



# 802.3bp 1000BASE-T1 PHY Ad Hoc F2F Meeting Update

San Antonio, TX  
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# Overview

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PHY Ad Hoc met on 11/4/2014, reviewed the proposals and achieved consensus for

- FEC polynomials (now, FEC is complete)
- PCS changes & baseline text
- Training related & Info field definition
- EEE updates
- Transmit Distortion
- Changing the scrambler polynomial (in order to make it usable for peak emissions)
- Force-mode synchronization
- Autoneg signaling
- Autoneg state machines
- OAM Channel

# Motion #1

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Move that the IEEE P802.3bp Task Force adopt 9-bit field generator polynomial and (450, 406) RS code generator polynomial as defined on Page 2 and page 3 respectively in shen\_3bp\_01\_1114.pdf for 1000BASE-T1 FEC

**M:** BZ Shen

**S:** William Lo

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #2

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Move that the IEEE P802.3bp Task Force adopt the first paragraph as shown in page 9 of chen\_3bp\_01\_1114.pdf to the PCS 80B/81B Encoder.

**M:** Steven Chen

**S:** William Lo

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #3

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Move that the IEEE P802.3bp Task Force adopt the PAM2 training format as shown on page 5 of tu\_3bp\_02b\_1114.pdf

**M:** Mike Tu

**S:** William Lo

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #4

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Move that the IEEE P802.3bp Task Force adopt the 96-bit InfoField format and valid InfoField messages as shown on pages 7, 8, 9 of tu\_3bp\_02b\_1114.pdf

**M:** Mike Tu

**S:** Zhenyu Liu

**All participants in the room**

• **Y:**                **N:**                **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**                **N:**                **A:**

# Motion #5

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Move that the IEEE P802.3bp Task Force adopt the state transition rules as shown on page 10 of tu\_3bp\_02b\_1114.pdf

**M:** Mike Tu

**S:** Zhenyu Liu

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #6

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Move that the IEEE P802.3bp Task Force adopt the additive data mode scrambler after the RS encoder, shown as “Scrambler Option #2” on page 4 of tu\_3bp\_01\_1114.pdf

**M:** Mike Tu

**S:** William Lo

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**



# Motion #7

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Move that the IEEE P802.3bp Task Force adopt diagrams shown on page 9, 10, 11, 12 of tu\_3bp\_01\_1114.pdf into the corresponding PCS subclauses.

**M:** Mike Tu

**S:** Brett McClellan

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #8

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Move that the IEEE P802.3bp Task Force adopt the following text: The receiver shall force a retrain if Refresh is unreliably detected within a moving window of 50 Q/R cycles (4.32ms).

**M:** Jim Graba

**S:** William Lo

**All participants in the room**

• **Y:**                **N:**                **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**                **N:**                **A:**

# Motion #9

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Move that the IEEE P802.3bp Task Force adopt a 1 second delay between the end of training and the start of LPI mode as detailed in graba\_3bp\_01a\_1114.pdf (page #7).

**M:** Jim Graba

**S:** Mandeep Chadha

**All in room**

• **Y:**                **N:**                **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**                **N:**                **A:**

# Motion #10

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Move that the IEEE P802.3bp Task Force adopt TX distortion measurement method and test limit for 1000BASE-T1 as defined in chini\_3bp\_01\_1114.pdf

**M:** Ahmad Chini

**S:** Shaoan Dai

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #11

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Move that the IEEE P802.3bp Task Force adopt scrambler polynomials

**Master Scrambler Polynomial :  $X^{15}+X^4+1$**

**Slave Scrambler Polynomial :  $X^{15}+X^{11}+1$**

during data mode and EEE mode as defined in chini\_3bp\_01a\_0914.pdf (page #9)

**M:** Ahmad Chini

**S:** William Lo

**All participants in the room**

• **Y:**                      **N:**                      **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**                      **N:**                      **A:**

# Motion #12

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Move that the IEEE P802.3bp Task Force adopt PHY synchronization baseline proposal with timing parameters, SEND\_S signaling, Master & Slave Synchronization state machines (wang\_3bp\_01a\_1114.pdf [pages 3, 6, 9 and 10]) for the case of Auto-negotiation being bypassed.

**M:** Mehmet Tazebay

**S:** Kirsten Matheus

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #13

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Move that the IEEE P802.3bp Task Force adopt DME as the underlying signaling for autoneg timing parameters (McClellan\_3bp\_01a\_1114.pdf page 12) and the Golay-26 preamble (cordaro\_3bp\_01\_1114.pdf page 9)

**M:** Brett McClellan

**S:** Mike Tu

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #14

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Move that the 802.3bp Task Force adopt the proposed baseline autonegotiation text in mcclellan\_3bp\_03\_1114\_Autoneg\_baseline\_text\_proposal\_v0p4.pdf subject to changes by the approved motions of this Task Force.

**M:** Brett McClellan

**S:** Mehmet Tazebay

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**



# Motion #15

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Move that the IEEE P802.3bp Task Force adopt OAM (operation, administration, management) channel definition as described in Matheus\_3bp\_01\_1114.pdf

**M:** Kirsten Matheus

**S:** Efstathios Larios

**All participants in the room**

• **Y:**                **N:**                **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**                **N:**                **A:**

# Motion #16

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Move that the 802.3bp Task Force adopt the proposed baseline PCS text in `mcclellan_3bp_02_1114_8023bp_proposed_PCS_text_5.pdf` subject to changes by the approved motions of this Task Force.

**M:** Brett McClellan

**S:** Mehmet Tazebay

**All participants in the room**

• **Y:**            **N:**            **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**            **N:**            **A:**

# Motion #17

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Move that the IEEE P802.3bp Task Force adopt the training and EEE framework as defined by Lo\_3bp\_02a\_1114.pdf pages 2 to 11.

**M:** William Lo

**S:** Mandeep Chadha

**All participants in the room**

• **Y:**                **N:**                **A:**

**802.3 voters only (technical: 75% is required)**

• **Y:**                **N:**                **A:**