



TUV SUD BABT TCB  
Octagon House,  
Segensworth Road,  
Fareham,  
Hampshire,  
PO15 5RL

### RF exposure information

Date: Aug. 04, 2015

FCC ID: NT862932; IC: 3043A-62932

#### 1. Introduction

The device is designed to be installed in mobile exposure conditions. It integrates a Bluetooth transmitter and a 2.4 WiFi transmitter which can not operate simultaneously.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all the persons and must not be co-located or operating in conjunction with any other antenna or transmitter except as under the conditions described KDB 447498 D01 General RF Exposure Guidance.

#### 2. MPE exposure limits

The table below is excerpted from Table 1B of 47 CFR 1.1310 titled Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure:

| Frequency Range (MHz) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|-----------------------|-------------------------------------|--------------------------|
| 1500 – 100.000        | 1,0                                 | 30                       |

The table below is excerpted from RSS-102, Issue 5, 4, titled “Table 4: RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)”:

| Frequency Range (MHz) | Power density (W/m <sup>2</sup> ) | Averaging time (minutes) |
|-----------------------|-----------------------------------|--------------------------|
| 300-6000              | $0.02619 f^{0.6834}$              | 6                        |

#### 3. Compliance criteria

Power density of individual transmitters is calculated using the equation:

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)  
P = power input to the antenna (in appropriate units, e.g., mW)  
G = power gain of the antenna in the direction of interest relative to an isotropic radiator  
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Power density must be lower than the MPE limits stated in item 2.

#### 4. Compliance calculations

| Frequency Band (MHz) | Mode                 | Frequency Range (MHz) | Reference frequency (Lowest freq.) (MHz) | Maximum conducted output power (per tune-up) (dBm) | Antenna gain (dBi) | Evaluation distance for compliance with MPE limits (cm) | FCC MPE limit (mW/cm <sup>2</sup> ) | IC MPE limit (mW/cm <sup>2</sup> ) | $S = \frac{PG}{4\pi R^2}$ (mW/cm <sup>2</sup> ) |
|----------------------|----------------------|-----------------------|------------------------------------------|----------------------------------------------------|--------------------|---------------------------------------------------------|-------------------------------------|------------------------------------|-------------------------------------------------|
| 2400-2483,5          | Bluetooth Basic Rate | 2402-2480             | 2402,0                                   | 3,53                                               | 0,39               | 20                                                      | 1,000                               | 0,535                              | 0,00049                                         |
| 2400-2483,5          | Bluetooth EDR        | 2402-2480             | 2402,0                                   | 5,81                                               | 0,39               | 20                                                      | 1,000                               | 0,535                              | 0,00083                                         |
| 2400-2483,5          | 802.11b              | 2412-2462             | 2412,0                                   | 17,44                                              | 0,39               | 20                                                      | 1,000                               | 0,537                              | 0,01207                                         |
| 2400-2483,5          | 802.11g              | 2412-2462             | 2412,0                                   | 16,22                                              | 0,39               | 20                                                      | 1,000                               | 0,537                              | 0,00911                                         |
| 2400-2483,5          | 802.11n20            | 2412-2462             | 2412,0                                   | 15,28                                              | 0,39               | 20                                                      | 1,000                               | 0,537                              | 0,00734                                         |

Yours sincerely,

Name: Mr Terry SanSouci  
Position: Product Assurance Test Engineer  
Company: Visteon Corporation  
Phone: 734-710-7137  
e-mail: tsansouc@visteon.com

p.a.