Cl 73 AN Baseline Proposal for eight-lane 800GBASE-CR8 and 800GBASE-KR8

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Supporters

- Adee Ran, Cisco
- Arthur Marris, Cadence

Background

- At the 2 May 2022 IEEE P802.3df electrical ad hoc, a Clause 73 baseline proposal for eight-lane 800GBASE-CR8 and 800GBASE-KR8 was reviewed
  - https://www.ieee802.org/3/df/public/adhoc/electrical/22_0502/lusted_3df_elec_01a_220502.pdf
- A straw poll indicated strong support:
  - Straw Poll #1
    - I would support the Clause 73 changes for eight-lane 800GbE proposed in lusted_3df_elec_01a_220502 slides 8-9
    - Passed by unanimous consent

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Starting from P802.3ck

- In Figure 73-1, update to add 800GMII
- In CL 73.5.1, update the second paragraph to add references to the new 800GBASE-CR8 and 800GBASE-KR8 clauses
- In 73.6.4, update Table 73-4 Technology Ability Field encoding to:
  - Bit A19 = 800GBASE-KR8 or 800GBASE-CR8
  - Bit A20 through A21 = Reserved
- In 73.6.4, change the first sentence of the last paragraph to “The fields A[21:20] are reserved for future use.”
- In Table 73-5, update Priority Resolution to insert “800GBASE-KR8 or 800GBASE-CR8” as priority 1 and renumerate the table accordingly

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- In 73.10.1, add new entry into the variable list: “800GR8; represents the 800GBASE-KR8 or 800GBASE-CR8 PMD”
- In the single_link_ready entry in 73.10.1, add “link_status_[800GR8] = OK” in the appropriate place
- In Table 73-7 Timer min/max value summary, append “800GBASE-KR8 or 800GBASE-CR8” to the link_fail_inhibit_timer case that contains “400GBASE-KR4”
- Modify Table 45-388 Backplane Ethernet, BASE-R copper status 2 register bit definitions to include an entry for “800GBASE-KR8 or 800GBASE-CR8”

Proposed Motion:

- Move to:
  - Adopt lusted_3df_01a_220602 slides 4-5 as the Clause 73 baseline for eight-lane 800GBASE-CR8 and 800GBASE-KR8
- M: Kent Lusted
- S: Jeff Slavick
- Technical (>=75%)
- Results

Thanks!