

Description:

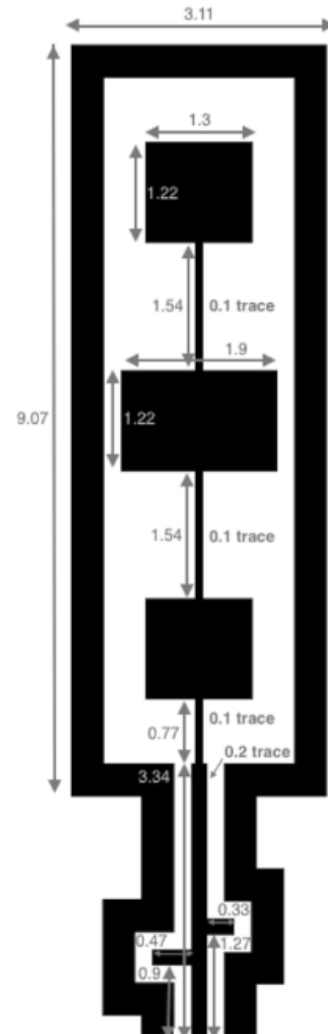
Unison Lab's 01566000101 is an onboard-etched long range patch cascade antenna array, with three transmitters and four receivers. The patch cascade is identical for each transmit and receive antenna path, with each antenna being connected to the transceiver using a 50Ω microstrip trace. The array is integrated into a single PCB copper layer for mmWave sensor processing.

Specifications:

Operation Frequency	61.0 - 61.5 GHz
Number of Receivers	4
Number of Transmitters	3
Technology	Antenna on PCB
Antenna Type	Cascaded Patch
Gain of single Patch Antenna	7 dBi
Gain of transmitter Patch Array	16.54 dBi
E-Plane [Elevation] (3dB Beamwidth)	<+/- 40 deg
H-Plane [Azimuth] (3dB Beamwidth)	<+/- 60 deg
Polarization	Vertical

Note: Receiver antenna array is constructed by a half-wavelength spacing, i.e., 2.5 mm, in the horizontal plane, whereas the transmit antenna array is constructed by a one wavelength spacing, i.e., 5.0 mm, in the horizontal plane.

Antenna Patch Mechanical Drawing:



All units are in: mm
Guard ring is 0.4mm
Guard ring keepout is 0.2mm