



Applicant Name	Shenzhen Gotron Electronic CO.,LTD.
Project	GQ5015-4G
Date	2024.07.20
Proposed by:	Zhulang
Approved by:	Xu Fu



Shenzhen 3Good Wireless Communication Co., Ltd

Applicant and Manufacturer information

Applicant Name	Shenzhen Gotron Electronic CO.,LTD.
Applicant address	7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China
Manufacturer Name	Shenzhen Gotron Electronic CO.,LTD.
Manufacturer address	7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City, Guangdong Province China

General information

Product Name	Mobile Phone
Model(s)	GQ5015RH
Antenna Type	LDS Antenna
Test Frequency	600MHz-6GHz



Shenzhen 3Good Wireless Communication Co., Ltd

Test Data

Three in one antenna

2400MHz-2500MHz

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	39.59	-4.02	2.6
2410	39.1	-4.08	2.46
2420	39.33	-4.05	2.54
2430	38.78	-4.11	2.6
2440	39.03	-4.09	2.74
2450	38.6	-4.13	2.72
2460	35.63	-4.48	2.33
2470	34.63	-4.61	2.07
2480	34.24	-4.65	1.93
2490	34.71	-4.6	1.89
2500	33.16	-4.79	1.68

1550MHz-1600MHz

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1550	42.87	-3.68	4.27
1555	42.93	-3.67	4.21
1560	44.29	-3.54	4.33
1565	43.91	-3.57	4.21
1570	44.29	-3.54	4.17
1575	43.99	-3.57	4.1
1580	44.07	-3.56	4.07
1585	43.42	-3.62	3.93
1590	42.94	-3.67	3.77
1595	43.7	-3.6	3.85
1600	41.51	-3.82	3.64

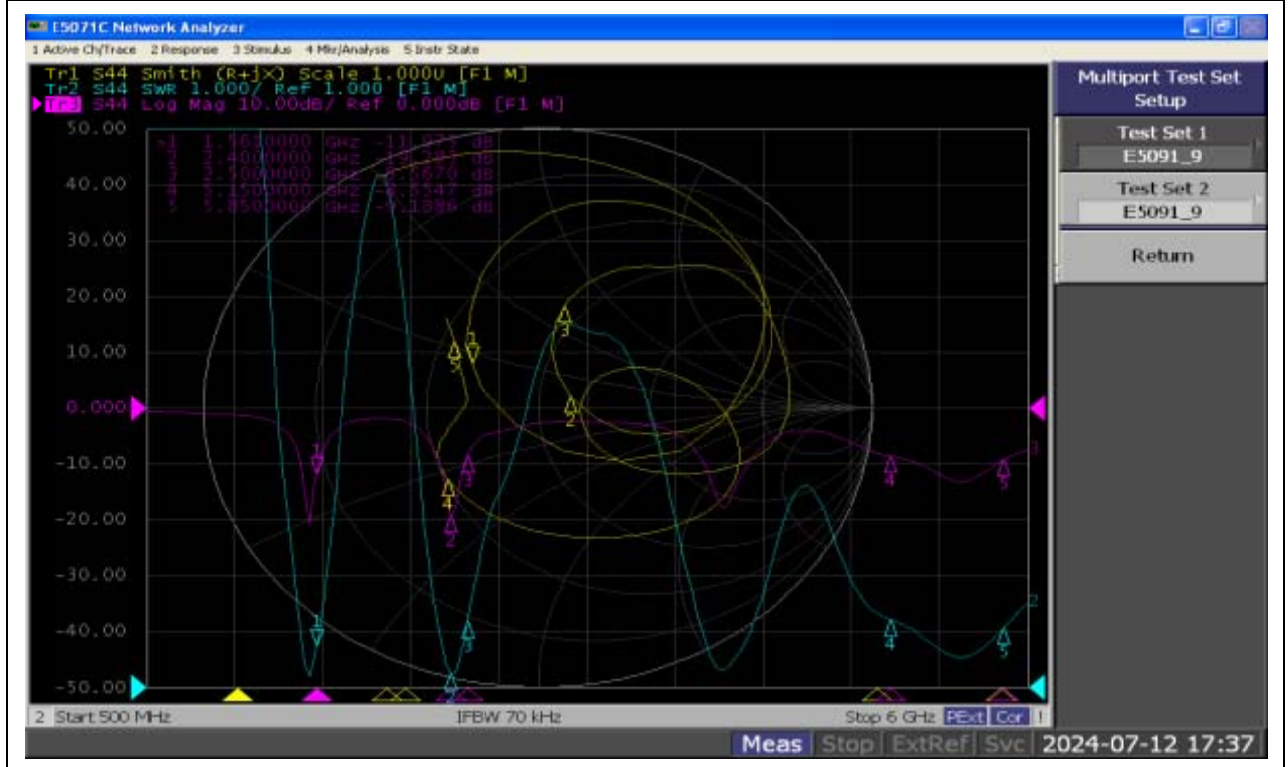


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5150MHz-5850MHz

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	29.91	-5.24	-0.14	5400	27.76	-5.57	-1.5	5630	27.67	-5.58	-1.59
5160	29.59	-5.29	-0.04	5410	26.96	-5.69	-1.65	5640	27.61	-5.59	-1.62
5170	28.16	-5.5	-0.57	5420	27.85	-5.55	-1.3	5650	27.83	-5.56	-1.75
5180	27.27	-5.64	-0.59	5430	28.08	-5.52	-1.26	5660	28.69	-5.42	-1.62
5190	26.99	-5.69	-0.66	5440	28.96	-5.38	-1.05	5670	28.02	-5.53	-1.66
5200	26.69	-5.74	-0.66	5450	29.04	-5.37	-0.97	5680	27.97	-5.53	-1.88
5210	28.32	-5.48	-0.48	5460	29.62	-5.28	-0.65	5690	27.2	-5.65	-2.14
5220	28.25	-5.49	-0.56	5470	28.97	-5.38	-0.79	5700	28.22	-5.5	-1.86
5230	28.41	-5.47	-0.52	5480	27.88	-5.55	-0.74	5710	28.4	-5.47	-1.73
5240	26.51	-5.77	-0.94	5490	29.06	-5.37	-0.73	5720	28.24	-5.49	-1.73
5250	25.59	-5.92	-1.11	5500	28.86	-5.4	-0.46	5730	29.57	-5.29	-1.25
5260	25.87	-5.87	-1.11	5510	29.63	-5.28	-0.41	5740	30.57	-5.15	-1.03
5270	25.5	-5.93	-1.25	5520	30	-5.23	-0.24	5750	32.03	-4.94	-0.8
5280	24.98	-6.02	-1.34	5530	31.37	-5.03	-0.18	5760	30.32	-5.18	-0.64
5290	25.7	-5.9	-1.64	5540	32.04	-4.94	-0.08	5770	30.98	-5.09	-0.83
5300	23.91	-6.21	-1.71	5550	30.76	-5.12	-0.11	5780	29.84	-5.25	-0.47
5310	23.12	-6.36	-1.96	5560	29.92	-5.24	-0.22	5790	29.02	-5.37	-0.78
5320	24.71	-6.07	-1.9	5570	29.37	-5.32	-0.32	5800	27.89	-5.54	-0.6
5330	23.9	-6.22	-2.12	5580	29.72	-5.27	-0.37	5810	27.98	-5.53	-0.77
5340	24.88	-6.04	-2.15	5590	29.14	-5.36	-0.68	5820	28.42	-5.46	-0.6
5350	25.12	-6	-1.99	5600	28.58	-5.44	-0.81	5830	27.96	-5.53	-0.69
5360	23.64	-6.26	-2.18	5610	27.45	-5.61	-1.34	5840	27.12	-5.67	-0.97
5370	23.43	-6.3	-2.21	5620	27.31	-5.64	-1.29	5850	27.74	-5.57	-0.86
5380	24.72	-6.07	-2.14								
5390	22.95	-6.39	-2.43								

three-in-one
(1550MHZ-1600MHZ) (2400MHZ-2500MHZ) (5150MHZ-5850MHZ)





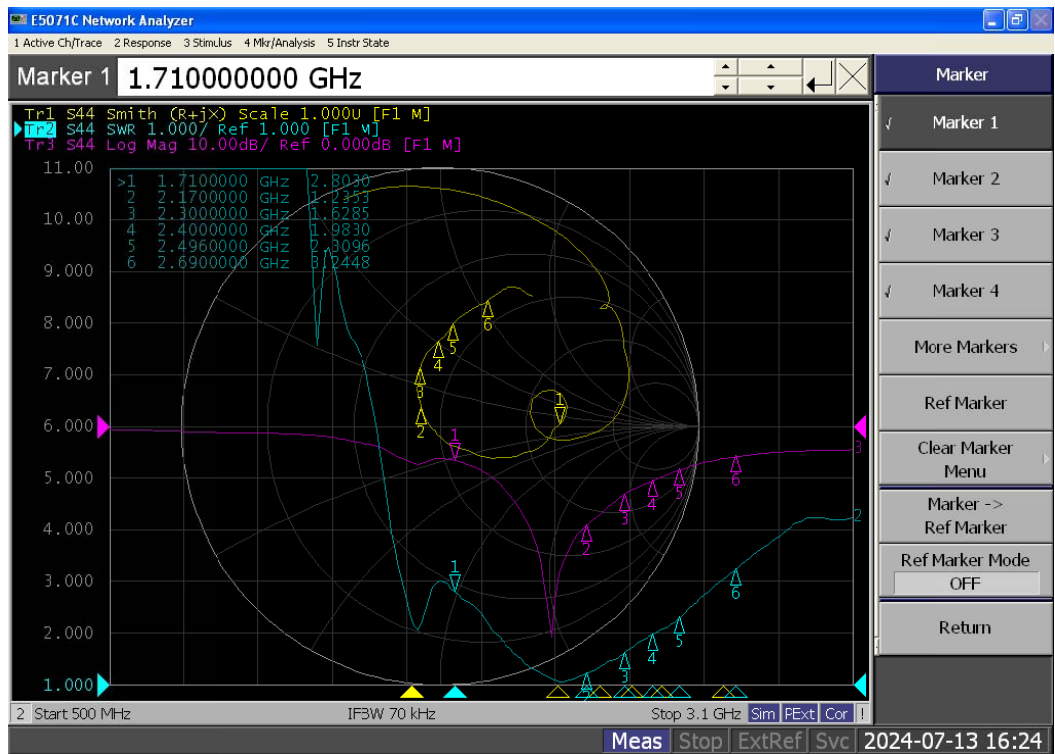
Shenzhen 3Good Wireless Communication Co., Ltd

Diversity Antenna

1710MHz-2700MHz

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1710	28.01	-5.53	-1.62	1960	32.55	-4.87	-1.24	2210	22.64	-6.45	-3.12	2460	25.53	-5.93	-1.54
1720	30.73	-5.12	-1.34	1970	31.05	-5.08	-1.46	2220	21.91	-6.59	-3.26	2470	24.88	-6.04	-1.4
1730	31.79	-4.98	-1.15	1980	30.78	-5.12	-1.39	2230	21.87	-6.6	-3.29	2480	25.88	-5.87	-1.02
1740	31.89	-4.96	-0.96	1990	29.34	-5.33	-1.57	2240	21.03	-6.77	-3.44	2490	26.81	-5.72	-0.61
1750	33.25	-4.78	-0.59	2000	29.4	-5.32	-1.39	2250	21	-6.78	-3.47	2500	28.51	-5.45	-0.06
1760	33.5	-4.75	-0.44	2010	28.63	-5.43	-1.46	2260	19.49	-7.1	-3.84	2510	27.26	-5.64	-0.17
1770	34.2	-4.66	-0.3	2020	27.47	-5.61	-1.57	2270	19.39	-7.12	-3.79	2520	28.21	-5.5	-0.16
1780	34.03	-4.68	-0.41	2030	28.24	-5.49	-1.37	2280	17.99	-7.45	-4.02	2530	28.88	-5.39	-0.25
1790	32.73	-4.85	-0.74	2040	28.1	-5.51	-1.28	2290	17.36	-7.6	-3.91	2540	29.62	-5.28	-0.34
1800	32.12	-4.93	-0.74	2050	27.87	-5.55	-1.2	2300	17.11	-7.67	-3.83	2550	31.45	-5.02	-0.32
1810	32.48	-4.88	-0.77	2060	27.48	-5.61	-1.19	2310	16.53	-7.82	-3.87	2560	33.42	-4.76	-0.25
1820	32.22	-4.92	-0.79	2070	26.96	-5.69	-1.23	2320	16.61	-7.8	-3.78	2570	34.29	-4.65	-0.38
1830	33.72	-4.72	-0.69	2080	26.64	-5.74	-1.38	2330	18.2	-7.4	-3.33	2580	35.45	-4.5	-0.38
1840	34.69	-4.6	-0.65	2090	27.22	-5.65	-1.36	2340	19.67	-7.06	-2.77	2590	36.29	-4.4	-0.18
1850	36.25	-4.41	-0.54	2100	27.01	-5.68	-1.53	2350	21.01	-6.78	-2.42	2600	38.21	-4.18	0.16
1860	37.6	-4.25	-0.51	2110	23	-6.38	-2.27	2360	21.25	-6.73	-2.31	2610	38.99	-4.09	0.29
1870	37.69	-4.24	-0.57	2120	22.33	-6.51	-2.56	2370	21.26	-6.72	-2.36	2620	37.15	-4.3	0.18
1880	38.44	-4.15	-0.59	2130	23.04	-6.37	-2.61	2380	22.88	-6.41	-2.05	2630	37.61	-4.25	0.23
1890	39.29	-4.06	-0.67	2140	24.18	-6.17	-2.59	2390	24.7	-6.07	-1.77	2640	39.6	-4.02	0.46
1900	40.54	-3.92	-0.79	2150	23.63	-6.27	-2.77	2400	25.64	-5.91	-1.61	2650	39.59	-4.02	0.46
1910	40.51	-3.92	-0.69	2160	23.13	-6.36	-3.01	2410	25.28	-5.97	-1.96	2660	40.18	-3.96	0.61
1920	39.7	-4.01	-0.63	2170	22.59	-6.46	-3.21	2420	25.25	-5.98	-2.08	2670	39.59	-4.02	0.59
1930	38.58	-4.14	-0.71	2180	22.64	-6.45	-3.24	2430	25.13	-6	-2.16	2680	39.1	-4.08	0.74
1940	35.54	-4.49	-0.96	2190	23.48	-6.29	-3.04	2440	26.22	-5.81	-2.07	2690	37.77	-4.23	0.82
1950	34.84	-4.58	-1.04	2200	22.96	-6.39	-3.01	2450	26.64	-5.74	-1.78	2700	37.08	-4.31	0.94

Diversity Antenna 1710MHz-2700MHz





Shenzhen 3Good Wireless Communication Co., Ltd

Main Antenna

800MHz-900MHz

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
820	9.44	-10.25	-6.54
830	8.71	-10.6	-6.72
840	8.43	-10.74	-6.28
850	8.32	-10.8	-6.24
860	9.78	-10.1	-5.81
870	11.53	-9.38	-5.58
880	15.22	-8.18	-3.93
890	17.58	-7.55	-3.1
900	19.71	-7.05	-2.5
910	20.25	-6.94	-2.21
920	20.49	-6.88	-2.2
930	19.61	-7.07	-2.49
940	17.88	-7.48	-3.32
950	16.33	-7.87	-4.18
960	14.75	-8.31	-4.37

600MHz-700MHz

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
600	8.88	-10.52	-6.54
610	9.69	-10.14	-6.34
620	12.06	-9.19	-5.78
630	15.47	-8.11	-4.97
640	17.2	-7.64	-4.07
650	16.45	-7.84	-4.19
660	17.08	-7.67	-4.24
670	17.99	-7.45	-5.07
680	19.72	-7.05	-4.02
690	23.03	-6.38	-2.78
700	24.11	-6.18	-2.86
710	28.26	-5.49	-2.17
720	25.2	-5.99	-2.83
730	22.53	-6.47	-3
740	19.7	-7.06	-3.6
750	20.79	-6.82	-3.18

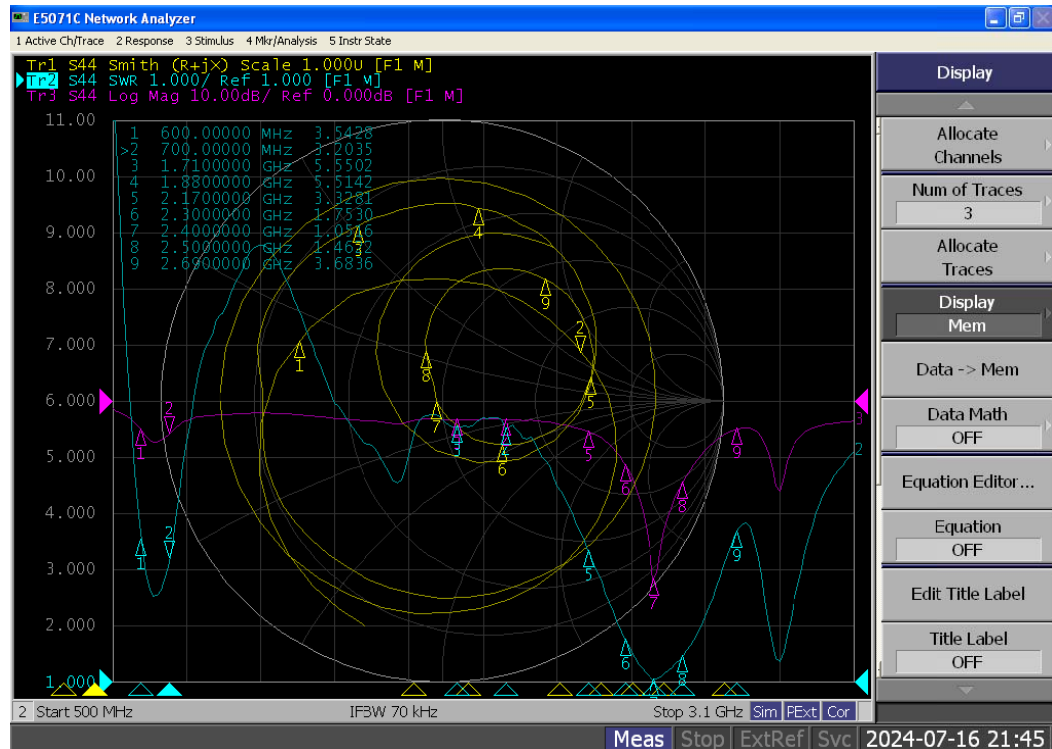


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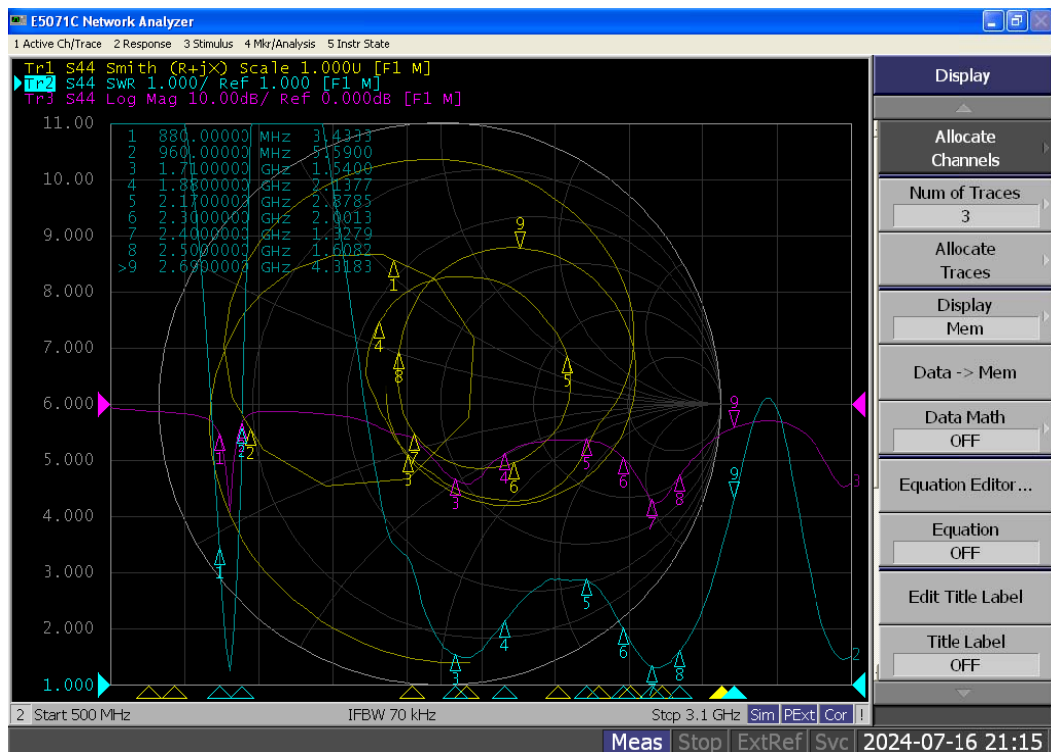
1710MHz-2700MHz

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1710	9.96	-10.02	-1.87	2050	22.97	-6.39	-0.36	2380	25.64	-5.91	0.43
1720	11.17	-9.52	-1.31	2060	22.63	-6.45	-0.21	2390	24.7	-6.07	-0.02
1730	11.42	-9.42	-1.24	2070	22.16	-6.55	-0.2	2400	25.35	-5.96	-0.02
1740	11.43	-9.42	-1.2	2080	22	-6.58	-0.14	2410	26.35	-5.79	-0.17
1750	11.49	-9.4	-1.15	2090	22.21	-6.54	-0.08	2420	26.41	-5.78	-0.1
1760	11.48	-9.4	-1.09	2100	22.92	-6.4	-0.03	2430	26.85	-5.71	-0.07
1770	12.41	-9.06	-0.79	2110	18.95	-7.22	-0.73	2440	25.49	-5.94	-0.23
1780	12.92	-8.89	-0.85	2120	18.82	-7.25	-0.72	2450	26.16	-5.82	-0.18
1790	13.13	-8.82	-1.06	2130	19.65	-7.07	-0.37	2460	27.07	-5.67	-0.04
1800	13.81	-8.6	-1.11	2140	21.08	-6.76	-0.09	2470	26.63	-5.75	-0.18
1810	13.5	-8.7	-1.34	2150	21.57	-6.66	0.1	2480	26.67	-5.74	-0.15
1820	13.46	-8.71	-1.69	2160	22.27	-6.52	0.34	2490	27.57	-5.6	-0.08
1830	14.12	-8.5	-1.65	2170	21.15	-6.75	0.24	2500	25.97	-5.86	-0.49
1840	14.74	-8.32	-1.9	2180	21.82	-6.61	0.44	2510	25.32	-5.97	-0.57
1850	15.65	-8.05	-1.79	2190	22.63	-6.45	0.51	2520	23.91	-6.21	-0.8
1860	15.47	-8.11	-1.99	2200	24.39	-6.13	0.89	2530	21.92	-6.59	-1.21
1870	15.51	-8.1	-1.9	2210	25.69	-5.9	1.14	2540	20.67	-6.85	-1.72
1880	16.77	-7.75	-1.45	2220	26.05	-5.84	1.43	2550	19.83	-7.03	-1.99
1890	17.66	-7.53	-1.28	2230	25.24	-5.98	1.38	2560	19.55	-7.09	-2.18
1900	18.91	-7.23	-1.03	2240	25.76	-5.89	1.51	2570	19.49	-7.1	-2.2
1910	19.71	-7.05	-0.8	2250	26.4	-5.78	1.53	2580	16.95	-7.71	-2.77
1920	19.3	-7.15	-0.85	2260	27.07	-5.67	1.62	2590	15.45	-8.11	-3.24
1930	19.9	-7.01	-0.81	2270	28.17	-5.5	1.76	2600	15.71	-8.04	-3.22
1940	20.12	-6.96	-0.99	2280	26.31	-5.8	1.35	2610	15.02	-8.23	-3.52
1950	21.14	-6.75	-0.84	2290	27.46	-5.61	1.37	2620	13.71	-8.63	-3.9
1960	21.83	-6.61	-0.95	2300	28.46	-5.46	1.36	2630	12.55	-9.01	-4.37
1970	22.11	-6.55	-0.98	2310	29.47	-5.31	1.4	2640	12.26	-9.11	-4.46
1980	22.63	-6.45	-1.29	2320	29.98	-5.23	1.36	2650	12.25	-9.12	-4.61
1990	23.18	-6.35	-1.33	2330	29.07	-5.37	0.94	2660	12.5	-9.03	-4.38
2000	24.13	-6.17	-1.32	2340	27.01	-5.68	0.53	2670	12.8	-8.93	-4.31
2010	24.06	-6.19	-1.04	2350	28.58	-5.44	0.62	2680	13.86	-8.58	-3.95
2020	22.94	-6.39	-1.02	2360	26.99	-5.69	0.51	2690	12.94	-8.88	-4.38
2030	22.88	-6.4	-0.76	2370	27.02	-5.68	0.54	2700	13.1	-8.83	-4.51
2040	23.05	-6.37	-0.51								

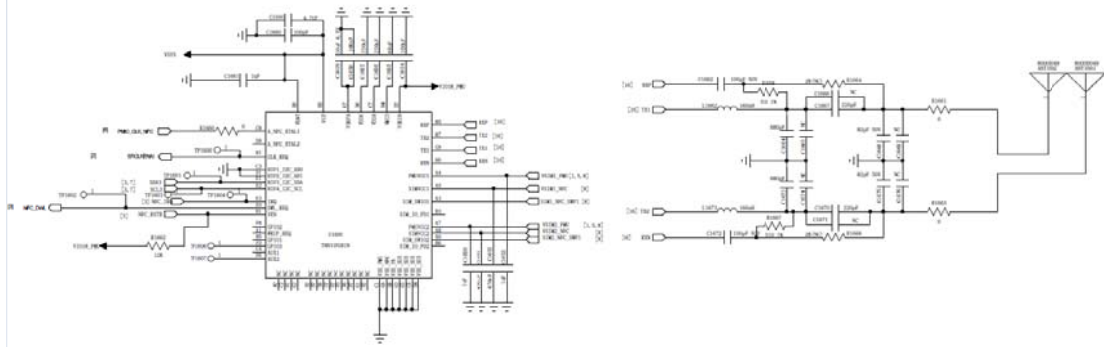
Main 600MHz-700MHz



Main 800MHz-900MHz 1710MHz-2700MHz



NFC Antenna



Antenna size

