• 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’

Block diagram

Transmitter output after channel

Without equalization

With equalization

Layout
Low Supply Low Power PLL

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

Block diagram

PLL output clock Jitter

Not compensated

Compensated

Layout

Phase-locked Loop Core

Supply Noise compensator