Response to Comment #4 on Page Received
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Brett McClellan
Todd Thompson
Solarflare Communications

Supporters
- Arthur Marris
  Author of comment #4 and 802.3ap editor of Clause 45
- Sanjay Kasturia
  802.3an editor-in-chief
- Mike McConnell
  803.3an editor of Clause 45

Page Received
- Page Received is a status bit with identical function between Clause 28 and Clause 45.
- When first set, Page Received indicates that a base page has been received and is ready to be read by management.
- Subsequently, Page Received indicates that a next page has been received and is ready to be read by management.

Page Received in Clause 28
- Page Received
  Register bit 6.1
  -maps to state variable: mr_page_rx (Table 28-8)
  -reset upon reading register 6 (28.2.4.1.5)
  Indicates a base page or next page may be read from register 5
  -see 28.2.4.1.5, 28.3.1, Fig 28-16

Page Received in Clause 45
- Page Received
  Register bit 7.1.6
  -a copy of Clause 22 bit 6.1 (45.2.7.2.2)
  -maps to state variable: mr_page_rx (Table 28-8)
  -reset upon reading register 7.1 (45.2.7.2.2)
  When first set, 7.1.6 indicates a base page may be read from AN LP base page ability register 7.19
  -see 28.2.4.1.5, 28.3.1, Fig 28-16, 45.2.7.7
  -Also indicates that the contents of AN advertisement register 7.16 are valid (45.2.7.2.2)
  Subsequently, 7.1.6 indicates an extended next page may be read from AN LP XNP ability registers 7.25-7.27
  -see (45.2.7.2.2)

Comment #4
- Comment #4
  45.2.7.2.2 (see last page)
  "Consider changing 'register 7.16' to 'the AN LP base page ability register 7.19-7.21'"
- The current text is accurate and does not contain a technical error.
  The suggested change is technically correct and would enhance the clarity of the functional description of register bit 7.1.6.
  -This enhancement may be added by the comment author in 802.3ap

Supporting Material

Page Received in Clause 28
- 28.2.4.1.5
  The Page Received bit (6.1) shall be set to logic one to indicate that a new Link Codeword has been received and stored in the Auto-

Negotiation Link Partner ability register. The Page Received bit shall be reset to logic zero on a read of the Auto-Negotiation expansion register (Register 6).

• Table 28-8

State diagram variable	MII register	MDIO register
mr_page_rx	6.1 Page Received	7.1.6 Page Received

Page Received in Clause 28 cont.

• 28.3.1

mr_page_rx

Status indicating whether a New Page has been received. A New Page has been successfully received when acknowledge_match=true and consistency_match=true and the Link Codeword has been written to mr_lp_adv_ability[16:1].

Values: false; a New Page has not been received.
true; a New Page has been received.

Page Received in Clause 28 cont.

• Figure 28-16-Arbitration state diagram

mr_page_rx <= false in states:
-AUTO-NEGOTIATION ENABLE
-ABILITY DETECT
-TRANSMIT DISABLE
-NEXT PAGE WAIT

mr_page_rx <= true in state:
-COMPLETE ACKNOWLEDGE
-mr_page_rx is set after any page is received (base page or next page)

Page Received in Clause 45 cont.

• 45.2.7.2.2 Page received (7.1.6)

The Page received bit (7.1.6) shall be set to one to indicate that a new Link Codeword has been received and stored in the AN LP XNP ability registers 7.25-7.27. The contents of register 7.16 are valid when bit 7.1.6 is set the first time during the Auto-Negotiation. The Page received bit shall be reset to zero on a read of the AN status register (Register 7.1) or if present, the Auto-Negotiation expansion register 6 (see 28.2.4.5). This bit is a copy of bit 6.1 in register 6, if present (see 28.2.4.1).

• 45.2.7.7

Register 7.19 is a copy of register 5, if present (See 28.2.4.1).