Quectel Wireless Solutions Company Limited

Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233

Statement

We **Quectel Wireless Solutions Co., Ltd** declare the following models.

Product Name: LTE-A Cat 12 M.2 Module **Model Number:** EM120R-GL, EM121R-GL

Hardware Version: R1.0

EM120R-GL and EM121R-GL support the same bands, use the same chips, which support PCle and USB two modes of interface, and the only difference is on GNSS configuration as below.

1. EM120R-GL supports GNSS L1, EM121R-GL supports GNSS L1 and L5. All the others are same.

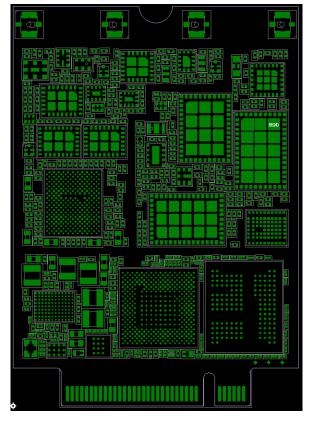
Module	Category	Supported Band	GNSS
EM120R-GL	CAT12	WCDMA : B1/B2/B3/B5/B8	
		LTE-FDD:	
		B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20	L1
		/B25/B26/B28/B29/B30/B32/B66	
		LTE-TDD : B38/B39/B40/B41/B42/B43/B46/B48	
EM121R-GL	CAT12	WCDMA : B1/B2/B3/B5/B8	
		LTE-FDD:	
		B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20	L1, L5
		/B25/B26/B28/B29/B30/B32/B66	
		LTE-TDD : B38/B39/B40/B41/B42/B43/B46/B48	

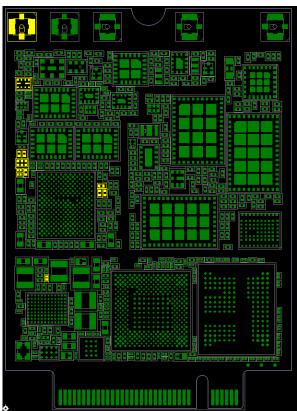
2. EM120R-GL has four antennas interface, GNSS and diversity share an antenna, and EM121R-GL has five antennas interface, EM121R-GL added the path of GNSS L5 path as below shows.

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EM120R-GL EM121R-GL

Designator	EM120R-GL	EM121R-GL
	(Part Description)	(Part Description)
U2103	/	IC RF RX Dual filter
		GPS/GLONASS/GALILEO Unbalance
		15dBm 1.5x1.1mm H0.5mm RO
U2104	/	IC RF LNA L5 1.1x0.7mm H0.6mm RO
R0107	/	100K +/-1% 1/32W 01005
C0102	100nf +/-10% 6.3V 01005	/
Q0102	/	WPM3027
R0106	/	100K +/-1% 1/32W 01005

Above changes won't impact the protocol and RF performance for same frequency bands.

Your assistance on this matter is highly appreciated.

Sincerely,

Name: Jean Hu

Jean Hu

Title: Certification Section