Accurately Defining the CR4/CR10 Test Points

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All of CR4/CR10 Test Point Shown on One Diagram

• Test point definition
  – DUT Board - Chip ball to TP0/TP5 loss 0.7 dB loss at Nyquist
  – Cable Test Board - TP1/TP4 to the style 1 or 2 connector pads loss 0.7 dB at Nyquist
  – Host Test Board – From TP2/TP3 to the mating interface of style 1 or 2 connector with loss of 1.3 dB at Nyquist.
  – Host Channel – From the SerDes chip ball to the style 1 or 2 connector pads defined by Eq 85-3.
Graphical Representations of Test Boards

- Definition the same as 86.7.1.1
Propose Definition of Test Boards

- Cable Test Board and DUT Board loss are designated by MCB.
- Host Test Board is designated by HCB.

\[ SDD21\text{ (dB) MCB=} -0.0006 - 0.1600 \times \sqrt{f} - 0.0587 \times f \]
\[ SDD21\text{ (dB) HCB=} -0.01 - 0.30 \times \sqrt{f} - 0.11 \times f \]
Summary

- TP0 and TP5 require definition of DUT board.
- TP2 and TP3 require definition of host test board.
- $\text{II}_{\text{camax}}$, ILD, and return loss for the cable must be measured with cable test board which has min loss.
- Cable test board and host test board B2B response definition further will improve test results.
  - Figure 86-6 provide B2B IL and ILD
  - Figure 86-7 provide B2B Return loss