

Operational Description

- General Product Information

The Cruz is one of the latest portable products with 7" TFT panel for multimedia player.

- Circuit Description :

system MCU RK2918 is a high performance processor solution for internet device and digital multimedia applications, RK2918 integrates an ARM Cortex-A8 with one NEON coprocessor.

The device can support access multimedia from internal memory I nand or from micro SD socket ,also can get media data from Wi-Fi download via internet.

Wireless module NC023 build in chipset BCM4329 supports the WLAN standards IEEE 802.11b/g/n and BT 2.1. in WIFI mode, download data are processed by MCU through SDIO interface. in Bluetooth mode datas transfer with UART interface. WLAN Operating Frequency is 2412~2462MHz while Bluetooth Operating Frequency is 2402-2480MHz.

WLAN Modulation: OFDM , 64QAM, 16QAM, QPSK , BPSK ,CCK, DQPSK, DBPSK

Bluetooth Modulation: GFSK, $\pi/4$ -DQPSK, 8-DPSK

RGB 24bit LCD controller can drive Output display module 7.0" LCD with 800X480 resolution image. The normal operation dot clock is 36 M.

Audio codec WM8900 connects with MCU by I2S interface ,driver for 2 speakers are TPA2005.

640X480 camera module connects with MCU by 8bits sensor/CCIR656 interface ,operating clock is 24M .

RTC and G-sensor with work MCU via I2C interface .Max I2C operating clock is 400K.

System power setup by several DC-DC power IC and LDO, typical power is 1.2V for MCU core and 3.0V for MCU IO etc.

Plud in 2.4G 50 ohm impedance antenna for Wifi and BT, this antenna with 2.6-3.2dBi peak gain.