

# VCSEL results

802.3cd interim, Pittsburgh, May 2018

Jonathan King, Leon Ho, Finisar

# TDECQ measurements

- 53.125 Gb/s VCSEL based transmitter, SFP56 form factor
- 802.3cd draft 3.2 TDECQ definition
- 11.2 GHz O/E bandwidth
  
- TDECQ in the 3.1 to 3.7 dB range
  - Maximum transmitter transition times,  $T_{20-80}$  , were approximately 33 ps

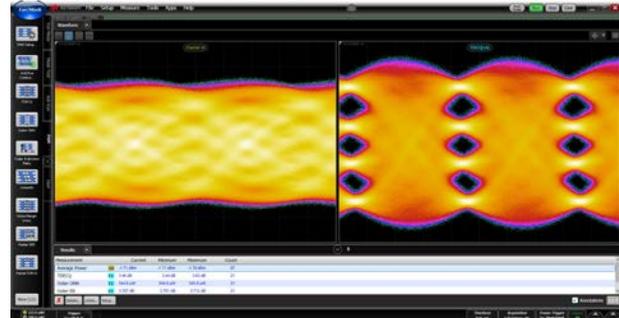
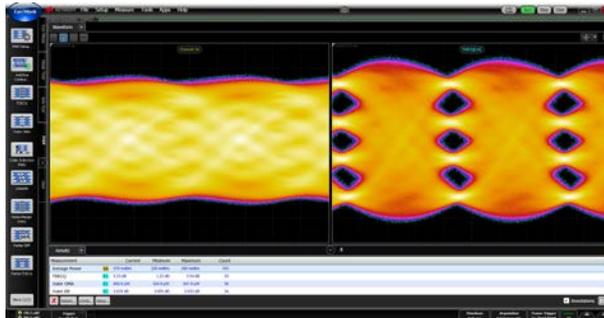
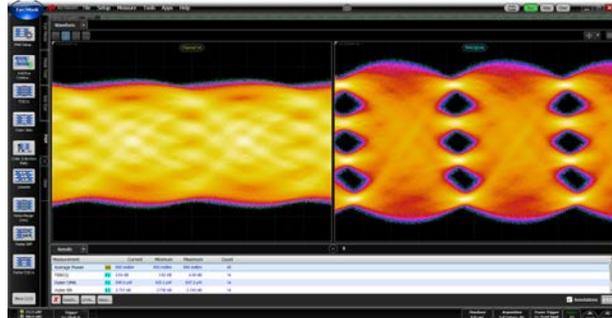
# VCSEL transmitter eyes and TDECQ

0 C

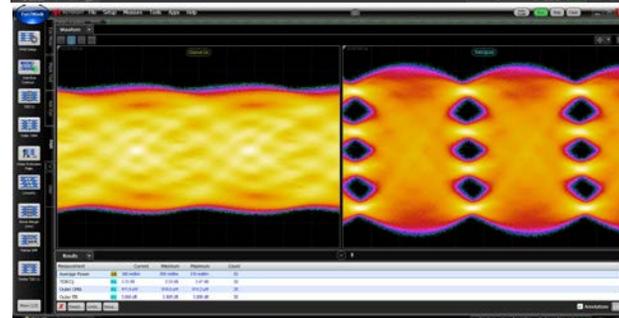
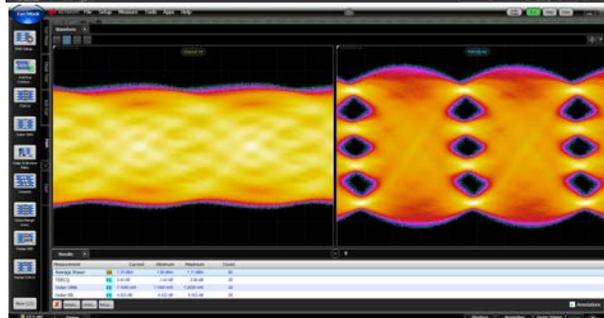
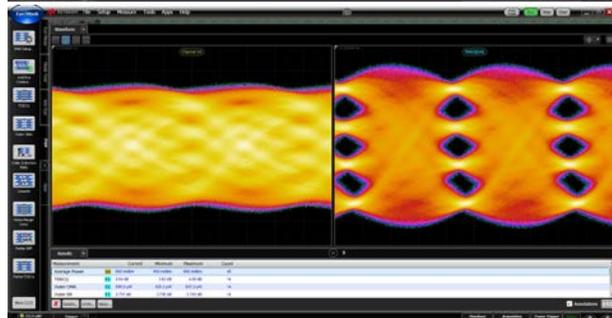
25 C

70 C

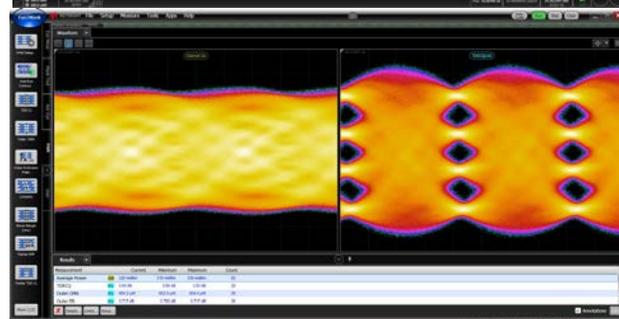
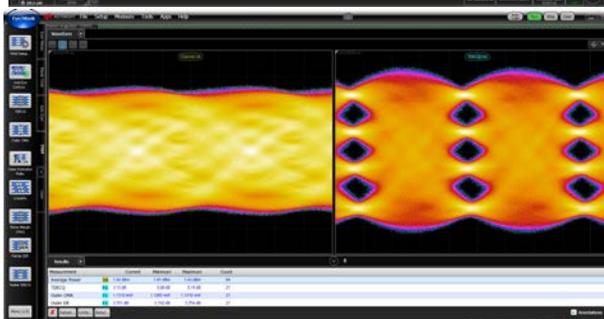
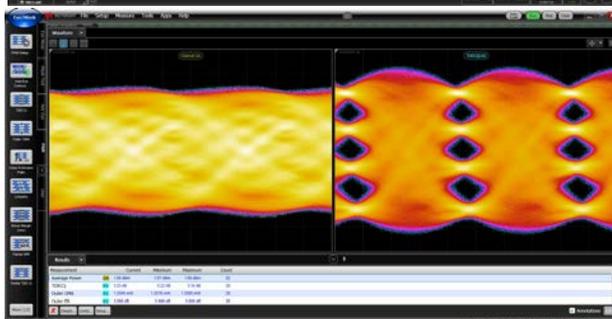
Tx 1



Tx 2



Tx 3



temp	0	25	70
TDECQ Tx 1	3.64	3.23	3.46
TDECQ Tx 2	3.6	3.43	3.33
TDECQ Tx 3	3.23	3.12	3.68