**HF-A21 Hardware Architecture**

Circuit Description：

This circuit consists of a Wi-Fi SoC, a SPI flash, a Chip antenna and other discrete components. The SoC integrates MAC, baseband processor, RF transceiver with power amplifier in hardware and in embedded firmware to make a fully self-contained 802.11b/g/n Wi-Fi solution for a variety of applications. This module provides a wireless interface to other equipment with UART or Ethernet interface for data transfer/receive.

The MT7688K is a high integrated Wi-Fi SoC. Power on the module, U3 will generate 40MHz clock for U1, then MT7688K will down load image from U4 .after powered on this module will transfer or receive WiFi signal immediately. The functions of discrete balun /filter are balance/unbalance and filter the 2.4 GHz WI-Fi signal.

Block Diagram：

