Loopback comment resolution

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Draft 1.1 Loopbacks

- **Required PCS Loopback**
- **Required PMD Loopback**
- **Optional System Loopback**
- **Optional Line Loopback**
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<td>Delete optional line loopback due to clock issues</td>
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<td>326/328</td>
<td>Make line loopback mandatory</td>
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<td>Make system side loopback optional for any PMA not just uppermost</td>
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<td>If serdes function in a PMA, then must support one of the following: loopback or test patterns</td>
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<td>Encompass as much of the PMA circuitry as is practical for system loopback</td>
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Line loopback

• 1
  • Delete optional line loopback due to clock issues
  • Proposed editor action: Reject, most devices in 10G successfully implement a line loopback

• 326/328
  • Make line loopback mandatory
  • Proposed editor action: Reject, in the logic track in Dallas there was no support for a mandatory line loopback

• 624
  • Limit line loopback based on PMD type
  • Proposed editor action: Reject. Line loopback is only meaningful if you can loop back the lanes of the PMD. If there are compelling reasons not to provide it for a particular implementation, loopback is optional.
System loopback

• 182
  • Make system loopback optional for any pma, not just the upper most
  • Proposed editor action: Accept in principle

• 655
  • System loopback optional at any exposed interface (trowbridge_02_0109)
  • Proposed editor action: Accept
When to Support Loopbacks

• 293
  • The title of the sub-clause should be changed to: PMA test patterns (optional)
  • Further clarification should be added that if the PMA contains a SerDes function (for example 10:4 as in 100GBASE-LR4 and 100GBASE-ER4) then test pattern support is not optional, and test patterns have to be supported.
  • Further clarification should be added that if the PMA does not support test patterns, then sub-clause 83.5.7 is not optional, and PMA system loopback mode must be supported. In other words, either PMA test patterns are optional or PMA PMA system loopback is optional, but not both. This is to permit verification of nAUI functionality by the host. If serdes function in a PMA, then must support one of the following: loopback or test patterns. Further clarification should be added that if the PMA does not support test patterns, then sub-clause 83.5.7 is not optional, and PMA system loopback mode must be supported. In other words, either PMA test patterns are optional or PMA PMA system loopback is optional, but not both. This is to permit verification of nAUI functionality by the host.
  • Proposed editor action: Accept first part, 2nd part reject.

• 619
  • Too many loopback and test patterns (dawe_02_0109)
  • Proposed editor action: Reject

• 656
  • Combine loopback with pattern generation/detection
  • Proposed editor action: PROPOSED ACCEPT IN PRINCIPLE. See presentation trowbridge_02_0109. If it is decided to only generate test patterns in Tx path and detect in Rx path, the problem goes away. Per presentation, if there is a decision to retain detection in Tx path, just gearbox test pattern even though garbage is sent downstream.