

RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	Tablet PC
Model Name	HT1002W16
FCC ID	2AL2SHT1002

2. EVALUATION METHOD

According to 447498 D01 General RF Exposure Guidance v05

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR.}$

Where $f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

3. CALCULATION

According to the follow transmitter output power (P_t) formula :

WiFi

According to the report AGC09377170503FE04,
 $P_t=9.53\text{dBm}=8.97\text{mW}$

The result for RF exposure evaluation

$\text{SAR} = (8.97\text{mW} / 5\text{mm}) \cdot [\sqrt{2.462(\text{GHz})}] = 2.81 < 3.0 \text{ for 1-g SAR}$

BT

According to the report AGC09377170503FE03,
 $P_t=-4.18\text{dBm}=0.38\text{mW}$

The result for RF exposure evaluation

$\text{SAR} = (0.38\text{mW} / 5\text{mm}) \cdot [\sqrt{2.48(\text{GHz})}] = 0.12 < 3.0 \text{ for 1-g SAR}$

Simultaneous transmission between Bluetooth and WiFi transmitter

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})/x}] \text{ W/kg, for test separation distances } \leq 50 \text{ mm;}$
where $x = 7.5$ for 1-g SAR and $x = 18.75$ for 10-g SAR.

$\text{SAR} = (0.12 + 2.81) / 7.5 = 0.39 \text{ W/kg} < 1.6 \text{ W/kg}$

4. CONCLUSION

The SAR evaluation is not required.