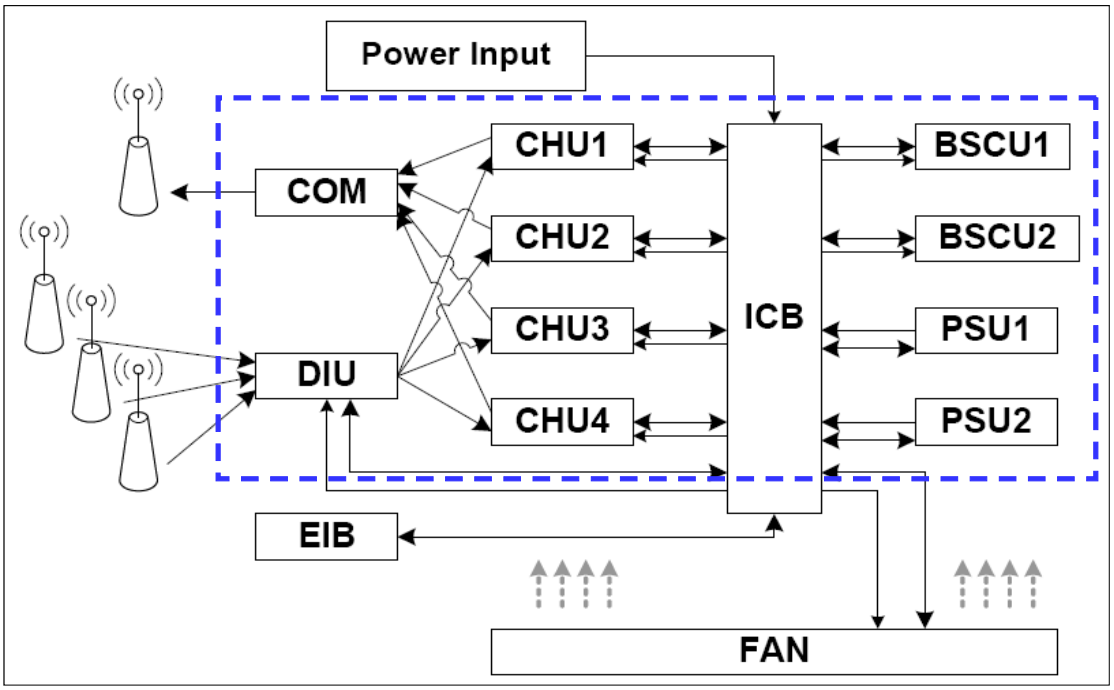
Tune-up Procedure

1、 Receive parameters

Item	Test Condition	Test equipment	Test Part	Specification/Remark
Sensitivity	input level：-119dBm	Signal generator	Receive Port	P_I=-119dBm，BER≤5%
Spurious Radiations	Spectrum analyzer 1. Resolution BW:100kHz; 2. Video BW：300kHz	Spectrum analyzer	Receive Port	9 kHz to 1 GHz≤ −57dBm; 1GHz to 12.75 GHz≤ −47dBm;

2、 Transmitter parameters

Item	Test Condition	Test equipment	Test Part	Specification/Remark
Frequency Stability	Spectrum analyzer 1.Resolution BW:30kHz; 2.Video BW：100kHz	Spectrum analyzer	Transmitter Port	≤±1kHz
Emission Mask	Spectrum analyzer 1.Resolution BW:300Hz; 2.Video BW：1kHz	Spectrum analyzer	Transmitter Port	
RF Output Power	Spectrum analyzer 1.Resolution BW:30kHz; 2.Video BW：100kHz	Spectrum analyzer	Transmitter Port	43.5dBm±1.5dB
Adjacent channel power	Spectrum analyzer 1.Resolution BW:30Hz; 2.Video BW：1kHz	Spectrum analyzer	Transmitter Port	≤-60dB
Occupied Bandwidth	Spectrum analyzer 1.Resolution BW:100Hz; 2.Video BW：300Hz	Spectrum analyzer	Transmitter Port	≤8.5kHz
Spectrum emission mask test	Spectrum analyzer 1.Resolution BW:100kHz; 2.Video BW：300kHz	Spectrum analyzer	Transmitter Port	9 kHz to 1 GHz≤ −36dBm; 1GHz to 12.75 GHz≤ −30dBm;



After going through the antenna, the service signal reaches DIU and CHU, where the signal will be delivered to baseband after appropriate processing. Then the baseband will send the service signal to BSCU for soft switch. Afterwards, the signal will be sent back via ICB to baseband, which would convert it into HF signal and send it to the transmitter. Finally, the transmitter will deliver the HF service signal to antenna via COM。

1、 Open the test tool exe , then input IP address of CHU to the ”Listen Remote IP ” pane, click the “Open udp” button;

2、 then find the Read Frequency pane, input the FPGA &STM32 frequency after this setup click the “Write frequency” button;

3、 fixed Read power pane used “Write power” button then open it;

4、 Input the RX Frequency to the ”Read Frequency” pane, click the “Write frequency” button.