IEEE802.3ch Timing and Next Steps

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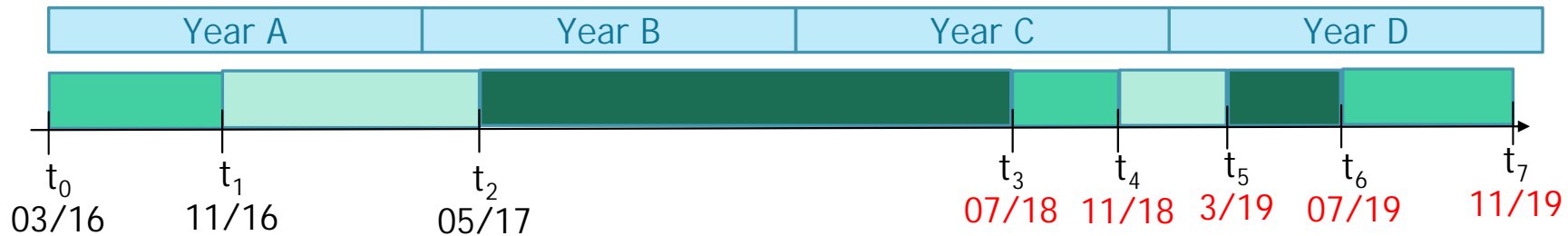
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IEEE P802.3ch

Typical Automotive Ethernet PHY IEEE Timing

Timeline from CFI with dates added.

- ▶ t_0 – Idea for CFI.
- ▶ t_1 – CFI approved. Start to work on PAR Components.
- ▶ t_2 – PAR approved. Start TF meetings and select technology components.
- ▶ t_3 – D1.0 complete. Refine specification.
- ▶ t_4 – D2.0 complete. WG ballot begins.
- ▶ t_5 – D3.0 complete. Sponsor ballot begins.
- ▶ t_6 – Sponsor ballot complete.
- ▶ t_7 – Completed specification available.

Year A	Year B	Year C	Year D

t_0	t_1	t_2	t_3	t_4	t_5	t_6	t_7
03/16	11/16	05/17	07/18	11/18	3/19	07/19	11/19

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IEEE P802.3 P802.3ch NGAUTO Ethernet PHY DRAFT Timeline

- September 2017 - Review baseline proposals (Draft 0.1 skeleton)
- March 2018 – Draft 0.2 for TF review (link segment)
- September 2018 – baselines selected, D1.0 for TF review
- November 2018 – last technical feature
  - D1.1 (January), D1.2 (OOS February Interim), D1.3 (March), (OOS April Interim)?
- May 2019 – D2.0, start WG ballot
  - 2 recircs, July 2019 (D2.1), September 2019 (D2.2) (OOS interim in October to get to sponsor ballot in November 2019)
- November 2019 – D3.0, begin Sponsor ballot
  - D3.1 (January 2020), D3.2 (March) recirculations (Potential April OOS Interim)
- May/June 2020 SASB approval

Timing Questions

- Can we be ready for TF review in 6 months?
  - No, 10-12 months is more realistic based on discussions in TF.

- Final silicon (Engineering Samples) is currently projected to be needed mid 2021. What does this mean for the spec timing?

Goals to TF Ballot

- March 2018
  - OEM topology Information and power consumption expectations
  - Cabling System Model (IL & RL at a minimum)
  - Signaling type and modulation (2.5 Gb/s and 10 Gb/s)
  - PHY vendors provide information on what type of EMC test data is preferred
- May 2018
  - Cabling System Model (TCL, ELTCTL)
  - Finalized: Signaling type and modulation (2.5 Gb/s and 10 Gb/s)
  - MDI RL limit (baseline to be provided to PoDL)
- July 2018
  - Line Coding and FEC initial proposals
  - PoDL definition (solicit help from bt)
  - OEMs provide results of Early EMC testing

Goals to TF Ballot

- September 2018
    - Line Coding and FEC updated proposals
    - PoDL definition baseline proposals
    - Initial Register maps, EEE support, PICs

- November 2018
    - Line Coding and FEC baseline adopted
    - Complete Register maps, EEE support, PICs