Channel Ad Hoc Meeting Minutes

February 10, 2005

a) Agenda overview presented by Adam Healey (http://ieee802.org/3/ap/public/channel_adhoc/agenda_c1_0205.pdf)

   i) Review of scheduled events

   ii) Review of motions passed in January Interim re: channel model

   iii) Review of XAUI and -CX4 channel definition efforts

   iv) Reactions to proposed minimum sets (slide 9):

      (1) Joe A – OIF/CEI has taken the same approach: normative transmitter, compliant channel, receiver must operate. T11.2's approach is not clear. Not sure if it is the right way. Might prefer normative receiver spec. Channel test criteria used Stat-Eye and something similar is important.

      (2) Charles M – Not fully comfortable with the idea that there are 2 parts of the system clearly defined and the 3rd is "left hanging" so that if it doesn't work, it's your fault. It's difficult to design a compliant part.

      (3) Justin G – Looking at set 1, don't believe it's complete enough to insure interoperability as use of a compliance channel can be a problem. From the data we have, each of the backplanes are quite different, and the ability of a transmitter and receiver to operate over each of them will be very different. In favor of step 2, but agrees with Joe re: use of Stat-Eye.

   v) Discussion:

      (1) Methodology to define adaptive transmitter

      (2) Define transmitter and receiver components for the interconnect specification methodology

         (a) Charles – some of the package specifications that have been suggested are better than a simple RC model. Prefers something along the lines of Rich's proposal. A simple RC model might work for the IC itself.

         (b) Adam – this looks like a proposal – a simple RC model for the die with one or more models for the package. We need to keep the number of models as small as possible for simplicity's sake.

         (c) Petre – Unclear on why we need to deal with the interaction between the IC and the package. Why does a normative model for the channel have to include anything else?

         (d) John D – Joe's presentations clearly show the importance of these effects.

         (e) Petre – Normative specs for the transmitter and receiver could include the packaging effects. Why should they be included in the normative spec for the channel?

(f) Adam – I'll suggest some specific guidelines for the model for the next conference call and we can work from there.

(3) Identify agreed-upon methodology to extrapolate to DC.

(a) Adam – I don't think there's a question about whether we need it, the question is how. Will anyone take an action to post anything to the reflector?

(b) John D – Will talk with the Agilent Test & Measurement. Also Dima

(c) Jeff S – There are some software packages that deal with this pretty well. Agilent's ADS is an example that works both in frequency and time domains.

(4) Identify critical time-domain parameters and bounds.

(a) Brian S – Can you please expand on the critical time domain parameters?

(b) Adam – what features of the pulse or impulse response do you need to constrain? Response peak, mask, etc. Left wide open so others can make proposals.

(c) Brian S – Like algorithmic approaches?

(d) Adam – yes, like Stat-Eye, masks, etc.

(e) Petre – Volunteered to make a presentation on this during the next conference call.

(5) Eliminate redundancy from the specification suite. Note: did not hear any strong feeling that there was redundancy or that it should be removed.

b) For the next meeting:

i) Adam will summarize the interconnect options

ii) Petre will outline which parameters he wants to see defined.

iii) John will take the lead on a method to extrapolate to DC

Attendance:

First	Last	
Joe	Abler	
Luke	Chang	
Chi-te	Chen	
John	D'Ambrosia	
Justin	Gaither	
Adam	Healey	
Matt	Hendrick	
Sammy	Hindi	
Mike	Lerer	
Cathy	Liu	
David	McCallum	
Charles	Moore	
Tom	Palkert	
William	Peters	
Petre	Popescu	
Brian	Seemann	
Jimmy	Sheffield	**x**
Dima	Smolyansky	
Schelto	van Doorn	

x = Meeting notes volunteer.