Mike Kuo

From: Kwon, James (Gunpo) [James.Kwon@sgs.com]
Sent: Thursday, January 11, 2007 6:23 AM
To: Mike Kuo
Cc: Jeong, Feel (Gunpo); Ham, Denny (Gunpo); Ko, Duke (Gunpo); Ryu, Erwin (Gunpo)
Subject: FW: C-motech Co., Ltd., FCC ID: TARCDU-680, Assessment NO.: AN07T6434, Notice#1

Hi Mike,

Pls find our reply at below.

James/SGS-Korea

From: Mike Kuo [mailto:mike.kuo@ccsemc.com]
Sent: Thursday, January 11, 2007 10:13 AM
To: Kwon, James (Gunpo)
Subject: FW: C-motech Co., Ltd., FCC ID: TARCDU-680, Assessment NO.: AN07T6434, Notice#1

Hi James:
I have done the technical review with the following questions. Additional questions may be asked based upon the replies.

M.Kuo

Question #1: Antenna specificaiton can be requested for long term confidential document but can not be request for short term confidential document. Please revised the request for confidentiality letter with the following changes:
In long term section, list Block Diagram, Schematic Diagram, Parts list, theory of operation and Antenna specification.
In short term section, list user manual, regulatory info, external photos, internal photos and test setup photos.

Once you done so, please submit the revised request letter.
[James] I revised request letter, and uploaded it.

Question #2: In the regulatory info document, it states " FCC guidelines stipulate that the antenna should be more than 1.5cm (0.6") from all persons. " Please delete this statement. The separation distance is the result from the evaluation. FCC does not provide guideline for separation distance for specific device.

"..The design of this phone complies with .." please change " phone " to " device".
"This device has been tested for FCC RF exposure hand and body SAR compliance for CDU-680 CDMA modem user. " please change above statement to the following:

" This device has been tested for FCC RF exposure body SAR compliance with typical laptop computer(s) for CDU-680 CDMA Modem user".
[James] I revised regulatory info document, and uploaded it.

Question #3: Section 1.6 of RF test report, please change 15.209 to 15.109; 15.207 to 15.107. 15.209 and 15.207 are applicable to unlicnesed transmitter which is not the case for this application.
[James] All number of test report was revised, and updated test report was uploaded.

Please go over the test report to replace 15.207 with 15.107; replace 15.209 with 15.109.

Question #4: Section 5.3 of RF test report: this is 15.109 tests but the heading in in the limit stated as AVE (average). For 15.109 emisison tests, frequencies below 1 GHz is QP limit. Please make necessary correction.

[James] Page 22 of test report was revised.

Question #5:Section 3.3 of RF test report: please inform which RC/SO or 1xEVDO Rev 0 or Rev. A configuraiton was used during the ERP/EIRP measurement.

[James] Comment was updated exactly on page 13 of test report.

Question #6:Based upon theroy of operation, this CDMA data modem has the following radio capabilities :
MS protocol Rev. 6 / IS-2000
1xEVDO Rev. 0
1xEVDO Rev. A
In section 6 of RF test report, preliminary tests were performed with various RC/SO configuraiton. However, these AVE/PK output power measurement were only applicable to 1xRTT. There is no information on the investigation of 1xEVDO Rev.0 and Rev.A. Please provide output power investigation on 1xEVDO Rev. 0 and 1xEVDO Rev. A

[James] We missed it. Comment was updated exactly on page 27-28 of test report.

Rev. 0

Cellular Band - RTAP					Cellular Band - FTAP				
			Conducted power (dBm)					Conducted power (dBm)	
Channel	f (MHz)	RTAP Rate	Average	Peak	Channel	f (MHz)	FTAP Rate	Average	Peak
1013	824.70	153.6			1013	824.70	307.2 kbps (2 slot, QPSK)		
384	836.52				384	836.52			
777	848.31				777	848.31			

PCS Band - RTAP					PCS Band - FTAP				
			Conducted power (dBm)					Conducted power (dBm)	
Channel	f (MHz)	RTAP Rate	Average	Peak	Channel	f (MHz)	FTAP Rate	Average	Peak
25	1851.25	153.6			25	1851.25	307.2 kbps (2 slot, QPSK)		
600	1880.00				600	1880.00			
1175	1908.75				1175	1908.75			

Rev. A

Cellular Band - RETAP					Cellular Band - FETAP				
			Conducted power (dBm)					Conducted power (dBm)	
Channel	f (MHz)	R-Data Pkt Size	Average	Peak	Channel	f (MHz)	FTAP Rate	Average	Peak
384	836.52	128			384	836.52	307.2 (2 slot)		
		256					307.2 (4 slot)		
		512							
		768							
		1024							
		1536							
		2048							
		3072							
		4096							
		6144							
		8192							
		12288							

PCS Band - RETAP				PCS Band - FETAP			
			Conducted power				Conducted power

Channel	f (MHz)	R-Data Pkt Size	(dBm) Average	(dBm) Peak	Channel	f (MHz)	FTAP Rate	(dBm) Average	(dBm) Peak
600	1880.00	128			600	1880	307.2 (2 slot)		
		256					307.2 (4 slot)		
		512							
		768							
		1024							
		1536							
		2048							
		3072							
		4096							
		6144							
		8192							
		12288							

Question #7: Necessary Bandwidht shall be based upon 99% Bandwidth measurement (not 26dB Bandwidth). Please update the test report with correct emission designator

[James] Acknowledged well. We updated page 3 of test report.

Question #8: Please explain why RC3/SO 32(+F-SCH) was not investigated. What is mean the RC/SO is only applicable to Lab applications?

[James] Acknowledged well. We investigated RC3/SO 32(+F-SCH). Referring to Theory of operation, we updated page 25 of test report clearer.

[James] Test report page is changed. So I uploaded related material again.

Additional Technical questions may be asked based upon replies to above questions.

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.

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