



Inverse RS-FEC Baseline Proposal

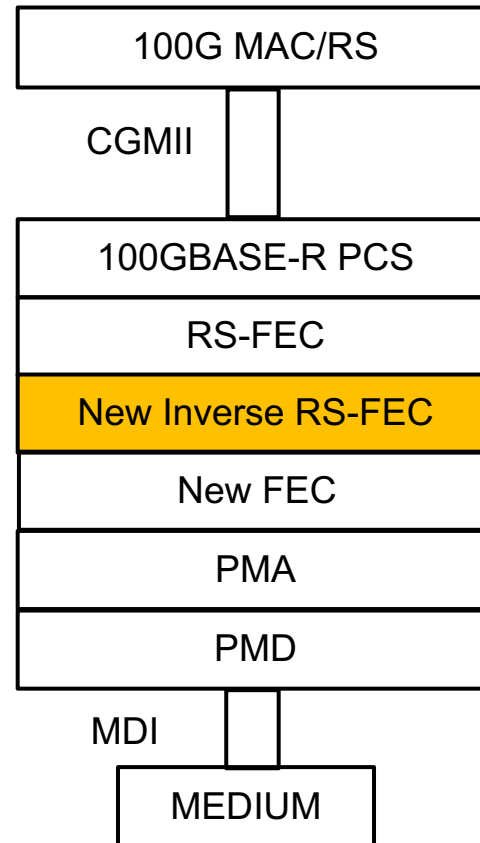
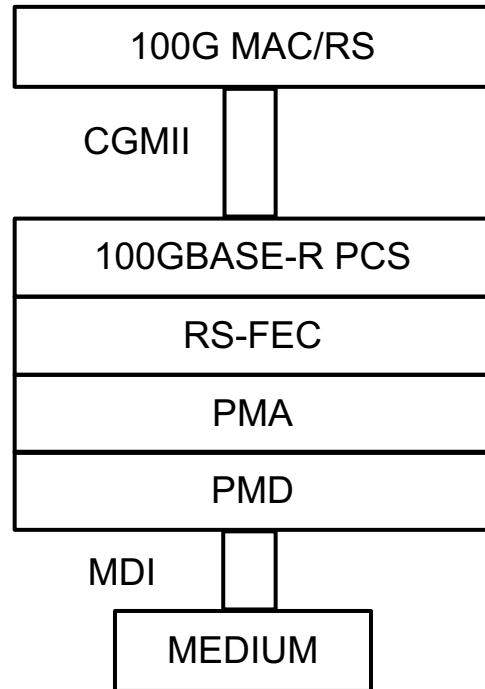
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Background

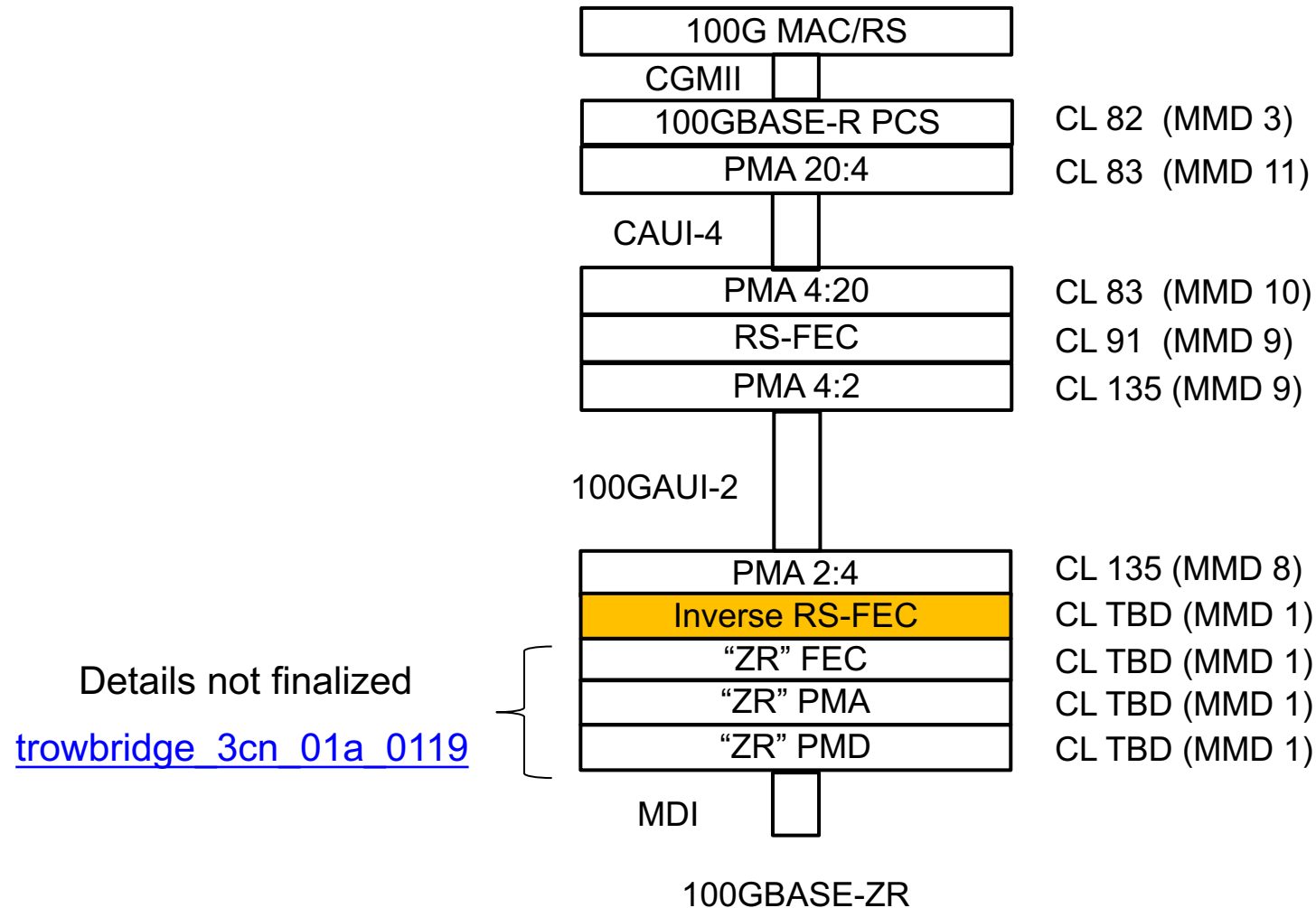
- A baseline proposal for an CGMII Extender was presented at the Long Beach meeting, [nicholl_3cn_01a_0119](#).
- Discussions following the meeting identified an issue with this proposal, resulting in a an alternative solution being proposed based on an Inverse FEC sublayer architecture. For more details please refer to the following ad-hoc presentation: [nicholl_3cn_01a_190207](#)
- This presentation is a baseline proposal for an optional Inverse RS-FEC (Clause 91) sublayer

Architectural View

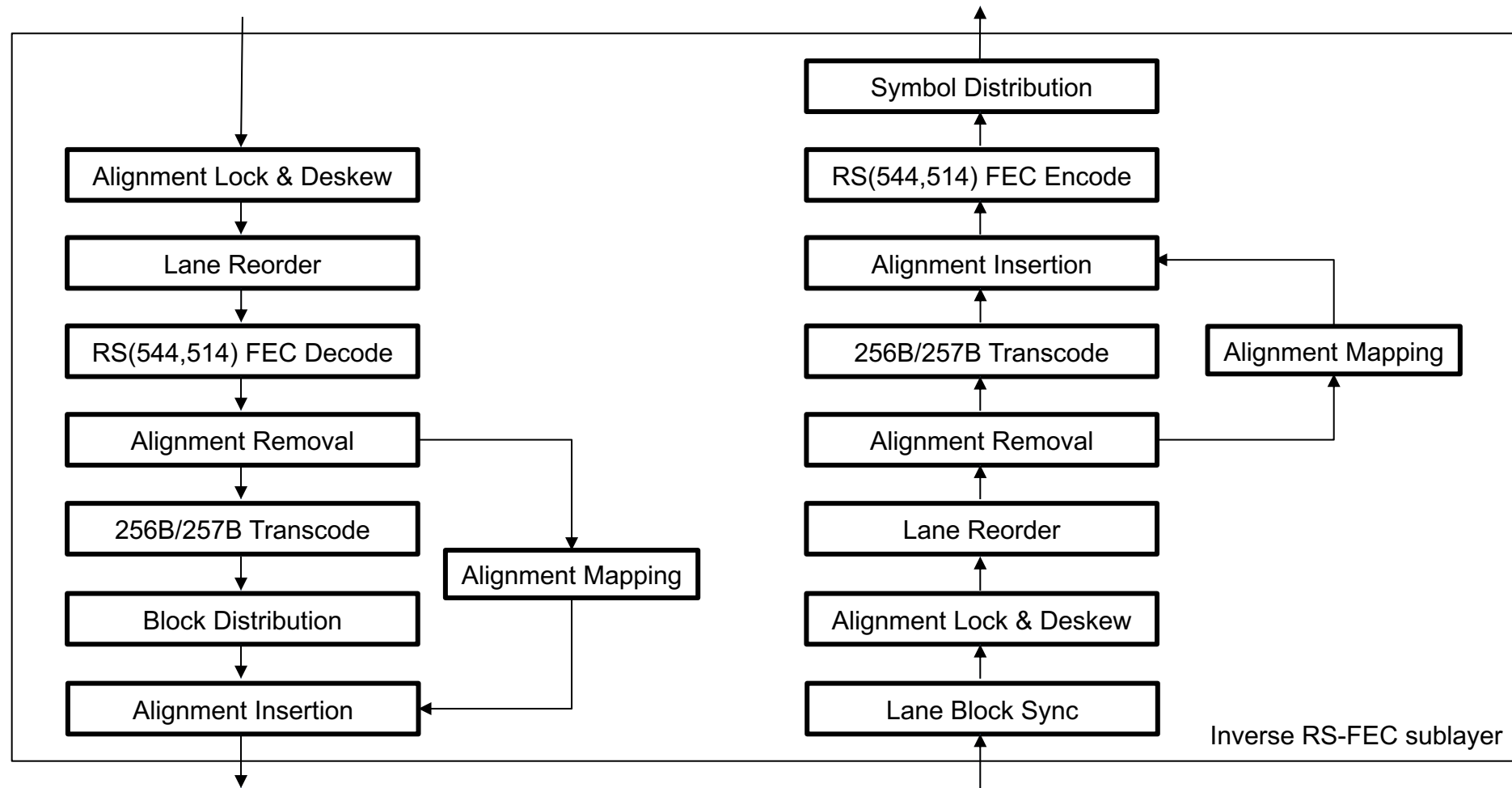


- The optional Inverse RS-FEC sublayer “unwinds” the RS-FEC (Clause 91) sublayer, allowing a new FEC sublayer to be inserted further down the stack

Example of Inverse RS-FEC Sublayer for 100GBASE-ZR



Inverse RS-FEC Sublayer Functional Block Diagram



Note: Inverted version of Figure 91-2

Inverse RS-FEC sublayer Summary

- An inverted version of Clause 91 RS-FEC sublayer
- Only implements RS(544,514) option of Clause 91
- A new set of “inverted” Clause 91 MDIO control and status variables to be defined and mapped to MMD1.