User manual Supplementary information
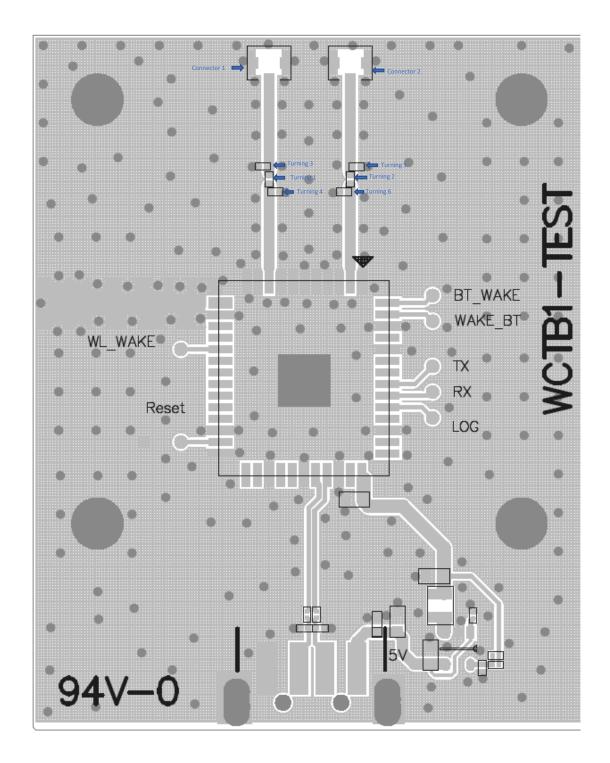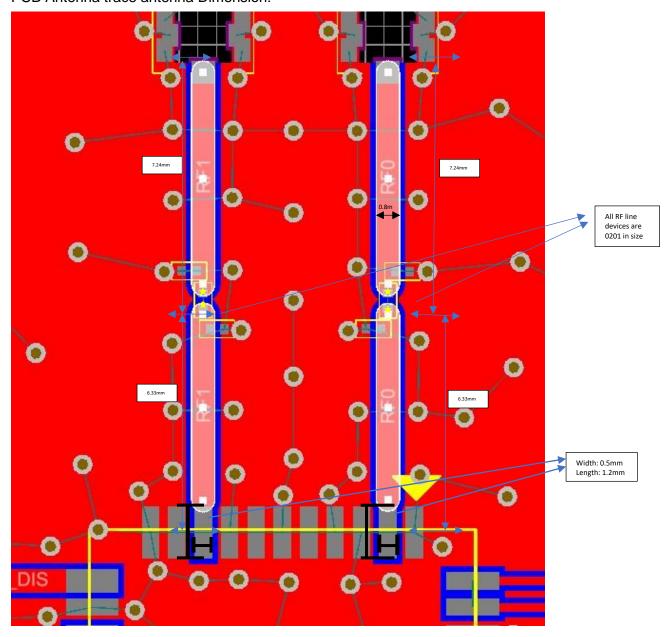
a) Trace layout and dimensions including specific designs for each type:
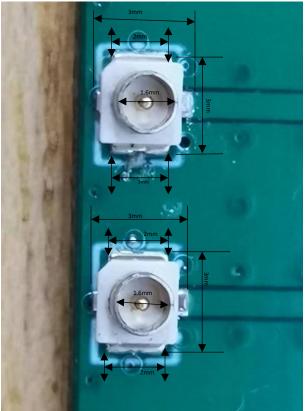   1. Layout of trace design, parts, antenna, connectors, and isolation requirements:

2. Boundary limits of size, thickness, length, width, shape(s), dielectric contain, and impedance must be clearly described for each type of antenna:

PCB Antenna trace antenna Dimension:

★ : 0.33*0.33mm

Note: 1. RF trace between module RF pinout to antenna width is 0.8mm.
2. RF trace between module and antenna impedance is 0ohm.

IPEX connector information:
Size:

3. Different antenna length and shapes effect radiated emission and each design should be considered a different type:
   2.4G WIFI:

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2412-2462	PIFA antenna	1.26
2	2412-2462	PIFA antenna	1.26

b) Appropriate parts of manufacturers and specifications:
Information about devices on RF lines:

Parts list	Parts number	Size	Manufacturer
Tuning 1/0Ω	/	0201	varies
Tuning 2/0Ω	/	0201	varies
Tuning 3/NC	/	0201	varies
Tuning 4/NC	/	0201	varies
Tuning 5/NC	/	0201	varies
Tuning 6/NC	/	0201	varies

	Type	line type	Impedance	Installation	Manufacturer
Connector 1	IPEX	Male pin	50Ω	Surface mount	varies
Connector 2	IPEX	Male pin	50Ω	Surface mount	varies

If customers completely refer to our antenna design for their own design, the antenna performance should also be the same as ours.

C) Test procedures and design verifications:

Customer product development and design
- > Must copy the RF traces of the DXF file on the board completely. Follow up PCB design rule and PCB stack.

- > Design Input

- > Review customer design

RF circuit matching and components selection confirmation

- > Design output

Process monitoring need for improvement

- > Customer Validate the design until it satisfies the needs

and FCC/IC requirements

Successfully validated design goes for production

d) Production test procedures for ensuring compliance

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Technology Maturation
and Risk Reduction Phase
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Customer Development Test and
Evaluation
make sure RF performance can meet
needs and FCC/IC requirement
(Radiated emission test if need)
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Manufacturing and
Development Phase
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Production Phase
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→
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Evaluation (Radiated emission test)
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