2007 May 28 IEEE PoEPlus Task Force Minutes

Start at 10:30.

Agenda:
- Appoint Recording Secretary
- Discussion of order
- Intros
- Background stuff
- Presentations

Meeting Order
- Mon 10:30-17:00 P802.3at
- Tue – Wed 09:00-17:00 P802.3at

Core agendum approved by voice without opposition

Ground Rules – mutual respect and consideration
- No cost, product pitches, etc
- All may speak and vote
- No restrictions on presentations or materials
- No prices in any currency, complexity is OK
- 802.3 rules apply

Rules – in general… behave

Rules – web sites presented for bylaws, operating rules, etc presented.

Patent Policy read by Mike McCormack
- Links provided
- 5 Slides pertaining to the patent policy were presented. Chair asks if any of the members wants to identify any patent claim / patent applications that affects the standards.
  - Bill asks if any rumors should also be brought to the committee. Chair confirms that all rumors should be reported.
  - Bob Grow points that if any letter of assurance has been provided by a member, he/she need not disclose the same patent during the meeting.
- Requested any letters to submit – none

Electronic information
- Web address – www.ieee802.org/3/at/index.html
- eMail reflector – stds-802-3-poep@ieee.org
- Private Area
- Next meeting – watch www.ieee802.org/meeting/index.html

Presentations

• Ad-Hoc Updates
1) TIA-TR 42 update Sterling
2) Vport Ad-Hoc Fred Schindler
3) Classification Ad-Hoc Dave Dwelley
• Presentations
4) Wael Diab
5) Yair Darshan

Vport ad hoc Current Limits – Fred Schindler
1. Presented the SELV correction. Motion:
The IEEE 802.3at Task Force adopt presentation schindler_5_28_07.pdf slides 4 to be incorporated in the next P802.3at draft
o Moved by Fred Schindler
o Seconded by Yair Darshan
o Chair rules this is a technical motion (75%)
o All – yea: 22; nay: 0; abstain: 1
o .3 voters – yea: 13; nay: 0; abstain: 0
o Motion passes
2. Thong asks if 180uF is enough for 30W. Yair responds that he has done the calculations to show that 180uF is sufficient.
3. Yair tries to point out that the model in Fred's presentation is incorrect. Chair recommends that Yair try to do that during his presentation.
4. Anoop suggests that the standards mandate the PD to limit the current. Fred to bring this up during the Ad-Hoc.

Steve Carlson speaks about the ballots in the 802.3 for ax and ay. 802.3ax fails because of the high abstinence rate. Steve requests the TF members who abstained in the ballot to reconsider their decision.

Mike McCormack
How many members to attend the San Francisco meeting – 17
September meeting in Seoul Korea moved to Sept 10th – Sept 14th 2007

Voltages and Currents in Power over MDI systems – Yair Darshan
1. Presents a PSE/PD model that uses a constant power model for the PD. Dave points out that the standard does not require the PD to be a constant power PD.

Vport_lim New parameter – Yair Darshan
1. Vport_lim is defined as the minimum PSE MDI voltage below which the PSE is free to turn off the port.
2. Discussion on whether the PSE should shut off power as soon as the Vport_lim condition is hit. Dave recommends that there be a be a foldback mechanism or a

Current Limit – Mike McCormack
1. Reiterates the fact that Ilim/Tlim in 802.3AF is broken. There is a need for this to be fixed.
2. Vport_min and Ilim_max spec cannot be met at the same time.

PoE Plus IEEE 802.3at Classification Ad-Hoc – Dave Dwelley
1. Presented an expanded PSE Classification State Machine
2. Requests that the members go through pages page 14-15 and discuss this during Ad-Hoc meetings before July meeting

Editor's Report - Matt Landry
1. Draft D0.2 released on 15 May 2007
2. All maintenance items are easy distinguishable. Double underlined
3. Not enough information with regards to L2 to start putting down into the Draft
4. Motion:
   The IEEE P802.3at TF authorizes the editor to release D0.8 for a TF review and comment period 30 days prior to the July Plenary
   o Moved by Matt landry
   o Seconded by Fred Schindler
   Friendly amendment to change:
   The IEEE P802.3at TF authorizes the editor to generate and release D0.8 for a TF review and comment period at least 30 days prior to the July 2007 Plenary
   o Chair rules this is a technical motion (75%)
   o All – yea: 21; nay: 0; abstain: 0
   o .3 voters – yea: 13; nay: 0; abstain: 0
   o Motion passes

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Current Foldback for Type 2 PSE – Thong Huynh
1. Current limit foldback should be defined as a function of Vds of the Mosfet.
2. Presently used SOT223 FET allows 30W dissipation for a duration of 75ms
3. Presented power dissipation as a function of Vds

Power parameters for Layer-2 MIB – Ramesh Sastry, Anoop Vetteth
1. Defines "Power Parameters" for Layer-2 MIB
2. Stresses on the need for consistency in interpretation of the power numbers transferred between PD/PSE
3. Need to define complete set of MIB types

Mike McCormack
Motion:
The P802.3at will meet with other 802.3 task forces for an interim meeting in Korea during September 2007.
   o Moved by Mike McCormack
   o Seconded by Fred Schindler
   o Chair rules this is a procedural motion (50%)
   o .3 voters – yea: 15; nay: 0; abstain: 1
   o Motion passes
How many panning to attend – 18

Straw Poll

1. We should mandate specific behavior
         Agree 0   Disagree 16

2. We should allow multiple behaviors
         Agree 16   Disagree 0

3. Should we allow foldback
         Agree 17   Disagree 0

4. We should allow immediate shutoff below TBD Vport with no minimum time
         Agree 7   Disagree 3

5. We should allow immediate shutoff below TBD Vport with TBD minimum time > 0
         Agree 10   Disagree 3

6. We should allow energy limit based (V*I*T) behavior
         Agree 13   Disagree 1

7. We should allow shutoff based on Vport below some minimum voltage
         Agree 14   Disagree 0

8. We expect the short circuit behavior to be described with a mask similar to that developed in the ad-hoc

        Agree 15   Disagree 0

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Steve Carlson
1. Went over the voting process and the need for all the vendors to review the ballot drafts.

Mike McCormack
1. Drafted an informal communiqué to 802.11 requesting information regarding the power requirements of various applications within the scope of their group.
2. Discussion on whether we should support outdoor applications.
3. Motion:

    o Chair rules this is a procedural motion (50%)
    o Motion passes by voice vote

Comment Tool - Mike McCormack

Type-2 PSE/PD behavior under overload/short-circuit – Anoop Vetteth
1. Proposed that the PD limit the current
2. Motion:
Move that there be a max current limit for type 2 PDs with the exception of current drawn by an input capacitor of max 0.12uF.
    o Moved by Anoop Vetteth
    o Seconded by Yair Darshan
    o Chair rules this is a technical motion (75%)
    o All – yea: 17; nay: 0; abstain: 1
    o .3 voters – yea: 13; nay: 0; abstain: 1
    o Motion passes

Mike McCormack
Motion: Move to adopt the timeline as shown in agenda_0507.pdf as the task force schedule.
    o Moved by Chad Jones
    o Seconded by Thong
    o Chair rules this is a procedural motion (50%)
    o All – yea: 18; nay: 0; abstain: 0
    o Motion passes
PSE Model
    Connect
        o 2.8V to 10V, 5ma maximum

Classification
- o 15.5 to 20.5V
- o 44mA Maximum

Powered on
- o 50V to 57V
- o 720 mA Maximum (at present guidance, we are looking for clarification on the proper value)

Mike McCormack

Motion: Move that the chair write an informal communication including drawing created to match text on slide "PSE Model" and forward drawings and model per the request.
- o Moved by David Law
- o Seconded by Wael Diab
- o Chair rules this is a technical motion (75%)
- o All – yea: 18; nay: 0; abstain: 2
- o Motion passes

Wael Diab
1. Prioritize and assign the "Big Ticket Items"
2. Discussion on magnetics. "Can we remove 350uH requirement (change to .3)
3. Motion
   Move to strike objective 11
   - o Moved by Matt Landry
   - o Seconded by Wael Diab
   - o Chair rules this is a technical motion (75%)
   - o All – yea: 17; nay: 0; abstain: 3
   - o .3 - yea: 12; nay: 0; abstain: 3
   - o Motion passes

Respectfully submitted
Anoop Vetteth