Updated Objectives

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Approved Objectives

- Support the IEEE 802.3/Ethernet frame format at the MAC client service interface

- Support the minimum and maximum frame size of the current IEEE 802.3 standard

- Support operation in automotive environments (e.g., EMC, temperature)

- Do not preclude meeting FCC and CISPR EMC requirements.

- Do not preclude power delivery over balanced and unbalanced link segments

- Define optional startup procedure which enables the time from power_on=FALSE to a state capable of transmitting and receiving valid data to be less than 100 ms

Approved Objectives

- Define performance characteristics of link segments suitable for use with automotive balanced-pair cabling and automotive unbalanced coaxial cabling supporting use of up to 4 inline connectors and up to at least 15m reach on at least one type of automotive cabling.

- Do not preclude using the low data rate signal to extract the timing reference for the high-data rate transmitter.

Approved Objectives

- ~~Define an electrical PHY to support up to 10 Gbps data rate point-to-point operation in one direction and up to 100 Mbps point-to-point operation in the other direction over the defined balanced-pair link segment.~~

- ~~Define an electrical PHY to support up to 10 Gbps data rate point-to-point operation in one direction and up to 100 Mbps point-to-point operation in the other direction over the defined unbalanced coaxial link segment.~~

- ~~Define an electrical PHY to support up to 5 Gbps data rate point-to-point operation in one direction and up to 100 Mbps point-to-point operation in the other direction over the defined balanced-pair link segment.~~

- ~~Define an electrical PHY to support up to 5 Gbps data rate point-to-point operation in one direction and up to 100 Mbps point-to-point operation in the other direction over the defined unbalanced coaxial link segment.~~

- ~~Define an electrical PHY to support up to 2.5 Gbps data rate point-to-point operation in one direction and up to 100 Mbps point-to-point operation in the other direction over the defined balanced-pair link segment.~~

- ~~Define an electrical PHY to support up to 2.5 Gbps data rate point-to-point operation in one direction and up to 100 Mbps point-to-point operation in the other direction over the defined unbalanced coaxial link segment.~~

Approved Objectives

- Define an electrical PHY supporting 2.5 Gbps point-to-point transmission and 100 Mbps point-to-point reception, and a complementary PHY supporting 2.5 Gbps reception and 100 Mbps transmission, with concurrent transmission in both directions, over the defined balanced pair link segment

- Define an electrical PHY supporting 5 Gbps point-to-point transmission and 100 Mbps point-to-point reception, and a complementary PHY supporting 5 Gbps reception and 100 Mbps transmission, with concurrent transmission in both directions, over the defined balanced pair link segment

- Define an electrical PHY supporting 10 Gbps point-to-point transmission and 100 Mbps point-to-point reception, and a complementary PHY supporting 10 Gbps reception and 100 Mbps transmission, with concurrent transmission in both directions, over the defined balanced pair link segment

- Define an electrical PHY to support bidirectional data transfer with 2.5 Gbps, 5 Gbps, or 10 Gbps point-to-point transmission or reception in one direction and 100 Mbps point-to-point reception or transmission in the other direction with the direction of asymmetry and high-speed rate determined at link startup for at least one transmission rate over the defined balanced pair link segment.

Approved Objectives

- Define an electrical PHY supporting 2.5 Gbps point-to-point transmission and 100 Mbps point-to-point reception, and a complementary PHY supporting 2.5 Gbps reception and 100 Mbps transmission, with concurrent transmission in both directions, over the defined unbalanced coaxial link segment

- Define an electrical PHY supporting 5 Gbps point-to-point transmission and 100 Mbps point-to-point reception, and a complementary PHY supporting 5 Gbps reception and 100 Mbps transmission, with concurrent transmission in both directions, over the defined unbalanced coaxial link segment

- Define an electrical PHY supporting 10 Gbps point-to-point transmission and 100 Mbps point-to-point reception, and a complementary PHY supporting 10 Gbps reception and 100 Mbps transmission, with concurrent transmission in both directions, over the defined unbalanced coaxial link segment

- Define an electrical PHY to support bidirectional data transfer with 2.5 Gbps, 5 Gbps, or 10 Gbps point-to-point transmission or reception in one direction and 100 Mbps point-to-point reception or transmission in the other direction with the direction of asymmetry and high-speed rate determined at link startup for at least one transmission rate over the defined unbalanced coaxial link segment.