

(references shown in red are the new content - shown as a help here, not in the actual comment)

Suggest Remedy:

At 128A.3.1.6 make the following changes to the existing text wording:

a) Capture at least one complete cycle of the test pattern PRBS9 (127.3.4.1) as specified in Table 68-6 at TP4H_D (see Figure 128A-4) per 85.8.3.3.4.

d) Measure the RMS deviation from the mean voltage at a fixed point in a run of at least 8 consecutive identical bits in a suitable pattern. PRBS9 (127.3.4.1) is an example of a pattern that includes runs suitable to perform the measurement. It is recommended that the deviation is measured within the flattest portion of the waveform at a point where the slope is closest to zero. The RMS deviation is measured for a run of zeros and also a run of ones. The average of the two measurements is denoted as σ_n .

Create a new sub clause as shown below, placed after the last paragraph of 127.3.4:

127.3.4.1 PMA PRBS9 test pattern (optional)

The PMA may optionally generate and detect a PRBS9 test pattern.

The ability to generate the test pattern in each direction of transmission is indicated by the PRBS9_Tx_generator_ability, and PRBS9_Rx_generator_ability status variables, which if a Clause 45 MDIO is implemented are accessible through bits 1.1500.5, 1.1500.4, respectively (see 45.2.1.140).

If supported, when send Tx PRBS9 test-pattern mode is enabled by the PRBS9_enable and PRBS_Tx_gen_enable control variables, the PMA shall generate a PRBS9 pattern (as defined in footnote^a of Table 68-6) toward the service interface below the PMA via the PMA_UNITDATA.request primitive.

If a Clause 45 MDIO is implemented, the PRBS9_enable and PRBS_Tx_gen_enable control variables are accessible through bits 1.1501.6 and 1.1501.3 (see 45.2.1.141). When send Tx PRBS9 test-pattern mode is disabled, the PMA returns to normal operation.

Note that PRBS9 is intended to be checked by external test gear, and no PRBS9 checking function is provided within the PMA.