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# Port task group report

P1394B

Fort Lauderdale  
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# — Scope includes:

- Define handling of arbitration and data signals through beta mode ports i.e. 'normal operation'.
- Define forwarding of packets between ports within a 1394B PHY (ports may be at different speeds and DS or beta mode).
- Define handling of errors in received signals
  - notification of errored packets
  - exit 'normal operation' to Start-up
- Generate text, state machines, C-code, timing parameters.

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# Activity

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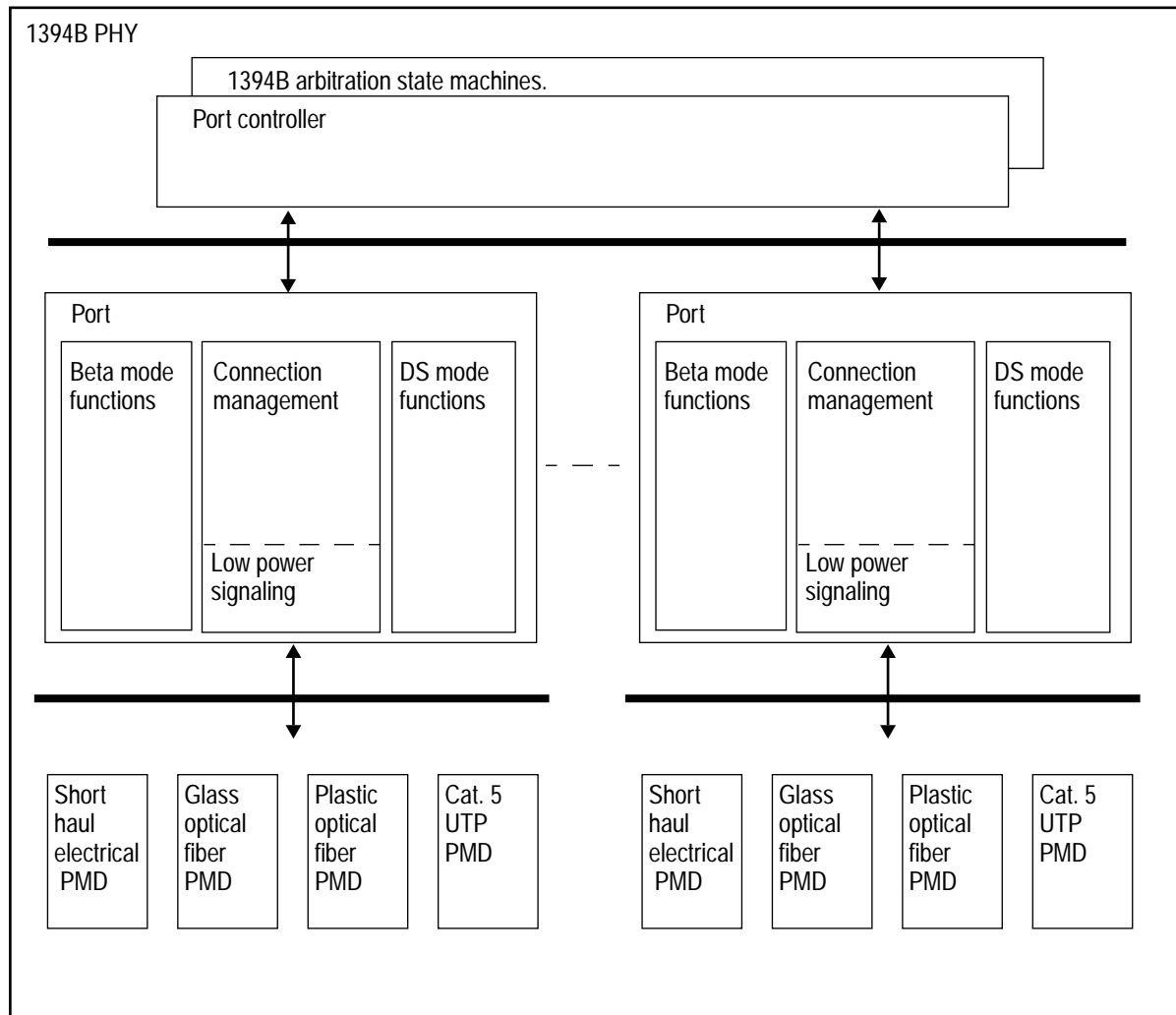
- email discussions of:
  - Speed signaling
  - Error handling
  - Port logic sharing (or not)
- Liaison with Upstarts
- Substantial additions to draft text

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# Progress

- Majority feel that sharing of port logic elements (specifically the 8B10B data coder and scrambler) is not worthwhile.
- Generated a proposal for an interface and service model.
- New speed signaling proposal - removes facility to “update” S200 to S400 speed signals - onus is on rxing DS port to make a definite decision.
- Some unilateral (and therefore subject to group review and discussion) actions by task group chair:
  - C-code generation
  - More text for draft
  - byte padding rather than bit padding

# Model



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# — Proposed BPORT services

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- Beta port activate request
  - Status:ACTIVE/INACTIVE. Operating Speed.
- Beta port clock indication
- Beta port training request
  - TRAIN/ LOCK.
- Beta port control request
- Beta port speed signal request
- Beta port data request
- Beta port control indication
- Beta port speed signal indication
- Beta port data indication
- Beta port error indication

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# — Proposed CM services

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- CM status indication
  - Port mode: DS/BETA.
  - Port speed.
  - Port status: DISCONNECTED/ CONNECTED/FAULT
- CM action request
  - Action: SUSPEND/RESUME/DISABLE.
  - Port mode: DS/BETA.

## Proposed PMD services

- PMD data request and indication.
- PMD status request and indication.

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# — Open Issues

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- **Error handling**
  - we may want to add a signal at the PHY/LINK interface to indicate that the PHY has detected an error in a packet (which the CRC may not detect).
- **Port controller specification**
  - buffering, retiming and forwarding of packets to multiple ports at multiple speeds and multiple modes (DS, beta).
- **Timing specifications - need to be observable to be testable.**
- **Refinement of draft text and c-code.**

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# — Plan

- Review and comments on current draft invited.
- Continue discussions of open issues via email:

[bport@zayante.com](mailto:bport@zayante.com)

(see [www.zayante.com/p1394b](http://www.zayante.com/p1394b) for joining instructions).