## InfiniBand™ Additional Capabilities Test List (Tests using a DTA [xCA only])

## <u>Link</u>

Test	Test	
Number	Subsection	Description
C7-042	C07-042-01	LRH Packet Length Check - Min Hdr
	C07-042-02	LRH Packet Length Check - Big Hdr
C7-043	C07-043-01	Minimum Packet Length Check - Send
	C07-043-02	Min PktLen Check - Receive
C7-045	C07-045-01	Max Packet Length Check - Send
	C07-045-02	Max Packet Length Check - Receive (xCA Only)

## **Communication Management**

Test Test
Number Subsection

Number	Subsection	Description
C12-005#01	C12-005#01	MRA rec'd for preceding REP with RTU to complete connection
C12-005#02	C12-005#02	MRA rec'd for preceding REP with REJ to reject connection
C12-005#03	C12-005#03	MRA rec'd for initial REP only
C12-005#04	C12-005#04	MRA rec'd for REP indicates message MRA'ed is other than REP
C12-005#05	C12-005#05	MRA rec'd for preceding REP with retries
C12-005#06	C12-005#06	MRA rec'd for preceding REP with retries except REJ last one
C12-005#07	C12-005#07	MRA rec'd for preceding REP with retries except RTU last one
C12-005#08	C12-005#08	MRA rec'd for REP w/retries except data pkt rec'd on QP on last one
C12-005#09	C12-005#09	MRA rec'd for REP w/retries followed by RTU receipt on last one
C12-004#01	C12-004#01	REJ component validation when rejecting REQ
C12-004#03	C12-004#03	REJ due to timeout on REP sent
C12-004#04	C12-004#04	REJ due to invalid transport service type in REQ
C12-004#06	C12-004#06	REJ due to invalid primary remote port GID in REQ
C12-004#07	C12-004#07	REJ due to invalid primary remote port LID in REQ
C12-004#08	C12-004#08	REJ due to invalid primary SL in REQ
C12-004#09	C12-004#09	REJ due to invalid path MTU in REQ
C12-004#10	C12-004#10	REJ due to insufficient responder resources in REQ
C12-004#11	C12-004#11	REJ due to RNR retry count in REQ
C12-004#13	C12-004#13	REJ due to invalid class version in REQ
C12-004#14	C12-004#14	REJ LocalCommID is RemoteCommID of rejected REP and
C12-004#15	C12-004#15	REJ LocalCommID is not RemoteCommID of rejected REP
C12-004#16	C12-004#16	REJ RemoteCommID is not LocalCommID of rejected REP
C12-003#02	C12-003#02	REP component validation
C12-003#09	C12-003#09	REP failover accepted
C12-003#10	C12-003#10	REP local CA GUID
C12-003#11	C12-003#11	Sender of REP receives REQ for same connection
C12-008#27	C12-008#27	RTU local and remote CommIDs based on preceding REP
C12-008#28	C12-008#28	RTU LocalCommID is not RemoteCommID of preceding REP
C12-008#29	C12-008#29	RTU RemoteCommID is not LocalCommID of preceding REP
C12-008#30	C12-008#30	Data packet received on QP but no RTU received
C12-008#31	C12-008#31	Data packet received on QP followed by receipt of RTU
C12-007#11	C12-007#11	DREQ received for non existent LocalCommID
C12-007#12	C12-007#12	DREQ received for non existent RemoteCommID
C12-007#13	C12-007#13	DREQ received for non existent remote QPN
C12-006#01	C12-006#01	DREP local and remote CommIDs
C12-005.1.2#01	C12-005.1.2#01	MRA with wrong sequence # received for preceding REP with retries
C12-005.1.2#02	C12-005.1.2#02	RTU with wrong sequence # received for preceding REP with retries

## Legend

- Additional tests for Atomic Operation

Test	Test	
Number	Subsection	Description Description
	C9-027#01	Send Only after RDMA Read
	C9-027#02	Write Only after RDMA Read
	C9-027#03	Read Only after RDMA Read
	C9-027#04	Atomic FetchAdd after RDMA Read
C09-027	C9-027#05	Atomic CompSwap after RDMA Read
	C9-027#06	Atomic CompSwap after Atomic CompSwap
ACK Pckts Strong Ordering	C9-027#07 C9-027#08	Atomic FetchAdd after Atomic CompSwap  Atomic FetchAdd after Atomic FetchAdd
	C9-027#08	Atomic CompSwap after Atomic FetchAdd
	C9-027#09 C9-027#10	
	C9-027#10	Send Only after Atomic CompSwap  Write Only after Atomic CompSwap
	C9-027#11	Send Only after Atomic Compswap  Send Only after Atomic FetchAdd
	C9-027#12	
	C9-060#01	Write Only after Atomic FetchAdd
C09-060		RC Completion Rules - Send Case
WQE Completion	C9-060#03	RC Completion Rules - RDMA Write Case RC Completion Rules - RDMA Read Case
	C9-060#05 C9-103#01	Error Behaviour - Dupe Send Local
C9-103	C9-103#01	Error Behaviour - Dupe RDMA Write
Err Behaviour for	C9-103#02	Error Behaviour - Dupe RDMA Read Req
Dupe Requests	C9-103#04	Dupe RDMA Read Req with Res Opcode
Dupe Requests	C9-103#05	Dupe RDMA Read Req with R#Key incr by 1
	C9-116#01	AckReg In RC Send Only
	C9-116#01	AckReg In RC Send Only AckReg In RC Send Only with Immediate
	C9-116#03	AckReg In RC Send Only with Infinediate  AckReg In RC Send First, Mid, Last
	C9-116#04	AckReg In RC Send First, Wild, Last  AckReg In RC Send Last with Immediate
	C9-116#05	AckReg In RC RDMA Write Only
C9-116	C9-116#06	AckReg In RC RDMA Write Only with Immediate
BTH AckReq	C9-116#07	AckReg In RC RDMA Write First, Mid, Last
DTTT ACKINEG	C9-116#08	AckReg In RC RDMA Write Last with Immediate
	C9-116#09	AckReg In RC RDMA Read Only
	C9-116#10	AckReg in RC RDMA Read First, Mid, Last
	C9-116#11	AckReg In RC CmpSwap
	C9-116#12	AckReg In RC FetchAdd
	C9-148#01	Initializing the MSN
	C9-148#02	Incrementing the MSN - RDMA Write and Send
	C9-148#03	Incrementing the MSN - RDMA Read
C9-148	C9-148#04	Incrementing the MSN - Atomic Operations
MSN Calculation	C9-148#05	Duplicated Requests and MSN Incrementation - RDMA Write
	C9-148#06	Duplicated Requests and MSN Incrementation - Send
	C9-148#07	Duplicated Requests and MSN Incrementation - RDMA Read
	C9-148#08	Duplicated Requests and MSN Incrementation - Atomic
C09-150	C09-150#1	End-to-End Flow Control Rules
	C09-161#1	If EE Credits suported, DUT shall indicate # of WQE on RQ
C09-161	C09-161#2	If EE Cr not supported , then DUT must send the invalid code in its CC
	C09-212#1	Decrement retry ctr when retrying an op that resulted in RNR NAK
	C09-212#2	Decrement retry ctr when retrying an op that resulted in PSN Error
C09-212	C09-212#3	Decrement retry ctr when retrying an op that resulted in Local Ack TO
	C09-212#4	Decr retry ctr when retrying an op that resulted in ACK PSN > ePSN
	C9-162#01	LTD Send Queue - RDMA Read Request
	C9-162#02	LTD Send Queue - RDMA Write with no immediate
C9-162	C9-162#03	LTD Send Queue - Compare and Swap Types
Send Queue		LTD Send Queue - Fetch Add Types
Send Queue WQE Limited	C9-162#04 C9-162#05	LTD Send Queue - Fetch Add Types LTD Send Queue - Send Case