TX4G-PCB-6613 User Manual

4G/LTE PCB Built-in Antenna IPEX-I Interface



Chengdu Ebyte Electronic Technology Co.,Ltd.

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Contents

Disclaimer..... 4

1 Introduction..... 5

2 Parameters..... 5

3 Antenna features..... 6

4 FAQ..... 7

About us..... 7

Copyright ©2012–2021, Chengdu Ebyte Electronic Technology Co., Ltd

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Disclaimer

EBYTE reserves all rights to this document and the information contained herein. Products, names, logos and designs described herein may in whole or in part be subject to intellectual property rights.

Reproduction, use, modification or disclosure to third parties of this document or any part thereof without the express permission of EBYTE is strictly prohibited.

The information contained herein is provided “as is” and EBYTE assumes no liability for the use of the information. No warranty, either express or implied, is given, including but not limited, with respect to the accuracy, correctness, reliability and fitness for a particular purpose of the information. This document may be revised by EBYTE at any time. For most recent documents, visit www.ebyte.com.

Copyright ©2012–2021, Chengdu Ebyte Electronic Technology Co., Ltd

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

1 Introduction

TX4G-PCB-6613 is a 4G/LTE frequency band PCB built-in antenna, size 66mm×13mm, IPEX-I interface, suitable for various 4G/LTE frequency equipment (mobile phone, SIM card, router)、wireless module，with small size, can be builded in the module, the signal is stable.

2 Parameters

Electrical parameters	
Frequency	4G/LTE
	800-960MHz;1710-2700MHz
Antenna gain	5dBi
Voltage standing wave ratio	≤1.5
Polarization direction	Linear polarization
Radiation direction	Omnidirectional
Input resistance	50Ω
Power capacity	5W
Other parameters	
Product size	66mm×13mm
Weight	2g
Feeder material	RF1.13
Length of the feeder	150mm（customizable）
Antenna material	PCB
Interface	IPEX-1
Operating temp.	-40℃~+85℃
Storage temp.	-40℃~+85℃

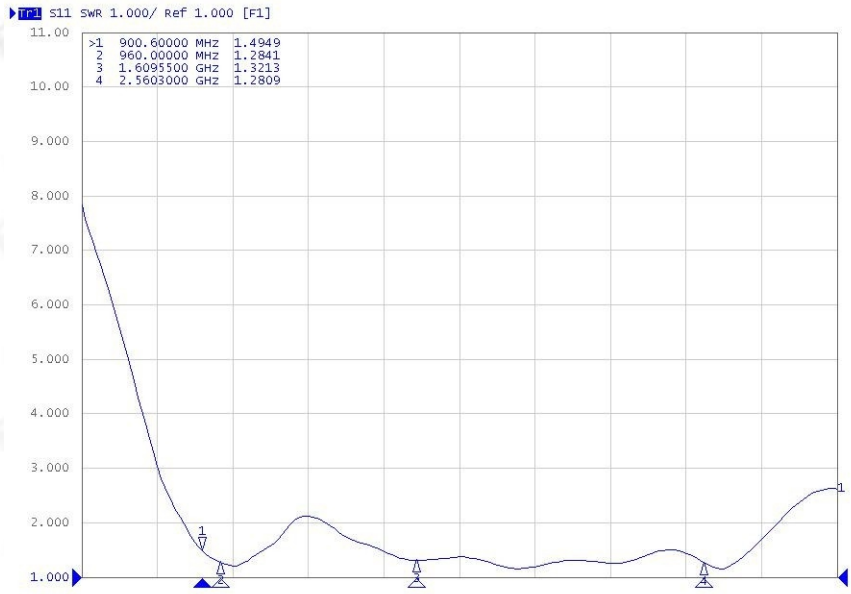


Copyright ©2012–2021, Chengdu Ebyte Electronic Technology Co., Ltd

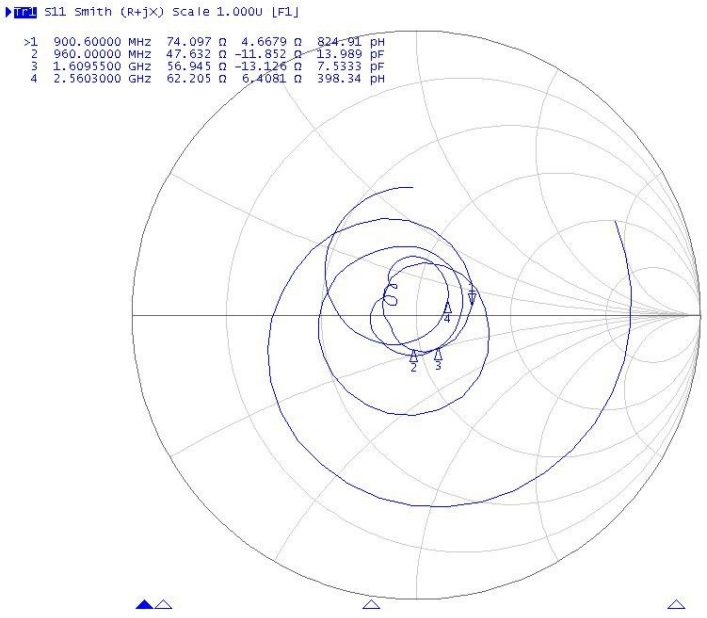
Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

3 Antenna features

VSWR



Smith chart



Copyright ©2012–2021, Chengdu Ebyte Electronic Technology Co., Ltd

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

4 FAQ

- The antenna frequency must match the frequency of the wireless device, otherwise the communication effect will be poor;
- The lower the communication frequency and the longer the wavelength, the better the diffraction performance;
- When there is a straight-line communication obstacle, the communication distance will be attenuated accordingly;
- Please pay attention to the antenna radiation direction, the incorrect installation direction of the antenna leads to a short transmission distance;
- The ground absorbs radio waves, and the test result near the ground is poor. It is recommended to increase the height;
- Sea water has a strong ability to absorb radio waves, so the seaside test results are not good;
- If there is a metal object near the antenna or placed in a metal shell, the signal attenuation will be very serious;
- The poor impedance matching between the antenna and the communication device will lead to poor communication effects.

About us

Technical support: support@cdebyte.com
Documents and RF Setting download link: www.ebyte.com
Thank you for using Ebyte products! Please contact us with any questions or suggestions: info@cdebyte.com
---
Phone: +86 028-61399028
Web: www.ebyte.com
Address: B5 Mould Park, 199# Xiqu Ave, High-tech District, Sichuan, China

Chengdu Ebyte Electronic Technology Co.,Ltd.

Copyright ©2012–2021, Chengdu Ebyte Electronic Technology Co., Ltd

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000