802.3cp center wavelength proposal

Tom Palkert

Richard Hsu

25GBASE-BR40 1270/1310 nm center wavelength proposal

- Transceiver solution is available today.
 -5G market is demanding fast time to market
- The traditional BOSA design (TOSA, ROSA, and WDM filter) can be used.
 - Lowest cost
- Existing infrastructure can be used

Why we should avoid 1290/1310 nm

- The WDM filter spacing is only 4 nm and cannot use traditional BOSA design. This wavelength pair will require a more specialized solution, resulting in higher costs and longer time to market.
 - Therefore, may not penetrate near term 5G market resulting in alternative solutions/MSAs
 - Unclear if transceiver vendors will develop specialty technology to support this lower volume application.

Proposed wavelengths

	10km	20km	40km
10G	1270/1330	1270/1330	1270/1330
25G	1270/1330	1270/1310	1270/1310
50G	1270/1330	*	*

+/- 10nm

*needs additional study

Feasibility of 25G 40km 1310nm

• See Liu_3cp_01_1909 page 6

Modeling results (2): The chirped case



25G NRZ 40 km 1270nm wavelength TDP meeting spec

