

1 Bluetooth Antenna Design

The Bluetooth antenna is integrated into the main PCB and occupies a 3,0 mm x 14,4 mm area of the board as shown in Figure 1 below.

See report: **Document 75952029-29 Issue 01**

Antenna gain @ 2.402GHz = -2.08dBi

Antenna gain @ 2.440GHz = -3.27dBi

Antenna gain @ 2.480GHz = -2.00dBi

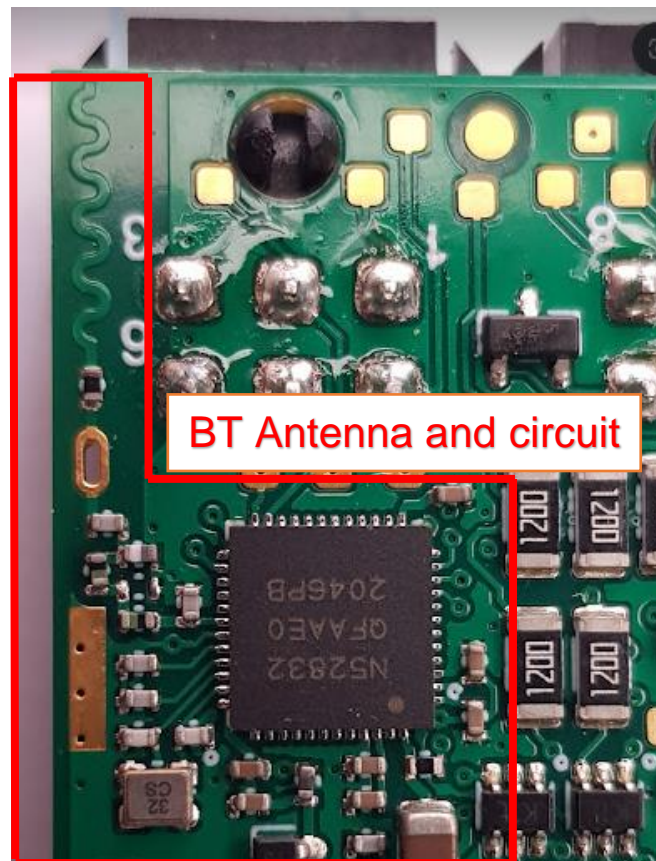
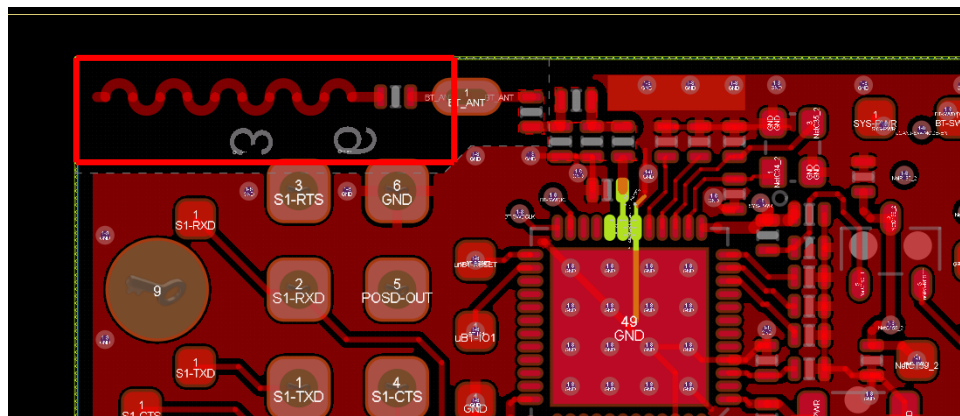


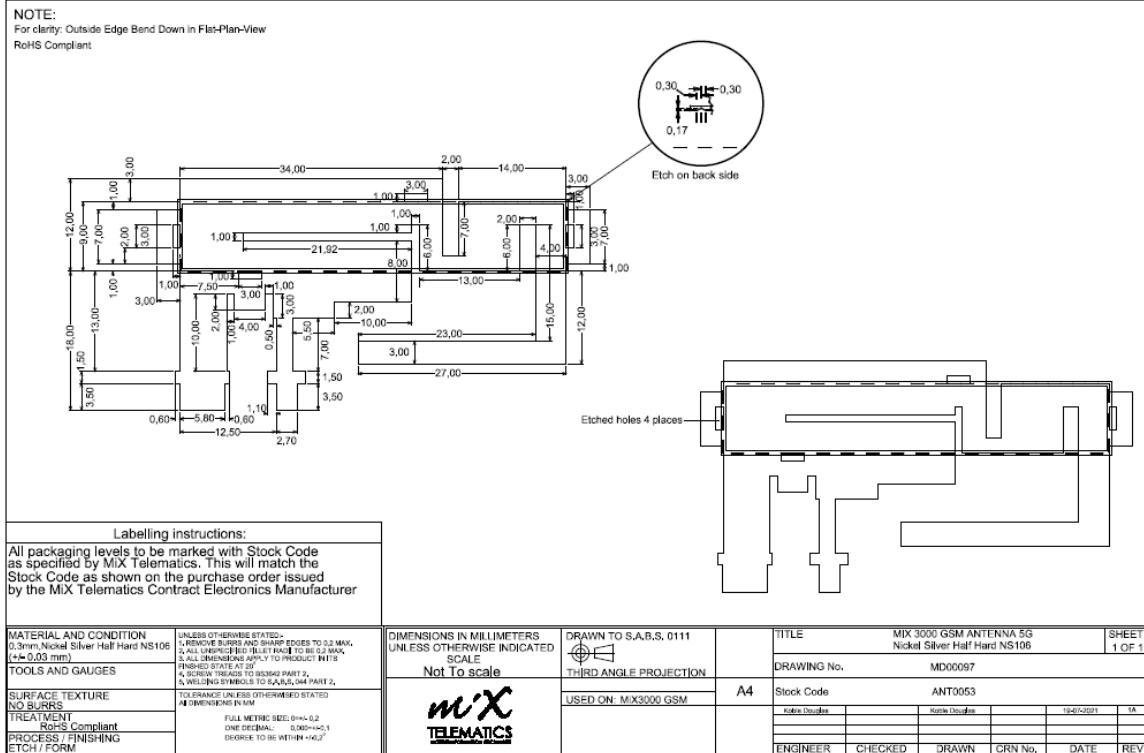
Figure 1 - Bluetooth Antenna



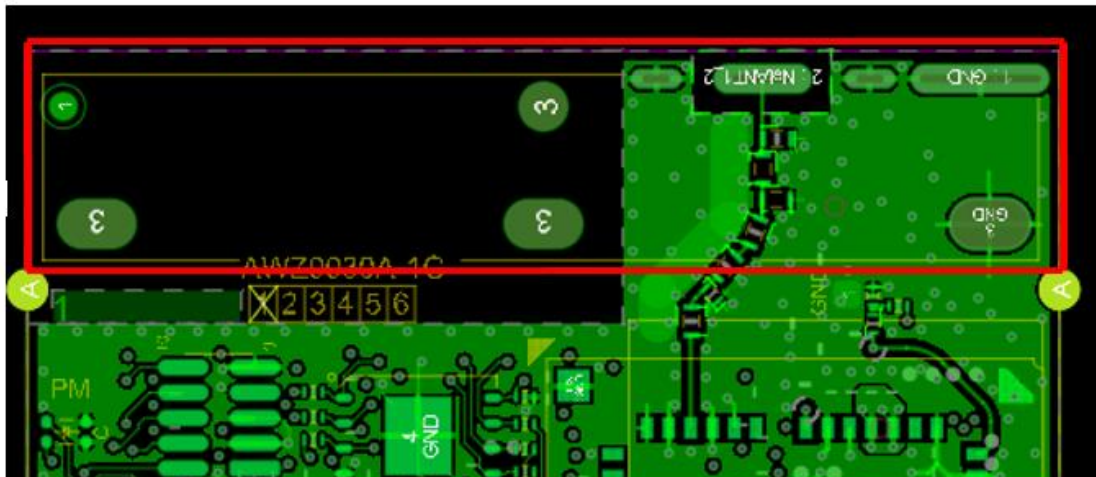
Antenna Detail

2 4G Antenna Design

MiX 3400-B



Antenna mounted on PCB




Antenna Detail

MiX 3400-B

3 GNSS External Antenna Design

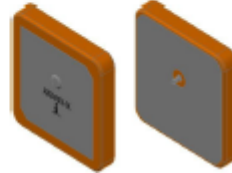
Refer to datasheet “JinChang_Patch_Antenna_JLTD1575-1602S25P4AA”.

Product Specification

Patch Antenna 
JLTD1575-1602S25P4AA

Feature

- High gain , Compact
- Pin type
- Customization available




Electrical Specification

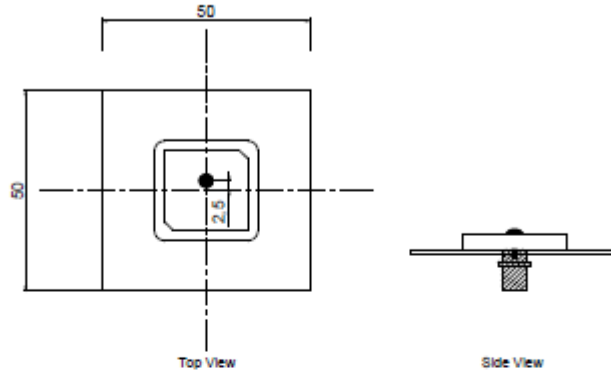
Center Frequency	Fo1: 1575.42 MHz	Fo2:1602 MHz
Return Loss @ F0	≥10dB	
Polarization	RHCP	
Gain @ Zenith	2.0 dBi typ.	
Ground plane	50 x50 mm	
Impedance	50 Ω	
Frequency Temperature Coefficient	±20 ppm/°C	
Operation Temperature Range	-40 ~ +85°C	

Antenna Detail

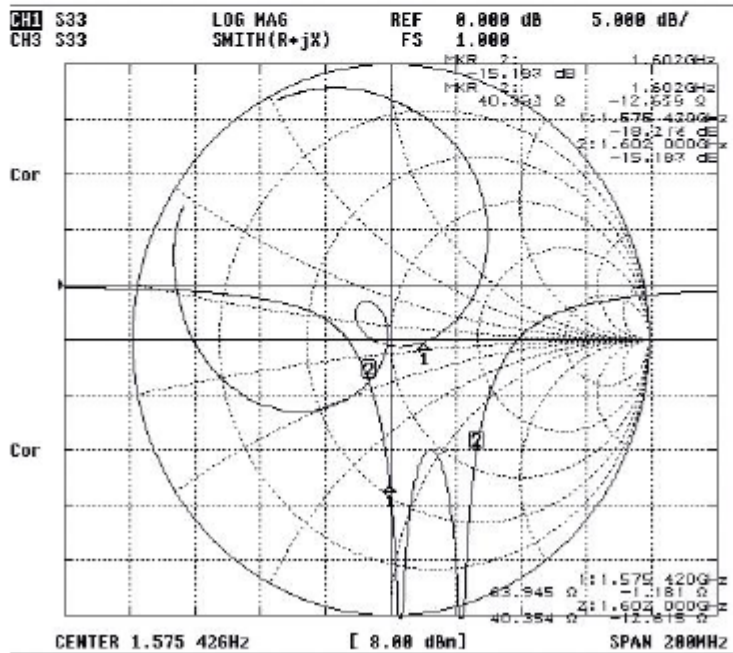
MiX 3400-B

Patch Antenna 
JLTD1575-1602S25P4AA

Test Fixture



Characteristics



Antenna Detail

MiX 3400-B

GNSS Internal Patch Antenna on PCB

