Elliott Laboratories
www.elliottlabs.com
684 West Maude Avenue
Sunnyvale, CA 94085-3518
408-245-7800 Phone
408-245-3499 Fax

American TCB
6731 Whittier Avenue, Suite C110
McLean, VA. 22101

To whom it may concern:

The enclosed documents constitute a formal submittal and application for Equipment Authorization for a WLAN module pursuant to the following rules:

Subpart B of Part 15 of FCC Rules (CFR 47), Class B PC Peripheral Devices
Subpart C of Part 15 of FCC Rules (CFR 47), DTS Devices
Subpart E of Part 15 of FCC Rules (CFR 47), UNII Devices
RSS-210, Issue 7, June 2007, "Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment"

The module supports 802.11 legacy modes in 5 operating bands (2400 – 2483.5 MHz, 5150 – 5250MHz, 5250 – 5350MHz, 5470 – 5725 MHz and 5725 – 5850MHz) operating in a single chain (1x1) mode. It also supports 802.11n 20MHz and 40MHz channels in 1x, 2x and 3x modes. The test report covers all possible combinations of single-, dual- and triple-chain operating modes.

The device does not use active scanning for channels 12 – 14 in the 2.4GHz as detailed in the operational description.

Modular approval is requested for OEM and end-user installation. End user installation is requested on the basis that the module and associated driver use a BiOS Lock mechanism to ensure the module is only installed into specific host systems under the control of the specific OEMs (Hewlett Packard and Lenovo) as detailed in this filing. A description of BiOS lock mechanism for each OEM has been included as one of the operational description exhibits and is to be held confidential.

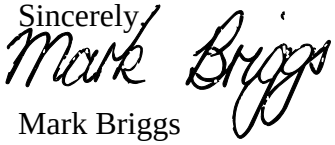
Two antennas are covered in this filing, one a magnetic dipole and the other a PIFA antenna:

- Ethertronics MPCI-8 Module antenna which is based on a magnetic dipole design. The nominal antenna gain is 3dBi in the 2.4GHz band and **5dBi in the 5GHz bands**
- Universe Technology antenna which is based on a PIFA design. The nominal antenna gain is **3.2 dBi in the 2.4GHz** band, 3.6dBi in the 5150-5250 MHz band, 3.7dBi in 5250-5350MHz band, 4.8dBi in the 5470 – 5725 MHz band and 5dBi in the 5725 – 5850MHz band.

Elliott Laboratories, as duly authorized agent prepared this submittal. A copy of the letter of our appointment as agent is included with the application.

If there are any questions or if further information is needed, please contact Elliott Laboratories for assistance.

Sincerely,



Mark Briggs
Principal Engineer

MB/dmg