

天线规格书
Antenna specification for approval

客户名称 Customer name	蓝晨		
机型 Model	MG1011 (11寸金属+塑胶壳-微步主板 M100QCA)		
天线功能 Antenna function	1.575GHz&2.4GHz&5GHz		
天线类型 Antenna type	GPS&WIFI&BT&5Gwifi 天线		
天线材质 Antenna material	FPC	FPC 颜色 FPC color	黑色
型号 model	ST1821A-1B2-A		
料号 Material number	ST1821A-1R24B-030-A		
客户料号 Customer Part Number			
索沃德承认签章 Ward accepted the signature		客户承认签章 Client acknowledges signature	
结构 structure	采购 Purchase		
文控 Document control	结构 structure		
射频 radio frequency	工程 engineering		
审核 To examine	品质 QC		
承办人 Responsible	李婷婷	审核 To examine	
日期 date 2024.07.12	盖章区 Seal area	日期 date 2024.07.12	盖章区 Seal area

二:概述

(1)Antenna performance

- 1.This approval sheet supports for MID project. FPC antennas include in this project. This report is for the performance of GPS&WIFI&BT antenna.
- 2.Antenna shape size: Meet the requirement of MID
- 3.Antenna band: 1570MHz~1580MHz, 2400MHz~2500MHz&5400MHz
- 4.Antenna material: Antenna material meet the requirement of MID
- 5.Adhesive performance: Adhesive performance meet the requirement of MID
- 6.Antenna performance meet the spec below:

Description	1.57GHz~1.58GHz 2.4GHz~2.5GHz&5GHz	Units
VSWR	≤2.0	
Average Antenna Gain	≥-4.5	dB
Feed Impedance	50 ohms	
Operating Temperature	-40 to +85 deg C	
Polarization / Azimuth	Linear / Omni-directional	

(2)Mechanical Information

Mechanical Dimension	
Cable Length	030mm/black
Description	GPS&WIFI&BT antenna
Material	FPC
Coaxial Cable	50Ω /0. D. 0. 81mm
Environmental	
Operation Temperature	-40 to +85 deg C
Storage Temperature	-40 to +85 deg C

Passive Test For 2.4G				Passive Test For 5G-WIFI			
Freq	Effi	Effi	Gain	Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)	(MHz)	(%)	(dB)	(dBi)
2400	26.07	-5.84	-1.69	5000	22.84	-6.41	-1.34
2410	28.21	-5.5	-1.21	5100	23.52	-6.29	-0.7
2420	27.85	-5.55	-1.18	5200	23.55	-6.28	-2.17
2430	30.01	-5.23	-0.73	5300	26.41	-5.78	0.69
2440	30.96	-5.09	-0.58	5400	27.33	-5.63	0.2
2450	34.96	-4.56	0.12	5500	22.42	-6.49	-1.66
2460	37.36	-4.28	0.2	5600	24.77	-6.06	-0.61
2470	37.16	-4.3	0.28	5700	23.65	-6.26	-0.87
2480	35.9	-4.45	0.06	5800	29.2	-5.35	0.91
2490	37.25	-4.29	0.16	5900	20.38	-6.91	-0.8
2500	37.67	-4.24	0.2	6000	28.02	-5.53	0.99

Passive Test For GPS			
Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)
1570	44.3	-3.54	0.52
1571	44.29	-3.54	0.55
1572	44.44	-3.52	0.56
1573	44.41	-3.53	0.61
1574	44.34	-3.53	0.62
1575	44.5	-3.52	0.67
1576	44.06	-3.56	0.64
1577	43.62	-3.6	0.6
1578	43.28	-3.64	0.6
1579	42.78	-3.69	0.54
1580	42.28	-3.74	0.48

八:3D pattern





