Text Proposal for EEE Quiet Signalling

Contribution to IEEE 802.3cy

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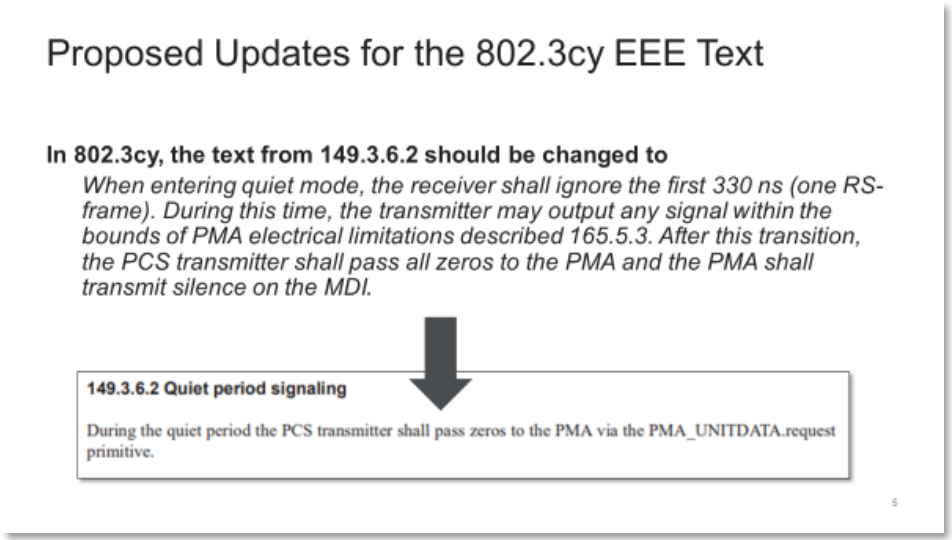
Introduction

- Previous contribution jonsson_majomard_3cy_01_05_03_22 suggested simple changes to the excising EEE text to help clarify the transition to quiet mode
- This presentation proposes an updated text for the quiet signaling



From:
https://www.ieee802.org/3/cy/public/adhoc/jonsson_majomard_3cy_01_05_03_22.pdf

NOTE – referenced slide said 149.3.6.2, should say 165.3.6.2

Proposed Updates for the 802.3cy EEE Text

Change the text in 165.3.6.2 to

During the quiet period the PCS transmitter shall pass zeros to the PMA via the PMA_UNITDATA.request primitive. The receiver should ignore transmissions during first 332.8 ns (one RS-FEC frame period) following the transition to the quiet period and ignore transmissions outside of the specified refresh and ALERT intervals.

Proposed Updates for the 802.3cy EEE Text

Change the text in 165.4.3.1 to

The symbols to be transmitted by the PMA are denoted by tx_symb. When the tx_mode is SEND_N, tx_symb represents the 25GMII data stream, and PMA Transmit generates a pulse-amplitude modulated signal on each pair in the following form:

$$s(t) = \sum_{n=0}^{\infty} a_n h_T(t - nT) \qquad (165-12)$$

In Equation (165–12), a_n is the PAM4 modulation symbol from the set {–1, –1/3, +1/3, +1} to be transmitted at time nT, and $h_T(t)$ denotes the system symbol response at the MDI. This symbol response shall comply with the electrical specifications given in 165.5.6.(165–12).

During training or quiet-refresh signalling, tx_mode is SEND_Z or SEND_T. During training or quiet-refresh signalling, PMA Transmit the value of a_n is a PAM modulation symbol {+1, 0, -1}.

NOTE – during the first 332.8 ns (one RS-FEC frame) following a transition to quiet-refresh signalling, the output of the transmitter is ignored by the receiver.

Straw Poll

I support adopting the proposed clarifying text updates on slides 3 and 4 of this presentation

Y: N:

Motion

Move to adopt the text updates on slides 3 and 4 of this presentation with editorial license to implement

M: Ragnar Jonsson
S:

Technical (>=75%)
Y: D: A:
Motion Passes/Fails

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