OIF

EPIC Online Technology Meeting on "Beyond 400G"

OIF – Leading the path "Beyond 400G"

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What is the OIF?

- For more than 20 years, OIF has brought together industry groups from the data and optical worlds

- Mission: To foster the development and deployment of ***interoperable products and services*** for data switching and routing based on optical networking technologies

- Our 100+ member companies represent the entire industry ecosystem:
  - Network operators and network users
  - Component and systems vendors
  - Testing and software companies

Current OIF Projects Enabling 400G & Beyond

- CEI 112 electrical interfaces (started: MCM 2017, XSR 2018, VSR 2016, MR 2017, LR 2018)
  - Five channel reach projects (from 25mm die to die, up to ~ 2m equipment to equipment)
  - Interoperable silicon interfaces
  - Key enabler for 50T switch chips and 800G pluggable modules
- 400ZR (started Q4, 2016)
  - 400G Coherent DWDM (80-100km), targeting client optics form factors (< 15W)
  - <u>Standardized</u>, pluggable (low power), high volume applications
  - Ethernet optimized
- IC-TROSA
  - <u>Standardized</u>, Transmit Receiver Optical Sub Assembly component
  - Key enabler for coherent interfaces (e.g. 400ZR)
- C-CMIS
  - Coherent – Common Management Interface Specification
  - Interoperable control interface for coherent optics and hosts
  - Extensions to CMIS to support coherent interfaces

Leading the Path "Beyond 400G"

- Beyond 400ZR Coherent workshop and industry survey (February, 2020)
  - End user requirements

- Next Generation Coherent (DCI) work session (May 2020)
  - Bring the concept and success of 400ZR to higher bit rate

- Co-packaged Optics workshop (July 2020).

- Beyond 112G Electrical workshop (June 2020)
  - Industry view and need for the next generation electrical interconnects

- CEI-224G Project Start Proposal (May 2020)
  - Electrical interfaces at data rates around 224Gbps.
  - Enable 1.6T architectures, and lower cost/complexity 400G and 800G

OIF has already started the Beyond 400G work – Join us – We can help each other!

Contact information

- For more information about OIF activities and projects please see the OIF website:
  - https://www.oiforum.com/
- For information about membership please contact Andi Koisch:
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Thank You !

- Identifying gaps and presenting new ideas

- Selecting among the best ideas and creating work projects

- Drafting and adopting Implementation Agreements

- Proving concepts through interoperability demos

- Presenting proposals to formal standards bodies