

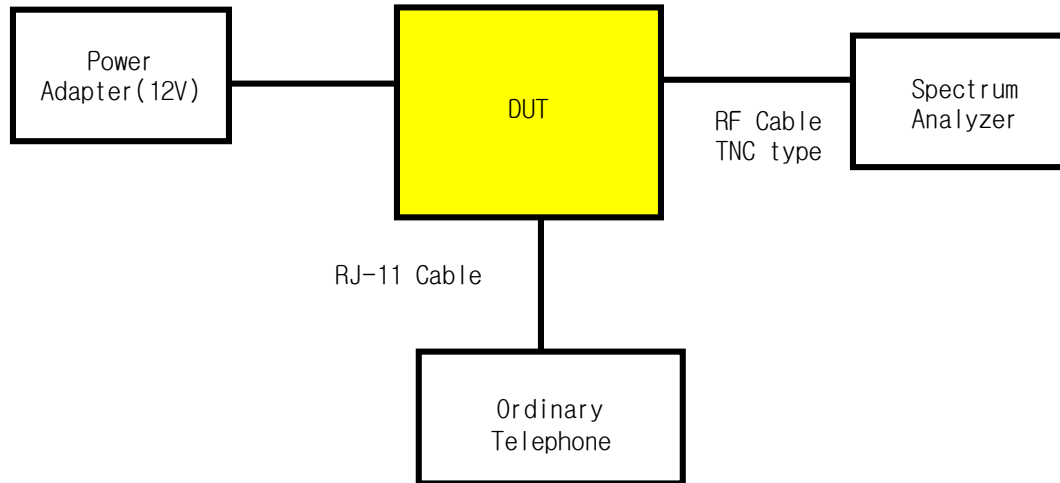
List of clock frequency

NO	Name	Frequency		Remark
		Cellular	US PCS	
1	Sleep clock	32.768KHz	32.768KHz	
2	USB & Sub clock	48.000MHz	48.000MHz	
3	Main clock	19.68MHz	19.68MHz	
4	Local clock for IF to baseband	170.76MHz	420.76MHz	
5	Local clock for IF to RF	954.38 ~ 979.38MHz	1719.62 ~ 1779.62MHz	Cellular : ± 0.5 PPM USPCS : ± 0.1 PPM

Tune-up information

1. Configuration of Tune-up

When you check DUT works rightly, you may connect Spectrum Analyzer.



2. Start the Test mode

- Pick up the Telephone
- Entering Key (using ordinary telephone): *759#845680 (Draw AT on the keypad) then you can hearing confirmation tone.
- Selecting test code (Below table summary for RF tune-up)

Test Item	Test Code	Test Method	Remark
RF ON/OFF	69#	69# . 1:ON 2:OFF # confirmation tone 69# . 1:ON 2:OFF # confirmation tone	

Manual Channel Change	78#	78# . 384 ==> ____ # confirmation tone * Range 1~1023#(Cellular) 1~1200#(PCS) 78# . 1011 ==> ____ # confirmation tone	
Manual Power change	86#	86# . 180 ==> ____ . Enter Value : (0 ~ 511#) * Range 0~511# 86# . 300 ==> ____ . Enter Value : (0 ~ 511#)	

3. RF Carrier and CDMA ON/OFF

The Command “69#” you can RF ON/OFF using “1(ON)” key and “2(OFF)” and press “#” then hearing confirmation tone.

4. Manual Channel Change

The Command “78#” you can change RF Channel using telephone key pad. And property channel number then press “#” (hearing confirmation tone).
The range of Channel show the “Frequency vs. Channel” (Refer to “1-5 Channel vs. Frequency table”)

5. Manual Power Change

The Command “86#” you can change RF Power using using telephone key pad. And property channel number then press “#” (hearing confirmation tone).

- The range [0(High Power) ~ 511(min Power)]

Power	PDM Value	Remark
23dBm	160 ~ 180	
-13dBm	290 ~ 320	

[note: This value just sample value, it is dependent the DUT and RF channel]

6. Example for RF tune-up

- 1) Turn on the phone
 - Connecting power adapter
 - Connecting Ordinary Telephone
 - Connecting the Spectrum Analyzer
- 2) Enter the Test mode
 - Pick up the hand set
 - Press the “*759#845680” (hearing the confirmation tone)
- 3) RF ON
 - Press 69#
 - Press “1” and “#” (hearing the confirmation tone)
 - Then RF Power will be generate from the antenna port.

- 4) Channel Change
- Press “78#”
 - Press property channel number and the press “#” (hearing the confirmation tone)
- *Channel number vs frequency : refer to the [] table

- 5) RF Output Power setting
- Press “86#”
 - Press property channel number and the press “#” (hearing the confirmation tone)
 - The range [0(High Power) ~ 511(min Power)]
 - You can write PDM value and press “#”
 - Normally setting value as below table

Power	PDM Value	Remark
23dBm	160 ~ 180	
-13dBm	290 ~ 320	

[note: This value just sample value, it is dependent the DUT and RF channel]

[Channel number vs frequency]

Cellular			US PCS		
CH No.	TX[MHz]	RX[MHz]	CH No.	TX[MHz]	RX[MHz]
1011	824.64	869.64	25	1851.25	1931.25
29	825.87	870.87	50	1852.5	1932.5
70	827.10	872.10	75	1853.75	1933.75
111	828.33	873.33	100	1855	1935
152	829.56	874.56	125	1856.25	1936.25
193	830.79	875.79	150	1857.5	1937.5
234	832.02	877.02	175	1858.75	1938.75
275	833.25	878.25	200	1860	1940
316	834.48	879.48	225	1861.25	1941.25
363	835.89	880.89	250	1862.5	1942.5
404	837.12	882.12	275	1863.75	1943.75
445	838.35	883.35	300	1865	1945
486	839.58	884.58	325	1866.25	1946.25
527	840.81	885.81	350	1867.5	1947.5
568	842.04	887.04	375	1868.75	1948.75
609	843.27	888.27	400	1870	1950
650	844.50	889.50	425	1871.25	1951.25
697	845.91	890.91	450	1872.5	1952.5
738	847.14	892.14	475	1873.75	1953.75
779	848.37	893.37	500	1875	1955
			525	1876.25	1956.25
			550	1877.5	1957.5
			575	1878.75	1958.75
			600	1880	1960
			625	1881.25	1961.25
			650	1882.5	1962.5
			675	1883.75	1963.75
			700	1885	1965
			725	1886.25	1966.25
			750	1887.5	1967.5
			775	1888.75	1968.75
			800	1890	1970
			825	1891.25	1971.25
			850	1892.5	1972.5
			875	1893.75	1973.75
			900	1895	1975
			925	1896.25	1976.25
			950	1897.5	1977.5
			975	1898.75	1978.75
			1000	1900	1980
			1025	1901.25	1981.25
			1050	1902.5	1982.5
			1075	1903.75	1983.75
			1100	1905	1985
			1125	1906.25	1986.25
			1150	1907.5	1987.5
			1175	1908.75	1988.75