HCV Wireless Pty Ltd Wireless Products Design and Development ABN 38 085 659 963



Level 1, 80 Jephson Street Toowong 4066 Queensland, Australia Email Phone Fax bluetooth@hcv.com.au +61 7 3327 9893 +61 7 3217 8737

Federal Communications Commission Authorization and Evaluation Division Equipment Authorization Branch 7435 Oakland Mills Road Columbia, MD 21046

HCV Wireless Pty Ltd FCC ID: QC3100001 FCC Part 15 Certification

## **RF Exposure Compliance Requirement**

We hereby declare that  $BlueMod^{TM}$  is considered to be a mobile transceiver. As such, it must comply with the maximum permissible exposure limits for the general population, as outlined in Table 1 of 47 CFR 1.1310.

The power density of the BlueMod<sup>™</sup> electromagnetic field can be calculated using the following formula:

 $S = (PG)/4pR^2$ 

Where:  $S = Power density = 1 mW/cm^2$ 

P = Power input to the antenna = 4.35 dBm

G = linear power gain relative to an isotropic antenna = 0 dBi

R = Distance to the centre of the radiation of the antenna

The highest measured conducted output power of the BlueMod<sup>TM</sup> Bluetooth Development Kit is 4.35 dBm (P). The radiating element is a printed monopole  $\frac{1}{4}$  wavelength antenna with a nominal gain of 0 dBi (G). As mentioned above, Table 1 0f 47 CFR 1.1310 defines the maximum permissible exposure (MPE) for the general population as 1 mW/cm<sup>2</sup> (S). Thus, solving the above equation for R, the MPE limit is reached at approximately 0.58 cm (0.02 feet) from the antenna.

BlueMod<sup>TM</sup> is designed to operate as a standalone Bluetooth product and as such will have a separation distance of at least 20 cm from all persons and will not be co-located or operating in conjunction with any other antenna or transmitter.

A safety statement concerning minimum separation distances from the BlueMod<sup>™</sup> enclosure of the will be integrated in the user manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

Therefore, BlueMod<sup>™</sup> meets the MPE requirements for uncontrolled exposure.

Name: Position: Location: Date: Alex Busteed Qualification Manager Brisbane, Australia 10<sup>th</sup> May, 2002

Signature