

IEEE802.3bt Kanata September 2014 Meeting Minutes

Christian Beia

Wednesday September 10th

802.3bt task force in session at 10.30 AM.

- Motion to approve the Agenda moved by Matthias Wendt, seconded by Yair Darshan. Passes by voice with no opposition.
- Information in slides #1 to #4 of the patent policy were shown by the Chair
- Chair read the patent slides and made a call for patents with no response from the room.
- Motion to approve July minutes: moved: David Abramson; seconded: Matthias Wendt. Passes by voice without opposition.

Proceeded with presentations as per agenda.

- 10:57 AM Channel Pair To Pair Resistance Imbalance Adhoc Report – Yair Darshan
- 11:07 AM Layer 1 Method to Detect 4PPoE Capable Legacy Type 1 & 2 PD Ad Hoc – David Tremblay
- 11:10 AM Part A: Existing compliant PD implementations; Part B: Proposal for detecting Type 1/2 capable of 4P operation – Yair Darshan

Session break at 11:53AM

Back in session at 1:01PM, continuing presentations

- Use Case Summary – Faisal Ahmad
- 1:18 PM Unsticking the Ad Hoc (Info for Everyone) - Geoff Thompson
- 1:33 PM IEEE P802.3bt Mutual Identification – David Abramson
- 2:20 PM Classification Using Hysteresis – Dave Dwelley

Session break at 2:57PM

Back in session at 3:17PM, continuing presentations

- 2-Level Classification – Christian Beia on behalf of Gaoling Zou
- 3:30 PM Consideration on bt classification signature – Yan Zhuang
- 4:00 PM PoE: Extended Power – Matthias Wendt
- 4:42 PM DLL Classification - Lennart Yseboodt
- **Straw Poll** w/Chicago rules:

I would support including the following classification schemes in 802.3bt:

Presentation 1 (Dave A – Multiple class currents)

Y:23

Presentation 2 (Dave D – Hysteresis)

Y:19

Presentation 3 (Gaoling – Two class voltage levels)

Y:6

Presentation 4 (Gaoling – PWM class)

Y:10

Session recessed at 5:19PM

Thursday September 11th

802.3bt task force in session at 9:00AM. Presentations as per agenda

- Consideration on dual channel PD detection – Hua Rui
- 9:41AM Clarifying Detection for 4PPoE - David Abramson
- 9:55AM Current Limits – Koussalya Balasubramanian

Session break at 10:30AM

Back in session at 10:46AM

- Preview of the motions – Koussalya Balasubramanian
- 10.50AM Making 1-Channel PSEs Work – Dave Dwelley

Session break at 12:17PM

Back in session at 2:01PM.

- **Motion 1** - Technical:
The BT project shall require a PSE to successfully complete a 4P-ID test before enabling power over all 4 pairs to Type 1 & 2 PDs.
 - Mover: David Tremblay
 - Seconder: Koussalya Balasubramanian
 - Y: 33; N: 0; A:1 – **motion passes**
- **Motion 2** - Technical:
The BT project will include a physical layer test to qualify Type 1 & Type 2 PDs, including those in the installed base, to receive power over all 4 pairs. This would, in turn, allow a 4-pair PSE to transmit 4-pair power to a Type1 or Type2 PD that passes such a test, which shall be a conformant mode within BT.
 - Mover: David Tremblay
 - Seconder: Lennart Yseboodt
 - Y:29; N:0; A:5 – **motion passes**
- **Motion 3** - Technical:
The BT project shall create a 4P-ID adhoc to recommend the criteria to qualify Type 1 and Type 2 PDs to receive power over all 4 pairs.
- **Motion to amend motion 3:**
 - Mover: Geoff Thompson
 - Seconder: Lennart
 - Y:21; N:4; A:5 – **motion passes**
- **Amended Motion 3** - Technical:
The BT project shall create a 4P-ID adhoc to recommend the L1 test criteria to qualify Type 1 and Type 2 PDs to receive power over all 4 pairs.

- Mover: David Tremblay
- Secunder: Fred Schindler
 - Y:24 N: 0 A:9 – **motion passes**

Session break 3:01PM

Back in session at 3:20PM

- **Straw Poll:**
Do you agree with this statement?
A valid Type3 or Type4 PD will present a signature resulting in the same classification at Alt-A and Alt-B. To clarify, this implies that T3 or T4 PDs cannot provide a different class signature on Alt-A then Alt-B and vice versa.
 - Y:13; N:7;

- **Motion 4 - Technical:**
Move that IEEE 802.3bt, permit LLDP to be used as a method to provide the 4P-ID.
Note: The 4P-ID is covered in, schindler_1_0514.pdf, schindler_2_0514.pdf, darshan_3_0714.pdf.
 - Mover: Fred Schindler
 - Sec: Koussalya Balasubramanian
 - Y:31; N: 0; A:1; – **motion passes**

- **Motion 5 - Procedural:**
Move that IEEE802.3bt accept the term “pair-set” and its definition as referring to either of the two valid 4-wire connections as listed in 33.2.3.
 - Mover: David Abramson
 - Secunder: Koussalya Balasubramanian
 - Y:30 ; N: 2; A:1; – **motion passes**

- **Motion 6 - Technical:**
Move to change text in 33.2.5 from:
 - “The PSE shall turn on power only on the same pairs as those used for detection.”
 To:
 - “The PSE shall turn on power only on the same pairs as those used for two-pair detection.”
 - Mover: David Abramson
 - Secunder: Dave Dwelley
 - Y: 27; N: 1; A:5; – **motion passes**

- **Motion 7 - Technical:**
Move to change text in 33.2.5.3 from:
 - A PSE shall accept as a valid signature a link section with both of the following characteristics between the powering pairs ...”
 To:
 - A PSE shall accept as a valid signature a pair-set within a link section with both of the following characteristics, with an offset voltage up to Vos max and an offset current up to Ios max, as specified in Table 33-5”

- Mover: David Abramson
 - Seconder: Dave Dwelley
 - Y: 29; N:1 ; A:0; – **motion passes**

- **Motion 8** - Technical:

Move to change the text in 33.2.5.4 from:

 - “The PSE shall reject link sections as having an invalid signature, when those link sections exhibit any of the following characteristics between the powering pairs...”

To:

 - “The PSE shall reject a pair-set within a link section as having an invalid signature when the pair-set exhibits any of the following characteristics as specified in Table 33–6:”
 - Mover: David Abramson
 - Seconder: Dave Dwelley
 - Y:31; N:0; A:2 – **motion passes**

- **Motion 9** – Technical:

Move that IEEE 802.3bt specify two new types of PSE and PD as follows

 - Type 3 : 0-60W
 - Type 4: 0-99W

NOTE: The above power levels are at PSE

 - Mover: Koussalya Balasubramanian
 - Seconder: David Abramson
 - Y:30; N:3; A:1 – **motion passes**

- **Motion 10** – Technical:

Move that IEEE802.3bt PSEs shall measure current with respect to I_{inrush} , I_{cut} , I_{lim} and DC-disconnect per powered pair-set.

 - Mover : Koussalya Balasubramanian
 - Seconder: Dave Dwelley
 - Y:29; N:2; A:2 – **motion passes**

- **Motion 11** – Technical:

Move to accept text in slide 7, 9 and 10 (Inrush Spec) of Balasubramanian_01_0914.pdf for IEEE802.3bt.

 - Mover : Koussalya Balasubramanian
 - Seconder: Dave Dwelley
 - Y:27; N:0; A:5 – **motion passes**

- **Motion 12** – Technical:

Move to accept text in slide 12 (Icut Spec) of Balasubramanian_01_0914.pdf for IEEE802.3bt.

 - Mover : Koussalya Balasubramanian
 - Seconder: Dave Dwelley
 - Y:25; N:0; A:6 – **motion passes**

- **Motion 13** – Technical:

Move to accept text in slide 17 and slide 18 (Ilim Spec) of Balasubramanian_01_0914.pdf for IEEE802.3bt.

- Mover : Koussalya Balasubramanian
- Seconder: Yair Darshan
 - Y: 29; N: 0; A:4 – **motion passes**

- Yair Darshan asked the secretary to report this notes:
 1. The group will adopt the number proposed in “Updated baseline proposal for motion a tseptember meeting REV 005.doc”
 2. The group agrees that for end to end unbalance we are using the equation of the channel and not a single worst case number.

- **Motion 14** – Technical:

Accept “Updated baseline proposal for motion a tseptember meeting REV 005.doc” as baseline text.

 - Mover : Yair Darshan
 - Seconder: Christian Beia
 - Y: 29; N: 0 ; A: 2 – **motion passes**

Session recessed at 5:32PM

Friday September 12th

802.3bt task force in session at 8.34AM. Presentations as per agenda:

- Classification signature of Type2 PD design – Yan Zhuang
- 9:09 AM One PSE Polarity – Lennart Yseboodt
 - Motions made and withdrawn, will work on consensus building for November.

Session Break 10:00AM

Back in session 10:15AM

- PSE PI and PD PI Pair to Pair Specifications – Yair Darshan
- 11:12 PI Balance specifications Rev.02 – Ken Bennett

11:12 Chair, Chad Jones has David Dwelley, become acting Chair.

11:16 Acting Chair, Dave Dwelley, restores Chad Jones, as Chair.

Session break at 11:44AM

Back in session 12:30PM

- **Motion 15** - Technical

Accept slide 8 of “bennett_01_0914 rev 3.pdf”

 - Mover: Yair Darshan
 - Seconder: Ken Bennet
 - Y:13 N:0 A:10 – **motion passes**

Chair notes that motion passes with apathy.

12:40PM Presentations as per agenda:

- Channel P2PRUNB Specification: comparison between specification alternatives – Yair Darshan
- 12:49PM Channel Pair To Pair Resistance Unbalance (CP2PRUNB) (only cables and connectors) Analysis of ad-hoc proposed use cases – Yair Darshan
- 12:59PM Mating and unmating under load – Bernd Horrmeyer.
- 1:09PM group review of liaisons letters previously sent to ISO SC25 and to TIA TR42, confirming that we asked for Channel Unbalance.

- **TF Action items:**
 - To create a new liaison to ISO through recirculating proposal on the reflector in November based on information in Bernd Horrmeyer’s presentation.
 - “Pair-set” terminology: the group doesn’t feel the need for a liaison.
 - Ad hocs: The End to End Channel P2PRUNB adhoc, chaired by Yair Darshan and the Layer 1 Method to Detect 4PPoE Capable Legacy Type 1 & 2 PD Adhoc , chaired by David Tremblay are concluded.
 - The 4-Pair ID Adhoc has been chartered. George Zimmerman appointed as the Chair
 - List of Use Cases : Faisal Ahmed to continue collecting from the group through the reflector.

- **Motion 16 – Procedural**

Instruct the editor to prepare a Draft 0.1 for TF preview on October 17

 - Mover: George Zimmerman
 - Seconder: Yair Darshan
 - Y:21; N:0; A:3 – **motion passes**

- **1:30 PM Motion to adjourn**

Passes by voice with no opposition

4PPoE Task Force Attendance Date: **Sept 2014**

Please initial for attendance

Name	Employer	Affiliation	9/10	9/11	9/12
David Tremblay	HP	HP	DT	DT	DT
DAVE DUELLEN	LTC	LTC	DMD	DMD	DMD
Yan ZHUANG	HW	HW	✓	✓	✓
Rui Hua	HW	HW	✓	✓	✓
Andy Gardner	LTC	LTC	AJB	AJB	ATG
THUYEN DINH	PULSE	PULSE	✓	✓	✓
SESHA PANGULURI	BROADCOM	BROADCOM	✓	✓	✓
Bernd Hommeyer	Phoenix Contact	Phoenix Contact	✓	✓	✓
Rick Frosch	PHitong	PHitong	✓	RF	RF
Alex Seiger	UNH-IOL	UNH-IOL	✓	AWS	AWS
Ken Bennett	SIFOS	SIFOS	✓	KB	KB
Miklos Lukacs	Silicon Labs	Silicon Labs	✓	Luk's	Luk's
Fred Schindler	Seen Simply	Seen Simply	✓	FS	FS
David Abramson	TI	TI	✓	Da	Da
Koussalya Balasubramanian	cisco	Cisco	✓	KB	KB
JEAN PICARD	TI	TI	✓	J	J
CHAD JONES	CISCO	CISCO	CJT	CJT	CJT
YAIR Darshan	MSSC	MSSC		Y	Y
Valeremagure	Siemon	Siemon		VM	VM
Ardeshir Mohammadian	Brocade	Brocade		A.M	A.M

4PPoE Task Force Attendance Date: Sept 2014 Please initial for attendance

Name	Employer	Affiliation	9/10	9/11	9/12
FAISAL AHMAD	AKROSS SILICON	AKROSS SILICON	✓	FA	FA
LENNART YSEBROODT	PHILIPS	PHILIPS	✓	✓	✓
Ruud van Bodehorst	Philips	Philips	✓	✓	✓
Matthias Wendt	Philips	Philips	✓	✓	✓
James Liu	Fairchild	Fairchild	✓	SL	SL
Yash Darghan	MSCC	MSCC	✓	CMT	✓
James Malkemus	GeneralCable	GeneralCable	✓	✓	✓
Christian Beic	STMicro	STMicro	✓	✓	✓
Pierre-Philippe Stevens	Microsemi	Microsemi	✓	W	W
SHAHAR FELDMAN	MICROSEMI	MICROSEMI	✓	✓	✓
ANDREW MCCOUBREY	CISCO	CISCO	✓	✓	✓
Ardeshir Mohammadian	Brocade	Brocade	✓		
George Zimmerman	CME Consulty	Commscope/ Linear Tech	✓	✓	✓
G-MANBD CHOUDHURY	Commscope	Commscope	✓	✓	
JON LEWIS	Dell	Dell	✓	✓	✓
PAUL KISIT	BELDEN	BELDEN	✓		
Victor Renteria	Bel Fus4	Bel Fus4	✓	✓	VR
Ardeshir Mohammadian	Brocade	Brocade	✓		
David Law	HP	HP	✓	D.L.	D.L.
LIANG DING	MC CANUM	PANVIST	✓	CMT	

