

Define a mechanism to reduce power consumption during periods of low link utilization for the following PHYs

- 100BASE-TX (Full Duplex)
- 1000BASE-T (Full Duplex)
- 10GBASE-T
- 10GBASE-KR
- 10GBASE-KX4
- 1000BASE-KX (added July 2008; WG approved Y: 68 N: 0 A: 13)

- Define a protocol to coordinate transitions to or from a lower level of power consumption
- The link status should not change as a result of the transition
- No frames in transit shall be dropped or corrupted during the transition to and from the lower level of power consumption

(All of the above modifications except 1000BASE-KX approved 5/29/07 All: 11/1/0, 802.3: 10/1/0)

- The transition time to and from the lower level of power consumption should be transparent to upper layer protocols and applications
(Modified 5/30/07 All: 7/0/1, 802.3: 5/0/1)

- Define a 10 megabit PHY with a reduced transmit amplitude requirement such that it shall be fully interoperable with legacy 10BASE-T PHYs over 100 m of Class D (Category 5) or better cabling to enable reduced power implementations. (Approved 5/30/07, All: 5/0/3, 802.3: 4/0/2)
- Any new twisted-pair and/or backplane PHY for EEE shall include legacy compatible auto negotiation (approved 3/15/07: All 4/1/7)