

RF EXPOSURE INFORMATION

RADIO FREQUENCY EXPOSURE (HAZARD) INFORMATION

Testing was performed in accordance with the requirements of FCC Part 15.247(i) and FCC Part 15.407(f).

Spread spectrum transmitters operating in the 2400 - 2483.5 MHz & 5725 – 5850 MHz (15.247) and 5.15 – 5.35 GHz & 5.47 – 5.725 GHz (15.407) bands are required to be operated in a manner that ensures that the public is not exposed to RF energy levels in accordance with CFR 47, Section 1.1307(b)(1).

In accordance with this section and also section 2.1093 this device has been defined as a portable device.

Mitsumi DWMW095A WLAN module was installed in the Fujitsu STYLISTIC T Series, Model: Q555. SAR testing results were reported under EMC Technologies' reports M140913_FCC_DWM-W095A_SAR_2.4 (2.4 GHz) and M140913_FCC_DWM-W095A_SAR_5.6 (5.18 – 5.825 GHz).

SAR values of 1.25 mW/g (5GHz) and 1.52 mW/g (2.4GHz) were measured which complied with the FCC human exposure requirements of 47 CFR 2.1093 (d).

The Mitsumi DWMW095A 802.11 11 abgn 2x2 MIMO+BT/BLE radio module incorporates a Bluetooth transmitter.

The Bluetooth maximum power is very low (9dBm including tune-up). It can only transmit via Antenna A (0).

In accordance with Section 4.3.2 of KDB 447498 D01 the Bluetooth did not require SAR testing as a stand-alone transmitter.

KDB 447498 section 4.3.1 exemption formula:

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR Result - } \left[\frac{(8\text{mW})}{(5\text{mm})} \right] \cdot [\sqrt{f(2.45\text{GHz})}] = 2.5$$

For simultaneous transmission according to section 4.3.2 the estimated SAR is given by formula:

$$(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f(2.45\text{GHz})/x}] \text{ W/kg}$$

Result - $\left[\frac{(8 \text{ mW})}{(5\text{mm})} \right] \cdot [\sqrt{f(\text{GHz})/7.5}] = 0.33 \text{ W/kg.}$

The highest SAR for the antenna A (0) was 1.52 mW/g and the highest SAR for antenna B(1) was 0.768 mW/g.

The ratio of above sum raised to the power of 1.5 to the distance between peak SAR locations is $(1.52 + 0.768)^{1.5} / 235 = 0.015 < 0.04$ so simultaneous transmission is not required

RF exposure and labeling will be addressed by Fujitsu according to FCC multi-transmitter and modular procedures.