

IEEE 802.3  
4-Pair Power over Ethernet  
(4PPoE) Study Group  
Closing Report  
18<sup>th</sup> July 2013,  
Geneva, Switzerland

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# Reflector and Web

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- To subscribe to the 4PPoE reflector, send an email to:

[ListServ@ieee.org](mailto:ListServ@ieee.org)

with the following in the body of the message (do not include “<>”):

*subscribe* stds-802-3-4PPOE <yourfirstname> <yourlastname>  
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- Send 4PPoE reflector messages to:

[stds-802-3-4PPOE@listserv.ieee.org](mailto:stds-802-3-4PPOE@listserv.ieee.org)

- Study Group web page URL:

<http://www.ieee802.org/3/4PPOE/>

# Progress this week

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- 31 Attendees
- 5 presentations covering pair-to-pair cable imbalance, 10G PoE and proposed objectives.
- Compatibility Matrix ad hoc report.
- Reviewed the online PAR entry
- Reviewed, modified and adopted the 5C
- Reviewed objectives, modified 1 objective, added 5 new objectives
- Motion to request a study group extension

# Presentations

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Compatibility Matrix Ad-Hoc	Yair Darshan	Microsemi
4Pair PoE Current unbalance	Christian Beia	ST Micro
Analysis of usable PD input power in 4P system	Yair Darshan	Microsemi
Power Over 10GBASE-T Ethernet	Paul Langner, George Zimmerman	Aquantia
Proposed New .bt objectives	Jeff Heath	Linear Tech
Proposed 4PPoE Objectives, Round 2	Chad Jones	Cisco

- The project will amend IEEE Std 802.3-2012 by amending Clause 33
- IEEE Std 802.3 will comply to the limited power source and SELV requirements as defined in ISO/IEC 60950
- Specify Mutual Identification to address four pair operation
- The standard shall not preclude the ability to meet FCC/ CISPR/EN Class A, Class B, Performance Criteria A and Performance Criteria B with data for all supported PHYs
- Support for operation over the following channels that have DC loop resistance of no greater than 25 ohms:
  - Class D or better 4-pair copper medium from ISO / IEC 11801:2002, including Amendments 1 & 2
  - Class D or better media from ISO / IEC 11801:1995
  - Category 5e or better cable and components as specified in ANSI/TIA-568-C.2
  - Category 5 cable and components as specified in ANSI/TIA/ EIA-568-A

*Adopted by the IEEE 802.3 4PPoE Study Group May 2013*

- ~~Investigate~~ Support operation with 10GBASE-T
- The project shall support a minimum of 49 Watts at the PD PI.
- Define parameters to limit maximum pair-to-pair current imbalance.
- 4PPoE PDs which operate at power levels consistent with IEEE 802.3-2012 PDs will interoperate with IEEE 802.3-2012 PSEs.
- 4PPoE PSEs will be backwards compatible with IEEE 802.3-2012 PDs.
- Update management parameters

*Adopted by the IEEE 802.3 4PPoE Study Group July 2013*

# Future Work Plan

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- Next meeting Thursday, Friday Sept 5th, 6th in York
- Compatibility Matrix ad hoc meeting, if needed
- Presubmit the PAR, 5C and Objectives for review
- November:
  - respond to comments on PAR and 5C
  - Present PAR, 5C and objectives to 802.3 WG for approval and forwarding to 802 EC for submission to NesCom and SASB

# Motion

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Move that IEEE 802.3 extend the 4-Pair Power over Ethernet Study Group.

Moved on behalf of the study group by Chad Jones

(> 50%)

Y: 77    N: 0    A: 0