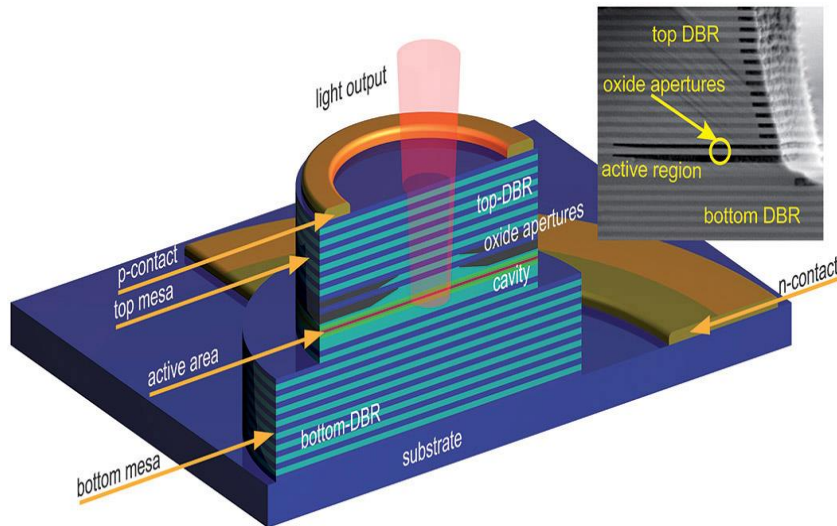


# 2021-1,2 Works

## Optical Interconnect : TX



- 😊 - Cost effective
- 😊 - Low system size
- 😊 - Low power
- 😞 - Non-linear properties
- 😞 - Process and Temperature dependency

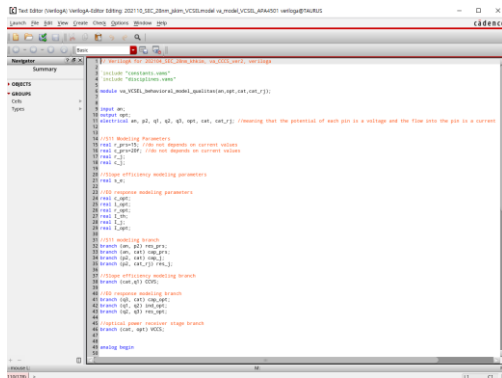
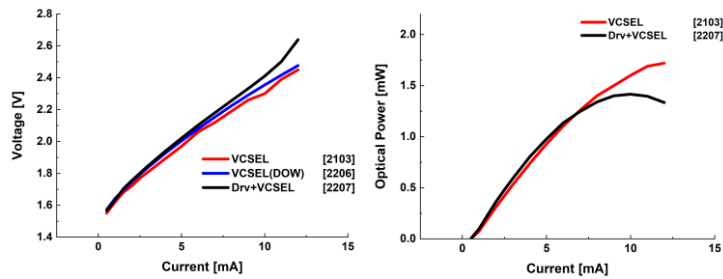
850nm VCSEL(Vertial-Cavity Surface-Emitting Laser)

→ This laser diode can be fabricated with semiconductor

→ Suitable for short-reach optical link

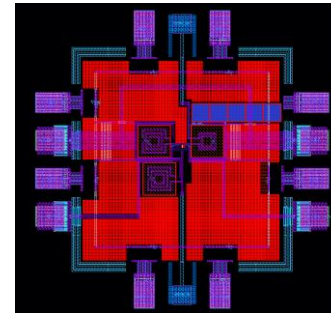
# 2021-1,2 Works

## VCSEL measurement & Verilog-A based modeling

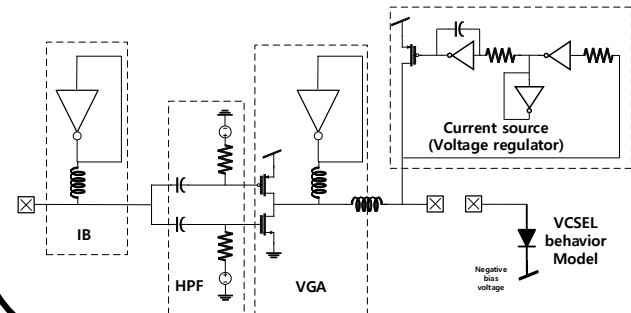
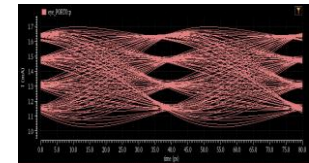


## Samsung 28nm LPP 50Gbps PAM4 VCSEL Driver

### 2021.10



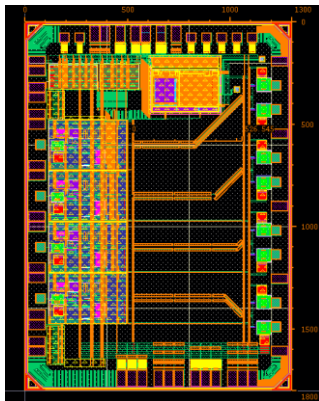
Pre-distortion for High RLM in PAM4



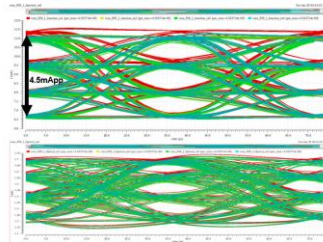
# 2022-1 Works

## Samsung 14nm LPU 4x 56Gbps PAM4 VCSEL Driver

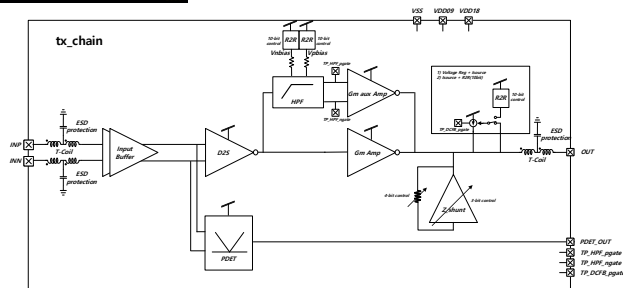
2022.04



VCSEL model  
Junction current EYE



VCSEL model  
Optical power EYE



## SEC2110 Chip measurement

