





# Reference Guide




## IBM and Mellanox Joint Solutions

IBM Power servers and storage systems address a host of next-generation business challenges, offering enterprises an optimal approach to meet the technology needs of companies that operate massive data centers, small enterprises for hybrid and multicloud, and scale-out servers for a wide variety of mixed workloads. IBM offers a wide range of Mellanox Ethernet switches at 1GbE, 10/40GbE, 40/100GbE, and InfiniBand switches at EDR and FDR speed from the top of the rack 36 port switches, all the way to 648 port chassis switches. Mellanox ConnectX-3, ConnectX-3 Pro, Connect-IB, ConnectX-4, ConnectX-4 Lx, and ConnectX-5 adapter cards, provides IBM customers the ability to run either 10/25/40/100 Gigabit Ethernet or 40/56/100Gb/s InfiniBand, connectivity. These adapters and switches enable extreme computing, real-time response, I/O consolidation and power savings for Cloud Computing, Big Data, modern HPC, analytics, and artificial intelligence (AI) application environments.

Product	Description	Mellanox PN	IBM MTM / FC
<b>TOR Ethernet Switch Products</b> 	<b>TOR</b>		
	32x 40/100GbE Port Switch B2F Power to Connector	MSN2700-CS2F	8831-00M
	48x 10GbE + 12x 40GbE Port Switch B2F P2C	MSX1410-BB2F2	8831-S48
	36x 40GbE Port Switch B2F Power to Connector	MSX1710-BS2F2	8831-NF2
	48x 1GbE RJ45 + 4x 1/10GbE SFP+	N/A-Custom	8831-S52
<b>Ethernet Switch Accessories</b>	<b>Air Duct</b>		
	1U Air Duct for 8831-S48	N/A-Custom	EDT6
	1U Air Duct for 8831-NF2 / 8831-00M	N/A-Custom	EDT4
	1U Air Duct for 8831-S52	N/A-Custom	EU36
<b>TOR InfiniBand Switch Products</b> 	<b>TOR</b>		
	FDR 36 Port Switch B2F Power to Connector	MSX6036F-2SFS	8831-F36
	FDR 36 Port Switch F2B Connector to Power	MSX6036F-2SRS	8831-F37
	EDR 36 Port Switch B2F Power to Connector	MSB7700-ES2F	8828-E36
	EDR 36 Port Switch F2B Connector to Power	MSB7700-ES2R	8828-E37
	EDR TOR 36 Port IB2 Switch B2F Power to Connector	MSB7800-ES2F	8828-G36
	EDR TOR 36 Port IB2 Switch F2B Connector to Power	MSB7800-ES2R	8828-G37
	EDR TOR 36 Port IB2 Un-Managed Switch B2F P2C	MSB7890-ES2F	8828-GU6
	EDR TOR 36 Port IB Router B2F Power to Connector	MSB7780-ES2F	8828-ER6
<b>InfiniBand Switch Accessories</b>	<b>Air Duct</b>		
	1U Air Duct for 8831-F36	N/A-Custom	EDT5
	1U Air Duct for 8828-E36 / G36 / ER6 / GU6	N/A-Custom	EDT4
<b>Chassis InfiniBand Switch</b> 	<b>Chassis</b>		
	MCS7500 - 648 port Director - Inc. 18 Spines + 6 Leaf	MCS7500	8828-ED2
	MCS7520 - 216 port Director - Inc. 6 Spines + 3 Leaf	MCS7520	8828-ED0
	MCS7510 - 324 port Director - Inc. 9 Spines + 3 Leaf	MCS7510	8828-ED1
	CS75XX Management Module	MMB7500	ESWL
	CS75XX EDR IB2 Leaf Module	MSB7560-E	ESWN
	CS75XX EDR IB2 Spine Module	MSB7570-E	ESWQ
<b>UFM</b> 	<b>Appliance</b>		
	UFM Appliance (Standard)	MUA9002F-2SF-xxx	8867-FM1
	UFM Appliance (Open)	N/A-Custom	8867-FM2
	High Availability Option	MUA9002F-2SF-HA	EHPO
	UFM License for 100 managed nodes - UFM License	MUA9002F-2SF-100	EU30
	UFM License for 250 managed nodes - UFM License	MUA9002F-2SF-250	EU31
	UFM License for 500 managed nodes - UFM License	MUA9002F-2SF-500	EU32
	UFM License for 1000 managed nodes - UFM License	MUA9002F-2SF-1K	EU33
	UFM License for 2000 managed nodes - UFM License	MUA9002F-2SF-2K	EU34
	UFM License for 4000 managed nodes - UFM License	MUA9002F-2SF-4K	EU35
	UFM Software Add-on License for 50 managed nodes - UFM	UFM-SDN-50-UPGRADE	EU3B
	UFM Software Add-on License for 250 managed nodes	UFM-SDN-250-UPGRADE	EU3C

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Product	Description	Mellanox PN	IBM FC#
	<b>10GbE – PCI Gen 3.0</b>		
	PCIE3 LP 2 Port 10GbE RoCE SR Adapter	MCX312B-XCCT	EC2M / EL40
	PCIE3 2 Port 10GbE RoCE SR Adapter	MCX312B-XCCT	EC2N / EL54
	PCIE3 LP 2 Port 10GbE RoCE SFP+ Adapter	MCX312B-XCCT	EC37 / EL3X
	PCIE3 2 Port 10GbE RoCE SFP+ Adapter	MCX312B-XCCT	EC38 / EL53
	<b>10GbE – PCI Gen 3.0</b>		
	PCIE3 LP 2 Port 10GbE RoCE SFP+ Adapter	MCX4121A-XCAT	EC2R
	PCIE3 2 Port 10GbE RoCE SFP+ Adapter	MCX4121A-XCAT	EC2S
	<b>10/25GbE – PCI Gen 3.0</b>		
	PCIE3 LP 2 Port 10/25GbE RoCE SFP28 Adapter	MCX4121A-ACAT	EKAU
	PCIE3 LP 2 Port 10/25GbE RoCE SFP+ Adapter	MCX4121A-ACAT	EC2T
	PCIE3 2 Port 10/25GbE RoCE SFP+ Adapter	MCX4121A-ACAT	EC2U
	<b>40GbE – PCI Gen 3.0</b>		
	PCIE3 LP 2 Port 40GbE RoCE QSFP Adapter	MCX314A-BCBT	EC3A
	PCIE3 2 Port 40GbE RoCE QSFP Adapter	MCX314A-BCBT	EC3B
	PCIE3 LP 2 Port 40/56 GbE RoCE QSFP Adapter	MC414A-BCAT	EKF1
	<b>FDR – PCI Gen 3.0</b>		
	PCIE3 LP 2 Port 56Gb FDR IB QSFP Adapter	MCB194A-FCAT	EC32 / EL3D
	PCIE3 2 Port 56Gb FDR IB QSFP Adapter	MCB194A-FCAT	EC33/ EL50
	<b>100GbE – PCI Gen 3.0</b>		
	PCIE3 1 Port 100GbE RoCE QSFP28 Adapter	MCX415A-CCAT	EKAM
	PCIE3 LP 2 Port 100GbE QSFP28 Adapter	MCX416A-ECAT	EC3L
	PCIE3 2 Port 100GbE QSFP28 Adapter	MCX416A-ECAT	EC3M
	<b>100GbE / EDR – PCI Gen 3.0</b>		
	PCIE3 2 Port 100GbE / EDR RoCE QSFP28 Adapter	MCX456A-ECAT	EKAL
	PCIE3 LP 2 Port 100GbE / EDR RoCE QSFP28 Adapter	MCX555A-ECAT	EKFD
	<b>100GbE / EDR – PCI Gen 4.0</b>		
	PCIE4 LP 2 Port 100GbE RoCE QSFP28 Adapter	MCX516N-EDAT	EC67
	PCIE4 2 Port 100GbE RoCE QSFP28 Adapter	MCX516N-EDAT	EC66
	<b>100GbE / EDR – PCI Gen 4.0</b>		
	PCIE4 LP 2 Port 100GbE / EDR RoCE QSFP28 Adapter	MCX556A-EDAT	EKAY
	<b>EDR – PCI Gen 3.0</b>		
	PCIE3 LP 2 Port 100Gb EDR IB QSFP Adapter	MCX456A-ECAT	EC3E
	PCIE3 2 Port 100Gb EDR IB QSFP Adapter	MCX456A-ECAT	EC3F
	PCIE3 LP 1 Port 100Gb EDR IB QSFP Adapter	MCX455A-ECAT	EC3T
	PCIE3 1 Port 100Gb EDR IB QSFP Adapter	MCX455A-ECAT	EC3U
	<b>EDR – PCI Gen 4.0</b>		
	PCIE4 LP 1 Port 100Gb EDR IB QSFP Adapter	MCX555N-ECAT	EC62
	PCIE4 1 Port 100Gb EDR IB QSFP Adapter	MCX555N-ECAT	EC63
	PCIE4 LP 2 Port 100Gb EDR IB QSFP Adapter	MCX556N-EDAT	EC64
PCIE4 2 Port 100Gb EDR IB QSFP Adapter	MCX556N-EDAT	EC65	
<b>Systems Adapters</b>			
<b>V7000, V5000, SVC, V9000 Adapters</b>	25GbE (RoCE) Adapter Pair - ConnectX-4 LX for Storwize V7000	MCX4121A-ACAT	AHB6
	25GbE (RoCE) Adapter Pair - ConnectX-4 LX for Storwize V5000	MCX4121A-ACAT	ACOE
	2 port 25Gb Ethernet Adapter (RoCE) - ConnectX-4 LX for SVC, V9000	MCX4121A-ACAT	AH16
<b>Flash System 900 Adapter</b>	QDR IB 4 Port Host Interface Card for Flash Systems	N/A-Custom	AF16
<b>zSystems Adapters</b>	10GbE RoCE Express (#0411) for Shared Memory Communications <b>z13</b>	MCX312A-XBCT	0411
	10GbE RoCE Express2 (#0412) for Shared Memory Communications <b>z14</b>	MCX4121A-ACAT	0412



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Product	Description	Mellanox PN	IBM FC#
Cables	<b>25GbE Cables</b>		
	0.5M 25GbE Copper Cable QSFP	MCP2M00-A00A	EB4J
	1M 25GbE Copper Cable QSFP	MCP2M00-A001	EB4K
	1.5M 25GbE Copper Cable QSFP	MCP2M00-A01A	EB4L
	2M 25GbE Copper Cable QSFP	MCP2M00-A002	EB4M
	2M 100GbE to 4x25GbE, QSFP28 to 4xSFP28	MCP7F00-A002	EB4P
	25GBASE-SR SFP28 Transceiver Module	MMA2P00-AS	EB47
	<b>40GbE / FDR Cables</b>		
	0.5M 40GbE FDR Copper Cable QSFP	MC2207130-00A	EB40
	1M 40GbE FDR Copper Cable QSFP	MC2207130-001	EB41
	2M 40GbE FDR Copper Cable QSFP	MC2207130-002	EB42
	3M 40GbE FDR Optical Cable QSFP	MC220731V-003	EB4A
	5M 40GbE FDR Optical Cable QSFP	MC220731V-005	EB4B
	10M 40GbE FDR Optical Cable QSFP	MC220731V-010	EB4C
	15M 40GbE FDR Optical Cable QSFP	MC220731V-015	EB4D
	20M 40GbE FDR Optical Cable QSFP	MC220731V-020	EB4E
	30M 40GbE FDR Optical Cable QSFP	MC220731V-030	EB4F
	50M 40GbE FDR Optical Cable QSFP	MC220731V-050	EB4G
	<b>EDR Cables</b>		
	0.5M EDR Copper Cable QSFP	MCP1600-E00A	EB50
	1.0M EDR Copper Cable QSFP	MCP1600-E001	EB51
	2.0M EDR Copper Cable QSFP	MCP1600-E002	EB52
	1.5M EDR Copper Cable QSFP	MCP1600-E01A	EB54
	3M EDR Optical Cable QSFP	MFA1A00-E003	EB5A
	5M EDR Optical Cable QSFP	MFA1A00-E005	EB5B
	10M EDR Optical Cable QSFP	MFA1A00-E010	EB5C
	15M EDR Optical Cable QSFP	MFA1A00-E015	EB5D
	20M EDR Optical Cable QSFP	MFA1A00-E020	EB5E
	30M EDR Optical Cable QSFP	MFA1A00-E030	EB5F
	50M EDR Optical Cable QSFP	MFA1A00-E050	EB5G
	100M EDR Optical Cable QSFP	MFA1A00-E100	EB5H
	<b>100GbE Cables</b>		
	0.5M 100GbE Copper Cable QSFP28	MCP1600-C00A	EB5J
	1.0M 100GbE Copper Cable QSFP28	MCP1600-C001	EB5K
	1.5M 100GbE Copper Cable QSFP28	MCP1600-C01A	EB5L
	2.0M 100GbE Copper Cable QSFP28	MCP1600-C002	EB5M
	3M 100GbE Optical Cable QSFP28	MFA1A00-C003	EB5R
	5M 100GbE Optical Cable QSFP28	MFA1A00-C005	EB5S
	10M 100GbE Optical Cable QSFP28	MFA1A00-C010	EB5T
	15M 100GbE Optical Cable QSFP28	MFA1A00-C015	EB5U
	20M 100GbE Optical Cable QSFP28	MFA1A00-C020	EB5V
	30M 100GbE Optical Cable QSFP28	MFA1A00-C030	EB5W
	50M 100GbE Optical Cable QSFP28	MFA1A00-C050	EB5X
	100M 100GbE Optical Cable QSFP28	MFA1A00-C100	EB5Y



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