PoE Plus Meeting Minutes - 2005 July 19

08:48 Start of meeting

Introductions

Agenda

- Appoint secretary
- Discussion of the order of the meeting
- Introductions
- Background stuff
- Approve Minutes of March meeting
- Presentations
- Review of Objective, 5 Criteria and develop PAR
- Motions

Meeting Order

- Tues 7/19/05
 - o 8:30-1 PoEPlus
 - 1-6 PoEPlus isolation ad-hoc
- Wed 7/20
 - o 8:30-1 No PoePlus meeting (maintenance meeting instead)
 - o 1-6 PoePlus
- Thurs 7/21
 - 8:30-11 PoEPlus
 - o 1-6 IEEE 802.3 WG
- Approve -28, against -0

Ground rules Patent in Standards (sect. 6) read IEEE Structure reviewed Rules reviewed Electronic info on above presented Presentation order request – covered PAR, 5 Criteria, Objectives – info briefly covered

Presentations (in order presented)

DTE Power via MDI and related isolation requirements, David Law, 3Com (law_1_0705.pdf)

- Covered conflicts
- Proposed solutions
- Proposed wording for 33.4.1 (will be covered in ad-hoc later)

4P HP vs. 2P HP what is the best system decision, Yair Darshan, PowerDsine

(darshan_1_0705.pdf)

- Outlined various options presented
- Summarized inputs from previous meetings

• Addressed cost of implementation of 4P vs. 2P

Bias Current Capability versus Differential Performance in a LAN Transformer, Hank Hinrichs, Pulse (hinrichs_1_0705.pdf)

- Transformer analysis for higher power
- Test results on insertion loss, phase response, and return loss

End session at 12:20p. Continue tomorrow morning. This afternoon is ad-hoc as discussed above.

Following presentations will be later in the week.

3. PoE+ Cost Effective Detection and Classification, Matt Landry, Silicon Magike (landry_1_0705.pdf)

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4. An Extended Classification Protocol for PoE Plus (Revised), Steve Robbins, Ixia (robbins_1_0705.pdf)

- 5. 802.3 PoEPlus Classification, Derek Koonce, JSI Microelectronics (koonce_1_0705.pdf)
- 6. Class Resolution Requirement Analysis, Yair Darshan, PowerDsine (darshan_2_0705.pdf)
- 7. Classification Resolution Analysis, Yair Darshan, PowerDsine (darshan_3_0705.pdf) •
- 9. Achieving Maximum Power for PoE Plus Steve Robbins, Ixia (robbins_1_0705.pdf) •

Ad-hoc presentations

- Revision of IEEE802.3af Isolation requirements, Arkadiy Peker, Yair Darshan, PowerDsine (peker_1_0705.pdf)
- Proposal for Update of Clause 33.4.1, Martin Patoka, TI (patoka_1_0705.pdf)

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Start: 13:01

Motion to accept minutes from last meeting – Derek Koonce, seconded by Steve Robbins All accepted minutes, no oppose

Objectives, PAR, 5 Criteria confirmation

Presentations

Achieving Maximum Power for PoE Plus - Steve Robbins, Ixia (robbins_1_0705.pdf)

- Covered why active current balancing is needed
- Covered why broken wire detection (BWD) is necessary
- Provided options for BWD and Spice simulations
- Discussion about where the detection should be placed

PoE+ Cost Effective Detection and Classification, Matt Landry, Silicon Magike (landry_1_0705.pdf)

• Proposes classification based on signals from PSE

An Extended Classification Protocol for PoE Plus (Revised), Steve Robbins, Ixia (robbins_1_0705.pdf)

- Proposes classification based on signals from PD
- Provided possible block circuit implementation to better understand cost implementation
- 802.3 PoEPlus Classification, Derek Koonce, JSI Microelectronics (koonce_1_0705.pdf)
 - Proposes classification based on signals from PSE, then PD response
 - Concern about patent issues due to communication between two devices

Class Resolution Requirement Analysis, Yair Darshan, PowerDsine (darshan_2_0705.pdf)

• Presentation on determination of average port power in order to help define class power step

Classification Resolution Analysis, Yair Darshan, PowerDsine (darshan_3_0705.pdf)

• Support document for previous presentation

802.3 PoEPlus Maximum Power, Derek Koonce, JSI Microelectronics (koonce_2_0705.pdf)

- Presents current capability for wire and proposes maximum power limit for PoEPlus
 - Concern is what connector is capable of handling

Ad-hoc presentations – done 2005 July 20

- Revision of IEEE802.3af Isolation requirements, Arkadiy Peker, Yair Darshan, PowerDsine (peker_1_0705.pdf)
- Proposal for Update of Clause 33.4.1, Martin Patoka, TI (patoka_1_0705.pdf)

Meeting closed at 16:52.

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Discussion regarding if we need to add to the objectives the concept that a Plus PD cannot try to pull more power than is available from an .af PSE. Objective 7 is clear enough.

Clarification on Objective 8 emissions by Boris Katzenbert, Ortronics. Will this objective cover EU's immunity requirements? Recommendation to add "/EN" after "CISPR" to address EU. Chair wants to ensure it is accurate. Discussion ensued. Motion to add in text by Boris, seconded by Yair. No discussion. Favor – 19, oppose – 0, abstain – 6. Motion passed.

Chad wanted to address Objective 12 if it was still relevant. Chair commented that Maintainence has assigned this to the PoEPlus group.

Motion to instruct the Chair to present the PoEPlus Study Group PAR, 5 Criteria, and Objectives to the Working Group in order to form an 802.3 Task Force – Motion by Chad Jones, seconded by Yair Darshan. No Discussion.

General voting: approve -32, oppose -0, abstain -0; motion passed by general voting. .3 voters: approve -16, oppose -0, abstain -0.

Motion to instruct the Chair to request an extension of the PoEPlus Study Group through the next Plenary – motion by Derek Koonce, seconded by Daniel Feldman. Voting: approve – 31, oppose – 0, abstain – 0. Motion passed.

Motion to instruct the Chair to request a meeting of the PoEPlus Study Group at the 802.3 September Interim – motion by Martin Patoka, seconded by Kevin Brown. Voting: approve – 29, oppose – 0, abstain – 0. Motion passed.

Motion to adjourn the meeting.