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ISSUE - - B

SERIES ANTENNA

PART NUMBER 201910575-10

Layout Considerations for ST60 Antennas

Customer : GENERIC

Project : GENERIC PCB (FR4, 4 Layers, Development PCB)

Reference documents:

Document Name	Document Type	Description / Comments
R380.845.002 - - B EN.pdf	T.D.S.	H-Polarization Gold Plated LCP Horn Antenna / Commercial Range
R380.845.102 - - B EN.pdf	T.D.S.	V-Polarization Gold Plated LCP Horn Antenna / Commercial Range
R380.846.002 - - B EN.pdf	T.D.S.	H-Polarization Gold Plated LCP Horn Antenna / Industrial Range
R380.846.102 - - B EN.pdf	T.D.S.	V-Polarization Gold Plated LCP Horn Antenna / Industrial Range
201910575-10-0 10-12-20B.DXF.zip	DXF Files	H-Polarization Horn Antenna Footprint
201910575-10-1 10-12-20B.DXF.zip	DXF Files	V-Polarization Horn Antenna Footprint

Content:

This document is intended as a reference for the layout design when using the Stackup shown in table 1.

Please note that the transition from the PCB to the antenna is performance critical. Any modification to the PCB stackup and / or board layout may result in RF performance degradation, and therefore should be assessed.

The ST60 chips and antennas are mm-wave devices. General microwave design rules should be applied to design the complete board (and the areas comprising the ST60 chips and antenna in particular) in order to avoid crosstalk and resonance phenomena. Particular attention shall be paid to plated through hole locations, line characteristic impedance, and sharp discontinuities.

In the following layout antennas are placed on the top layer

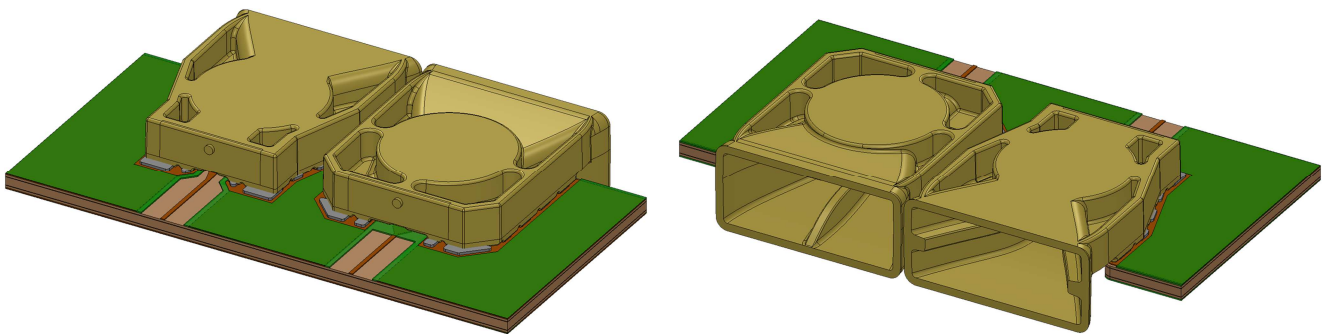


Figure 1: View of the Antennas Soldered on the PCB

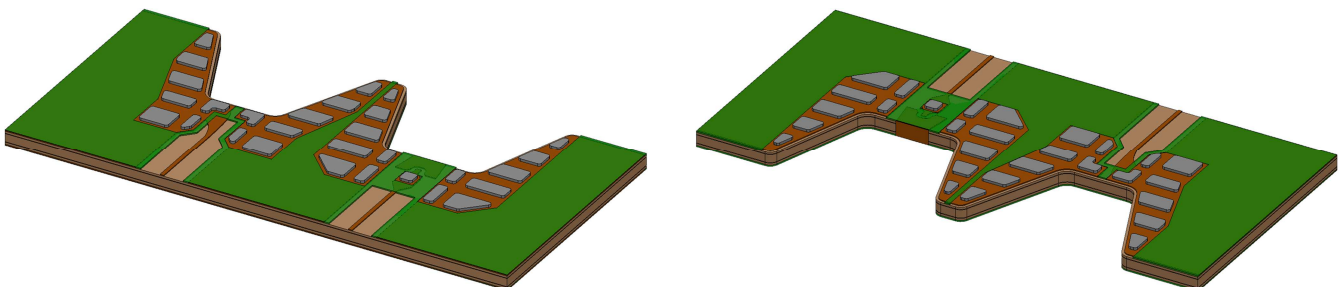


Figure 2: Views of the PCB (PSR TOP shown in green)