

D3 Embedded

RS-L6432S, RS-L6432D

Antenna Declaration Letter

Antenna Report/Datasheet

Antenna Manufacturer's Name: D3 Embedded

Model Number/Part Number: No specific PN is assigned. PCB trace antenna is, fully integrated and non-detachable, on the main board assembly (PN PCA-00C019044 or PCA-00C019049). Each transmitter (2) and receiver (3) has a dual-patch antenna as described below.

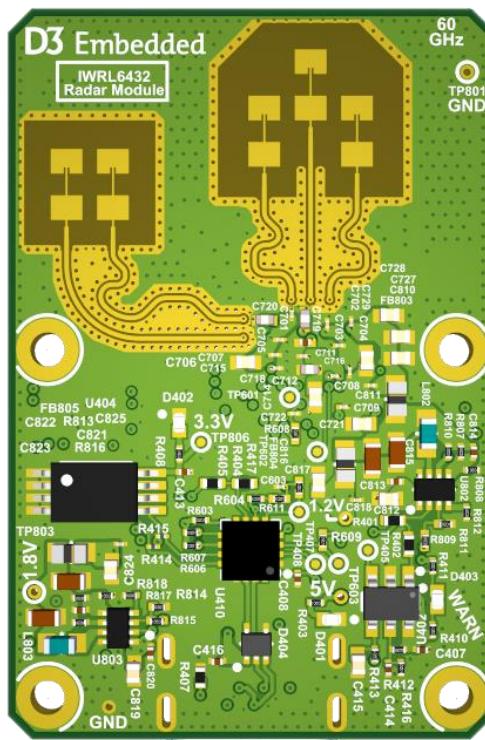


Figure 1 – PCA-00C019044 or PCA-00C019049 PCB with Built-In Antenna

Antenna image and dimensions:

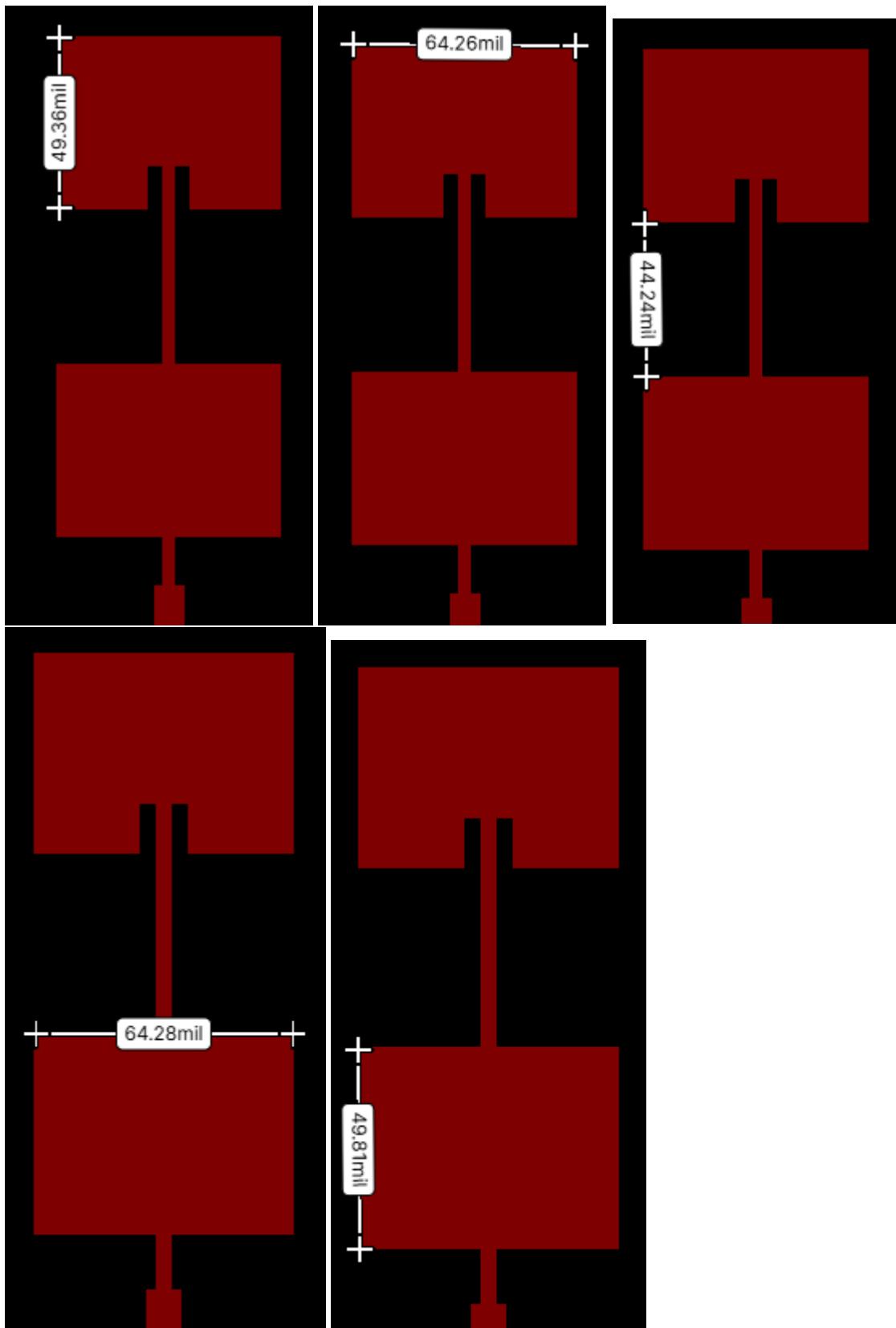


Figure 2 – Antenna Image and Dimensions

Material: 1.6 mil of copper over 5 mil of FR4

Type of Antenna: 2-element Microstrip Patch with elements stacked in Elevation

Gain Specifications: Peak gain in dBi: 5 dBi, Average gain: Not applicable, Gain tolerances: negligible

Radiation pattern: The radiation pattern is roughly a cardioid with 3 dB beamwidth of 120 degrees in Azimuth and 80 degrees in Elevation.

Operational Description Requirements

Operating Frequency Bands: 60 to 64 GHz

Channel Spacing and Number: Not applicable

Modulation Type and Parameters: 4G06F0N (4.06 GHz FM with no modulation, carrying no information)

Maximum Rated output power: Maximum IC transmit power = 11 dBm, Maximum EIRP with antenna 16 dBm.

Operating Modes: Active (transmitting periodically), Inactive/Unconfigured (not transmitting)

Power Supply Requirements: Standard USB Type C, 5 V up to 500 mA

Description of user controls: User connects to PC via USB C and issues configuration and activation commands.

Security Features: None

The fundamental EIRP testing was performed radiated – the field strength was measured and the EIRP was calculated from it, so the stated antenna gain (5 dBi) was not used in any of the EIRP calculations.

According to the FCC P15 antenna guidelines in such cases the actual antenna datasheet/report is not required.