

MMF ad hoc teleconference  
29<sup>th</sup> June 2012  
approved minutes

Jonathan King

# MMF ad hoc notes, 29<sup>th</sup> June 2012

- 8.03 am Meeting start, attendee list based on e-mailed requested responses from participants.
- 8.05 Presentation and discussion
  - Petar Pepeljugoski – ‘Dynamic behavior of Mode Partition Noise in MMF’  
Petar presented recent work on MPN showing how the amplitude noise term due to MPN varies through the eye and a bit sequence, compared to the 10GE spreadsheet model which calculates MPN at the centre of a ‘worst case’ eye. A snapshot of statistics for a Monte Carlo model of 40000 links using the TIA OM3 fibre model were also shown.
  - Discussion: Broad appreciation with most of the work presented, but the question of whether the MPN penalty calculated in the 10GE spreadsheet model should be scaled by the ISI was unresolved
- Action items: David Cunningham suggested that if the normalization of mpn penalty is removed from the link model calculation, then the non normalized sigma of the mpn would have to be divided by the the Pisi (in linear units). If the MPN penalty is calculated for that case and compared to the normal "normalised" method then the MPN penalty will be the same. Petar agreed to do this and share the results.
- Next steps: A teleconference is planned for 6<sup>th</sup> July so that ‘Mode Partition Noise modeling’ from Robert Lingle and Kasyapa Balemarthy can be presented.
- 9.30 am Meeting end
- Presented material will be available at <http://www.ieee802.org/3/100GNGOPTX/public/mmfadhoc/meetings/index.html>

# Attendees

John Abbott	Corning
Kasyapa Balemarthy	OFS
Kevin Burt	Samtec
David Cunningham	Avago Technologies
Piers Dawe	IPtronics
Galen Fromm	Cray
Tom Issenhuth	Microsoft
Jonathan King	Finisar
Paul Kolesar	Commscope
Phil McClay	TE Connectivity
Salen Olof	TE Connectivity
Peter Pepeljugoski	IBM
John Petrilla	Avago Technologies
Rick Pimpinella	Panduit
CK Wong	FCI