

## **Operational description and technical overview for V18**

The device adopts the MTK's chipset which includes MT6223DA and AD6548BCPZ. The MT6223DA is an entry level chipset solution with class 10 GSM modem. MT6223DA is our first 2.5G system-on-chip, integrating all essential electronic components, including DBB, ABB, power management unit. It integrates not only analog baseband but also power management blocks into one chip and can greatly reduce the component count. Besides, MT6223DA is capable of SAIC (Single Antenna Interference Cancellation) and AMR speech. Based on 32 bit ARM7EJ-S TM RISC processor, MT6223DA provides an unprecedented platform for high quality modem performance. It also integrates some power management function on the chip and D/A converter for applications like MP3 music and an audio power amplifier for hands-free speakerphone operation.

The GSM RF part includes two main components AD6548BCPZ and GLT2218. The AD6548BCPZ is a quadruple band transceiver IC suitable for GSM 850, PCS1900 class 12 applications. The GLT2218 is a quad band power amplifier module designed to support quad band applications. The Memory used is NOR+PSRAM(128Mb+32Mb)

Keypad keys are another user interface. There are SIX WHITE LEDs under the keypad to work as keypad backlight.

In the audio process and amplify part, all analog audio signals from or to ABB, GSM module is processed. This part contains an audio power amplifier, several analog multiplexers/switches and operation amplifiers.

The machine is configured a Micro SD connector which can support up to 2GB micro SD card