

CFP 100GE-SR10 Applications

CFP MSA Member Companies:

Avago Technologies

Finisar Corp.

Fujitsu Optical Components

Opnext, Inc.

Sumitomo Electric Industries

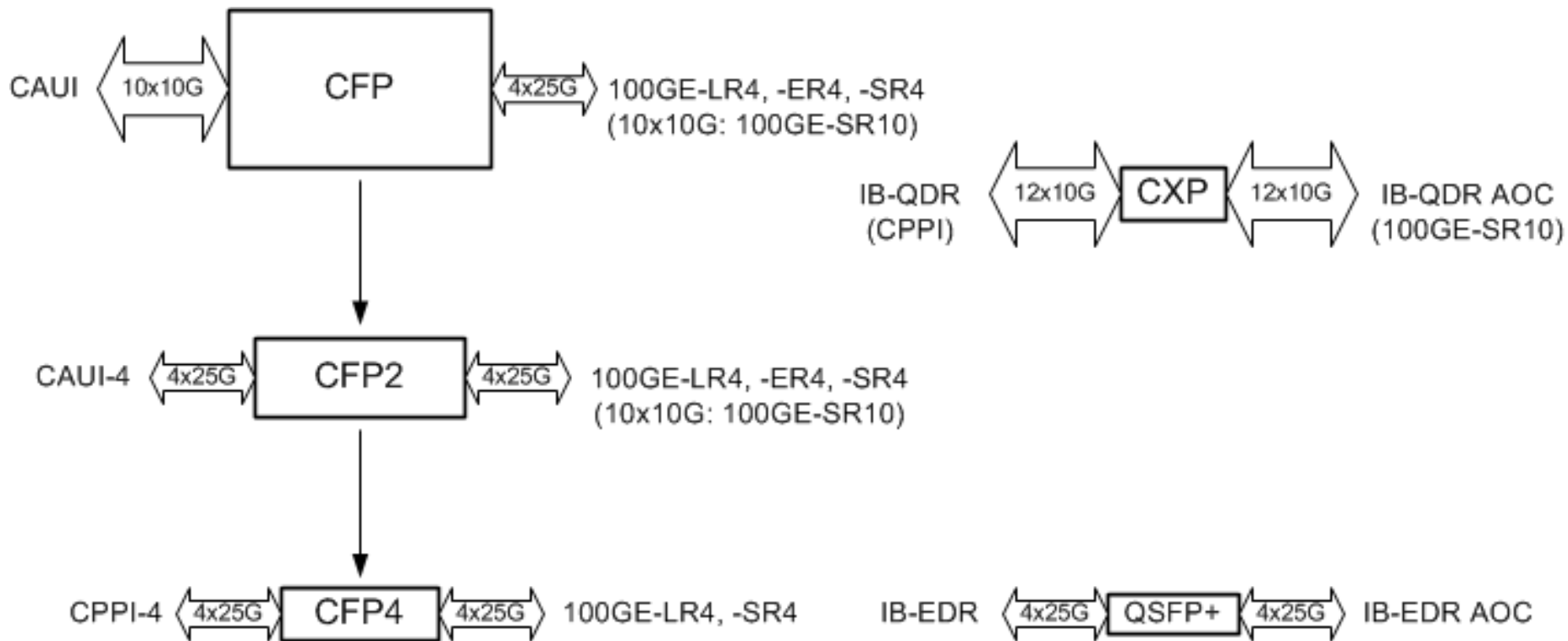
21 March 2011



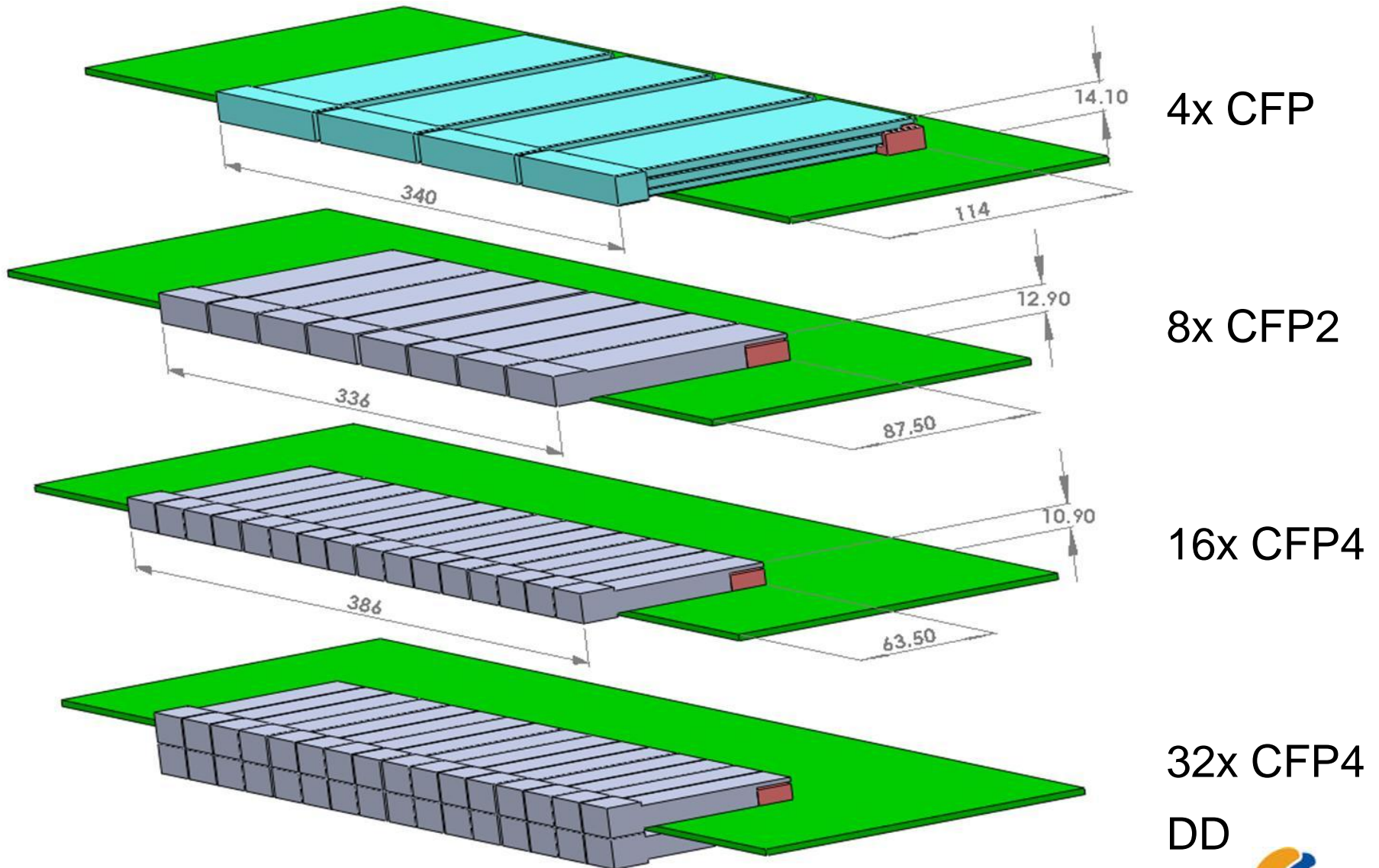
Outline

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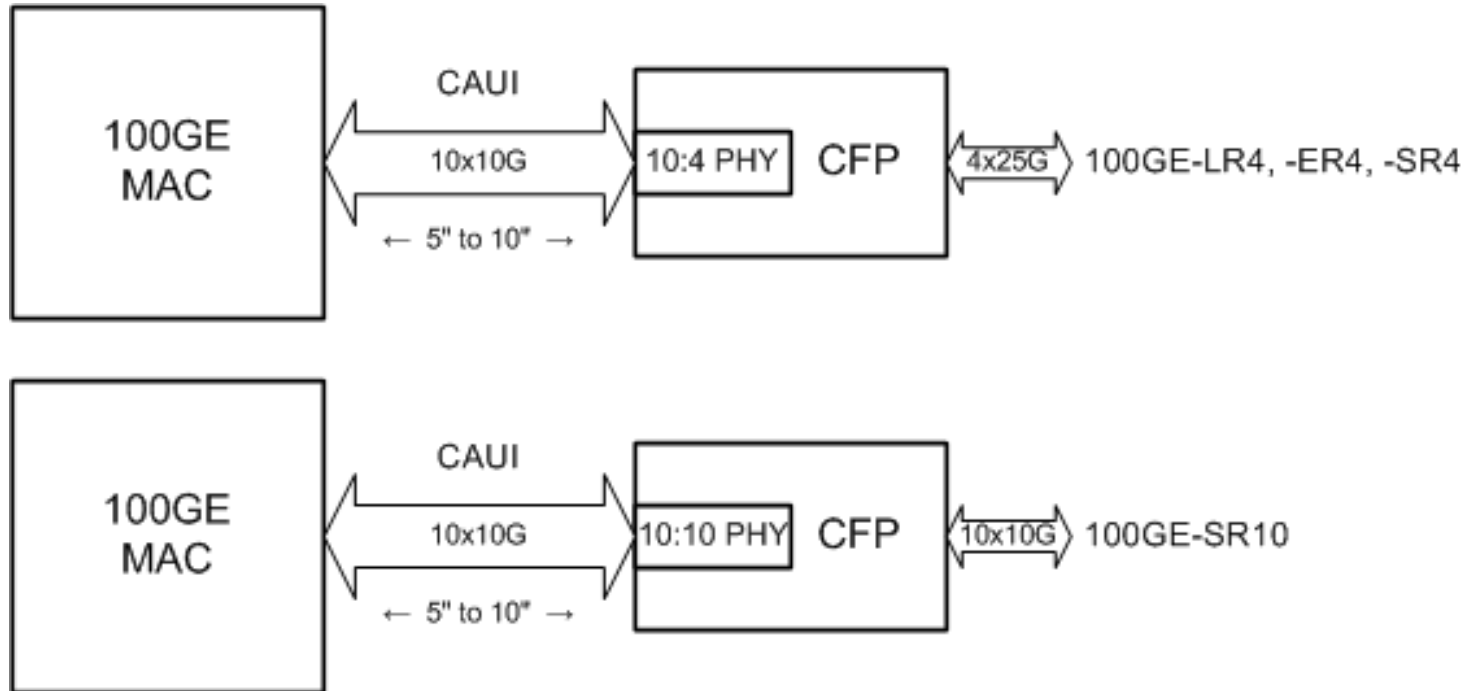
CFP MSA 100G Form Factor Roadmap



CFP MSA 100G Proposed Baseline

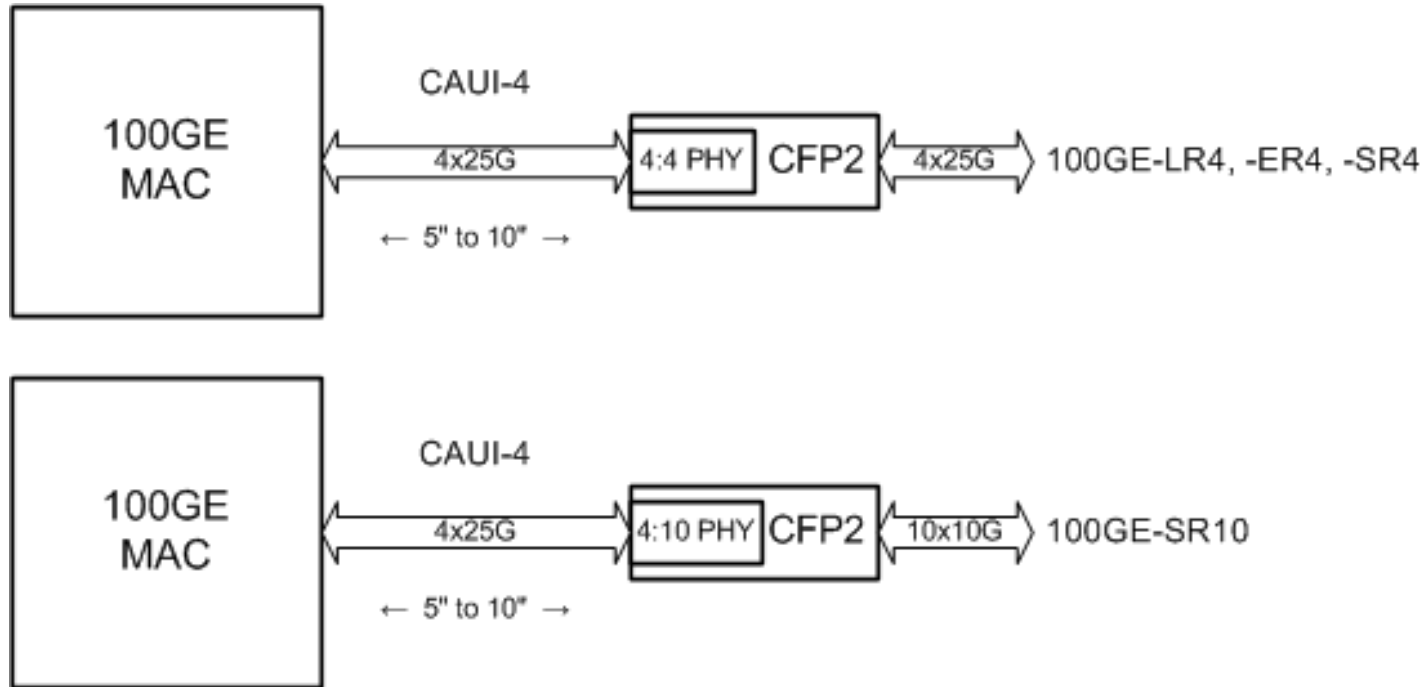


CFP Applications



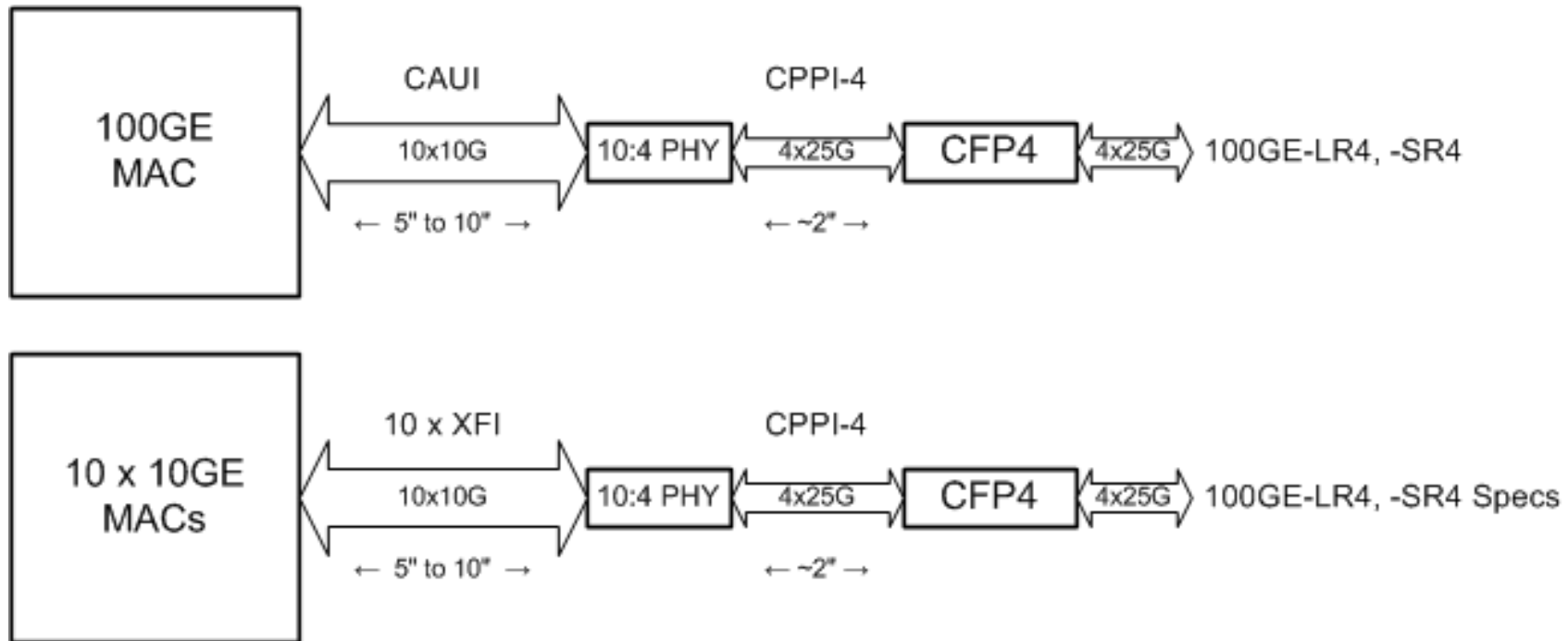
- ❑ CFP CAUI (10G lane) PHY I/O skew variation tolerance specification is 0.2ns.
- ❑ 100GE-SR10 10:10 PHY can be self-timed

CFP2 CAUI-4 Applications



- ❑ CFP2 requires reverse “gearbox” (10:4 PHY) to support 100GE-SR10
- ❑ CFP2 100GE-SR10 (10G lane) PHY I/O skew variation tolerance specification is 3.6ns.

CFP4 CAUI Applications



- ❑ CFP4 10G lane I/O requires PCS MLD framing to restore 10GE lanes from 5G virtual lanes multiplexed over 25G lanes
- ❑ 10GE lanes have to be synchronous for proper PHY operation

Conclusions

- ❑ CFP and CFP2 support 100GE-SR10 applications
- ❑ 10:4 PHY used as reverse “gearbox” in CFP2 for 100GE-SR10 applications requires 10G lane 3.6ns skew variation tolerance
- ❑ Transparent end to end transport of 10 individual 10GE lanes using CFP2 or CFP4 requires PCS MLD framing in the 10:4 PHY to recover 10GE lanes from 5G virtual lanes multiplexed over 25G lanes
- ❑ Industry agreement of exact 10:4 PHY PCS MLD framing algorithm implementation is required to enable interoperability