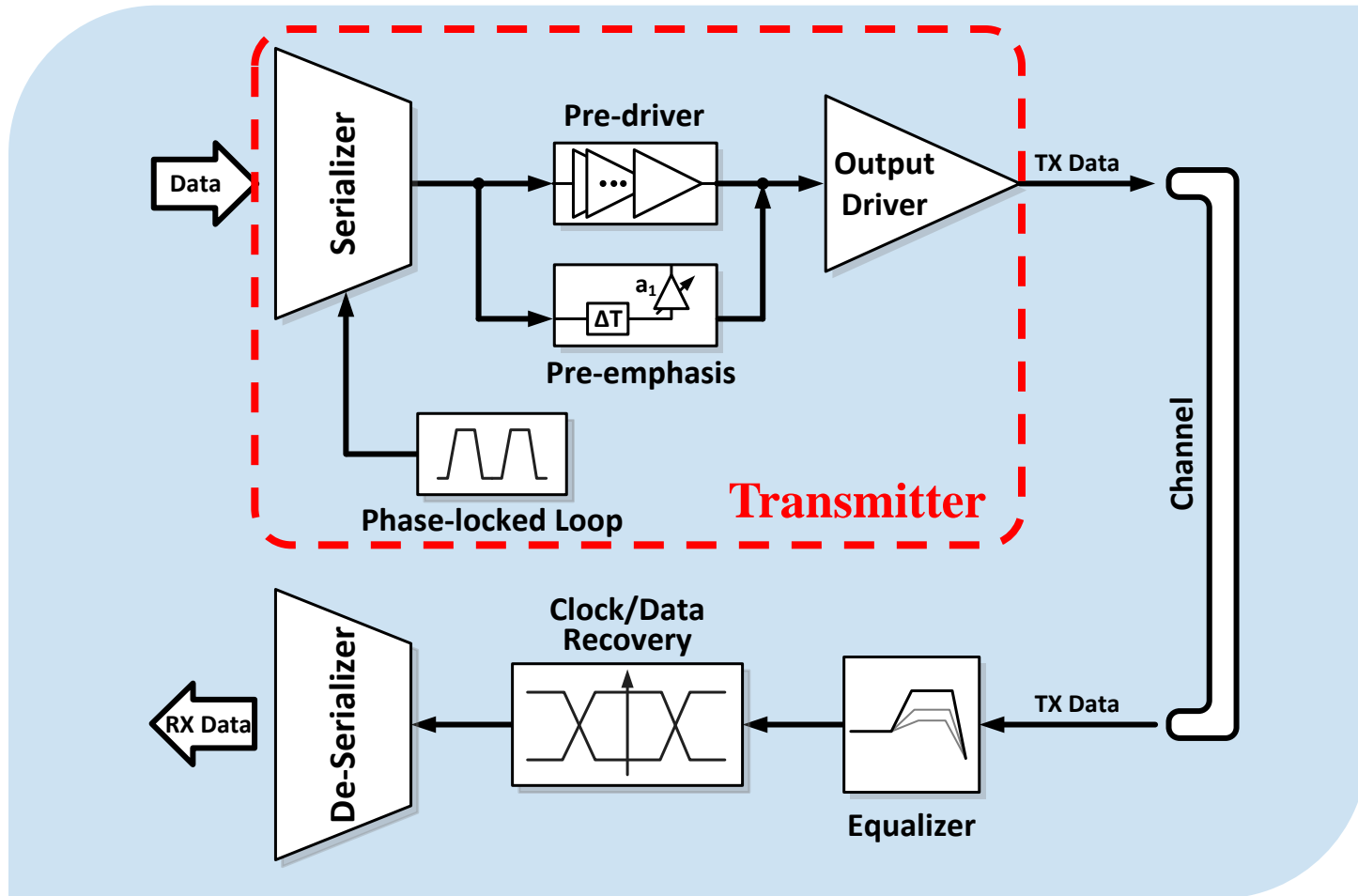


# High-Speed SERDES System

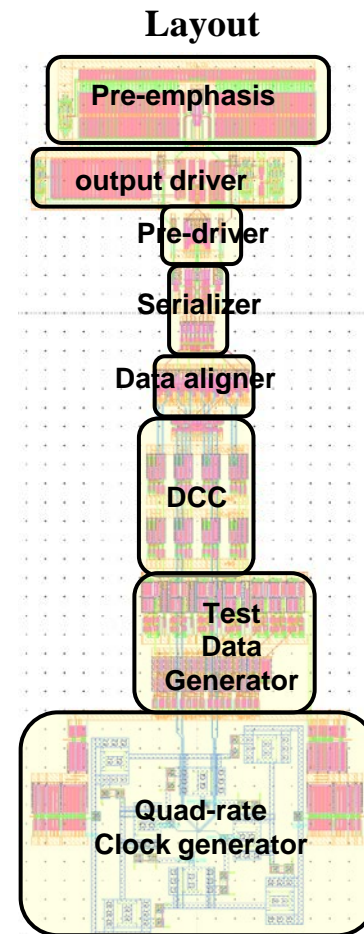
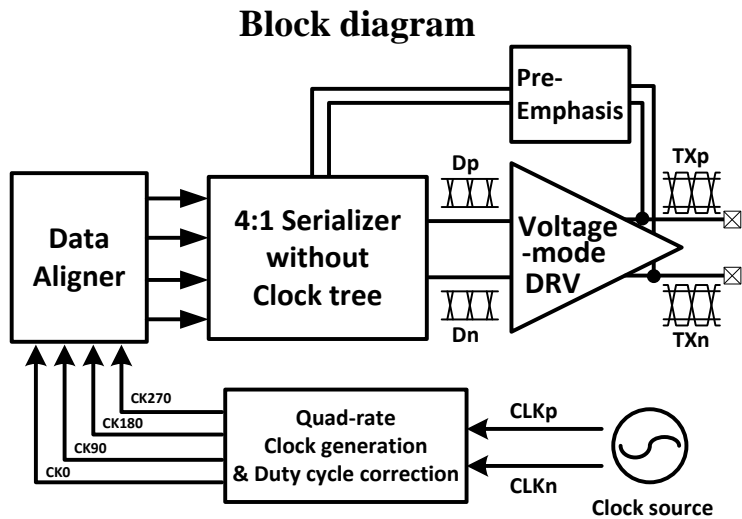


- 10-GHz low-power transmitter with pre-emphasis
- 0.65-V low-supply, low power PLL with charge pump current and supply noise compensation

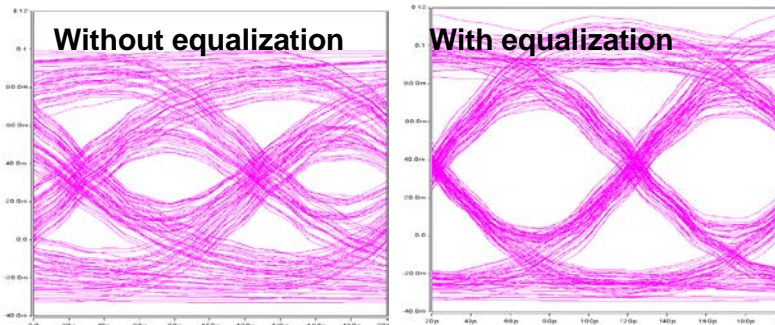
# Low Power Transmitter

- 10-Gb/s 1.837-mW low power transmitter with pre-emphasis

→ Domestic patent pending – ‘SERIALISER AND DATA TRANSMITTER COMPRISING THE SAME’



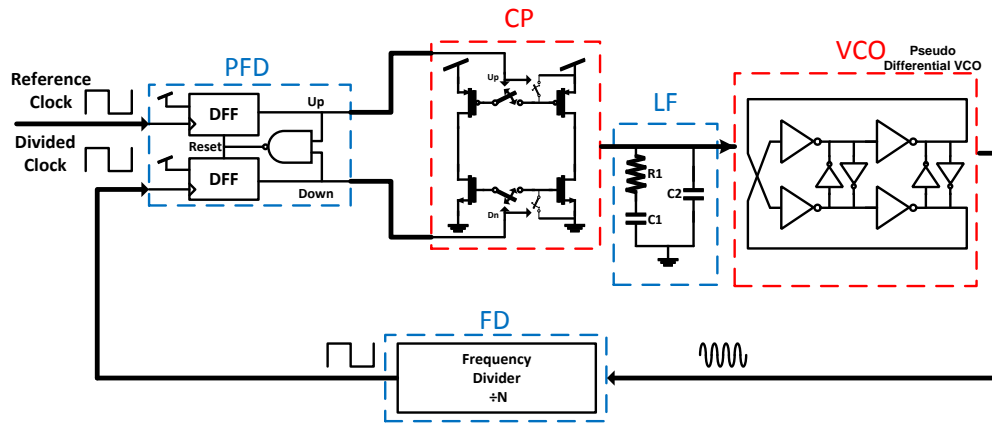
**Transmitter output after channel**



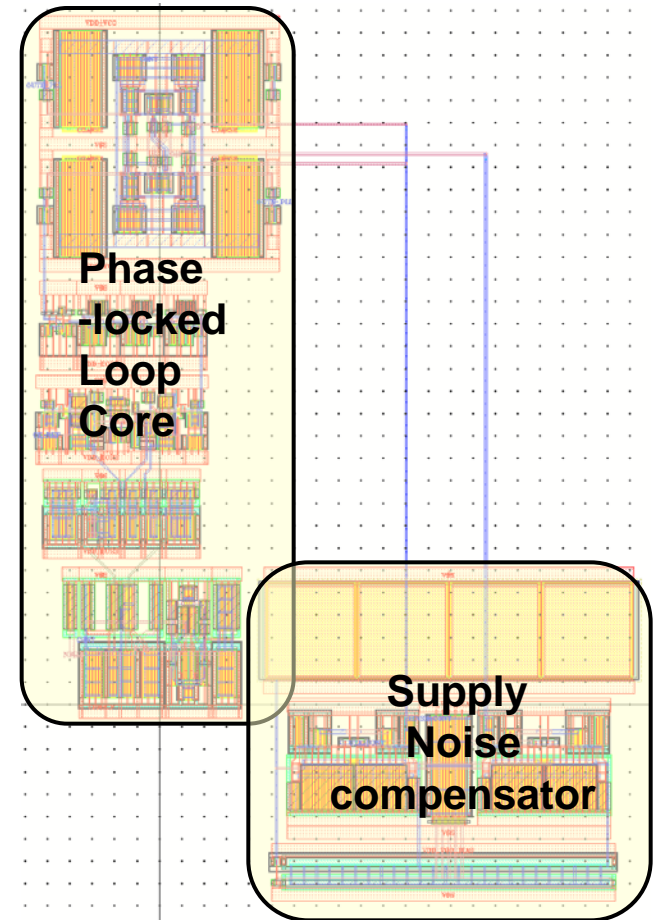
# Low Supply Low Power PLL

- 0.65-V 400-MHz low power PLL with charge pump current and supply noise compensation

Block diagram



Layout



PLL output clock Jitter

