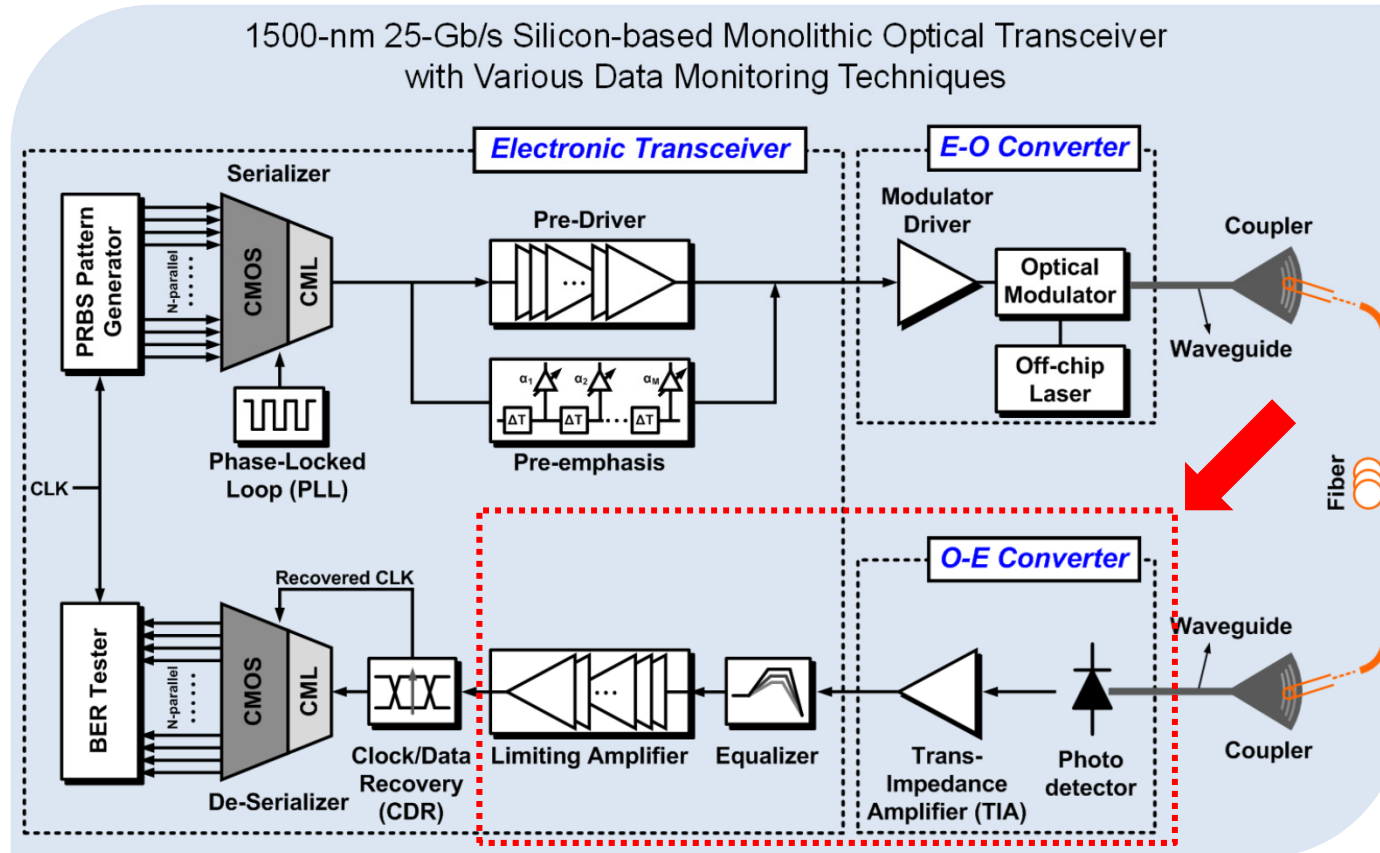


Silicon-based Optical Transceiver

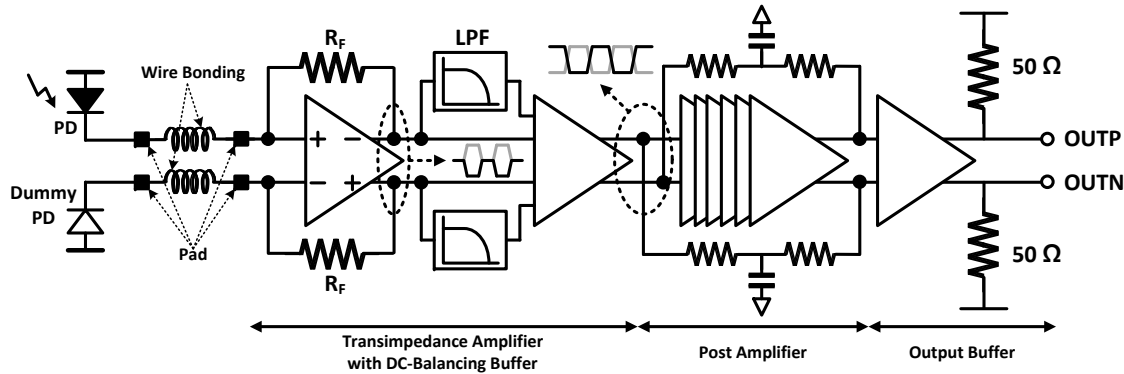
- Silicon-based monolithic optical transceiver block diagram



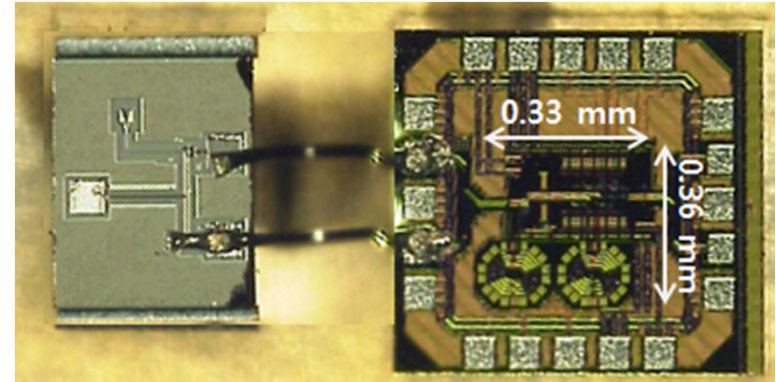
“Development of CMOS-compatible optical components is of paramount importance”

(ITRS Road 2009 – Interconnect, p.56)

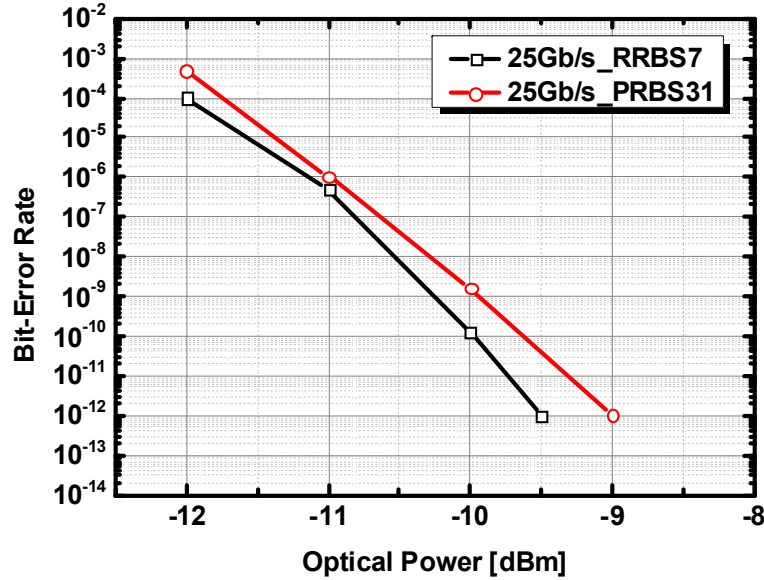
25 Gb/s Optical Receiver with Ge Photodetector



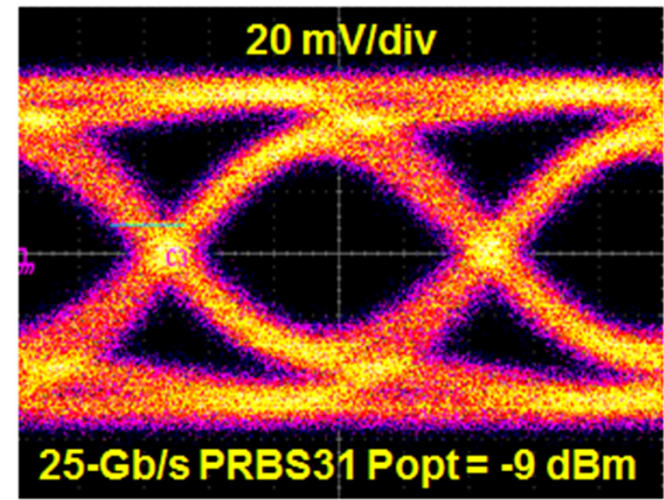
<Block diagram>



<Chip photo>

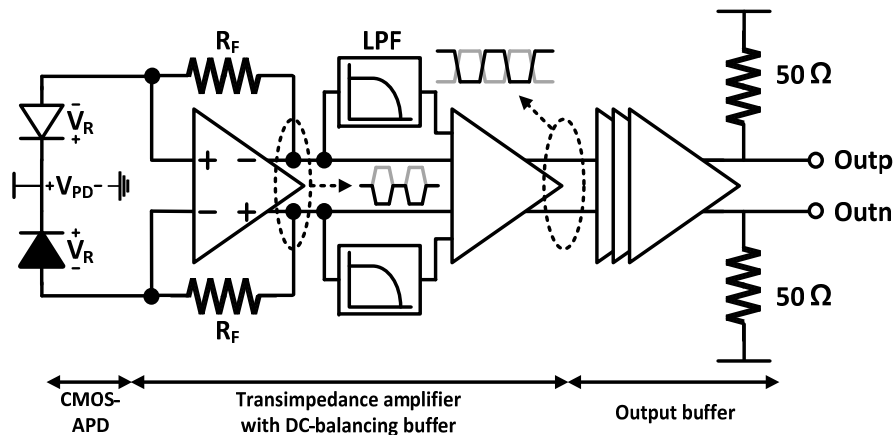


<BER vs. optical power>

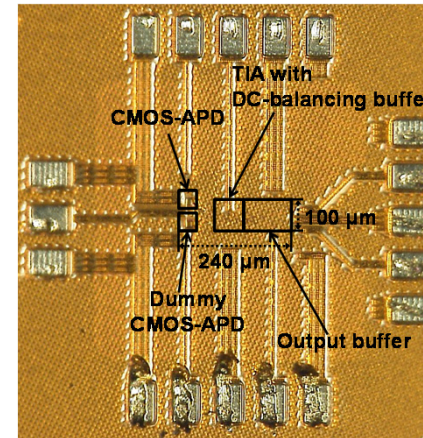


<Eye diagram>

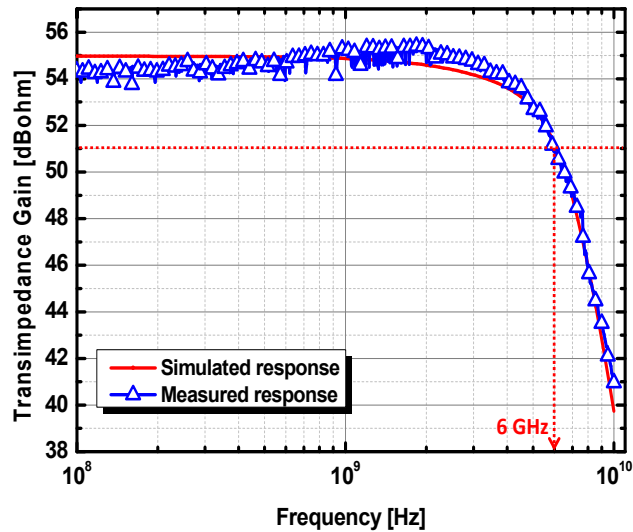
12.5 Gb/s Optical Receiver with Under-Damped TIA



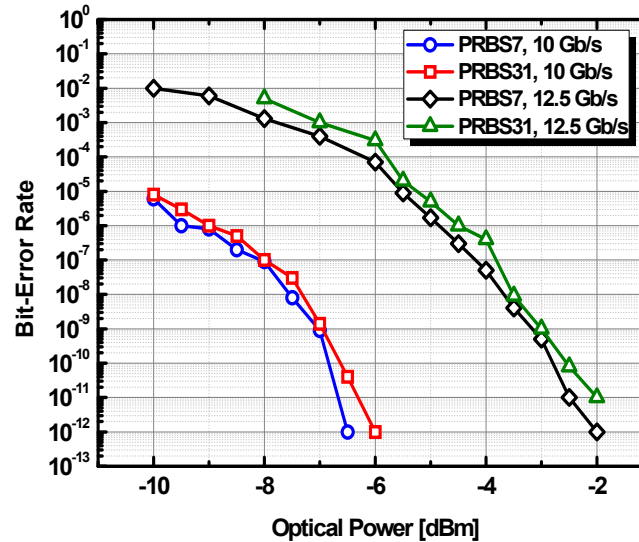
<Block diagram>



<Chip photo>



<AC response>



<BER curve & eye diagram>

