Host Budget Consensus Building

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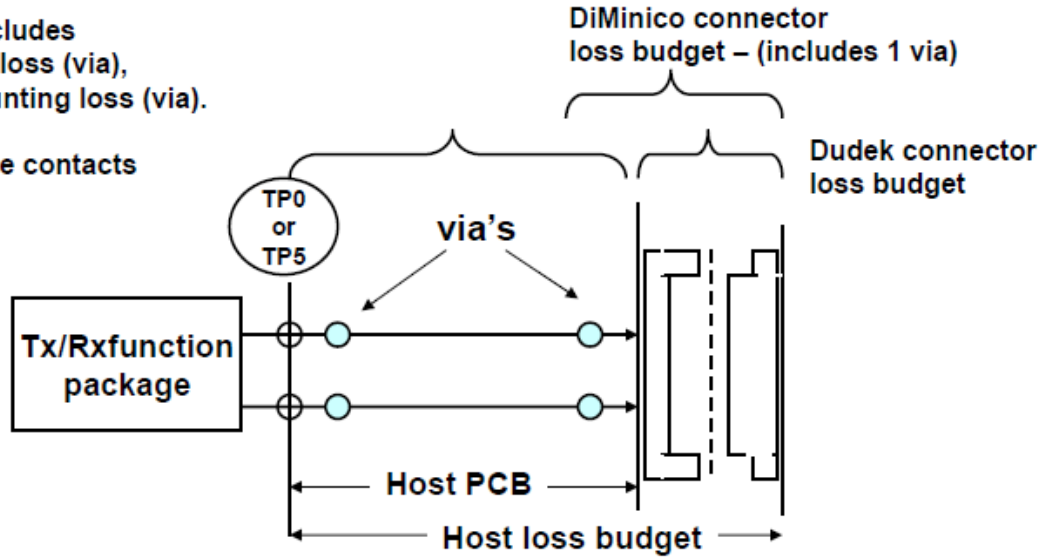
Consensus Building Summary

- 3 Conference calls were held in an effort to build consensus around host channel loss
  - Focus on isolating differences between diminico_01_1111, CEI-28G-VSR, Dudek_01a_1111
- Established basis for comparison:
  - Host budget components (up to and including connector)
  - Target trace lengths based on layout requirements
  - Loss associated PCB, Vias, Connector
- Host budget summary @ 14GHz:
  - diminico_01_1111 : 7.37dB
  - CEI-28G-VSR: 8.5dB
  - Dudek_01a_1111: 9.2dB
  - Major differences are in loss/inch assumption and overall link loss budget (FEC vs. non-FEC)
- Future discussion topics include
  - Consensus on loss / inch
  - Eye closure due to reflections

Host Loss Comparison

Host Loss budget update

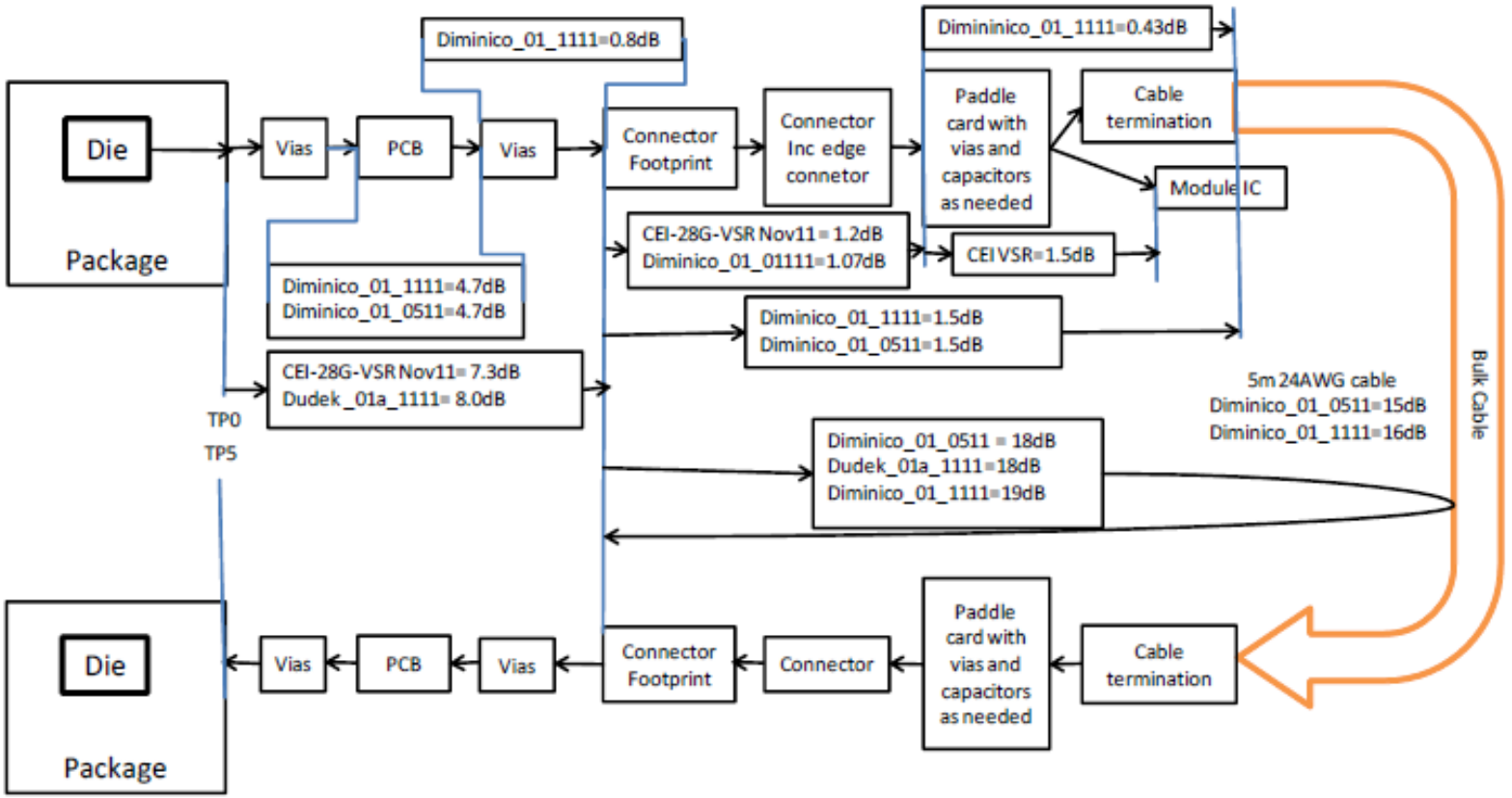
Host loss budget includes
- Chip/ball mounting loss (via),
- MDI receptacle mounting loss (via).
- MDI receptacle
- Plug connector edge contacts



Reference	Host PCB	Mated Connector	Host loss budget - 12.89 GHz	Host loss budget – 14 GHz
diminico_01_1111.pdf, diminico_01_0511.pdf	4.70 dB @ 12.89 GHz (1.175 dB/in) 5.07 dB @ 14.00 GHz (1.268 dB/in) (4" Megtron 4) – no via	1.87 dB @ 12.89 GHz 2.30 db @ 14.00 GHz (includes connector via)	6.57 dB	7.37 dB
CEI-28G-VSR Nov11	7.3 dB 14 GHz (PCB+2 via's) (2 via's[0.5 dB] + host trace[6.8 dB]) (4" N4000-13 or slightly worse material (up to 1.7dB/in) at 14GHz	1.2 dB @ 14 GHz		8.50 dB
Dudek_01a_1111..pdf	8.0 dB 12.89 GHz (PCB+2 via's)	1.2 dB @ 12.89 GHz	9.20 dB	9.20 dB

As presented by Chris Diminico

Channel Loss Budget Comparison



As presented by Mike Dudek