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A realization of PMA training PAM2 Sequences – 10G-T vs. 2.5G/5G-T

- 10G-T in Clause 55 – Figure 55-13

Derived sequences

$$Sa_n = \begin{cases} Scr_n[0] \oplus 1 & \text{if } n \bmod 256 = 0 \\ Scr_n[0] & otherwise \end{cases}$$

$$Sb_n = Scr_n[3] \oplus Scr_n[8]$$

$$Sc_n = Scr_n[6] \oplus Scr_n[16]$$

$$Sd_n = Scr_n[9] \oplus Scr_n[14] \oplus Scr_n[19] \oplus Scr_n[24]$$

Figure 55–13—A realization of PMA training PAM2 sequences

- Sd_n is the XORed of four elements of $Scr_n[9]$, $Scr_n[14]$, $Scr_n[19]$, & $Scr_n[24]$

- In 2.5G/5G-T, Figure 126-11 is similar to Figure 55-13, but with the wrong locations of parenthesis

Derived sequences:

$$Sa_n = \begin{cases} Scr_n[0] \oplus 1 & \text{if } n \bmod 256 = 0 \\ Scr_n[0] & otherwise \end{cases}$$

$$Sb_n = Scr_n[3] \oplus Scr_n[8]$$

$$Sc_n = Scr_n[6] \oplus Scr_n[16]$$

$$Sd_n = Scr_n[9] \oplus Scr_n([14] \oplus Scr_n([19] \oplus Scr_n[24]))$$

Figure 126–11—A realization of PMA training PAM2 sequences

- They shall be corrected as
- $Sd_n = Scr_n[9] \oplus (Scr_n[14] \oplus (Scr_n[19] \oplus Scr_n[24]))$

Thank You