

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.

# 2023 Workshop

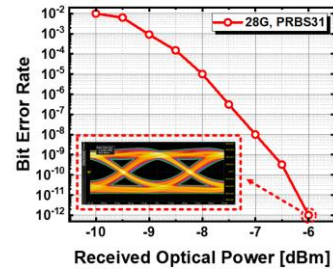
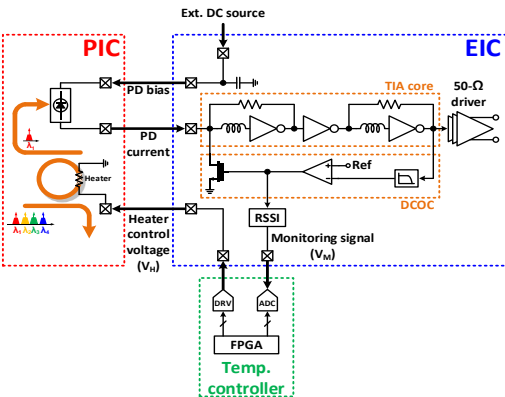
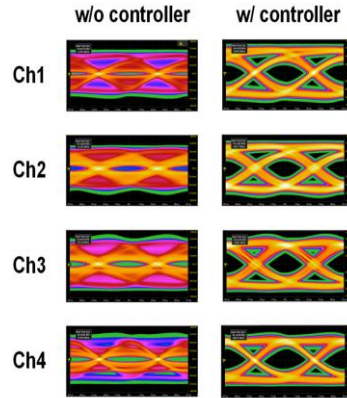
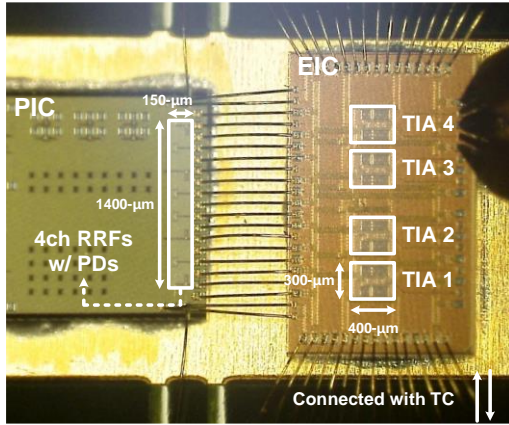
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Dept. of Electrical and Electronic Engineering  
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# 2023 Works

- 4- $\lambda$  28Gb/s/ $\lambda$  WDM Rx

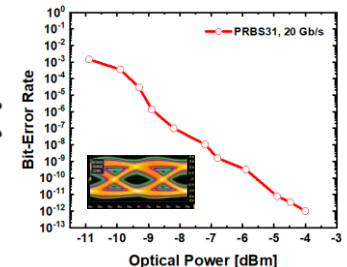
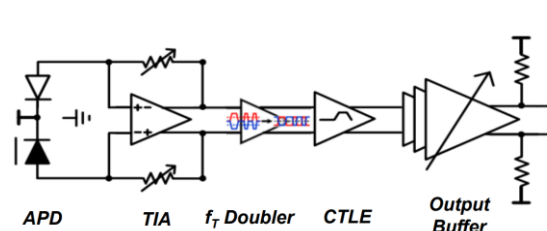
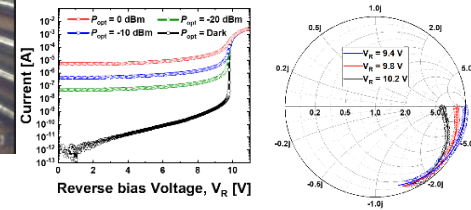
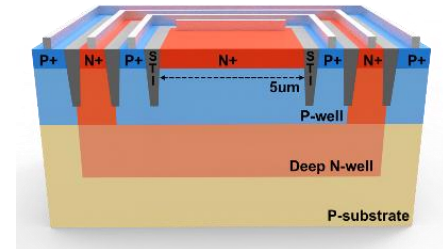
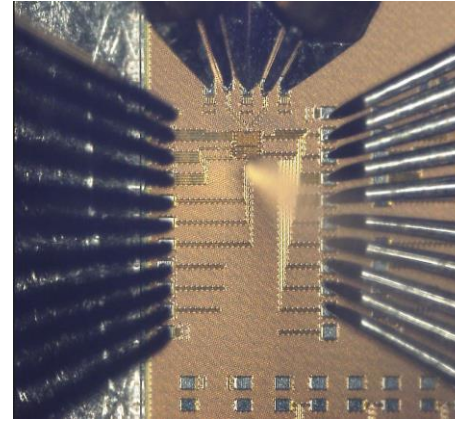
SEC28LPP 2204



- Inverter-based TIA with inductive peaking
- Successfully operates at 28Gb/s, PRBS31 data

- Monolithic ORx with 28-nm CMOS APD

SEC28LPP 2207 & 2301



- CML-based TIA without inductor
- Successfully operates at 20Gb/s, PRBS31 data

# 2023~ Plan

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## ➤ Fabrication

- AMF 2309
  - 1- $\lambda$  RRF & PD
  - 4- $\lambda$  Demux
  
- SEC 2310
  - 64Gb/s PAM4 Orx without inductor
  - Temperature controller (ADC)

## ➤ Measurement

- SEC 2307
  - APD ORx with on-chip reverse bias control loop (Voltage Multiplier, Triple-well TIA)