PMA Clause 120 Technical Completeness and 200G Additions

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PMA Clause Technical Completeness 1/2

- MMD Device Numbers
  - See CDXS presentation. Limit MMD devices to four (MMD 1, 8, 9, 10). Update clause 120.1.4 and remove all magenta text accordingly. Change CDXS to black in Figure 120-5. Update and make black MMD device number list in clause 120.6.
- Delay Constraints
  - Make numbers black in Table 120-1 and corresponding PICs. Since the skew variation numbers are the same as P802.3ba with 4x the bit-rate, confirm the same overall delay in ns with represents 4x the bits and pause quanta
  - Make corresponding row in Table 116-3 black

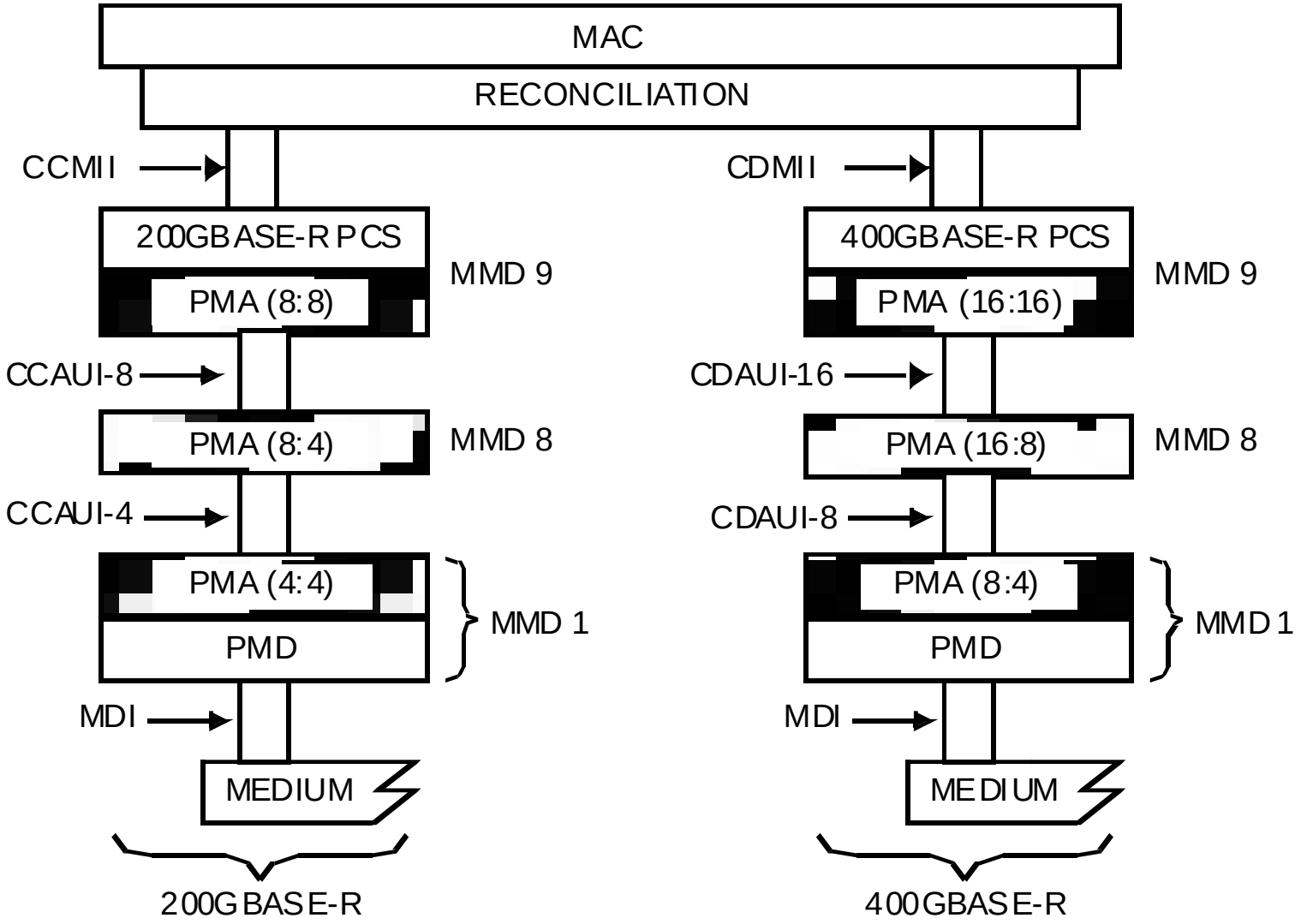
PMA Clause Technical Completeness 2/2

- PAM4 Test Pattern Optionality
  - Confirm that all patterns are optional
  - Remove magenta editor's note from 120.5.11.2
  - Change "may optionally" to black in each of the PAM4 test pattern sub-clauses.

PMA Clause 200G Additions

- Global change 400GBASE-R to 200GBASE-R and 400GBASE-R
- Global change CDAUI-8 to CCAUI-4 and CDAUI-8. Global change CDAUI-16 to CCAUI-8 and CDAUI-16
- Number of PCS lanes for 200G is 8. Number of PCS lanes per physical lane for 200G is 8/p.
- Major capabilities/options: add *PCS200G and *PCS400G. LANES_UPSTREAM can be 8 or 16 for 400G and 4 or 8 for 200G. LANES_DOWNSTREAM can be 4, 8 or 16 for 400G and 4 or 8 for 200G.
- PAM4 is when number of lanes is 4 or 8 for 400G or the number of lanes is 4 for 200G
- Redraw Figures 120-1 and 120-2 with 200G and 400G stacks left and right (similar to showing 40G and 100G in clause 83)
- Skew numbers for 200G are the same as for 400G. Delay numbers are the same value in ns with half the bits and half the pause quanta.

Example Left/Right 200G Figure



Nomenclature Issue

- Part of the community would prefer 200GAUI & 200GMII to CCAUI and CCMII
- On the other hand, it seems strange to juxtapose CDMII/200GMII and CDAUI/200GAUI in the draft
- Need to make a nomenclature decision so the editors can implement consistently

Annex 120A changes for 200G

- Title(s) 200Gb/s and 400Gb/s PMA sublayer partitioning examples
- 120A.1 – no change as there is no 200GBASE-SR8
- 120A.2 – change both figures to show a 200G stack to 200GBASE-DR4/FR4/LR4 on the left and 400GBASE-FR8/LR8 on the right, similar to 40G/100G figures in Annex 83B
- 120A.3 – No change since there is no 200GBASE-DR2
- For two figures proposed to be added for CDXS, show left and right 200G and 400G stacks to include also CCXS