SONY

Sony Mobile Communications, Inc.
4-12-3 Higashi-shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan

Date: December 11, 2018

Tune up Information

FCC ID: PY7-50241M

Maximum Target Average Power for Production Unit

Mode	GSM 850		GSM 1900	
	Full Power Mode	Reduced Power Mode	Full Power Mode	Reduced Power Mode
GSM (GMSK, 1 Tx slot)	32.7dBm(+/-1dB)	NA	29.7dBm(+/-1dB)	27.7dBm(+/-1dB)
GPRS/EDGE (GMSK, 1 Tx slot)	32.7dBm(+/-1dB)	NA	29.7dBm(+/-1dB)	27.7dBm(+/-1dB)
GPRS/EDGE (GMSK, 2 Tx slots)	31.7 dBm (+/-1dB)	NA	28.7 dBm (+/-1dB)	26.7dBm(+/-1dB)
GPRS/EDGE (GMSK, 3 Tx slots)	29.7 dBm (+/-1dB)	NA	26.7dBm(+/-1dB)	24.7dBm(+/-1dB)
GPRS/EDGE (GMSK, 4 Tx slots)	28.7dBm(+/-1dB)	NA	25.7dBm(+/-1dB)	23.7dBm(+/-1dB)
EDGE (8PSK, 1 Tx slot)	27.0 dBm (+/-1dB)	NA	26 dBm (+/-1dB)	NA
EDGE (8PSK, 2 Tx slots)	26.0 dBm (+/-1dB)	NA	25 dBm (+/-1dB)	NA
EDGE (8PSK, 3 Tx slots)	24.0 dBm (+/-1dB)	NA	23 dBm (+/-1dB)	NA
EDGE (8PSK, 4 Tx slots)	23.0 dBm (+/-1dB)	NA	22 dBm (+/-1dB)	NA

Power unit: dBm

Maximum Target Average Power for Production Unit

Mode	WCDMA Band V		WCDMA Band II	
	Full Power Mode	Reduced Power Mode	Full Power Mode	Reduced Power Mode
AMR 12.2K	23	NA	23	20
	+/-1dB		+/-1dB	+/-1dB
RMC 12.2K	23	NA	23	20
	+/-1dB		+/-1dB	+/-1dB
HSDPA Subtest-1	22.0	NA	22.0	19.0
	+/-1dB		+/-1dB	+/-1dB
HSDPA Subtest-2	22.0	NA	22.0	19.0
	+/-1dB		+/-1dB	+/-1dB
HSDPA Subtest-3	21.5	NA	21.5	18.5
	+/-1dB		+/-1dB	+/-1dB
HSDPA Subtest-4	21.5	NA	21.5	18.5
	+/-1dB		+/-1dB	+/-1dB
DC-HSDPA Subtest-1	22.0	NA	22.0	19.0
	+/-1dB		+/-1dB	+/-1dB
DC-HSDPA Subtest-2	22.0	NA	22.0	19.0
	+/-1dB		+/-1dB	+/-1dB
DC-HSDPA Subtest-3	21.5	NA	21.5	18.5

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	+/-1dB		+/-1dB	+/-1dB
DC-HSDPA Subtest-4	21.5	NA	21.5	18.5
	+/-1dB		+/-1dB	+/-1dB
HSUPA Subtest-1	20	NA	20	17
	+/-1dB		+/-1dB	+/-1dB
HSUPA Subtest-2	20	NA	20	17
	+/-1dB		+/-1dB	+/-1dB
HSUPA Subtest-3	21	NA	21	18
	+/-1dB		+/-1dB	+/-1dB
HSUPA Subtest-4	19.5	NA	19.5	16.5
	+/-1dB		+/-1dB	+/-1dB
HSUPA Subtest-5	21	NA	21	18
	+/-1dB		+/-1dB	+/-1dB

Power unit: dBm

Maximum Target Average Power for Production Unit

LTE Band II						
Modulation	**BW (MHz)**	**RB size**	**Full Power mode (MPR)**	**Full Power mode**	**Reduced Power mode (MPR)**	**Reduced Power mode**
QPSK	20	≤ 18	0	23.7(+/-1dB)	0	20.7(+/-1dB)
QPSK	20	> 18	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	20	≤ 18	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	20	> 18	2	21.7(+/-1dB)	2	18.7(+/-1dB)
QPSK	15	≤ 16	0	23.7(+/-1dB)	0	20.7(+/-1dB)
QPSK	15	> 16	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	15	≤ 16	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	15	> 16	2	21.7(+/-1dB)	2	18.7(+/-1dB)
QPSK	10	≤ 12	0	23.7(+/-1dB)	0	20.7(+/-1dB)
QPSK	10	> 12	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	10	≤ 12	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	10	> 12	2	21.7(+/-1dB)	2	18.7(+/-1dB)
QPSK	5	≤ 8	0	23.7(+/-1dB)	0	20.7(+/-1dB)
QPSK	5	> 8	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	5	≤ 8	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	5	> 8	2	21.7(+/-1dB)	2	18.7(+/-1dB)
QPSK	3	≤ 4	0	23.7(+/-1dB)	0	20.7(+/-1dB)
QPSK	3	> 4	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	3	≤ 4	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	3	> 4	2	21.7(+/-1dB)	2	18.7(+/-1dB)
QPSK	1.4	≤ 5	0	23.7(+/-1dB)	0	20.7(+/-1dB)
QPSK	1.4	> 5	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	1.4	≤ 5	1	22.7(+/-1dB)	1	19.7(+/-1dB)
16QAM	1.4	> 5	2	21.7(+/-1dB)	2	18.7(+/-1dB)

Power unit: dBm

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Maximum Target Average Power for Production Unit

LTE Band Ⅴ						
Modulation	BW (MHz)	RB size	Full Power mode (MPR)	Full Power mode	Reduced Power mode (MPR)	Reduced Power mode
QPSK	10	≤ 12	0	23.7(+/-1dB)	NA	NA
QPSK	10	> 12	1	22.7(+/-1dB)	NA	NA
16QAM	10	≤ 12	1	22.7(+/-1dB)	NA	NA
16QAM	10	> 12	2	21.7(+/-1dB)	NA	NA
QPSK	5	≤ 8	0	23.7(+/-1dB)	NA	NA
QPSK	5	> 8	1	22.7(+/-1dB)	NA	NA
16QAM	5	≤ 8	1	22.7(+/-1dB)	NA	NA
16QAM	5	> 8	2	21.7(+/-1dB)	NA	NA
QPSK	3	≤ 4	0	23.7(+/-1dB)	NA	NA
QPSK	3	> 4	1	22.7(+/-1dB)	NA	NA
16QAM	3	≤ 4	1	22.7(+/-1dB)	NA	NA
16QAM	3	> 4	2	21.7(+/-1dB)	NA	NA
QPSK	1.4	≤ 5	0	23.7(+/-1dB)	NA	NA
QPSK	1.4	> 5	1	22.7(+/-1dB)	NA	NA
16QAM	1.4	≤ 5	1	22.7(+/-1dB)	NA	NA
16QAM	1.4	> 5	2	21.7(+/-1dB)	NA	NA

Power unit: dBm

Maximum Target Average Power for Production Unit

LTE Band Ⅶ						
Modulation	BW (MHz)	RB size	Full Power mode (MPR)	Full Power mode	Reduced Power mode (MPR)	Reduced Power mode
QPSK	20	≤ 18	0	23.7(+/-1dB)	0	22.7(+/-1dB)
QPSK	20	> 18	1	22.7(+/-1dB)	1	21.7(+/-1dB)
16QAM	20	≤ 18	1	22.7(+/-1dB)	1	21.7(+/-1dB)
16QAM	20	> 18	2	21.7(+/-1dB)	2	20.7(+/-1dB)
QPSK	15	≤ 16	0	23.7(+/-1dB)	0	22.7(+/-1dB)
QPSK	15	> 16	1	22.7(+/-1dB)	1	21.7(+/-1dB)
16QAM	15	≤ 16	1	22.7(+/-1dB)	1	21.7(+/-1dB)
16QAM	15	> 16	2	21.7(+/-1dB)	2	20.7(+/-1dB)
QPSK	10	≤ 12	0	23.7(+/-1dB)	0	22.7(+/-1dB)
QPSK	10	> 12	1	22.7(+/-1dB)	1	21.7(+/-1dB)
16QAM	10	≤ 12	1	22.7(+/-1dB)	1	21.7(+/-1dB)
16QAM	10	> 12	2	21.7(+/-1dB)	2	20.7(+/-1dB)
QPSK	5	≤ 8	0	23.7(+/-1dB)	0	22.7(+/-1dB)
QPSK	5	> 8	1	22.7(+/-1dB)	1	21.7(+/-1dB)
16QAM	5	≤ 8	1	22.7(+/-1dB)	1	21.7(+/-1dB)
16QAM	5	> 8	2	21.7(+/-1dB)	2	20.7(+/-1dB)

Power unit: dBm

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802.11b 1M

WLAN2.4GHz	
Center Freq (MHz)	Maximum limit power (dBm)
Ch1	19
Ch2	19
Ch3	19
Ch4	19
Ch5	19
Ch6	19
Ch7	19
Ch8	19
Ch9	19
Ch10	19
Ch11	19

Power unit: dBm

802.11b/g/n

WLAN2.4GHz	IEEE 802.11		
Center Freq (MHz)	11b	11g_6M	11n-HT20_MCS0
Maximum limit power (dBm)			
Ch1	19	16	15
Ch2	19	16	15
Ch3	19	16	15
Ch4	19	16	15
Ch5	19	16	15
Ch6	19	16	15
Ch7	19	16	15
Ch8	19	16	15
Ch9	19	16	15
Ch10	19	16	15
Ch11	19	16	15

Power unit: dBm

802.11a 6M

WLAN 5.2GHz/5.3GHz/5.5GHz/5.8GHz Band	
Center Freq (MHz)	Maximum limit power (dBm)
Ch36	12
Ch38	NA
Ch40	12
Ch44	12
Ch46	NA
Ch48	12
Ch50	NA

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Ch52	12
Ch54	NA
Ch56	12
Ch58	NA
Ch60	12
Ch62	NA
Ch64	12
Ch100	12
Ch102	NA
Ch104	12
Ch106	NA
Ch108	12
Ch110	NA
Ch112	12
Ch114	NA
Ch116	12
Ch118	NA
Ch120	12
Ch122	NA
Ch124	12
Ch126	NA
Ch128	12
Ch132	12
Ch134	NA
Ch136	12
Ch138	NA
Ch140	12
Ch149	12
Ch151	NA
Ch153	12
Ch155	NA
CH157	12
Ch159	NA
Ch161	12
CH165	12

Power unit: dBm

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802.11a/n20/n40

WLAN5.2GHz Band	IEEE 802.11		
Center Freq (MHz)	11a	11n-HT20 MCS0	11n-HT40 MCS0
Maximum limit power (dBm)			
Ch36	12	11	NA
Ch38	NA	NA	11
Ch40	12	11	NA
Ch42	NA	NA	NA
Ch44	12	11	NA
Ch46	NA	NA	11
Ch48	12	11	NA

Power unit: dBm

WLAN5.3GHz Band	IEEE 802.11		
Center Freq (MHz)	11a	11n-HT20 MCS0	11n-HT40 MCS0
Maximum limit power (dBm)			
Ch50	NA	NA	NA
Ch52	12	11	NA
Ch54	NA	NA	11
Ch56	12	11	NA
Ch58	NA	NA	NA
Ch60	12	11	NA
Ch62	NA	NA	11
Ch64	12	11	NA

Power unit: dBm

WLAN5.5GHz Band	IEEE 802.11		
Center Freq (MHz)	11a	11n-HT20 MCS0	11n-HT40 MCS0
Maximum limit power (dBm)			
Ch100	12	11	NA
Ch102	NA	NA	11
Ch104	12	11	NA
Ch106	NA	NA	NA
Ch108	12	11	NA
Ch110	NA	NA	11
Ch112	12	11	NA
Ch114	NA	NA	NA
Ch116	12	11	NA
Ch118	NA	NA	11
Ch120	12	11	NA

Ch122	NA	NA	NA
Ch124	11	11	NA
Ch126	NA	NA	11
Ch128	12	11	NA
Ch132	12	11	NA
Ch134	NA	NA	11
Ch136	12	11	NA
Ch138	NA	NA	NA
Ch140	12	11	NA

Power unit: dBm

WLAN5.8GHz Band	**IEEE 802.11**		
Center Freq (MHz)	**11a**	**11n-HT20 MCS0**	**11n-HT40 MCS0**
Maximum limit power (dBm)			
Ch149	12	11	NA
Ch151	NA	NA	11
Ch153	12	11	NA
Ch155	NA	NA	NA
CH157	12	11	NA
Ch159	NA	NA	11
Ch161	12	11	NA
CH165	12	11	NA

Power unit: dBm

*Note: It has been verified that the lowest data rate has the highest power. Therefore, only the lowest data rate power is indicated in this Tune up Information document.

Bluetooth

Mode / Band	**Maximum Target Average Power (dBm)**				
	1Mbps (GFSK)	**2Mbps (π/4-DQPSK)**	**3Mbps (8-DPSK)**	**LE (1M)**	**LE (2M)**
2.4 GHz Bluetooth	9.5	9.5	9.5	-4	-4

Power unit: dBm