Product Spec List

Product Name：MF210V2

Version： 2.1

Date:2013-08-29

Version History

Version	Date	Author	Reviewer	Reason for Revision
V2.0	2013-8-23			The 2nd version
V2.1	2013-8-29			Modify the Approvals &Certification, add the support of win8 OS.

NOTE: As the wireless module will need to be upgraded and improved constantly in the further, part of the content can't make sure and is instead of TBD at present. This part of the document will be updated in subsequent versions.

MF210V2 Spec List					
Item	**Feature**	**Description**		**Supportability**	**Notes**
	Product Name	MF210V2			
Artwork	Dimensions	51mm*30mm*4.7mm			
	Weight	About 10g			
	Picture				
	Form Factor	PCI Express mini Card			
	USB Interface Type	Other			Provide USB Interface
	Design guide	Hardware & Software Design guide		Yes	
Solution	Chipset supplier	Qualcomm			
Baseband	Processor	ARM 9			
	Processor speed (Apps)	MSM6290:High-performance ARM926EJ-STM running at up to 297.6 MHz for 7.2 Mbps HSDPA			
	USIM/SIM	Support Standard SIM card			3V SIM card and 1.8V SIM card
	Memory(SDRAM/NAND)	32MByte/128MByte			Cost Related
	MICRO SD Card	No memory card support			
	USB Version	USB 2.0 HIGH SPEED			
	Interface	PCI EXPRESS MINI CARD			
	Active power consumption	about 150mA			W2100, Average normal working current (without services)
	Sleep mode	about 4.6mA			
	Power supply	3.3V(3.0~3.8V)			
	LED control	1 LED pin			
RF	Receive Diversity			Optional	Support GPS and diversity antenna, but they are not supported simultaneously. ZTEWelink does not provide the antenna which is provided by the third party
	Main Antenna	External			Provide Antenna Interface
	Receive Diversity Antenna	External			Provide Antenna Interface
	GSM Band	EDGE/GPRS/GSM:1900/1800/900/850MHz			Cost Related
	UMTS Band	WCDMA/HSDPA:2100/1900/850(900)MHz			Cost Related
	RxDiv Band	2100/1900/850(900)MHz			
	Max. transmitter power	WCDMA/HSDPA 2100/1900/850(900)MHz: +24dBm+1/-3dBm (Power Class 3) GSM/GPRS 850MHz/900MHz: +33dBm ±2dBm(Power Class 4) GSM/GPRS 1800MHz/1900MHz: +30dBm±2dBm (Power Class 1) EDGE 850MHz/900MHz: +27dBm ±3dBm(Power Class E2) EDGE 1800MHz/1900MHz: +26dBm -4/+3dBm(Power Class E2)			
Technical Standard	GSM/EDGE/WCDMA	GSM CS: UL 9.6kbps/DL 9.6kbps GPRS: Multi-slot Class 10 EDGE: Multi-slot Class 12 WCDMA CS: UL 64kbps/DL 64kbps WCDMA PS: UL 384kbps/DL 384kbps			
	HSDPA/HSUPA/HSPA+	HSDPA: DL 7.2Mb/s(Category 8) HSUPA: UL 5.76Mb/s(Category 6)			
	3GPP Release	R99,R5,R6			
	OS	Window	Windows XP (SP2 and later)	Yes	
			Windows Vista (32bit)	Yes	
			Windows Vista (64bit)	Yes	
			Windows 7/ Win 8	Yes	
		WinCE	WinCE 5.0	Yes	CPU:X86、ARM
			WinCE 6.0	Yes	CPU:X86、ARM
		Android	1.x	Yes	
			2.x	Yes	
			3.x	Yes	
			4.x	Yes	
		Linux	kernel 2.6.20 and later	Yes	
	GPRS Class	Class B			
Application	DATA	RAS		Yes	
		NDIS		Optional	Windows
		ECM		Optional	Linux
	GPS			Optional	Receive Diversity and GPS are optional, but can not use simultaneously
	SMS			Yes	
	MMS			Yes	not support build-in MMS protocol stack
	STK			Yes	
	USSD			Yes	
	PHONEBOOK			Yes	
	NETWORK LOCK			Optional	
	POWER SUPPLY	RF Switch		Yes	
		Standby & Hibernation		Yes	
		USB Selective Suspend		Yes	
		Remote Wake-up		Yes	
Approvals &Certification	CE			Yes	
	GCF			Yes	
	FCC			Yes	
	ROHS			Yes	
	PTCRB			Yes	
	CCC			Yes	
	Others	CTA		Yes	
Envionment	Operating Temperature	-25 ~ +60° C			
	Limited Temperature	-25 ~ +75° C			
	Storage Temperature	-40 ~ +85° C			
	Humidity	5%~ 95%			
Commercial Details	Engineering samples Date (yyyy/mm/dd)	TBD			
	Final samples Date (yyyy/mm/dd)	TBD			
	Product Market launch Date (yyyy/mm/dd)	TBD			

MF210V2 PIN Define

Pin	Standard PIN	ZTEWelink PIN	Description	I/O	Remark
1	WAKE#	WAKE_N	Wake up the host machine	DO	Optional , and can be reused as another signal by 0 ohm resistance
2	3.3Vaux	VDD_3V3	Power supply (3.0-3.8V,typical 3.3V)	AI	3.3V(3.0~3.8V)
3	COEX1	SPI_SDI	SPI data signal	DI	Optional, The default is SPI data signal, and can be reused as another signal by 0 ohm resistance
4	GND	GND	Ground		
5	COEX2	SPI_SDO	SPI data signal	DO	Optional, and can be reused as another signal by 0 ohm resistance
6	1.5V	SPI_CS	SPI segment signal	DO	
7	CLKREQ#	SPI_CLK	SPI synchronization clock		Optional, and can be reused as another signal by 0 ohm resistance
8	UIM_PWR	VREG_UIM	USIM/RUIM VCC supply	AO	1.8/3.0V
9	GND	GND	Ground		
10	UIM_DATA	UIM_DATA	USIM/RUIM data	DIO	
11	REFCLK-	UART1_RX	UART1 port receive data	DI	
12	UIM_CLK	UIM_CLK	USIM/RUIM clock	DO	
13	REFCLK+	UART1_TX	UART1 port transmit data	DO	
14	UIM_RESET	UIM_RST	USIM/RUIM reset	DO	
15	GND	GND	Ground		
16	UIM_VPP	UART1_DSR	Data is ready	DO	
17	Reserved(UIM_C8)	UART1_RI	Ringtone indicator	DI	
18	GND	GND	Ground		
19	Reserved(UIM_C4)	N/C			
20	W_DISABLE#	W_DISABLE_N	Diable Wireless via a host system-provied switch	DI	Optional
21	GND	GND	Ground		
22	PERST#	PON_RESET_N	Hardware reset (Active Low)	DI	
23	PERn0	UART1_CTS	UART1 port, clear to send	DIO	
24	+3.3Vaux	VDD_3V3	Power supply (3.0-3.8V,typical 3.3V)	AI	3.3V(3.0~3.8V)
25	PERp0	UART1_RFR	UART1 port, preparing to receive	DO	
26	GND	GND	Ground		
27	GND	GND	Ground		
28	+1.5V	N/C			
29	GND	GND	Ground		
30	SMB_CLK	Reserved			
31	PETn0	UART1_DTR	UART1 data terminal ready	DI	
32	SMB_DATA	Reserved			
33	PETp0	UART1_DCD	UART1 carrier wave detection	DI	
34	GND	GND	Ground		
35	GND	GND	Ground		
36	USB_D-	USB_DM	USB data negative	AIO	
37	GND	GND	Ground		
38	USB_D+	USB_DP	USB data positive	AIO	
39	+3.3Vaux	VDD_3V3	Power supply (3.0-3.8V,typical 3.3V)	AI	3.3V(3.0~3.8V)
40	GND	GND	Ground		
41	+3.3Vaux	VDD_3V3	Power supply (3.0-3.8V,typical 3.3V)	AI	3.3V(3.0~3.8V)
42	LED_WWAN#	LED_WWAN_N	LED control PIN	DO	Optional
43	GND	GND	Ground		
44	LED_WLAN#	N/C			
45	Reserved	Reserved			
46	LED_WPAN#	SLIC_INT	exclusive use for routing adaptation	DO	
47	Reserved	Reserved			
48	+1.5V	SLIC_RESTE	exclusive use for routing adaptation	DO	
49	Reserved	Reserved			
50	GND	GND	Ground		
51	Reserved	Reserved			
52	+3.3Vaux	VDD_3V3	Power supply (3.0-3.8V,typical 3.3V)	AI	3.3V(3.0~3.8V)

Notes:

1. DI:Digital input, DO:Digital output,DIO:Digital output & Digital output
2. AI:Analog input, AO:Analog output,AIO:Analog output & Analog output