

## Chris Harvey

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**From:** SunHee Kim (HCT) [alondra@hct.co.kr]  
**Sent:** Monday, August 18, 2008 9:32 PM  
**To:** charvey-tcb@ccsemc.com; Chris Harvey  
**Cc:** □□□ (HCT); 'Michael Heckrotte'; charvey-tcb@ccsemc.com; claire.hoque@ccsemc.com; lucy.tsai@ccsemc.com; 'Sang-Jun Lee (HCT)'; 'khpark (HCT)'; 'Nam-Wook Kang (HCT)'; '□□□ □(HCT)'  
**Subject:** Re: AXESSTEL INC., FCC ID: PH7MV440, Assessment NO.: AN08T8196, Notice#2A  
**Attachments:** MV440\_Rev\_20080819.zip

Dear Chris,

Thank you for your response.

We added the additional photo showing the external transmitting antennas to clarify.

Please find the SAR report on page 21 and Antenna distance photos.

- Antenna separation distance on the PCB: 7.5 cm
- Distance between External Transmitting Antennas: 5.1 cm (We use this value because this is worst than 7.5 cm)
- Tx Main and Tx WLAN Antennas can transmit simultaneously.

Because the conducted output power level of the WLAN transmitter is more than  $2*P_{ref}$ , although the WLAN antenna is more than 5.0 cm from the CDMA antenna, stand-alone WLAN SAR are required for the EUT. The device is capable of simultaneous transmission between CDMA/PCS and WLAN, but the Cell/PCS-to-WLAN ratio is  $(0.818 + 0.491) / \textcolor{red}{5.1} = 0.257 < 0.3$ . Therefore a simultaneous SAR evaluation is not required.

If you have further comments, please let me know.

Thank you!

P.S. We

Best Regards,  
SunHee Kim

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

**From:** [Chris Harvey](#)  
**To:** ['SunHee Kim \(HCT\)' ; charvey-tcb@ccsemc.com](#)  
**Cc:** ['□□□□□ \ \(HCT\)' ; 'Nam-Wook Kang \(HCT\)' ; 'khpark \(HCT\)' ; 'Sang-Jun Lee \(HCT\)' ; lucy.tsai@ccsemc.com ; claire.hoque@ccsemc.com ; charvey-tcb@ccsemc.com ; 'Michael Heckrotte'](#)  
**Sent:** Monday, August 18, 2008 11:20 PM  
**Subject:** RE: AXESSTEL INC., FCC ID: PH7MV440, Assessment NO.: AN08T8196, Notice#2A

SunHee, I have had the opportunity to review the response. Thank you for the replacement label.

The question about the antenna separation has not been answered in the additional photograph submitted. The photo shows the measurement between the WLAN (not Bluetooth) and Main antenna connectors on the PCB, but not the distance between the Transmitting antennas. There has been no information submitted about which of the 4 antennas can transmit, and which ones can transmit simultaneously. The SAR report states that the antenna separation between transmitting antennas is 10.5cm, but there is no supporting documentation for this distance measurement. The original request stated:

- 1. The SAR exhibit indicates that the separation between the CDMA Tx antenna and WLAN Tx antenna is 10.5cm; however the photos seem to show antennas that are much closer than 10.5cm to each other. Please provide a better exhibit that shows all 4 antennas, which ones are Tx antennas and the measurement of the

separation between the closest Tx antennas.

- In addition to the items addressed in An08T8196, the WLAN Block Diagram and Schematics seem to show that both the Main Antenna and Aux Antenna can transmit. Please clarify if both antennas can transmit either simultaneously or individually.

Please provide a photo of the enclosure with the 4 antennas, indicating which antennas are transmit antennas, showing the measured distance between the transmitting antennas. If this distance is different than the 10.5cm stated in the report, please update the SAR exhibits in accordance with the FCC Policies for multiple transmitters Knowledge Database KDB# 447498:

<http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=20676&switch=P>

Please let me know if you have any questions.

Best regards,

Chris Harvey

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**From:** SunHee Kim (HCT) [mailto:[alondra@hct.co.kr](mailto:alondra@hct.co.kr)]  
**Sent:** Monday, August 18, 2008 5:24 AM  
**To:** Chris Harvey; [charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)  
**Cc:** '□□□□□ (HCT)'; 'Nam-Wook Kang (HCT)'; 'khpark (HCT)'; 'Sang-Jun Lee (HCT)'; [lucy.tsai@ccsemc.com](mailto:lucy.tsai@ccsemc.com); [claire.hoque@ccsemc.com](mailto:claire.hoque@ccsemc.com); [charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com); 'Michael Heckrotte'  
**Subject:** Re: AXESSTEL INC., FCC ID: PH7MV440, Assessment NO.: AN08T8196, Notice#2

Hello Chris,

Thank you for your support.

We attach the ID Label and Antenna separation distance photo.

Please find the files and if you need more coordination, please let me know.

Best Regards,  
SunHee Kim

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

**From:** [Chris Harvey](mailto:Chris.Harvey@ccsemc.com)  
**To:** 'SunHee Kim (HCT)' ; [charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)  
**Cc:** '□□□□□ (HCT)'; 'Nam-Wook Kang (HCT)'; 'khpark (HCT)'; 'Sang-Jun Lee (HCT)'; [lucy.tsai@ccsemc.com](mailto:lucy.tsai@ccsemc.com) ; [claire.hoque@ccsemc.com](mailto:claire.hoque@ccsemc.com) ; [charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com) ; 'Michael Heckrotte'  
**Sent:** Thursday, August 14, 2008 8:24 PM  
**Subject:** RE: AXESSTEL INC., FCC ID: PH7MV440, Assessment NO.: AN08T8196, Notice#2

SunHee, thank you for your e-mail. I will review the responses this morning. I confirm that we are reviewing these applications for FCC ID: PH7MV440, under assessments AN08T8196 (PCB) and AN08T8197 (DTS, not DSS) with the goal of having the 2 Grants for this composite device.

I will communicate again if I have any further questions.

Best regards,

Chris Harvey

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**From:** SunHee Kim (HCT) [mailto:[alondra@hct.co.kr](mailto:alondra@hct.co.kr)]  
**Sent:** Wednesday, August 13, 2008 7:48 PM  
**To:** [charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)  
**Cc:** □□□□□ (HCT); Nam-Wook Kang (HCT); khpark (HCT); Sang-Jun Lee (HCT); [lucy.tsai@ccsemc.com](mailto:lucy.tsai@ccsemc.com); [claire.hoque@ccsemc.com](mailto:claire.hoque@ccsemc.com); [charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)  
**Subject:** Re: AXESSTEL INC., FCC ID: PH7MV440, Assessment NO.: AN08T8196, Notice#2

Hello Chris,

Thank you for your understanding for keeping the SAR in this application.  
And, please make sure if we can get the separate DSS Grant for WLAN.  
We'll check and get in touch with you soon as for your comment.

Best Regards,  
SunHee Kim

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

From: <[charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)>  
To: <[alondra@hct.co.kr](mailto:alondra@hct.co.kr)>  
Cc: <[charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)>; <[claire.hoque@ccsemc.com](mailto:claire.hoque@ccsemc.com)>; <[lucy.tsai@ccsemc.com](mailto:lucy.tsai@ccsemc.com)>  
Sent: Thursday, August 14, 2008 1:32 AM  
Subject: AXESSTEL INC., FCC ID: PH7MV440, Assessment NO.: AN08T8197, Notice#1

> Dear SunHee Kim,  
>  
> You are listed as the Technical Contact for the above referenced TCB applications. We have continued the review as requested. The following item needs to be resolved before the review can be continued:  
>  
> In addition to the items addressed in An08T8196, the WLAN Block Diagram and Schematics seem to show that both the Main Antenna and Aux Antenna can transmit. Please clarify if both antennas can transmit either simultaneously or individually.  
>  
> 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](mailto:Charvey-tcb@ccsemc.com)

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

From: <[charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)>  
To: <[alondra@hct.co.kr](mailto:alondra@hct.co.kr)>  
Cc: <[charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)>; <[claire.hoque@ccsemc.com](mailto:claire.hoque@ccsemc.com)>; <[lucy.tsai@ccsemc.com](mailto:lucy.tsai@ccsemc.com)>  
Sent: Thursday, August 14, 2008 1:31 AM  
Subject: AXESSTEL INC., FCC ID: PH7MV440, Assessment NO.: AN08T8196, Notice#2

> Dear SunHee Kim,  
>  
> You are listed as the Technical Contact for the above referenced TCB applications. We have continued the review as requested. The following items need to be resolved before the review can be continued:  
>  
> 1. The SAR exhibit indicates that the separation between the CDMA Tx antenna and WLAN Tx antenna is 10.5cm; however the photos seem to show antennas that are much closer than 10.5cm to each other. Please provide a better exhibit that shows all 4 antennas, which ones are Tx antennas and the measurement of the separation between the closest Tx antennas.  
==> [Please fine the attachment file.](#)  
>  
> 2. Please provide a replacement FCC ID label & location exhibit with the FCC ID legible (the original is not clear).  
==> [Please fine the attachment file.](#)  
  
> 3. The Users Manual shows an optional battery for the MV400i Series. The SAR test report does not address the use of battery, but only addresses the charger input. Please explain this and/or provide SAR compliance documentation for use of this device with the battery.  
==> [We already eaplainded this issue.](#)  
>  
> 4. The Users Manual contains a Body-Worn paragraph, which explains the use of this device when worn on the body,

and used with clips and similar accessories. This explanation does not apply to this device which is used on a table top, and has been SAR tested for Near Body (2cm) operation. Please revise this Body-Worn paragraph, to be for Near Body operation, and removes statements about clips and accessories, but instead informs the user to keep the transmitting antennas at least 2cm from the body.

[==> We already explained this issue.](#)

>  
> 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](mailto:Charvey-tcb@ccsemc.com)

>

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

**From:** [SunHee Kim \(HCT\)](#)

**To:** [Chris Harvey](#) ; ['Chris Harvey'](#) ; ['Mike Kuo'](#)

**Cc:** ['Chris Harvey'](#) ; ['Lucy Tsai'](#)

**Sent:** Tuesday, August 12, 2008 10:57 AM

**Subject:** Re: AXESSTEL INC., FCC ID: PH7MV440, Assessment NO.: AN08T8196/AN08T8197, Notice#1

Hi Chris,

We noted your recommendation.

But if we have no choice but to keep the SAR in this application, it can be available to get the Grant?

Even though it takes time to review by FCC, we'd like to proceed with SAR.

And As you find SAR report on page21, it can't be a problem because it doesn't require simultaneous SAR testing between CDMA/PCS and WLAN.

As for #2, you mentioned we can get only TNB portion Grant. But we already performed the WLAN testing for this product.

Is there any way to get the separate DSS Grant for WLAN?

If there is any comments, please let me know.

Best Regards,  
SunHee Kim