

Mike Kuo

From: vicky.liu [vicky.liu@tw.ccsemc.com]
Sent: Wednesday, August 01, 2007 1:58 AM
To: Mike Kuo
Cc: application@tw.ccsemc.com; chingf.wu
Subject: RE: Billinton Systems Inc., FCC ID: NLF-GUBTCR42T, Assessment NO.: AN07T7058, Notice#1

Dear Mike,

Thank you for your reply. The answer of ACL Packet Type is **DH1**.

If this case has no problem, we hope to get FCC cert ASAP. Because our client pushes us to get cert, we hope to get up to the request of our client. If it still has any questions, please let me know. Thanks a million.

Best Regards

Vicky Liu 劉淑芳

Certification Dept.  

Compliance Certification Services Inc.
Rm.258, Bldg.17, No.195, Sec.4, Chung
Hsing Rd., Chutung, Hsinchu, Taiwan, R.O.C.
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----- 轉呈者 vicky.liu/ccsemc 於 2007/08/01 04:41 PM -----

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

2007/08/01 01:38 AM

收件人: "vicky.liu" <vicky.liu@tw.ccsemc.com>

副本抄送: <application@tw.ccsemc.com>

主旨: RE: Billinton Systems Inc., FCC ID: NLF-GUBTCR42T, Assessment NO.: AN07T7058, Notice#1

Hi Vicky:

Question #5: Based upon revised user manual and theory of operation, this device is designed per Bluetooth 2.0+EDR. As stated in the test report and theory of operation, this device is capable of operating in three different modulations: GFSK, QPSK and 8PSK. In the test report, there is information on which ACL packet Type was selected for the final testing and the worse case investigation. Please address. For your information, Bluetooth 2.0+EDR are capable with the following ACL packet Type:

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Type	Payload Header (bytes)	User Payload (bytes)	FEC	CRC	Symmetric max rate (kb/s)	Asymmetric Max Rate (kb/s) Forward	Asymmetric Max Rate (kb/s) Reverse
DM1	1	0-17	$\frac{2}{3}$	yes	108.8	108.8	108.8
DH1	1	0-27	no	yes	172.8	172.8	172.8
DM3	2	0-121	$\frac{2}{3}$	yes	258.1	387.2	54.4
DH3	2	0-183	no	yes	390.4	585.5	86.4
DM5	2	0-224	$\frac{2}{3}$	yes	286.7	477.8	36.3
DH5	2	0-339	no	yes	433.9	723.2	57.6
AUX1	1	0-29	no	no	185.6	185.6	185.6
2-DH1	2	0-54	no	yes	345.6	345.6	345.6
2-DH3	2	0-367	no	yes	782.9	1174.4	172.8
2-DH5	2	0-679	no	yes	869.7	1448.5	115.2
3-DH1	2	0-83	no	yes	531.2	531.2	531.2
3-DH3	2	0-552	no	yes	1177.6	1766.4	235.6
3-DH5	2	0-1021	no	yes	1306.9	2178.1	177.1

Best Regards

Mike Kuo
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From: vicky.liu [mailto:vicky.liu@tw.ccsemc.com]
Sent: Monday, July 30, 2007 7:43 PM
To: Mike Kuo
Cc: application@tw.ccsemc.com
Subject: RE: Billinton Systems Inc., FCC ID: NLF-GUBTCR42T, Assessment NO.: AN07T7058, Notice#1

Dear Mike,

Thank you for your reply and please find the attachment for theory of operation.

8/1/2007

Vicky Liu 劉淑芳

Certification Dept.



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----- 轉呈者 vicky.liu/ccsemc 於 2007/07/31 10:36 AM -----

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

2007/07/31 06:28 AM

收件人 : "vicky.liu" <vicky.liu@tw.ccsemc.com>
副本抄送 : <application@tw.ccsemc.com>
主旨 : RE: Billinton Systems Inc., FCC ID: NLF-GUBTCR42T, Assessment NO.: AN07T7058, Notice#1

Hi Vicky:

Please answer Question #4. In addition, in the theory of operation file, only block diagram is included. Please provide theory of operation .

Best Regards

Mike Kuo
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From: vicky.liu [mailto:vicky.liu@tw.ccsemc.com]
Sent: Sunday, July 29, 2007 10:40 PM
To: Mike Kuo
Cc: application@tw.ccsemc.com
Subject: Billinton Systems Inc., FCC ID: NLF-GUBTCR42T, Assessment NO.: AN07T7058, Notice#1

Dear Mike,

Thank you for your reply and my answer is as belowing.

#1: Per page 4 of user manual, the output power for Class 2 Bluetooth device is 0dBm, but test report listed the max. output power was 2.23dBm. Please explain.

Q#2: Page 6 of user manual indicated that 58.6 x 19.8 x 8.1 mm (L x W x H) is for Class 2); and 72.2 x

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29.8 x 8.5 mm (L x W x H) is for Class 1 width including external antenna. But per external photo, the dimension of EUT was 46 x18(L x W), please confirm if the provided user manual suit for this application.

Ans: Please find the attachment for the revised user Guide.

Q#3: DH5 measured as page 23 test plot indicated was 2.925ms but not 2.958ms as listed in page 21, please revise.

Ans: Please find the attachment for the revised Test Report for page 21.

Vicky Liu 劉淑芳

Certification Dept.



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----- 轉呈者 vicky.liu/ccsemc 於 2007/07/30 10:10 AM -----

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

2007/07/29 08:04 AM

收件人: <application@tw.ccsemc.com>
副本抄送: <lucy.tsai@tw.ccsemc.com>
主旨: Billionton Systems Inc., FCC ID: NLF-GUBTCR42T, Assessment NO.: AN07T7058, Notice#1

Hi Vicky:

Q#1: Per page 4 of user manual, the output power for Class 2 Bluetooth device is 0dBm, but test report listed the max. output power was 2.23dBm. Please explain.

Q#2: Page 6 of user manual indicated that 58.6 x 19.8 x 8.1 mm (L x W x H) is for Class 2); and 72.2 x 29.8 x 8.5 mm (L x W x H) is for Class 1 width including external antenna. But per external photo, the dimension of EUT was 46 x18(L x W), please confirm if the provided user manual suit for this application.

Q#3: DH5 measured as page 23 test plot indicated was 2.925ms but not 2.958ms as listed in page 21, please revise.

Q#4: Please demonstrate that this Bluetooth device has complied with FCC 15.247 requirement as below:

Is the hopping sequence pseudorandom, based on the technical description?

Is each channel used equally on average, based on the technical description?

Does the associated system receiver have a compliant input bandwidth, based on the measured 20 dB

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emission bandwidth?

Does the associated system receiver have the ability to hop in synchronization with the transmitter, based on the technical description?

15.247(g) Does the design of the frequency hopping system allow it to comply with all pertinent requirements when presented with a lengthy data stream?

15.247(h) Does the frequency hopping system comply with the non-coordination requirement?

Best Regards,

Mike Kuo

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.

No virus found in this incoming message.

Checked by AVG Free Edition.

Version: 7.5.476 / Virus Database: 269.10.20/919 - Release Date: 7/26/2007 9:56 AM

No virus found in this outgoing message.

Checked by AVG Free Edition.

Version: 7.5.476 / Virus Database: 269.10.20/919 - Release Date: 7/26/2007 9:56 AM

This e-mail transmission is confidential and intended solely for being reviewed by the recipient(s) identified above. If you are not an identified recipient, please ensure that this communication remains confidential and promptly return it to the sender. Please contact immediately by phone (Tel: 886-2-2299-9720) for any problem with this transmission. Thank you for your attention.

No virus found in this incoming message.

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Version: 7.5.476 / Virus Database: 269.10.20/919 - Release Date: 7/26/2007 9:56 AM

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Version: 7.5.476 / Virus Database: 269.10.20/919 - Release Date: 7/26/2007 9:56 AM

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Version: 7.5.476 / Virus Database: 269.11.0/927 - Release Date: 7/30/2007 5:02 PM

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Checked by AVG Free Edition.

Version: 7.5.476 / Virus Database: 269.11.0/927 - Release Date: 7/30/2007 5:02 PM

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Checked by AVG Free Edition.

Version: 7.5.476 / Virus Database: 269.11.0/929 - Release Date: 7/31/2007 5:26 PM

8/1/2007