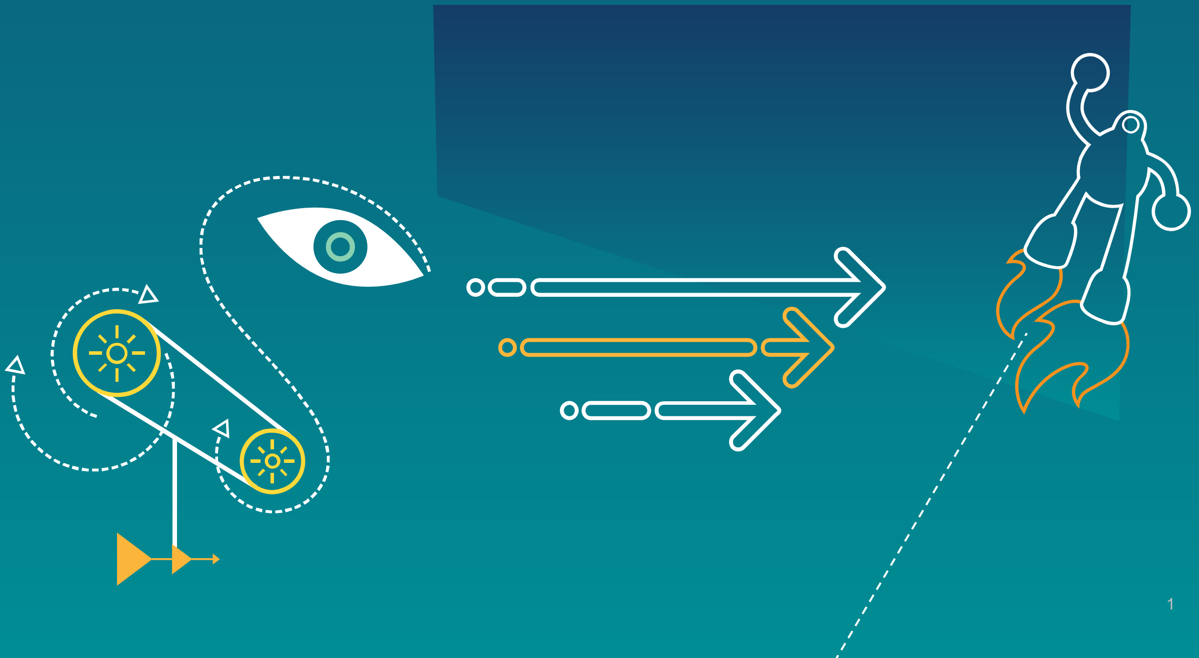
Speaker name
Job title, date, legal entity

layout feedback April 19th

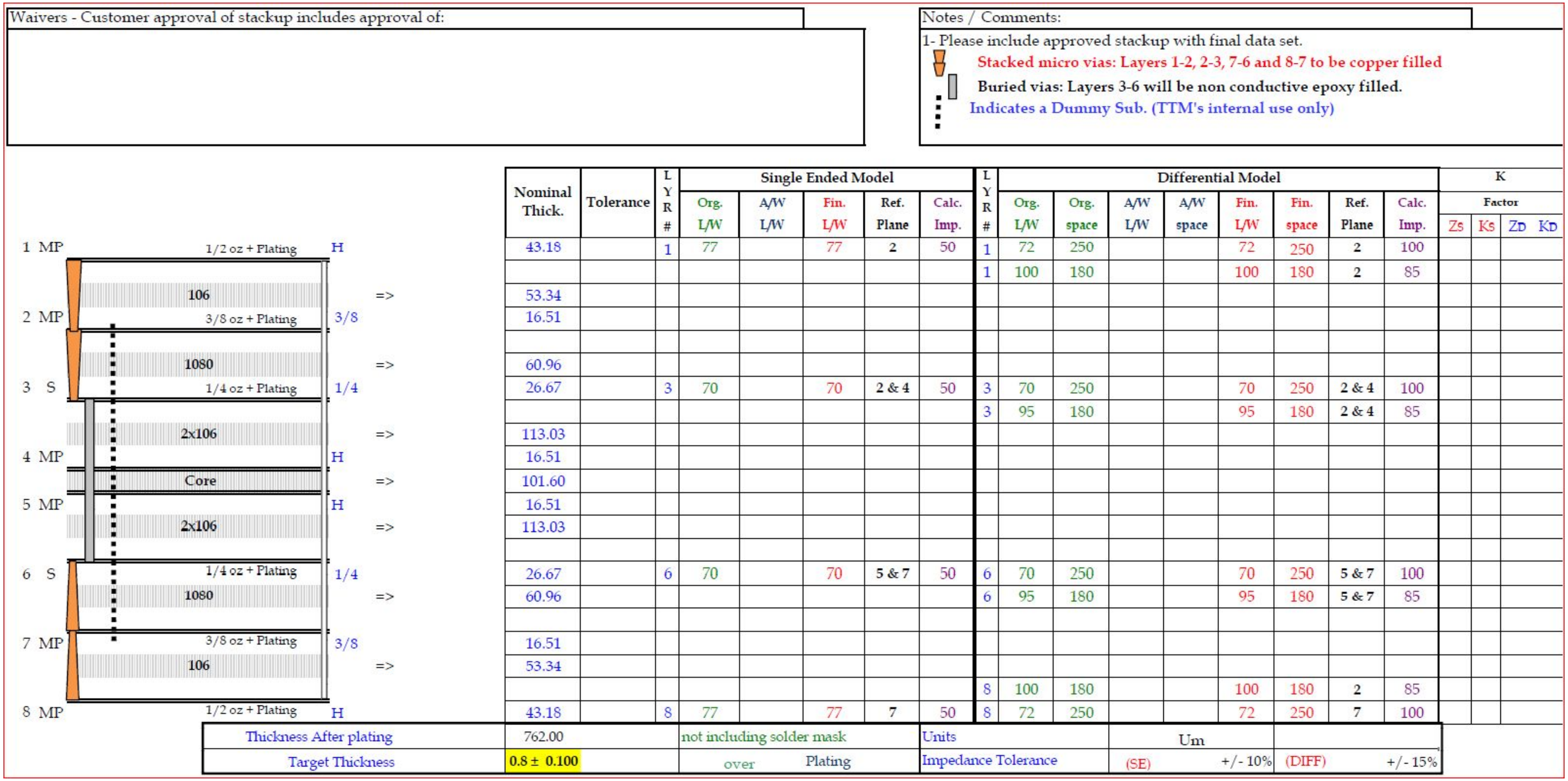
QUALCOMM®



Stackup change

We switched to different PWB manufacturer.

Need to update all the control impedance traces in all the layers



Waivers - Customer approval of stackup includes approval of:

Notes / Comments:

1- Please include approved stackup with final data set.

Stacked micro vias: Layers 1-2, 2-3, 7-6 and 8-7 to be copper filled

Buried vias: Layers 3-6 will be non conductive epoxy filled.

Indicates a Dummy Sub. (TTM's internal use only)

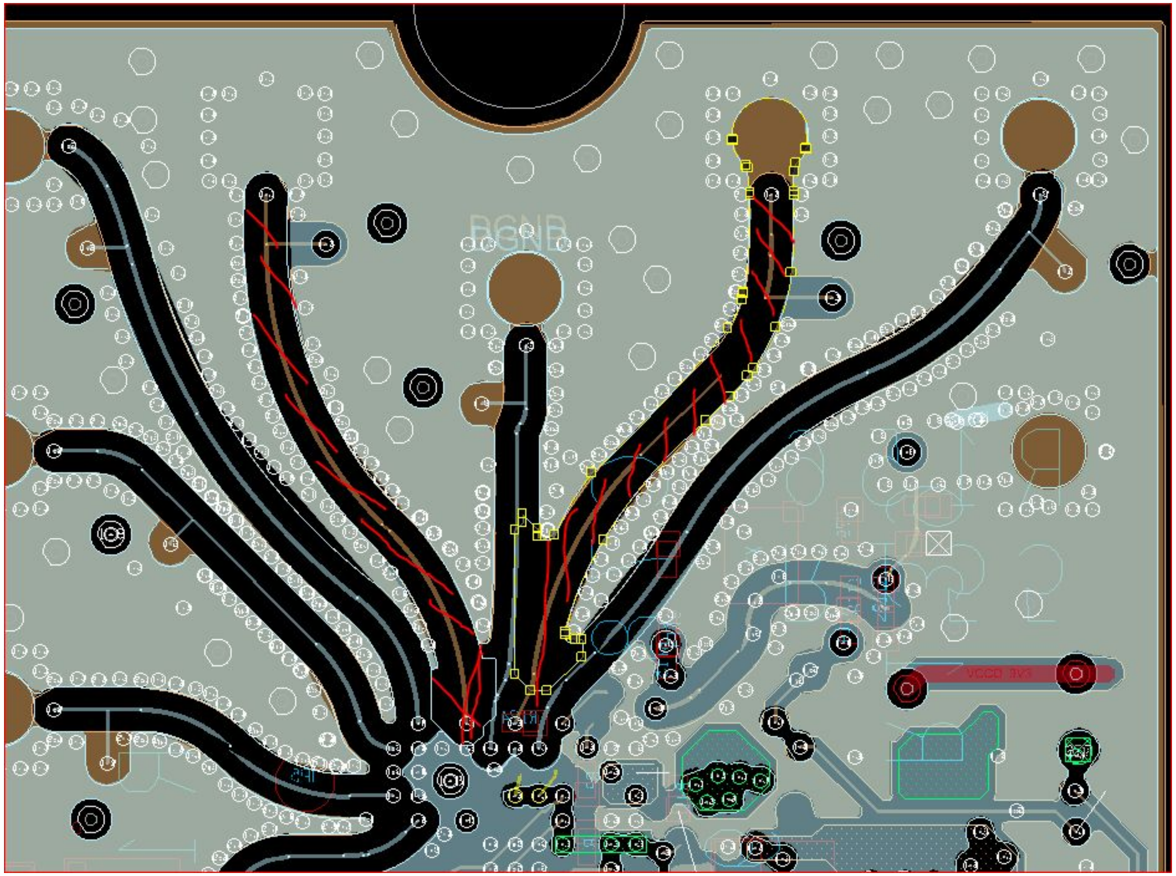
Layer	Construction	Cu		Nominal Thick.	Tolerance	LYR #	Single Ended Model					LYR #	Differential Model								K Factor			
							Org. L/W	A/W L/W	Fin. L/W	Ref. Plane	Calc. Imp.		Org. L/W	Org. space	A/W L/W	A/W space	Fin. L/W	Fin. space	Ref. Plane	Calc. Imp.	Zs	Ks	ZD	KD
1 MP	1/2 oz + Plating	H		43.18		1	77		77	2	50	1	72	250			72	250	2	100				
												1	100	180			100	180	2	85				
	106		=>	53.34																				
2 MP	3/8 oz + Plating	3/8		16.51																				
	1080		=>	60.96																				
3 S	1/4 oz + Plating	1/4		26.67		3	70		70	2 & 4	50	3	70	250			70	250	2 & 4	100				
												3	95	180			95	180	2 & 4	85				
	2x106		=>	113.03																				
4 MP		H		16.51																				
	Core		=>	101.60																				
5 MP		H		16.51																				
	2x106		=>	113.03																				
6 S	1/4 oz + Plating	1/4		26.67		6	70		70	5 & 7	50	6	70	250			70	250	5 & 7	100				
	1080		=>	60.96								6	95	180			95	180	5 & 7	85				
7 MP	3/8 oz + Plating	3/8		16.51																				
	106		=>	53.34																				
												8	100	180			100	180	2	85				
8 MP	1/2 oz + Plating	H		43.18		8	77		77	7	50	8	72	250			72	250	7	100				

Thickness After plating	762.00	not including solder mask	Units	Um	
Target Thickness	0.8 ± 0.100	over Plating	Impedance Tolerance	(SE) +/- 10%	(DIFF) +/- 15%

XIF Trace on Layer 3 – fill Layer 2

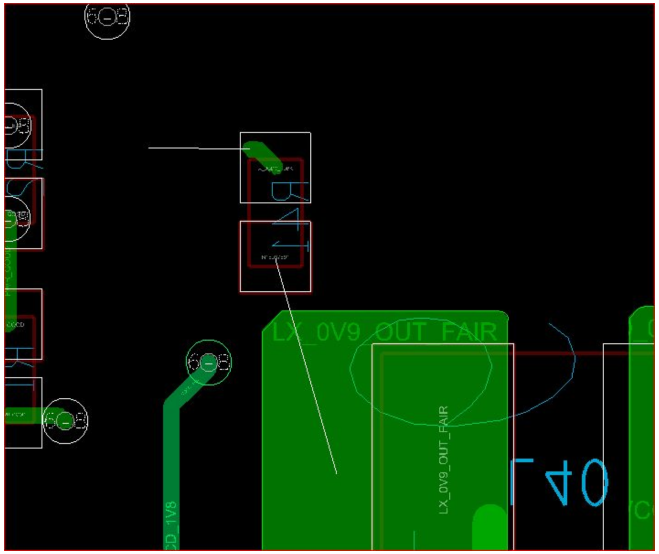
Route on L3 with L2 full reference above (ref layers L2 and L4)

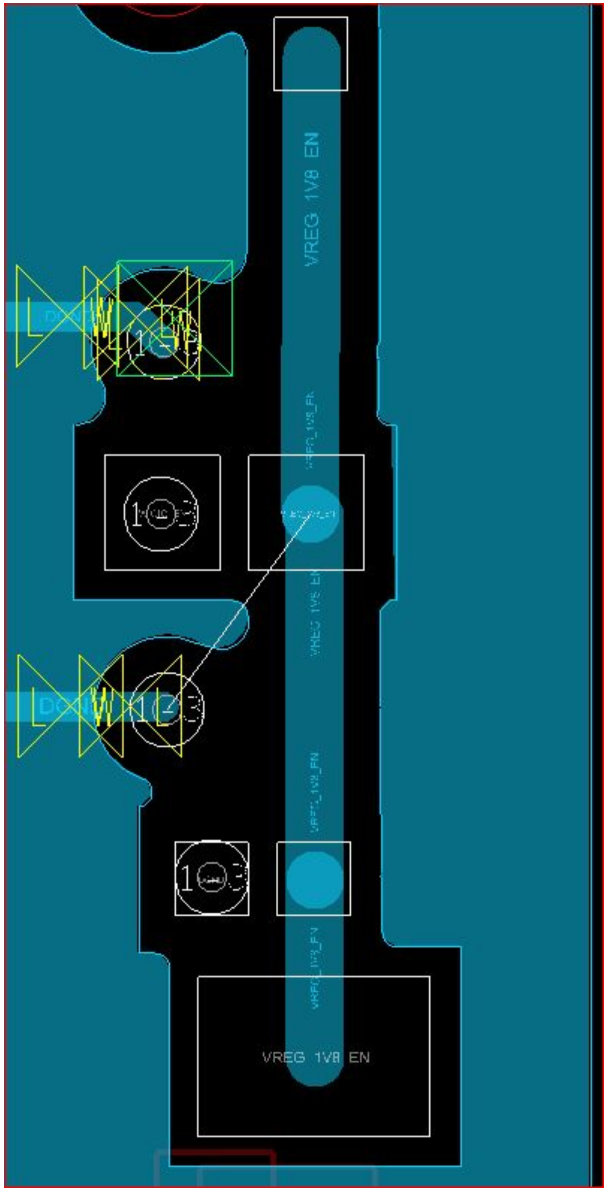
Ned stackup allow this new routing



Netlist change

Fix open nets – I removed several components





Silk screen

Make the bottom side label smaller to fit the