

XR-2 Antenna Report

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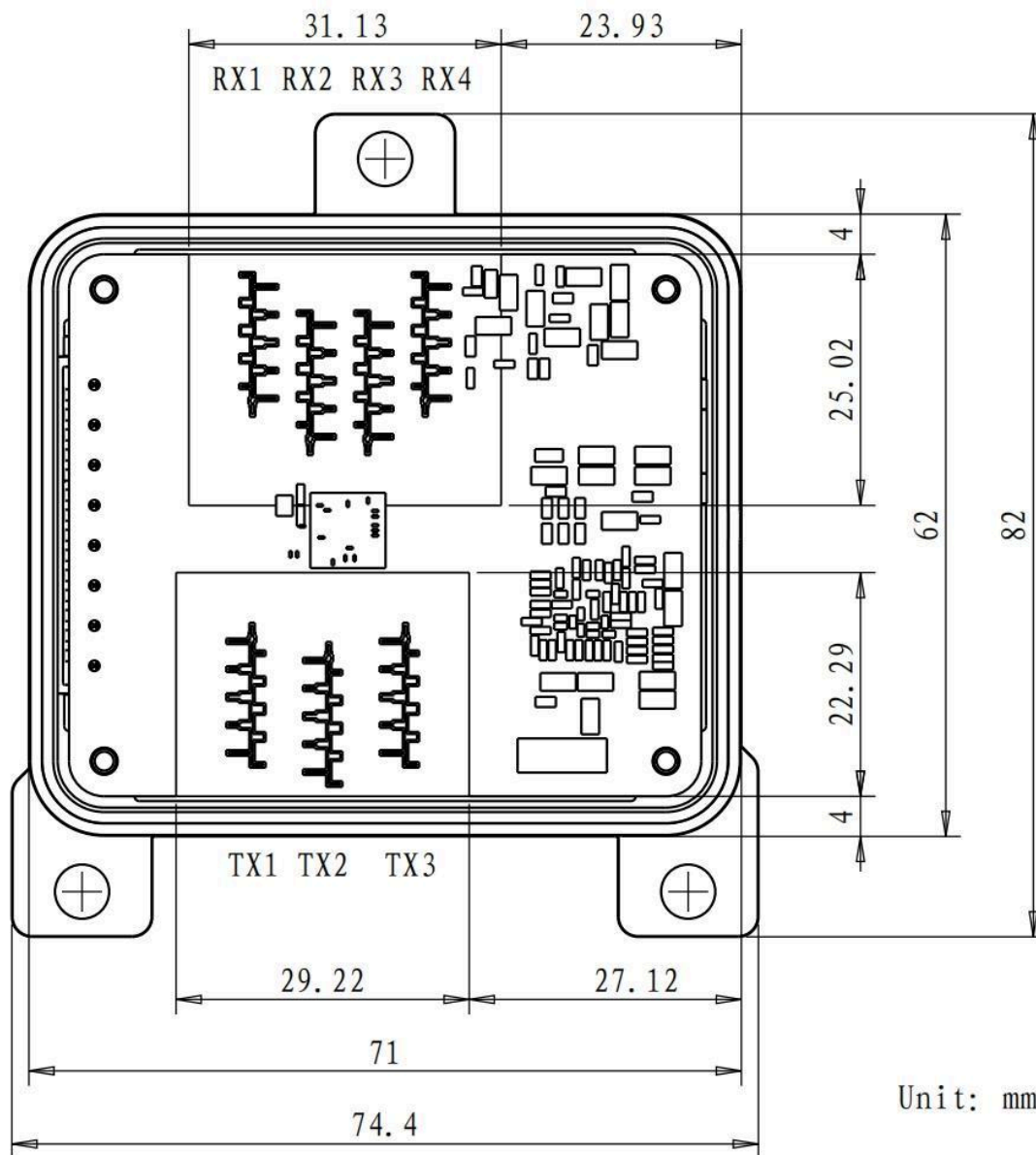
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1. Antenna Description

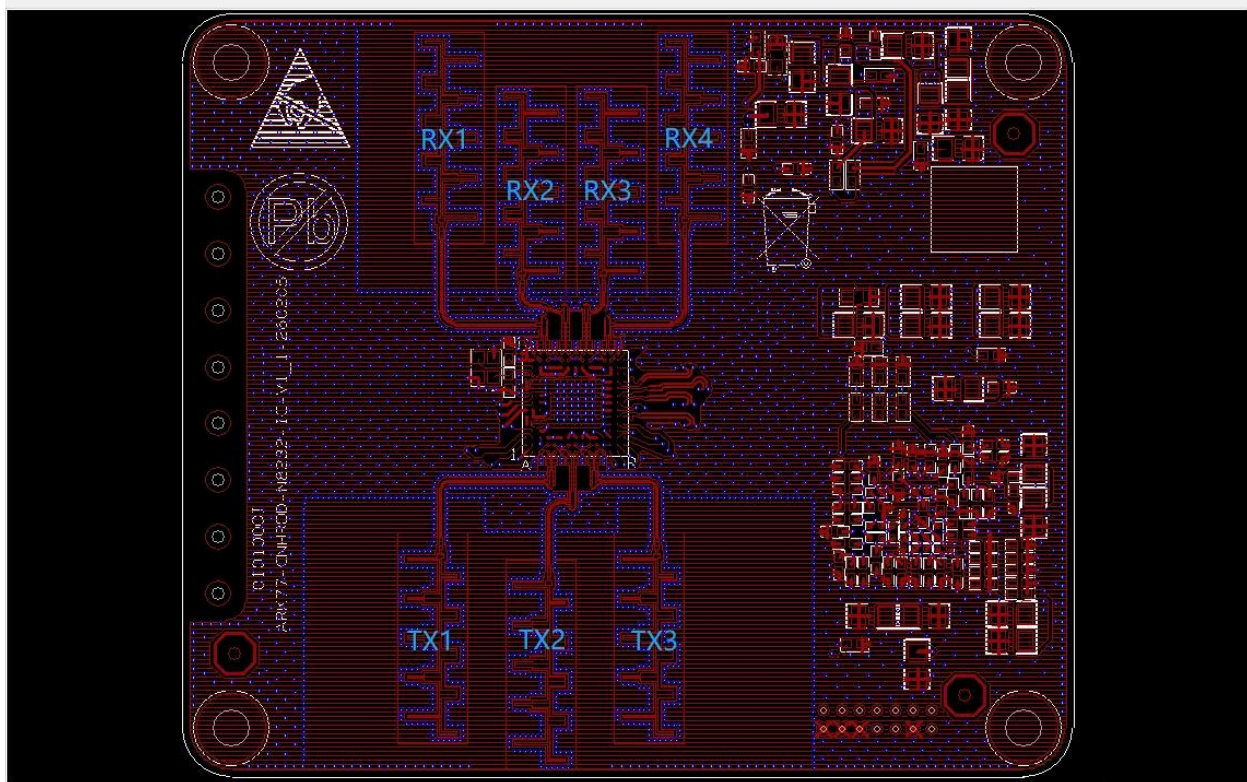
XR-2 radar has three transmitters and four receivers, XR-2 Tx(Transmitter) antenna is a 1×10 Comb antenna array antenna with a gain of 9 dBi. Rx(Receiver) antenna is a 1×10 Comb antenna array antenna with a gain of 9.5 dBi. The frequency range of the antenna is 77.2 to 79.6 GHz.

2. Antenna Layout and Dimensions

Antenna area view in Mechanical dimensions:

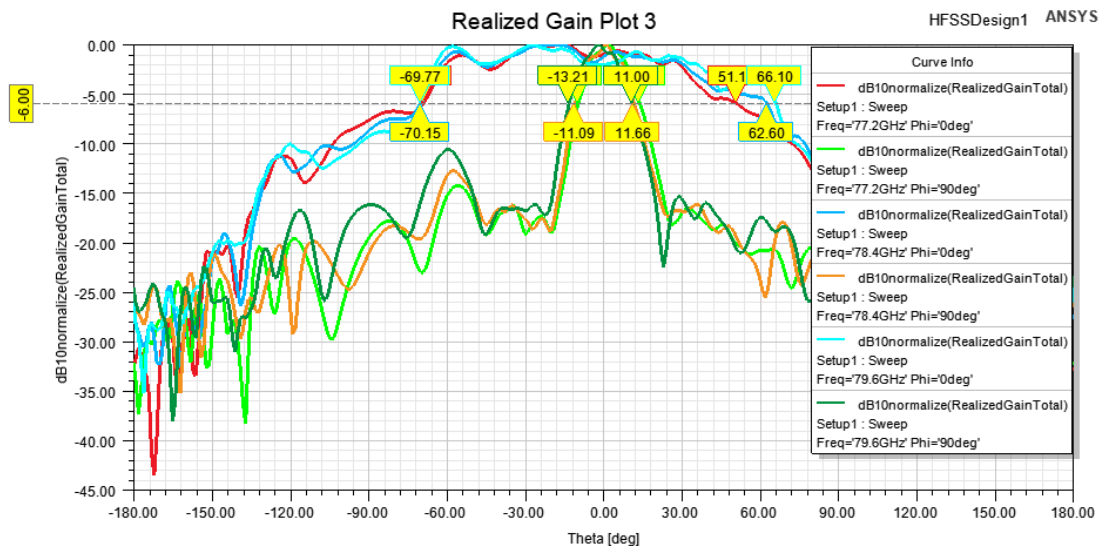


Antenna area view in PCB design:



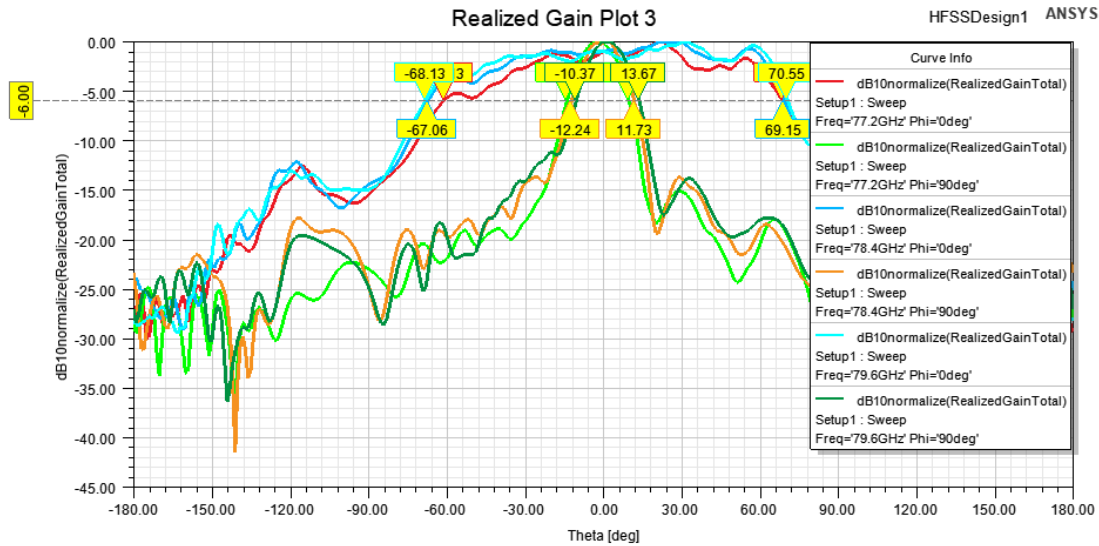
3. Antenna Simulation Report

Tx Antenna Simulation Result:



Realized Gain(dBi)	9
3dB Beam width:(Azimuth,Elevation)(deg)	100*(16)
6dB Beam width:(Azimuth,Elevation)(deg)	132*(23)

Rx Antenna Simulation Result:



Realized Gain(dBi)	9.5
3dB Beam width:(Azimuth,Elevation)(deg)	106*(17)
6dB Beam width:(Azimuth,Elevation)(deg)	136*(24)

4. Antenna manufacturer name and address

Shennan Circuit Co., Ltd

99 Qiaocheng East Road, Nanshan District, Shenzhen, Guangdong, China