802.3BT 4P-ID AD HOC AGENDA -
24 Feb 2015

Participants are encouraged to review IEEE meeting guidelines available at the following URL - https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf

The proposed agenda for the meeting follows.

8 AM Pacific Time meeting start (120 minute meeting planned)

1. Roll call : Please send an email indicating your attendance, employer and affiliation to mailto:george@cmeconsulting.onmicrosoft.com?subject=802.3bt%254PID%20ad%20hoc%20attendance%2024Feb15
   - George Zimmerman – CME Consulting/Commscope & LTC
   - Chad Jones - Cisco
   - Dave Dwelley - LTC
   - Christian Beia - ST
   - Dan Dove – Dove Networking / LTC
   - David Abramson - TI
   - Don Miletich - Cree
   - Gaoling Zou - Maxim
   - John Wilson - SiLabs
   - Ken Bennett - SiFos
   - Koussalya Balasubramian - Cisco
   - Matthias Wendt - Phillips
   - Miklos Lukacs - SiLabs
   - Peter Scruton - UNH-IOL
   - Yair Darshan – Microsemi

     UNIDENTIFIED INDIVIDUALS NOTED ON CALL:
     - Henry Gong?
     - Call in #5?

2. Reminder of IEEE patent policy
   www.ieee802.org/3/patent.html

3. Housekeeping
   (no prior minutes to approve)

4. Old business from previous ad hoc meetings:
   None

5. New business at this meeting:

   Name of presenter: George Zimmerman, CME Consulting, Commscope & LTC

Title of presentation: 4PID Ad Hoc – Review (zimmerman_3btah_01_0215.pdf)
Abstract: a review of status of 4PID discussions and possible next steps
Discussion: Points of agreement were validated; identifying PDs not just by signature, but signature, class & load was clarified, resulting in revised presentation with notes (01a)

Name of presenter: David Dwelley, LTC
Title of presentation: 4PID and Detection
Abstract: The presenter reviewed interactions between 4PID & BT detection, proposes that disabling the signature on the unpowered pair is not useful as a 4PID, because it would be used both ways. Also discusses the relation of connection check and PD, and connection check / 4PID timing, proposing it should be complete before inrush, and that this has implications because Tpon is calculated from end of detection.
Discussion:

- Agreed that there should be a detectable distinction between an option 1 PD and an option 2 PD that does not desire / support (disagreement here) 4P power. (some disagreement on whether to support such a PD)
- Connection check and 4PID speak to the same thing – maybe we should make them the same thing.
    - YD: connection check is a test for dual signatures, not a 4PID state machine
    - DD: 4PID is the determination to apply and maintain 4P power. (disagreement on whether maintain is part of the
    - KB: connection check is to determine option 1 or option 2 PD – a step in 4PID.
    - DD: Proposes 4PID is characteristic of PD, connection check is the process in the PSE (not agreed)
    - Agreement that connection check is a first step or pre-step in the 4PID process, but not whole thing
    - DA: discussed that timing on connection check vs. inrush was a hot topic, something under development.
    - Agreed – DA is working connection check

DISCUSSION OF NEXT STEPS

- Agreement that CC is part of or prestep for 4PID, and DA has the ball on that for a next turn of text. CC: output – 'Possible Option 1', 'Possible Option 2' – determining invalidity is a separate step. [all it does 'is are the two pair sets connected' (e.g., through a diode bridge)]
- What do you use CC for: CC is a test in our toolbox, used for 4PID, to interpret results of class, and possibly DC disconnect or other functions.
- Agreement – 4PID: (valid_detect_A)*(valid_detect_B)*(CC=Option 1) + (valid_detect_A)*(valid_detect_B)*(CC=Option 2)* [x?]
    - Disagreement: DD: x = TRUE (unconditional) [with secondary test optional] OR
    - YD: x = (when one pair set is powered)*(unpowered pair set = valid_sig)
    - Pete: difficult to make a determination of designers intent, as current standard requires invalid signature on other pair.

- DISCUSSION and disagreement on whether existing standard (802.3at) requires unpowered pair set to have an invalid signature
- GZ: According to 802.3at, YD is always false.
- YD: Agree – fully at compliant option 2 PDs will give x=FALSE. But, test has value because it enables 4P powering of pre-standard (not full at) 4P capable PDs are enabled by unpowered pair set = valid_sig.
    - DD would use enforcement of classification power levels to exclude fully at compliant option 2 PDs that YD would give x=FALSE.
- DD & YD to work offline to resolve or narrow disagreement.

Name of presenter: Yair Darshan, Microsemi
Title of presentation: Part A: Existing compliant PD implementations, Part B: Proposal for detecting Type 1/2 capable of 4P operation: Layer 1 Method to Detect 4PPoE Capable Legacy Type 1 & 2 PD – Rev 007 (Not presented)

Brief description of topic: Previously presented material – no change since Nov 2014.

6. Next meeting time: Not proposed at this time.
7. Adjournment: 10AM Pacific Time