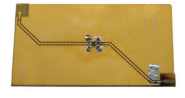


# Dualband WiFi/Bluetooth Chip Antenna Evaluation Board



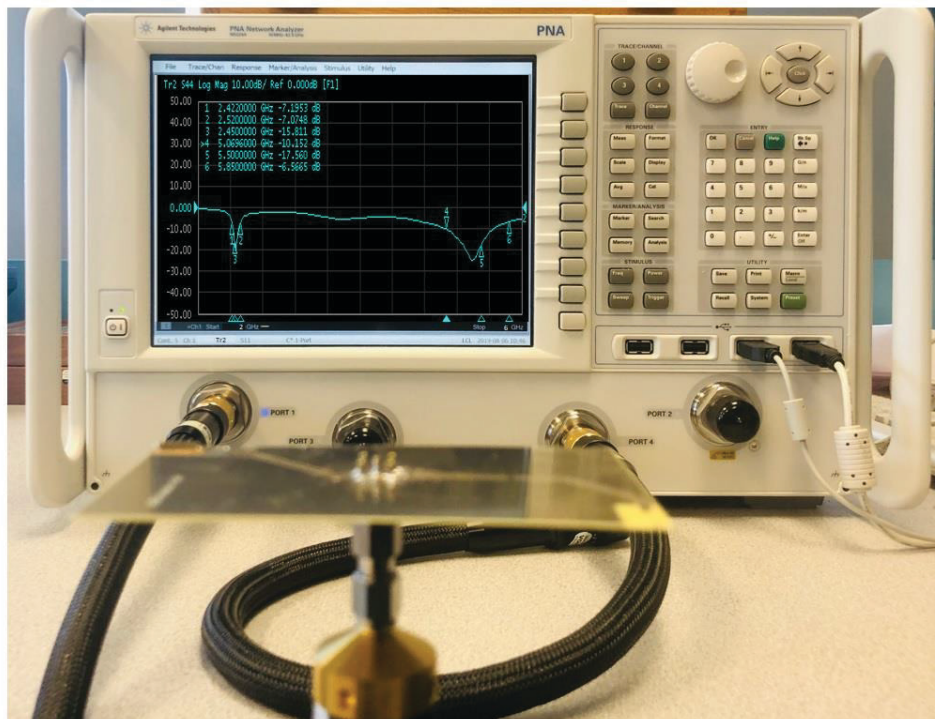
ACAG0301-24505500-EVB

90.0 x 50.0 mm

## Description

ACAG0301-24505500-EVB Evaluation boards are designed to provide a means to facilitate engineering evaluation of the dual band Wi-Fi chip antenna : ACAG0801-24505500-T working at 2450 and 5500 MHz. With a typical bandwidth of 100 MHz and 800 MHz in the respective frequency ranges, the chip can be used for applications including but not limited to Wi-Fi, Bluetooth, BLE and ISM.

To evaluate the performance of antenna, calibrate the Vector Network analyzer (VNA) for the testing frequency band and connect the evaluation board to the calibrated port using the given SMA connector on the board.



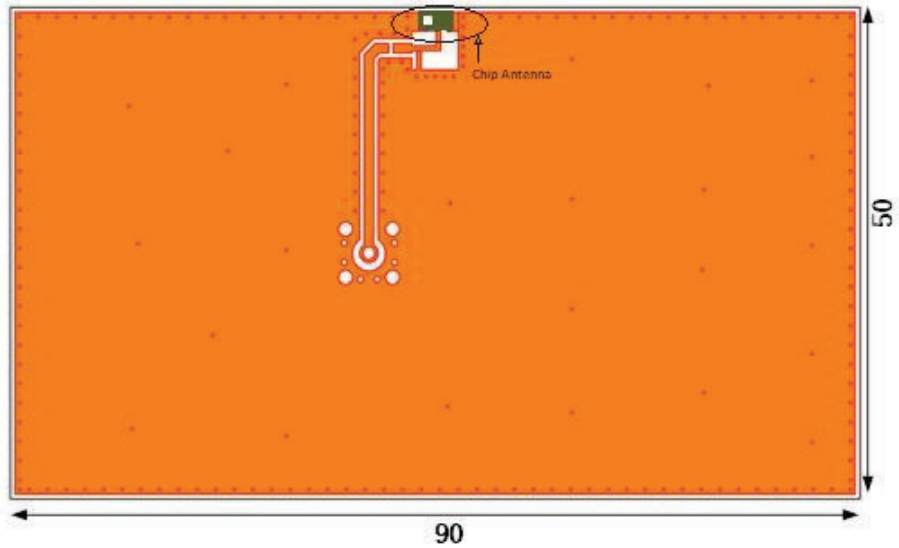
# Dualband WiFi/Bluetooth Chip Antenna Evaluation Board



ACAG0301-24505500-EVB

90.0 x 50.0 mm

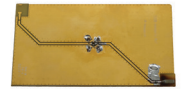
## Evaluation Board with Chip Antenna Layout



Evaluation Board dimension : 90 x 50 mm

Unit: mm

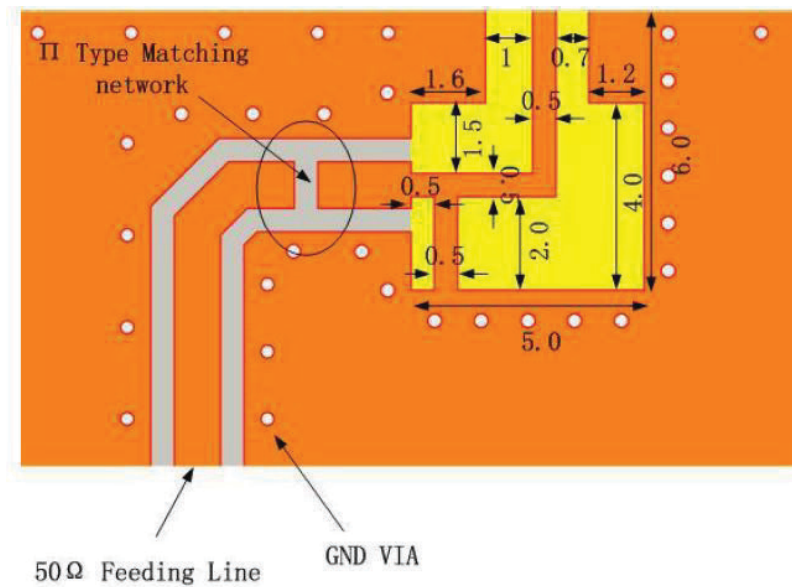
# Dualband WiFi/Bluetooth Chip Antenna Evaluation Board



ACAG0301-24505500-EVB

90.0 x 50.0 mm

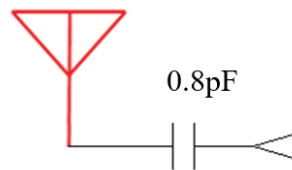
## Chip Antenna Layout



Unit: mm

### Matching Network on EVB:

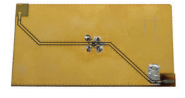
Antenna matching network is designed using a capacitor (0.8 pF) near the input terminal as shown in the above figure.



### Note :

1. Yellow highlighted space represents the ground clearance area around the chip antenna.
2. Desired clearance area : 6.0 x 5.0 mm
3. Width of the 50  $\Omega$  line is designed in accordance with the PCB thickness and material considered.
4. Matching network (Pi - network) provided is in accordance with the EVB layout and matching will differ in the actual customer PCB depending on the layout.

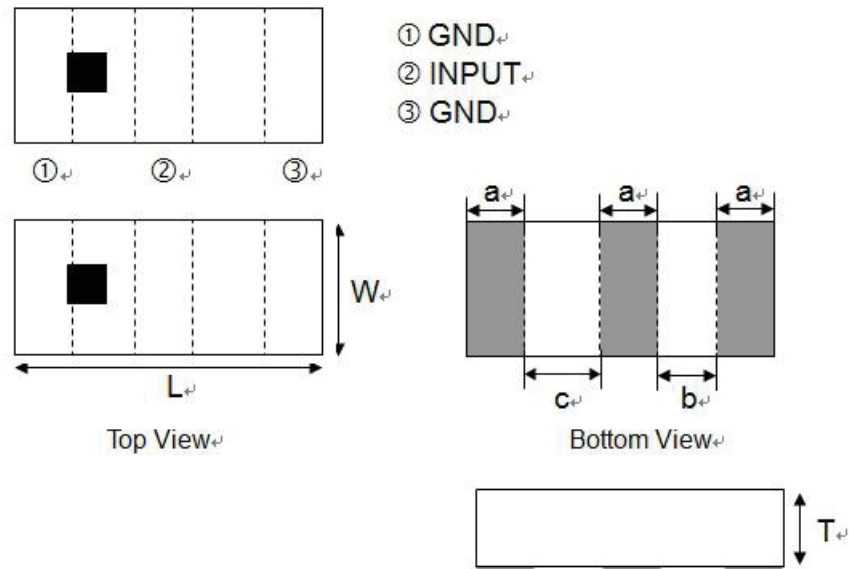
# Dualband WiFi/Bluetooth Chip Antenna Evaluation Board



ACAG0301-24505500-EVB

90.0 x 50.0 mm

## Chip Antenna Dimension



Symbol	L	W	T	a	b	c
Dimensions	3.2+/-0.2	1.6+/-0.2	1.2+/-0.1	0.5+/-0.1	0.7+/-0.1	1.0+/-0.1

Unit: mm

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