

### **Radxa ROCK 3C Description of the principle**

At the heart of the Radxa ROCK 3C is the RK3566 SoC. The oscillator component Y1 generates a frequency of 24MHz as the base clock frequency and the RK3566-T is a central processing unit that runs at a main frequency of 1.6GHz. The ROCK 3C has 1GB/2GB of LPDDR4 DRAM and four USB type A ports for connecting other USB devices. There is also an HDMI output for display, an RJ45 connector for 1000M Ethernet and PoE support. A headphone jack for audio. The ROCK 3C has a built-in wireless module for WiFi 5 and BT 5.0. 40 Pins of GPIO for extended interface functionality. In terms of storage, eMMC, Micro SD card and M.2 M key interfaces are supported for mass storage.

wifi module: AP6266

2.4GWIFI: 2412MHz~2462MHz(802.11b/802.11g/802.11n(HT20))

5GWIFI:Band 1:5180MHz-5240MHz

BT/BLE:2402MHz-2480MHz

Modulation Type: 2.4GWIFI: DSSS, OFDM

5GWIFI: OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac;

BT:GFSK, $\pi/4$ DQPSK.8DPSK

Modulation Type: GFSK1M/2M

Data Rate: LE 1M PHY, LE 2M PHY

Antenna Type: Chip antenna

Antenna Gain: 2.4G:1.5dBi 5.1G:2.3dBi

Crystal: 24MHz, 32.768KHz