
IEEE P802.3ap/D3.0

Sponsor Ballot TR Comment

Supporters:

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802.3ap - Interoperability TR comment

To ensure interoperability channel parameters are typically normatively specified and included in the performance implementation conformance statement (PICS). The channel parameters are identified, in part, to enable appropriate tests against by which to assess the claim for conformance of the implementation. The PICS for Clauses 70, 71 and 72 (802.3ap-200x) do not include channel parameters and/or appropriate specifications/tests to ensure interoperability.

Annex 69B provides informative interconnect characteristics for differential, controlled impedance traces up to 1 m, including two connectors, on printed circuit boards residing in a backplane environment. Although Annex 69B states that the interconnect characteristics can be applied to a specific implementation of the full path (including transmitter and receiver packaging and supporting interaction of these components, the interconnect characteristics are not normatively specified and more importantly are not directly tied to appropriate tests (PICS) to ensure interoperability.

Recognizing that a backplane interconnect is highly dependent on implementation and the need to enable system trade-offs for the designer, a subset of draft 3 channel parameters may be sufficient to ensure interoperability.

Suggested Remedy

Clause: 69B

Page 188

Line: 3

Change informative to normative.

Add shall statements (below) to the channel parameters necessary to enable appropriate tests by which to assess the claim for conformance of the implementation. Include those channel parameters in the Clauses 70, 71 and 72 (802.3ap-200x) PICS and/or appropriate specifications/tests to ensure interoperability.

Subclause: 69B.4.6.4

Page 195: Line 16.

Replace: It is recommended that ICRfit, offset by PILD and PSYS, be greater than or equal to ICRmin as defined in Equation (69B–26). With: ICRfit, offset by PILD and PSYS, **shall** be greater than or equal to ICRmin as defined in Equation (69B–26).

Suggested Remedy

Subclause: 69B.4.5.

Page 192: Line 28:

Replace: It is recommended that the channel return loss, RL , measured in dB at TP1 and TP4, be greater than or equal to RL_{min}

With: The channel return loss, RL , measured in dB at TP1 and TP4, **shall** be greater than or equal to RL_{min} as defined in Equations (69B–12), (69B–13), and (69B–14).

Subclause: 69B.4.4.

Page 191: Line 34

Replace: It is recommended that ILD be within the high confidence region defined by Equation (69B–10) and Equation (69B–11):

With: The ILD **shall** be within the region defined by Equation (69B–10) and Equation (69B–11; see figure 69B–5—Insertion loss deviation limits

Subclause: 69B.4.4.

Page 191: figure 69B–5—Insertion loss deviation limits

Replace: High Confidence Region

With: ILD Region