D3.0-1
COMMENT AGAINST 802.3ab D3.0
Name: Vahe Hagopian
Email: vahe@level1.com
Page: 40-9
Line #'s: 11-12
Comment type: EDITORIAL
Comment:
The Slave timer was removed but is still mentioned in this paragraph.
Proposed Resolution:
Replace the phrase "Upon entering this state, the SLAVE timer and the maxwait timer are started..." with "Upon entering this state, the maxwait timer is started..."
Resolution: Accept, changed

D3.0-2
COMMENT AGAINST 802.3ab D3.0
Name: Vahe Hagopian
Email: vahe@level1.com
Page: 40-16
Line #: 9
Comment type: EDITORIAL
Comment:
The sentence "PCS Reset initializes..." is in the wrong place.
Proposed Resolution:
Move "PCS Reset initializes all PCS functions" to a separate, non indented line following part (c) and add a period.
Resolution: Accept, changed. (moved to lead at line 5)

D3.0-11
COMMENT AGAINST 802.3ab D3.0
Name: Vahe Hagopian
Email: vahe@level1.com
Page: 40-29
Line number: 12.5
Comment type: EDITORIAL
COMMENT:
In the final column, there are periods separating the numbers (instead of commas).
PROPOSED RESOLUTION:
Change periods to commas
Resolution: Accept, changed

D3.0-9
802.3ab D3-0 COMMENT - AJC3.0_1
Name: Andy Castellano
E-mail: ajc@broadcom.com
Page: 40-54
Line number: 29
Subclause (figure, table) number: Table 40-5
Comment type: technical
COMMENT:
The ASM_DIR bit belongs in the Base Page with the other PAUSE bit, not in the 1000Base-T Next Page Register. This issue was raised at the Merrimack Interrim meeting (via a comment by Howard Frazier) and was greeted by silence. At the time I knew essentially nothing about the purpose of this bit, and I gather most other people were in the same boat. Now that I know more about it, I agree with Howard. The PAUSE and ASM_DIR bits are encoded as a two bit value indicating the desired PAUSE mode, and it doesn't make sense to split them up.
PROPOSED RESOLUTION OF THIS COMMENT:
Remove the ASM_DIR bit from clause 40.

In Annex 28B, change bit A6 from reserved to ASM_DIR and add appropriate definitions (see also related comment AJC3.0_2)

Resolution: accept in principle—assigned to editor

D3.0-10

802.3ab D3-0 COMMENT - AJC3.0_2

Name: Andy Castellano

E-mail: ajc@broadcom.com

Page: 40-54

Line number: 29

Subclause (figure, table) number: Table 40-5

Comment type: editorial

COMMENT:

The definition of the ASM_DIR bit says "See 37.4 for details." This does not seem appropriate, since clause 37 is 1000Base-X Auto-Negotiation, not UTP auto-negotiation (and 37.4 is the wrong section anyway).

PROPOSED RESOLUTION OF THIS COMMENT:

Remove the reference to 37.4 and replace with a copy of sections 37.2.1.4 and 37.2.4.2 (including Tables 37-2 and 37-4).

Resolution: accept in principle, assigned to editor

D3.0-8

802.3ab D3-0 COMMENT TJR-E30

Name: Tam Ross

Email: tross@level1.com

Page: 40-55

Line number: 10

Subclause (figure, table) number:

Comment type: editorial

COMMENT:

1) wording is incorrect because it incorporates a "shall" on a management function, not a PHY function.

2) As the 'graph above, this should reference the value of 9.12

3) It's slightly confusing because it really has nothing to do with operating as a DTE or repeater
4) Table 40-8 is confusing because you can be both a DTE and a manual_SLAVE etc.
PROPOSED RESOLUTION OF THIS COMMENT:
Change to:
"Bit 9.10 is used to indicate the preference to operate as MASTER (Repeater) or as SLAVE (DTE) if the Manual MASTER-SLAVE configuration Enable bit, 9.12, is not set. Usage of this bit is described in 40.5.4.3."
Resolution: Accept, changed

D3.0-3
802.3ab D3-0 COMMENT TJR-E25
Name: Tam Ross
Email: tross@level1.com
Page: 40-57
Line number: 1, 14, 19, 23
Subclause (figure, table) number:
Comment type: editorial
COMMENT:
Bits 10.14, 11, 10, and 9 may not be valid until auto-negotiation completes.
PROPOSED RESOLUTION OF THIS COMMENT:
Add the note (from 28.2.4.1.4) to each of the bit descriptions:
"This bit is only guaranteed to be valid once Auto-Negotiation has successfully completed, as indicated by bit 1.5 or, if used with Next Page exchange, after the Page Received bit (6.1) has been set to logic one."

P.S. shouldn't this be: "set to a logic one" or "set to logical one" ?
Resolution: Accept, changed for 11, 10, 9

D3.0-18

Name: Gary Huff
E-mail: ghuff@broadcom.com
Page: 40-62
Figure 40-15
Comment Type: Technical
Comment:
Figure 40-15 incorrectly assigns the null message as:
mr_np_tx[11:1] <= "0" in states Software_NULL_TX(*2) and
1000T_NULL_TX. According to Annex 28C page 28-49 the
Null
Message is defined as M[10:0] = "00000000001".
Proposed Resolution:

Change Figure 40-15 in states Software_NULL_TX(*2) and
1000T_NULL_TX from: mr_np_tx[11:1] <= "0" to:
mr_np_tx[11:2] <= "0"; mr_np_tx[1] <= "1
Resolution: Accept, editor to change

D3.0-7
802.3ab D3-0 COMMENT TJR-E29
Name: Tam Ross
Email: tross@level1.com
Page: 40-75
Line number: 1
Subclause (figure, table) number: Figure 40-22
Comment type: editorial
COMMENT:
Figure Title should go on same page as figure.
PROPOSED RESOLUTION OF THIS COMMENT:
move it.
Resolution: Accept, changed

D3.0-17
COMMENT AGAINST 802.3ab D3.0
Name: Chris Di Minico

Email: cd@mohawk-cdt.com
Page: 40-89
Line #: 31
Comment type: Technical
Comment:
Change 25 mV peak-to-peak to 35 mV peak-to-peak
Rationale:
Sailesh and I have been discussing this for some time.
Most of the rationale provided is based on those discussions
and is primarily based on Sailesh's input. Generally, I feel 25
mv peak-to-peak does not sufficiently characterize the noise
environment and I support the increase in noise rejection.
The change is to account for the noise on all four pairs.
The test as specified is to measure the BER when we add
noise to each pair individually; but the test should include the
noise of the other pairs which can be included by increasing
the noise the individual pair tested. The probability of error of
a 4D-PAM5 symbol in the presence of Gausian noise is
related to the sum of the squares of the noise power. It is
sufficient to add the equivalent noise power onto one pair
alone as long as it includes the additional noise contributions
from other pairs.

Resolution: Rejected. As per Task Force vote, value kept at
25 mV peak-to-peak.

D3.0-4
802.3ab D3-0 COMMENT TJR-E26
Name: Tam Ross
Email: tross@level1.com
Page: 40-98
Line number: 34
Subclause (figure, table) number: 40-34
Comment type: editorial

COMMENT:
If RND(Sample_Timer)=0, the state machine is hung. Since no transition occurred, Sample_Timer will never be restarted, and the "other" state will never attempted.
PROPOSED RESOLUTION OF THIS COMMENT:
Either change sample_timer to a free running timer, or add a loopback state in 40-99 from both states (back to themselves) with the condition:
"Sample_timer-Done & RND(Sample_Timer)=0."
Also remove the TD_AUTONEG=idle condition on all transitions, because this will now block the desired state change a significant percentage of the time (up to 25%).
Resolution: Accepted and text change as per text provided by Dan Dove. Draft changed 7/8/98

D3.0-5
802.3ab D3-0 COMMENT TJR-E27
Name: Tam Ross
Email: tross@level1.com
Page: 40-98
Line number: 17
Subclause (figure, table) number:
Comment type: editorial
COMMENT:
unclear negation. If True is " A and B" does occur, False should be "A and B" does not occur. I'm sure some combination of and/or/neither/nor would be logically correct and grammatically clear, but I can't find one. So,
PROPOSED RESOLUTION OF THIS COMMENT:
change to: "FALSE: otherwise".
Resolution: Accepted and text change as per text provided by Dan Dove. Draft changed 7/8/98

D3.0-6
802.3ab D3-0 COMMENT TJR-E28
Name: Tam Ross

Email: tross@level1.com
Page: 40-99
Line number: 8
Subclause (figure, table) number: Figure 40-34
Comment type: editorial
COMMENT:
"&" should be "*"
PROPOSED RESOLUTION OF THIS COMMENT:
change them.
Resolution—editor to change (note that this is a technical change)

D3.0-12
COMMENT No. KK10-02
Ken Kimura
Tsushin Kogyo Electric Wire & Cable Co., Ltd
tel:+81-492-31-1232
fax:+81-492-33-2446
E-mail:tushin@saitama-j.or.jp
Page: 40-115
line:34
Subclause: 40.7.3.1 Near End Crosstalk
Comment :
Title for the clause 40.7.3.1 is not same as 40.7.3.2
P.R.:
Title of the subclause 40.7.3.1 will be "Near End Crosstalk (NEXT)
Resolution: Accept, changed

D3.0-13
COMMENT No. KK10-03
Ken Kimura
Tsushin Kogyo Electric Wire & Cable Co., Ltd
tel:+81-492-31-1232
fax:+81-492-33-2446

E-mail:tushin@saitama-j.or.jp
Page: 20C-2
line : 39
subclause : 40CH ANNEX 28C
Comment:
I think suffix of the subclause 40 title "(1000BASE-T2)" is probably only mistake.
P.R:
The suffix of the title for the subclause40 will be "(1000BASE-T)" without "2".
Accept: Editor to change

Comment D2-2.16
COMMENT AGAINST 802.3ab D2.2
Name: John Creigh
Email address: jcreigh@broadcom.com
Page: 40-88,89
Line #: 48 on 40-88, 14 on 40-89
Subclause/Figure/Table #: 40.6.1.2.5
Comment type: TECHNICAL
0.250 ns for the high pass filtered jitter is unnecessarily restrictive and difficult to measure. 0.500 ns does not significantly degrade the receiver performance and is reasonable to measure.

Proposed resolution:
Change the master and slave high pass filtered jitter to 0.500 ns.

Additionally, change the 0.100ns on page 40-88 link 39 to 0.300 ns.
Resolution: modified as per text proided by John Creigh with additions from Sailesh Rao. Chan ge made in draft 7/8/98.
COMMENTS FROM THE FLOOR: JULY 7
Tam Ross

Page 40-56
Line 15
COMMENT/PROPOSED CHANGE
Type should equal RO/LH.
Add LH=Latch High
Resolution: Accept, done

Andy Castellano
Page 40-56
Table 40-6
Would like a clarification of the definition of self clear. Does this mean clear on read?
Resolution: Accept, done

40-132

In PICs table defining timing requirements, add "MAX" to all values.
Resolution: Accept, done

Steve Pryor
Page 1-1
Line 12
Insert "for" after the word "requirements," change "and" at end of line to ","
Line 13
Change "100BASE-T" to "100BASE-TX" and add "and 1000BASE-T." To the end of the line.
Line 33
Insert after "100BASE-" the phrase ",100BASE-TX and 1000BASE-T"
Line 47
Replace "," after "24" with "and"
Page 1-2
Line 35
Check for definition of "receiver training, blind mode"
Resolution: accept, done

Steve Pryor
Page 28D-1
Check and update all cross references to clause 40.
Line 12
Change "DTEs" to PHY operations"
Line 33
Check use of "x" in 28.3.1
Resolution: accpet, done

COMMENTS FROM THE FLOOR, JULY 8
Abhibit Phanse
NCR
Page 40-87, 88
40.6.1.2.5
Technical
0.100 ns for peak-to=peak jitter at the output of the MDI relative to the corresponding edge of the TX_CLK is very restrictive. 0.0250 ns of high pass filtered jitter on he TX_CLK is also very restrictive. These numbers will restrict the integration of the PHY transciever with the MAC layer (with PCI bus) and switch layer fabric on extremely noisy silicon substrates. Relaxing these numbers as proposed does not show any significant degradation in receiver performance (degradation of 1.5 dB SNR is seen at 120 meters worst-cable, including eal-life worst-case jitter contrbuted by non-=ideal circuits in the implementation.)
Proposed resolution: Change master and slave high pass filtered jitter to 0.500 ns.
Change the jitter at the output of the MDI relativ to TX-TCLK (on line 41, pg 87) to 0.200 ns.

Resolution: deemed resolved by the response accepted for 2-2.16.

Bob Campbell
Page 40-88

40.6.1.3.3

Comment
Replace 40.6.1.3.3 with proposed drop-in text and insert proposed Annex 40B.

Response: Accept common mode noise clamp and test in principle and adopt test levels that corrspond to a 3V/meter radiated immunity test as specified in IEC 61000-4-3.