CGF801R IEEE 802.11b/g/n, 1T1R, NGFF module



Bointec

802.11 b/g/n, 1T1R, NGFF(M.2) A+E Key modul

Introduction of Products

Bointec CGF801R is a WLAN module supporting IEEE 802.11 b/g/n standard via the M.2 interface which formerly is known as the Next Generation Form Factor (NGFF), a specification for internally mounted computer expansion cards and associated connectors. CGF801R is truly a cost-effective solution for the current NGFF application. It can achieve the max throughput of 150Mbps based on 1T1R for the basic data rate requirement and various environments such as household appliances, industry, consumer and automobile applications. Based on the compact standard size module and robust setup scheme, CGF801R provides those advantages to enhance the value of our customer's target product.

Product Highlight

- -Main chipset: Realtek RTL8188SU
- -IEEE 802.11 b/g/n standard
- -Supporting HT20/HT40 based on 2.4GHz frequency band
- -802.11a: 6, 9, 12, 24, 36, 48, 54Mbps
- -802.11b: 1, 2, 5.5, 11Mbps; 802.11g: 6, 9, 12, 24, 36, 48,54Mbps
- -802.11n: Support PHY rate up to 150Mbps.
- -Next Generation Form Factor (NGFF)/M.2 Interface
- -One U.FL connectors
- -PCB Dimensions: 22 mm x 30 mm x 1.8(Max) mm
- -RoHS compliant



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Specification

Feature	Specification	Product quick glance
Vain Chipset	Realtek RTL8188SU	71
Frequency band	2.4GHz	
Bandwidth	HT20 and HT40	
Operation Frequency	USA: 2.400 ~ 2.483GHz	
	Europe: 2.400 ~ 2.483GHz	
	Japan: 2.400 ~ 2.497GHz	
	China: 2.400 ~ 2.483GHz	
Standard	IEEE 802.11 b/g/n standard	
Antenna	One U.FL connector	
Host Interface	Next Generation Form Factor (NGFF)/M.2 Interface	
Channels Support	802.11 b/g/n	
	US/Canada: 11 (1 ~ 11)	
	Major European country: 13 (1 ~ 13)	71
	France: 4 (10 ~ 13)	
	Japan: 11b: 14 (1~13 or 14th),11g: 13 (1 ~ 13)	
	China: 13 (1 ~ 13)	ME Drawing/placement
Transmit Spectrum mask	Frequency mask is complying with IEEE 802.11spec	
Modulation Technique	802.11 Legacy b/g	200940.35
	DSSS (DBPSK, DQPSK, CCK)	Lim Lim <thlim< th=""> <thlim< th=""> <thlim< th=""></thlim<></thlim<></thlim<>
	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)	
	DSSS (Direct Sequence Spread Spectrum) with	The second second
	DBPSK (Differential Binary Phase Shift Keying 1Mbps),	
	DQPSK (Differential Quaternary Phase Shift Keying 2Mbps), and	
	CCK (Complementary Code Keying 5.5&11Mbps), and	
	OFDM (Orthogonal Frequency Division Multiplexing with BPSK for 6,9Mbps、 QPSK for	- 200 200 - 200 Bottom side 0.1mm
	12,18Mbps、 16QAM for 24,36Mbps、 64QAM for 48, 54Mbps)	
	802.11n a/g	
	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)	
	802.11b: 1, 2, 5.5, 11Mbps	Top view Bottom view
	802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps	
	802.11n:	
	MCS0-7, Support up to 72Mbps @ HT20	
	MCS0-7, Support up to 150Mbps@HT40	Block diagram
PCB Dimension	(22 +/- 0.15 mm) x (30+/- 0.15 mm) x 1.8mm (Max)	11
Power	3.3 V DC	71
Operation Temperature	-10~+55 degree C	71
Storage Temperature	-40~+65 degree C	1



RTL8188SU

Crystal 40MHz

USB 2.0 Interface

Interface Signals

PART NUMBER	DESCRIOPTION

2.4G TX0/RX0

TriQuint

Antenna 0

100410



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