

IEEE P802.3az unsatisfied comments comments

Cl 22	SC 22.7.a.2.3	P 32	L 15	# 10165	Cl 22	SC 22.2.2.6a	P 28	L 46	# 10167
Frazier, Howard	Broadcom Corporation				Frazier, Howard		Broadcom Corporation		
<b>Comment Type</b>	<b>TR</b>	<b>Comment Status</b>	<b>R</b>		<b>Comment Type</b>	<b>TR</b>	<b>Comment Status</b>	<b>R</b>	
<b>SuggestedRemedy</b>					<b>SuggestedRemedy</b>				
Take out the state diagram. The 100BASE-TX PHY with LPI should be responsible for asserting and deasserting CRS, and then implement the Suggested Remedy in my general comment concerning the structure of the draft amendment.					Remove the abstract service primitive from the timing diagram, and then implement the Suggested Remedy in my general comment concerning the structure of the draft amendment.				
<b>Response</b>	<b>Response Status</b>	<b>U</b>			<b>Response</b>	<b>Response Status</b>	<b>U</b>		
REJECT.					REJECT.				
In favor of accepting the proposed reject:									
Yes: 15									
No: 0									
Abstain: 7									
The state machine in the Reconciliation Sublayer was the cornerstone of the baseline (law_01_1108) that was adopted by the Task Force.					The diagram is based on the proposal "law_01_1108" that was adopted as the baseline for this section.				
It was considered advantageous to have the control of the PLS_CARRIER.indication in the RS for a number of reasons:					The representation of PLS_CARRIER.indication adds clarity to the diagram without any ambiguity.				
1. It keeps the PHY receive and transmit paths separate (the PHY considers CRS to be part of the receive path).					This diagram would be present regardless of the document structure chosen.				
2. It allows the PHY to go to sleep without having to maintain state & control the wake process.									
3. It keeps the "data holdback" function close to the MAC and egress buffers, where it would be implemented in most designs.									
4. It frees the PHY from having to participate in the wake time negotiation process (that is controlled using LLD P frames).									
5. It works for PHYs that operate at speeds greater than 1Gbps, so the same mechanism can be used for all speeds.									
The state diagram would be present (or deleted according to the comment) whether the proposed changes to the document are accepted or not.									

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Cl 00 SC 0 P1 L1 # 10174 # 10201

Frazier, Howard Broadcastcom Corporation Intel

Comment Type TR Comment Status A Comment Type TR Comment Status A

This is a general comment regarding the structure of the draft amendment.  
 As an amendment to IEEE Std 802.3, the material in this draft will eventually be folded into the base standard. When this happens, the definitions for the 100BASE-X and 1000BASE-X Physical Coding Sublayers will be substantially changed, and the changes will be difficult to discern. The definitions for the MII and GMII will also be substantially changed.

The 100BASE-X and 1000BASE-X PCSs are used for many other port types besides 100BASE-TX and 1000BASE-KX. Among these are 100BASE-FX, 100BASE-LX10, 100BASE-BX10, 1000BASE-SX, 1000BASE-LX, 1000BASE-CX, 1000BASE-LX10, 1000BASE-BX10, 1000BASE-PX10, 1000BASE-PX20, 10G/1GBASE-PRX-D/U1, 10G/1GBASE-PRX-D/U2, and 10G/1GBASE-PRX-D/U3.

These port types are not included in the set of objectives for P802.3az, and the specifications for the PCS and MII for these port types must not be changed or effected in any way by P802.3az. Each of these port types must have a current IEEE Std 802.3 PCS and MII to reference.

*SuggestedRemedy*  
 There are many ways to solve this problem. I prefer the following approach:

1. Preserve the definitions for the MII, GMII, 100BASE-X PCS, and 1000BASE-X PCS without change.
2. Define the changes required to support EEE in a set of normative annexes, i.e. Annex 24A for Clause 24, and Annex 25A for Clause 25, etc. Example text for Annex 24A and Annex 25A have been provided by me to the task force chair.
3. Refer to these normative annexes from the body of Clause 78.

Response Response Status U  
 ACCEPT IN PRINCIPLE.

See response to Comment #410

doc-structure

I can't figure out what the last sentence is trying to specify. It also seems that the edits treat service primitives as logic signals. Service primitives are not logic signals, they are events and therefore can't remain in any state. Though the value sent in a primitive may have state, the primitive is only generated when the value changes state. So, it may not be best to use the term set in earlier sentences either.

*SuggestedRemedy*  
 If I understand the intent right, the following would be more accurate, though I don't believe there is a way to put timing requirements in the service primitives, (only in the layers that cause generation of the primitive) so the following isn't correct either (this needs thought and work):

An LPI\_IDLE.request primitive with value ASSERT shall not be generated unless the attached link is operational (i.e. link\_status = OK, according to the underlying PCS/PMA). The PHY shall not cause an LP\_IDLE.request primitive with value ASSERT to be generated for at least one second following a link\_status change to OK.

A similar problem exists in 46.1.7.  
 Response Response Status U  
 ACCEPT IN PRINCIPLE.

Accept the suggested remedy for this clause. Make a similar change for 46.1.7.  
 Also add a reference to 78.1.2.1.2.

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<b>Cl 78</b>	<b>SC 78.1.2.1.4</b>	<b>P 228</b>	<b>L 26</b>	<b># 10202</b>	<b>Cl 49</b>	<b>SC 49.2.9</b>	<b>P 150</b>	<b>L 28</b>	<b># 20127</b>
Grow, Robert		Intel			Dawe, Piers		Independent		
<b>Comment Type</b>	<b>TR</b>	<b>Comment Status</b>	<b>A</b>		<b>Comment Type</b>	<b>TR</b>	<b>Comment Status</b>	<b>R</b>	
<p>Is signaling of LPI between an RS and its link partner, or between the RS and the lower parts of the PHY? If the PHY has no option to signal the request, then the language is appropriate, but it seems inconsistent with MII text describing the xMII signals. The effect of the primitive is to generate signals on the MII and that isn't specified here, but should be.</p> <p><i>SuggestedRemedy</i></p> <p>Assure MII clause are consistent in what layer is signaling to what peer layer, and that any additional requirements on conveying the LPI request in lower sublayers is properly represented. Add generic text that covers the three MII types -- how the assert or deassert is signaled, can probably be generic using the MII definition of assert low power idle.</p> <p><b>Response</b> <i>Response Status</i> <b>U</b></p> <p>ACCEPT IN PRINCIPLE.</p> <p>The PHY has no option to signal the request so the language is appropriate however editor will look into adding clarifying text as in the suggested remedy.</p> <p>Editor to check if that this is clear in the xMII clauses.</p>									

<b>Cl 78</b>	<b>SC 78.1.2.1</b>	<b>P 228</b>	<b>L 47</b>	<b># 10203</b>
Grow, Robert		Intel		
<b>Comment Type</b>	<b>TR</b>	<b>Comment Status</b>	<b>A</b>	
<p>When generated is too generic.</p> <p><i>SuggestedRemedy</i></p> <p>The primitive is generated because of a change from something (xMII normal Idle to assert low power idle) and vise versa.</p> <p><b>Response</b> <i>Response Status</i> <b>U</b></p> <p>ACCEPT IN PRINCIPLE.</p> <p>Adopt suggested remedy with editorial licence to clear typos/grammatical errors.</p>				

<b>Response</b>	<i>Response Status</i> <b>W</b>
REJECT.	
<p>This was discussed at length during the resolution of comments against draft 2.0 and the task force decided against the suggested remedy.</p>	