

Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1 [Inbox](#)

★ from "tim.dwyer@ccsemc.com" <tim.dwyer@ccsemc.com>

[hide details](#) Sep 10

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to "Y.K. Kwon" <ykkwon@onetech.co.kr>

cc tim.dwyer@ccsemc.com

date Sep 10, 2007 9:04 PM

subject Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

Dear Y.K.,

Attached are the review items for this application. If you have questions, please ask.

Q1: TCB's can approve 2.4 GHz devices without SAR evaluation if the device powers are below the threshold powers or 48.97 mW for devices used >2.5 cm and 24.48 mW for devices used < 2.5 cm. Devices with powers above the threshold require SAR evaluation to be qualified for TCB approval. Test report page 72/72 indicates the device is for portable category use <20 cm with a power output of 72.444 mW EIRP. The power of this device exceeds the threshold power set by FCC OET for approval by a TCB. For TCB approval, SAR evaluation is required.

Q2: The schematics and block diagram provided show circuitry for the host device but do not include details for the WLAN module. Please submit schematic and block diagram for the WLAN module.

Q3: The information in Q1 and Q2 may not be necessary if the WLAN module employed holds an FCC modular approval for portable category use with co-located Bluetooth device as configured in this device. If the WLAN module has such an FCC grant, please provide the FCCID for the module for further evaluation.

Q4: The user manual must include and RF exposure statement.

Q5: The block diagram shows "CDMA and 13.56 MHz Modules" but no evaluation data for any CDMA or 13.56 MHz device was included in the application. Please provide additional explanation for these devices.

Q6: Please provide detailed internal photos for the WLAN module including photos with shields removed.

Q7: The application has been reviewed to the extent possible pending receipt of RF exposure and other information above. Final evaluation will be performed when complete information is received.

Best regards,

Tim Dwyer
CCS Technical Reviewer

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.

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★ from "Y.G. Gwon" <ykkwon@onetech.co.kr>

[hide details](#) Sep 11 (7 days ago)

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to tim.dwyer@ccsemc.com

date Sep 11, 2007 7:15 AM

subject RE: Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

Dear Mr. Dwyer,

Thank you for your kind comments regarding subject project, but I would like to ask a question regarding your comment 1, SAR Test Data. As you know the device usually use more than 20cm from a person's body. In this case, I think SAR test is not required acc. to 2.1091. If above my opinion is not correct, could you please inform me how to test SAR in detail. As you know the device will be supplied hand strap ring only.

Best Regards,

Y. G. Gwon (權容廣)
ONETECH Corp.
RF/EMC Div.
TEL: +82-31-765-8289 (Ext.107)
FAX: +82-31-766-2904
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from **Tim Dwyer** <Timothy_Dwyer@ieee.org>

[hide details](#) Sep 11 (7 days ago)

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to "Y.G. Gwon" <ykkwon@onetech.co.kr>

cc Mike Kuo <mike.kuo@ccsemc.com>

date Sep 11, 2007 9:14 AM

subject Re: Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

mailed-by gmail.com

Dear Y.G.,

The test report states the device is portable category and will be used <20 cm from the body and there is no cautionary warning in the user manual advising a separation of >20 cm. As we are previously unfamiliar with the device, we can evaluate only based on the information included in the application. We cannot make any unsupported assumptions about how a device will be used.

Even if the instructions state to use the device > 20 cm, FCC requires that evaluation consider the typical use of a device.

I did research in the FCC database before sending the notice and looked at similar products from other manufacturers. All applications I found for similar products included at least Body SAR evaluation. I did not find any similar product without SAR evaluation. This is normal because a small product like this in normal use will sometimes be used near the body like in a pocket or on a belt clip.

The catalog page for Be Interactive at http://www.beinteractive.co.kr/download/ud720s_catalog_070110.pdf shows this device with a belt clip accessory. Use of a belt clip accessory indicates that SAR evaluation is required for this product.

The SAR evaluation must be carried out with consideration of how the product will be used. More information about SAR measurement procedures can be found at <http://www.fcc.gov/oet/ea/eameasurements.html>.

In case you need help with specific test requirements for this device, I will cc this email to Mike Kuo. He may be able to refer you to someone who can assist with the evaluation.

Best regards,

Tim Dwyer

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from **"Y.G. Gwon"** <ykkwon@onetech.co.kr>

[hide details](#) Sep 11 (7 days ago)

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to Tim Dwyer <Timothy_Dwyer@ieee.org>

cc Mike Kuo <mike.kuo@ccsemc.com>

date Sep 11, 2007 9:39 AM

subject RE: Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

Dear Tim,

Thank you for your kind advice and cooperation.

I am sorry for inconvenience you, if the device shall be used for occupational device only, is that device will be exempt SAR testing?

Also inform me what the meaning of occupational device in detail is.

Best Regards,

Y. G. Gwon (權容廣)

ONETECH Corp.

RF/EMC Div.

TEL: +82-31-765-8289 (Ext.107)

FAX: +82-31-766-2904

From: rfspectrum@gmail.com [mailto:rfspectrum@gmail.com] **On Behalf Of** Tim Dwyer
Sent: Tuesday, September 11, 2007 10:15 PM
To: Y.G. Gwon
Cc: Mike Kuo
Subject: Re: Be **Interactive** Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

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☆ from **Tim Dwyer** <Timothy_Dwyer@ieee.org> [hide details](#) Sep 11 (7 days ago) [Reply](#) ▼
to "Y.G. Gwon" <ykkwon@onetech.co.kr>
cc Mike Kuo <mike.kuo@ccsemc.com>
date Sep 11, 2007 10:12 AM
subject Re: Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1
mailed-by gmail.com

Dear Y.G.,

If this device could be for occupational exposure category, **SAR** evaluation might not be required. But, TCB's cannot make approvals for portable devices in the occupational exposure category. Those applications must be submitted directly to FCC, and FCC may determine based on product characteristics that **SAR** testing is required. Current speed of service at FCC is 30-60 days.

Occupational devices are devices which operate only in a location where all persons will be aware of the higher exposure condition, and no person who is not aware would be allowed in the area. For this device, it would need to be shown that the device is sold only to specific customers who would be able to meet these requirements. Normally these devices are used only in laboratories, broadcast stations, and similar areas with controlled access.

Best regards,

Tim

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☆ from **"Y.G. Gwon"** <ykkwon@onetech.co.kr> [hide details](#) Sep 11 (7 days ago) [Reply](#) ▼
to Tim Dwyer <Timothy_Dwyer@ieee.org>
cc Mike Kuo <mike.kuo@ccsemc.com>
date Sep 11, 2007 10:20 AM
subject RE: Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

Dear Tim,

Thank you so much for your kind information.

I order **SAR** testing for body worn condition to our colleague and send test report to you, but I need your certificate within this week.

Could you please review that at your earliest convenience?

Thanks a lot!

Best Regards,

Y. G. Gwon (權容廣)

ONETECH Corp.

RF/EMC Div.

TEL: +82-31-765-8289 (Ext.107)

FAX: +82-31-766-2904

From: rfspectrum@gmail.com [mailto:rfspectrum@gmail.com] **On Behalf Of** Tim Dwyer

Sent: Tuesday, September 11, 2007 11:12 PM

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★ **Tim Dwyer** Dear Y.G., CCS policy is to process applications as quickly as possible. Plea Sep 11 (7 days ago)

★ from **Mike Kuo** <mike.kuo@ccsemc.com> [hide details](#) Sep 11 (7 days ago) [Reply](#) ▼

to Tim Dwyer - TCB <Timothy_Dwyer@ieee.org>

date Sep 11, 2007 1:57 PM

subject RE: Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

Hi Tim:

1. This device can not be qualified for occupational RF exposure category. This is handheld Barcode scanner which is designed for general public / business uses.
2. TCB can review and certify occupational RF exposure category as long as the higher of RF conducted / EIRP are below high power threshold (2250/f(GHz))
3. Based upon page 4 of user manual, this device is capable of having CDMA function. So if CDMA function is available and can be transmitting simultaneously with WLAN, then TCB can not review this application.

Association of Fn1 (function 1)

Association	Function
Fn2 + home key	CDMA function

Best Regards

Mike Kuo

Compliance Certification Services

47173 Benicia Street

Fremont, CA 94538

Direct: (510) 771-1105

Fax: (510) 661-0888

Main: (510) 771-1000

e-mail: mike.kuo@ccsemc.com

Web Site: www.ccsemc.com

From: rfspectrum@gmail.com [mailto:rfspectrum@gmail.com] **On Behalf Of** Tim Dwyer

Sent: Tuesday, September 11, 2007 7:28 AM

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No virus found in this incoming message.

Checked by AVG Free Edition.

Version: 7.5.485 / Virus Database: 269.13.14/1001 - Release Date: 9/11/2007 1:37 PM

No virus found in this outgoing message.

Checked by AVG Free Edition.

Version: 7.5.485 / Virus Database: 269.13.14/1001 - Release Date: 9/11/2007 1:37 PM

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★ from **Tim Dwyer** <Timothy_Dwyer@ieee.org>

[hide details](#) Sep 11 (7 days ago)

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to Mike Kuo <mike.kuo@ccsemc.com>

date Sep 11, 2007 2:49 PM

subject Re: Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

mailed-by gmail.com

Hi Mike,

Thanks for your comments and time on the phone. They are appreciated.

I included in my notice a question about the CDMA function because I saw it also in the block diagram. Also they have a mention about 13.56/900 MHz RFID, but also no more information yet

I will send him additional clarification on your item 3. There is no detail on the CDMA function so I do not know if it operates simultaneously or whether it meets 30 sec handover requirement.

Best regards,

Tim

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★ from **"Y.G. Gwon"** <ykkwon@onetech.co.kr>

[hide details](#) Sep 14 (4 days ago)

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to tim.dwyer@ccsemc.com

date Sep 14, 2007 5:07 AM

subject RE: Be Interactive Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

Hi Tim,

I would like to embed my reply between your kind comments.

If you have any deviation from you, please inform me that at your earliest convenience.

Best Regards,

Y. G. Gwon (權容廣)

ONETECH Corp.

RF/EMC Div.

TEL: +82-31-765-8289 (Ext.107)

FAX: +82-31-766-2904

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

From: tim.dwyer@CCSEMC.com [mailto:tim.dwyer@CCSEMC.com]
Sent: Tuesday, September 11, 2007 10:05 AM
To: Y.K. Kwon
Cc: tim.dwyer@CCSEMC.com
Subject: Be **Interactive** Co., Ltd., FCC ID: PNGUD720, (DTS WLAN part) Assessment NO.: AN07T7178, Notice#1

Dear Y.K.,

Attached are the review items for this application. If you have questions, please ask.

Q1: TCB's can approve 2.4 GHz devices without **SAR** evaluation if the device powers are below the threshold powers or 48.97 mW for devices used >2.5 cm and 24.48 mW for devices used < 2.5 cm. Devices with powers above the threshold require **SAR** evaluation to be qualified for TCB approval. Test report page 72/72 indicates the device is for portable category use <20 cm with a power output of 72.444 mW EIRP. The power of this device exceeds the threshold power set by FCC OET for approval by a TCB. For TCB approval, **SAR** evaluation is required.

[YK] I would like to send a **SAR** test report in the email for DSS part, because our mail server cannot transfer more than total 5 MB.

Q2: The schematics and block diagram provided show circuitry for the host device but do not include details for the WLAN module. Please submit schematic and block diagram for the WLAN module.

[YK] Attached please find files for schematic and block diagram for WLAN module.

Q3: The information in Q1 and Q2 may not be necessary if the WLAN module employed holds an FCC modular approval for portable category use with co-located Bluetooth device as configured in this device. If the WLAN module has such an FCC grant, please provide the FCCID for the module for further evaluation.

[YK]The used module in the device does not get a FCC certificate.

Q4: The user manual must include and RF exposure statement.

[YK] Attached please find a revised user manual.

Q5: The block diagram shows "CDMA and 13.56 MHz Modules" but no evaluation data for any CDMA or 13.56 MHz device was included in the application. Please provide additional explanation for these devices.

[YK] Attached please find a revised system block diagram and applicant's declaration.

Q6: Please provide detailed internal photos for the WLAN module including photos with shields removed.

[YK] Attached please find a file for revised internal photo. The photo for removed shield was in page 4.

Q7: The application has been reviewed to the extent possible pending receipt of RF exposure and other information above. Final evaluation will be performed when complete information is received.

[YK] Please review all attached files and then informs me, if you have any deviation from you.

Best regards,

Tim Dwyer

CCS Technical Reviewer

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.

6 attachments — [Download all attachments](#)

Block Diagram_WLAN.pdf



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SWL-2460 Schematic.pdf



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DeclarationCDMA.pdf



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