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Thank you for purchasing HUAWEI MU609 HSPA mini PCIE Module (hereinafter referred to as the MU609)

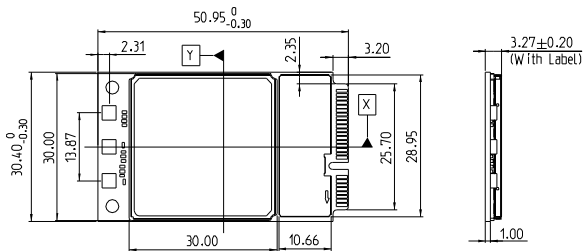
Note:

- This manual briefly describes the dimension, the position of RF connectors and Pin definitions.
- You are recommended to read the manual before using the MU609.

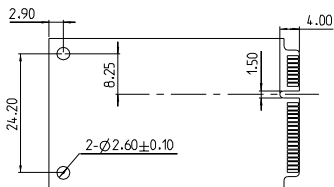
Getting to Know the MU609

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.



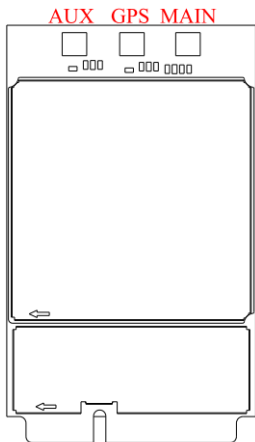
TOP VIEW



BOTTOM VIEW

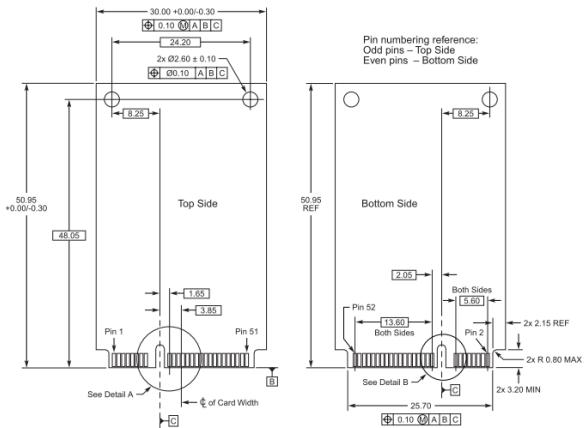
Position of RF Connectors

The PCIE Adapter module provided three antenna connectors (MAIN_ANT, GPS_ANT and AUX_ANT) for connecting the external antennas.



Pin Definitions

- The sequence of mini-PCIE interface is shown below.



- The Pin definitions of the Mini PCIe interface is shown below.

PIN No.	Pin Name		I / O	Description	DC Characteristics (V)		
	Mini PCI Express Standard Description	HUAWEI Pin Description			Min.	Typ.	Max
1	WAKE#	WAKE#	O	Open collector active low signal. This signal is used to wake up the host.	-0.3	-	-
2	3.3Vaux	VCC_3V3	P	3.3 V DC supply rails from the PC side.	3.0	3.3	3.6
3	COEX1	NC	-	Not connected	-	-	-
4	GND	GND	-	Mini Card ground	-	-	-
5	COEX2	NC	-	Not connected	-	-	-
6	1.5 V	NC	-	Not connected	-	-	-
7	CLKREQ#	NC	-	Not connected	-	-	-
8	UIM_PWR	UIM_PWR	O	Power source for the external UIM/SIM card	-	1.8/2.85	-
9	GND	GND	-	Mini Card ground	-	-	-

PIN No.	Pin Name		I / O	Description	DC Characteristics (V)		
	Mini PCI Express Standard Description	HUAWEI Pin Description			Min.	Typ.	Max
10	UIM_DATA	UIM_DATA	I / O	External UIM/SIM data signal	-0.3	1.8/2.85	2.1/3.05
11	REFCLK-	NC	-	Not connected	-	-	-
12	UIM_CLK	UIM_CLK	O	External UIM/SIM clock signal	-0.3	1.8/2.85	2.1/3.05
13	REFCLK+	NC	-	Not connected	-	-	-
14	UIM_RESET	UIM_RESET	O	External UIM/SIM reset signal.	-0.3	1.8/2.85	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	-	-	-

PIN No.	Pin Name		I / O	Description	DC Characteristics (V)		
	Mini PCI Express Standard Description	HUAWEI Pin Description			Min.	Typ.	Max
20	W_DISABLE #	W_DISABLE #	-	For ending the wireless communications . Please refer to the LGA module, which is on the PCIE Adapter. For MU609 the module cannot support this function.	-	-	-
21	GND	GND	-	Mini Card ground	-	-	-
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	-	-	-

PIN No.	Pin Name		I / O	Description	DC Characteristics (V)		
	Mini PCI Express Standard Description	HUAWEI Pin Description			Min.	Typ.	Max
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-	I / O	USB signal D-	-	-	-
37	GND	GND	-	Mini Card ground	-	-	-

PIN No.	Pin Name		I / O	Description	DC Characteristics (V)		
	Mini PCI Express Standard Description	HUAWEI Pin Description			Min.	Typ.	Max
38	USB_D+	USB_D+	I / O	USB signal D+	-	-	-
39	3.3Vaux	VCC_3V3	P	3.3 V DC supply rails from the PC side.	3.0	3.3	3.6
40	GND	GND	-	Mini Card ground	-	-	-
41	3.3Vaux	VCC_3V3	P	3.3 V DC supply rails from the PC side	3.0	3.3	3.6
42	LED_WWAN #	LED_WWAN	I	Active-low LED signal indicating the state of the card	-	-	-
43	GND	GND	-	Mini Card ground	-	-	-
44	LED_WLAN#	NC	-	Not connected	-	-	-
45	Reserved	PCM_CLK	O	PCM interface clock	-0.3	1.8	2.1

PIN No.	Pin Name		I / O	Description	DC Characteristics (V)		
	Mini PCI Express Standard Description	HUAWEI Pin Description			Min.	Typ.	Max
46	LED_WPAN#	NC	-	Not connected	-	-	-
47	Reserved	PCM_DOUT	O	PCM I/F data out	-0.3	1.8	2.1
48	1.5 V	NC	-	Not connected	-	-	-
49	Reserved	PCM_DIN	I	PCM I/F data in	-0.3	1.8	2.1
50	GND	GND	-	Mini Card Ground	-	-	-
51	Reserved	PCM_SYNC	O	PCM interface sync	-0.3	1.8	2.1
52	3.3Vaux	VCC_3V3	P	3.3 V DC supply rail from the PC side.	3.0	3.3	3.6