Description of AirmaxVS Demonstrator Backplane Link

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↳ **Description of AirmaxVS connector**

✎ **Footprint on Demonstrator Backplane**

	1	2	3	4	5	6	7	8	9	10
A	o	x	o	x	o	x	o	x	o	x
B	o	o	o	o	o	o	o	o	o	o
C	x	o	x	o	x	o	x	o	x	o
D	o	x	o	x	o	x	o	x	o	x
E	o	o	o	o	o	o	o	o	o	o
F	x	o	x	o	x	o	x	o	x	o
G	o	x	o	x	o	x	o	x	o	x
H	o	o	o	o	o	o	o	o	o	o
I	x	o	x	o	x	o	x	o	x	o
J	o	x	o	x	o	x	o	x	o	x
K	o	o	o	o	o	o	o	o	o	o
L	x	o	x	o	x	o	x	o	x	o
M	o	x	o	x	o	x	o	x	o	x
N	o	o	o	o	o	o	o	o	o	o
O	x	o	x	o	x	o	x	o	x	o

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Set-up:

❏ *Backplane = DC03_BP2_A*

❏ *Testboards used*

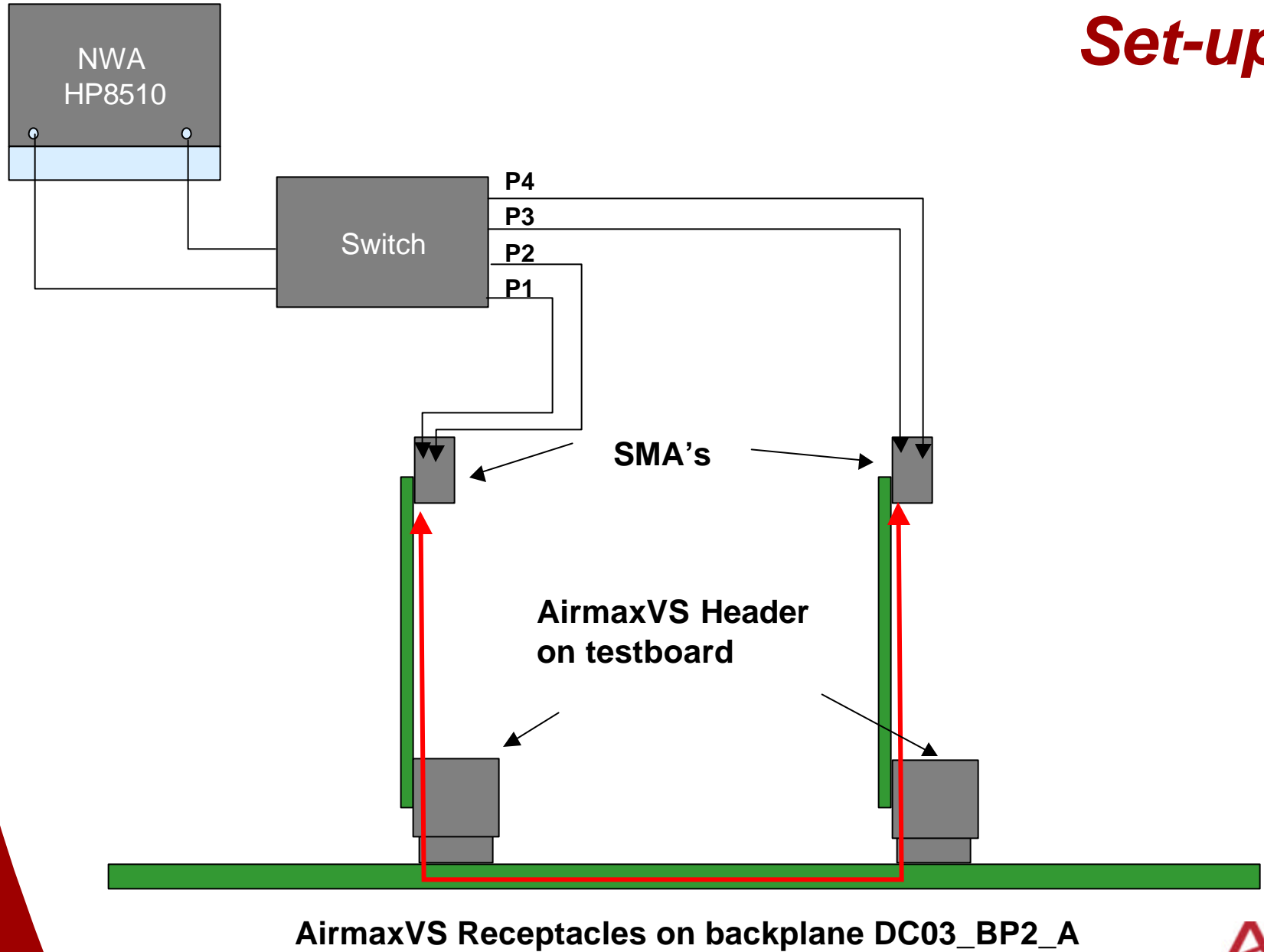 ◦ *SK10009600 rev1, board 1 (Ro4350)*

  ◦ *SK10009601 rev3, board 2 (RO4350)*

❏ *Connectors used:*

  ◦ *AirmaxVS Header: SK10019403-101*

  ◦ *AirmaxVS Receptacle: SK10023291-101*

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Sample description
Set-up

NWA
HP8510

Switch

P4
P3
P2
P1

SMA's

AirmaxVS Header
on testboard

AirmaxVS Receptacles on backplane DC03_BP2_A

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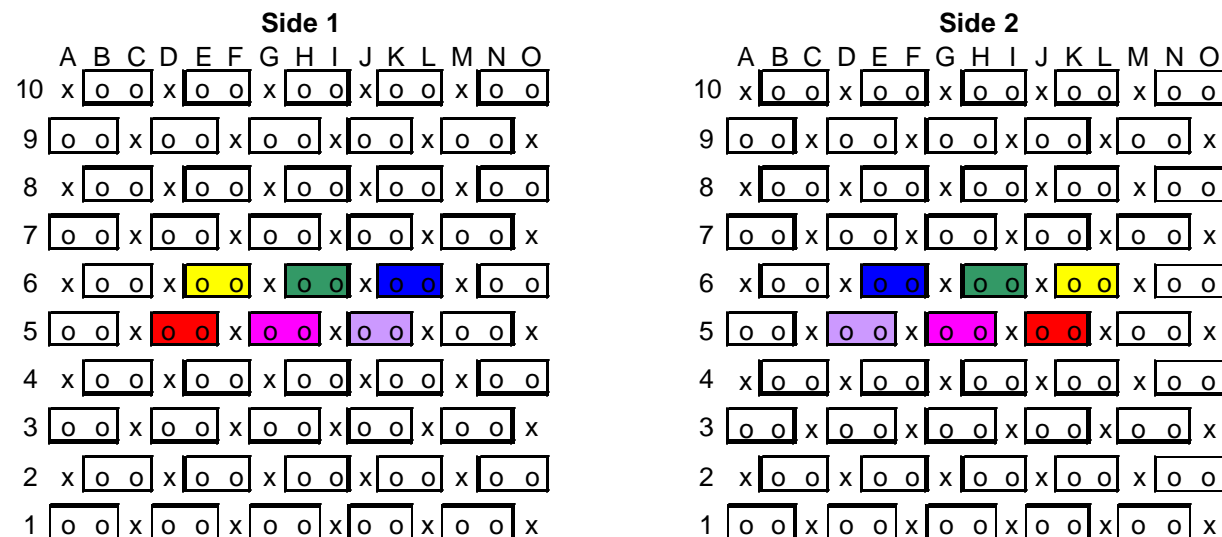# *Sample description: AirMaxVS Demonstrator Backplane*

↳ *Connections on the backplane are shown on the added figure:*
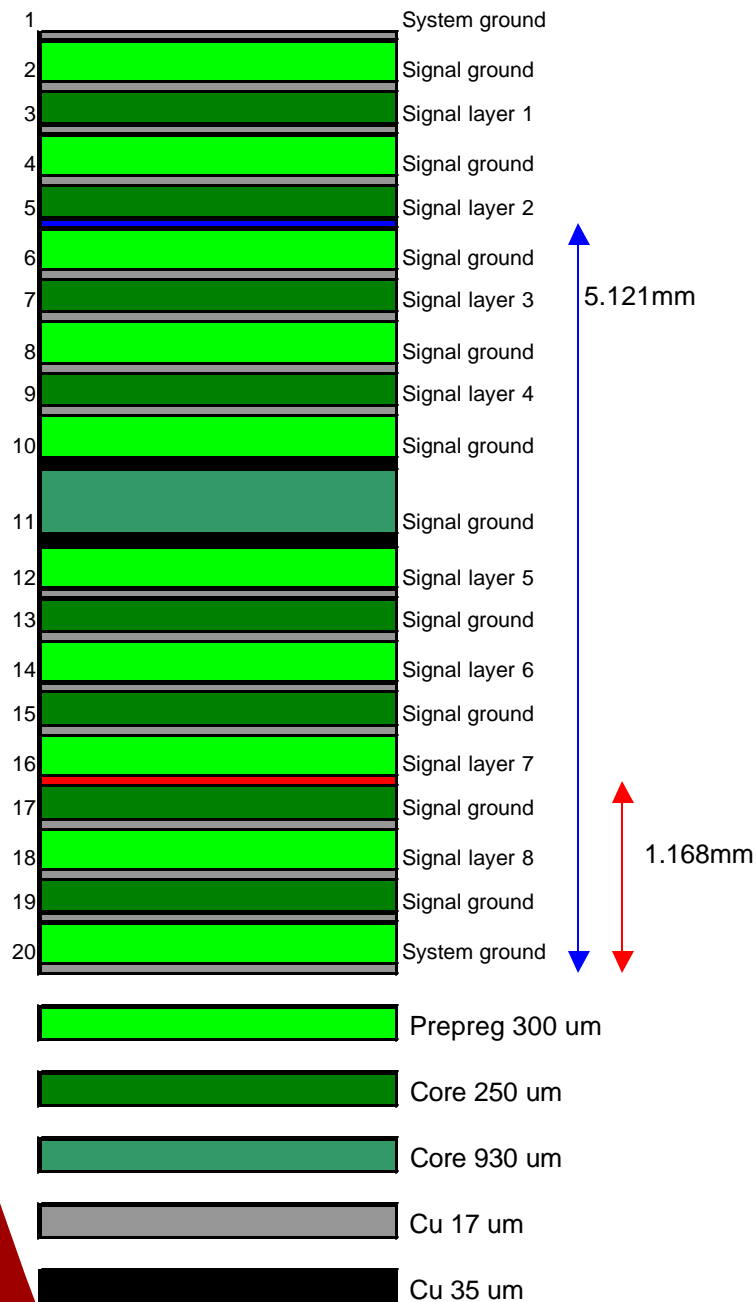
  ✍ *D5E5 is connected to J5K5 and vice versa*

  ✍ *G5H5 is connected to G5H5*

  ✍ *E6F6 is connected to K6L6 and vice versa*

  ✍ *H6I6 is connected to H6I6*

> Presentation title - Date - References

F C I

Layer	Description
1	System ground
2	Signal ground
3	Signal layer 1
4	Signal ground
5	Signal layer 2
6	Signal ground
7	Signal layer 3
8	Signal ground
9	Signal layer 4
10	Signal ground
11	Signal ground
12	Signal layer 5
13	Signal ground
14	Signal layer 6
15	Signal ground
16	Signal layer 7
17	Signal ground
18	Signal layer 8
19	Signal ground
20	System ground

5.121mm

1.168mm

Prepreg 300 um

Core 250 um

Core 930 um

Cu 17 um

Cu 35 um

↳ *4 lengths* **are available on the backplane: 7.5cm, 25cm, 50cm and 75cm**

↳ **Signal lines are routed on** *different layers:* **measurements are performed on layer 16 (signal layer 7)**

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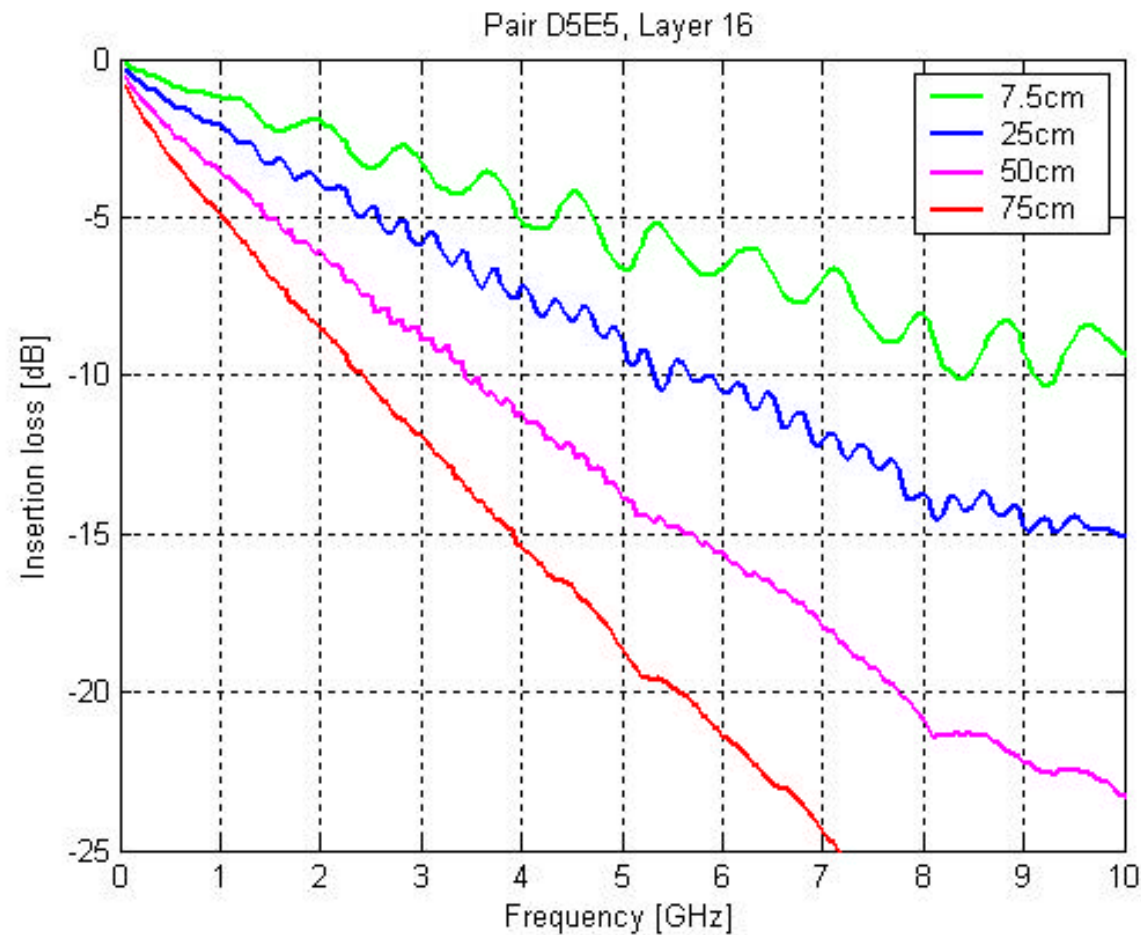
Sample description: AirMaxVS Demonstrator Backplane

❑ *Trace and via hole dimensions*

AIRMAX VS	
Column Pitch [mm]	2.000
Row Pitch	1.400
Finished hole [mm]	0.500
Pad Size [mm]	0.900
Proposed Trace width [mm]	0.225
Proposed Isoloation [mm]	0.220
Anti-pad	1.330

❑ *Backdrilling is applied to all via holes*

❑ *Board material = FR4*

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Pair D5E5, Layer 16

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↳ **All provided files are in touchstone format containing single ended measurement data !**

✍ ***Real + imaginary part***

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