

Clarification Request

Request from: BTL-Labmanager@softdel.com>

References: BTL Specified Tests

Stage: ☒ Request, ☐ Listed, ☐ Analysis, ☐ Resolved

Actions necessitated: ☐ Checklist/Test Plan change, ☒ BTL Specified Tests change, 2.2.17,
☐ SSPC Interpretation required, ☐ Implementation Guidelines change,

Date of BTL-WG Response: _____
☐ All actions necessitated have been completed

Background:

2.2.17 MS/TP Network Startup Tests (Reference device joins the MS/TP network)

Reason for Change: No test exists for this functionality. This test is included in CLB-014.

Purpose: Verify that the IUT can allow other devices to be introduced into a working MS/TP network of which the IUT is the SoleMaster.

Setup: An existing MS/TP network shall be comprised of the IUT. Normal network operation shall be verified using a serial analyzer. In this scenario (SoleMaster), the only frames being transmitted should be Poll For Master Frames generated by the IUT. Reference Master A should be configured with a MAC address less than the IUT and a Max_Master greater than the IUT's MAC address. Reference Master B should be configured with a MAC address greater than the IUT and a Max_Master greater than the IUT's MAC address. Reference Master A and B should be configured with the same baud rate as the IUT.

Test Steps:

1. Power on the IUT.

CHECK (verify with the serial analyzer that the IUT declares sole master and generates Poll For Master frames at TS+1).

Power on Reference Master A.

CHECK (verify that the IUT continues to send Poll for Master frames to successive addresses up to and including the Reference Master A MAC Address).

WAIT (until the Reference Master A sends a Reply to Poll for Master to the IUT).

CHECK (verify that the IUT sends a Token Frame to Reference Master A).

WAIT (until the Reference Master A sends a Poll for Master requests to all devices from its TS+1 to IUT).

CHECK (verify that the IUT sends a Reply to Poll for Master to Reference Master A).

WAIT (until the Reference Master A sends a Token Frame to IUT).

Power on Reference Master B.

CHECK (verify that IUT sends a Poll for Master to all devices from its TS+1 to Reference Master B).

WAIT (until Reference Master B sends a Reply to Poll for Master to IUT).

CHECK (verify that IUT sends a Token Frame to Reference Master B).

CHECK (verify that IUT is quiet until it receives another Token).

Question:

If a device cannot pass the first check because it does autobaud, should the test be Skipped?

Response:

No, the test should not be skipped. An IUT can remain in autobaud mode indefinitely, as long as it is not a router. The rest of the test can be run by transmitting something so that the IUT detects the baud rate.