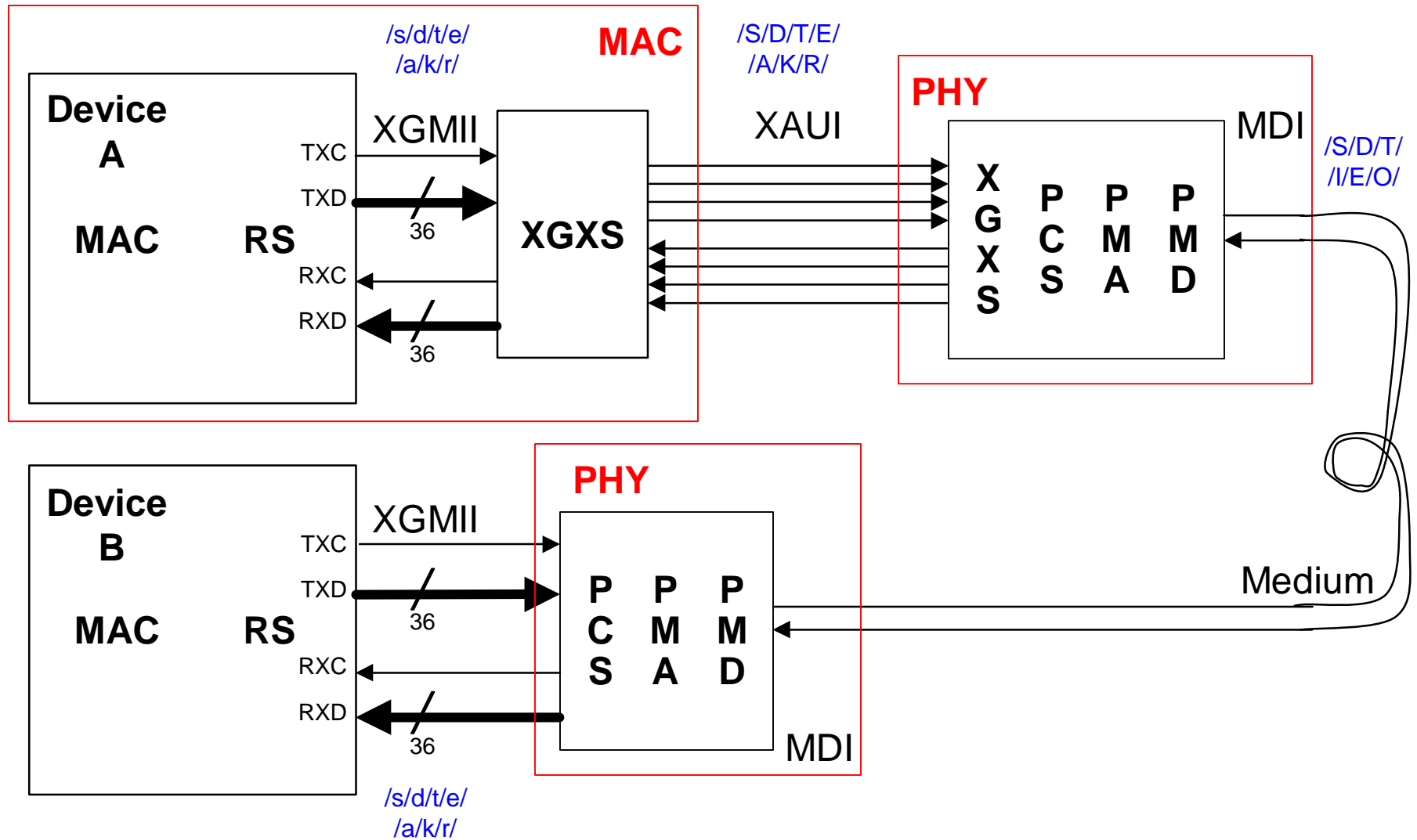


Coding Schemes



Coding Schemes

- RS transmits and receives /s/, /d/, /t/, /e/, /a/, /k/ and /r/. These are byte wide symbols. The RS generates the randomness of the idle stream (/a/, /k/, /r/) to reduce EMI on the XGMII and XAUI.
- XGXS translates byte wide XGMII symbols to/from 10-bit wide XAUI symbols (based on 8b/10b coding scheme). The XGXS handles the generation and checking of the running disparity.
- PHY (PCS, PMA, PMD) translates the byte wide XGMII symbols to/from the desired physical layer symbols (i.e. 64/66, SLP, WWDM, etc.). The PHY handles encoding the idle stream (/a/, /k/, /r/) into idles (/I/), and vice versa. The PHY also generates and terminates the /O/ data (extremely useful for leased dark fiber that has regenerators that are not SONET/SDH specific).