

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

- 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
- The transition time to and from the lower level of power consumption should be transparent to upper layer protocols and applications

- 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.
- Any new twisted-pair and/or backplane PHY for EEE shall include legacy compatible auto negotiation