

From: Roland Gubisch ES-Box  
Sent: Wednesday, February 16, 2005 9:01 AM  
To: David Chernomordik ES-Mpk  
Cc: TCB\_Admin ES-Crt  
Subject: RE: TCB Review of Mentor FCC ID: RZ3MDC0V01 and 2 Permissive Changes  
David,

Thank you. This information is satisfactory, and certification will proceed as soon as possible.

Regards,  
Roland

-----Original Message-----

From: David Chernomordik ES-Mpk  
Sent: Tuesday, February 15, 2005 8:15 PM  
To: Roland Gubisch ES-Box  
Cc: TCB\_Admin ES-Crt  
Subject: RE: TCB Review of Mentor FCC ID: RZ3MDC0V01 and 2 Permissive Changes

Hi Roland,

Below is the response to your comments.

I. Original application FCC ID: RZ3MDC0V01

A. Administrative

1. Internal photos do not show how device is constructed; only PCBs are shown. Please comment.
2. No 2.1033(c) exhibits are provided for the module (schematics, b/m, block diagram) even though confidentiality for them has been requested. These are required exhibits. Please note attached FCC interpretation.  
<< File: Required exhibits when certified module is used.doc >>

1) The revised file "internal photos" showing construction details is attached.

<< File: Internal photos MDC rev.pdf >>

2) The documents for the module (manufactured by Wavecom) and confidentiality letter are attached.

<< File: Q2438F BOM for FCC.pdf >> << File: Q2438F Function of RF active device.pdf >> << File: Q2438F RF Block Diagram for FCC.pdf >> << File: Q2438F RF Tuneup\_procedure.pdf >> << File: Q2438F Schematics.pdf >> << File: Q2438F confidentiality FCC.pdf >>

These files also may be used for Permissive Change Applications.

B. Technical

1. Form 731 power should be ERP for Part 22H and EIRP for Part 24E. Calculation is shown in test report. Is this acceptable expression of power:  
Part 22H, 0.302W; Part 24E, 0.457W. Grant note: Power listed is ERP for Part 22 and EIRP for Part 24, based on conducted power and maximum antenna gain of 3 dBi.

Since the device has an antenna connector, more reasonable is to grant the conducted power with restriction on the antenna gain. Below is the proposed Grant Note:

Power Output listed is conducted. The antenna gain, including cable loss, must not exceed 10 dBi in Cell band / 9 dBi in PCS band, for satisfying RF exposure compliance. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End Users and Installers must be provided with antenna installation instructions and transmitter operation conditions for satisfying RF exposure compliance.

The numbers in this Note was calculated as:

In Cell band ----  $10 \times \log(1.5/0.23) + 2.1 = 10.2$  dBi, where 1.5 W is ERP from FCC sec 2.1091(c); 2.1 is conversion from "dBd" to "dBi"

In PCS band----  $10 \times \log(2/0.23) = 9.4$  dBi, where 2W is EIRP Limit from FCC sec 24.232(b)

## II. Permissive Change BBX

Administrative - description of differences between certified unit and permissive change is not sufficient. If attached table does not contain confidential information, it should be used instead. Please comment.

<< File: MDC Family Attributes.doc >>

Attached is the letter from the Applicant regarding the differences.

<< File: Mentor\_Permissive\_Change\_Letter\_FCC\_2.pdf >>

Please note, that in the letter submitted with this Application, it states that RF module is identical to that used in original Application.

## III. Permissive Change MultiConnect

Administrative - same comment as under II. above.

The same as in II.

Thanks  
David

-----Original Message-----

From: Roland Gubisch ES-Box  
Sent: Friday, February 11, 2005 3:20 PM  
To: David Chernomordik ES-Mpk  
Cc: Terre Wolak ES-Atl  
Subject: TCB Review of Mentor FCC ID: RZ3MDC0V01 and 2 Permissive Changes; CB Review of IC: 2234A-MDC0V01

David,

Review of these applications for certification is complete, and the following points are noted:

### I. Original application FCC ID: RZ3MDC0V01

#### A. Administrative

1. Internal photos do not show how device is constructed; only PCBs are shown. Please comment.

2. No 2.1033(c) exhibits are provided for the module (schematics, b/m, block diagram) even though confidentiality for them has been requested. These are required exhibits. Please note attached FCC interpretation.

<< File: Required exhibits when certified module is used.doc >>

B. Technical

1. Form 731 power should be ERP for Part 22H and EIRP for Part 24E. Calculation is shown in test report. Is this acceptable expression of power:

Part 22H, 0.302W; Part 24E, 0.457W. Grant note: Power listed is ERP for Part 22 and EIRP for Part 24, based on conducted power and maximum antenna gain of 3 dBi.

II. Permissive Change BBX

Administrative - description of differences between certified unit and permissive change is not sufficient. If attached table does not contain confidential information, it should be used instead. Please comment.

<< File: MDC Family Attributes.doc >>

III. Permissive Change MultiConnect

Administrative - same comment as under II. above.