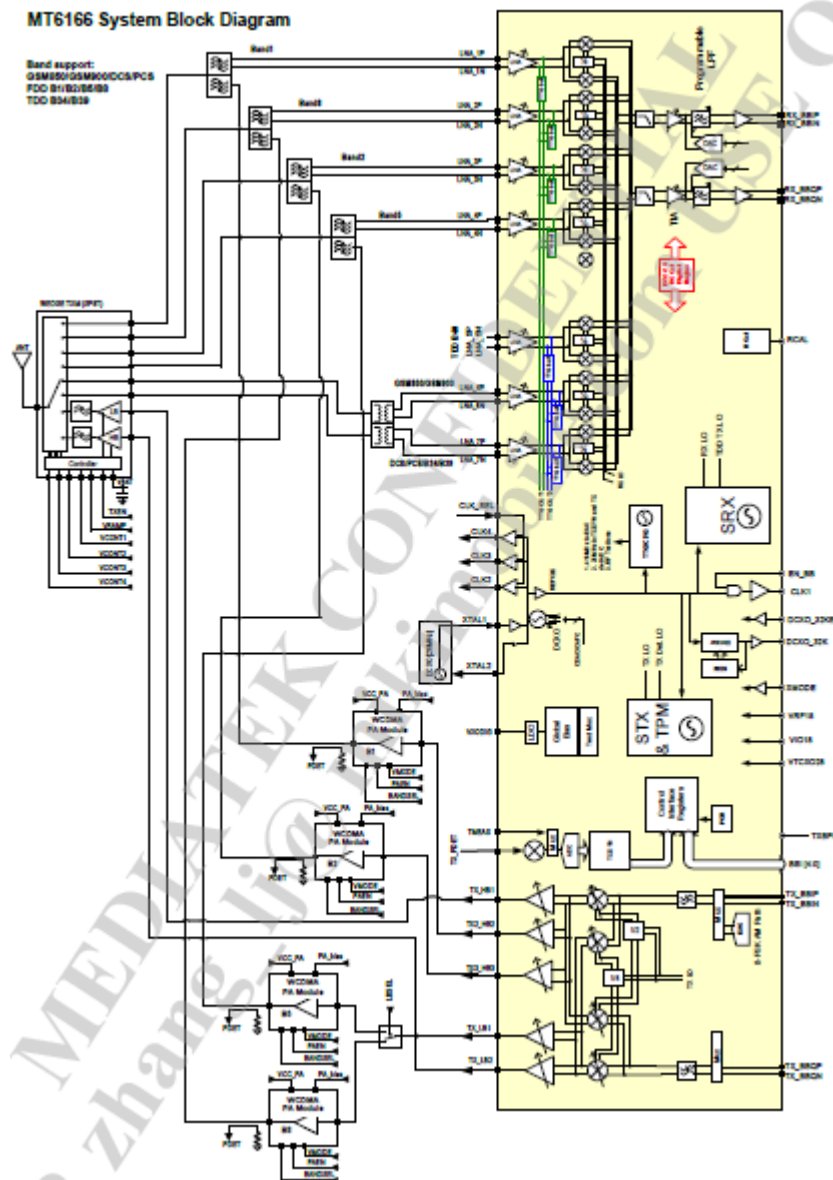




T2C RF working principle

1.1 Overview

The MT6166 is a RF transceiver targeted at high speed 2G/3G-FDD/TDD multi-mode smart phone and tablet computers implanted in 40nm CMOS. The RF transceiver function is fully integrated. This document briefly introduces the RF macros in MT6166.



1. 2G receiving part

Signal through the antenna to TXM (AP6690) through the logic control from TXR1 TXR2, into the Balun, 2 - in - 1, to MT6166V, signal processing chip, the signal transmission to the baseband IQ.

2. 2G launch part



2GHB_tx from MT6166V chip and 2GHB_tx to amplify the output signal after TXM (AP6690) from the output to the antenna, the ANT outward radiation.

3. 3G receiving part

Antenna to receive 3 g signal into TXM (AP6690) through the logic control, B1, B2 B5 B8 respectively from TXR3, TXR5, TXR4, TXR6 output through their respective duplexer, get difference signal input to MT6166V, signal processing chip, the signal transmission to the baseband IQ

4. 3G launch part

From MT6166V chip 3GH1_tx , 3GH2_tx, 3GL5_tx output signal through their respective RF power amplifier, and then through their respective duplexer into TXM (AP6690) from ANT output to the antenna, outward radiation.

5. 2.4G wlan part

Wi-fi/IEEE 802.11 b/g/n :2.4 GHz wireless technology, and its spectrum between 2.412 GHz to 2.462 GHz, and 2.4 GHz wireless technology is different from the previous 27 MHZ wireless technology, the way it works is full-duplex mode of transmission, this advantage decided its strong anti-jamming and transmission distance up to 10 meters;