	4Z57A14183	B4QR
	1.5m Mellanox HDR IB Passive Copper QSFP56 Cable	MCP1650-H01AE30	4Z57A14184	B4QS
	2m Mellanox HDR IB Passive Copper QSFP56 Cable	MCP1650-H002E26	4Z57A14185	B4QT
<b>Optical HDR Cables (AOC)</b> 	3m Mellanox HDR IB Active Optical QSFP56 Cable	MFS1S00-H003E	4Z57A14188	B4QW
	5m Mellanox HDR IB Active Optical QSFP56 Cable	MFS1S00-H005E	4Z57A14189	B4QX
	10m Mellanox HDR IB Active Optical QSFP56 Cable	MFS1S00-H010E	4Z57A14190	B4QY
	15m Mellanox HDR IB Active Optical QSFP56 Cable	MFS1S00-H015E	4Z57A14191	B4QZ
	20m Mellanox HDR IB Active Optical QSFP56 Cable	MFS1S00-H020E	4Z57A14192	B4R0
	30m Mellanox HDR IB Active Optical QSFP56 Cable	MFS1S00-H030E	4Z57A16016	B68P
	50m Mellanox HDR IB Active Optical QSFP56 Cable	MFS1S00-H050E	4Z57A16017	B68N
	100m Mellanox HDR IB Active Optical QSFP56 Cable	MFS1S00-H100E	4Z57A16018	B68M
<b>Passive HDR to 2x HDR100 Splitter Cables (DAC)</b>	1m Mellanox HDR IB Passive Copper Splitter QSFP56 Cable	MCP7H50-H001R30	4Z57A14193	B4R1
	1.5m Mellanox HDR IB Passive Copper Splitter QSFP56 Cable	MCP7H50-H01AR30	4Z57A14194	B4R2
	2m Mellanox HDR IB Passive Copper Splitter QSFP56 Cable	MCP7H50-H002R26	4Z57A11477	B68L
<b>Optical HDR to 2x HDR100 Splitter Cables (AOC)</b> 	3m Mellanox HDR IB Active Optical Splitter QSFP56 Cable	MFS1S50-H003E	4Z57A14196	B4R4
	5m Mellanox HDR IB Active Optical Splitter QSFP56 Cable	MFS1S50-H005E	4Z57A14197	B4R5
	10m Mellanox HDR IB Active Optical Splitter QSFP56 Cable	MFS1S50-H010E	4Z57A14198	B4R6
	15m Mellanox HDR IB Active Optical Splitter QSFP56 Cable	MFS1S50-H015E	4Z57A14199	B4R7
	20m Mellanox HDR IB Active Optical Splitter QSFP56 Cable	MFS1S50-H020E	4Z57A14214	B4R8
	30m Mellanox HDR IB Active Optical Splitter QSFP56 Cable	MFS1S50-H030E	4Z57A11490	B68K
<b>Passive EDR Cables (DAC)</b> 	0.5m Mellanox EDR IB Passive Copper QSFP28 Cable *	MCP1600-E00A	00MP516	ASQT
	0.75m Mellanox EDR IB Passive Copper QSFP28 Cable *	MCP1600-Exxx *	00MP520	ASQU
	1m Mellanox EDR IB Passive Copper QSFP28 Cable *	MCP1600-E001	00MP524	ASQV
	1.25m Mellanox EDR IB Passive Copper QSFP28 Cable *	MCP1600-Exxx *	00MP528	ASQW
	1.5m Mellanox EDR IB Passive Copper QSFP28 Cable *	MCP1600-E0A1	00MP532	ASQX
	2m Mellanox EDR IB Passive Copper QSFP28 Cable *	MCP1600-E002	00MP536	ASQY
	3m Mellanox EDR IB Passive Copper QSFP28 Cable *	MCP1600-E003	00MP560	ASRM
<b>Optical EDR Cables (AOC)</b> 	3m Mellanox EDR IB Optical QSFP28 Cable *	MFA1A00-E003	00MP563	ASRN
	5m Mellanox EDR IB Optical QSFP28 Cable *	MFA1A00-E005	00MP540	ASQZ
	10m Mellanox EDR IB Optical QSFP28 Cable *	MFA1A00-E010	00MP544	ASR0
	15m Mellanox EDR IB Optical QSFP28 Cable *	MFA1A00-E015	00MP548	ASR1
	20m Mellanox EDR IB Optical QSFP28 Cable *	MFA1A00-E020	00MP552	ASR2
	30m Mellanox EDR IB Optical QSFP28 Cable *	MFA1A00-E030	00MP556	ASR3
	50m Mellanox EDR IB Optical QSFP28 Cable *	MFA1A00-E050	00MP566	ASRP
<b>Passive FDR Cables (DAC)</b> 	0.5m Mellanox QSFP Passive DAC Cable	MC2207130-00A	44T1364	ARZA
	0.75m Mellanox QSFP Passive DAC Cable	MC2207130-xxx *	00KF002	ARZB
	1m Mellanox QSFP Passive DAC Cable	MC2207130-001	00KF003	ARZC
	1.25m Mellanox QSFP Passive DAC Cable	MC2207130-xxx *	00KF004	ARZD
	1.5m Mellanox QSFP Passive DAC Cable	MC2207130-0A1	00KF005	ARZE
	2m Mellanox QSFP Passive Copper FDR14 InfiniBand Cable	MC2207130-002	46W0583	A44G
	3m Mellanox QSFP Passive DAC Cable	MC2207128-003	00KF006	ARZF
<b>Optical FDR Cables</b> 	3m Mellanox Active IB FDR Optical Fiber Cable	MC220731V-003	00KF007	ARYC
	5m Mellanox Active IB FDR Optical Fiber Cable	MC220731V-005	00KF008	ARYD
	10m Mellanox Active IB FDR Optical Fiber Cable	MC220731V-010	00KF009	ARYE
	15m Mellanox Active IB FDR Optical Fiber Cable	MC220731V-015	00KF010	ARYF
	20m Mellanox Active IB FDR Optical Fiber Cable	MC220731V-020	00KF011	ARYG
	30m Mellanox Active IB FDR Optical Fiber Cable	MC220731V-030	00KF012	ARYH
	50m Mellanox QSFP Optical FDR14 InfiniBand Cable	MC2207310-050	00W0045	A2YS

**Table 4: Ethernet Interconnect Products**

Product	Description	Related Mellanox PN	Lenovo MTM/OPN	FC
<b>Transceivers</b> 	25GBase-SR SFP28 transceiver (LC-LC, 850nm, upto 100m)	MMA2P00-AS	7G17A03537	AV1B
	Lenovo 25GBase-LR SFP28 Transceiver (LC-LC, 1310nm, upto 10km)	MMA2L20-AR	7G17A03538	AV1C
	100GBase-SR4 QSFP28 transceiver (MPO, 850nm, upto 100m)	MMA1B00-C100D	7G17A03539	AV1D
	100GBase-LR4 QSFP28 transceiver (LC-LC, 1310nm, upto 10km)	MMA1L10-CR	7G17A03540	AV1E
<b>Optical 25GbE Cables (AOC)</b> 	Lenovo 3m 25G SFP28 Active Optical Cable	MFA2P10-A003	7Z57A03541	AV1F
	Lenovo 5m 25G SFP28 Active Optical Cable	MFA2P10-A005	7Z57A03542	AV1G
	Lenovo 10m 25G SFP28 Active Optical Cable	MFA2P10-A010	7Z57A03543	AV1H
	Lenovo 15m 25G SFP28 Active Optical Cable	MFA2P10-A015	7Z57A03544	AV1J
	Lenovo 20m 25G SFP28 Active Optical Cable	MFA2P10-A020	7Z57A03545	AV1K
<b>Optical 100GbE Cables (AOC)</b> 	Lenovo 1m 100G SFP28 Active Optical Cable	MFA1A00-C001	4Z57A10844	B2UZ
	Lenovo 3m 100G SFP28 Active Optical Cable	MFA1A00-C003	7Z57A03546	AV1L
	Lenovo 5m 100G QSFP28 Active Optical Cable	MFA1A00-C005	7Z57A03547	AV1M
	Lenovo 10m 100G QSFP28 Active Optical Cable	MFA1A00-C010	7Z57A03548	AV1N
	Lenovo 15m 100G QSFP28 Active Optical Cable	MFA1A00-C015	7Z57A03549	AV1P
	Lenovo 20m 100G QSFP28 Active Optical Cable	MFA1A00-C020	7Z57A03550	AV1Q
<b>Optical Splitter Cables (AOC)</b> 	Lenovo 3m 100G to 4x25G Breakout Active Optical Cable	MFA7A50-C003	7Z57A03551	AV1R
	Lenovo 5m 100G to 4x25G Breakout Active Optical Cable	MFA7A50-C005	7Z57A03552	AV1S
	Lenovo 10m 100G to 4x25G Breakout Active Optical Cable	MFA7A50-C010	7Z57A03553	AV1T
	Lenovo 15m 100G to 4x25G Breakout Active Optical Cable	MFA7A50-C015	7Z57A03554	AV1U
	Lenovo 20m 100G to 4x25G Breakout Active Optical Cable	MFA7A50-C020	7Z57A03555	AV1V
<b>Hybrid / Conversion</b>	Mellanox 100G QSFP28 to 25G SFP28 Cable Adapter	MAM1Q00A-QSA28	4G17A10853	B306
	Mellanox QSFP to SFP+ adapter	MAM1Q00A-QSA	00D9676	ARZH



350 Oakmead Parkway, Suite 100  
 Sunnyvale, CA 94085  
 Tel: 408-970-3400  
 Fax: 408-970-3403  
[www.mellanox.com](http://www.mellanox.com)

## Mellanox Email Contact Information for Lenovo Sales and Technical assistance

[LenovoSales@Mellanox.com](mailto:LenovoSales@Mellanox.com)  
[LenovoTech@Mellanox.com](mailto:LenovoTech@Mellanox.com)