IEEE P802.3cb CU4HDD Objectives

- Support MAC data rates of 2.5 Gb/s and 5 Gb/s
- Support full duplex operation only
- Preserve the 802.3 Ethernet frame format utilizing the 802.3 MAC
- Preserve minimum and maximum Frame Size of current 802.3 standard
- Support Auto-Negotiation (Clause 73)
- Support optional Energy-Efficient Ethernet operation.
- Support a BER better than or equal to $10^{-12}$ at the MAC/PLS service interface (or the frame loss ratio equivalent)
- Define a PHY for 2.5 Gb/s operation over a printed circuit board backplane with total channel insertion loss of $\leq 11$ dB at 1.5625 GHz
- Define a PHY for 5 Gb/s operation over a printed circuit board backplane with total channel insertion loss of $\leq 16$ dB at 2.578125 GHz