



IBTA RoCE Interoperability List

April 2018



These Interoperability results represent system tests and include the testing of the entire environment including device transmitters, cable media and device receivers. The Interoperability results include 10, 25, 40, 50 and 100 GbE RoCE devices with SFP+, SFP28, QSFP+ and QSFP28 cables.

While every effort was made to test worst-case conditions, results may vary with alternative port configurations, device and cable manufacturing variation, device firmware and software, traffic density and data patterns, temperature variation, etc. The following documentation identifies the test conditions used to obtain these Interoperability results.

Hardware used to test Interoperability

Manufacturer	Description of Hardware	Model	IC Type	Type	FW	SW	Max Speed
Broadcom	Broadcom P150p NetXtreme-E Single-port 40Gb/50Gb Ethernet PCIe Adapter	BCM957414A4140	QSFP+	RNIC	20.8.63	OFED 4.8-2	50 GbE
Broadcom	Broadcom P1110p NetXtreme-E Single-port 50Gb/100Gb Ethernet PCIe Adapter	BCM957454A4540	QSFP28	RNIC	20.8.63	OFED 4.8-2	100 GbE
Broadcom	Broadcom NetXtreme-E Dual-port 25G RDMA Ethernet PCIe Adapter	BCM957414A4142	SFP28	RNIC	20.8.63	OFED 4.8-2	25 GbE
Broadcom	Broadcom Stingray PS225 Dual-port 25Gb Ethernet SmartNIC PCIe Adapter	BCM958802A8024	SFP28	RNIC	212.0.103	OFED 4.8-2	25 GbE
Cavium	QLogic FastLinQ Dual-Port 25GbE SFP28	QL45212HL	SFP28	RNIC	8.34.8.0	OFED 4.8-2	25 GbE
Cavium	QLogic FastLinQ Dual-Port 25GbE SFP28	QL41212HL	SFP28	RNIC	8.34.8.0	OFED 4.8-2	25 GbE
Cavium	QLogic FastLinQ Dual-Port 40GbE QSFP+	QL45412HL	QSFP+	RNIC	8.34.8.0	OFED 4.8-2	40 GbE
Cavium	QLogic FastLinQ Single-Port 40/100GbE QSFP28	QL45611HL	QSFP28	RNIC	8.34.8.0	OFED 4.8-2	100 GbE
Cavium	QLogic FastLinQ Quad-Port 25GbE SFP28	QL41234HL	SFP28	RNIC	8.34.8.0	OFED 4.8-2	25 GbE
Huawei	Smart-IO-NIC-4-25, 25/10GbE Quad-port SFP28	Smart-IO-NIC-4-25	SFP28	RNIC	1.2.6.0	OFED 4.8-2	25 GbE
Huawei	Smart-IO-NIC-2-100, 40/100GbE Dual-port QSFP28	Smart-IO-NIC-2-100	QSFP28	RNIC	1.2.6.0	OFED 4.8-2	100 GbE
Mellanox	ConnectX@-3 Pro EN network interface card, 10GbE, dual-port SFP+	MCX312B-XCCT	SFP+	RNIC	2.42.500	MLNX OFED 4.3-1	10 GbE
Mellanox	ConnectX@-4 Lx EN network interface card, 25GbE dual-port SFP28	MCX4121A-ACAT	SFP28	RNIC	14.22.1002	MLNX OFED 4.3-1	25 GbE
Mellanox	ConnectX@-4 EN network interface card, 50GbE dual-port QSFP28	MCX414A-GCAT	QSFP28	RNIC	12.22.1002	MLNX OFED 4.3-1	50 GbE
Mellanox	ConnectX@-4 EN network interface card, 40GbE dual-port QSFP28	MCX416A-BCAT	QSFP28	RNIC	12.22.1002	MLNX OFED 4.3-1	40 GbE
Mellanox	ConnectX@-5 EN network interface card, 10-100GbE dual-port QSFP28	MCX516A-CCAT	QSFP28	RNIC	16.22.1002	MLNX OFED 4.3-1	100 GbE
Mellanox	Half-Width 12-port Non-blocking 40/56GbE QSFP+	MSX1012B-2BFS	QSFP+	Switch	9.4.5070	3.6.6102	40 GbE
Mellanox	SwitchX@-2 InfiniBand to Ethernet gateway, 36 QSFP+ ports, 8 RoCE + 28 IB ports	MSX6036G-2SFS	QSFP+	Switch	9.4.5070	3.6.6003	40 GbE
Mellanox	48 SFP28 ports, 8 QSFP28 ports, Supports speeds of 10/25/40/50/56/100GbE	MSN2410-CB2F	QSFP28	Switch	13.1620.0222	3.6.6102	100 GbE



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Software Used to Test Interoperability

Software	Versions
Operating System	CentOS 7.4
OFED Versions	OFED 4.8-2
Mellanox OFED Version	MLNX_OFED 4.3-1.0.1.0
Open MPI Version	Open MPI 3.0.0
Open MPI Home	https://www.open-mpi.org/doc/
IMB Version	Intel MPI Benchmark 2018
IMB Source	https://github.com/intel/mpi-benchmarks
IMB Documentation	https://software.intel.com/en-us/imb-user-guide
Test Plan Version	https://cw.infinibandta.org/wg/CIWG/document/8069
Test Duration	3-15 minutes

Conditions for passing Interoperability Testing	
Link State	Link state must be active
Link Width	Link width is @ expected width - i.e. 1x,4x, etc
Link Speed	Link speed is @ expected speed - e.g. 100 GbE
SFI_Perf	There must be no errors during performance testing
IMB + Open MPI Test	There must be no errors during the MPI Benchmark

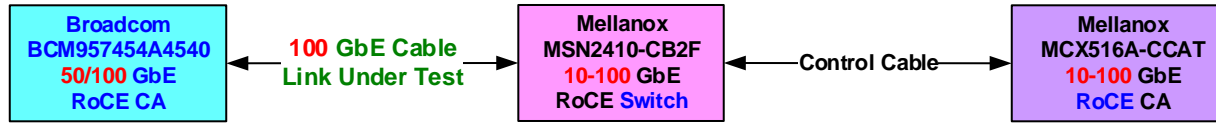
Software	Versions
Software Forge HPC-Performance Monitor	HPC-PM-2.0.99

Open MPI Intel Benchmark Tests	
PingPong	Gather
PingPing	Gatherv
Sendrecv	Scatter
Exchange	Scatterv
Allreduce	Alltoall
Reduce	Alltoallv
Reduce_scatter	Bcast
Allgather	Barrier
Allgatherv	

RDMA over Converged Ethernet (RoCE) Interop Testing

Broadcom BCM957454A4540 to Mellanox MSN2410 Switch to Mellanox MCX516A

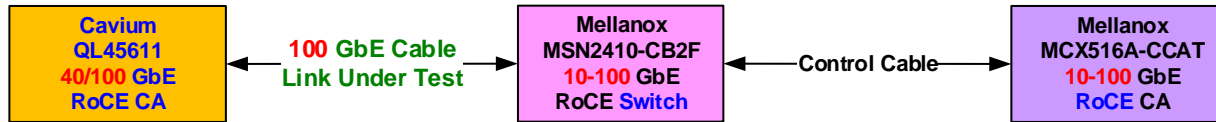
Scenario 01



Scenario 01

Cavium QL45611 to Mellanox MSN2410 Switch to Mellanox MCX516A

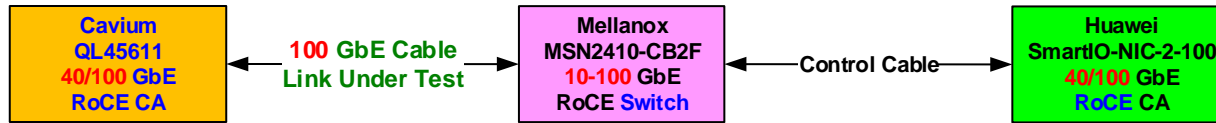
Scenario 02



Scenario 02

Cavium QL45611 to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-2-100

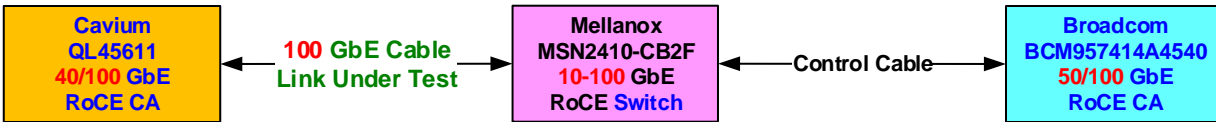
Scenario 03



Scenario 03

Cavium QL45611 to Mellanox MSN2410 Switch to Broadcom BCM957454A4540

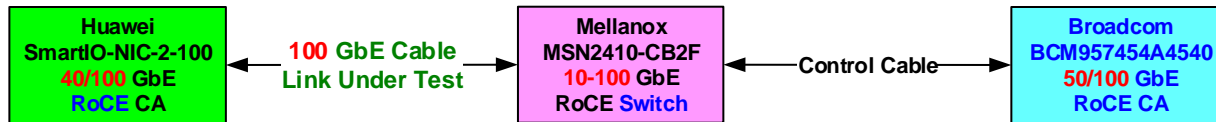
Scenario 04



Scenario 04

Huawei SmartIO-NIC-2-100 to Mellanox MSN2410 Switch to Broadcom BCM957454A4540

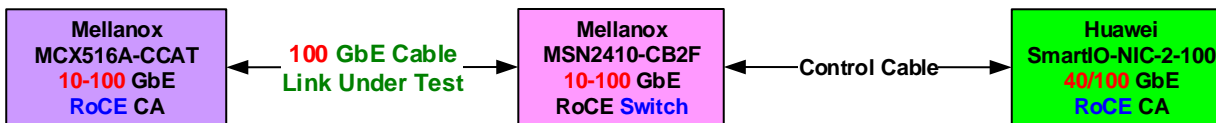
Scenario 05



Scenario 05

Mellanox MCX516A to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-2-100

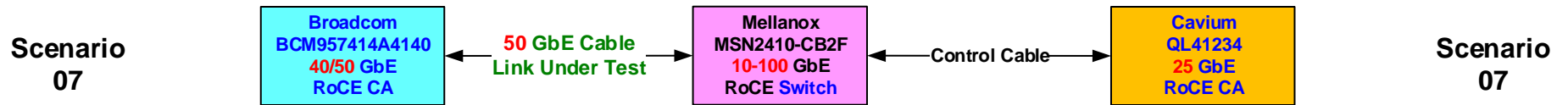
Scenario 06



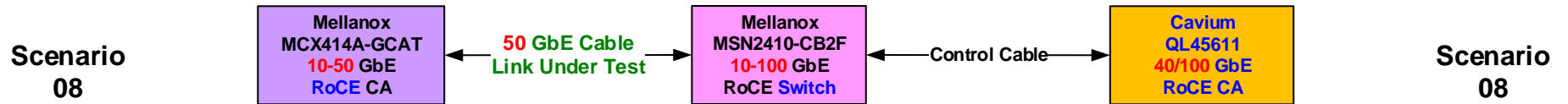
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RDMA over Converged Ethernet (RoCE) Interop Testing

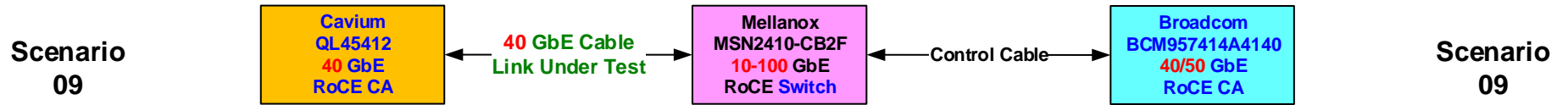
Broadcom BCM957414A4140 to Mellanox MSN2410 Switch to Cavium QL41234



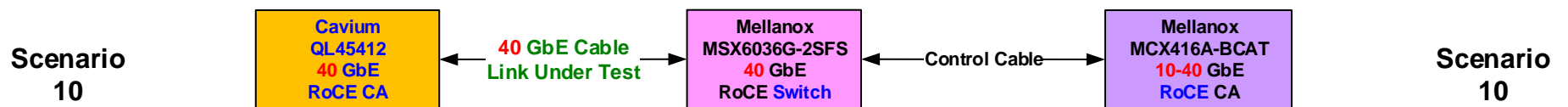
Mellanox MCX414A to Mellanox MSN2410 Switch to Cavium QL45611



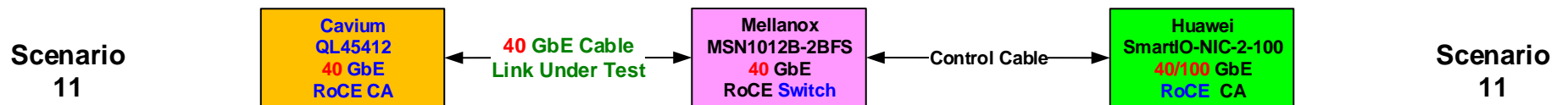
Cavium QL45412 to Mellanox MSN2410 Switch to Broadcom BCM957414A4140



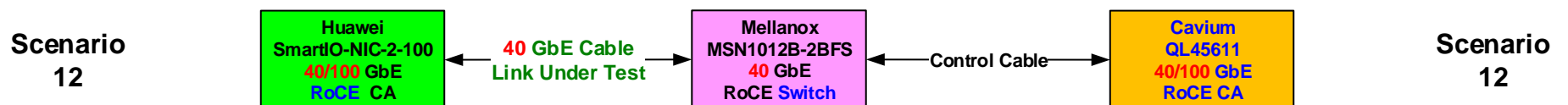
Cavium QL45412 to Mellanox MSX6036G Switch to Mellanox MCX416A



Cavium QL45412 to Mellanox MSN1012 Switch to Huawei SmartIO-NIC-2-100



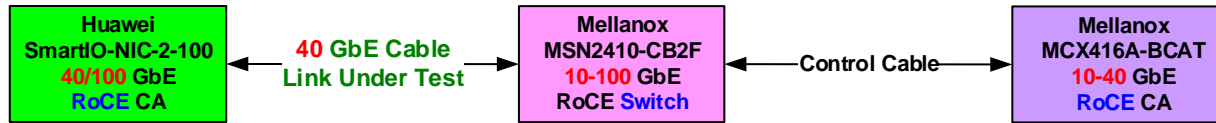
Huawei SmartIO-NIC-2-100 to Mellanox MSN1012 Switch to Cavium QL45611



RDMA over Converged Ethernet (RoCE) Interop Testing

Huawei SmartIO-NIC-2-100 to Mellanox MSN1012 Switch to Mellanox MCX416A

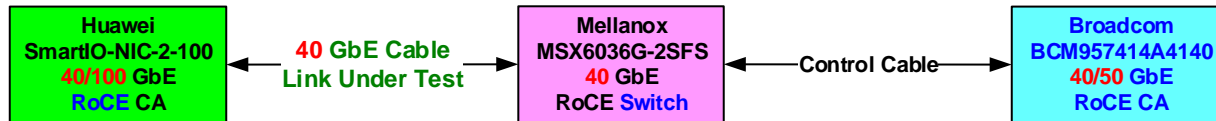
Scenario 13



Scenario 13

Huawei SmartIO-NIC-2-100 to Mellanox MSX6036G Switch to Broadcom BCM957414A4140

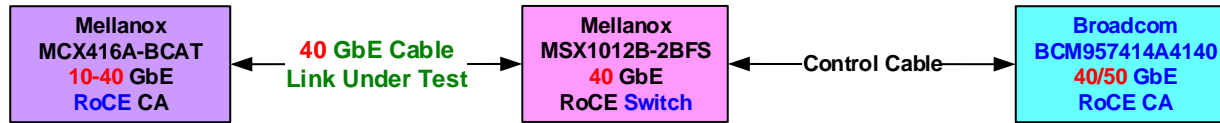
Scenario 14



Scenario 14

Mellanox MCX416A to Mellanox MSX1012B Switch to Broadcom BCM957414A4140

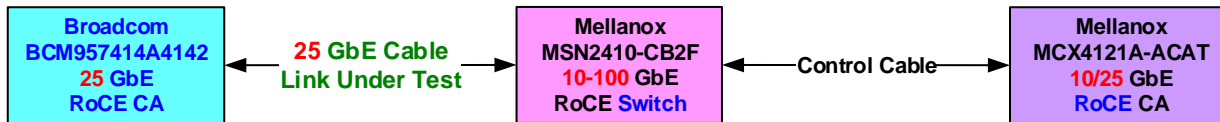
Scenario 15



Scenario 15

Broadcom BCM957414A4142 to Mellanox MSN2410 Switch to Mellanox MCX4121A

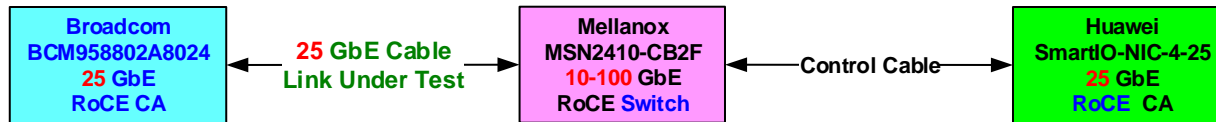
Scenario 16



Scenario 16

Broadcom BCM958802A8024 to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-4-25

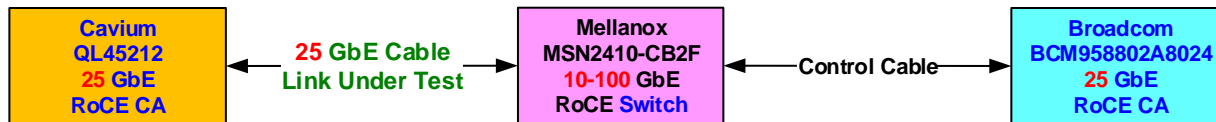
Scenario 17



Scenario 17

Cavium QL45212 to Mellanox MSN2410 Switch to Broadcom BCM958802A8024

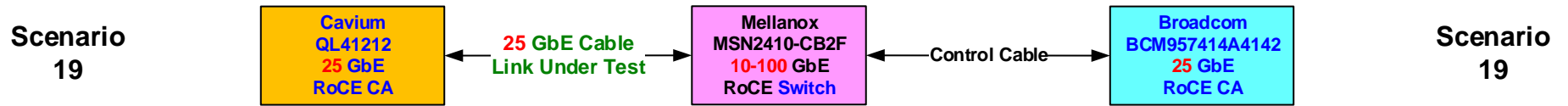
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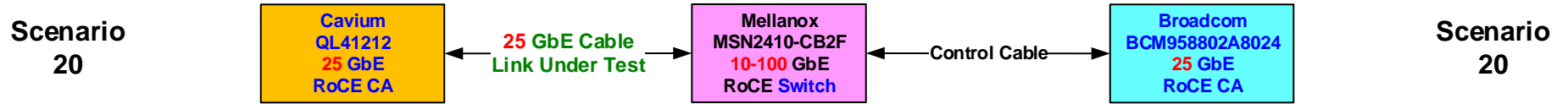
Scenario 18

RDMA over Converged Ethernet (RoCE) Interop Testing

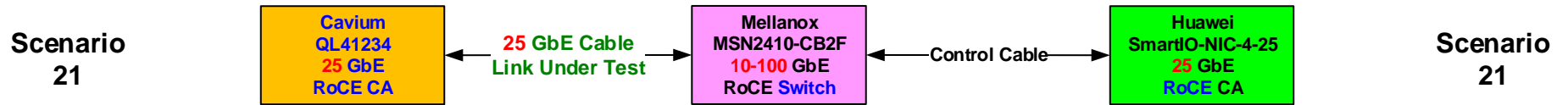
Cavium QL41212 to Mellanox MSN2410 Switch to Broadcom BCM957414A4142



Cavium QL41212 to Mellanox MSN2410 Switch to Broadcom BCM958802A8024



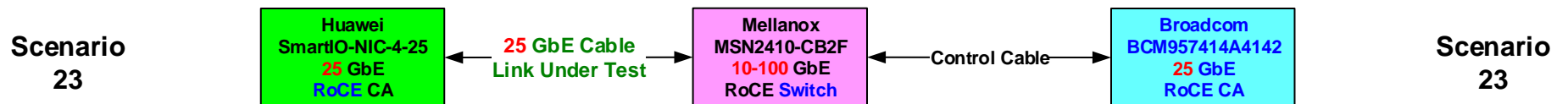
Cavium QL41234 to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-4-25



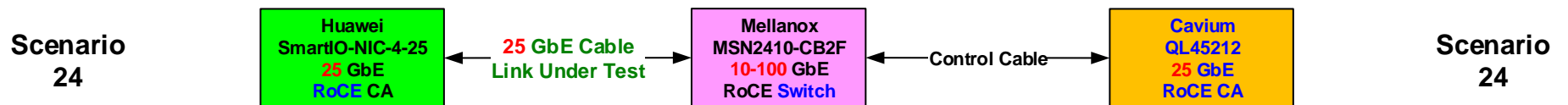
Huawei SmartIO-NIC-4-25 to Mellanox MCX4121A



Huawei SmartIO-NIC-4-25 to Mellanox MSN2410 Switch to Broadcom BCM957414A4142



Huawei SmartIO-NIC-4-25 to Mellanox MSN2410 Switch to Cavium QL45212



RDMA over Converged Ethernet (RoCE) Interop Testing

Huawei SmartIO-NIC-4-25 to Cavium QL41212

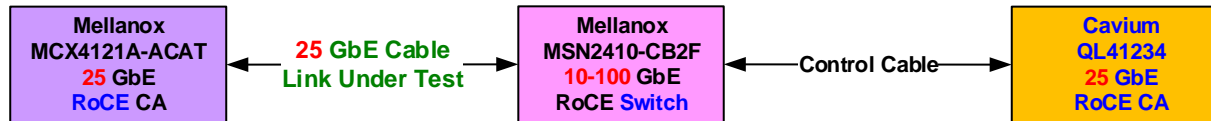
Scenario
25



Scenario
25

Mellanox MCX4121A to Mellanox MSN2410 Switch to Cavium QL41234

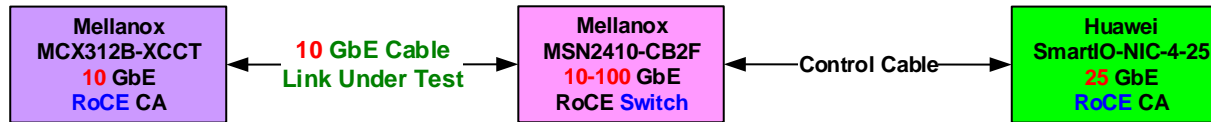
Scenario
26



Scenario
26

Mellanox MCX312B to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-4-25

Scenario
27



Scenario
27



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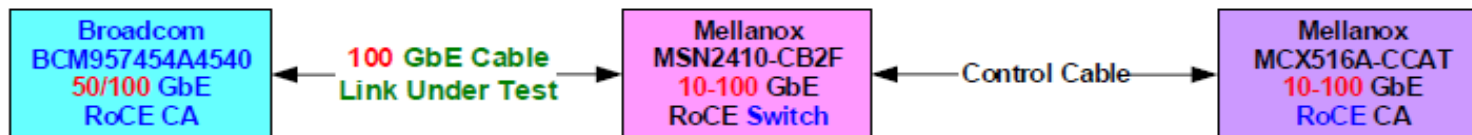
100 Gigabit Ethernet

Scenario 01



Company	Length Meters	AWG	Equalization	Connector Type	Broadcom RNIC	Cable Under Test	Mellanox Switch	Mellanox RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	1	N/A	Fiber - Active	QSFP28	BCM957454A4540	FCBN425QE1C01	MSN2410-CB2F	MCX516A-CCAT	100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			100	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			100	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			100	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			100	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			100	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			100	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			100	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			100	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			100	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			100	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			100	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			100	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	100	Pass	Pass	Pass	0	Pass			

Broadcom BCM957454A4540 to Mellanox MSN2410 Switch to Mellanox MCX516A





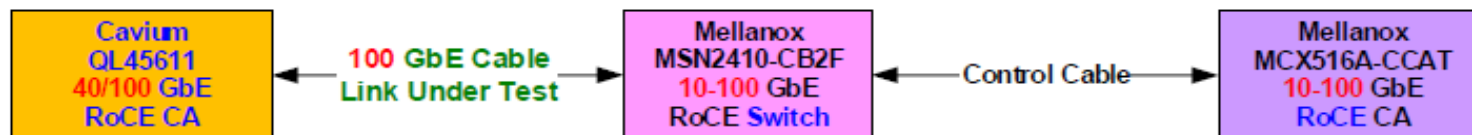
IBTA PF33 RoCE Interoperability

100 Gigabit Ethernet Scenario 02



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Mellanox RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	1	N/A	Fiber - Active	QSFP28	QL45611	FCBN425QE1C01	MSN2410-CB2F	MCX516A-CCAT	100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			100	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			100	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			100	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			100	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			100	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			100	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			100	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			100	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			100	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			100	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			100	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			100	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28		VAHS-26-0355			100	Pass	Pass	Pass	0	Pass

Cavium QL45611 to Mellanox MSN2410 Switch to Mellanox MCX516A





IBTA PF33 RoCE Interoperability

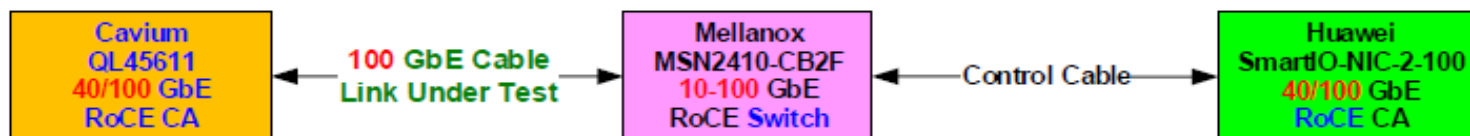
100 Gigabit Ethernet

Scenario 03



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Huawei RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	1	N/A	Fiber - Active	QSFP28	QL45611	FCBN425QE1C01	MSN2410-CB2F	SmartIO-NIC-2-100	100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			100	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			100	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			100	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			100	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			100	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			100	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			100	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			100	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			100	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			100	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			100	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			100	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	100	Pass	Pass	Pass	0	Pass			

Cavium QL45611 to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-2-100





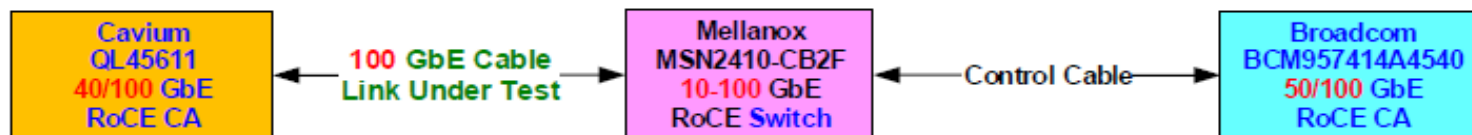
IBTA PF33 RoCE Interoperability

100 Gigabit Ethernet Scenario 04



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	1	N/A	Fiber - Active	QSFP28	QL45611	FCBN425QE1C01	MSN2410-CB2F	BCM957454A4540	100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			100	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			100	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			100	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			100	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			100	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			100	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			100	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			100	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			100	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			100	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			100	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			100	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28		VAHS-26-0355			100	Pass	Pass	Pass	0	Pass

Cavium QL45611 to Mellanox MSN2410 Switch to Broadcom BCM957454A4540





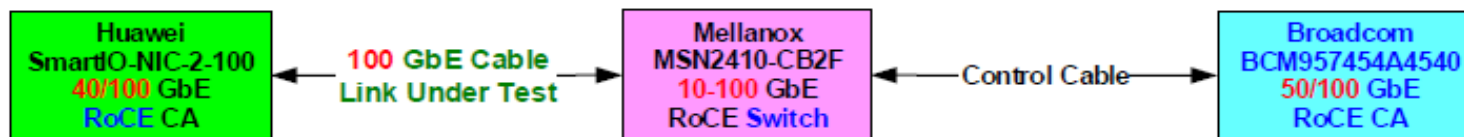
IBTA PF33 RoCE Interoperability

100 Gigabit Ethernet Scenario 05



Company	Length Meters	AWG	Equalization	Connector Type	Huawei RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	1	N/A	Fiber - Active	QSFP28	SmartIO-NIC-2-100	FCBN425QE1C01	MSN2410-CB2F	BCM957454A4540	100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			100	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			100	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			100	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			100	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			100	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			100	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			100	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			100	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			100	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			100	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			100	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			100	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	100	Pass	Pass	Pass	0	Pass			

Huawei SmartIO-NIC-2-100 to Mellanox MSN2410 Switch to Broadcom BCM957454A4540





IBTA PF33 RoCE Interoperability

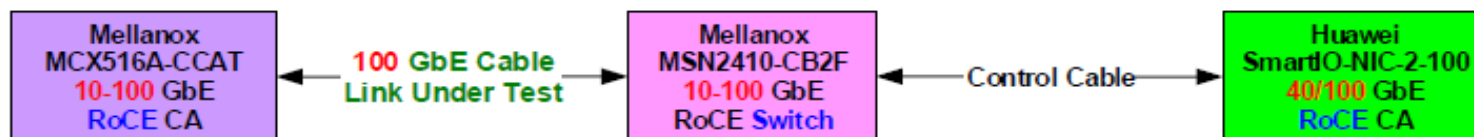
100 Gigabit Ethernet

Scenario 06



Company	Length Meters	AWG	Equalization	Connector Type	Mellanox RNIC	Cable Under Test	Mellanox Switch	Huawei RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	1	N/A	Fiber - Active	QSFP28	MCX516A-CCAT	FCBN425QE1C01	MSN2410-CB2F	SmartIO-NIC-2-100	100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			100	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			100	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			100	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			100	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			100	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			100	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			100	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			100	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			100	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			100	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			100	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			100	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			100	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			100	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	100	Pass	Pass	Pass	0	Pass			

Mellanox MCX516A to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-2-100





IBTA PF33 RoCE Interoperability

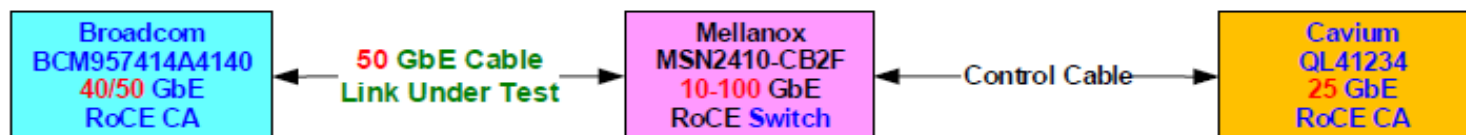
50 Gigabit Ethernet

Scenario 07



Company	Length Meters	AWG	Equalization	Connector Type	Broadcom RNIC	Cable Under Test	Mellanox Switch	Cavium RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	1	N/A	Fiber - Active	QSFP28	BCM957414A4140	FCBN425QE1C01	MSN2410-CB2F	QL41234	50	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			50	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			50	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			50	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			50	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			50	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			50	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			50	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			50	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			50	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			50	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			50	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			50	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			50	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			50	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			50	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28		VAHS-26-0355			50	Pass	Pass	Pass	0	Pass

Broadcom BCM957414A4140 to Mellanox MSN2410 Switch to Cavium QL41234





IBTA PF33 RoCE Interoperability

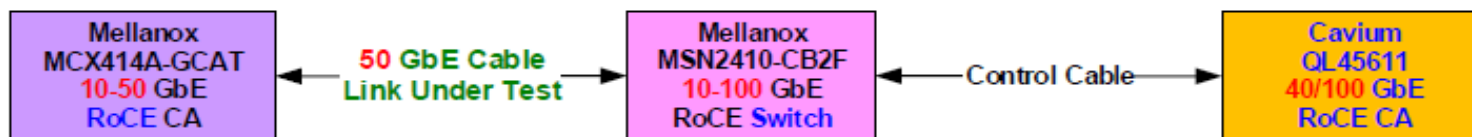
50 Gigabit Ethernet

Scenario 08



Company	Length Meters	AWG	Equalization	Connector Type	Mellanox RNIC	Cable Under Test	Mellanox Switch	Cavium RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	1	N/A	Fiber - Active	QSFP28	MCX414A-GCAT	FCBN425QE1C01	MSN2410-CB2F	QL45611	50	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			50	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			50	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			50	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			50	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			50	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			50	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			50	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			50	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			50	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			50	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			50	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			50	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			50	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			50	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			50	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	50	Pass	Pass	Pass	0	Pass			

Mellanox MCX414A to Mellanox MSN2410 Switch to Cavium QL45611





IBTA PF33 RoCE Interoperability

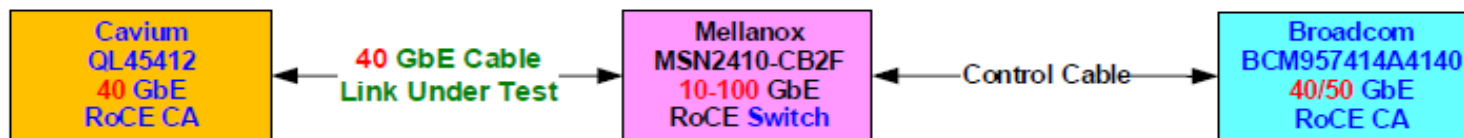
40 Gigabit Ethernet

Scenario 09



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	2	N/A	Fiber - Active	QSFP+	QL45412	FCBN410QD3C02	MSN2410-CB2F	BCM957414A4140	40	Pass	Pass	Pass	0	Pass
Finisar	35	N/A	Fiber - Active	QSFP+		FCBN410QD3C35			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP+		FCBN410QD3C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP+		FCBN410QD3CX0			40	Pass	Pass	Pass	0	Pass
Mellanox	3	N/A	Fiber - Active	QSFP+		MC220731V-003			40	Pass	Pass	Pass	0	Pass
Mellanox	30	N/A	Fiber - Active	QSFP+		MC220731V-030			40	Pass	Pass	Pass	0	Pass
Mellanox	50	N/A	Fiber - Active	QSFP+		MC220731V-050			40	Pass	Pass	Pass	0	Pass
Mellanox	100	N/A	Fiber - Active	QSFP+		MC220731V-100			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			40	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			40	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			40	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP+		MC2207130-00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP+		MC2207130-001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP+		MC2207130-0A1			40	Pass	Pass	Pass	0	Pass
Mellanox	2	30	Copper - Unequalized	QSFP+		MC2207130-002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	28	Copper - Unequalized	QSFP+		MC2207128-0A2			40	Pass	Pass	Pass	0	Pass
Mellanox	3	28	Copper - Unequalized	QSFP+		MC2207128-003			40	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			40	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			40	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			40	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			40	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28		VAHS-26-0355			40	Pass	Pass	Pass	0	Pass

Cavium QL45412 to Mellanox MSN2410 Switch to Broadcom BCM957414A4140





IBTA PF33 RoCE Interoperability

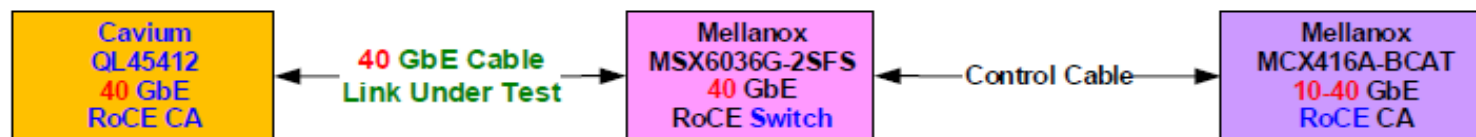
40 Gigabit Ethernet

Scenario 10



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Mellanox RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	2	N/A	Fiber - Active	QSFP+	QL45412	FCBN410QD3C02	MSX6036G-2SFS	MCX416A-BCAT	40	Pass	Pass	Pass	0	Pass
Finisar	35	N/A	Fiber - Active	QSFP+		FCBN410QD3C35			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP+		FCBN410QD3C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP+		FCBN410QD3CX0			40	Pass	Pass	Pass	0	Pass
Mellanox	3	N/A	Fiber - Active	QSFP+		MC220731V-003			40	Pass	Pass	Pass	0	Pass
Mellanox	30	N/A	Fiber - Active	QSFP+		MC220731V-030			40	Pass	Pass	Pass	0	Pass
Mellanox	50	N/A	Fiber - Active	QSFP+		MC220731V-050			40	Pass	Pass	Pass	0	Pass
Mellanox	100	N/A	Fiber - Active	QSFP+		MC220731V-100			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			40	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			40	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			40	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP+	MC2207130-00A	40	Pass	Pass	Pass	0	Pass			
Mellanox	1	30	Copper - Unequalized	QSFP+	MC2207130-001	40	Pass	Pass	Pass	0	Pass			
Mellanox	1.5	30	Copper - Unequalized	QSFP+	MC2207130-0A1	40	Pass	Pass	Pass	0	Pass			
Mellanox	2	30	Copper - Unequalized	QSFP+	MC2207130-002	40	Pass	Pass	Pass	0	Pass			
Mellanox	2.5	28	Copper - Unequalized	QSFP+	MC2207128-0A2	40	Pass	Pass	Pass	0	Pass			
Mellanox	3	28	Copper - Unequalized	QSFP+	MC2207128-003	40	Pass	Pass	Pass	0	Pass			
Volex	1	30	Copper - Unequalized	QSFP56	VAHS-30-0571	40	Pass	Pass	Pass	0	Pass			
Volex	2	30	Copper - Unequalized	QSFP28	VAHS-30-0572	40	Pass	Pass	Pass	0	Pass			
Volex	2	26	Copper - Unequalized	QSFP56	VAHS-26-0353	40	Pass	Pass	Pass	0	Pass			
Volex	2.5	26	Copper - Unequalized	QSFP28	VAHS-26-0354	40	Pass	Pass	Pass	0	Pass			
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	40	Pass	Pass	Pass	0	Pass			

Cavium QL45412 to Mellanox MSX6036G Switch to Mellanox MCX416A





IBTA PF33 RoCE Interoperability

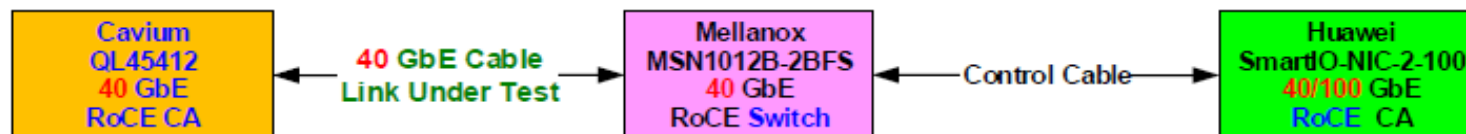
40 Gigabit Ethernet

Scenario 11



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Huawei RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	2	N/A	Fiber - Active	QSFP+	QL45412	FCBN410QD3C02	MSX1012B-2BFS	SmartIO-NIC-2-100	40	Pass	Pass	Pass	0	Pass
Finisar	35	N/A	Fiber - Active	QSFP+		FCBN410QD3C35			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP+		FCBN410QD3C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP+		FCBN410QD3CX0			40	Pass	Pass	Pass	0	Pass
Mellanox	3	N/A	Fiber - Active	QSFP+		MC220731V-003			40	Pass	Pass	Pass	0	Pass
Mellanox	30	N/A	Fiber - Active	QSFP+		MC220731V-030			40	Pass	Pass	Pass	0	Pass
Mellanox	50	N/A	Fiber - Active	QSFP+		MC220731V-050			40	Pass	Pass	Pass	0	Pass
Mellanox	100	N/A	Fiber - Active	QSFP+		MC220731V-100			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			40	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			40	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			40	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP+		MC2207130-00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP+		MC2207130-001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP+		MC2207130-0A1			40	Pass	Pass	Pass	0	Pass
Mellanox	2	30	Copper - Unequalized	QSFP+		MC2207130-002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	28	Copper - Unequalized	QSFP+		MC2207128-0A2			40	Pass	Pass	Pass	0	Pass
Mellanox	3	28	Copper - Unequalized	QSFP+		MC2207128-003			40	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			40	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			40	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			40	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			40	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	40	Pass	Pass	Pass	0	Pass			

Cavium QL45412 to Mellanox MSN1012 Switch to Huawei SmartIO-NIC-2-100





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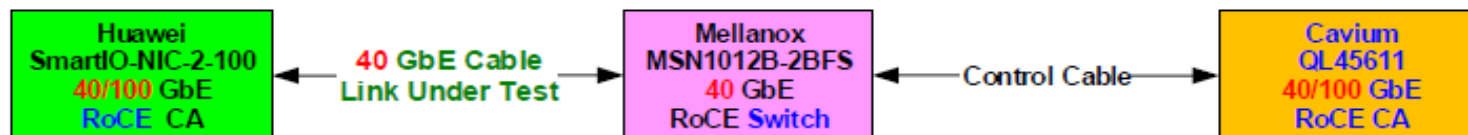
40 Gigabit Ethernet

Scenario 12



Company	Length Meters	AWG	Equalization	Connector Type	Huawei RNIC	Cable Under Test	Mellanox Switch	Cavium RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	2	N/A	Fiber - Active	QSFP+	SmartIO-NIC-2-100	FCBN410QD3C02	MSN1012B-2BFS	QL45611	40	Pass	Pass	Pass	0	Pass
Finisar	35	N/A	Fiber - Active	QSFP+		FCBN410QD3C35			40	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP+		FCBN410QD3C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP+		FCBN410QD3CX0			40	Pass	Pass	Pass	0	Pass
Mellanox	3	N/A	Fiber - Active	QSFP+		MC220731V-003			40	Pass	Pass	Pass	0	Pass
Mellanox	30	N/A	Fiber - Active	QSFP+		MC220731V-030			40	Pass	Pass	Pass	0	Pass
Mellanox	50	N/A	Fiber - Active	QSFP+		MC220731V-050			40	Pass	Pass	Pass	0	Pass
Mellanox	100	N/A	Fiber - Active	QSFP+		MC220731V-100			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			40	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			40	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			40	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP+		MC2207130-00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP+		MC2207130-001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP+		MC2207130-0A1			40	Pass	Pass	Pass	0	Pass
Mellanox	2	30	Copper - Unequalized	QSFP+		MC2207130-002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	28	Copper - Unequalized	QSFP+		MC2207128-0A2			40	Pass	Pass	Pass	0	Pass
Mellanox	3	28	Copper - Unequalized	QSFP+		MC2207128-003			40	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	QSFP56		VAHS-30-0571			40	Pass	Pass	Pass	0	Pass
Volex	2	30	Copper - Unequalized	QSFP28		VAHS-30-0572			40	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	QSFP56		VAHS-26-0353			40	Pass	Pass	Pass	0	Pass
Volex	2.5	26	Copper - Unequalized	QSFP28		VAHS-26-0354			40	Pass	Pass	Pass	0	Pass
Volex	3	26	Copper - Unequalized	QSFP28		VAHS-26-0355			40	Pass	Pass	Pass	0	Pass

Huawei SmartIO-NIC-2-100 to Mellanox MSN1012 Switch to Cavium QL45611





IBTA PF33 RoCE Interoperability

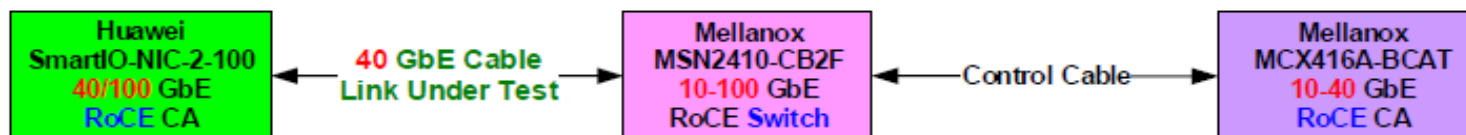
40 Gigabit Ethernet

Scenario 13



Company	Length Meters	AWG	Equalization	Connector Type	Huawei RNIC	Cable Under Test	Mellanox Switch	Mellanox RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	2	N/A	Fiber - Active	QSFP+	SmartIO-NIC-2-100	FCBN410QD3C02	MSN2410-CB2F	MCX416A-BCAT	40	Pass	Pass	Pass	0	Pass
Finisar	35	N/A	Fiber - Active	QSFP+		FCBN410QD3C35			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP+		FCBN410QD3C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP+		FCBN410QD3CX0			40	Pass	Pass	Pass	0	Pass
Mellanox	3	N/A	Fiber - Active	QSFP+		MC220731V-003			40	Pass	Pass	Pass	0	Pass
Mellanox	30	N/A	Fiber - Active	QSFP+		MC220731V-030			40	Pass	Pass	Pass	0	Pass
Mellanox	50	N/A	Fiber - Active	QSFP+		MC220731V-050			40	Pass	Pass	Pass	0	Pass
Mellanox	100	N/A	Fiber - Active	QSFP+		MC220731V-100			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			40	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			40	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			40	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP+	MC2207130-00A	40	Pass	Pass	Pass	0	Pass			
Mellanox	1	30	Copper - Unequalized	QSFP+	MC2207130-001	40	Pass	Pass	Pass	0	Pass			
Mellanox	1.5	30	Copper - Unequalized	QSFP+	MC2207130-0A1	40	Pass	Pass	Pass	0	Pass			
Mellanox	2	30	Copper - Unequalized	QSFP+	MC2207130-002	40	Pass	Pass	Pass	0	Pass			
Mellanox	2.5	28	Copper - Unequalized	QSFP+	MC2207128-0A2	40	Pass	Pass	Pass	0	Pass			
Mellanox	3	28	Copper - Unequalized	QSFP+	MC2207128-003	40	Pass	Pass	Pass	0	Pass			
Volex	1	30	Copper - Unequalized	QSFP56	VAHS-30-0571	40	Pass	Pass	Pass	0	Pass			
Volex	2	30	Copper - Unequalized	QSFP28	VAHS-30-0572	40	Pass	Pass	Pass	0	Pass			
Volex	2	26	Copper - Unequalized	QSFP56	VAHS-26-0353	40	Pass	Pass	Pass	0	Pass			
Volex	2.5	26	Copper - Unequalized	QSFP28	VAHS-26-0354	40	Pass	Pass	Pass	0	Pass			
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	40	Pass	Pass	Pass	0	Pass			

Huawei SmartIO-NIC-2-100 to Mellanox MSN1012 Switch to Mellanox MCX416A





IBTA PF33 RoCE Interoperability

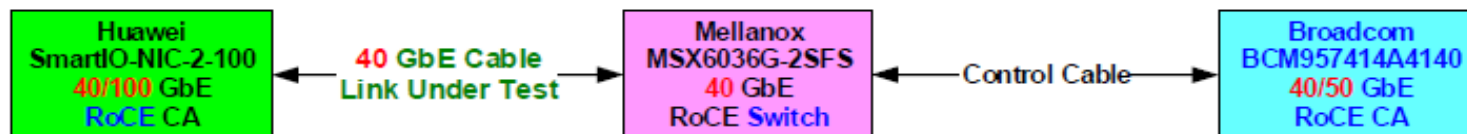
40 Gigabit Ethernet

Scenario 14



Company	Length Meters	AWG	Equalization	Connector Type	Huawei RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	2	N/A	Fiber - Active	QSFP+	SmartIO-NIC-2-100	FCBN410QD3C02	MSX6036G-2SFS	BCM957414A4140	40	Pass	Pass	Pass	0	Pass
Finisar	35	N/A	Fiber - Active	QSFP+		FCBN410QD3C35			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP+		FCBN410QD3C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP+		FCBN410QD3CX0			40	Pass	Pass	Pass	0	Pass
Mellanox	3	N/A	Fiber - Active	QSFP+		MC220731V-003			40	Pass	Pass	Pass	0	Pass
Mellanox	30	N/A	Fiber - Active	QSFP+		MC220731V-030			40	Pass	Pass	Pass	0	Pass
Mellanox	50	N/A	Fiber - Active	QSFP+		MC220731V-050			40	Pass	Pass	Pass	0	Pass
Mellanox	100	N/A	Fiber - Active	QSFP+		MC220731V-100			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			40	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			40	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			40	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP+		MC2207130-00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP+		MC2207130-001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP+		MC2207130-0A1			40	Pass	Pass	Pass	0	Pass
Mellanox	2	30	Copper - Unequalized	QSFP+	MC2207130-002	40	Pass	Pass	Pass	0	Pass			
Mellanox	2.5	28	Copper - Unequalized	QSFP+	MC2207128-0A2	40	Pass	Pass	Pass	0	Pass			
Mellanox	3	28	Copper - Unequalized	QSFP+	MC2207128-003	40	Pass	Pass	Pass	0	Pass			
Volex	1	30	Copper - Unequalized	QSFP56	VAHS-30-0571	40	Pass	Pass	Pass	0	Pass			
Volex	2	30	Copper - Unequalized	QSFP28	VAHS-30-0572	40	Pass	Pass	Pass	0	Pass			
Volex	2	26	Copper - Unequalized	QSFP56	VAHS-26-0353	40	Pass	Pass	Pass	0	Pass			
Volex	2.5	26	Copper - Unequalized	QSFP28	VAHS-26-0354	40	Pass	Pass	Pass	0	Pass			
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	40	Pass	Pass	Pass	0	Pass			

Huawei SmartIO-NIC-2-100 to Mellanox MSX6036G Switch to Broadcom BCM957414A4140





IBTA PF33 RoCE Interoperability

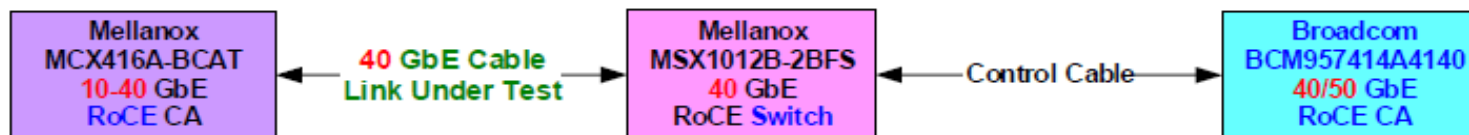
40 Gigabit Ethernet

Scenario 15



Company	Length Meters	AWG	Equalization	Connector Type	Mellanox RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Finisar	2	N/A	Fiber - Active	QSFP+	MCX416A-BCAT	FCBN410QD3C02	MSX1012B-2BFS	BCM957414A4140	40	Pass	Pass	Pass	0	Pass
Finisar	35	N/A	Fiber - Active	QSFP+		FCBN410QD3C35			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP28		FCBN425QE1C01			40	Pass	Pass	Pass	0	Pass
Finisar	5	N/A	Fiber - Active	QSFP28		FCBN425QB1C05			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP28		FCBN425QE1CX0			40	Pass	Pass	Pass	0	Pass
Finisar	1	N/A	Fiber - Active	QSFP+		FCBN410QD3C01			40	Pass	Pass	Pass	0	Pass
Finisar	100	N/A	Fiber - Active	QSFP+		FCBN410QD3CX0			40	Pass	Pass	Pass	0	Pass
Mellanox	3	N/A	Fiber - Active	QSFP+		MC220731V-003			40	Pass	Pass	Pass	0	Pass
Mellanox	30	N/A	Fiber - Active	QSFP+		MC220731V-030			40	Pass	Pass	Pass	0	Pass
Mellanox	50	N/A	Fiber - Active	QSFP+		MC220731V-050			40	Pass	Pass	Pass	0	Pass
Mellanox	100	N/A	Fiber - Active	QSFP+		MC220731V-100			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP28		MCP1600-E00A			40	Pass	Pass	Pass	0	Pass
Mellanox	1	30	Copper - Unequalized	QSFP28		MCP1600-E001			40	Pass	Pass	Pass	0	Pass
Mellanox	1.5	30	Copper - Unequalized	QSFP28		MCP1600-E01A			40	Pass	Pass	Pass	0	Pass
Mellanox	2	28	Copper - Unequalized	QSFP28		MCP1600-E002			40	Pass	Pass	Pass	0	Pass
Mellanox	2.5	26	Copper - Unequalized	QSFP28		MCP1600-E02A			40	Pass	Pass	Pass	0	Pass
Mellanox	3	26	Copper - Unequalized	QSFP28		MCP1600-E003			40	Pass	Pass	Pass	0	Pass
Mellanox	3.5	24	Copper - Unequalized	QSFP28		MCP1600-E03A			40	Pass	Pass	Pass	0	Pass
Mellanox	0.5	30	Copper - Unequalized	QSFP+	MC2207130-00A	40	Pass	Pass	Pass	0	Pass			
Mellanox	1	30	Copper - Unequalized	QSFP+	MC2207130-001	40	Pass	Pass	Pass	0	Pass			
Mellanox	1.5	30	Copper - Unequalized	QSFP+	MC2207130-0A1	40	Pass	Pass	Pass	0	Pass			
Mellanox	2	30	Copper - Unequalized	QSFP+	MC2207130-002	40	Pass	Pass	Pass	0	Pass			
Mellanox	2.5	28	Copper - Unequalized	QSFP+	MC2207128-0A2	40	Pass	Pass	Pass	0	Pass			
Mellanox	3	28	Copper - Unequalized	QSFP+	MC2207128-003	40	Pass	Pass	Pass	0	Pass			
Volex	1	30	Copper - Unequalized	QSFP56	VAHS-30-0571	40	Pass	Pass	Pass	0	Pass			
Volex	2	30	Copper - Unequalized	QSFP28	VAHS-30-0572	40	Pass	Pass	Pass	0	Pass			
Volex	2	26	Copper - Unequalized	QSFP56	VAHS-26-0353	40	Pass	Pass	Pass	0	Pass			
Volex	2.5	26	Copper - Unequalized	QSFP28	VAHS-26-0354	40	Pass	Pass	Pass	0	Pass			
Volex	3	26	Copper - Unequalized	QSFP28	VAHS-26-0355	40	Pass	Pass	Pass	0	Pass			

Mellanox MCX416A to Mellanox MSX1012B Switch to Broadcom BCM957414A4140





IBTA PF33 RoCE Interoperability

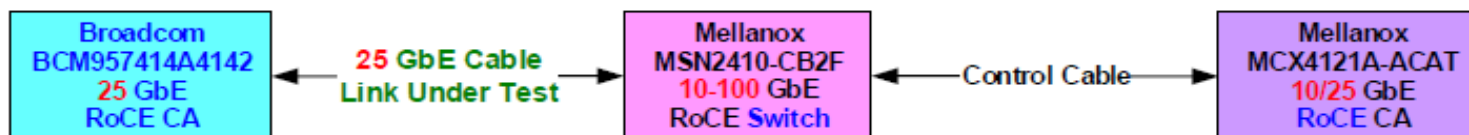
25 Gigabit Ethernet

Scenario 16



Company	Length Meters	AWG	Equalization	Connector Type	Broadcom RNIC	Cable Under Test	Mellanox Switch	Mellanox RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	BCM957414A4142	MCP2M00-A002	MSN2410-CB2F	MCX4121A-ACAT	25	Pass	Pass	Pass	0	Pass
Volet	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			25	Pass	Pass	Pass	0	Pass
Volet	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			25	Pass	Pass	Pass	0	Pass

Broadcom BCM957414A4142 to Mellanox MSN2410 Switch to Mellanox MCX4121A





IBTA PF33 RoCE Interoperability

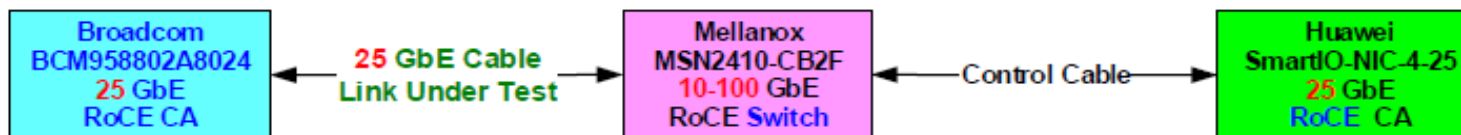
25 Gigabit Ethernet

Scenario 17



Company	Length Meters	AWG	Equalization	Connector Type	Broadcom RNIC	Cable Under Test	Mellanox Switch	Huawei RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	BCM958802A8024	MCP2M00-A002	MSN2410-CB2F	SmartIO-NIC-4-25	25	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			25	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			25	Pass	Pass	Pass	0	Pass

Broadcom BCM958802A8024 to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-4-25





IBTA PF33 RoCE Interoperability

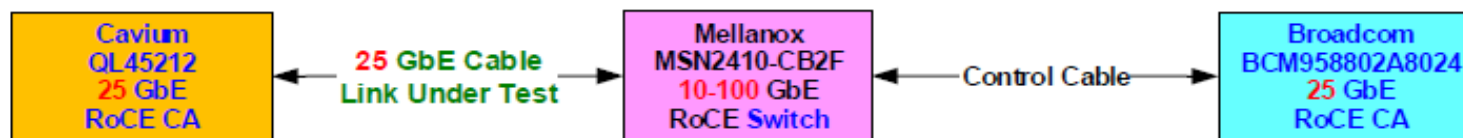
25 Gigabit Ethernet

Scenario 18



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	QL45212	MCP2M00-A002	MSN2410-CB2F	BCM958802A8024	25	Pass	Pass	Pass	0	Pass
Volet	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			25	Pass	Pass	Pass	0	Pass
Volet	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			25	Pass	Pass	Pass	0	Pass

Cavium QL45212 to Mellanox MSN2410 Switch to Broadcom BCM958802A8024





IBTA PF33 RoCE Interoperability

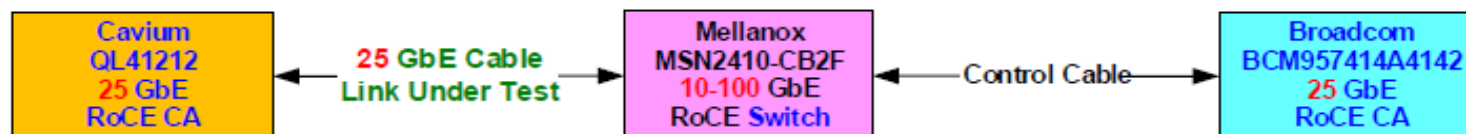
25 Gigabit Ethernet

Scenario 19



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	QL41212	MCP2M00-A002	MSN2410-CB2F	BCM957414A4142	25	Pass	Pass	Pass	0	Pass
Volet	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			25	Pass	Pass	Pass	0	Pass
Volet	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			25	Pass	Pass	Pass	0	Pass

Cavium QL41212 to Mellanox MSN2410 Switch to Broadcom BCM957414A4142





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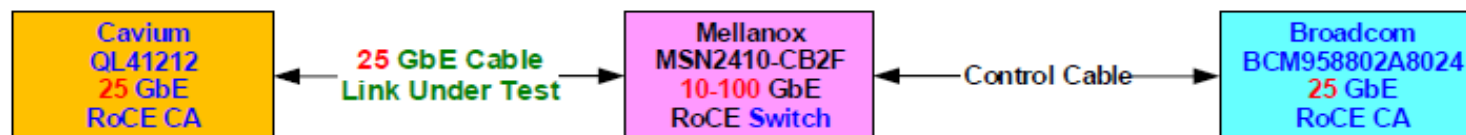
25 Gigabit Ethernet

Scenario 20



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	QL41212	MCP2M00-A002	MSN2410-CB2F	BCM958802A8024	25	Pass	Pass	Pass	0	Pass
Volet	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			25	Pass	Pass	Pass	0	Pass
Volet	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			25	Pass	Pass	Pass	0	Pass

Cavium QL41212 to Mellanox MSN2410 Switch to Broadcom BCM958802A8024





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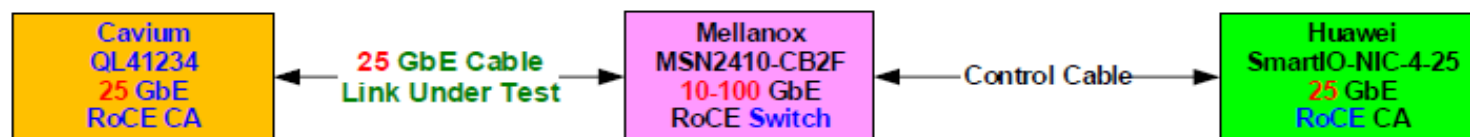
25 Gigabit Ethernet

Scenario 21



Company	Length Meters	AWG	Equalization	Connector Type	Cavium RNIC	Cable Under Test	Mellanox Switch	Huawei RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	QL41234	MCP2M00-A002	MSN2410-CB2F	SmartIO-NIC-4-25	25	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			25	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			25	Pass	Pass	Pass	0	Pass

Cavium QL41234 to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-4-25





IBTA PF33 RoCE Interoperability

25 Gigabit Ethernet

Scenario 22



Company	Length Meters	AWG	Equalization	Connector Type	Huawei RNIC	Cable Under Test	Mellanox Switch	Mellanox RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	SmartIO-NIC-4-25	MCP2M00-A002	N/A	MCX4121A-ACAT	25	Pass	Pass	Pass	0	Pass
Voilex	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			25	Pass	Pass	Pass	0	Pass
Voilex	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			25	Pass	Pass	Pass	0	Pass

Huawei SmartIO-NIC-4-25 to Mellanox MCX4121A





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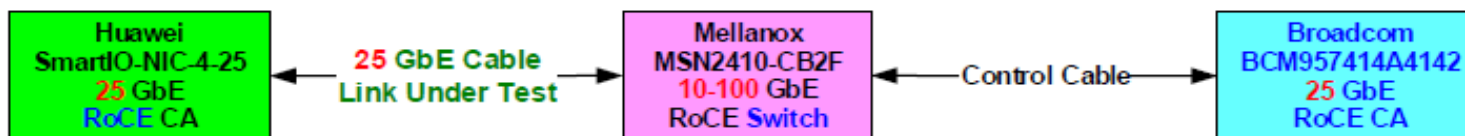
25 Gigabit Ethernet

Scenario 23



Company	Length Meters	AWG	Equalization	Connector Type	Huawei RNIC	Cable Under Test	Mellanox Switch	Broadcom RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	SmartIO-NIC-4-25	MCP2M00-A002	MSN2410-CB2F	BCM957414A4142	25	Pass	Pass	Pass	0	Pass

Huawei SmartIO-NIC-4-25 to Mellanox MSN2410 Switch to Broadcom BCM957414A4142





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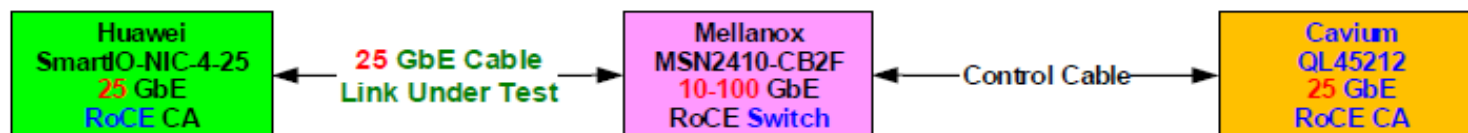
25 Gigabit Ethernet

Scenario 24



Company	Length Meters	AWG	Equalization	Connector Type	Huawei RNIC	Cable Under Test	Mellanox Switch	Cavium RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	SmartIO-NIC-4-25	MCP2M00-A002	MSN2410-CB2F	QL45212	25	Pass	Pass	Pass	0	Pass

Huawei SmartIO-NIC-4-25 to Mellanox MSN2410 Switch to Cavium QL45212





IBTA PF33 RoCE Interoperability

25 Gigabit Ethernet

Scenario 25



Company	Length Meters	AWG	Equalization	Connector Type	Huawei RNIC	Cable Under Test	Mellanox Switch	Cavium RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	SmartIO-NIC-4-25	MCP2M00-A002	N/A	QL41212	25	Pass	Pass	Pass	0	Pass

Huawei SmartIO-NIC-4-25 to Cavium QL41212





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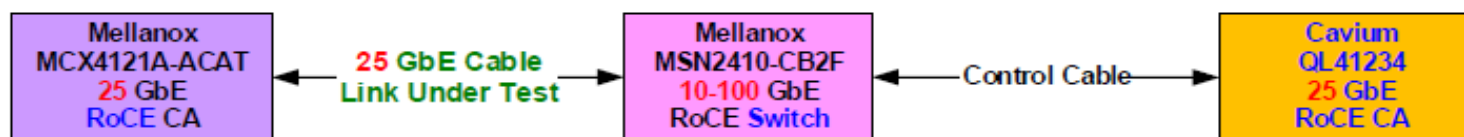
25 Gigabit Ethernet

Scenario 26



Company	Length Meters	AWG	Equalization	Connector Type	Mellanox RNIC	Cable Under Test	Mellanox Switch	Cavium RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	MCX4121A-ACAT	MCP2M00-A002	MSN2410-CB2F	QL41234	25	Pass	Pass	Pass	0	Pass
Volet	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			25	Pass	Pass	Pass	0	Pass
Volet	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			25	Pass	Pass	Pass	0	Pass

Mellanox MCX4121A to Mellanox MSN2410 Switch to Cavium QL41234





IBTA PF33 RoCE Interoperability

10 Gigabit Ethernet

Scenario 27



Company	Length Meters	AWG	Equalization	Connector Type	Mellanox RNIC	Cable Under Test	Mellanox Switch	Huawei RNIC	Link Speed	Device Link	SFI_Perf Testing	Open MPI + IMB Testing	Errors	Interop Result
Mellanox	2	30	Copper - Unequalized	SFP28	MCX312B-XCCT	MCP2M00-A002	MSN2410-CB2F	SmartIO-NIC-4-25	10	Pass	Pass	Pass	0	Pass
Volex	1	30	Copper - Unequalized	SFP28		VAHS-30-0573			10	Pass	Pass	Pass	0	Pass
Volex	2	26	Copper - Unequalized	SFP28		VAHS-26-0356			10	Pass	Pass	Pass	0	Pass

Mellanox MCX312B to Mellanox MSN2410 Switch to Huawei SmartIO-NIC-4-25

