

Meeting Notes: 12/28/06

Attendees:

Last	First	Employer	Affiliation
Braun	Ralph Peter	Deutsche Telekom AG	Deutsche Telekom AG
Chang	Frank	Vitesse	Vitesse
Dhliwayo	Jabulani	Corning	Corning
Huff	Lisa	Nexans	Nexans
Jaeger	John	Infinera	Infinera
Lingle	Robert	Ofsoptics	Ofsoptics
Miao	Tremont	Analog Devices	Analog Devices
Moorwood	Andy	Extreme Networks	Extreme Networks
Palkert	Tom	XILINX	XILINX
Patel	Sashi	Foundry Networks	Foundry Networks
Schrans	Thomas	Optical Communication Products	Optical Communication Products
Schell	Martin	Heinrich Hertz Institute	Heinrich Hertz Institute
Song	Steve	Exelight	Exelight
Tatah	Karim	Cray	Cray
Tsumura	Eddie	Exelight	Exelight
Vandoorn	Schelto	Intel	Intel

Starting with Ralf Peter Braun's Presentation

=====

Economic Feasibility of 10K and 40K reach

Mike D: Surprised that long reach was related to SR factor of 1, some confusion on the relative cost of LRvsSR

Ralf Peter: The difference in the LR and SR transceivers is pretty small compared to line card cost

Tremont asks if this includes SM fiber, RP says yes.

Dan says would be useful to have formula with T(ransceiver), F(iber), I(stallation) cost factors and then we can agree/challenge the relative numbers.

Some discussion of the factors and their relative accuracy...need more discussion on this Presentation indicates that if no 40Km solution is available, people would use 40G non-standard solutions instead

Mike D: question on slide 9 should you not be referencing ER? - If no 40Km, then 4x10GLR is the basis for comparison

Ralf Peter - Assumed for 10K a cost factor of 5x for the 100G transceiver, and thus 5x10GLR links x 4 links or total of 20x10GLR

Mike D: The remark on the bottom of slide 9 appears incorrect...references SR..is this correct?

Ralf Peter - If 100G would cost 5x that value, then this is how it goes.

Dan Dove - Would be helpful to compare Short Reach 10 to SR 100, LR 10 to LR 100 and ER10 to ER100

Lisa Huff - I agree with Dan

MD - Relative cost of SR, LR and ER (reach) more useful than 2x, 3x, etc.

=====

Martin Schell Presentation:

DML 5x20 and 4x25 relative costs

PG 5 shows 40Gbps on 1.55um if you transform that to 1.3um regime, 20-25G should be relatively likely

Mike Dudek - Does OSA include the Mux/Demux?

Martin - Yes

DD - We should include cost of silicon, PCB, mech packaging to get total relative cost of transceiver

Martin - For DML, the relative cost of optics should be consistent regardless of 10G or 100G..

Mike D: Unless you need Dispersion Compensation

Martin - Unlikely that you will need DComp.

Kujimo - Do you have to tune the current at the precise operating point?

Martin - ~10ma with +- 30mA range

Kujimo - What about CW, do you have to set at a specific point?

Martin - You can characterize the laser, then set at the transceiver level.

Kujimo - Will it change due to degradation?

Martin - Don't anticipate this...optical length would have to change 50-100nm

Melinda - Is there public documentation on this device?

Mike D: Do you think it will be difficult to achieve the receive sensitivity?

Martin - No, in 1.3u were able to get -24dB with BER of 10^{-12} at 43Gbps

=====

Reviewing Cole slides

MD: Why is 10k 1550 DML low when 1310 is mid?

JJ: in 1550 there are already products there, thus its better understood.

DAN D: Motion to adopt tables as adhoc basis for future work.

No objection; Decision by Acclamation!

Xavier - Kotura - In economic consideration... should we take into account the testing, etc?

Dan - Please bring in presentations to the upcoming IEEE 802.3 plenary meeting in Orlando.

Teleconference closed.