

2.3bu D3.0 Power over Datalines (PoDL) of Single Balanced Pair Ethernet 2nd Sponsor recirculation ballo

CI 104 SC 104.4.3.3 P48 L45 # r02-1  
Law, David Hewlett Packard Enter

Comment Type TR Comment Status D

According to Figure 104-5 'Detection state diagram' the VALID\_SIGNATURE state can only be entered if vsig\_valid is TRUE. Subclause 104.4.3.3 'Variables' defines vsig\_valid as TRUE when 'VPSE is in the range of Vgood\_PSE during the DETECTION state' and FALSE when 'VPSE is outside the range of Vgood\_PSE during the DETECTION state.'. Table 104-3 item 7 defines the Vgood\_PSE range as the valid PD detection signature range measured at PSE PI in the range 4.05V min to 4.7V max. Based on this the DEGLITCH state can only be entered when the voltage at the PSE PI is in the range 4.05V min to 4.7V max and cannot be entered when the voltage is outside that range.

This conflicts directly with the text in subclause 104.4.4.3 'Rejection criteria' which states that 'A PSE may accept or reject a voltage in the band between Vbad\_lo\_PSE max and Vgood\_PSE min and in the band between Vgood\_PSE max and Vbad\_hi\_PSE min.'. Since subclause 104.5.3.2 'Conventions' states that '... the state diagram follows the conventions of state diagrams as described in 21.5.' and subclause 21.5 states 'State diagrams take precedence over text.' this text in subclause 104.4.4.3 cannot be followed.

SuggestedRemedy

Suggest that the text:

vsig\_valid  
TRUE: VPSE is in the range of Vgood\_PSE during the DETECTION state.  
FALSE: VPSE is outside the range of Vgood\_PSE during the DETECTION state.

be changed to read:

vsig\_valid  
TRUE: A valid PD signature has been detected as defined in 104.4.4.2 and 104.4.4.3.  
FALSE: An invalid PD signature has been detected as defined in 104.4.4.2 and 104.4.4.3.

Proposed Response Response Status W

PROPOSED ACCEPT.