

The background features a large, light blue watermark of the Yonsei University logo. The logo is circular and contains a shield with a book, a lamp, and a central circle. The text 'YONSEI UNIVERSITY' is written around the top half of the circle, and '연세대학교' is written around the bottom half. The year '1885' is also visible within the shield.

Low Sensitivity Optical Receiver and Berkeley Analog Generator (BAG)

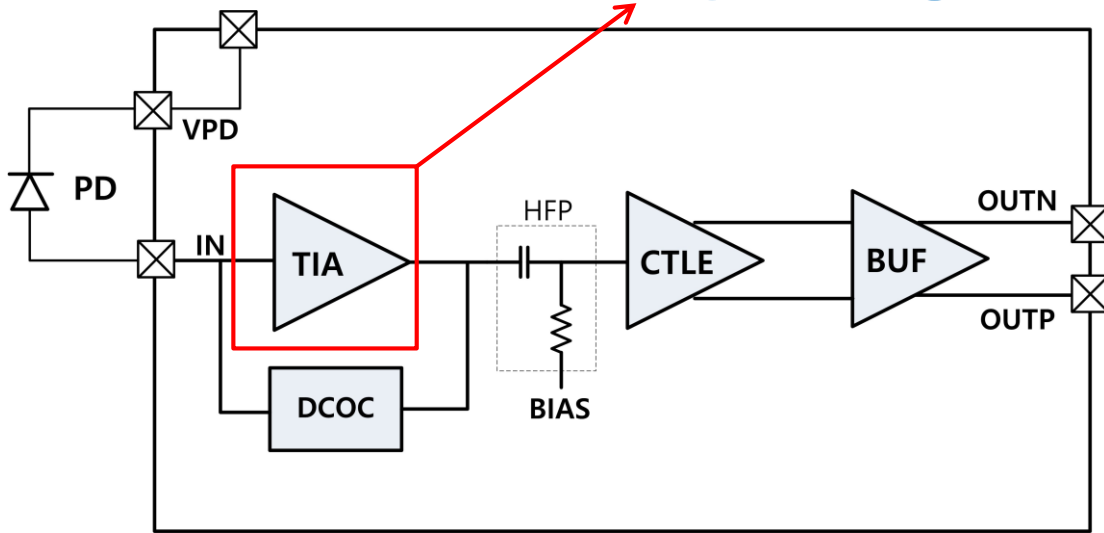
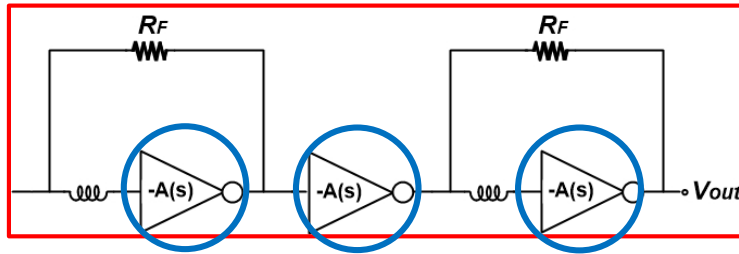
Winter Seminar

TaeYoung Choi

2023-1 Works

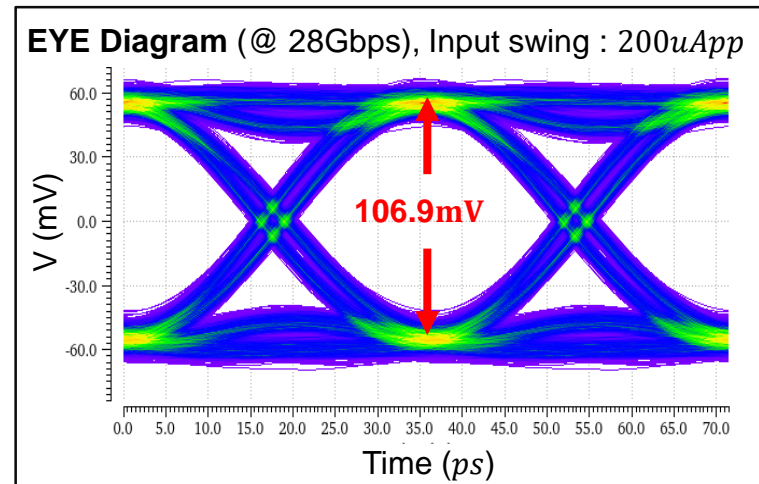
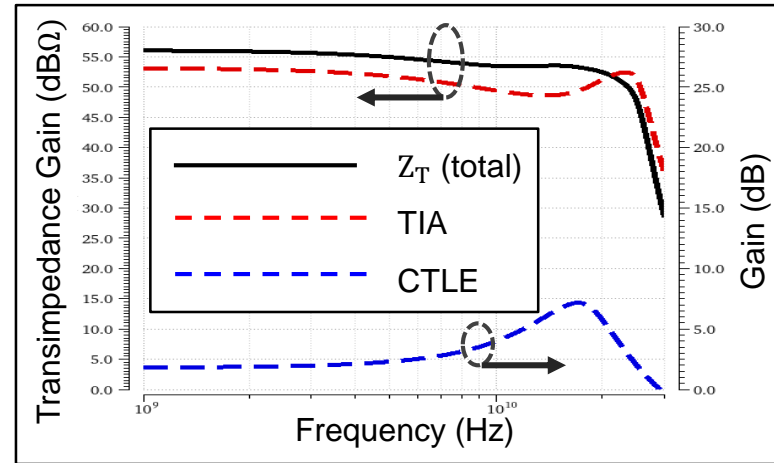
28Gbps NRZ Optical Receiver with Inductor

2023.10



BAG Layout : TIA, Inductor
Hand Layout : DCOC, Buffer

Simulation Results

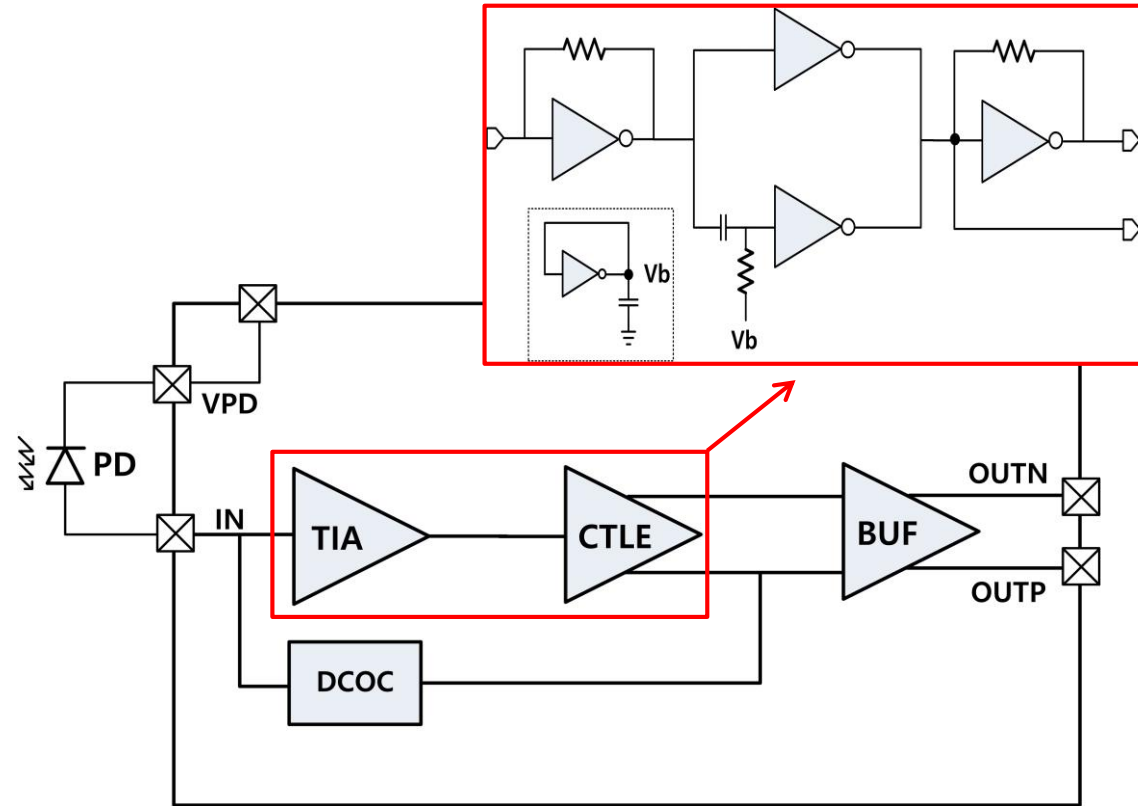


Total Gain : 56dB
 TIA BW : 8.45GHz
 Total BW : 18.2GHz
 IRN : $2.563 \mu A_{rms}$

2023-2 Works

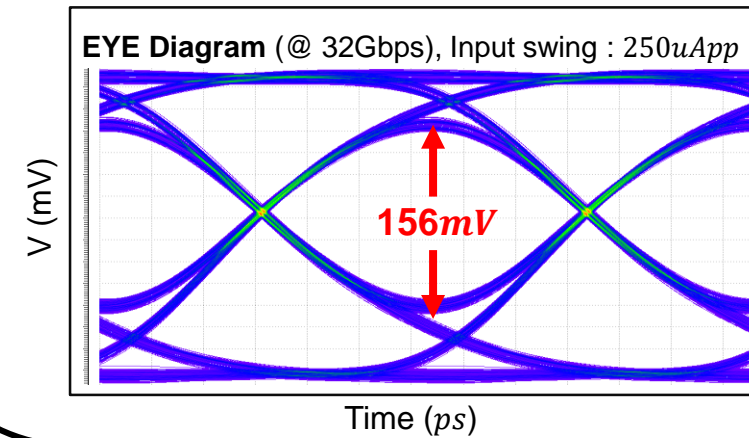
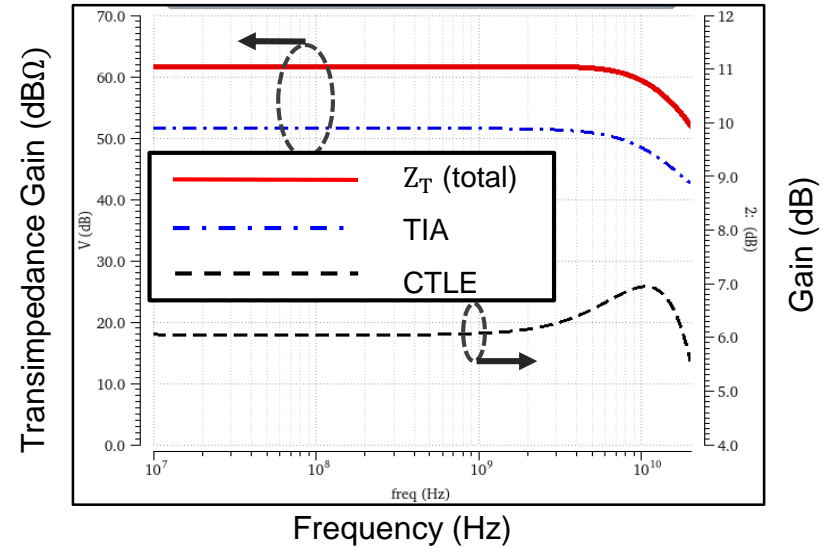
Inverter Based Inductor-Less 32Gbps NRZ Optical Receiver

2024.01



BAG Layout : TIA, CTLE
Hand Layout : DCOC, Buffer

Simulation Results



Total Gain : 61.6dB
 TIA BW : 9.7 GHz
 Total BW : 11.2GHz
 IRN : 1.39 μA_{rms}

2024 Plan

- ▶ **BAG Manual 작성**

- ▶ **Measurement**

- **2310 Chip (28Gbps NRZ Optical Receiver with Inductor)**

- **2401 Chip (Inverter Based Inductor-Less 32Gbps NRZ Optical Receiver)**