

Suggest Remedy:

(no need to change 128A.3.1.6 – as written, it is consistent with other clauses which use this method, e.g. 92.8.3.7)

Create a new sub clause 127.3.4.1, placed after the last paragraph of 127.3.4:

127.3.4.1 PMA PRBS9 test pattern (optional)

The PMA may optionally generate a PRBS9 test pattern in the transmit direction.

The ability to generate the test pattern is indicated by the PRBS9_Tx_generator_ability status variable, which, if a Clause 45 MDIO is implemented, is accessible through bit 1.1500.5 (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.

Add 45.2.1.140 to the draft with the following content:

45.2.1.140 Test-pattern ability (Register 1.1500)

Change the first paragraph as follows:

The test-pattern ability register is used for PHY types that implement SSPRQ, square wave, and PRBS testing in the PMA. These functions are described in 127.3.4.1, 83.5.10, and 120.5.11. The assignment of bits in the test-pattern ability register is shown in Table 45–105.