
802.3ck D1.3

AC-coupling comments

#129,#130,#138

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AC-coupling: 129, 130, 138

CI 162 SC 162.11 P 156 L 18 # 129
Ghiasi, Ali Ghiasi Quantum/Inphi
Comment Type TR Comment Status D AC coupling
802.3cd standards specified 50 kHz AC coupling but this standard is operating 2x the Baudrate
SuggestedRemedy
Replace 50 KHz with 100 kHz
Proposed Response Response Status W
PROPOSED REJECT.
The AC-coupling specification is used throughout 802.3ck and applied to predictive models as well as implemented in 802.3cd cable assemblies. The comment does not provide sufficient evidence for the proposed changed.

CI 162 SC 162.11 P 156 L 19 # 130
Ghiasi, Ali Ghiasi Quantum/Inphi
Comment Type TR Comment Status D AC coupling
If the AC coupling needs to be 50 KHz or 100 KHz why are we defining capacitor value, actually 100 nF results in 32 KHz cut off
SuggestedRemedy
Remove recommended AC coupling value
Proposed Response Response Status W
PROPOSED REJECT.
Resolve using the response to comment #129.

CI 163 SC 163.10.5 P 186 L 48 # 138
Ghiasi, Ali Ghiasi Quantum/Inphi
Comment Type TR Comment Status D AC coupling
802.3cd standards specified 50 kHz AC coupling but this standard is operating 2x the Baudrate
SuggestedRemedy
Replace 50 KHz with 100 kHz
Proposed Response Response Status W
PROPOSED REJECT.
Resolve using the response to comment #129.

162.11 Cable assembly characteristics

For 100GBASE-CR1, 200GBASE-CR2, and 400GBASE-CR4, the lanes are AC-coupled. The AC-coupling shall be within the cable assembly. It is recommended that it is within the plug connectors. It should be noted that there may be various methods for AC-coupling in actual implementations. The low-frequency 3 dB cutoff of the AC-coupling shall be less than 50 kHz. It is recommended that the value of the coupling capacitors be 100 nF. **The capacitor limits the inrush charge and baseline wander.**

163.10.5 AC-coupling

AC-coupling shall be implemented within the channel (between TP0 and TP5) using DC blocking capacitors. The low-frequency 3 dB cutoff of the channel shall be less than 50 kHz.