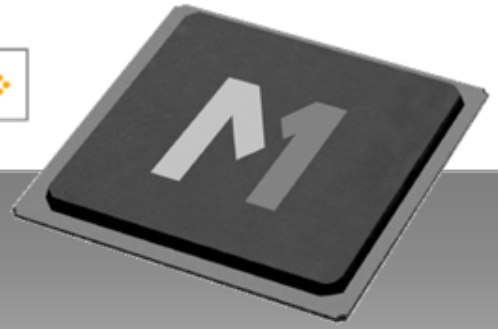
CAUI Loss Budget



July 26 2012

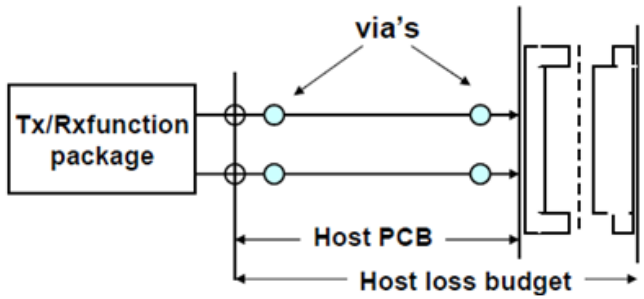
MINDSPEED

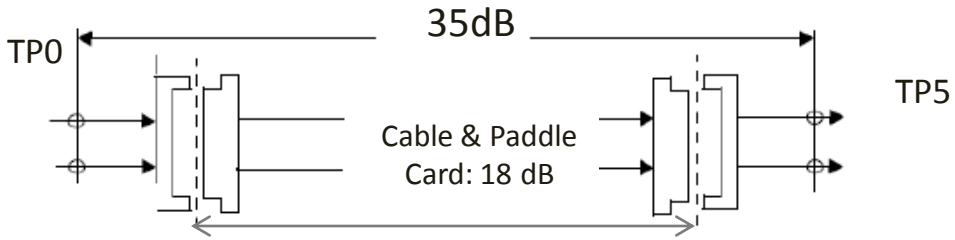
Agenda

- Recap and new presentations
  - latchman_01_0312.pdf
  - ghiasi_02a_0712.pdf
  - CAUI4 options (Tom Palkert)
- Discussion

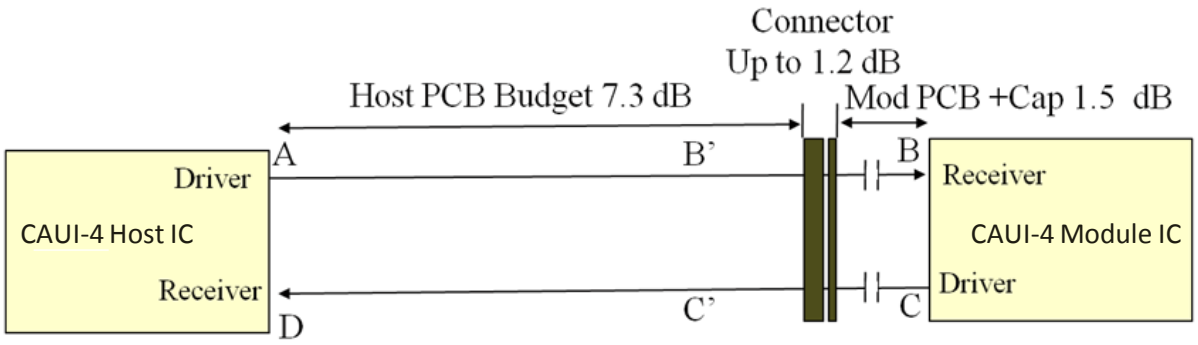
Latchman_01_0312 Recommendation

- Host Loss Budget: 8.5dB at 12.89GHz
  - includes PCB loss, two sets of vias and mated connector





CR4 Budget: 5 m cable assembly link budget example with 8.5 dB host loss: 35 dB @12.89 GHz (FEC Required)

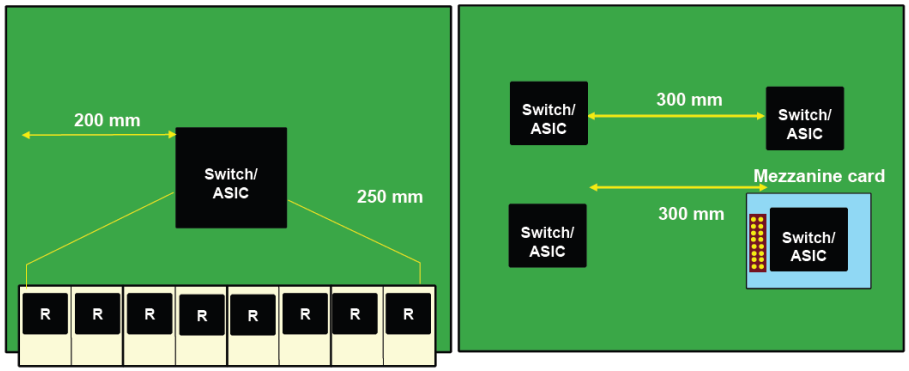


CAUI Budget

Ghiasi_02a_0712 Summary

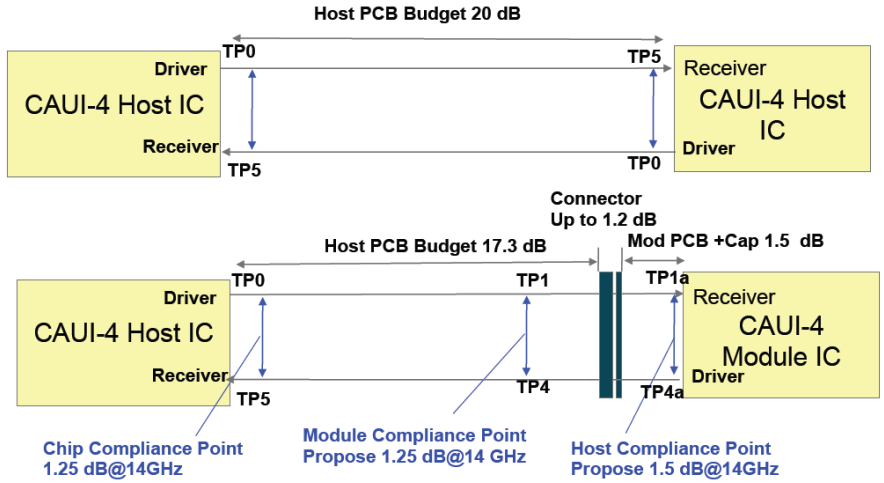
CAUI-4 Applications

- Chip to module applications supporting 250 mm
- Chip to chip applications supporting 300 mm



Proposed CAUI-4 Architecture and Reference Points

- Following 802.3 CL83A/B (CAUI) where common I/O supports chip to chip and chip to module



Conclusion

- Have a nice day

Discussion

- Keep chip-module CAUI 4 budget as is and have one budget
  - Repeaters for channels which do not meet budget
  - Keeps common port for copper and optics
- Increase CAUI 4 chip-module budget
  - Higher power module unless asymmetric interface is possible
  - Lose common port with CR4 for that port type (interop issues)
    - Consensus that a solution which is interoperable is required
- Add another CAUI 4 chip-module budget
  - Lose common port with CR4 for that port type (interop issues)
- Make chip to chip spec different loss from chip to module
  - Compliance points would be different relative to chip-module but would allow for higher loss budgets