

K-77 –G3-24V /12V Antenna Report

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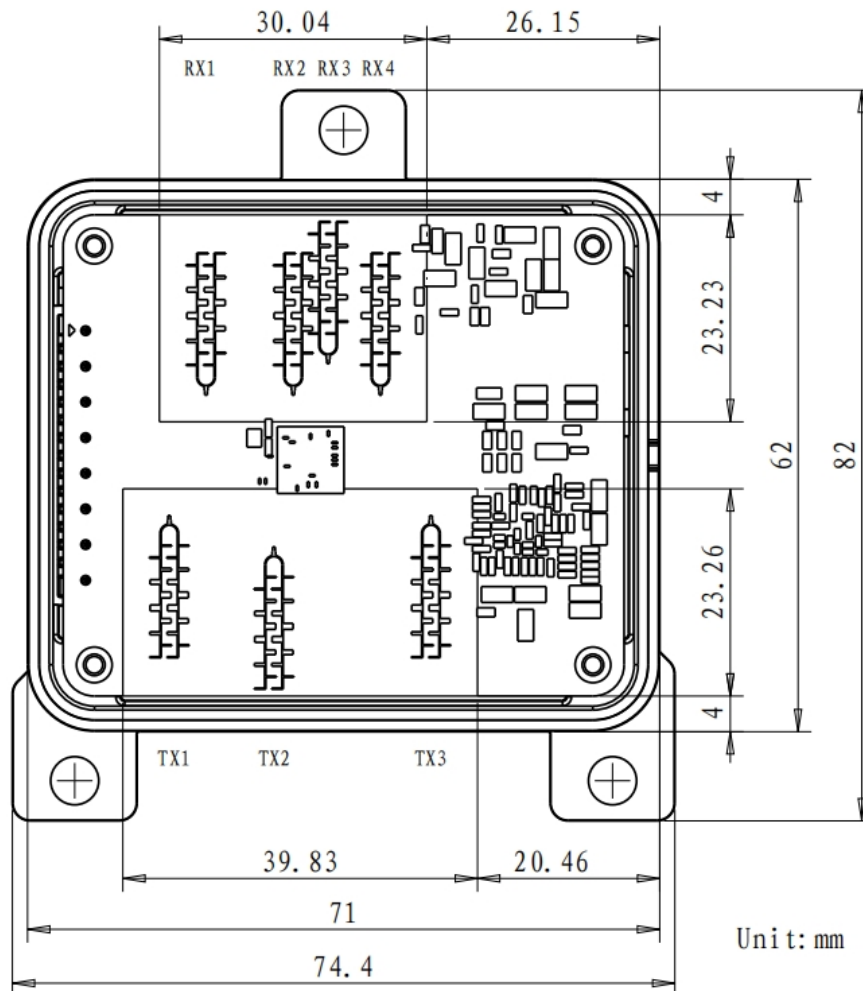
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1. Antenna Description

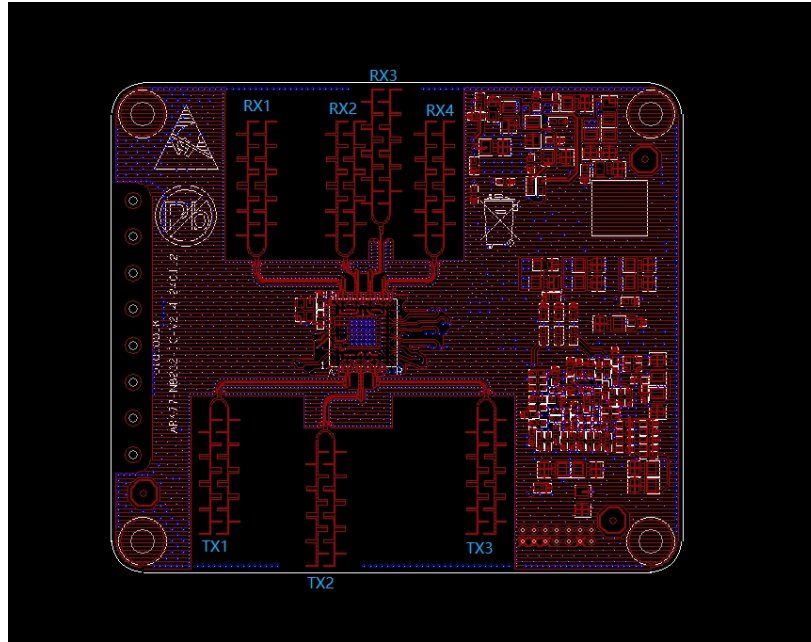
K77 2.4 radar has three transmitters and four receivers, K77 2.4 Tx(Transmitter) antenna is a 2×10 Comb antenna array antenna with a gain of 15 dBi. Rx(Receiver) antenna is a 2×10 Comb antenna array antenna with a gain of 14.7 dBi. The frequency range of the antenna is 76 to 77 GHz.

2. Antenna Layout and Dimensions

Antenna area view in Mechanical dimensions:

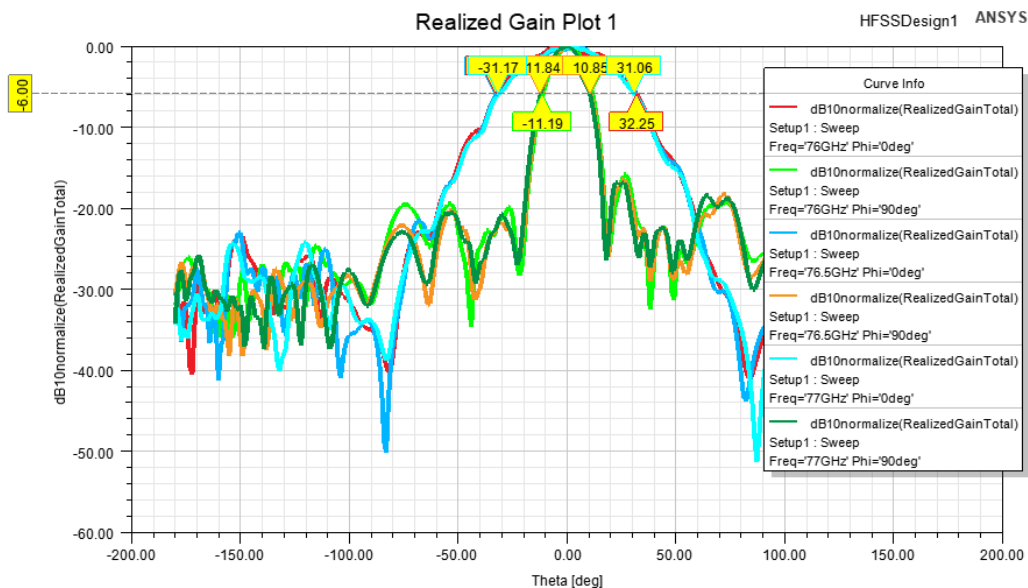


Antenna area view in PCB design:



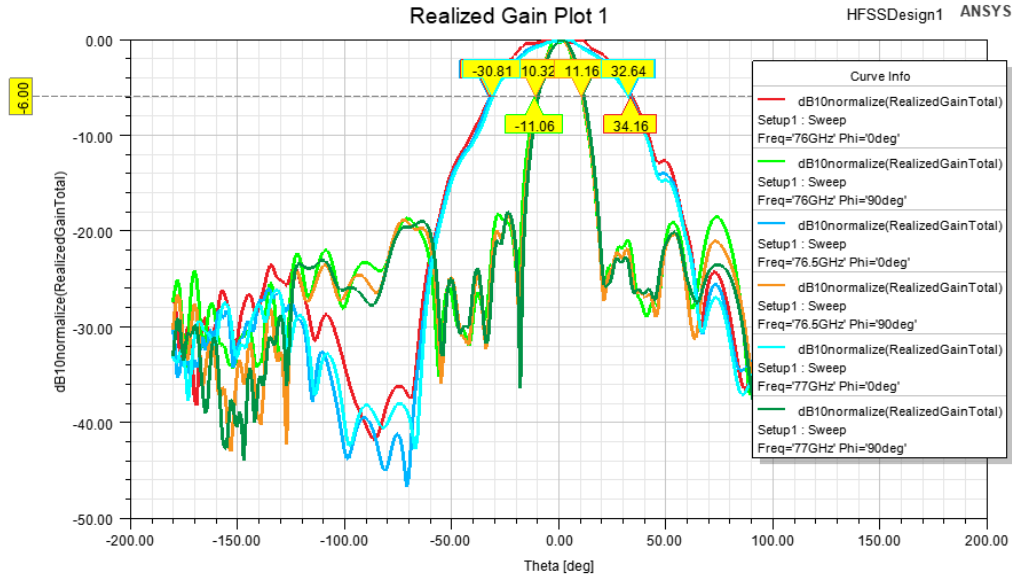
3. Antenna Simulation Report

Tx Antenna Simulation Result:



Realized Gain(dBi)	15
3dB Beam width:(Azimuth,Elevation)(deg)	50*(15)
6dB Beam width:(Azimuth,Elevation)(deg)	65*(21)

Rx Antenna Simulation Result:



Realized Gain(dBi)	14.7
3dB Beam width:(Azimuth,Elevation)(deg)	51*(16)
6dB Beam width:(Azimuth,Elevation)(deg)	66*(22)

4. Antenna manufacturer name and address

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