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<u>Legend</u>

P-Pass   A-Application Specific   N/A

F-Fail   N-Not Tested

Test Name	Description	Results
	DATA LINK TRANSMIT TESTS - GENERAL	
Position and order of PGN in the 29-bit Frame Header (DUT as Source)	Verify proper placement of PGN within 29-bit header of all frames.	P
Use of EDP Bit to identify PGN (DUT as Source)	Verify DUT properly sets the EDP Bit for all 29-bit frames.	P
Use of DP Bit to identify PGN (DUT as Source)	Verify DUT properly sets the DP Bit for all 29-bit frames.	P
Data Field Byte Length (DUT as Source)	Verify the length of the data field for all 29-bit Frames (Page 1 & 2) is 8 bytes, except for PGN 59904 frames.	P
Byte Ordering within Data Field (DUT as Source)	Verify proper byte ordering of the parameter data for multiple byte parameters. (e.g. Verify Address Claim data, PGN 60928). This verification also applies to -7X.	A
Multipacket capable PGN with less than 9 bytes of data sent as single CAN Data Frame with 8 byte data field. (DUT as Source)	Verify DUT indeed uses single CAN Frame to send PGN under this situation. Verify any unused bytes are filled with 0xFF.	P
Request Scheduling (DUT as Source)	Verify the DUT does not send a Request message for a PGN if that PGN was received with the last 50 ms.	A
Request Retries (DUT as Source)	Verify the DUT stops sending the same Request message after the third attempt (second retry). A Request retry is issued following a Response Timeout (Tr) failure.	A
Correct Interpretation of 'Requested PGN' in Request (PGN 59904) (DUT as Source)	Verify Correct Request message structure. Verify 'Requested PGN' in Request sent by DUT has correct content (order and position)	A
Response Timing (DUT as Source)	Verify DUT waits 1.25 S (T3) for a required response before retrying or quitting.	A
Devices Responds to its own Global Read Requests (DUT as Source)	Verify DUT sends a response to its own Global Read request within the Tr Time Verify the DUT uses the appropriate type of response.	P

Support of the Acknowledgement Address data byte for each ACK and NACK (DUT as Source)	Verify DUT evaluates the 'Acknowledgement Address' data field byte to determine the context of the Acknowledgement (ACK and NACK of same PGN with different 'Acknowledgement Address' data values)	P
	DATA LINK RECEIVE TESTS - GENERAL	
Standard Frame Message Tolerance	Verify DUT not affected by standard frames.	P
Device not a CAN 2.0A Device	Verify DUT not CAN 2.0A device by issuing 29-bit (CAN 2.0B) frames.	P
Independence of Priority Bits in PGN Receive (DUT as Recipient)	Verify DUT receives a PGN regardless of the priority bits in 29-bit header. Change priority bits and confirm received.	P
Use of EDP Bit to identify PGN (DUT as Recipient)	Verify DUT evaluates the EDP Bit when processing in 29-bit frames. (Same CAN header except for EDP bit and different data values to see if DUT acts on data values)	P
Use of DP Bit to identify PGN (DUT as Recipient)	Verify DUT evaluates the DP Bit when processing in 29-bit frames.	P
Filtering on Destination Address (DUT as Recipient)	Verify DUT evaluates the Destination Address for 29-bit frames. (Same PGN to different DA with different data values to see if DUT acts on data values)	P
Supports Receive of Global Destination Address (DUT as Recipient)	Verify DUT responds to globally addressed messages.	P
PDU Processing Capabilities (DUT as Recipient)	Verify device does not lose messages when the data link is at 100 percent utilization for 10 ms. Verify device does not lose back-to-back messages when the data link is at 100 percent utilization for 10 ms.	P
Multipacket capable PGN with less than 9 bytes of data sent as single CAN Data Frame with 8 byte data field. (DUT as Recipient)	Verify DUT receives the PGN in the single CAN Frame format.	P
Concurrent receive of Multipacket capable Destination Specific (PDU1) PGN - one instance with less than 9 bytes (single CAN Frame) and the other instance with more than 9 bytes (RTS/CTS) (DUT as Recipient)	Verify DUT can receive both concurrent instances of same PGN	P

Concurrent receive of Multipacket capable Broadcast (PDU2) PGN - one instance with less than 9 bytes (single CAN Frame) and the other instance with more than 9 bytes (BAM) (DUT as Recipient)	Verify DUT can receive both concurrent instances of same PGN	P
Correct Interpretation of 'Requested PGN' in Request (PGN 59904) (DUT as Recipient)	Verify DUT properly interprets 'Requested PGN' in Request message by monitoring for correct PGN response	A
Proper Response to Destination Specific Request for Single Packet Destination Specific (PDU1) PGN (DUT as Recipient)	Verify DUT sends the Requested PGN with the Destination Address set to the Source Address from the Request message. Verify DUT sends response within 200 ms (Tr) after the Request	P
Proper Response to Global Request for Single Packet Destination Specific (PDU1) PGN (DUT as Recipient)	Verify DUT sends the Requested PGN with the Destination Address set to the Global Address. Verify DUT sends response within 200 ms (Tr) after the Request.	P
Proper Response to Destination Specific Request for Multipacket Destination Specific (PDU1) PGN (DUT as Recipient)	Verify DUT sends a SAE J1939 Transport RTS for the Requested PGN to the Source Address from the Request message. Verify DUT sends the RTS response within 200 ms (Tr) after the Request.	P
Proper Response to Global Request for Multipacket Destination Specific (PDU1) PGN (DUT as Recipient)	Verify DUT sends a SAE J1939 Transport BAM for the Requested PGN. Verify DUT sends the BAM response within 200 ms (Tr) after the Request.	P
Proper Response to Destination Specific Request for Single Packet Broadcast (PDU2) PGN (DUT as Recipient)	Verify DUT sends the Requested PGN. Verify DUT sends response within 200 ms (Tr) after the Request.	P
Proper Response to Global Request for Single Packet Broadcast (PDU2) PGN (DUT as Recipient)	Verify DUT sends the Requested PGN. Verify DUT sends response within 200 ms (Tr) after the Request.	P
Proper Response to Destination Specific Request for Multipacket Broadcast (PDU2) PGN (DUT as Recipient)	Verify DUT sends a SAE J1939 Transport RTS for the Requested PGN to the Source Address from the Request message. Verify DUT sends the RTS response within 200 ms (Tr) after the Request.	P
Proper Response to Global Request for Multipacket Broadcast (PDU2) PGN (DUT as Recipient)	Verify DUT sends a SAE J1939 Transport BAM for the Requested PGN. Verify DUT sends the BAM response within 200 ms (Tr) after the Request.	P
Response Timing (DUT as Recipient)	Verify DUT sends all required responses within 200 ms (Tr).	A

Proper NACK Response for Destination Specific Request for Unsupported PGN (DUT as Recipient)	Verify DUT does nothing if it wasn't the Destination of the Request. Verify DUT uses the Global Address for the message. Verify DUT sends NACK within 200 ms (Tr).	P
Proper NACK Response for Globally Addressed Request for Unsupported PGN (DUT as Recipient)	Verify DUT does not send any Acknowledgement message PGN (59392). Monitor for DUT messages for 1.25 S (T3) to verify the DUT does not send an Acknowledgement for the requested PGN.	P
Proper use of ACK Response when Applicable (DUT as Recipient)	Verify DUT sends an Acknowledgement (PGN 59392) with Requested PGN and Control Byte of ACK (= 0). Verify DUT sends ACK only if it was the Destination of the Request. Verify DUT does nothing if it wasn't the Destination of the Request. Verify DUT uses the Global Address for the message. Verify DUT sends ACK within 200 ms (Tr)	A
Proper use of Access Denied NACK Response (DUT as Recipient)	Verify DUT sends an Acknowledgement (PGN 59392) with Requested PGN and Control Byte of NACK Access Denied (= 2). Verify DUT sends NACK only if it was the Destination of the Request. Verify DUT does nothing if it wasn't the Destination of the Request. Verify DUT uses the Global Address for the message. Verify DUT sends ACK within 200 ms (Tr)	A
Proper use of Cannot Respond NACK Response (DUT as Recipient)	Verify DUT sends an Acknowledgement (PGN 59392) with Requested PGN and Control Byte of NACK Cannot Respond (= 3). Verify DUT sends NACK only if it was the Destination of the Request. Verify DUT does nothing if it wasn't the Destination of the Request. Verify DUT uses the Global Address for the message. Verify DUT sends ACK within 200 ms (Tr)	A
Support of the Acknowledgement Address data byte for each ACK and NACK (DUT as Recipient)	Verify the 'Acknowledgement Address' data field byte contains a valid or appropriate address value.	A
Correct Response to Request2 with 'yes' for the "Use Transfer PGN" Option (DUT as Recipient)	Verify the response data field byte contains a valid or appropriate address value.	A
Correct Response to Request2 with 'no' for the "Use Transfer PGN" Option (DUT as Recipient)	Verify the response data field byte contains a valid or appropriate address value.	A
Proper NACK Response for Request2 for Unsupported PGN (DUT as Recipient)	Verify the response data field byte contains a valid or appropriate address value.	A
	DATA LINK TRANSMIT TESTS - TP BAM	

BAM Protocol: BAM is valid content and format. (DUT as Originator)	Verify correct PGN, data size, & # packets. Verify all match the BAM TP.DT from the DUT.	P
BAM Protocol: BAM is sent before Data Packets. (DUT as Originator)	Verify DUT sends BAM prior to Data Packets. Verify time between BAM and first Data Packet is is between 50 and 200 ms (5.10.1.3).	P
BAM Protocol: Verify no Conn_Abort is sent (DUT as Originator)	Verify DUT does not send a TP.Conn_Abort for any reason for a BAM. Verify DUT ignores a TP.Conn_Abort received for the PGN of the BAM.	P
BAM Protocol: Only one per Originator at a time (DUT as Originator)	Verify DUT doesn't start a BAM a previous BAM data transferred.	P
BAM Protocol: Simultaneous BAMs with different Originators (DUT as Originator)	Verify DUT doesn't start a BAM a previous BAM data transferred.	P
Transport Data Packets content correct (DUT as Originator)	Verify first data byte is sequence number Verify remaining 7 bytes are correct data for packet.	P
BAM Transport Data Packets sent in ascending sequential order (DUT as Originator)	Verify DUT sends the TP Data Packets for BAM in sequential order. Verify the first TP.DT packet is sequence number = 1.	P
All Transport Data packets (PGN 60160) have an 8 byte data field (DUT as Originator)	Verify DUT sends packets with 8 bytes	P
Unused bytes of Last Transport Data packets (PGN 60160) filled with "0xFF" (DUT as Originator)	Verify unused bytes of last packets sent & filled properly.	P
Time between Transport Data Packets for BAM (DUT as Originator)	Verify packets are sent between 50 and 200 ms apart.	P
	DATA LINK RECEIVE TESTS - TP BAM	
BAM Protocol: BAM is valid (content and format) (DUT as Responder)	Verify behavior when receiving the BAM with correct PGN placed, data size, & Number of Data packets. Verify behavior when receiving the BAM with incorrect PGN placed, data size, & Number of Data packets.	P
BAM Protocol: BAM is sent before Data Packets (DUT as Responder)	Verify behavior when time between BAM and first packet is between 50 and 200 ms. Verify behavior when time between BAM and first packet is faster than 50 ms. Verify behavior when time between BAM and first packet is longer than 200 ms.	P
BAM Protocol: Verify no EndOfMsgACK is sent after final Data Packet (DUT as Responder)	Verify DUT does not send an TP.CM_EndOfMsgACK after the final data packet of the BAM.	P

BAM Protocol: Verify no Conn_Abort is sent (DUT as Responder)	Verify DUT does not send an TP.Conn_Abort for any reason for a BAM.	P
BAM Protocol: Only one per Originator at a time (DUT as Responder)	Verify behavior when sees a BAM from an originator before previous BAM data transferred.	P
BAM Protocol: Simultaneous BAMs with different Originators (DUT as Responder)	Verify ability of DUT to successfully receive multiple simultaneous BAMs from different originators.	P
BAM Transport Data Packets sent in ascending sequential order (DUT as Responder)	Verify DUT behavior when the TP Data packets for a BAM are received in sequential order. Verify behavior when TP Data packets for a BAM are received out of sequential order.	P
BAM Data Packets: Time between Transport Data Packets for BAM (DUT as Responder)	Verify behavior when packets are sent between 50 and 200 ms apart. Verify behavior when packets are sent faster than 50 ms apart. Verify behavior when packets are sent longer than 200 ms apart.	P
	DATA LINK TRANSMIT TESTS - TP RTS/CTS	
RTS/CTS Protocol: RTS is sent before starting Data Transfer (DUT as Originator)	Verify DUT sends RTS to initiate connection.	P
RTS/CTS Protocol: RTS is valid (content and format) (DUT as Originator)	Verify correct PGN, data size, & total # packets, max packets. Verify all match the RTS/CTS TP.DT from the DUT.	P
RTS/CTS Protocol: CTS response to RTS is valid (content and format) (DUT as Originator)	Verify behavior when CTS sent within 200 ms (Tr) following RTS. Verify behavior when CTS sent after more than 200 ms (Tr) following RTS. Verify DUT checks PGN. Verify behavior when # packets (CTS) > max packets (RTS). Verify behavior for wrong/invalid next packet.	P
RTS/CTS Protocol: To reject, RTS is followed by valid Conn_Abort (content and format) (DUT as Originator)	Verify DUT terminates or stops in response to reject (Abort). Verify DUT checks PGN.	P
RTS/CTS Protocol: CTS issued after last Transport Data packet of previous CTS (DUT as Originator)	Verify behavior when CTS sent within T3 time following last packet. Verify behavior when CTS sent after more than T3 time following last packet. Verify DUT checks PGN. Verify behavior when # packets (CTS) > max packets (RTS). Verify behavior for wrong/invalid next packet.	P

RTS/CTS Protocol: CTS next packet numbering (DUT as Originator)	Verify behavior if next packet number specified in CTS is same as next packet number of previous CTS. Verify behavior if next packet number specified in CTS is within packet range of previous CTS. Verify behavior if next packet number specified in CTS is less than last confirmed packet number. Verify behavior if next packet number specified in CTS is one greater than next packet number plus number of packets from last CTS. Verify behavior if next packet number specified in CTS is two or more greater than next packet number plus number of packets from last CTS.	P
RTS/CTS Protocol: CTS to pause or stop data flow (DUT as Originator)	Verify behavior when receives CTS to pause. Verify DUT checks PGN. Verify behavior when CTS sent within T3 time following last packet. Verify behavior when CTS sent after more than T3 time following last packet.	P
RTS/CTS Protocol: CTS to pause repeat (DUT as Originator)	Verify behavior when receives CTS to pause within 500 ms (Th). Verify behavior when receives CTS to pause exceeds 500 ms (Th). Verify behavior when receives CTS to pause exceeds T4 Time. Verify DUT checks PGN.	P
RTS/CTS Protocol: EndOfMsgACK (DUT as Originator)	Verify behavior when receives TP.CM_EndOfMsgACK within T3 Time. Verify behavior when receives TP.CM_EndOfMsgACK after more than T3 Time. Verify ignores TP.CM_ EndOfMsgACK if received before final Data Transfer. Verify DUT checks PGN.	P
RTS/CTS Protocol: Connect Abort issued by Originator (DUT as Originator)	Verify correct content in TP.Conn_Abort. Verify only sends once connection is established (i.e. after initial Accept CTS).	P
RTS/CTS Protocol: Connect Abort issued by Responder (DUT as Originator)	Verify behavior when receives TP.Conn_Abort. Verify DUT checks PGN. Verify TP Data stops within 50 ms after TP.Conn_Abort. Verify TP Data sends no more than 32 packets after TP.Conn_Abort.	P
RTS/CTS Protocol: Multiple duplicate CTS (same SA, DA, PGN) received in short period (DUT as Originator)	Verify behavior (abort) with received multiple duplicate CTS (excluding CTS(0)).	P
RTS/CTS Protocol: CTS outside of connection is ignored (DUT as Originator)	Verify ignores CTS for a PGN that is not part of a connection.	P

RTS/CTS Protocol: Another RTS with same Originator and Responder but with different PGN (DUT as Originator)	Verify DUT does not send an RTS for another PGN to Responder while another RTS/CTS open with same Responder.	P
RTS/CTS Protocol: Simultaneous RTS/ CTS with different Originators (DUT as Originator)	Verify behavior (abort) with received multiple duplicate CTS (excluding CTS(0)).	P
Transport Data Packets for RTS/CTS have correct content (DUT as Originator)	Verify first data byte is sequence number. Verify remaining 7 bytes are correct data for packet.	P
Transport Data Packets for RTS/CTS sent in ascending sequential order (DUT as Originator)	Verify DUT sends the TP Data Packets for an RTS/CTS in sequential order. Verify the first TP.DT packet is sequence number = 1.	P
All Transport Data Packets for RTS/CTS have an 8 byte data field (DUT as Originator)	Verify DUT sends packets with 8 bytes	P
Unused bytes of Last Transport Data Packets for RTS/CTS filled with "0xFF" (DUT as Originator)	Verify unused bytes of last packets sent & filled properly.	P
Transport Data Packets for RTS/CTS start within T2 time following CTS (DUT as Originator)	Verify packets are sent no greater than 200 ms apart.	P
Time between consecutive Transport Data Packets for RTS/CTS, in which the CTS that allows more than 1 packet, are sent within T2 time of one another (DUT as Originator)	Verify packets of a CTS set are sent no greater than 200 ms apart (says T1 of 750 ms in 5.10.2.4).	P
	DATA LINK RECEIVE TESTS - TP RTS/CTS	
RTS/CTS Protocol: RTS is valid (content and format) (DUT as Responder)	Verify behavior when unsupported or unknown PGN. Verify behavior for other reject reasons for the DUT.	P
RTS/CTS Protocol: Multiple duplicate RTS (same SA, DA, PGN) received in short period (DUT as Responder)	If DUT accepts, verify DUT only once (not to every RTS).	P
RTS/CTS Protocol: CTS following RTS is valid (content and format) (DUT as Responder)	Verify CTS sent within 200 ms (Tr) following RTS. Verify correct PGN, next packet(= 1), number of packets (<= RTS max packets).	P

RTS/CTS Protocol: To reject, RTS is followed by valid Conn_Abort (content and format) (DUT as Responder)	Verify DUT Conn_Abort has correct PGN and a valid abort reason provided and is sent withing 200 ms (Tr) following RTS.	P
RTS/CTS Protocol: CTS issued after last Transport Data packet of the previous CTS (DUT as Responder)	Verify CTS sent within T3 time following last packet. Verify correct PGN, next packet (valid), number of packets(<= RTS max packets).	P
RTS/CTS Protocol: CTS next packet numbering (DUT as Responder)	Verify next packet number specified in CTS is not less than packet number already confirmed. Verify next packet number specified in CTS is either same as last CTS, within range of last CTS, or one greater than the next packet number plus number of packets from last CTS.	P
RTS/CTS Protocol: CTS issued after T2 time out during the transport of data packets (DUT as Responder)	Verify sends CTS (or Abort) after T2 time with no packets following CTS.	P
RTS/CTS Protocol: CTS to pause or stop data flow (DUT as Responder)	Verify correct setting of PGN and number of packets (0) and all other bytes set to 1's. Verify CTS sent within T3 time following last packet.	P
RTS/CTS Protocol: CTS to pause repeat (DUT as Responder)	Verify correct setting of PGN and number of packets (0) and all other bytes set to 1's. Verify CTS pause sent within 500 ms (Th) of last CTS pause. Verify sent only after receiving all packets recently cleared (or expired receive time out).	P
RTS/CTS Protocol: EndOfMsgACK (DUT as Responder)	Verify correct content in TP.CM_EndOfMsgACK. Verify sends a valid TP.CM_EndOfMsgACK only after the last data packet. Verify sends a valid TP.CM_EndOfMsgACK within T3 Time after last data packet (or CTS pause).	P
RTS/CTS Protocol: Connect Abort issued by Originator (DUT as Responder)	Verify behavior when receives TP.Conn_Abort. Verify ignores any Transport Data packets following Abort. Verify DUT checks PGN.	P
RTS/CTS Protocol: Connect Abort issued by Responder (DUT as Responder)	Verify correct content in TP.Conn_Abort. Verify ignores any Transport Data packets following Abort.	P
RTS/CTS Protocol: CTS outside of connection is ignored (DUT as Responder)	Verify doesn't randomly send CTS for PGNs not in a connection.	P

RTS/CTS Protocol: Multiple duplicate CTS (same SA, DA, PGN) received in short period (DUT as Responder)	Verify doesn't send multiple duplicate CTS (excluding CTS(0)).	P
RTS/CTS Protocol: Simultaneous RTS/ CTS with different Originators (DUT as Responder)	Verify ability of DUT to successfully manage Transport Data when RTS/CTS and BAM with same originator. Verify DUT uses/evaluates Destination Address. Verify doesn't send multiple duplicate CTS (excluding CTS(0)).	P
TP Protocol: Simultaneous RTS/CTS and BAMs with same Originator (DUT as Responder)	Verify ability of DUT to successfully manage Transport Data when RTS/CTS and BAM with same originator. Verify DUT uses/evaluates Destination Address to distinguish TP.DT for RTS/CTS or BAM.	P
RTS/CTS Protocol: Another RTS with same Originator and Responder but with different PGN (DUT as Responder)	Verify behavior (DUT rejects by sending Conn_Abort) any additional RTS from an Originator while another RTS/CTS open with same Originator.	P
RTS/CTS Protocol: RTS received when ECU at TP Connection Limit (DUT as Responder)	Verify behavior (DUT rejects by sending Conn_Abort) any additional RTS while DUT at Connection Limit.	P
Transport Data Packets for RTS/CTS to be sent in ascending sequential order (DUT as Responder)	Verify DUT behavior when the TP Data packets for an RTS/CTS are received in order. Verify behavior when TP Data packets for an RTS/CTS are received out of order.	P
All Transport Data Packets for RTS/CTS have an 8 byte data field (DUT as Responder)	Verify behavior when receives packets with 8 bytes. Verify behavior when receives packets with less than 8 bytes.	P
Transport Data Packets for RTS/CTS start within T2 time following CTS (DUT as Responder)	Verify behavior when packets are started within T2 time following CTS. Verify behavior when packets are started after T2 time following CTS.	P
Time between consecutive Transport Data Packets for RTS/CTS, in which the CTS that allows more than 1 packet, are sent within T2 time of one another (DUT as Responder)	Verify behavior when packets are sent less than 200 ms apart (says T1 of 750 ms in 5.10.2.4). Verify behavior when packets are sent longer than 200 ms apart (says T1 of 750 ms in 5.10.2.4).	P
	NETWORK LAYER TESTS	
Address Claimed Message	Verify that the ECU does not go bus off due to the forwarding and contention of an Address Claimed message.	N/A

Maximum messages forwarded	Verify that an ECU can forward the guaranteed maximum number of messages during average and peak busload.	N/A
Maximum messages filtered	Verify that an ECU can forward and filter the guaranteed maximum number of messages during average and peak busload with the maximum number of entries in the database.	N/A
Maximum transit delay	Verify that the worst-case latency for transmitting a message from one device to another device on a different bus segment does not exceed the maximum transit delay and is less than 50ms.	N/A
Message Forwarding	Verify that messages can be forwarded from one segment to another.	N/A
Higher Priority Forwarding	Verify that messages with higher priority are forwarded before messages with lower priority.	N/A
Equal Priority Forwarding	Verify that messages with equal priority are forwarded in the order received.	N/A
Message Filtering	Verify that messages can be filtered from one segment to another.	N/A
Block or Pass Filtering	Verify one of the following : 1.) Messages are forwarded by default, and blocked only if they exist in the filter database. 2.) Messages are blocked by default, and forwarded only if they exist in the filter database.	N/A
Database management	Verify that entries added to the filtering databases can only be removed by the device that created the entry, or by diagnostic tools that have the ability to override the address match requirement.	N/A
Address Translation	Verify that source/destination addresses can be substituted in messages, which use a single address to reference a particular vehicle system.	N/A
Message Repackaging	Verify that messages can be repackaged and forwarded.	N/A

Message Filter Database Manipulation	Verify that the filter database can be manipulated as follows: - Request entries - Add entries - Delete entries - Clear database - Set filter mode - Create entry, specifying filter mode	N/A
General Parametrics	Verify that general parametrics can be accessed.	N/A
Port Pair Parametrics	Verify that specific port pair parametrics can be accessed.	N/A
Network Topology	Verify that network topology information can be accessed.	N/A
	NETWORK MANAGEMENT TESTS	
ECU NAME	Verify the NAME contents for the ECU (DUT) align with -81.	P
System Initialization	Verify each ECU transmits a address claim at power-up system initialization.	P
Non-Configurable Address ECU	Verify that a non-configurable address ECU or service configurable address ECU stops transmitting and sends a Cannot Claim Address message if it fails to claim a valid address.	P
Commanded Addresses	Verify that a command configurable address ECU can receive a Commanded Address message and either initiate an address claim procedure with the new address or, if it cannot claim the new address, issue an address claim for it's current address.	N/A
Self-Configurable Address ECU	Verify that a self-configurable address ECU can re-calculate and claim another address if it is not successful in claiming the calculated address.	P
Request for Address Claimed	Verify an ECU can send a request for address claimed and process responses.	P
Request for Address Claimed	Verify an ECU responds to a request for address claimed with an Address Claimed/Cannot Claim message (or nothing if that ECU has not yet attempted to claim an address).	P

Address Claimed Cannot Claim	Verify an ECU sends an Address Claimed message upon initialization and waits for the defined period (250 ms or 50 ms) before resuming normal network traffic.	P
Address Claimed Cannot Claim	Verify an ECU receiving an Address Claimed message with a lower priority claiming it's own source address responds with an Address Claimed Message.	P
Address Claimed Cannot Claim	Verify an ECU receiving an Address Claimed message with a higher priority claiming it's own source address either attempts to claim a new address or responds with a Cannot Claim message after a time delay.	P
Address Not Claimed	Verify an ECU that cannot claim an address sends the Cannot Claim message in response to the Request for Address Claimed. No other messages shall be sent.	P
Power Interruption	Verify an ECU does not perform network initialization with a power loss < 2ms.Verify an ECU does perform network initialization with a power loss > 1 second.	A
Network Disruption	Verify that an ECU can be connected, disconnected, and powered up without disrupting network communications.	A
Address Continuity	Verify that an ECU attempts (if applicable) to use the same address and addresses for ECUs that are communicated with across powerdown and power-up cycles.	A
	PHYSICAL LAYER TESTS	
J1939-11 physical layer	Verify to requirements of SAE J1939-11 Conformance Tests.	A
J1939-15 physical layer	Verify to requirements of SAE J1939-15 Conformance Tests.	A