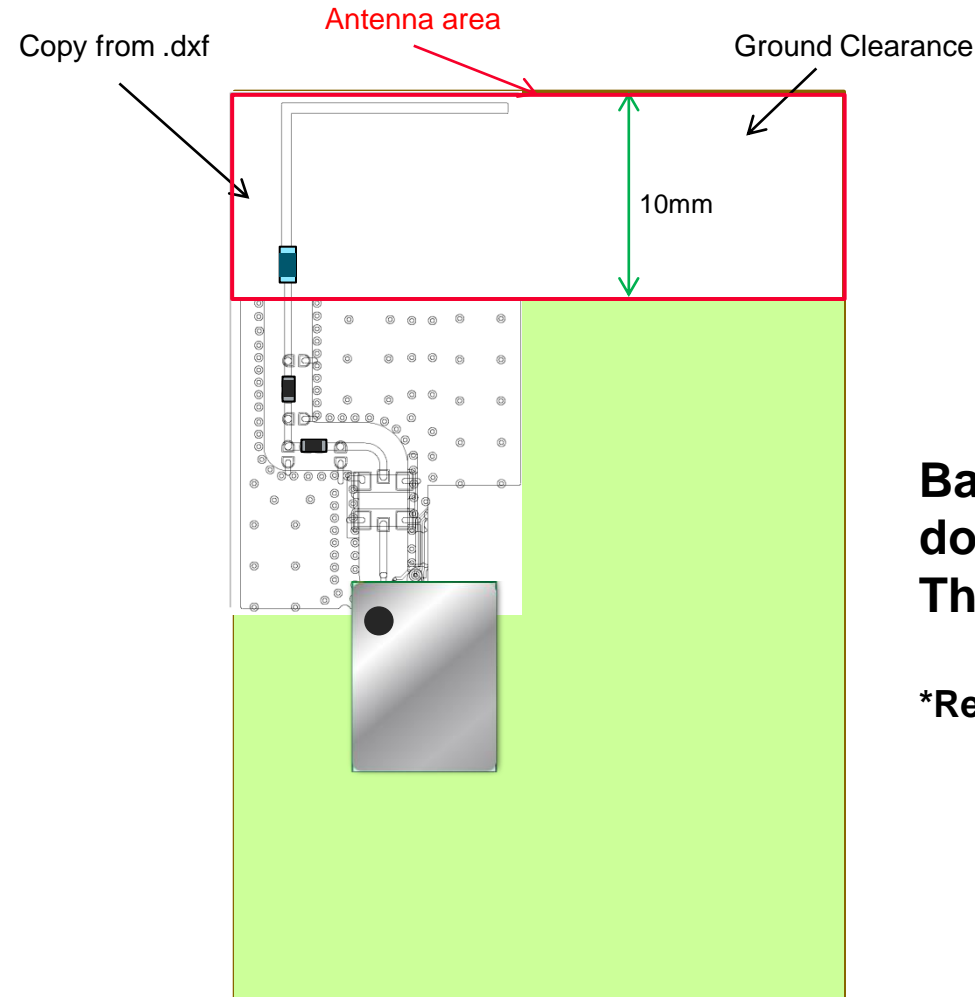


# Type1YN Design guide

Oct, 2021



# 1. Layout Guide of Antenna area

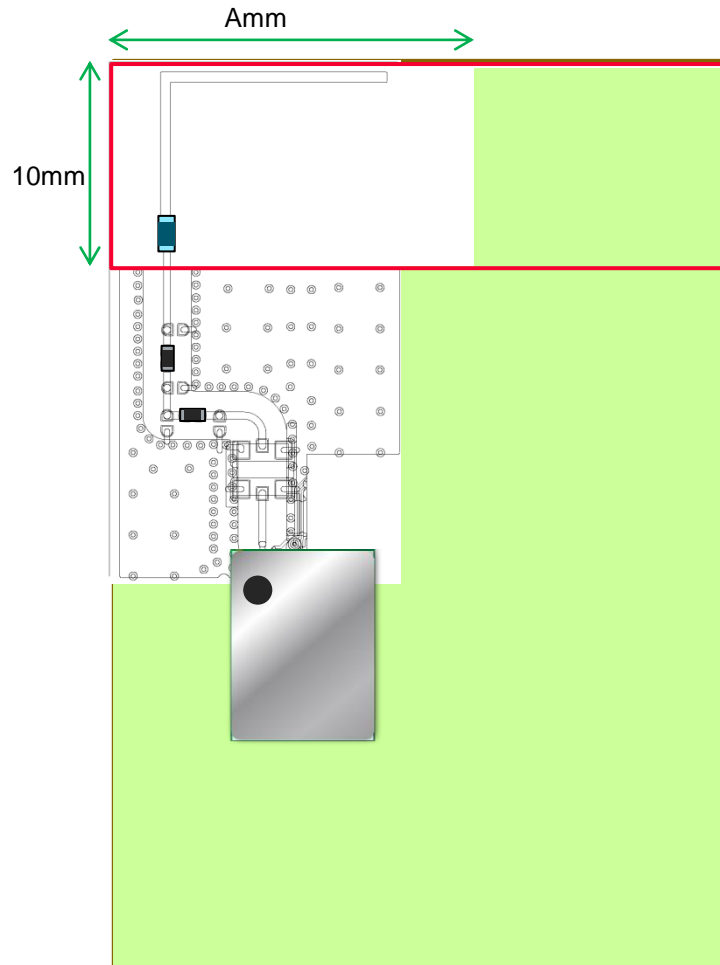


- Place the antenna on top-left corner.
- Keep GND clearance all long the top edge.

**Basically please propose Antenna area doesn't have GND plane .  
This is 1<sup>st</sup> priority.**

**\*Refer to Type1DX\_Antenna Performance\_20160419**

## 2. Layout Guide of Antenna area



If PCB has to arrange GND plane in antenna right area

- Recommend size A : >20mm
- Simulation results

Efficiency	Frequency [MHz]			[dB]
	2400	2442	2484	
Condition				Average
A=15mm	-1.9	-1.9	-2.0	-1.9
A=20mm	-1.3	-1.3	-1.3	-1.3
A=25mm	-1.2	-1.2	-1.2	-1.2
A=30mm	-1.1	-1.1	-1.2	-1.1
A=35mm	-1.2	-1.2	-1.2	-1.2
A=40mm	-1.2	-1.3	-1.3	-1.3

Under 20mm : worse than efficiency of 20mm

Over 20mm : Same efficiency

- \*Need to change matching circuit for each condition
- \*Detail simulation results : RERC16170-SE.xlsx