# IEEE802.3bt LLDP adhoc

Meeting #1: Rev 001, Tuesday June 13, 2017

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# Meeting # 01 Attendees.

Yair Darshan, Microsemi
Tremblay David, HP
Chad Jones, Cisco
Geoff Thompson, Gracy
John Skinner, Sifos
Heath Stewart, Analog Devices
Bruce Nordman, IBL



### Proposed Agenda for meeting #01

• Starting at 18:00 IDT. Ending at 19:00 IDT. Chad has volunteered to take notes of this meeting.

#	Time	Subject	Owner
1	18:00 –18:05	<ul> <li>Introduction</li> <li>Patent policy</li> <li>approving meeting minutes from last meeting- NA</li> <li>Approving proposed Agenda for this meeting</li> </ul>	Yair
2	18:05 – 18:15	LLDP concept review as agreed on D2.3 <u>darshan 08 0317.pdf</u> regarding how to fill in pd_requested_power, pse_allocated_power, pd_req_power_mode(A), pse_allocated_power_Alt(A), pd_req_power_mode(B) and pse_allocated_power_Alt(B).	Yair
3	18:15 – 18:45	Discussion. The objective in this meeting is to reach consensus regarding item 2. It will help to resolve comments from D2.4	Group
4	18:45 – 18:50	Other issues for next meeting	Group
5	18:50 – 19:00	Summarizing of A.I. and points of agreements	Group



### Introduction and other businesses 09:00 – 09:05

 The purpose of this ad-hoc is to resolve LLDP state machine related comments from D2.4 and related issues for PSE and PDs prior sponsor ballot for D3.0.

### Patent Policy

Please read the Patent Policy slides at <a href="http://www.ieee802.org/3/patent.html">http://www.ieee802.org/3/patent.html</a> prior the meeting.

#### Meetings process.

- During the meeting: Questions only after presenter done with his presentation.
- Follow the agenda as much as possible. Other issues can be tabled to be discuss later at the meeting, over the reflector, or at the next meeting agenda.
- Discussions over the reflector prior the meeting is valuable and saves time during the meeting to reach consensus.
- After the meeting, please send your affiliation and attendance confirmation by email.



### LLDP concept review as agreed on D2.3

 We agree in D2.3 to fill in the following fields in Figure 79-3 per the following concept (See darshan\_08\_0317.pdf for approved base line):

PD	PSE	PD requested	PD requested	PSE	PSE
requested	allocated	power value	power value	allocated power	allocated
power value	power value	Mode A	Mode B	value Alternative A	power value Alternative B

#### Part of Figure 79-3

#	PSE	Operating over	Connected	TLV field		
	Type		to a PD	Y	Α	В
				pd_requested_power	pd_req_power_mode(A)	pd_req_power_mode(B)
				pse_allocated_power	pse_allocated_power_Alt(A)	pse_allocated_power_Alt(B)
1	3/4	4-pairs	SS	1-999	0	0
2	3/4	2-pairs	SS	1-999	0	0
	3/4	4-pairs	DS	1-999	1-499	1-499
				Y=A+B		
	3/4	4-pairs with time	DS	1-999	1-499	1-499
3		delay until the 2 <sup>nd</sup> mode is active too		Y=A+B	(*) if this mode/Alt is	(*) if this mode/Alt is inactive,
				(To discuss next	inactive, set to value 0.	set to value 0.
				meeting. See A.I.		
				slide)		
4	3/4	2-pairs	DS	1-499	1-499.	1-499.
				The value of Y=X.	if this mode/Alt is inactive,	if this mode/Alt is inactive, set
				X=A or B.	set to value 0.	to value 0
5	1/2	2-pairs	DS	1-499	Almost the same as in	4. See details in next slide



(\*) See IDLE state in Figure 145-45 and Figure 145-46 for supporting this use case.

# LLDP concept review as agreed on D2.3 – Cont.

PD	Use	PSE	Use
Single-Signature	PD requested power	4-pair	PSE allocated power
Dual-signature	<ul> <li>PD requested power Mode (X).</li> <li>Fill in 0 in the inactive field of PD requested power Mode (X).</li> <li>PD requested power = PD requested power Mode A + PD requested power Mode B.</li> </ul>	Type 3 or 4.  Operating over 2- pair.  Type 3 or 4 when connected  To dual-sig PD operating on 2-pair mode	<ul> <li>PSE allocated power Alternative (X).</li> <li>Fill in 0 in the inactive field of PSE allocated power Alternative (X).</li> <li>PSE allocated power = PSE allocated power Alternative A + PSE allocated power Alternative B</li> </ul>
Dual-signature	<ul> <li>PD requested power Mode (X).</li> <li>Fill in 0 in the inactive field of PD requested power Mode (X).</li> <li>PD requested power = PD requested power Mode A + PD requested power Mode B.</li> </ul>	Type 1 or 2.  Operating over 2- pair.	<ul> <li>PSE allocated power Alternative (X).</li> <li>Fill in 0 in the inactive field of PSE allocated power Alternative (X).</li> <li>(*May) PSE allocated power = PSE allocated power Alternative A + PSE allocated power Alternative B (*May) PSE allocated power Alternative (X) may not used by legacy PSE.</li> </ul>
Dual-signature	<ul> <li>PD requested power Mode A</li> <li>PD requested power Mode B</li> <li>PD requested power =</li> <li>PD requested power Mode A +</li> <li>PD requested power Mode B</li> </ul>	Operating over 4-pair.	<ul> <li>PSE allocated power Alternative A</li> <li>PSE allocated power Alternative B</li> <li>PSE allocated power =</li> <li>PSE allocated power Alternative A + PSE allocated power Alternative B</li> </ul>



# Other issues for next meeting - 1

- (Related to comment #297 D2.4)
- Figure 145-45 power control state diagram when connected to dualsignature PD.
  - In D2.3 we add IDLE state in which PSEAllocatedPowerValue\_alt(X), PDRequestedPowerValueEcho\_alt(X) and TempVar\_alt(X) where set to 0 prior going to INITIALIZE state in order to resolve non active Alternative(X) value.
  - The same concept applied to Figure 145-46 for the Dual-signature PD power control state diagram for the relevant PD variables (PDRequestedPowerValue\_mode(X), PSEAllocatedPowerValueEcho\_mode(X), PDMaxPowerValue\_mode(X) and TempVar\_mode(X))



# Other issues for next meeting - 2

#### Comment #130, #293 D2.4 (Page 70 line 14 in D2.5)

Added text, "Type 1 and Type 2 devices shall not support the Type 3 and Type 4 extension."

Incorrectly blocks legacy types from using TLVs, Power status, System setup, PSE maximum available power, Autoclass, and Power done. The existing text does indicate what legacy Types are required to place in all Type 3 and Type 4 extension fields.

#### SuggestedRemedy

Strike the called-out text.

ACCEPT IN PRINCIPLE.

OBE by 293

Comment 293 has the following response:

ACCEPT IN PRINCIPLE.

No changes to draft.

LLDP ad hoc was formed.

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#### **Discussion:**

Yair: The proposed response to delete this text make sense. No reason to block new features from existing Type 1 and 2. Strike the called out text.

Geoff: All "shalls' should be in clause 145.

Heath: We agree to delete the text if PSE/ PD requested/allocated power mode A/B is set to zero when Type 1 and Type 2 PSE are used.

Jhon/Yair: In this case of Type 1/2 PSE connected to dual-signature PD, the fields are already defined. We need to focus only on the PSE fields since DS PD has access to all fields.

Heath A.I to generate comment and remedy for discussion for next time.



# Other issues for next meeting - 3

Comment #297 D2.4 (Page 75 line 12 in D2.5)

"If Mode (X) is non-active while the other mode is active, the inactive PD requested power value Mode (X) field value shall be set to 0."

What is this trying to do? The PD may wish to ask for power on an unpowered Mode...

SuggestedRemedy

Strike sentence.

ACCEPT IN PRINCIPLE.

no changes to draft.

An LLDP ad hoc was formed

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#### **Discussion:**

Yair: See concept description slides for why we did it (Slide 7).

A.I: Group to verify that they are OK with the state machine in Figure 145-45 and Figure 145-46.



# Discussion and A.I for next meeting.

- Slide 5: To discuss the red text. Is it also the sum Y=A+B or Y=X where X=A or X=B. What is best for delayed operation use case. Y=A+B is always true even when A=0 or B=0 for some time.
- Slide 6: To discuss the red text. It doesn't look accurate. The original text does.
- Slide 8: Heath to generate comment and remedy for discussion for next adhoc meeting.
- Slide 9: Group to verify that they are OK with the state machine in Figure 145-45 and Figure 145-46 regarding IDLE state rational which is to support the case that one of the modes is inactive when the dll is ready.

