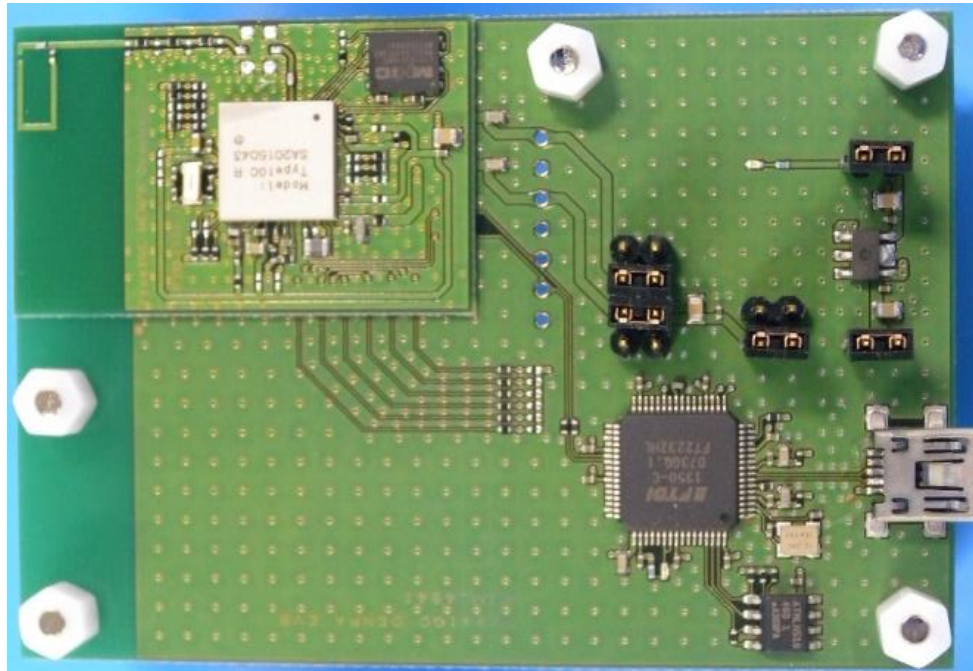


Type1GC Antenna Performance

April, 2016



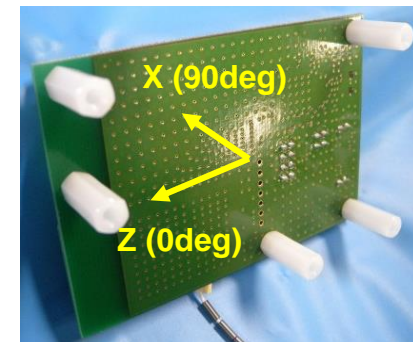
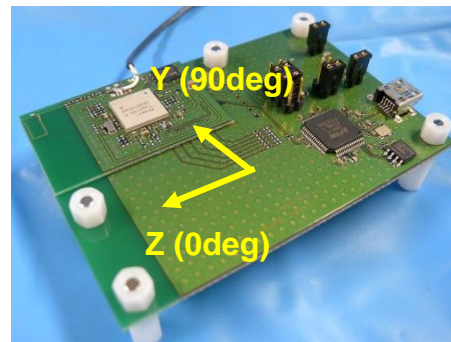
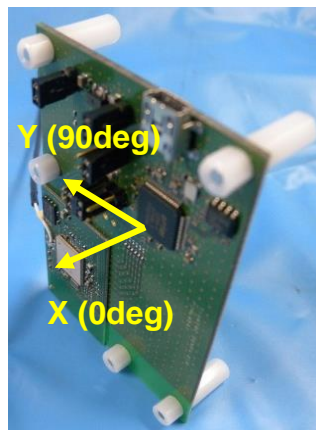
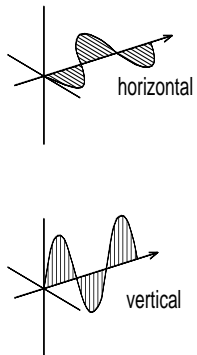
Measurement Board



XY plane

YZ plane

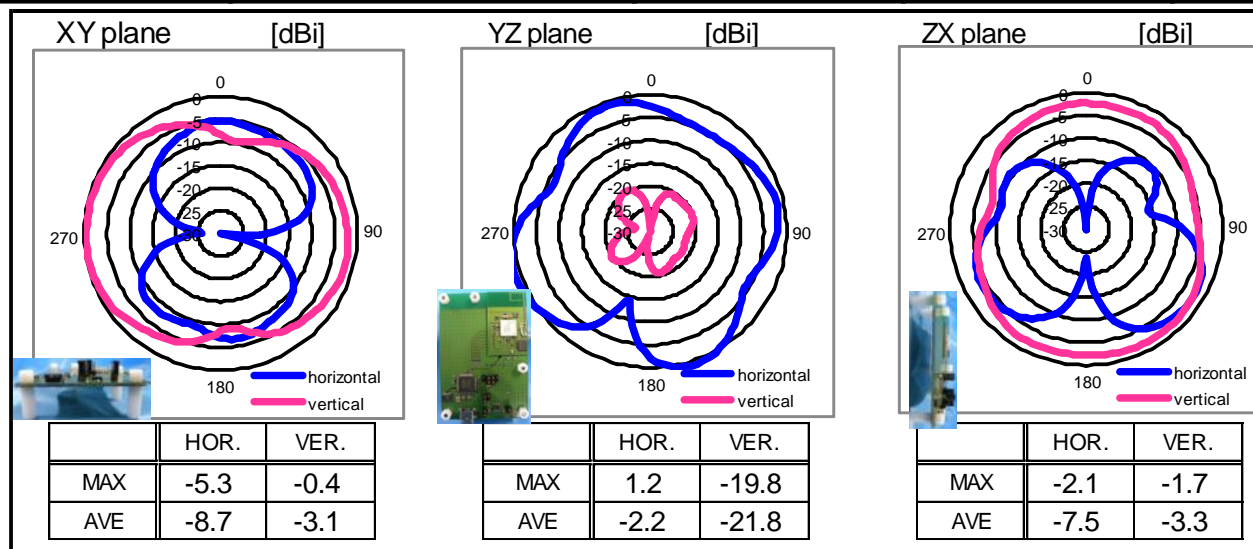
ZX plane



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Antenna Performance for 2GHz

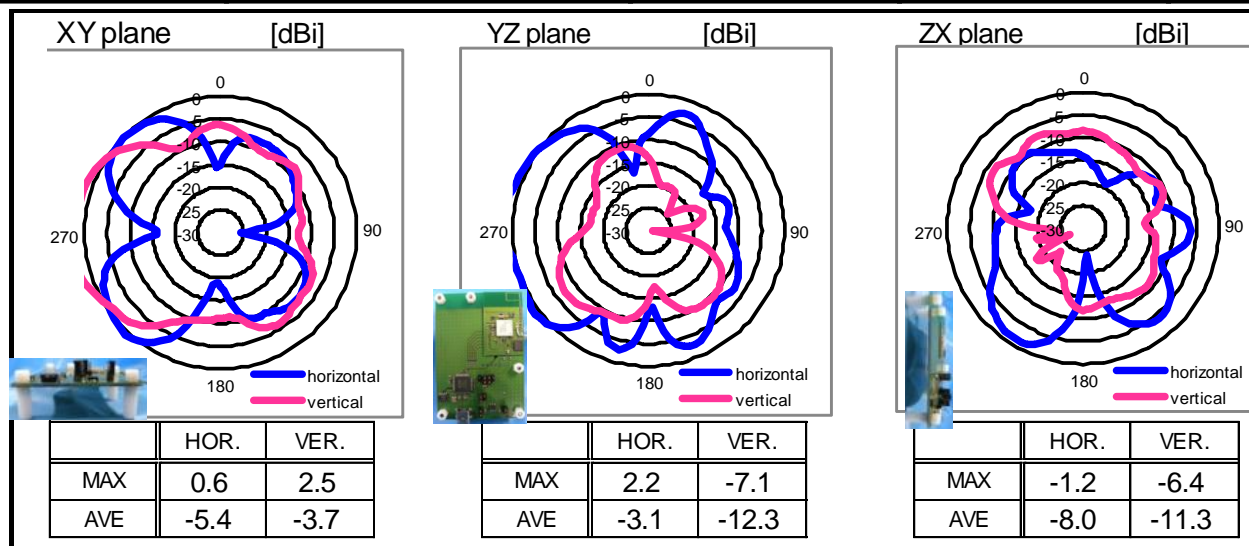
LINEAR POLARIZATION		XY-plane		YZ-plane		ZX-plane		Total Efficiency [dB]
		hor.	ver.	hor.	ver.	hor.	ver.	
2400 MHz	MAX.	-5.4	-0.3	1.2	-18.9	-2.3	-1.5	-2.1
	AVE.	-9.2	-3.2	-2.4	-23.1	-7.9	-3.4	
2442 MHz	MAX.	-5.3	-0.4	1.2	-19.8	-2.1	-1.7	-1.9
	AVE.	-8.7	-3.1	-2.2	-21.8	-7.5	-3.3	
2484 MHz	MAX.	-4.9	-0.6	1.2	-20.3	-2.1	-1.7	-1.9
	AVE.	-8.5	-3.2	-2.2	-22.7	-7.4	-3.3	



Antenna Type: Monopole (pattern antenna)
Antenna Gain: 1.2dBi (peak)

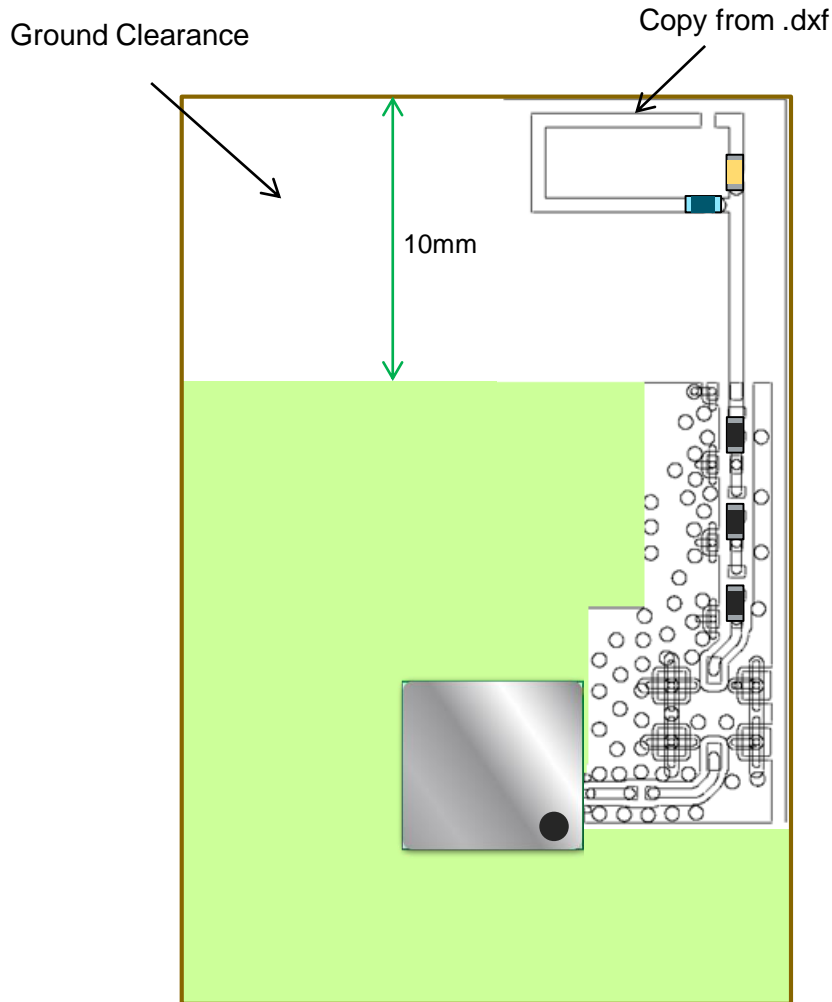
Antenna Performance for 5GHz

LINEAR POLARIZATION		XY-plane		YZ-plane		ZX-plane		Total Efficiency [dB]
		hor.	ver.	hor.	ver.	hor.	ver.	
5150 MHz	MAX.	-1.1	1.5	1.6	-7.9	-2.6	-7.4	-3.2
	AVE.	-7.0	-4.2	-3.4	-13.7	-8.8	-12.5	
5500 MHz	MAX.	0.6	2.5	2.2	-7.1	-1.2	-6.4	-2.3
	AVE.	-5.4	-3.7	-3.1	-12.3	-8.0	-11.3	
5850 MHz	MAX.	0.8	2.1	1.9	-8.8	-2.6	-6.3	-2.7
	AVE.	-5.1	-4.0	-3.5	-12.9	-8.9	-10.9	



Antenna Type: Monopole (pattern antenna)
Antenna Gain: 2.5dBi (peak)

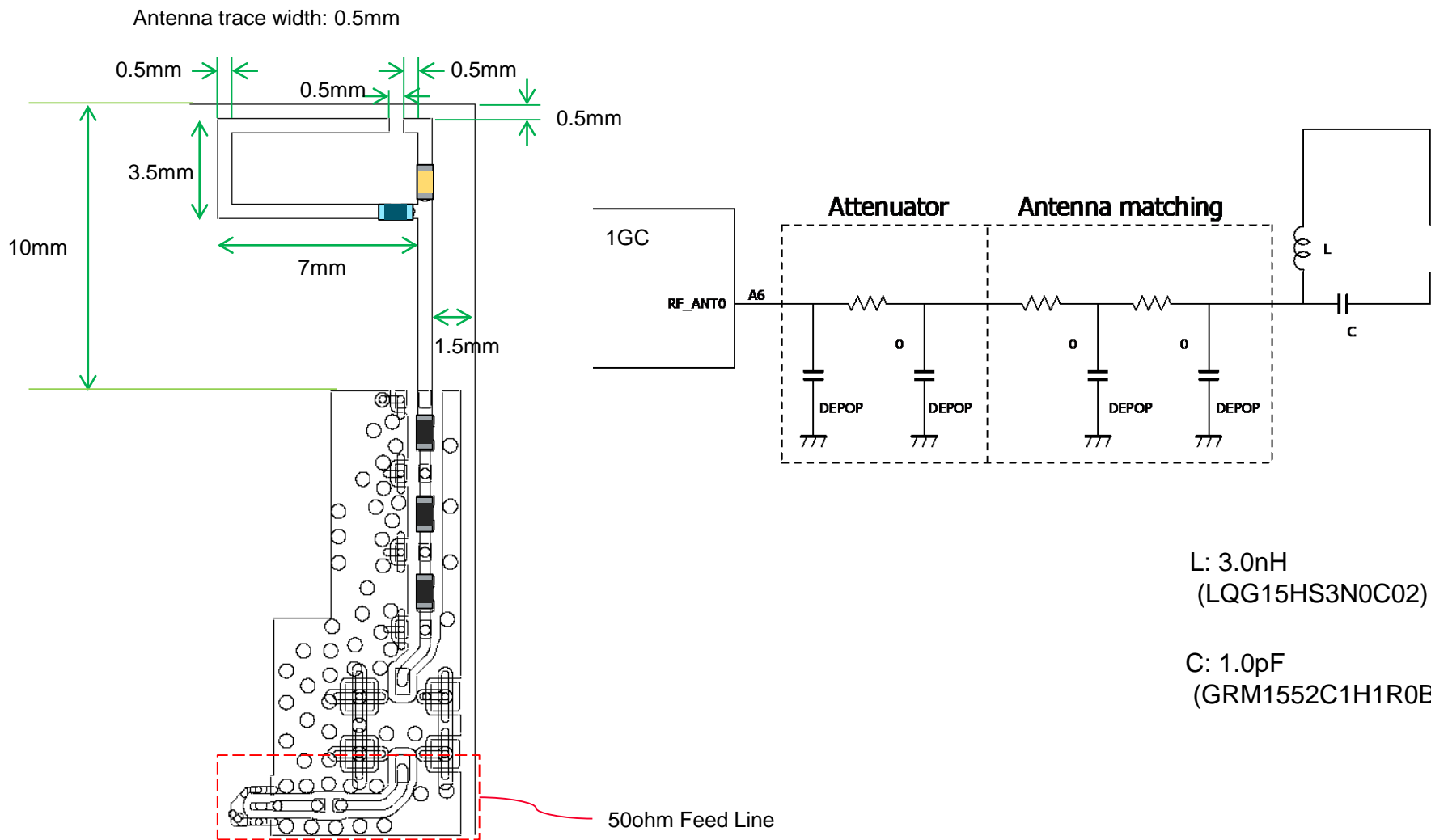
Layout Guide for Good Antenna Performance



- Place the antenna on top-right corner.
- Keep GND clearance all along the top edge.
- Place metal stuff as far as possible.
- Place two pi-network for matching and attenuating.
 - Put 0ohm in series and no load in parallel on the initial design.
 - Put appropriate value of C/L/R depends on actual performance.

Please follow Installation Manual.

Antenna Design



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Please follow Type1GC_Antenna_P2ML4515-1-A.dxf