

From: EmilyChen <emilychen@quietek.com>  
To: tjohnson@atcb.com  
Cc: "Ted@Atcb.Com" <ted@atcb.com ...snip...  
'Major Chen' <major@atcb.com>  
Subject: RE: Documents sent by Siemens for ATCB005334

Dear Tim,

Sorry for my fault and carelessness.  
I missed to uploaded the other revised files.

For the previous comments, Here's the responses:

1) Typically this type of device normally requests confidentiality on tune up, parts list, and operational description information as well. Note much of this information from the RF module manufacturer is currently incomplete, insufficient, or missing. If desired, please update the confidentiality letter.

**ANS: Pls check uploaded file"(336A,SAZO GPS)-Confidentiality"**

2) The 731 form cites FCC ID: VBZ336A, while the label shows VBZ-336A. Which is correct? Please adjust any and all documents that this may affect.

**ANS: The FCC ID should be VBZ-336A.**

**Pls check uploaded file "(336A,SAZO GPS)-731Form-ATCB"**

3) The operational description reads like an advertisement and it does not explain anything about the circuitry involved (i.e., please provide operational description, circuitry description of the GSM module). For example, this normally meets with the following requirements:

- Information regarding Type(s) of emissions, Frequency Ranges, Range of operating power values or specific operating power levels (and description of means for variation of operating power), and maximum power should be provided? (2.1033(c)(4)-(c)(7)).

- A description of all circuitry and devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation, and for limiting power should be provided (2.1033(c)(10)).

- For equipment employing digital modulation techniques, a detailed description of the modulation system to be used, including the response characteristics (frequency, phase and amplitude) of any filters provided, and a description of the modulating wavetrain, been provided for the maximum rated conditions at which the equipment will be operated should be provided (2.1033(c)(13))

**ANS: Customer has provided product's modual data.**

4) Schematics should be of the RF portion of the device (i.e. transmitter module). Please provide.

**ANS: Customer has provided product's modual data.**

5) The parts list should be of the transmitter module itself. The Requirement under part 2 generally require this to meet the requirements of Part 2.1033(c) (10) & (13).

**ANS: Customer has provided product's modual data.**

6) The tune up procedure simply states that the maximum gain must be set but does not say how.

**ANS: Customer has provided product's modual data.**

7) It does not appear that information regarding both DC voltages AND currents applied into the several elements of the final radio frequency amplifying device for normal operation over the power range has been provided? (2.1033(c)(8)).

ANS: Customer has provided product's modual data.

8) Occupied Bandwidth measurements use a larger bandwidth than expected. Typically this is done with RBW = 3 kHz and the results appear between 250 kHz and 300 kHz. Please review.

ANS: Pls check file "(336A,SAZO GPS)-TestRpt-phone Part24E-1024" P.16-P.18.

9) Generally conducted results using RBW = 1 MHz should also be provided for 30 MHz to roughly 20 GHz. Please provide.

ANS: Pls check file "(336A,SAZO GPS)-TestRpt-phone Part24E-1024" P.25-P.27

10) The plot on page 13 of the EMC report does not look like a characteristic GSM modulation and needs proper explanation

ANS: The plot is GSM modulation characteristic, and explained in file "(336A,SAZO GPS)-TestRpt-phone Part24E-1024" P.11 3.3.

Pls check it.

11) FYI....731 form should list frequencies for this device as 1850.2 – 1909.8 MHz. Please watch this

in the future.

12) FYI....Note that this device is subject to Part 15 DoC as well. However kindly note that the testing

involves a minimum PC peripheral configuration that is not covered or properly shown by the provided Part 15 Report. While we are not requesting this data since proper implementation of the DoC authorization is the manufacturers responsibility. Note that the lab and manufacturer must ensure that this has been done appropriately.

13) FYI....2.1077 information, all placed on a single page in the manual does not currently appear in

the manual. Since this deals with the DoC part of the device, we are not requiring this to be

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provided back to us. However to be in compliance with FCC rules and regulations the manufacturer must appropriately implement this info in the manual.

14) The plots at the band edges do not clearly show how or if the attenuation from the directional coupler are figured into the reading.

ANS: Pls check file "(336A,SAZO GPS)-TestRpt-phone Part24E-1024" P.19

15) Users manual must address body worn accessories, lack of metal, and body to EUT distances. Please correct.

ANS: Pls check file "(336A,SAZO GPS)-UserMan-1024" P.28

16) The SAR validation appears to have used the wrong parameters. As has been said a number of times, the system accuracy test is to be done using the dipole calibration factors and not those from 1528. This is clearly stated in the FCC guidelines for probe and validation calibration published in Jan 2007 for frequencies between 150MHz to 3GHz. The validation appears to have been referenced to the 1528 conductivity and permittivity numbers and not the dipole conductivity and permittivity numbers. The dipole numbers appear to be 39.9 dielectric constant and 1.42 conductivity, but the refer in the report appears to be 40.0 dielectric and 1.4 conductivity. It is hard

to tell because the report does not properly identify these numbers in a way that they can be associated easily with the validation. Also the results form the dipole calibration for SAR reference is 36w/kg in 1gram while the results of the accuracy test is 39.688 W/kg over 1g. This is just over the 10% from the reference the FCC says is to be used. Also the actual calibration of the dipole itself appears to be in excess of 10% from the 1528 table references which does not make your job any easier. This also means that the permittivity and conductivity uncertainties are suspect. Lastly, dipole validation for Body could not be found to compare the dielectric target values on page 14 of 22 to the appropriate values.

ANS: Pls check file "(336A,SAZO GPS)-SarRpt-Part -1024" P.13,P.16,P.23-P.26

Again, I am so sorry for the delay.  
If there are any problems, pls inform me.

and pls help issue the grant as possible as you can.  
Thanks a lot for your help.

BR,  
Emily

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

**From:** Ted Chao [mailto:[ted@atcb.com](mailto:ted@atcb.com)]  
**Sent:** Wednesday, October 24, 2007 10:55 AM  
**To:** 'EmilyChen'  
**Cc:** 'Ted Chao'; 'Major Chen'; 'natashatai'  
**Subject:** FW: Documents sent by Siemens for ATCB005334

Dear Emily,

I already transferred the documents sent by Siemens to Tim. Please also respond the rest of comments to him ASAP.

Thanks,

Ted  
ATCB/Taipei  
0922343092

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**From:** Timothy R. Johnson [mailto:[tjohnson@atcb.com](mailto:tjohnson@atcb.com)]  
**Sent:** Wednesday, October 24, 2007 10:38 AM  
**To:** Ted Chao  
**Cc:** 'Ted Chao'; 'Major Chen'  
**Subject:** Re: Documents sent by Siemens for ATCB005334

Ted - there were many issues beyond just the Siemens Files that need addressing before we go back and review - labeling issues, confidentiality issues, SAR issues, EMC issues, manual issues, etc.

Tim

At 10:22 AM 10/24/2007 +0800, Ted Chao wrote:

Dear Tim,  
Enclosed please find the ZIP file sent by Siemens for ATCB005334. Please go ahead to review this project.

Thanks,

Ted