FCC RF exposure

FCC ID: QAPMW0931

Bluetooth:
Frequency: 2402-2480 MHz (79 channels)
Modulation: FHSS (GFSK, pi/4-DQPSK, 8-DPSK)
Mid-Channel: 2.441 GHz (channel 39)
Mid-Channel Peak Power or highest measured, Conducted: 0.603 dBm == 1.15 mW
Antenna Gain: G = 0 dBi

Limit = 60/f = 60/2.441 = 24.58 mW

$P_{radiated,\ max} = P_{conducted,\ dBm} + G_{dBi}$ = 0.603 dBm + 0 dBi == 0.603 dBm = 1.15 mW

The emitted power appears to be (far) below the required limit, so PASS.

802.11b/g/n:
Frequency: 2412-2462 MHz (12 channels)
Modulation: FHSS (CCK, OFDM, DBPSK, DQPSK)
Mid-Channel: 2.437 GHz (channel 06)
Mid-Channel Peak Power or hightest measured, Conducted: 12.43 dBm == 17.5 mW (achieved in 11b mode)
Antenna Gain: G = 0 dBi

Limit = 60/f = 60/2.437 = 24.62 mW

$P_{radiated,\ max} = P_{conducted,\ dBm} + G_{dBi}$ = 12.43 dBm + 0 dBi == 12.43 dBm = 17.5 mW

The emitted power appears to be (far) below the required limit, so PASS.

Bluetooth + 802.11b/g/n
When Bluetooth and 802.11b/g/n are transmitting simulataneously in each the worst case emission mode, the sum of both powers remain sufficiently under the 60/f limits . In addition, the sum of both powers also remain far below the regulatory limit of 1Watt as specified in the applicable Rule Part 15.247 for this device.

Note 1: f shall be the mid-band frequency expressed in GHz; the limit calculated with this mid-band frequency applies to all channels. For PTT with body-worn or face-held modes, d is the distance from the device case to a parson's body; for modules with antennas inside laptops, d is the distance from the antenna to the person's body.

Note 2: Average Power levels are always equal or below the measured Peak Power levels, which means that calculating the EIRP using the Peak power can be considered as worst case.)