Chris Harvey

From: Claire Hoque [claire.hoque@ccsemc.com]

Sent: Tuesday, April 29, 2008 2:23 PM

To: Chris Harvey
Cc: Thu Chan; Ron Hsu

Subject: answer: AT ROAD, Inc., FCC ID: PDC-ILM316X, Assessment NO.: AN08T7818 (DTS) &

AN08T7819 (PCB), Notice#1

Attachments: PDC-ILM316X Internal Photos(revised) 1.pdf; PDC-ILM316X Internal Photos(revised) 2.pdf;

xi325_schematic_Z-Com.pdf; 08U11688-2 FCC IC DTS WLAN Report_Final.pdf; C_ZCOM XI-325_Block Diagram_030528.pdf; iLM316X-W_Ant_Gain_Calculation.pdf; M4Y-000325 Internal Photos 1.pdf; M4Y-000325 Internal Photos 2.pdf; MC5725 Internal Photos.pdf;

MC5725 schematic eng3.pdf















PDC-ILM316X PDC-ILM316X xi325_schematic_Z-38U11688-2 FCC IC C_ZCOM iLM316X-W_Ant_Ga M4Y-000325 Internal Photos(re...Internal Photos(re.







M4Y-000325 MC5725 Internal MC5725 schematic nternal Photos 2.p.. Photos.pdf (47... eng3.pdf (343...

Hi Chris,

Pls see answer belowo. Thanks,

Claire Hoque

----Original Message----

From: Chris Harvey

Sent: Wednesday, April 16, 2008 7:35 AM

To: Thu Chan

Cc: Chris Harvey; Claire Hoque

Subject: AT ROAD, Inc., FCC ID: PDC-ILM316X, Assessment NO.: ANO8T7818

(DTS) & AN08T7819 (PCB), Notice#1

Dear Claire & Thu,

You are listed as the Technical Contact for the above referenced TCB application. The following item(s) need(s) to be resolved before the review can be continued:

- 1. The RF test report for the Z-Com WLAN module submitted with this application was issued in 2001, and shows the product was tested to ANSI C63.4:1992. While the testing for the module complied with the requirements in 2001, the FCC requires that devices being approved today are tested in accordance with ANSI C63.4:2003. Please provide a supplementary report documenting compliance with ANSI C63.4:2003, and today's FCC Rules and DTS test requirements. <answer>report is revised.
- 2. The internal photograph exhibit does not show the clarity of images required for FCC submissions. Please provide internal photographs that clearly show the components on both sides of each PC Board, including components inside the RF shields, and shows the general construction.

<answer>internal photos are revised.

3. The original Z-Com WLAN card was approved with an integral antenna (part of the PCMCIA card, although removable using tools). This new device is being submitted for approval using a reverse SMA connector on the enclosure and connected to a combined GPS, WWAN and WLAN antenna from Mobile Mark Communications. FCC 15.204 requires that the highest gain

antenna of each type be approved for use with a Part 15 device. Please provide the appropriate compliance documentation of this WLAN module with the 5dBi antenna in the application.

<answer>revised report has included the required info.

- 4. Additionally, the WWAN module was approved for use in the PCS band (1850-1910 MHz) with a maximum 4.15dBi antenna, including cable loss. The Antenna Specifications state that this antenna operates with a peak 5dBi gain in this band. There is no additional documentation that clarifies that the cable loss of the actual cable used in this band will keep the effective gain below 4.15dBi. Please provide documentation that clearly shows the effective gain of antenna and cable loss will be a maximum of 4.15dBi. <answer>attached.
- 5. This application is being submitted for approval of a single product that contains two previously approved modules. This new product will be labeled with its own FCC ID number. An application for a new FCC ID number must be complete, including all detailed information such as schematics of each RF board. While schematics have been submitted, the detailed schematics of the Z-Com WLAN board and Sierra Wireless WWAN RF circuitry have not been submitted. Please provide the complete RF schematics, which will be covered by the existing confidentiality request letter.
 <answer>two module schematic files are attached.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.

Best regards,

Chris Harvey Charvey-tcb@ccsemc.com