

CubieBoard5

SKU: 10000 Category: [Board](#)

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Description

Cubieboard5 is the 5rd generation product of CubieBoard series from Cubietech Limited Company, and it' s the updated version of CubieBoard3. Thanks to Allwinnertech' H8 SOC, Compared with CubieBoard3 the performance has been increased by 4 times. CubieBoard5 is open source hardware, single board computer, or development board which targets Developers, Geeks, Makers, Students...

CubieBoard5 is also can be used as low power industry computer in all works of life since we have designed a very sturdy and durable metallic enclosure for it which named CubieTruck Plus Metal case. In this case, not only the CubieBoard5 main board can be installed, but also the 2.5 inch HDD/SSD and 5300mAh Li-Po battery. With the HDD and battery, the CubieBoard5 is more suitable for industry applications.

Because of open source strategy of our company, the CubieBoard5' s application space is more flexible, and the ecology is more perfect.

Product Information

Name: Cubieboard5, CB5 for short, Also named CubieTruck plus as MiniPc

Property: Software open source, Hardware open, Production materials closed

Owner: CubieTech Limited

Chipset: Allwinner technology H8, Arm architecture Cortex-A7 octa-core SOC

System: Android, Ubuntu and many other open source distribution...

Target: Developer, Geek, Maker, Scholar, Student...

Product Introduction

Cubieboard5 is the updated version of CubieBoard3 open source hardware. It' s a new PCB model adopted with Allwinner H8 main chip. And it is enhanced with some features, such as 2GB DDR3 memory, DP display port on-board, 100M/1000M RJ45, WIFI+BT on-board, support Li-battery and RTC battery, SPDIF audio interface.

It's a standard single board computer and has the matching features with the X86 personal computer, such as RJ45, USB hosts, SATA Port, HDMI&DP, Audio in&out interface. Furtherly, CubieBoard5 main board integrates some mobile device features, such as micro SD card slot, Wifi&BT feature, battery as power source character. And lots of expansion pins are broken out for development, there are I2S, I2C, SPI, ADC, UART, PS2, PWM, CSI, TVIN...

It's not only for development, but also can be used in various areas like other MiniPc products. Thanks to its rich interfaces, low costs, and good open source support, more and more developers can benefit based on it and would like to do lots of promotion work for it.

Product Features

1. AllWinner SOC H8 , ARM® Cortex™-A7 Octa-Core , PowerVR SGX544 GPU @ up to 700MHz
Supports OpenGL ES 2.0/1.1, OpenCL 1.1, DX 9_3
2. 1GB/2GB DDR3@480MHz (960MTPS), 2GB Default
3. HDMI&DP 1080P@60Hz display output
4. 100M/1000M Ethernet RJ45
5. Wifi+BT4.0 wireless connection with antenna on-board
6. SATA 2.0 interface support 2.5' HDD , (for 3.5' HDD, need another 12V power input)
7. Storage solution : NAND Flash +MicroSD card slot / TSD + MicroSD card slot / 2*MicroSD card slot
8. 2 x USB HOST , 1 x OTG , 1 x Toslink (SPDIF Optical) , 1 x IR , 4 x LEDs , 1 Headphone , 3 x Keys
9. Power : DC5V @ 2.5A with HDD , support Li-battery & Real Time Clock battery
10. Extended pins including I2S, I2C, SPI, CVBS output, Low Resolution ADC x2,UART, PS2, PWMx2, TS/CSI, IRDA, LINEIN&FMIN&MICIN, TVIN analog video signal input x4 with 2.0mm pitch header pins
11. It's suitable for installing a 2.5' HDD/SSD within the cases

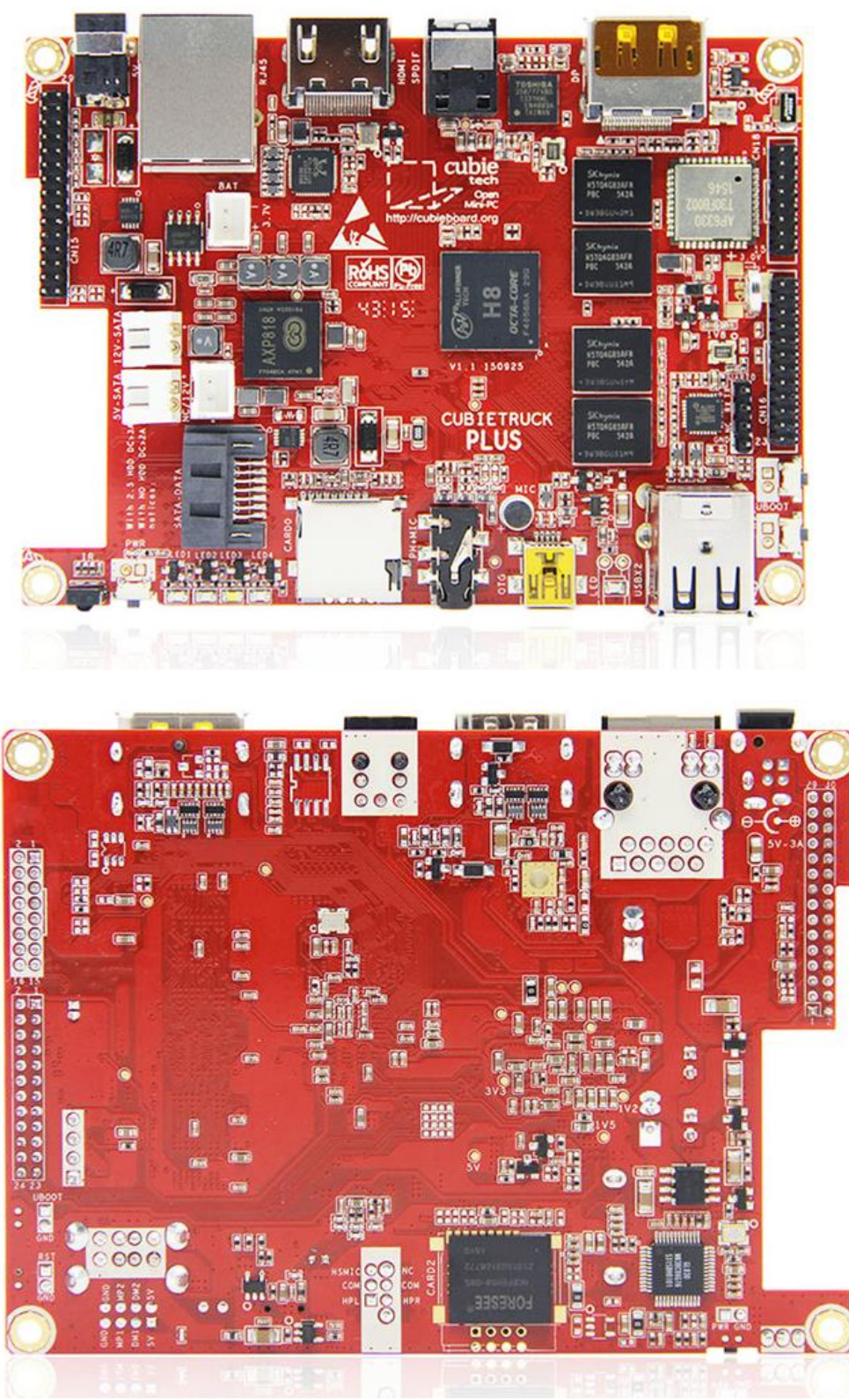
Other Specifications

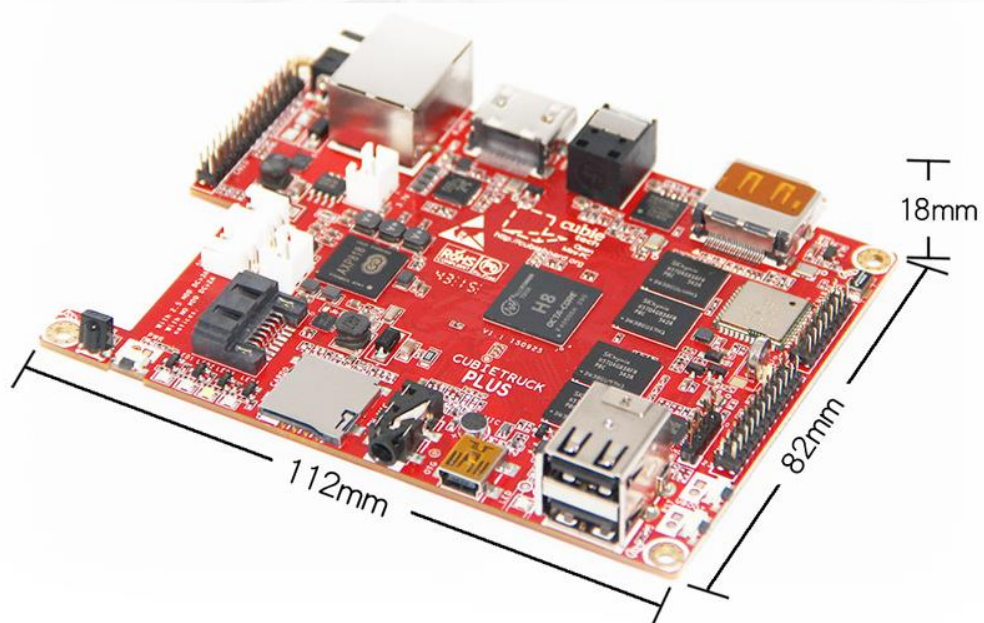
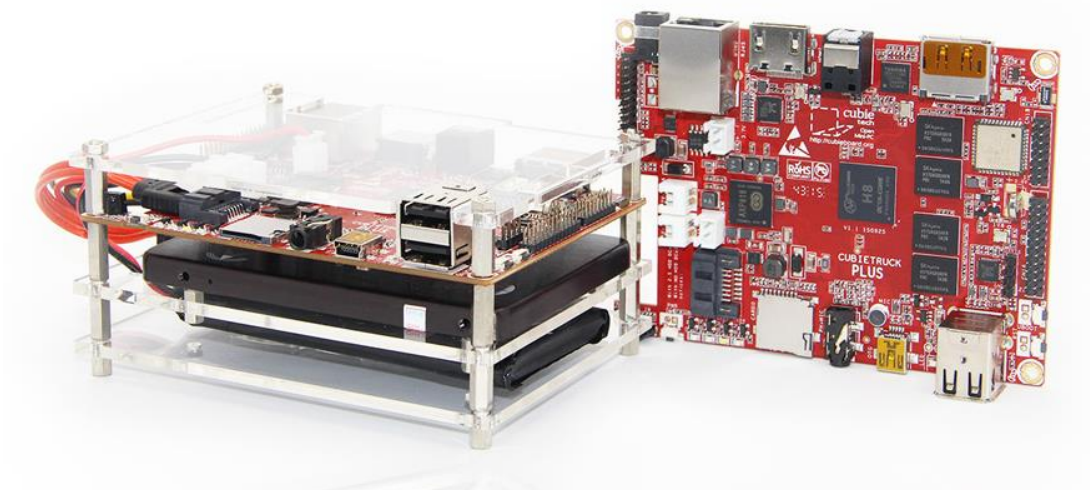
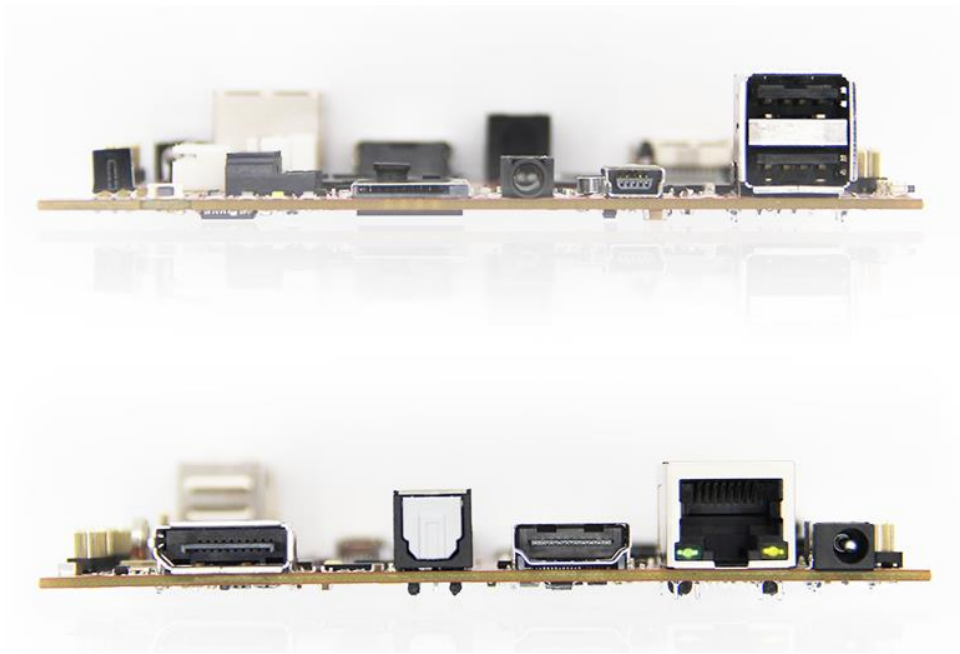
Operating Temperature:	-20°C~70°C
Environment Friendly:	RoHS
Radio Standard:	Fcc & CE compatible
Board Size:	112mm*82mm*18mm
Packing Weight:	425g
Packing Size:	170mm*125mm*100mm

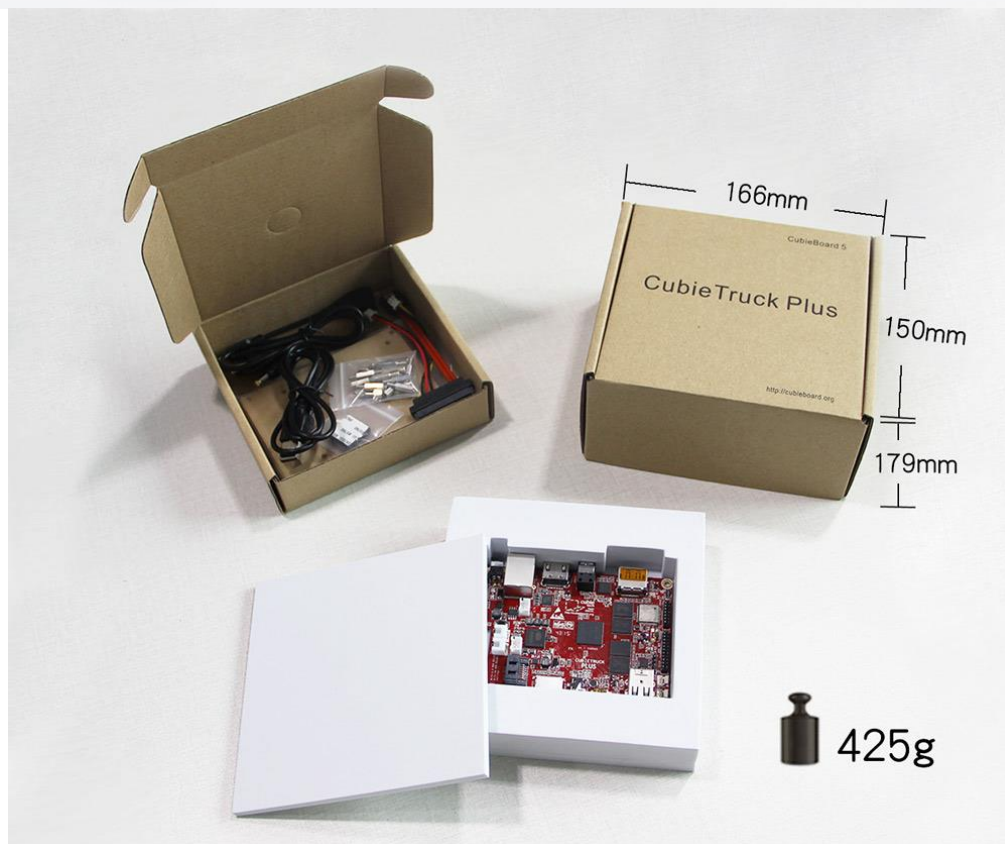
Development Materials

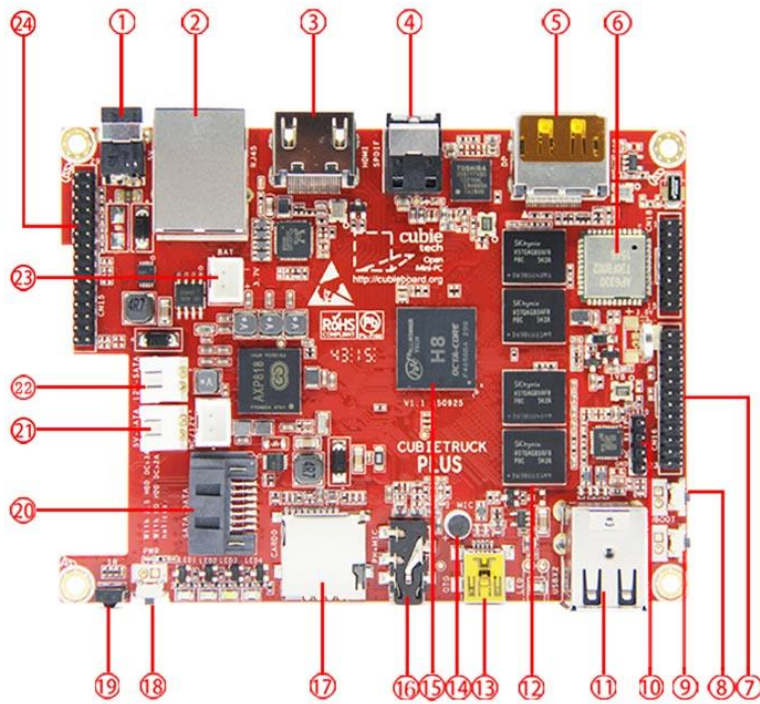
Technical Website:	http://cubieboard.org/
Resources and Materials:	https://mega.nz/#F!A54iBKZZ!HKk2a-Qt3pfQ668woM6Fyw
Distribution contacts:	sales@cubietech.com
Technical contacts:	support@cubietech.com
Distributors:	http://cubieboard.org/buy/

General Details







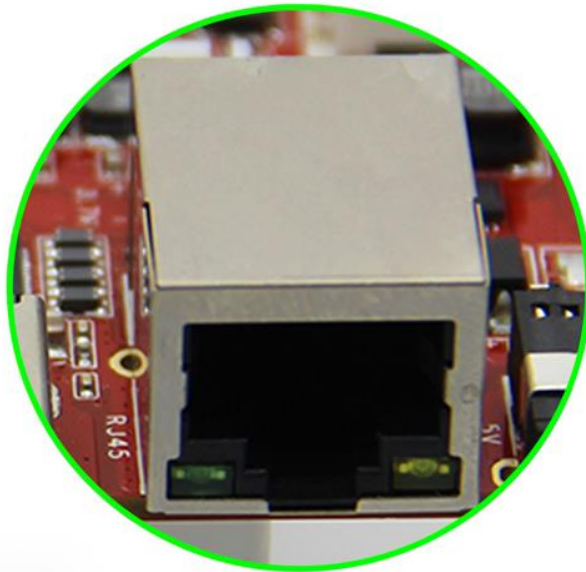
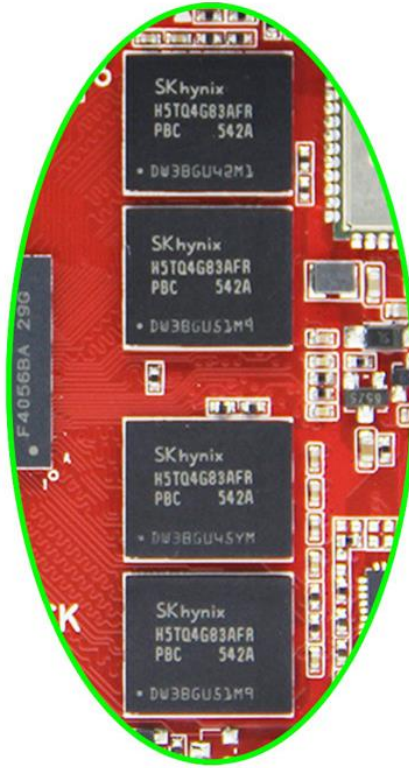
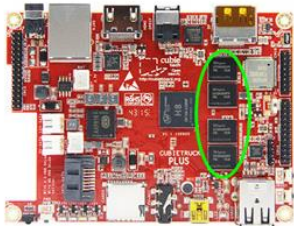


- ① Power Jack
- ② Ethernet Port
- ③ HDMI Port
- ④ SPDIF FIBER
- ⑤ Display Port
- ⑥ WIFI+BT
- ⑦ Extended Pin
- ⑧ UBOOT Key
- ⑨ RESET Key
- ⑩ UART Head Pin
- ⑪ USB 2.0*2
- ⑫ DRAM
- ⑬ Mini USB OTG
- ⑭ MIC
- ⑮ CPU
- ⑯ Earphone+MIC
- ⑰ TF-CARD
- ⑱ PWER ON/OFF
- ⑲ IR Sensor
- ⑳ SATA-DATA
- ㉑ 5V-SATA
- ㉒ 12V-SATA
- ㉓ Li-Battery
- ㉔ Extended Pin

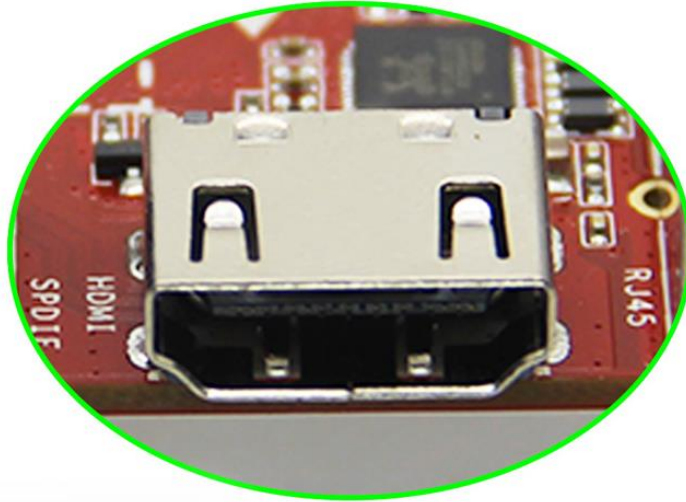


Allwinner H8
 Octa-Core Cortex-A7
 CPU @ up to 2.0GHz
 PowerVR SGX544 GPU
 @ up to 700MHz

2GB DDR3
32Bit Width
512M*8*4pcs

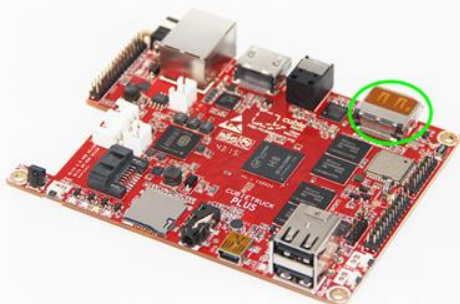
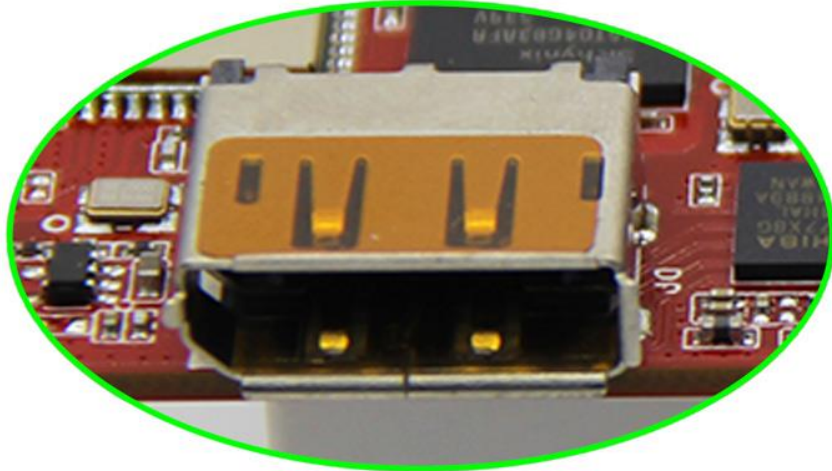


GigaBit RJ45
Support 10M/100M/1000Mbps



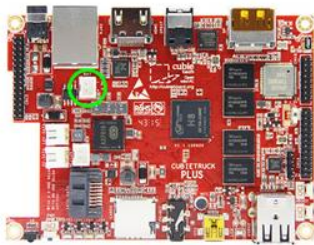
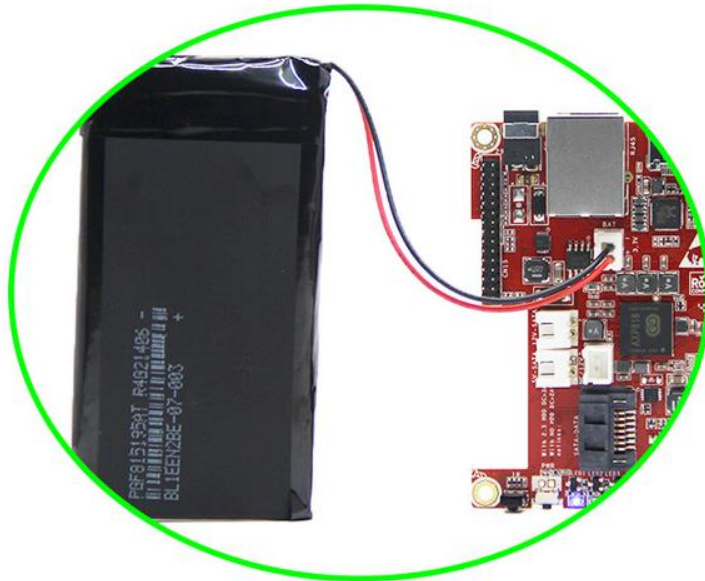
HDMI 1.4a

Support HD (1080P)



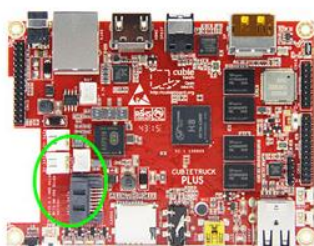
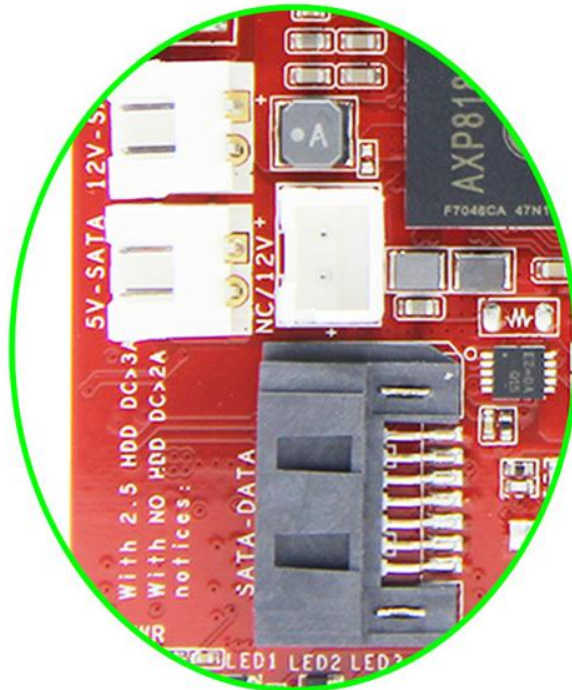
DP 1.1

Up to 10.8Gb/s



Lithium Battery
Provide UPS level
power protection

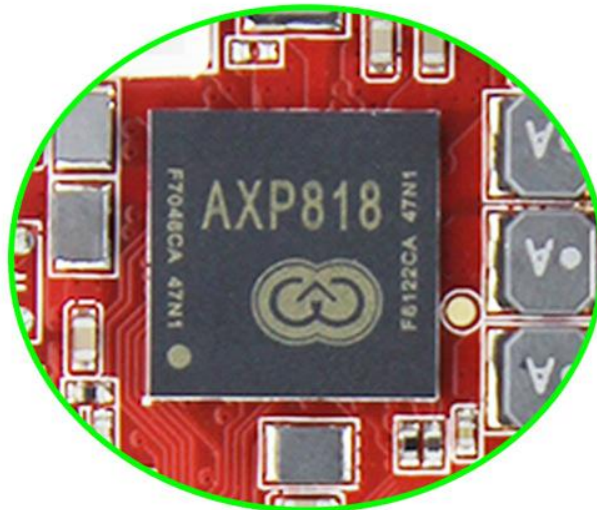
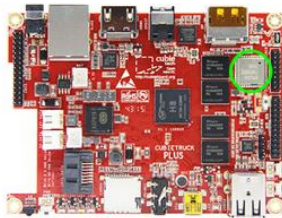
SATA2.0



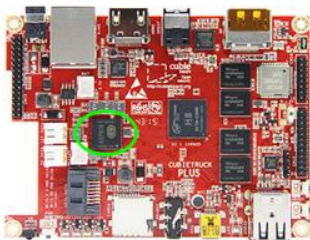
120GB default

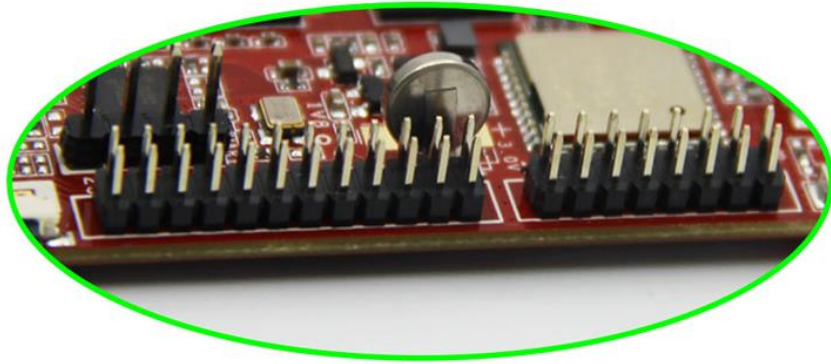


Bluetooth 4.0
WIFI a/b/g/n
(2.4/5GHz dual frequency)



Intelligent PMU
Support DVFS





Rich functional interface

UART/JTAG

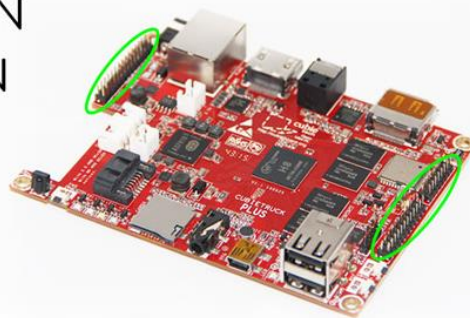
LINE IN

MIC IN

PWM

ADC

SPI



I2C

CCIR656

MIPI_CSI

I2S/UART



Android
version 4.4.4



Ubuntu Linaro
- desktop 14.04

