Adopted PHY baselines

George Zimmerman / CME Consulting, Inc.

1/8/2024

(fixed link on slide 2, Fitzgerald)

PHY baseline motions (11/14/2024)

11/14/2024:

- **Motion #3: Move that the IEEE P802.3dg Task Force adopt slides 3 to 8 and slide 10 of Murray_3dg_01a_11132024.pdf**

  - **Encoding and decoding rules for the PCS using 8N/(8N+1) Encoding, and optional support of Sequence Ordered Sets**

- **Motion #4: Move that the IEEE P802.3dg Task Force adopt slides 4 to 7 of Murray_3dg_03a_11132024.pdf**

  - **EEE LPI quiet-refresh timing and definition of the auxiliary bit for signaling insufficient LPI refresh.**

- **Motion #5: Move that the IEEE P802.3dg Task Force adopt slides 3 to 7 of Fitzgerald_3dg_01_11132024.pdf**

  - **Auto-Negotiation parameters including technology definition bits, transmit level negotiation, priority resolution, & break_link_timer**

PHY baseline motions (9/17/2024)

9/17/2024:

- **Motion #6: Move that the IEEE P802.3dg Task Force adopt slides 2, 3, and 4 of murray_3dg_02_09172024.pdf**

  - Slides 2 & 3 are a 33-bit side stream PCS Tx scrambler, based on 40.3.1.3.2, including how the data octet is combined with scrambler bits

  - Slide 4 is a format for a PMA training frame, composed of 16 partial PHY frames with several TBD parameters including partial frame length and infofield contents.

- **Motion #8: Move that IEEE 802.3dg not include an OAM channel, and set the auxiliary bit in the PHY frame to zero**

PHY baseline motions (5/13 & 7/15/2024)

7/15/2024:

- **Motion #1 Adopt a proposal for a 100BASE-T1L PHY using PAM-3 8b6T in Murray_3dg_07152024.pdf** *(as amended during discussion)*

    https://www.ieee802.org/3/dg/public/May_2024/Murray_3dg_01a_07152024.pdf

- **Motion #2 Adopt:**

    - Sequence ordered set of the MII according to **Lo_3dg_01a_0724.pdf**, page 3.

    - The nibble combining at the input of the 8N/(8N+1) encoder, and byte splitting rules at the output of the 8N/(8N+1) decoder according to Lo_3dg_01a_0724.pdf, page 10, 11, 12, 15 and page 9 for ordered sets.

    - The 100BASE-T1L 8N/(8N+1) encoder/decoder with modifications according to Lo_3dg_01a_0724.pdf, pages 13, 14

5/13/2024: (These motions refined and implemented by the above)

- **Motion #1** Move that the TF select PAM3 as the modulation for the IEEE 802.3dg PHY

- **Motion #2 :** Move that 802.3dg add the capability to support sequence ordered sets to the MII signaling.