# Copyright © Huawei Technologies Co., Ltd. 2013.

### All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

The product described in this manual may include copyrighted software of Huawei Technologies Co., Ltd and possible licensors. Customers shall not in any manner reproduce, distribute, modify, decompile, disassemble, decrypt, extract, reverse engineer, lease, assign, or sublicense the said software, unless such restrictions are prohibited by applicable laws or such actions are approved by respective copyright holders under licenses.

#### Trademarks and Permissions



HUAWEI, HUAWEI, and



are trademarks or registered trademarks of Huawei Technologies

Co., Ltd.

Other trademarks, product, service and company names mentioned are the property of their respective owners.

## Notice

Some features of the product and its accessories described herein rely on the software installed, capacities and settings of local network, and may not be activated or may be limited by local network operators or network service providers, thus the descriptions herein may not exactly match the product or its accessories you purchase.

Huawei Technologies Co., Ltd reserves the right to change or modify any information or specifications contained in this manual without prior notice or obligation.

## NO WARRANTY

THE CONTENTS OF THIS MANUAL ARE PROVIDED "AS IS". EXCEPT AS REQUIRED BY APPLICABLE LAWS, NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE IN RELATION TO THE ACCURACY, RELIABILITY OR CONTENTS OF THIS MANUAL.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO CASE SHALL HUAWEI TECHNOLOGIES CO., LTD BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, OR LOST PROFITS, BUSINESS, REVENUE, DATA, GOODWILL OR ANTICIPATED SAVINGS.

#### Import and Export Regulations

Customers shall comply with all applicable export or import laws and regulations and will obtain all necessary governmental permits and licenses in order to export, re-export or import the product mentioned in this manual including the software and technical data therein.

# Contents

Getting to Know the ME909U-523D	1
Dimension	1
Position of RF Connectors	2
Pin Definitions	3

## Thank you for purchasing HUAWEI ME909U-523D LTE mini PCIE Module (hereinafter referred to as the ME909U-523D)

#### Note:

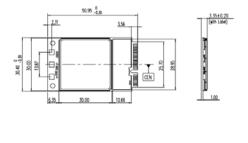
- This manual briefly describes the dimension, the position of RF connectors and Pin definitions.
- You are recommended to read the manual before using the ME909U-523D.

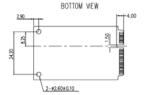
# Getting to Know the ME909U-523D

## Dimension

The package of the mini PCIE module is 52 pin PCIE with a dimension of 51 mm × 30.4 mm × 3.4 mm. It is applied to the user interface board, and can be used as a wireless terminal in a network environment.

TOP VIEW





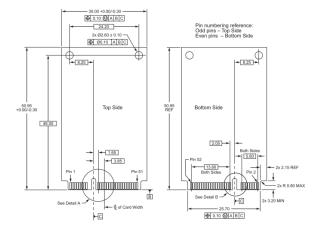
## Position of RF Connectors

The PCIE module provided three antenna connectors (MAIN\_ANT, GPS\_ANT and AUX\_ANT) for connecting the external antennas.

AUX GPS MAIN

## **Pin Definitions**

The sequence of mini-PCIE interface is shown below.



The Pin definitions of the Mini PCIE interface is shown below.

PIN	Pin Name		Ι	Description	DC Cl	haracteristi	ics (V)
No.	Mini PCI Express Standard Description	HUAWEI Pin Description	/ 0		Min.	Тур.	Max
1	WAKE#	WAKE#	0	Open collector active low signal. This signal is used to wake up the host.	-0.3	-	-
2	3.3Vaux	VCC_3V3	Ρ	3.3 V DC supply rails from the PC side.	3.0	3.3	3.6
3	RESERVED	UARTO_CTS _PCIE	-	CTS of UARTO	-	-	-
4	GND	GND	-	Mini Card ground	-	-	-
5	RESERVED	UARTO_RTS_ PCIE	-	RTS of UARTO	-	-	-
6	1.5 V	NC	-	Not connected	-	-	-
7	CLKREQ#	NC	-	Not connected	-	-	-
8	UIM_PWR	UIM_PWR	0	Power source for the external UIM/SIM card	-	1.8/2.8 5	-
9	GND	GND	-	Mini Card ground	-	-	-
10	UIM_DATA	UIM_DATA	/ 0	External UIM/SIM data signal	-0.3	1.8/2.8 5	2.1/3 .05
11	REFCLK-	NC	-	Not connected	-	-	-

PIN	Pin Name		Ι	Description	DC Cl	haracteristi	ics (V)
No.	Mini PCI Express Standard Description	HUAWEI Pin Description	/ 0		Min.	Тур.	Max
12	UIM_CLK	UIM_CLK	0	External UIM/SIM clock signal	-0.3	1.8/2.8 5	2.1/3 .05
13	REFCLK+	NC	-	Not connected	-	-	-
14	UIM_RESET	UIM_RESET	0	External UIM/SIM reset signal.	-0.3	1.8/2.8 5	2.1/3 .05
15	GND	GND	-	Mini Card ground	-	-	-
16	UIM_Vpp	Reserved	-	Reserved	-	-	-
17	RESERVED	Reserved	-	Reserved	-	-	-
18	GND	GND	-	Mini Card ground	-	-	-
19	RESERVED	Reserved	-	Reserved	-	-	-
20	W_DISABLE#	W_DISABLE #	-	The W_DISABLE# signal is an active low signal that when asserted (driven low) by the system shall disable radio operation. The software version is planning.	-	-	
21	GND	GND	-	Mini Card ground	-	-	-

PIN	Pin Name		Ι	Description	DC C	haracteristi	ics (V)
No.	Mini PCI Express Standard Description	HUAWEI Pin Description	/ 0		Min.	Тур.	Max
22	PERST#	NC	-	Not connected	-	-	-
23	PERn0	NC	-	Not connected	-	-	-
24	3.3Vaux	VCC_3V3	-	3.3 V DC supply rails from the PC side.	3.0	3.3	3.6
25	PERp0	NC	-	Not connected	-	-	-
26	GND	GND	-	Mini Card ground	-	-	-
27	GND	GND	-	Mini Card ground	-	-	-
28	1.5 V	NC	-	Not connected	-	-	-
29	GND	GND	-	Mini Card ground	-	-	-
30	SMB_CLK	NC	-	Not connected	-	-	-
31	PETn0	NC	-	Not connected	-	-	-
32	SMB_DATA	NC	-	Not connected	-	-	-
33	PETp0	NC	-	Not connected	-	-	-
34	GND	GND	-	Mini Card ground	-	-	-
35	GND	GND	-	Mini Card ground	-	-	-
36	USB_D-	USB_D-	l/ O	USB signal D-	-	-	-
37	RESERVED	RESERVED	-	RESERVED	-	-	-

PIN	Pin Name		Ι	Description	DC Cl	haracteristi	ics (V)
No.	Mini PCI Express Standard Description	HUAWEI Pin Description	/ 0		Min.	Тур.	Max
38	USB_D+	USB_D+	l/ 0	USB signal D+	-	-	-
39	RESERVED	VCC_3V3	Ρ	3.3 V DC supply rails from the PC side.	3.0	3.3	3.6
40	GND	GND	-	Mini Card ground	-	-	-
41	RESERVED	VCC_3V3	Ρ	3.3 V DC supply rails from the PC side	3.0	3.3	3.6
42	LED_WWAN #	LED_WWAN	Ι	Active-low LED signal indicating the state of the card The software feature is under development and don't support this function now.	-	-	-
43	GND	GND	-	Mini Card ground	-	-	-
44	LED_WLAN#	NC	-	Not connected	-	-	-
45	RESERVED	PCM_CLK	0	PCM interface clock	-0.3	1.8	2.1
46	LED_WPAN#	NC	-	Not connected	-	-	-

PIN	Pin Name		Ι	Description	DC Cl	haracteristi	ics (V)
No.	Mini PCI Express Standard Description	HUAWEI Pin Description	/ 0		Min.	Тур.	Max
47	RESERVED	PCM_DOUT	0	PCM I/F data out	-0.3	1.8	2.1
48	1.5 V	NC	I	Not connected	-	-	-
49	RESERVED	PCM_DIN	—	PCM I/F data in	-0.3	1.8	2.1
50	GND	GND	I	Mini Card Ground	-	-	-
51	RESERVED	PCM_SYNC	0	PCM interface sync	-0.3	1.8	2.1
52	3.3Vaux	VCC_3V3	Ρ	3.3 V DC supply rail from the PC side.	3.0	3.3	3.6