45% power saving in a 0.25μm BiCMOS 10Gb/s 50Ω-terminated packaged active-load laser driver - DTU Orbit (12/08/2019)

45% power saving in a 0.25μm BiCMOS 10Gb/s 50Ω-terminated packaged active-load laser driver
A 0.25μm BiCMOS laser driver based on active loads allows operation at 10Gb/s while drawing 5mA from a 1.8V supply. The design guarantees the correct matching of the driver outputs without the use of physical 50Ω load resistors. This enables a theoretical current consumption reduction of 50% (45% in the actual prototype) compared to the traditional laser-driver design.

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