

## **ATTACHMENT L – OPERATIONAL DESCRIPTION**

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## 1-1. General

ITEM	CDMA
Tx Frequency Range	824 ~ 849MHz
Rx Frequency Range	869 ~ 894MHz
Channel Bandwidth	1.23MHz
Channel Spacing	1.23MHz
Number of Channel	20FA
Duplex Separation	45MHz
Type of Emission	40KOF8W, 40KOF1D
Tx Intermediate Frequency	130.38MHz
Rx Intermediate Frequency	85.38MHz
Tx Local Frequency	1st( $F_{tx} + 130.38\text{MHz}$ ) / 2nd(260.76MHz)
Rx Local Frequency	1st(170.76MHz) / 2nd( $F_{rx} + 85.38\text{MHz}$ )
TCXO Frequency	19.68MHz
Frequency Stability	$\pm 2.5\text{ppm}(-30^{\circ}\text{C} \sim + 60^{\circ}\text{C}, -4^{\circ}\text{F} \sim + 140^{\circ}\text{F})$
Operating Temperature	$-30^{\circ}\text{C} \sim + 60^{\circ}\text{C} (-4^{\circ}\text{F} \sim + 140^{\circ}\text{F})$
Supply Voltage	3.6V
Size and Weight	Standard : 105(L) * 45(W) * 20.5(H), 118g

## 1-2. Transmitter

Waveform Quality : 0.944 or more

Open Loop Power Control Range

-25 dBm : -57.5dBm ~ -38.5dBm

-65 dBm : -17.5dBm ~ + 1.5dBm

-104 dBm : +18.0dBm ~ + 30dBm

Minimum Tx Power Control : below -50dBm

Closed Loop Power Control Range :  $\pm 24$ dBm

Maximum RF Output Power : 400mW

Occupied Bandwidth : 1.23MHz

Conducted Spurious Emission @900KHz: below -42dBc / 30KHz

@1.98MHz: below -54dBc / 30KHz

## 1-3. Receiver

Rx Sensitivity and Dynamic Range : -104dBm, FER=0.5% or less  
-25dBm, FER=0.5% or less

Conducted Spurious Emission

869 ~ 894 : < -81dBm

824 ~ 849 : < -61dBm

All Other Frequencies : < -47dBm

Single Tone Desensitization : lower than 1%

Rx power level : -101dBm

Tone power level : -30dBm

Tone offset from carrier :  $\pm 900$ KHz

Intermodulation Spurious Response Attenuation : lower than 1%

Rx power level : -101dBm

Tone 1 power : -43dBm

Tone 2 power : -43dBm

Tone 1 offset from carrier :  $\pm 900$ KHz

Tone 2 offset from carrier :  $\pm 1.7$ MHz

1-4. FREQUENCY RANGE

FA NO.	CHANNEL NO.	Transmitter(MHz)	Receiver(MHz)
1	1011	824.64	869.64
2	29	825.87	870.87
3	70	827.10	872.10
4	111	828.33	873.33
5	152	829.56	874.56
6	193	830.79	875.79
7	234	832.02	877.02
8	275	833.25	878.25
9	316	834.48	879.48
10	363	835.89	880.89
11	404	837.12	882.12
12	445	838.35	883.35
13	486	839.58	884.58
14	527	840.8 1	885.81
15	568	842.04	887.04
16	609	843.27	888.27
17	650	844.5	889.5
18	697	845.9 1	890.91
19	738	847.14	892.14
20	779	848.37	893.37