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|                 8802-3/802.3 REVISION REQUEST 1136                 |      2
+====================================================================+      3
                                                                           4
DATE:                 29th Apr, 2004                                       5
NAME:                 Peter Bradshaw                                       6
COMPANY/AFFILIATION:  BitBlitz Communications                             7
E-MAIL:               pbradshaw@bitblitz.com                              8
                                                                           9
REQUESTED REVISION:                                                       10
    STANDARD:         IEEE Std 802.3ae-2002                               11
    CLAUSE NUMBER:    45.5.5.16                                           12
    CLAUSE TITLE:     Electrical characteristics                         13
                                                                          14
PROPOSED REVISION TEXT:                                                   15
                                                                          16
Make item EC7 optional, as in [N/A]. For details see attached draft.     17
                                                                          18
RATIONALE FOR REVISION:                                                   19
                                                                          20
Item EC7 specifies an IOH of <= -4mA at Vi = 1.0V, and makes it          21
Mandatory. The item refers to Section 45.4.1, where there is appended:-  22
                                                                          23
NOTE - It is possible to implement the MDIO electrical interface using   24
open drain buffers and a weak resistive pull up to a VDD of 1.2V.        25
                                                                          26
The specification refers to Table 45-65, where there is a note 'a' to the 27
corresponding item:-                                                      28
                                                                          29
'a' IOH parameter is not applicable to open drain drivers.               30
                                                                          31
Although a resistive pullup of 50 ohms would meet the IOH spec, this     32
hardly qualifies as a "weak" pullup, and indeed the IOL spec would need  33
to be better than 50 mA to even come close to working.                   34
                                                                          35
IMPACT ON EXISTING NETWORKS:                                             36
                                                                          37
I think any 'open drain' MDIO drivers will have followed the Table 45-65 38
requirements, rather than EC7. There should then be no impact.           39
                                                                          40
+--------------------------------------------------------------------+     41
| Please attach supporting material, if any                          |     42
| Submit to:- Bob Grow, Chair IEEE 802.3                             |     43
|             E-Mail: Bob.Grow@intel.com                             |     44
|                                                                    |     45
|             +------- For official 802.3 use -----------+          |     46
|             | REV REQ NUMBER: 1136                      |          |     47
|             | DATE RECEIVED: 29th Apr, 2004             |          |     48
|             | EDITORIAL/TECHNICAL                       |          |     49
|             | ACCEPTED/DENIED                           |          |     50
|             | BALLOT REQ'D YES/NO                       |          |     51
|             | COMMENTS: 08-Mar-06 Ver: D3.0 Status: P   |          |     52
+-------------+-------------------------------------------+----------+     53
| For information about this Revision Request see -                  |     54
|http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1136 |
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Add the following entry to the end of the table found in subclause 45.5.4.3 'Major capabilities/options':

*ODB	Open drain buffer	45.4.1		O	Yes [ ] No [ ]

Change PICS entry EC7 found in subclause 45.5.5.16 as follows:

EC7	I_{OH}	45.4.1	$\leq$ –4mA at V_I = 1.0V	!ODB:M	Yes [ ] N/A[ ]