

Mmwave Platform

Abstract

Millimeter wave development platform is developed by the Industrial Technology Research Institute for the development of 5G 38GHz band wireless communication technology, using FPGA (processing time domain signal) + DSP (frequency domain signal processing) architecture, with carrier aggregation 250MHz bandwidth. This product also provides real-time two-way communication function, the channel measurement can be a practical assessment, to verify the 5G wireless communication software function of the best development tools.

Features

- Superheterodyne architecture, supports up to 60GHz band
- Support carrier aggregation, bandwidth: 62.5MHz/carrier
- Phased array antenna: BS side 8x8 64-antenna, UE side 4x8 32-antenna (or 1x8 8-antenna)
- Beam-forming and phase steering
- Beam tracking



Technical Specification

- Carrier Frequency: 38GHz
- Bandwidth: 250MHz with carrier aggregation
- Peak transmission rate > 1Gbps
- Latency < 0.2ms
- Phased Array Antenna with 64 antennas
- Coverage: 100m
- Beam-forming/Beam-tracking

