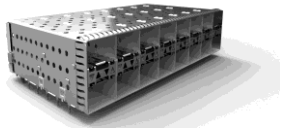


Medium Reach/Chip-to-Chip Channel using Armor Connector

IEEE802.3bs Electrical Interface Ad Hoc

Megha Shanbhag, Nathan Tracy

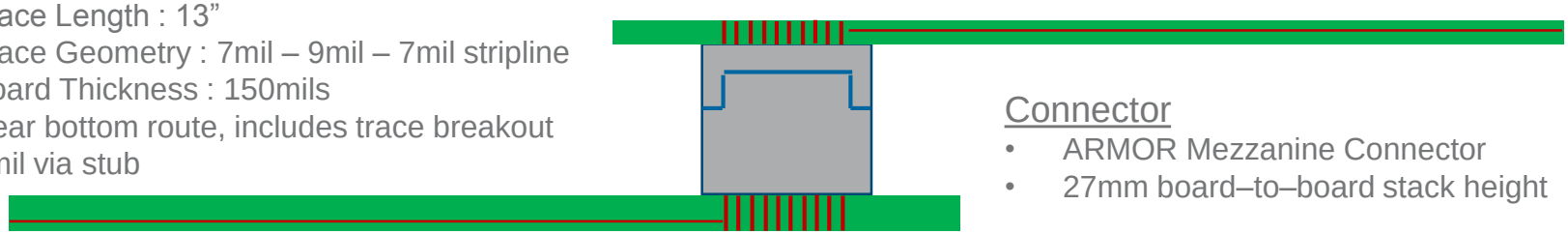
Purpose

- To aid the consensus building effort for 400Gb/s Electrical Interface a Medium Reach/ Chip to Chip channel using a single connector (Armor) is being provided

Channel Description

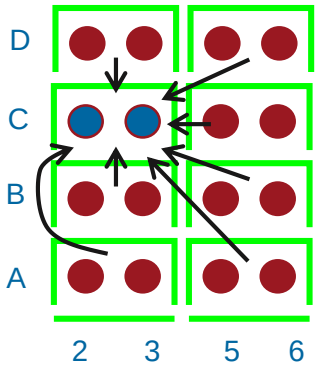
DaughterCard
- Material : Megtron 6 [Er=3.5, TanD=0.007@15GHz]
- Trace Length : 13”
- Trace Geometry : 7mil – 9mil – 7mil stripline
- Board Thickness : 60mils
- Near bottom route, includes trace breakout
- 8mil via stub

MotherBoard
- Material : Megtron 6 [Er=3.5, TanD=0.007@15GHz]
- Trace Length : 13”
- Trace Geometry : 7mil – 9mil – 7mil stripline
- Board Thickness : 150mils
- Near bottom route, includes trace breakout
- 8mil via stub



Connector
- ARMOR Mezzanine Connector
- 27mm board–to–board stack height

- Data based on simulation
- Data provided as .s4p files for THRU for victim and 7 FEXT aggressors



Channel Performance