

1. Section 2.983 (d)(3). Range of operating power levels and description of means for variation of operating power

1. Range of operating power levels

The operating power level is divided into 16 steps in CDMA mode.

FM mode : $7.8\text{dBm} + 2/-4\text{ dB} \sim 27.8\text{dBm} + .2/-4\text{dB}$

Level 0 : $27.8\text{dBm} + .2/-4\text{ dB}$

Level 1 : $27.8\text{dBm} + .2/-4\text{ dB}$

Level 2 : $27.8\text{dBm} + .2/-4\text{ dB}$

Level 3 : $23.8\text{dBm} + 2/-4\text{ dB}$

Level 4 : $19.8\text{dBm} + 2/-4\text{ dB}$

Level 5 : $15.8\text{dBm} + 2/-4\text{ dB}$

Level 6 : $11.8\text{dBm} + 2/-4\text{ dB}$

Level 7 : $7.8\text{dBm} + 2/-4\text{ dB}$

CDMA mode : $-49.2\text{dBm} \sim 25.5\text{dBm} + /-0.3\text{dB}$

Level 0 : $25.5\text{dBm} + /-0.3\text{dB}$

Level 8 : $-21.2\text{dBm} \pm 0.3\text{dB}$

Level 1 : $18.0\text{dBm} \pm 0.3\text{dB}$

Level 9 : $-26.8\text{dBm} \pm 0.3\text{dB}$

Level 2 : $12.4\text{dBm} \pm 0.3\text{dB}$

Level 10 : $-32.4\text{dBm} \pm 0.3\text{dB}$

Level 3 : $6.8\text{dBm} \pm 0.3\text{dB}$

Level 11 : $-38.0\text{dBm} \pm 0.3\text{dB}$

Level 4 : $1.2\text{dBm} \pm 0.3\text{dB}$

Level 12 : $-43.6\text{dBm} \pm 0.3\text{dB}$

Level 5 : $-4.4\text{dBm} \pm 0.3\text{dB}$

Level 13 : $-49.2\text{dBm} \pm 0.3\text{dB}$

Level 6 : $-10.0\text{dBm} \pm 0.3\text{dB}$

Level 7 : $-15.6\text{dBm} \pm 0.3\text{dB}$

2. Means for variation of operating power

The RF interface of MSM communicates with the RF analog circuitry. This RF interface performs gain controls of EA(exciter amplifier) and AGC(automatic gain control) amplifier using digital control signals.

The mid-range transmission frequency generated in IFT(Tx Baseband-IF converter) is designed to be gain-controlled for 84 dB dynamic range. The 84 dB dynamic range is 39 dB when the voltage 3.0V and -45 dB in 0.1V. The 80 dB dynamic range(0.1V ~ 3.0V) gain is used in this hand-held device. The RF power output level is detected and then this information is sent to the MSM. The software controlled power management in MSM controls the Tx-AGC adjust signal.