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Date: Sep. 3, 2013  
PCTEST TCB/CB  
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Columbia, MD 21045

Subject: Samsung Electronics Co., Ltd.  
FCC ID: A3LSPHL520

To Whom it May Concern

We attest the following regarding FCC ID: A3LSPHL520

1. MPR is permanently implemented for all channel BWs, modulations, frequency bands and RB sizes:  
Supported channel BWs, modulations, frequency bands:
  - a. LTE Band 25 (Channel BW 3 & 5 & 10 MHz)/QPSK & 16QAM
  - b. LTE Band 26 (Channel BW 1.4 & 3 & 5 & 10 MHz)/QPSK & 16QAM
  - c. LTE Band 41 (Channel BW 10 & 15 & 20 MHz)/QPSK & 16QAM
  
2. MPR is implemented per 3GPP TS 36.101. With the MPR permanently implemented, this device will never operate higher than 23.5dBm in QPSK and 16QAM.
  
3. We confirm the specific MPR targets and tolerances shown below

a. The LTE MPR Targets for Band 25 (Channel BW 3 & 5 & 10 MHz) are:

Band	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Target MPR [dB]	Maximum MPR Allowed per 3GPP [dB]
LTE Band 25	3	QPSK	1	0	0	0
	3	QPSK	1	7	0	0
	3	QPSK	1	14	0	0
	3	QPSK	8	0	1	0-1
	3	QPSK	8	4	1	0-1
	3	QPSK	8	7	1	0-1
	3	QPSK	15	0	1	0-1
	3	16-QAM	1	0	1	0-1
	3	16-QAM	1	7	1	0-1
	3	16-QAM	1	14	1	0-1
	3	16-QAM	8	0	2	0-2
	3	16-QAM	8	4	2	0-2
	3	16-QAM	8	7	2	0-2
	3	16-QAM	15	0	2	0-2
	5	QPSK	1	0	0	0
	5	QPSK	1	12	0	0
	5	QPSK	1	24	0	0
	5	QPSK	12	0	1	0-1
	5	QPSK	12	6	1	0-1
	5	QPSK	12	13	1	0-1
	5	QPSK	25	0	1	0-1
	5	16-QAM	1	0	1	0-1
	5	16-QAM	1	12	1	0-1
	5	16-QAM	1	24	1	0-1
	5	16-QAM	12	0	2	0-2
	5	16-QAM	12	6	2	0-2
	5	16-QAM	12	13	2	0-2
	5	16-QAM	25	0	2	0-2
	10	QPSK	1	0	0	0
	10	QPSK	1	25	0	0
	10	QPSK	1	49	0	0
	10	QPSK	25	0	1	0-1
	10	QPSK	25	12	1	0-1
	10	QPSK	25	25	1	0-1
	10	QPSK	50	0	1	0-1
	10	16-QAM	1	0	1	0-1
	10	16-QAM	1	25	1	0-1
	10	16-QAM	1	49	1	0-1
	10	16-QAM	25	0	2	0-2
	10	16-QAM	25	12	2	0-2
	10	16-QAM	25	25	2	0-2
	10	16-QAM	50	0	2	0-2

b. The LTE MPR Targets for Band 26 (Channel BW 1.4 & 3 & 5 & 10 MHz) are:

Band	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Target MPR [dB]	Maximum MPR Allowed per 3GPP [dB]
LTE Band 26	1.4	QPSK	1	0	0	0
	1.4	QPSK	1	2	0	0
	1.4	QPSK	1	5	0	0
	1.4	QPSK	3	0	0	0
	1.4	QPSK	3	2	0	0
	1.4	QPSK	3	3	0	0
	1.4	QPSK	6	0	1	0-1
	1.4	16-QAM	1	0	1	0-1
	1.4	16-QAM	1	2	1	0-1
	1.4	16-QAM	1	5	1	0-1
	1.4	16-QAM	3	0	1	0-1
	1.4	16-QAM	3	2	1	0-1
	1.4	16-QAM	3	3	1	0-1
	1.4	16-QAM	6	0	2	0-2
	3	QPSK	1	0	0	0
	3	QPSK	1	7	0	0
	3	QPSK	1	14	0	0
	3	QPSK	8	0	1	0-1
	3	QPSK	8	4	1	0-1
	3	QPSK	8	7	1	0-1
	3	QPSK	15	0	1	0-1
	3	16-QAM	1	0	1	0-1
	3	16-QAM	1	7	1	0-1
	3	16-QAM	1	14	1	0-1
	3	16-QAM	8	0	2	0-2
	3	16-QAM	8	4	2	0-2
	3	16-QAM	8	7	2	0-2
	3	16-QAM	15	0	2	0-2
	5	QPSK	1	0	0	0
	5	QPSK	1	12	0	0
	5	QPSK	1	24	0	0
	5	QPSK	12	0	1	0-1
	5	QPSK	12	6	1	0-1
	5	QPSK	12	13	1	0-1
	5	QPSK	25	0	1	0-1
	5	16-QAM	1	0	1	0-1
	5	16-QAM	1	12	1	0-1
	5	16-QAM	1	24	1	0-1
	5	16-QAM	12	0	2	0-2
	5	16-QAM	12	6	2	0-2
	5	16-QAM	12	13	2	0-2
	5	16-QAM	25	0	2	0-2
	10	QPSK	1	0	0	0
	10	QPSK	1	25	0	0
	10	QPSK	1	49	0	0
	10	QPSK	25	0	1	0-1
	10	QPSK	25	12	1	0-1
	10	QPSK	25	25	1	0-1
	10	QPSK	50	0	1	0-1
	10	16-QAM	1	0	1	0-1
10	16-QAM	1	25	1	0-1	
10	16-QAM	1	49	1	0-1	
10	16-QAM	25	0	2	0-2	
10	16-QAM	25	12	2	0-2	
10	16-QAM	25	25	2	0-2	
10	16-QAM	50	0	2	0-2	

c. The LTE MPR Targets for Band 41 (Channel BW 10 & 15 & 20 MHz) are:

Band	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Target MPR [dB]	Maximum MPR Allowed per 3GPP [dB]
LTE Band 41	10	QPSK	1	0	0	0
	10	QPSK	1	25	0	0
	10	QPSK	1	49	0	0
	10	QPSK	25	0	1	0-1
	10	QPSK	25	12	1	0-1
	10	QPSK	25	25	1	0-1
	10	QPSK	50	0	1	0-1
	10	16-QAM	1	0	1	0-1
	10	16-QAM	1	25	1	0-1
	10	16-QAM	1	49	1	0-1
	10	16-QAM	25	0	2	0-2
	10	16-QAM	25	12	2	0-2
	10	16-QAM	25	25	2	0-2
	10	16-QAM	50	0	2	0-2
	15	QPSK	1	0	0	0
	15	QPSK	1	36	0	0
	15	QPSK	1	74	0	0
	15	QPSK	36	0	1	0-1
	15	QPSK	36	18	1	0-1
	15	QPSK	36	37	1	0-1
	15	QPSK	75	0	1	0-1
	15	16-QAM	1	0	1	0-1
	15	16-QAM	1	36	1	0-1
	15	16-QAM	1	74	1	0-1
	15	16-QAM	36	0	2	0-2
	15	16-QAM	36	18	2	0-2
	15	16-QAM	36	37	2	0-2
	15	16-QAM	75	0	2	0-2
	20	QPSK	1	0	0	0
	20	QPSK	1	50	0	0
	20	QPSK	1	99	0	0
	20	QPSK	50	0	1	0-1
	20	QPSK	50	25	1	0-1
	20	QPSK	50	50	1	0-1
	20	QPSK	100	0	1	0-1
	20	16-QAM	1	0	1	0-1
	20	16-QAM	1	50	1	0-1
	20	16-QAM	1	99	1	0-1
	20	16-QAM	50	0	2	0-2
	20	16-QAM	50	25	2	0-2
	20	16-QAM	50	50	2	0-2
	20	16-QAM	100	0	2	0-2

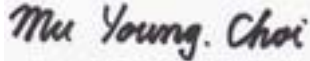
4. A-MPR was disabled for all SAR test samples for SAR testing purposes only.

5. This device does implement power back-off schemes for SAR compliance.

6. We attest to the Simultaneous Tx listed on Operational Description to be accurate and furthermore, any other simultaneous Tx combinations not listed on the SAR report are not supported by software/hardware design.

Should you have any questions or comments concerning the above, please contact the undersigned.

Sincerely,



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