System Overview:

This phone uses Qualcomm MSM7225 + RTR6285 platform. In cellular radio, quad-band (GSM850, EGSM900, DCS1800, PCS1900) GSM/GPRS/EDGE and triple-band (band I/II/V) WCDMA/HSDPA/HSUPA are supported. All receivers and transmitters use direct down / up method to generate signals between baseband and RF parts. For GSM/EDGE transmitter, Qualcomm also use Polar modulation technique. They (GSM and WCDMA systems) use the same antenna.

For WCDMA transmit, DSP chip (MSM7225) send the modulated signals to radio chipset (RTR6285) for further direct-up modulator processing, then it will transfer to TX SAW for out-of-band rejection and amplified by WCDMA RF amplifier. Finally, signals are transferred by duplexer for TX and RX bands rejection.

For WCDMA receiver, signals received by antenna and duplexer. Then it will pass to RTR6285 LNA circuits for direct-down conversion before MSM7225 demodulation.

This phone also supports GPS, BT and WiFi sub-systems.

For GPS receiver core circuits, they are integrated into RTR6285, only a external "LNA + SAW" is kept for GPS signal quality due to cellular interference.

For BT / WiFi, we use a combo module (AW-GH600B) and one antenna solution. BT 2.0 and EDR functions are supported in the same time.