

The background features a large, light blue watermark of the Yonsei University logo. The logo is circular with the text 'YONSEI UNIVERSITY' around the top and '1885' at the bottom. In the center is a shield with a book, a lamp, and a central circle.

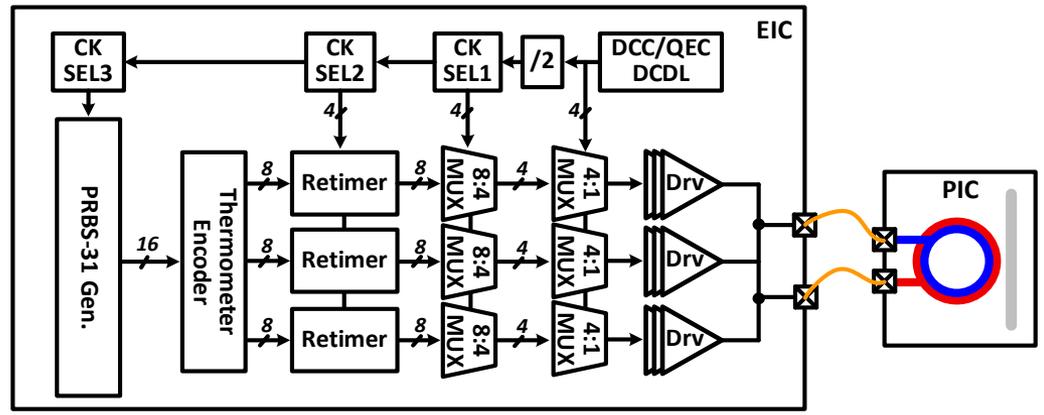
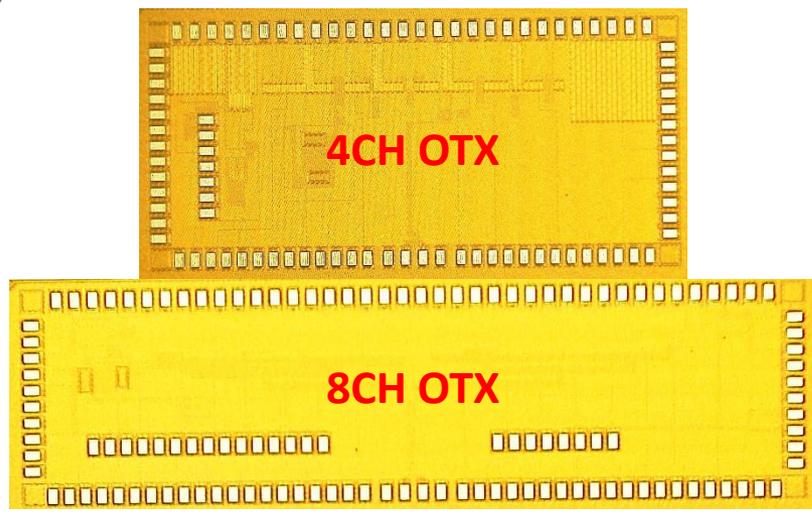
2025 Workshop

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Dept. of Electrical and Electronic Engineering
Yonsei University**

2025 Works

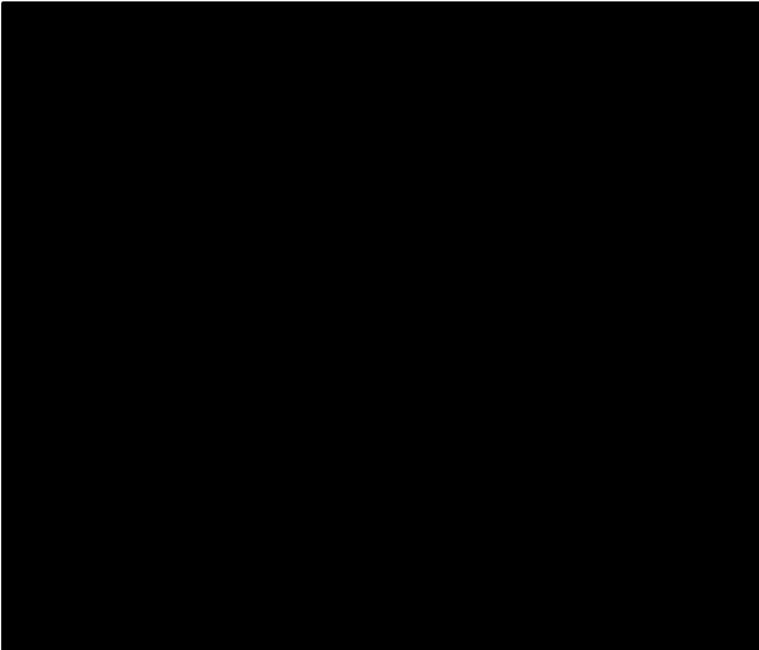
Si Micro-Ring Modulator Transmitter



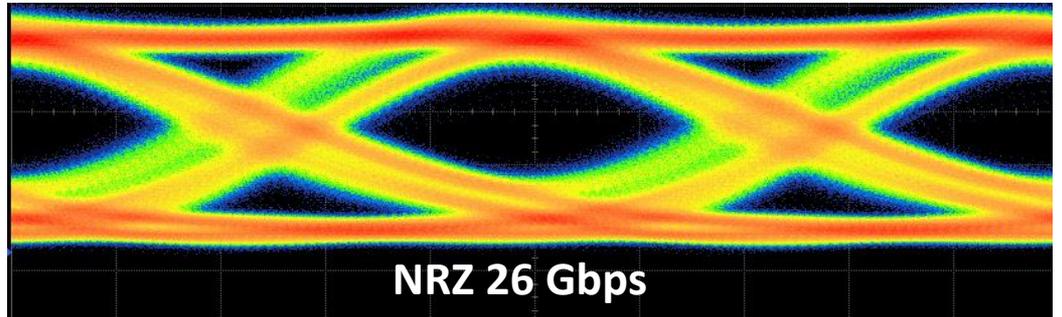
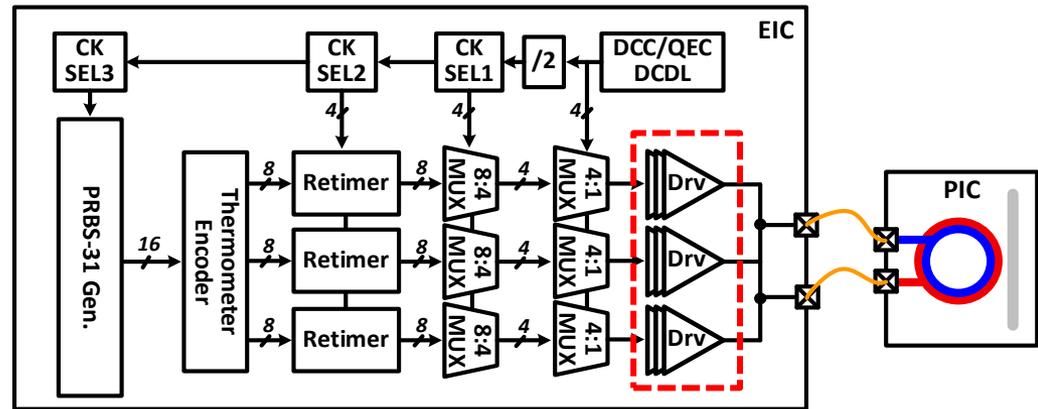
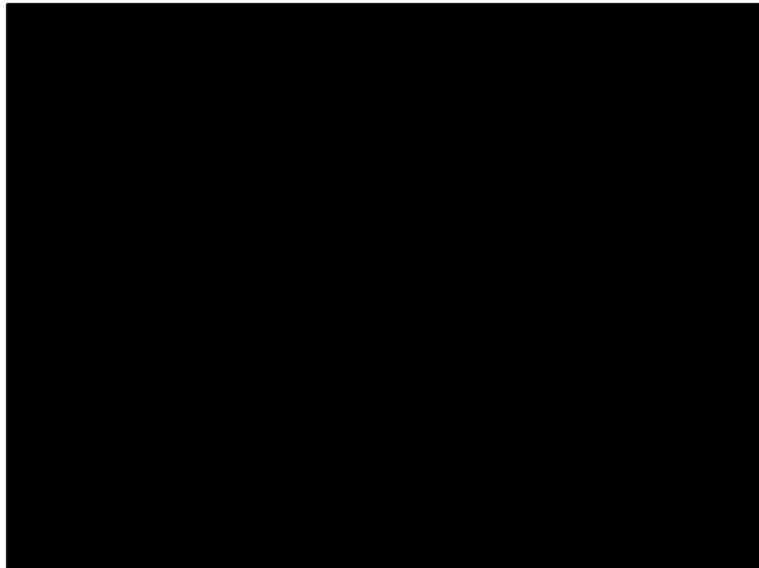
✓ 4Vpp output swing

✓ HPF less output driver

Level Shifter Based Driver

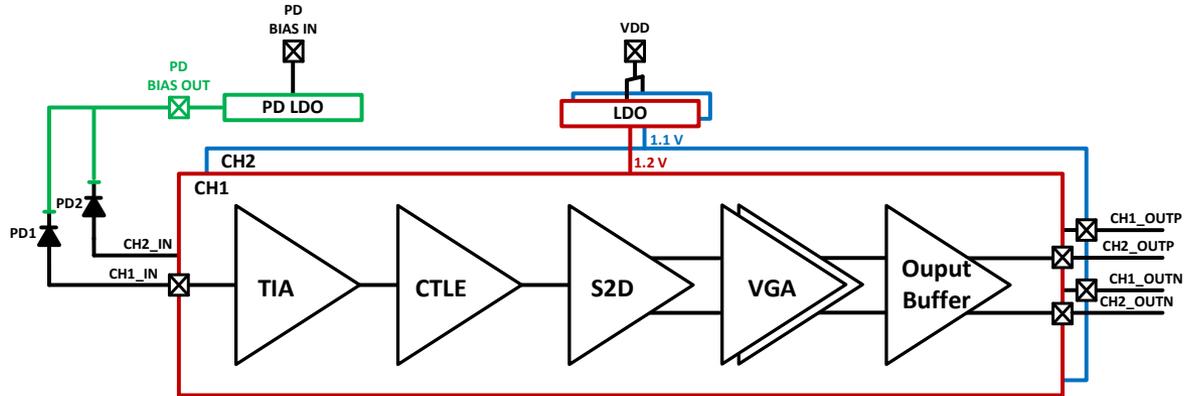
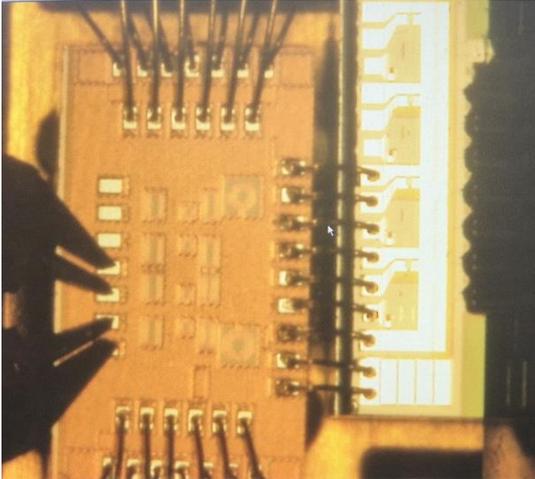


High Pass Filter Based Driver



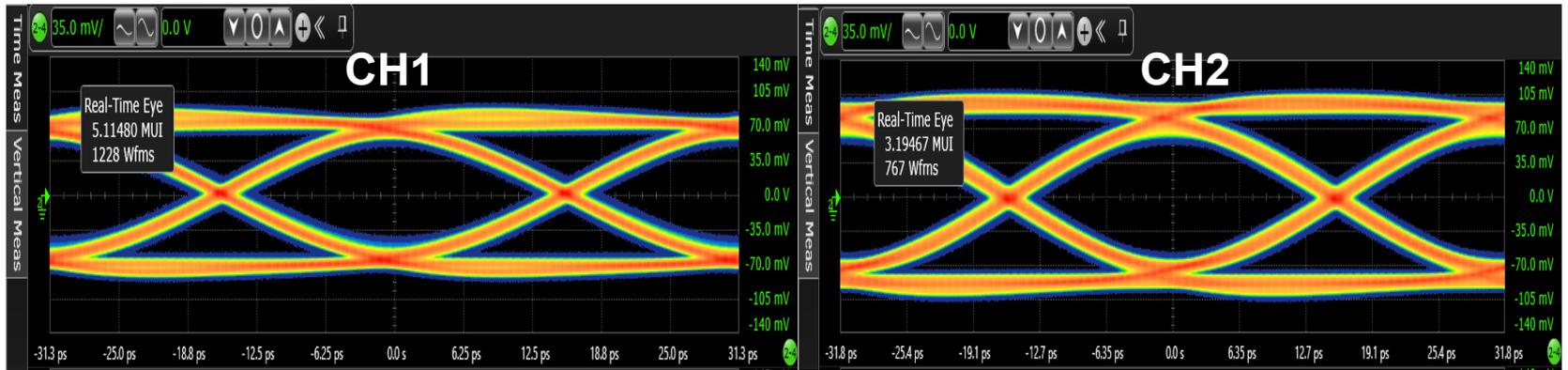
2025 Works

64Gbps PAM-4 Si Micro Ring Resonator Receiver

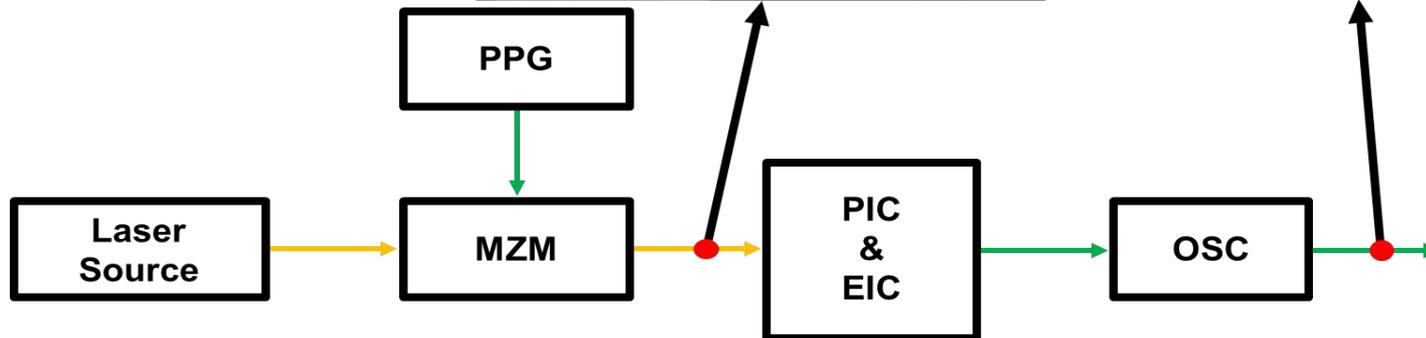
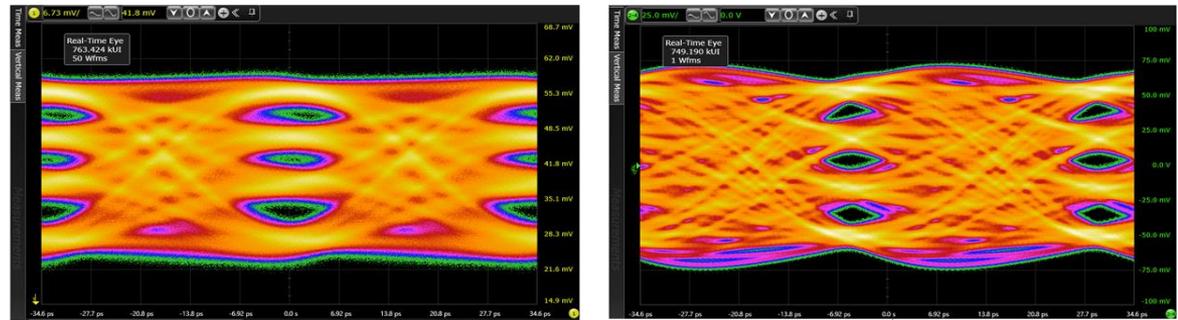


- ✓ New core amp design
- ✓ Inverter based CTLE
- ✓ Interpolation based S2D

32Gbps NRZ (Input optical power -3dBm)

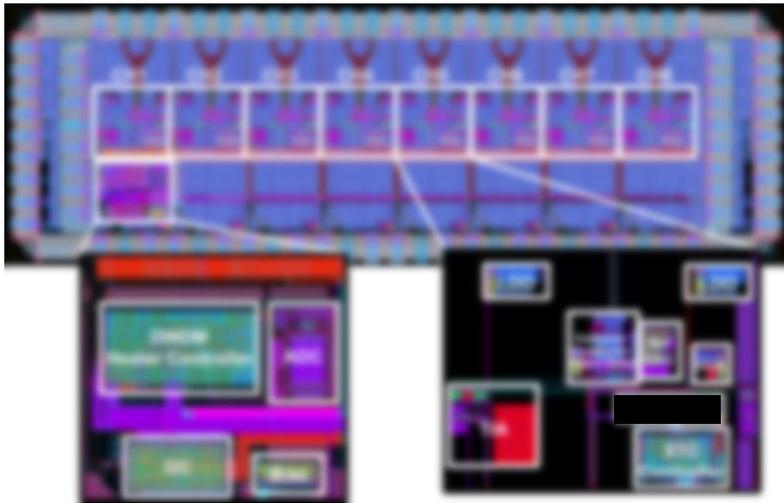


57.8Gbps PAM-4 (Input optical power -3dBm)

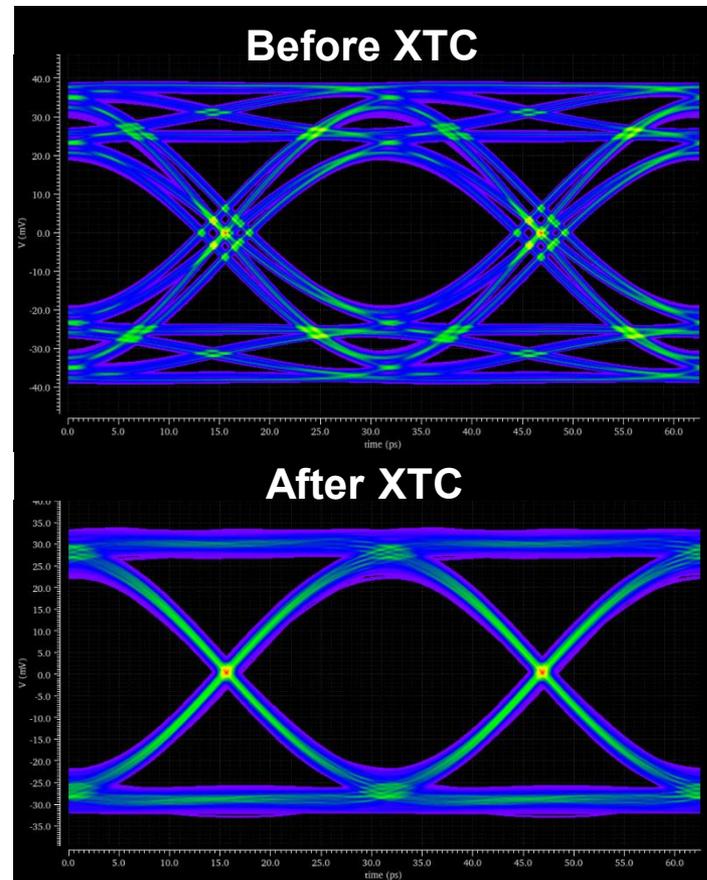
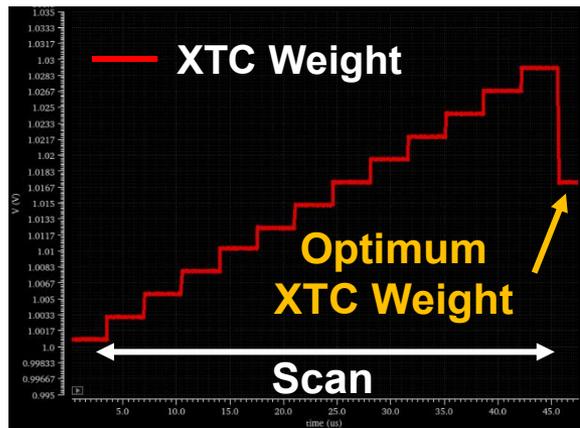


2025 Works

8CH XTC Micro Ring Resonator Receiver

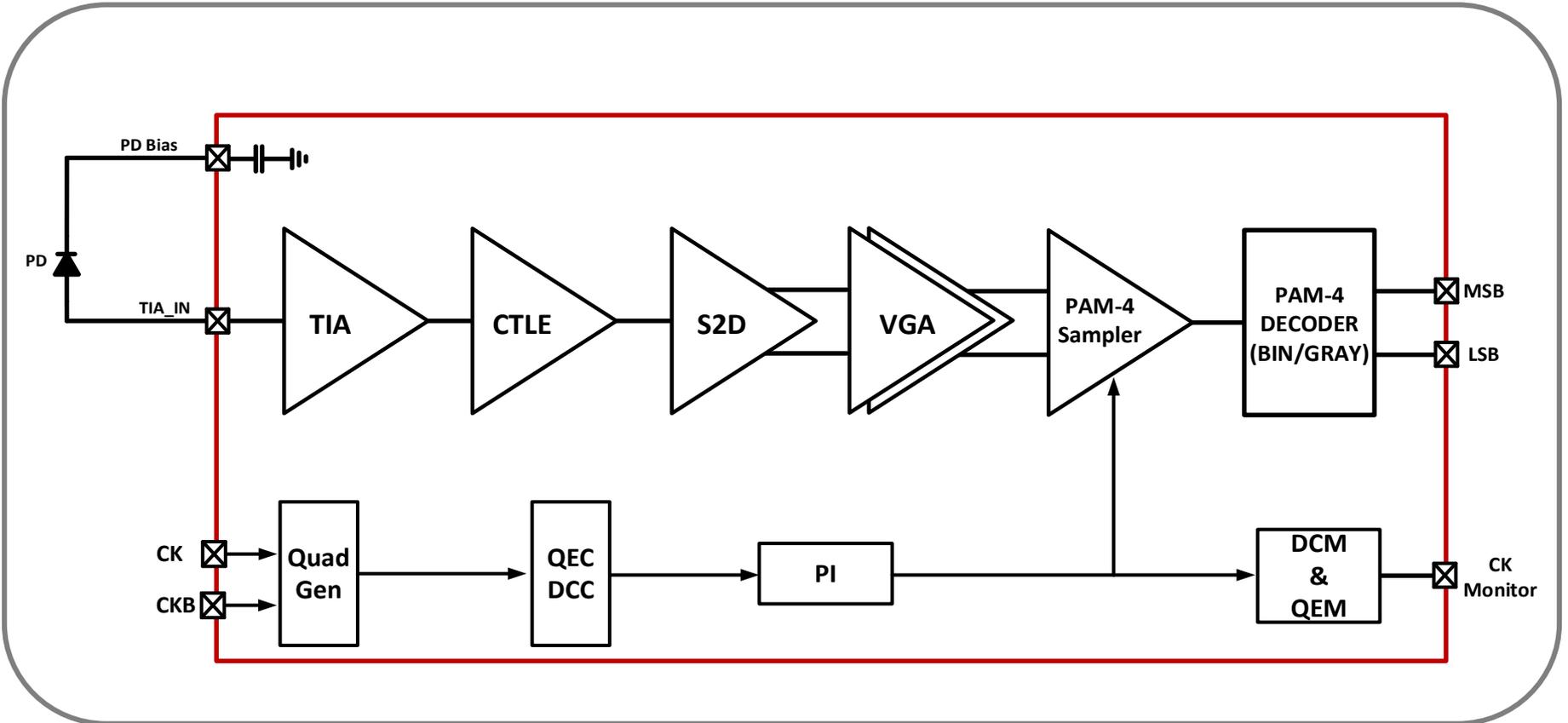


- ✓ Inductor-less ORX
- ✓ On-chip DWDM heater controller
- ✓ On-chip XTC controller



2025 Works

80Gbps PAM-4 Si Micro Ring Resonator Receiver



✓ High-speed ORX

✓ PAM-4 sampler