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# **P802.3bp RTPGE**

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**IEEE 802.3 Ethernet Working Group**

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**High Speed Design, Inc.**

**November 11, 2013**

**Dallas, TX**

# Reflector and Web

- To subscribe to the RTPGE reflector, send an email to:

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with the following in the body of the message (do not include “<>”):

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- Send RTPGE reflector messages to:

**stds-802-3-RTPGE** [@listserv.ieee.org](mailto:stds-802-3-RTPGE@listserv.ieee.org)

- Task Force web page URL:

[www.ieee802.org/3/bp/index.html](http://www.ieee802.org/3/bp/index.html)

# IEEE P802.3bp Task Force

- Met in York UK Tuesday and Wednesday, September 3-4, 2013
- ~30 people in the room
- **Channel ad hoc**
  - Update from the ad-hoc meeting conference calls on Aug 8, Aug 15, Aug 29 , the goal has been the creation of baseline channel consensus proposal for presentation in York
- Reviewed IL proposal in (802.3bp baseline proposal-D0.2.pdf) updated with ILD term
- Reviewed RL and alien crosstalk proposals (herman\_3bp\_01\_0713.pdf)

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- Balance specifications (Mehmet RTPGE\_EMCLimit\_Lines\_06662013.pdf)
- Time domain channel representation resulting from insertion loss (IL) (Anand Dabak dabak\_3bp\_01\_0813)
- Reviewed presentation on cable balance measurements - (Michael Rucks RTPGEBalanceTestchannel\_cableonly.pdf)
- Reviewed presentation on EMC/channel ad hoc discussion of balance parameter requirements (Stefan Buntz - buntz\_3bp\_01\_0829.pdf)
- Car manufacturer feedback on cabling

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- **EMC and Noise ad hoc**
- 2 conference calls since July Plenary meeting and review of previous work to date.
  - Differential Channel Impairments
  - EMC Noise & Limit Lines
  - EMC Channel Transfer Function Modeling
  - Alien XTALK
  - In-Car Background Noise
  - Impulse Noise
  - Other Noise sources?
  - Review of previous work to date
  - Currently in 2nd phase – reach consensus on baseline limit for EM emissions (&mask) and based on that define TX PSD mask

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- **EMC and Noise ad hoc**
- Updates in following area:
  - New balance results measured (1pair 15m UTP w 4inline) and presented to the group
  - during channel / EMC ad hoc.
  - 3 different connector companies confirmed previously proposed mode conversion limit line is attainable for component level of connectors
  - There are 2 different 1 pair UTP cables which meet the component level model conversion limit line

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- **EMC and Noise ad hoc**
  - ISO BCI measurements only go to 400Mhz
  - Probably need to extend to higher frequencies
  - BCI probes are spec'd to 1GHz
  - Is the BCI limit RMS or peak?
- Further presentations on BCI, noise immunity and mode conversion
- The TF must develop these specifications and test methods

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**Amended Motion #2** - Move that The IEEE P802.3bp Task Force affirms the proposed Baseline IL Channel Performance for link segment insertion to establish the absolute value across the frequency range through 600MHz.  
(herman\_3bp\_01\_0913.pdf)

**M: Todd Herman S: Stefan Buntz**

**Technical motion, requires 75%**

**Everyone in the room votes**

**Y:25 N:0 A:4**

**Motion Passes**



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**Motion #8** - Move that The IEEE P802.3bp Task Force affirms the proposed Baseline PSANEXT (in slide 11 in herman\_3bp\_01\_0913.pdf ) and PSAACRF (in slide 13 in herman\_3bp\_01\_0913.pdf) for link segment specification over frequency range 1MHz -600MHz. (alien crosstalk configuration in [http://www.ieee802.org/3/bp/public/jul13/moffitt\\_3bp\\_01\\_0713.pdf](http://www.ieee802.org/3/bp/public/jul13/moffitt_3bp_01_0713.pdf))

**M: Todd Herman S: Xiaofeng Wang**

**Technical 75%**

**Vote**

**Y: 18    N: 1    A: 10**

**MOTION: Passes**

# IEEE P802.3bp Task Force

**Motion #9** – Move that the IEEE P802.3bp Task Force affirms the proposed Baseline Mode Conversion limit in (slide 13 tazebay\_3bp\_01a\_0913.pdf) 10MHz-600MHz.

**M: Mehmet Tazebay S: Stefan Buntz**

**Technical 75%**

**Vote**

**Y: 13 N: 6 A: 7**

**MOTION: Fails**

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**Motion #10** – Move that PHY proposals focus on 64B/65B PCS encoding of data and control characters

**M: George Zimmerman S: Mehmet Tazebay**

**Technical 75%**

**Vote**

**Y: 21 N: 0 A: 5**

**MOTION: Passes**

# Goals for the week

- Meet Tuesday, Wednesday 9:00AM – 6:00PM and Thursday morning (if needed)
- Reports
  - Automotive link segment ad hoc
  - EMC ad hoc
- Presentations on channel, channel test fixtures, EMC, MDI
- Wrap up the automotive link segment
- Review TF Draft 0.2
- Plan for next meeting

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**Thank you!**