
400G SMF PMD Alternatives

A System Vendor's Perspective

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Overview

- This presentation captures three points related to SMF PMD objectives that the authors (all with a system vendor's background) agreed upon.

PMD Objectives Recap

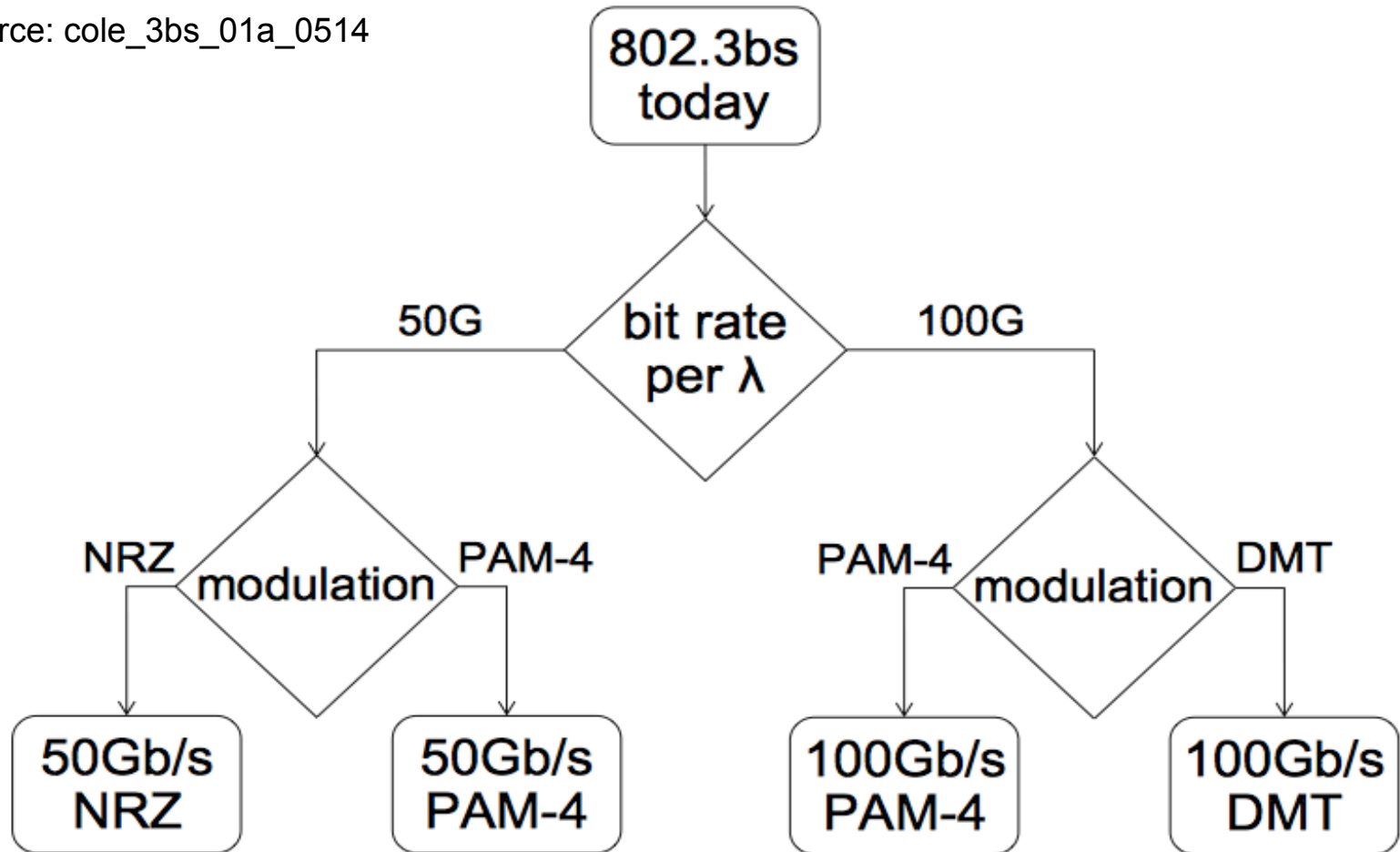
Provide physical layer specifications which support link distances of:

- At least 100 m over MMF
- At least 500 m over SMF
- At least 2 km over SMF
- At least 10 km over SMF

Focus of this presentation is on the three SMF objectives

SMF PMD Decision Tree

Source: cole_3bs_01a_0514



Agreement

1. A common solution for all SMF PMD objectives is not a requirement.
 - A different path through the decision tree may be taken for the different PMD objectives
2. Electrical and Optical lane rates do not need to be coupled
 - Decisions on the electrical and optical interfaces should be made independently, and in the context of optimizing the overall system solution.
3. The 2km and 10km objectives should be based on a duplex solution.

Thank You