

*Finisar*<sup>®</sup>



ethernet alliance

# 100G Single Lambda Optics

Ethernet Alliance Panel 1  
OFC/NFOEC 2014  
San Francisco, CA  
11 March 2014  
Chris Cole

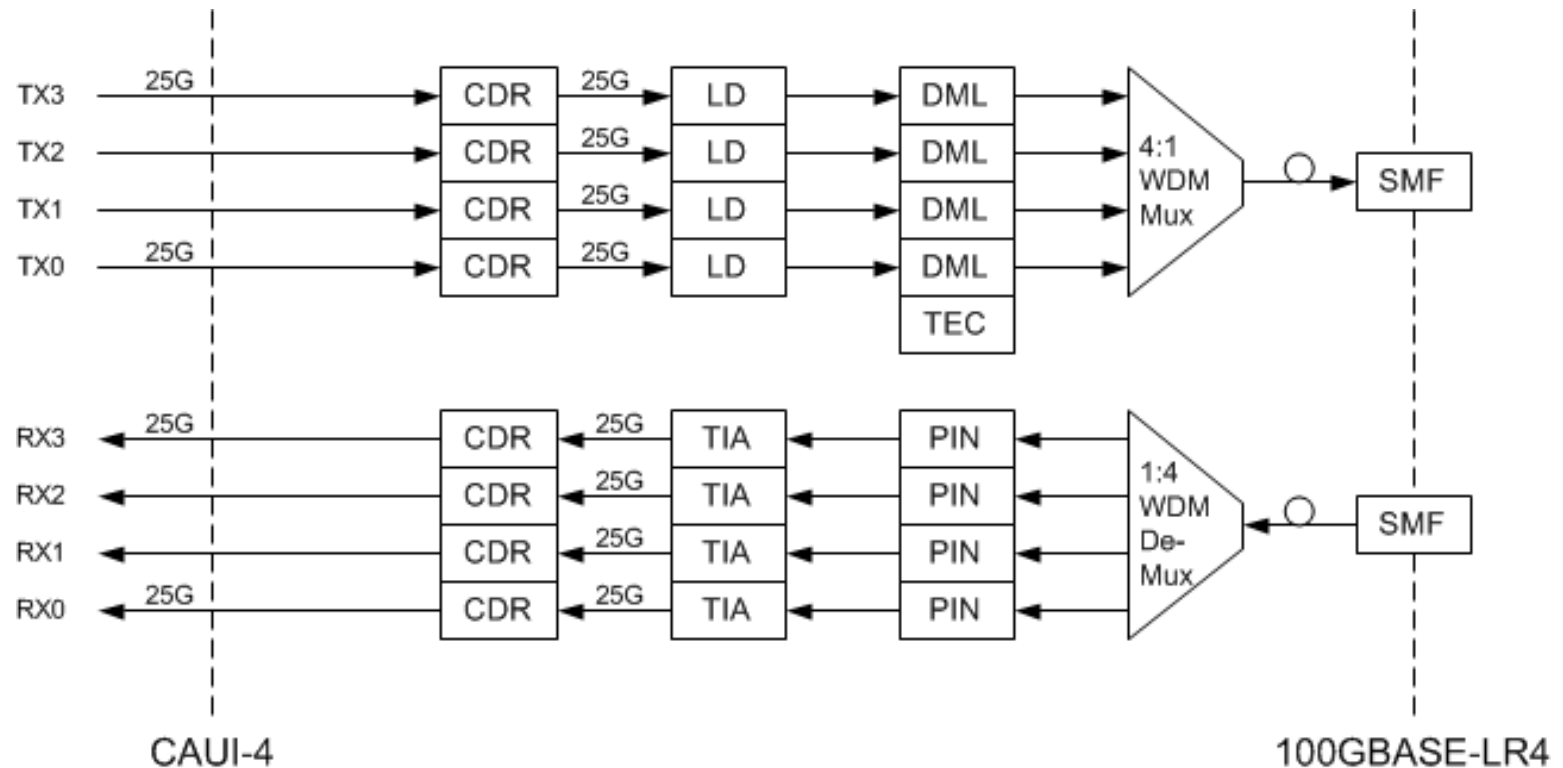
# Disclaimer



The views expressed in this presentation are personal views and should not be considered the views or positions of the Ethernet Alliance.

*Finisar*<sup>®</sup>

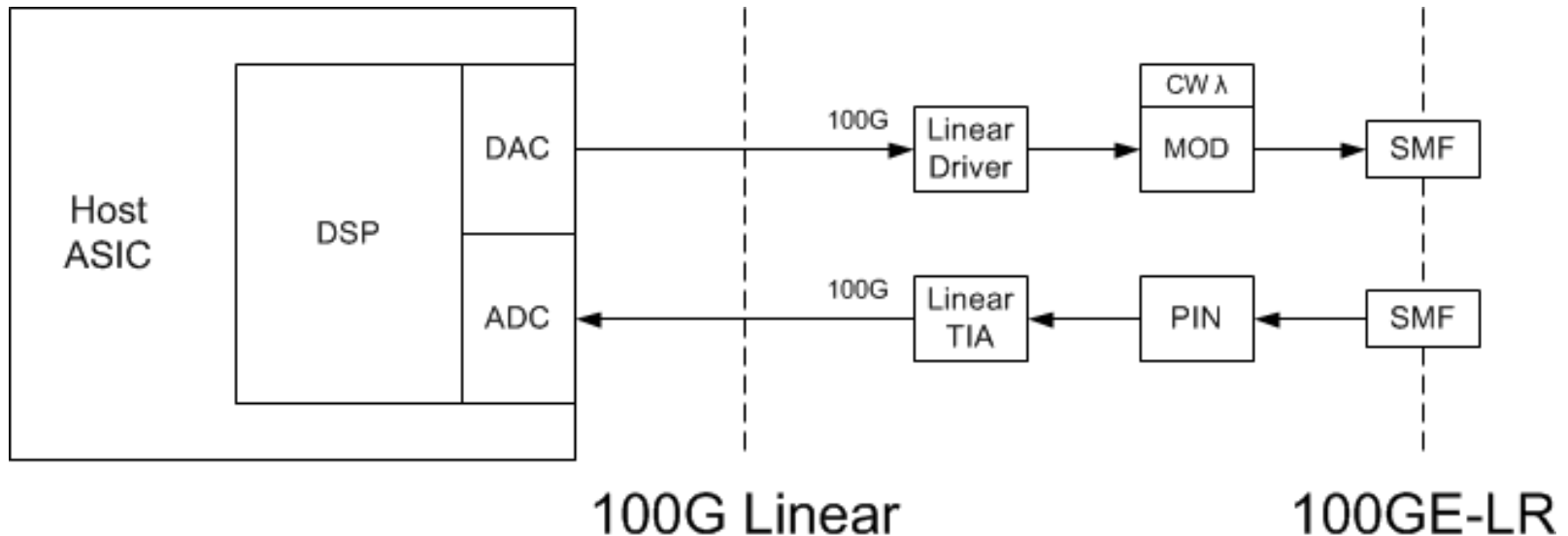
# 100G Today: 4x25G $\lambda$ NRZ



- SiP or InP Modulator w/ Driver (MD) are DML alternatives
- 3.5W Typical in CFP4 module
- CFP MSA sponsoring CFP4 Treasure Hunt
- Count CFP4s at OFC'14 to win an iPad

*Finisar*<sup>®</sup>

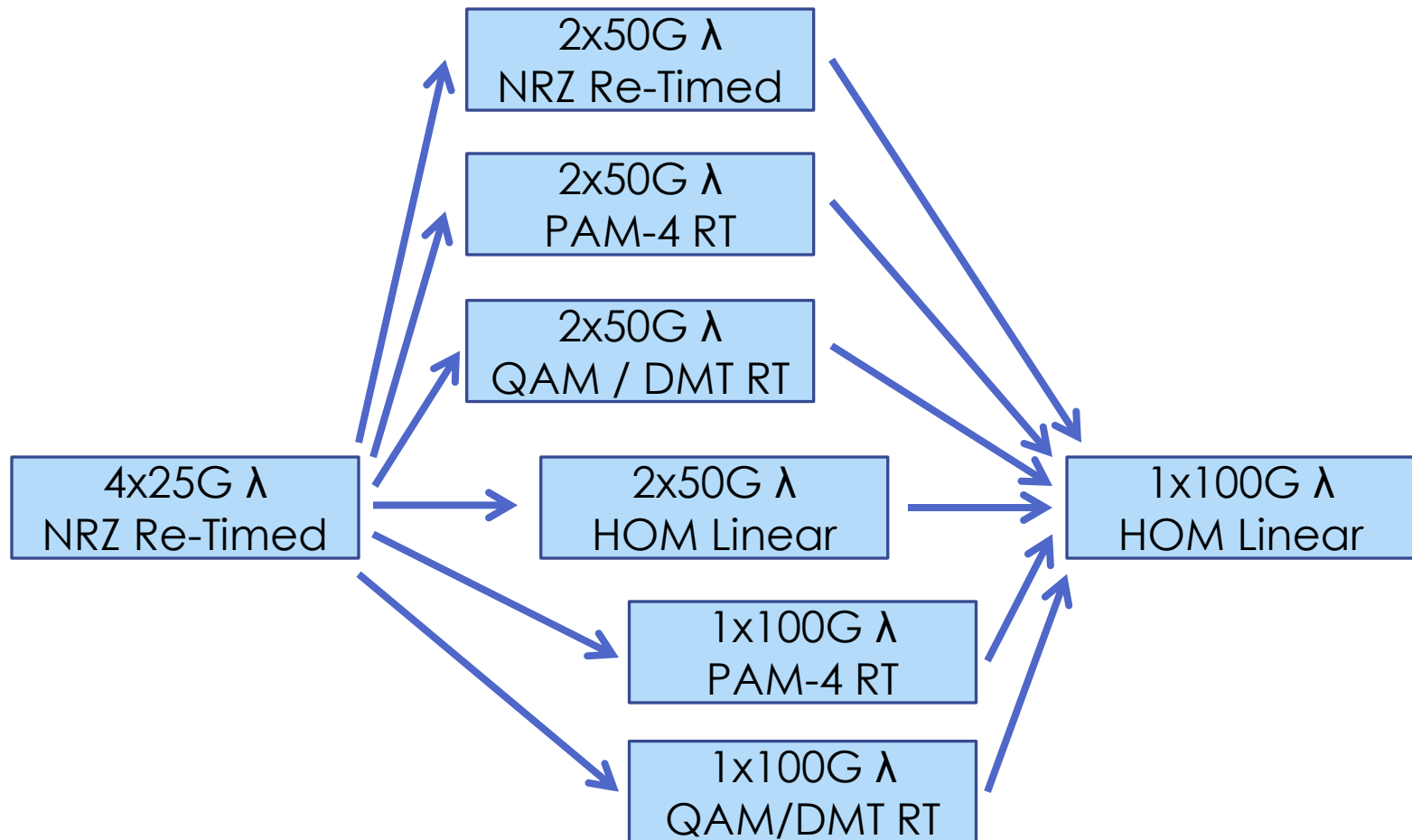
# Ultimate 100G: 1x100G $\lambda$ HOM Linear



- Similar architecture to 10GbE-LRM SFP+
- Will leverage CFP2 AOC development
- Supports 4x density increase over 4x25G
- Requires future CMOS technology

*Finisar*<sup>®</sup>

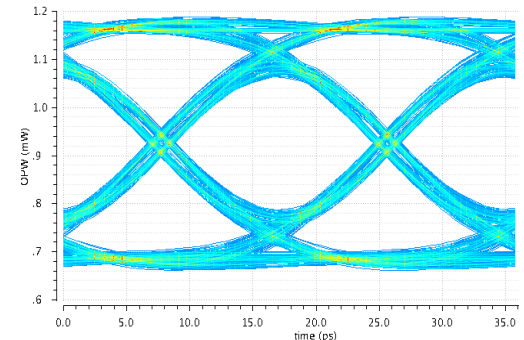
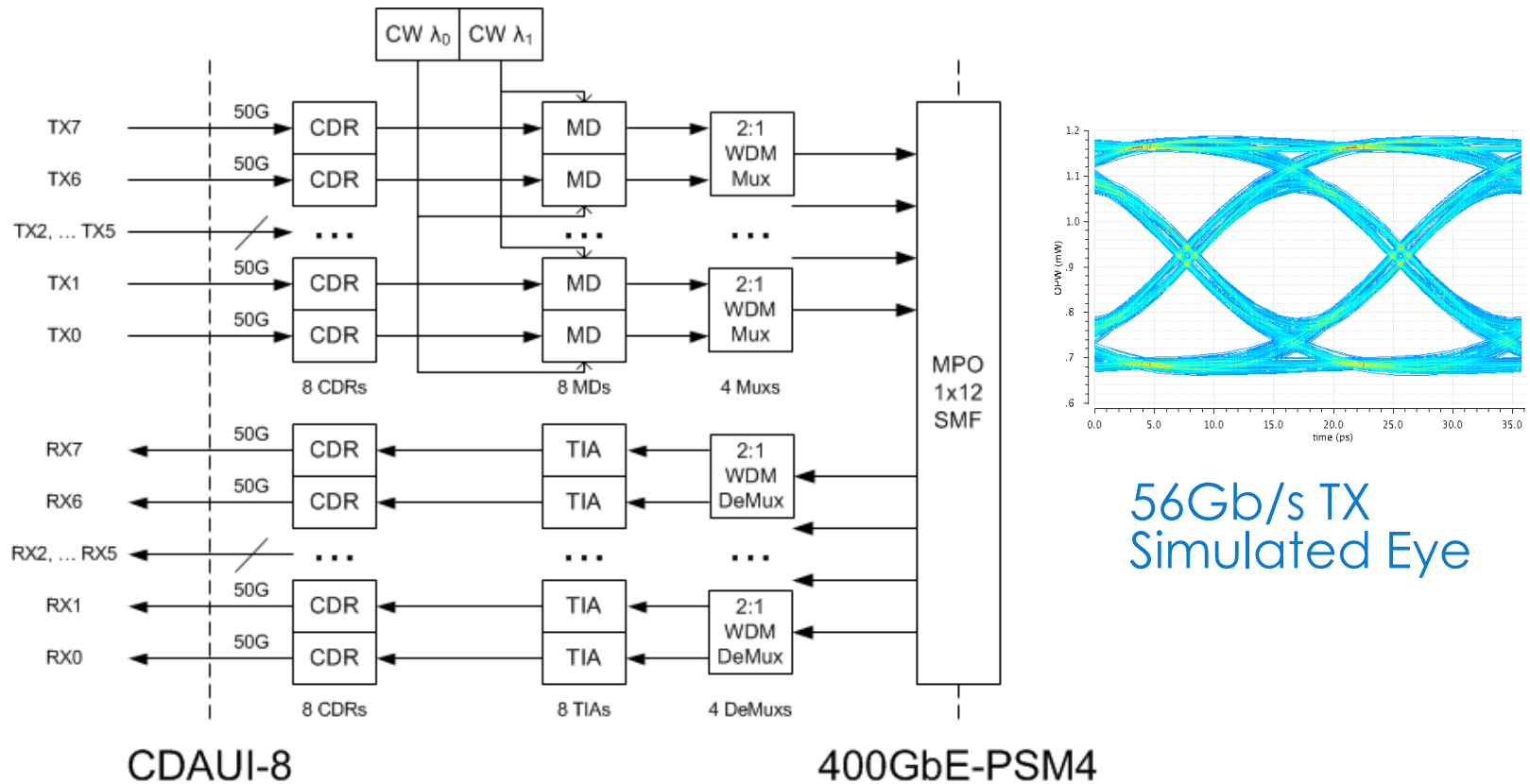
# 100G Alternatives Roadmap



- Each alternative as a step towards long term solution has advantages and disadvantages
- Next solution should be based on its merit

*Finisar*<sup>®</sup>

# Next 100G: 2x50G $\lambda$ NRZ (Quad)



56Gb/s TX  
Simulated Eye

- 1/2 CW Laser and ~2W per 100GbE channel
- Conventional, demonstrated NRZ Electronics & Optics
- Benchmark against which to compare more complex next step solutions.

*Finisar*<sup>®</sup>

# 100G Single Lambda Optics



Thank you!

*Finisar*<sup>®</sup>