



Samsung Electronics Co., LTD.  
 416, Maetan-3dong, Yeongtong-gu  
 Suwon-City, Gyeonggi-do, 443-742, Korea

Date: MARCH, 28, 2013  
 PCTEST TCB/CB  
 Div. of PCTEST Engineering Lab., Inc.  
 660-B Dobbin Road  
 Columbia, MD21045

Subject: Samsung Electronics Co., Ltd.  
 FCC ID: A3LSGHI337

To Whom it May Concern

We attest the following regarding FCC ID: A3LSGHI337

1. MPR is permanently implemented for all channel BWs, modulations, frequency bands and RB sizes:  
 Supported channel BWs, modulations, frequency bands:
  - a. LTE Band 2 (Channel BW 5 , 10, 15 & 20 MHz)/QPSK & 16QAM
  - b. LTE Band 4 (Channel BW 5 , 10, 15 & 20 MHz)/QPSK & 16QAM
  - c. LTE Band 5 (Channel BW 5 & 10 MHz)/QPSK & 16QAM
  - d. LTE Band 17 (Channel BW 5 & 10 MHz)/QPSK & 16QAM
2. MPR is implemented per 3GPP TS 36.101. With the MPR permanently implemented, this device will never operate at 24.0dBm or higher in QPSK and 16QAM.
3. We confirm the specific MPR targets and tolerances shown below

1) The LTE MPR Targets for Band2 are:

Band	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Target MPR [dB]	Maximum MPR Allowed per 3GPP [dB]
Band 2	5	QPSK	1	0	0	0
	5	QPSK	1	24	0	0
	5	QPSK	12	6	1	0-1
	5	QPSK	25	0	1	0-1
	5	16-QAM	1	0	1	0-1
	5	16-QAM	1	24	1	0-1
	5	16-QAM	12	6	2	0-2
	5	16-QAM	25	0	2	0-2
	10	QPSK	1	0	0	0
	10	QPSK	1	49	0	0
	10	QPSK	25	12	1	0-1
	10	QPSK	50	0	1	0-1
	10	16-QAM	1	0	1	0-1
	10	16-QAM	1	49	1	0-1
	10	16-QAM	25	12	2	0-2
	10	16-QAM	50	0	2	0-2
	15	QPSK	1	0	0	0
	15	QPSK	1	74	0	0
	15	QPSK	36	18	1	0-1
	15	QPSK	75	0	1	0-1
15	16-QAM	1	0	1	0-1	
15	16-QAM	1	74	1	0-1	

15	16-QAM	36	18	2	0-2
15	16-QAM	75	0	2	0-2
20	QPSK	1	0	0	0
20	QPSK	1	99	0	0
20	QPSK	50	25	1	0-1
20	QPSK	100	0	1	0-1
20	16-QAM	1	0	1	0-1
20	16-QAM	1	99	1	0-1
20	16-QAM	50	25	2	0-2
20	16-QAM	100	0	2	0-2

2) The LTE MPR Targets for Band 4 (AWS) are:

Band	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Target MPR [dB]	Maximum MPR Allowed per 3GPP [dB]
Band 4	5	QPSK	1	0	0	0
	5	QPSK	1	24	0	0
	5	QPSK	12	6	1	0-1
	5	QPSK	25	0	1	0-1
	5	16-QAM	1	0	1	0-1
	5	16-QAM	1	24	1	0-1
	5	16-QAM	12	6	2	0-2
	5	16-QAM	25	0	2	0-2
	10	QPSK	1	0	0	0
	10	QPSK	1	49	0	0
	10	QPSK	25	12	1	0-1
	10	QPSK	50	0	1	0-1
	10	16-QAM	1	0	1	0-1
	10	16-QAM	1	49	1	0-1
	10	16-QAM	25	12	2	0-2
	10	16-QAM	50	0	2	0-2
	15	QPSK	1	0	0	0
	15	QPSK	1	74	0	0
	15	QPSK	36	18	1	0-1
	15	QPSK	75	0	1	0-1
	15	16-QAM	1	0	1	0-1
	15	16-QAM	1	74	1	0-1
	15	16-QAM	36	18	2	0-2
	15	16-QAM	75	0	2	0-2
	20	QPSK	1	0	0	0
	20	QPSK	1	99	0	0
	20	QPSK	50	25	1	0-1
	20	QPSK	100	0	1	0-1
	20	16-QAM	1	0	1	0-1
	20	16-QAM	1	99	1	0-1
20	16-QAM	50	25	2	0-2	
20	16-QAM	100	0	2	0-2	

3) The LTE MPR Targets for Band 5 are:

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

4) The LTE MPR Targets for Band 17 are:

Band	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Target MPR [dB]	Maximum MPR Allowed per 3GPP [dB]
Band 17	5	QPSK	1	0	0	0
	5	QPSK	1	24	0	0
	5	QPSK	12	6	1	0-1
	5	QPSK	25	0	1	0-1
	5	16-QAM	1	0	1	0-1
	5	16-QAM	1	24	1	0-1
	5	16-QAM	12	6	2	0-2
	5	16-QAM	25	0	2	0-2
	10	QPSK	1	0	0	0
	10	QPSK	1	49	0	0
	10	QPSK	25	12	1	0-1
	10	QPSK	50	0	1	0-1
	10	16-QAM	1	0	1	0-1
	10	16-QAM	1	49	1	0-1
	10	16-QAM	25	12	2	0-2
10	16-QAM	50	0	2	0-2	

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

5. This device does not 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,  
**JongWon Lee**  
**Engineer**  
**Samsung Electronics CO. LTD**  
**TEL: +82-31-301-3663**  
**E-mail: [\\_jw78.lee@samsung.com](mailto:_jw78.lee@samsung.com)**