

Next Generation 100G Optics MMF ad hoc
29th November 2011
approved meeting notes

jonathan king

MMF ad hoc notes, 29th November 2011

- 10.30 Meeting start, roll call. Attendees were reminded of the IEEE patent policy

<http://www.ieee802.org/3/patent.html>

Meeting notes of 22nd Nov were approved

- 10.40 Presentation – ‘PMD Solution Set Analyzer’ - Paul Kolesar

- Paul presented a summary of his updated cost calculator model and link distributions.

– http://www.ieee802.org/3/100NGOPTX/public/mmfadhoc/meetings/kolesar_01_11-29-11_NG100GOPTX_MMFAHoc.pdf

Q&A: Paul’s proposal to include cabling costs was seen as valuable. The relative merits of the concatenated channel distributions in columns Q, R, and S were debated. Paul explained they are one cabling supplier’s attempt to calculate total channel lengths from the distributions of constituent cords and cables shipped (which includes MMF and SMF cables). The channel distributions in columns O and P were drawn from surveys of data centers, and were not debated. The validity of convolving cord length distributions was questioned, because it exaggerates tail lengths of the distributions. Paul said the calculated distributions compare to real survey data in prior 802.3 contributions, referenced in the spreadsheet, and that all five share the same basic cumulative distribution shape which is characterized by a rapid rise followed by a long tail. Scott proposed eliminating the pure single-link and double-link cases, keeping only the 2:1 mixture of column R. John Petrilla said they should all be kept, and that there was little point to wrangling over the tails of the distributions as they characterize only the fringe (i.e. 3-sigma and higher) portion.

It was suggested that the relative numbers of the ‘server to switch’ and ‘switch to switch’ links should be accounted for in any unified link distribution. Paul said the first application need will be to support switch-to-switch aggregation channels because server-to-switch access channels will not be deployed until 100G-capable servers are developed.

A few people referenced the paper “The Datacenter as a Computer: An Introduction to the Design of Warehouse-Scale Machines” by Luiz André Barroso and Urs Hölzle”, which says a majority of data centers are <5000 sq ft.

- 11.35 End

Attendees

- John Petrilla, Avago Technologies
- Schmuel Levy, Mellanox
- David Skirmont, Brocade
- Pete Anslow, Ciena
- Paul Kolesar, Commscope
- Petar Pepeljugin, IBM
- Tom Palkert, Molex
- Piers Dawe, IPtronics
- Mike Dudek, Qlogic
- Ali Ghiasi, Broadcom
- Paul Vanderlaan, Nexans
- Anthony Torza, Xilinx
- Katsuhina Tawa
- Wheling Cheng
- Martin Gilpatric
- Greg Le Cheminant, Agilent
- Andy Moorwood, Infinera
- John Abbott, Corning
- Jack Jewel
- Vineet Sahuke
- Scott Kipp, Brocade
- Jeff Maki, Juniper
- Gary Nichol, Cisco
- Dan Dove, Applied Micro
- Jonathan King, Finisar
- Rick Pimpinella, Panduit

Call plan

- YOU ARE INVITED to comment and contribute on teleconference calls to be held on Tuesdays from 22nd November 2011 until 17th January 2012.
- INTENTION: to discuss and reach consensus on MMF objectives for Next Gen 100G Optics
- TIMING Planned meetings:
 - Tuesday 29th Nov 2011, from 10.30 am to 11.30 am, PCT
 - Tuesday 13th Dec 2011, from 10am to 11am PCT
 - Tuesday 10th Jan 2012, from 10am to 11am PCT
 - Tuesday 17th Jan 2012, from 10am to 11am PCT
- Webex/call in details will be sent out before each meeting