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+------------------------------------------------------------------+      1
|                8802-3/802.3 REVISION REQUEST 1183               |      2
+------------------------------------------------------------------+      3
                                                                          4
DATE:                  19th Sep, 2006                                     5
NAME:                  Brett McClellan                                    6
COMPANY/AFFILIATION:   Solarflare Communications                         7
E-MAIL:                bmcclellan@solarflare.com                          8
                                                                          9
REQUESTED REVISION:                                                      10
    STANDARD:          IEEE Std 802.3an-2006                             11
    CLAUSE NUMBER:     45.2.1.60                                         12
    CLAUSE TITLE:      10GBASE-T pair swap and polarity register         13
                                                                         14
PROPOSED REVISION TEXT:                                                  15
                                                                         16
802.3an-2006 page 32                                                     17
802.3an D4.0 page 42 line 25                                             18
                                                                         19
In table Table 45-49, change the description for bits 1.130.1:0         20
(MDI/MDI-X connection) from:                                            21
"1 1 = No crossover                                                     22
1 0 = Pair A/B crossover only                                           23
0 1 = Pair C/D crossover only                                           24
0 0 = Pair A/B and pair C/D crossover "                                 25
                                                                         26
to:                                                                     27
"1 1 = No crossover                                                     28
1 0 = Reserved                                                          29
0 1 = Reserved                                                          30
0 0 = Pair A/B and pair C/D crossover "                                 31
                                                                         32
                                                                         33
RATIONALE FOR REVISION:                                                 34
                                                                         35
The current table description of 1.130.1:0 does not match the text     36
description (see text below). 45.2.1.60.5 states that bits 1.130.1:0    37
indicate the resolution of the automatic MDI/MDI-X configuration defined 38
in section 55.4.4. 55.4.4 state that automatic MDI/MDI-X configuration  39
shall comply with 40.4.4.1 and 40.4.4.2. However, the only resolution of 40
the auto MDI/MDI-X function specified by 40.4.4.1 and 40.4.4.2 will be   41
either no crossover (1.130.1:0 = 11) or pair A/B and pair C/D crossover  42
(1.130.1:0 = 00). Pair A/B crossover only (1.130.1:0 = 10) and pair A/B  43
crossover only (1.130.1:0 = 01) are not valid resolutions of the        44
automatic MDI/MDI-X configuration specified in 40.4.4.1 and 40.4.4.2.    45
                                                                         46
                                                                         47
                                                                         48
45.2.1.60.5 MDI/MDI-X connection (1.130.1:0)                            49
Bits 1.130.1:0 indicate the resolution of the automatic MDI/MDI-X       50
configuration defined in section 55.4.4. This function is intended to   51
eliminate the need for crossover cables between similar devices. The    52
automatic configuration method used shall comply with 40.4.4.1 and      53
40.4.4.2.                                                               54
```

55.4.4 Automatic MDI/MDI-X configuration
Automatic MDI/MDI-X configuration is intended to eliminate the need for
crossover cables between similar devices. Automatic MDI/MDI-X
configuration is required for 10GBASE-T devices and shall comply with
40.4.4.1 and 40.4.4.2.

IMPACT ON EXISTING NETWORKS:

None. This is a clarification of the use of bits 1.130.1:0.


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+---------------------------------------------------------------------+
| Please attach supporting material, if any                           |
| Submit to:- Bob Grow, Chair IEEE 802.3                              |
|             E-Mail: Bob.Grow@intel.com                              |
|                                                                     |
|             +------- For official 802.3 use -----------+           |
|             | REV REQ NUMBER: 1183                      |           |
|             | DATE RECEIVED: 19th Sep, 2006             |           |
|             | EDITORIAL/TECHNICAL                       |           |
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|             | BALLOT REQ'D YES/NO                       |           |
|             | COMMENTS: 14-Mar-07 Ver: D1.1 Status: V  |           |
+-------------+-------------------------------------------+-----------+
| For information about this Revision Request see -                   |
|http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1183 |
+---------------------------------------------------------------------+
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