

CU4HDD BER Requirements

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BER Across Storage and Ethernet Backplane Standards

- The BER requirements for storage and Ethernet Backplane standards closely align
- SAS: 10E-12
 - Reference Document: SAS3r06.pdf
 - Reference Section: 5.5.1 TxRx connection characteristics overview
- SATA: 10E-12
 - Reference Document: SerialATA_Revision_3_2_Gold.pdf
 - Reference Section: 7.63 Frame error rate testing
- 1000BASE-KX: 10E-12
 - Reference Document: 802.3-2012_section5.pdf
 - Reference Section: 70.7.2 Receiver characteristics
- 10GBASE-KX4: 10E-12
 - Reference Document: 802.3-2012_section5.pdf
 - Reference Section: 71.7.2 Receiver characteristics
- 10GBASE-KR: 10E-12
 - Reference Document: 802.3-2012_section5.pdf
 - Reference Section: 72.7.2 Receiver characteristics

Conclusion

- Propose to preserve the $10E-12$ BER that has historically been used for SAS, SATA, and backplane Ethernet standards