P802.3bu PoDL Report

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Berlin March 2015

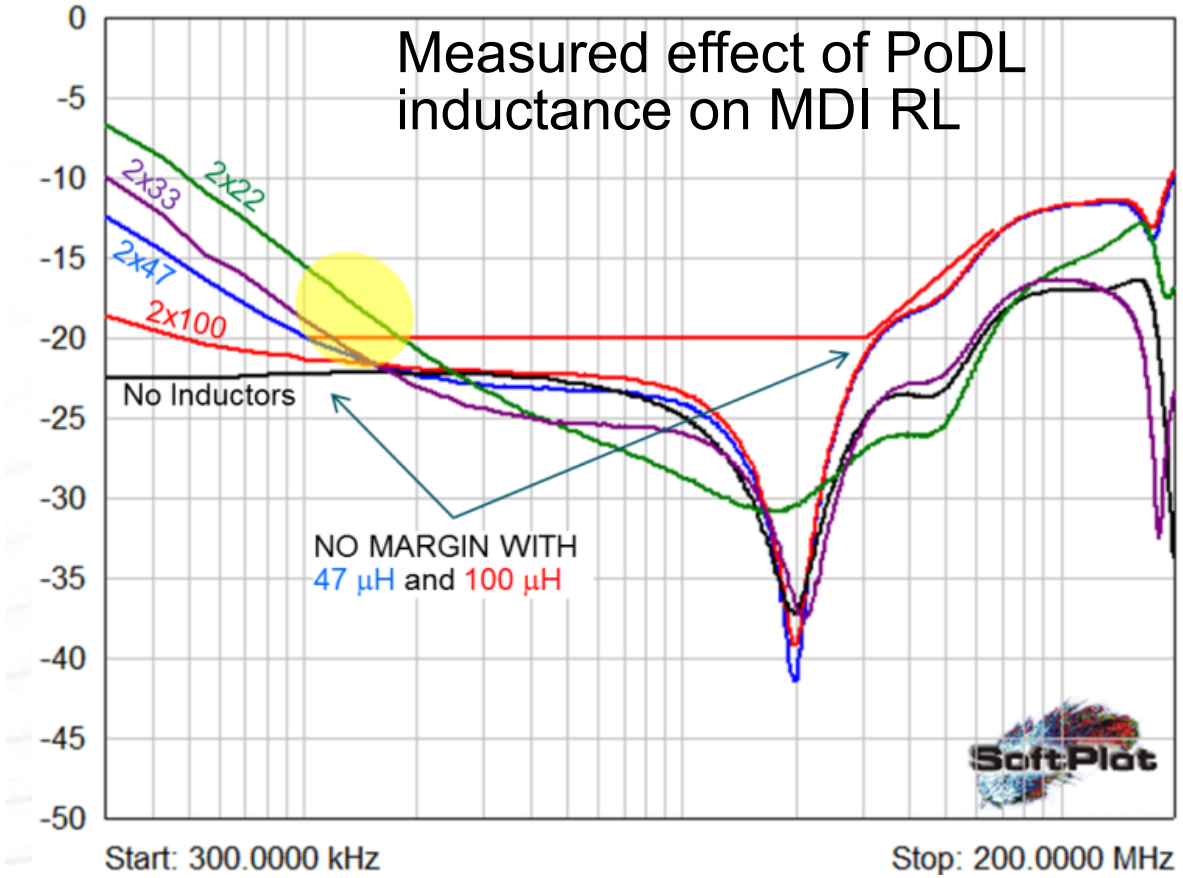
Progress This Week

- Met Monday afternoon and Tuesday morning
- 29 attendees (with 1000BASE-T1 schedule overlap)
- Three presentations reviewed, baseline text adopted
  - 100BASE-T1 low frequency RL spec change (PoDL only, in Clause 104)
  - New classification table
  - New MPS scheme
- Additional presentation on cable resistance derivation

Draft is Now Feature Complete

- No blank sections in the draft
  - Working PoDL devices could in theory be designed
- Limits and specifications still need refinement
- Features can still be added until July 2015 per the adopted schedule
  - Wakeup feature still to be discussed

New RL Curve: 2MHz Lower Limit



New Class Table

System Class								
R_{Loop} loss 20%	I (12V)	II (12V)	II (24V)	III (24V)	III (48V)	IV (48V)	V (48V)	VI (Open)
*$V_{PSE(max)}$ (V)	14	14	28	28	56	56	56	-
*$V_{PSE(min)}$ (V)	9	9	18	18	36	36	36	-
$I_{PI(max)}$ (A)	0.28	0.69	0.35	0.69	0.35	0.87	2.08	-
**$R_{Loop(max)}$ (Ω)	6.5	2.6	10.4	5.2	20.7	8.3	3.5	-
$V_{PD(min)}$ (V)	7.2	7.2	14.4	14.4	28.8	28.8	28.8	-
***P_{PSE} (W)	2.5	6.25	6.25	12.5	12.5	31.25	75	-
****$P_{PD(max)}$ (W)	2	5	5	10	10	25	60	-

New MPS Specs

Parameter	Symbol	Unit	Min	Max
MPS dropout time limit	T_{MPDO}	s	0.3	0.4
MPS sliding window time limit	T_{MPS}	s	0.090	0.110
Averaged MPS current	I_{Hold}	µA	20	30

Draft 1.0

- Editor chartered to create Draft 1.0 with new baseline text included
- http://www.ieee802.org/3/bu/private/P802.3bu_D1.0.pdf will be live 1 April
- Comment period closes 1 May
- Comment resolution will be primary task during May Interim in Pittsburgh

Thank You