

Certification Exhibit

FCC ID: 2AB7YVDBTLE24

FCC Rule Part: 15.247

ACS Project Number: 13-0399

Manufacturer: Viper Design, LLC
Model: VDBTLE24DIH

RF Exposure

General Information:

Applicant: Viper Design, LLC
Device Category: Mobile/Portable
Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: PCB etched Meander antenna

Antenna Gain: 0 dBi

Maximum Transmitter Conducted Power: -1.80 dBm, 0.66 mW

Maximum Transmitter Calculated EIRP: -1.80 dBm, 0.66 mW

* Meets the thresholds of draft IC RSS-102 Issue 5, section 2.5.1 Table 1. Linear interpolated threshold is 3.94 mW at 2480 MHz.

Justification for SAR Test Exclusion:

The VDBTLE24DIH is a Bluetooth Low Energy device capable of sending and receiving data from a multitude of Bluetooth enabled devices including smart phones, tablets, and computers. The module is intended to be installed on or inside another product in order to receive the power and signals required for operation.

Minimum Test Separation Distance: 5 mm

Highest Operating Frequency: 2480 MHz

Maximum Measured Conducted Power: -1.80 dBm, 0.66 mW

Per KDB 447498 D01 General RF Exposure Guidance v05r02, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$\begin{aligned} & [(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot \\ & [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR} \\ & = (0.66 / 5) \cdot (\sqrt{2.48}) \\ & = 0.13 \cdot 1.58 \\ & = 0.21 \end{aligned}$$

Based on the results above, the unit meets SAR test exclusion requirements.