Link Synchronization proposal at 802.3cy

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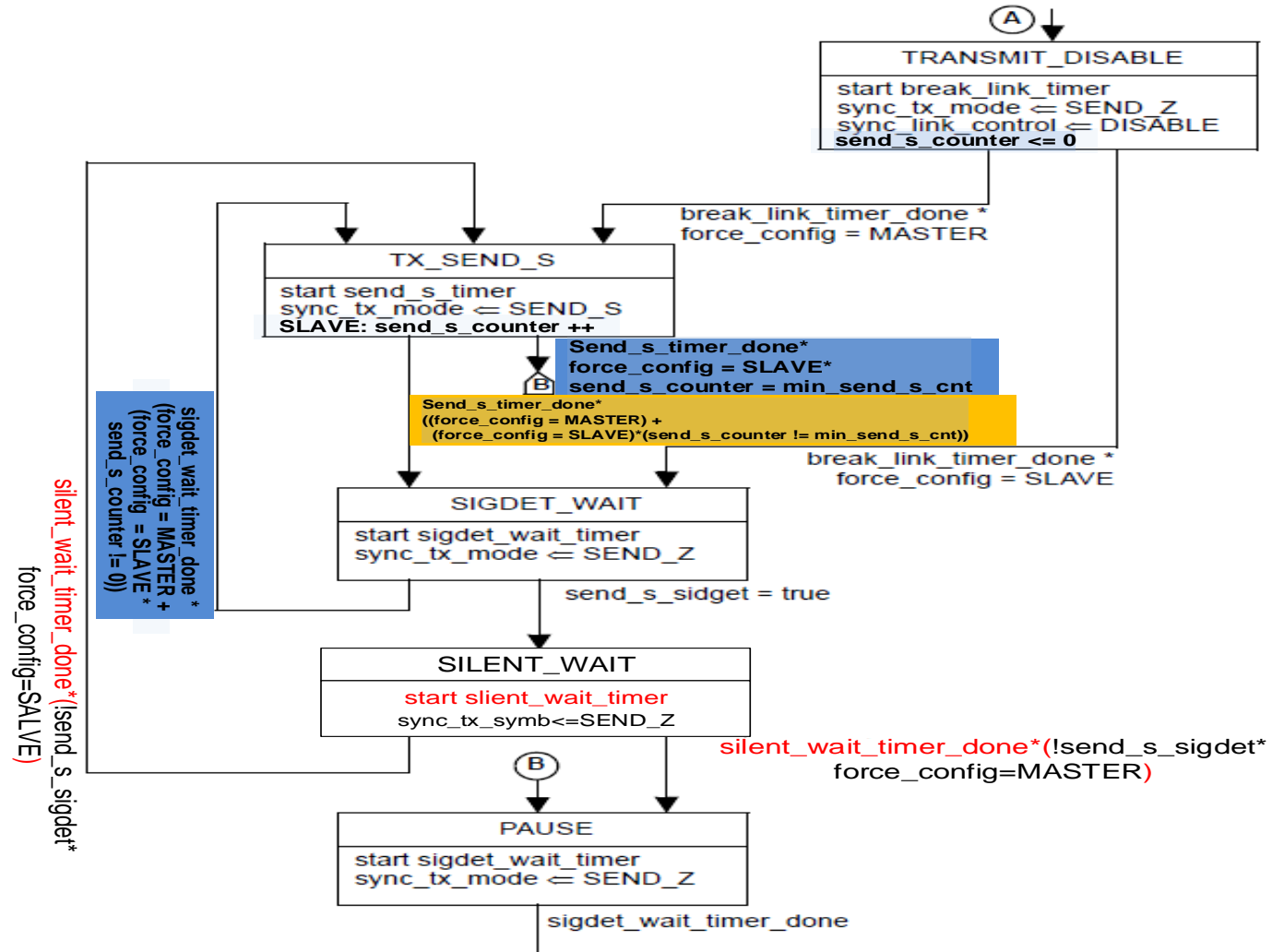802.3cy TF, interim meeting, Jan 18, 2022

Introduction

- At 802.3cy interim meeting on Jan 11, 2022
  - Motion #6 has been passed to adopt scheme proposed at Wu_3cy_01a_0122.pdf

- At presentation Wu_3cy_02a_0122.pdf, a state diagram at Page 10 was proposed.

- The timer ranges are proposed to be tighten up to avoid possible overlapping of send_s signals from both sides. The possible overlapping result from accumulation the frame width difference after 16 SLAVE frames of the worst-case timer selections in the implementations at link partners.

  New Timers ranges are proposed:
  - send_s_timer: 1.25 µs ± 0.025 ~~0.05~~ µs
  - sigdet_wait_timer: 5 µs ± 0.025 ~~0.15~~ µs
  - silent_wait_timer: 5 µs ± 0.025 ~~0.05~~ µs

Final proposed state machine at 802.3cy

PHY Link Synchronization state diagram- 802.3cy

Summary

- Propose to adopt the state diagram on Page 3
- Add in slient_wait_timer
- The timers ranges are:
  - send_s_timer: 1.25 µs ± 0.025 µs
  - sigdet_wait_timer: 5.00 µs ± 0.025 µs
  - silent_wait_timer: 1.25 µs ± 0.025 µs

Questions and Discussions

Motion #:

- Motion #n: Move to adopt the link synchronization scheme update proposed on Page 4 in wu_3cy_03_0122.pdf.

M: Peter Wu

 S: Mike Tu

Technical (>=75%)

A: D: A:

Motion