400 Gb/s per lane C2C channel files

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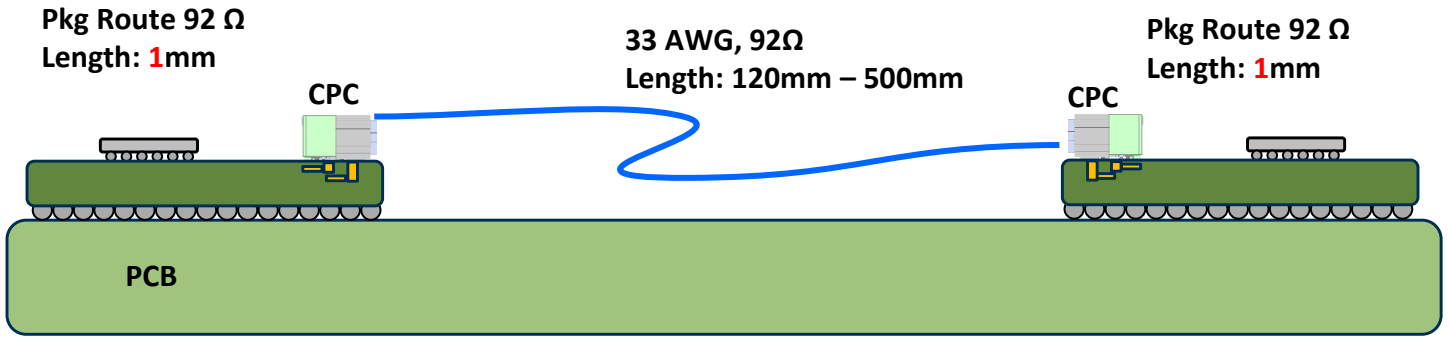
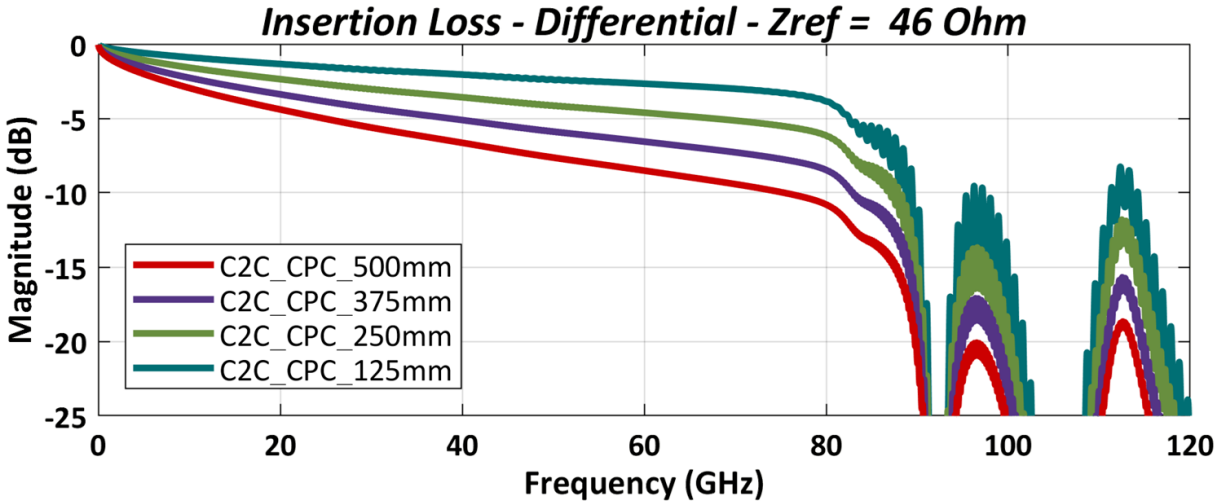
C2C CPC Simulation Channel

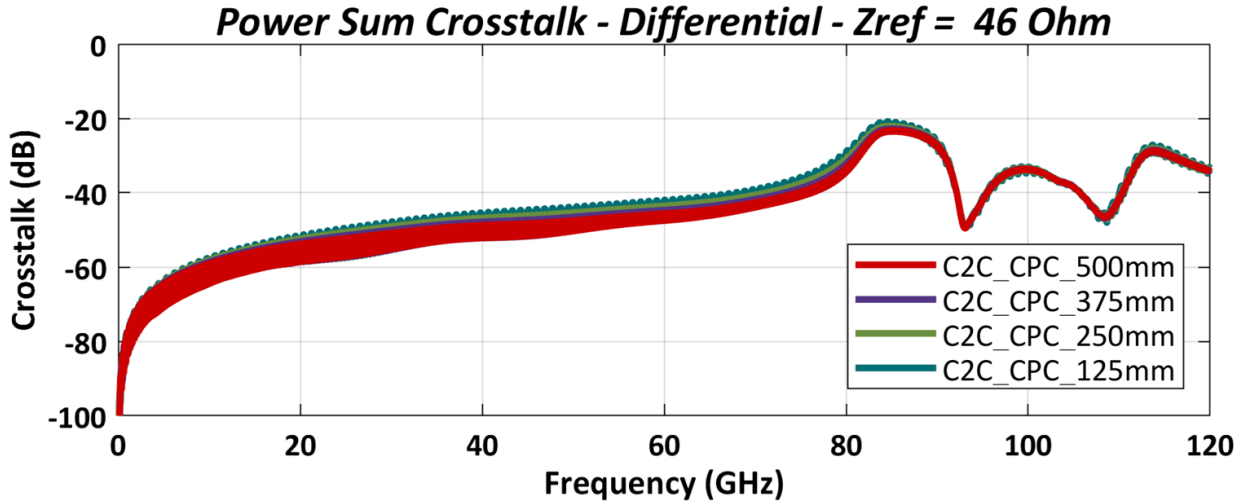
Intra Tray Co Package Copper Chip to Chip

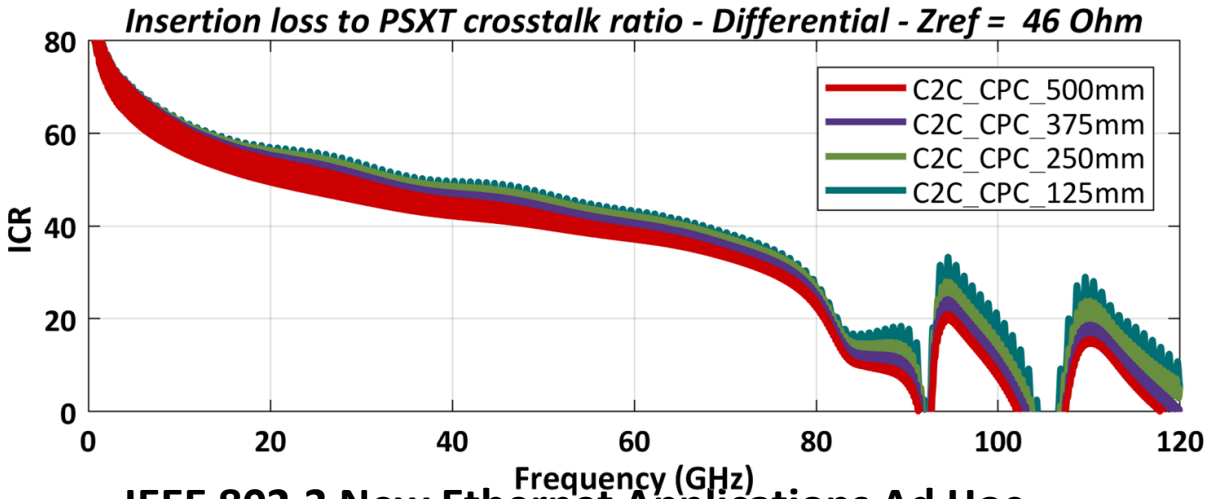
- Exploratory, simulation-based channel models
- Connector has shallow vertical substrate transition underneath. Long pkg routing is not included
  - Channel boundary has just enough PKG trace to create a good EM boundary
- Various twinax cable lengths to create loss variation
- Two connector options to enable investigation of component bandwidth impact
  - CPC is current generation target performance
  - CPC_EBW is extended bandwidth performance



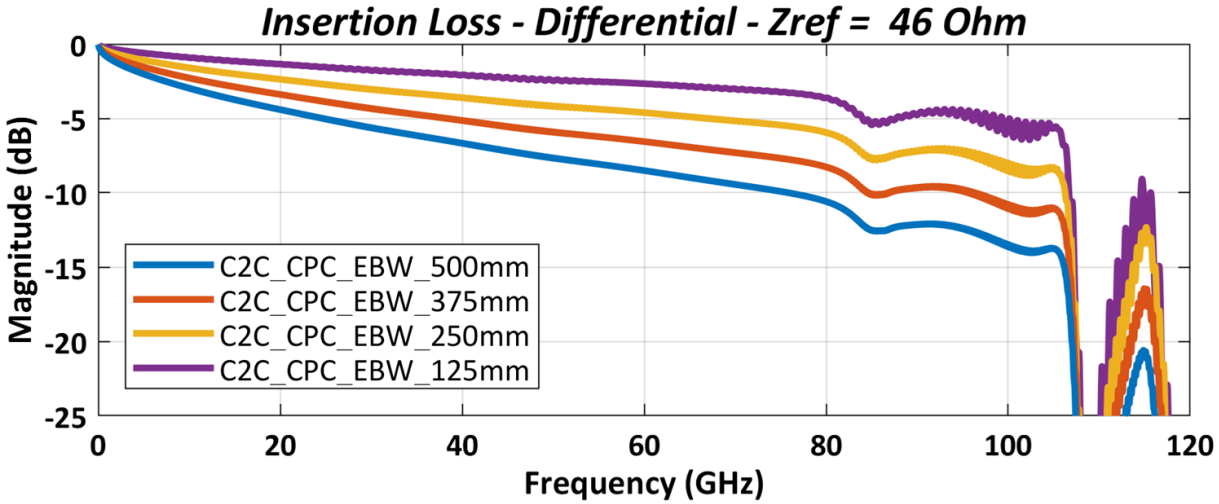
Frequency Domain Response of CPC Channels

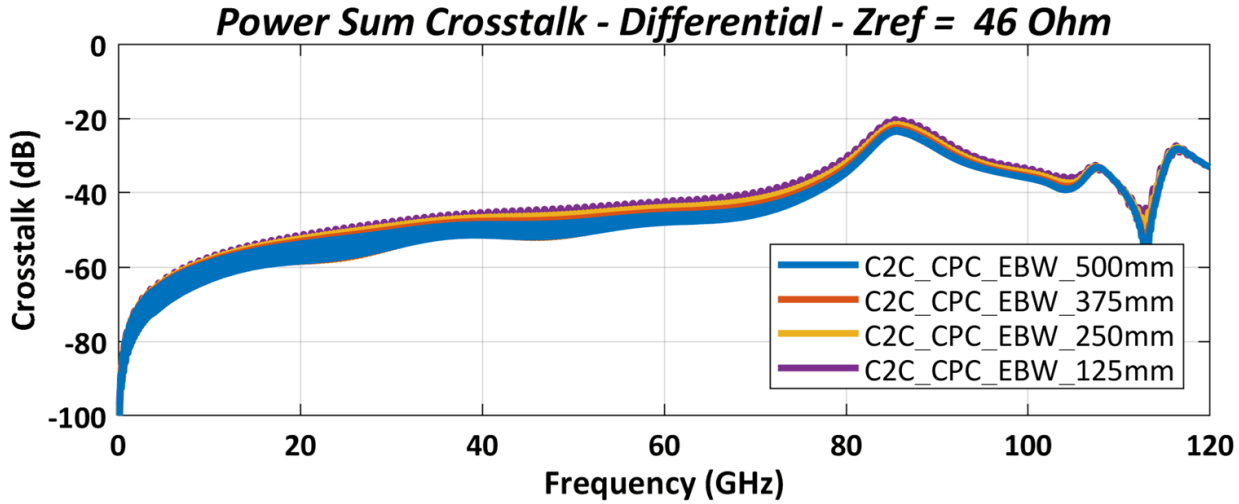


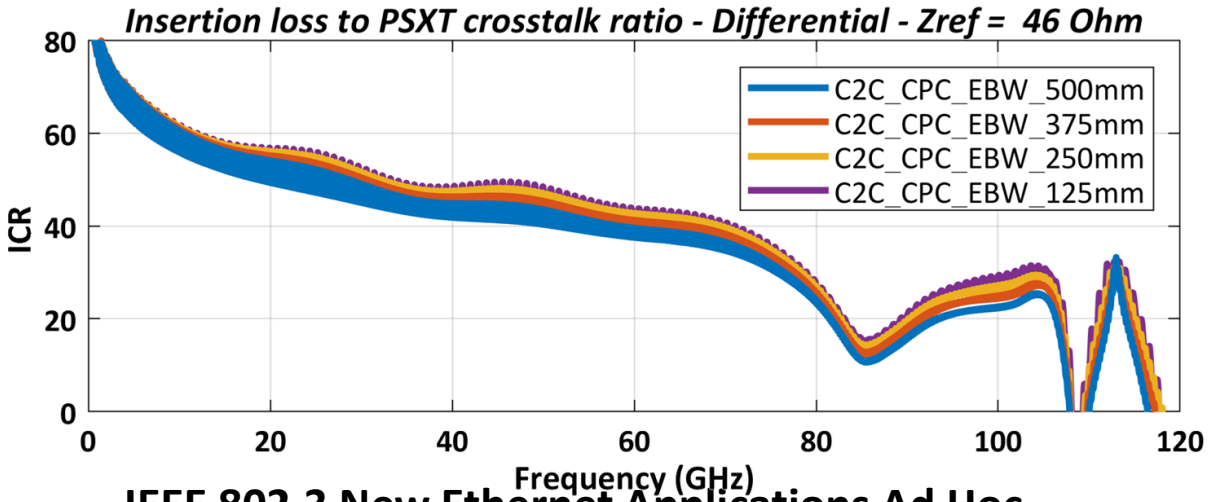




Frequency Domain Response of CPC EBW Channels







File Key

File Name	Component	Cable Length (mm)
c2c_cpc_125mm_thru.s4p	CPC	125
c2c_cpc_250mm_thru.s4p	CPC	250
c2c_cpc_375mm_thru.s4p	CPC	375
c2c_cpc_500mm_thru.s4p	CPC	500
c2c_cpc_ebw_125mm_thru.s4p	Extended Bandwidth	125
c2c_cpc_ebw_250mm_thru.s4p	Extended Bandwidth	250
c2c_cpc_ebw_375mm_thru.s4p	Extended Bandwidth	375
c2c_cpc_ebw_500mm_thru.s4p	Extended Bandwidth	500

Channel File zip Contents

- gore_e4ai_02_250529.zip with fmax of 120 GHz

File Name
c2c_cpc_125mm_thru.s4p; c2c_cpc_125mm_fext1.s4p; c2c_cpc_125mm_next1.s4p
c2c_cpc_250mm_thru.s4p; c2c_cpc_250mm_fext1.s4p; c2c_cpc_250mm_next1.s4p
c2c_cpc_375mm_thru.s4p; c2c_cpc_375mm_fext1.s4p; c2c_cpc_375mm_next1.s4p
c2c_cpc_500mm_thru.s4p; c2c_cpc_500mm_fext1.s4p; c2c_cpc_500mm_next1.s4p

gore_e4ai_02a_250529.zip
Contains the same channel configurations but an increase of fmax to 150 GHz.

Thank You!