

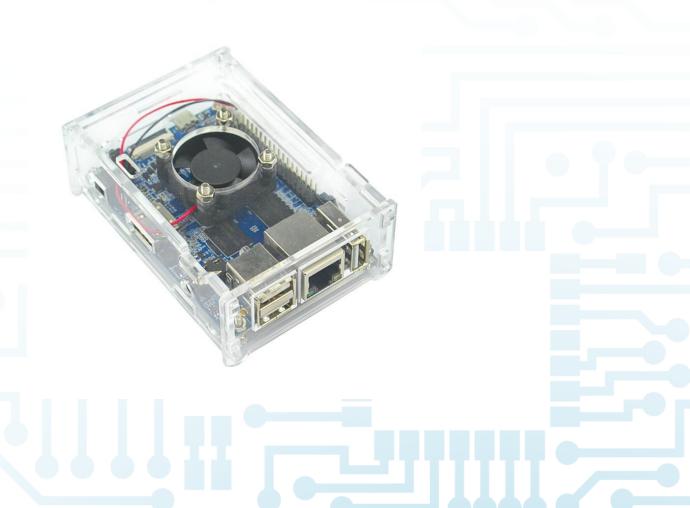
## Orange PI PC VI.2 : hardware , software & services specification



This document is intended to draw the specs regarding the services proposed by ctrl+f Agency in order to present prototyping materials for a subsequent pre-usage of professionnal devices into a corporate environnement.

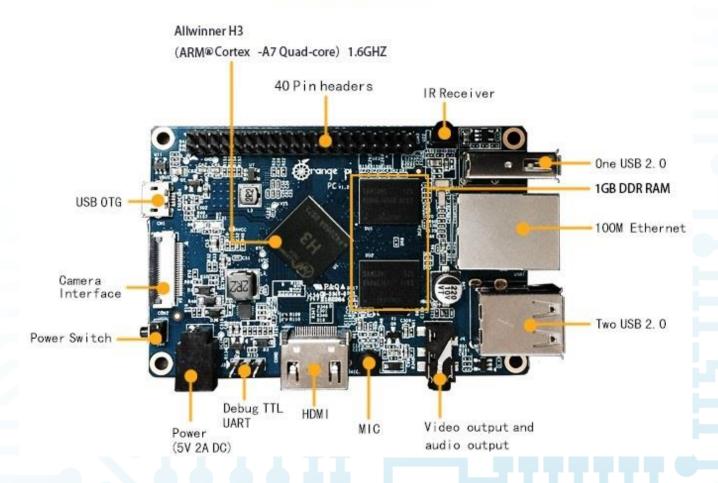


### HARDWARE



### Top View

### Top view





### **Bottom View**

### **Bottom view**



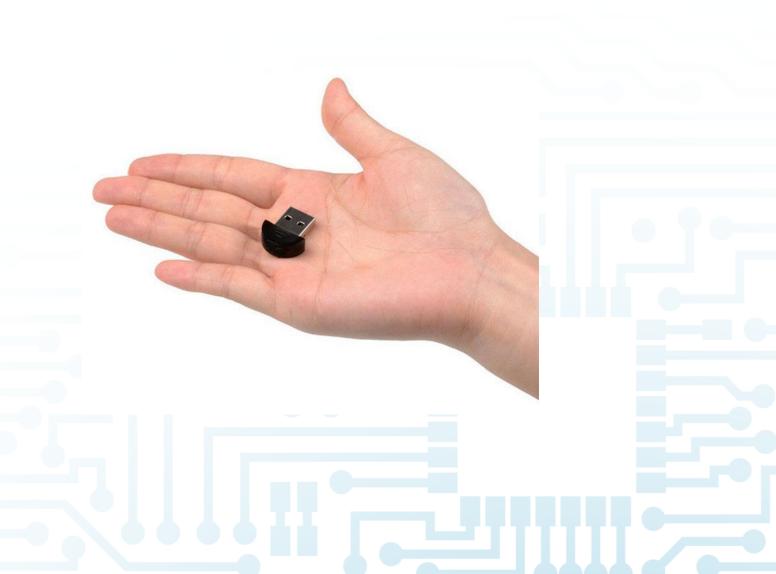
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## Hardware board specifications

CPU	H3 Quad-core Cortex-A7 H.265/HEVC 4K
	. Madi 400MD2 CDI I @600MH <del>2</del>
GPU	· Mali 400MP2 GPU @600MHz
Memory (SDRAM)	·Supports OpenGL ES 2.0  1GB DDR3 (shared with GPU)
Onboard Storage	TF card (Max. 64GB) / MMC card slot
Onboard Network	10/100M Ethernet RJ45
Official diversions	
Video Input	A CSI input connector Camera: Supports 8-bit YUV422 CMOS sensor interface
	Supports CCIR656 protocol for NTSC and PAL
	Supports SM pixel camera sensor
	Supports video capture solution up to 1080p@30fps
Audio Input	MIC
Video Outputs	Supports HSupports HDMI output with HDCP
	Supports HDMI CEC
	Supports HDMI 30 function
	Integrated CVBS
	Supports simultaneous output of HDMI and CVBSDMI output with HDCP
Audio Output	3.5 mm Jack and HDMI
Power Source	DC input can supply power, but USB OTG input don't supply power
USB 2.0 Ports	Three USB 2.0 HOST, one USB 2.0 OTG
Buttons	Power Button(SW4)
Low-level peripherals	40 Pins Header, compatible with Raspberry Pi B+
GPIO(1x3) pin	UART, ground.
LED	Power led & Status led
Key	IR input, POWER
Supported OS	Android, Ubuntu, Debian, Rasberry Pi Image, Openwrt, archlinux
Interface definition	
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Product size	85 mm × 55mm
Weight	38g



### Bluetooth





### Bluetooth specs

Bluetooth V2.0 + EDR

Built-in linux kernel driver for orangepi

USB2.0 specification, backward compatible with USB1.1/1.2

USB bus powered, no power supply is built-in LED work light indication

Frequency: 2.400-2.4835 Ghz

Usage Frequency: frequency hopping

Spread spectrum (FHSS)

Transfer Rate: 3Mbit / s (EDR), transmission speed more quickly

Security: 128 bits safe mode

Supports Ubuntu & all Windows systems, including Windows, xp, vista, win7 win 8, etc

Support EDR security mode

Wireless transmission of documents, audio, video, wireless networking features such as wireless printing

Wireless connected devices (such as computer / PDA / mobile phones / printers / wireless game controller) with Bluetooth technology

Support VOIP voice calls seamlessly connect Skype software.

Bluetooth specification V 2.0 & V 1.2 Compliant

Supporting profiles: networking, Dial-up, Fax, LAN access, and Headset

Plug and Play, no driver

Length with only 1.9cm

Working with led lights

Weight: Approx 9g



### Bluetooth headset





### Bluetooth headset specs

Version:	V4.0 EDR
Support:	Linux, iOS, Android etc
Function:	bluetooth / handsfree /wireless
Frequency Range:	2.4GHz
Talk Time:	4 Hours
Standby Time:	160 Hours
Rechargeable Battery:	150 mAh
Receiving sensitivity:	<-80dBm



### Wireless dongle



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Color: black

### Wireless dongle specs

Complies with IEEE 801.11n IEEE 802.11g, IEEE 802.11b standards 1x1 / 1x2 modes STBC Support for Extended Range Legacy and High Throughput Modes 20MHz / 40MHz bandwidth Reverse Direction Data Flow and Frame Aggregation WEP 64/128, WPA, WPA2 Support Multiple BSSID Support Provides USB 2.0 Hi-Speed interface Osco CCX V 1.0 V2.0 V3.0 Compliance Low Power with Advanced Power Management Works with, Windows 7 Windows XP Windows Vista and Windows 2000 Specification: Standard: IEEE 802.11g IEEE 802.11b CS MA / CA with ACK Interface: USB2.0 Frequency Range: 2.4GHz-2.4835GHz Radio Data Rate: 11N: 150/54/28/14/7/3 (a da ptive) 11G: 54/28/14/7/3 (adaptive) 11b: 11 / 5.5 / 2 / 1M (adaptive) Channel: 1-11 (US Canada) 1-13 (Europe) 1-14 (Japan) Spread Spectrum: DSSS Modulation: BPSK, QPSK, CCK and OFDM (BPSK / QPSK / 16-QAM / 64-QAM) Transmission Distance: Indoor up to 100m, outdoor up to 300m Transmit Power: 15dBm Antenna plus: 2X2dBi LED Indicator: Status Data Security: WPA 64/128-bit WEP TKIP / AES Environment: Operating Temperature: 0-40 degree (32 ~ 104) Operating Humidity: 10%-90% non-condensing Specifications: Original box: NO Net weight: 1.7g Package weight: 10g

### Micro SD card



### Micro SD card specs

Type: Micro SD / XC / HC / UHS-I

Capacity: 32GB,64GB,128GB

Packaging: Bulk Packaging

Dimensions 0.43" x 0.59" x 0.039" (11mm x 15mm x 1mm)

Operating Temperature -13º F to 185º F (-25º C to 85 º C)

Storage Temperature -40º F to 185º F (-40º C to 85º C)

Voltage 3.3v

Weight 0.05 oz (1.4g)

Upper than 10MB/s bandwidth

Waterproof



## Others external peripherals





## Others external peripherals specs

#### **USB HUB 7 Ports**

Plug and play; no driver required.

ON / OFF switches activate or deactivate individual ports.

LED indicator lights show which USB ports are in use at any given time.

Built-in USB cable

Color:Black or White

Supports: Windows 7/ Vista/ XP/ 2000 and Mac OS X 10.2 and higher/ Linux 9.

Size:16.5x3.5x2.2cm

Cable length: 55cm

#### European AC Power supply adapter

Input: 100-240VAC 0.3A 50/60HZ

Output: 5V2A

Color: Black

Weight:75g

HDMI to VGA converter (male female)

Model Number: KBT010144K

Full-size high-definition resolution of 720p or 1080p.

Built-in chipset.

HDMI input: the HDMI input interface.

Weight:50g.

Color: Black



## Others internal peripherals







## Others internal peripherals specs

#### Heatsink

1x 14mm(L) x 14mm(W) x 5mm(H) Heatsink for Soc

1x 9mm(L) x 9mm(W) x 4mm(H) Heatsink for Voltage Regulator

1x 9mm(L) x 9mm(W) x 4mm(H) Heatsink for LAN9512

#### Fan

Orange PI Fan, Active Cooling Fan for Customized Acrylic Case

Support OPI model 2 Customized Acrylic Case & OPI model Plus Customized Acrylic Case

#### Case

Material: 100% original Acrylic

Color: Transparent

Use For : Orange Pi PC



#### Softwares



Xubuntu 15,04 – vivid armhf Image

- □ Linux 3.4 kernel
- ☐ Xfce 4.12 Desktop Environnement
- □ LightDM display manager
- □ Wireless (mt7601) built'in kernel drivers
- bluetooth built'in kernel drivers

On demand installed locales :

- O English en\_US ,
- □ Arabic ar\_SA,
- □ French fr\_FR



### Hardware acceleration

- Ultra HD / HD 1080p Hdmi Experimental drivers for H3 SoC
- □Libdri2
- □Sunxi-mali
- **□**Libump
- ■Xf86-video-sunxifb
- **□**AlOdisp
- □Libvdpau-sunxi
- □Sunxi-tools

See <a href="http://linux-sunxi.org/H3">http://linux-sunxi.org/H3</a> for further info.

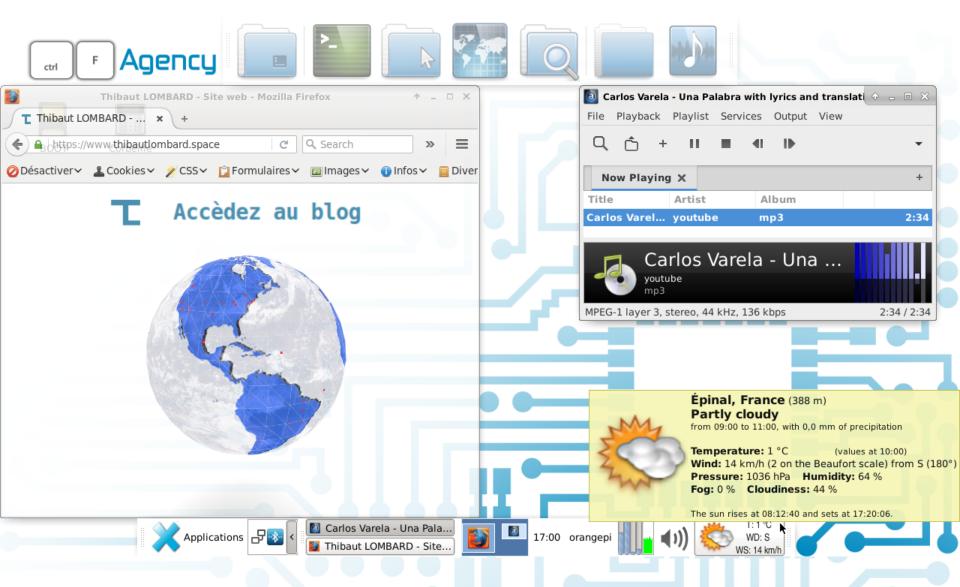
### **Applications**

- □Crypto: ecryptfs, encfs, veracrypt
- □Connectivity : bluetooth and wireless applet, gammu, wammu, gnokii, Xgnokii, ekiga etc...
- Maths / Dev : Rstudio, R, Maths libreoffice.
- □Office : libreoffice suite
- □Multimedia: mplayer, mpv...
- ■Web-dev: LAMPP
- □Planning : Orage calendar
- □Browsing : firefox with webdevelopper toolbar and noscript plugin, Iceweasel
- ☐Weather applet
- Others : vsftpd, samba, gedit, youtube-dl, WiringOP, SPI, 1-wire, Aria2 etc. . .

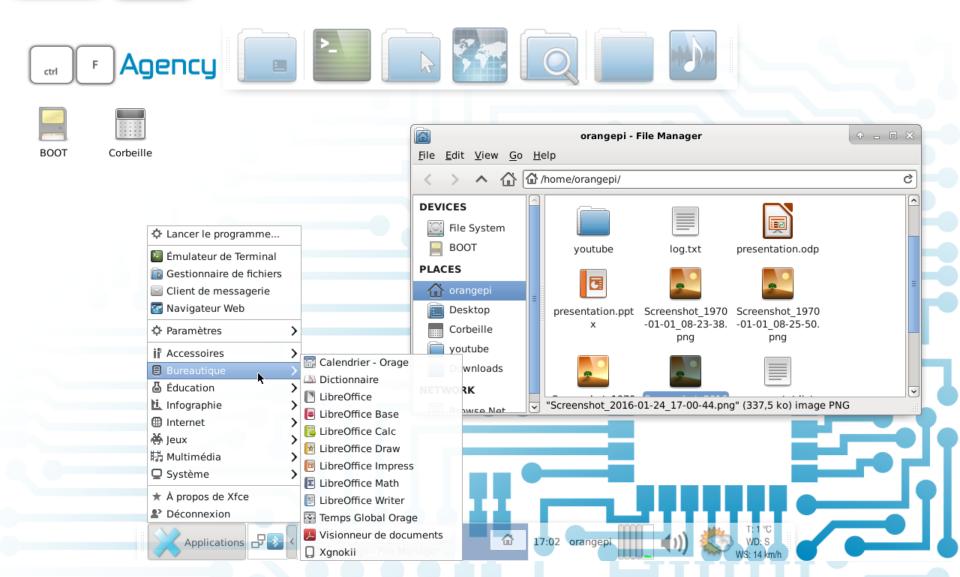




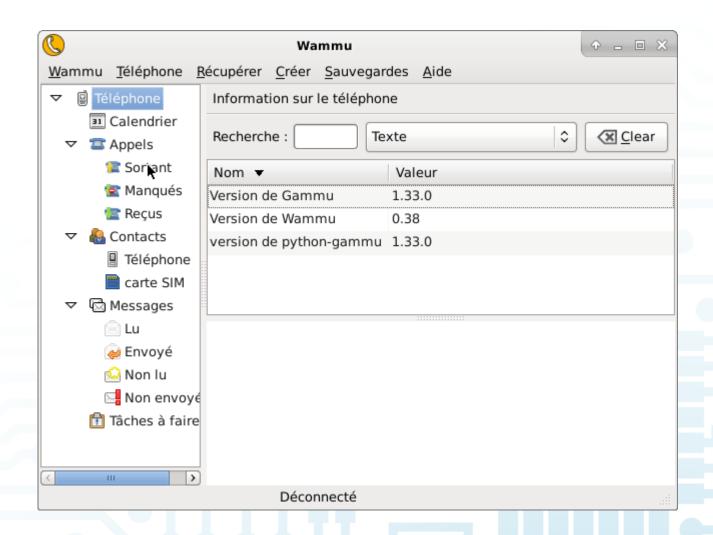




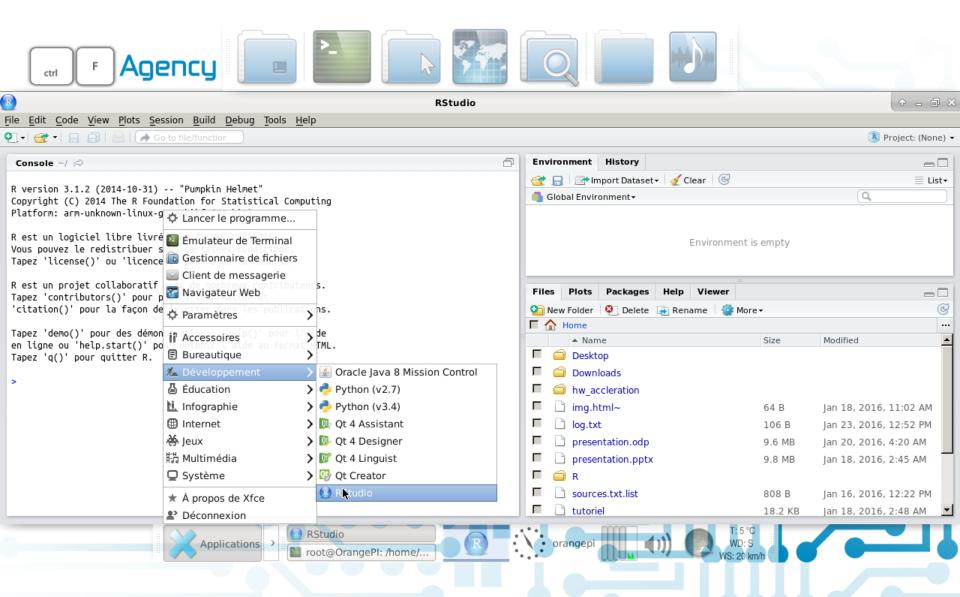
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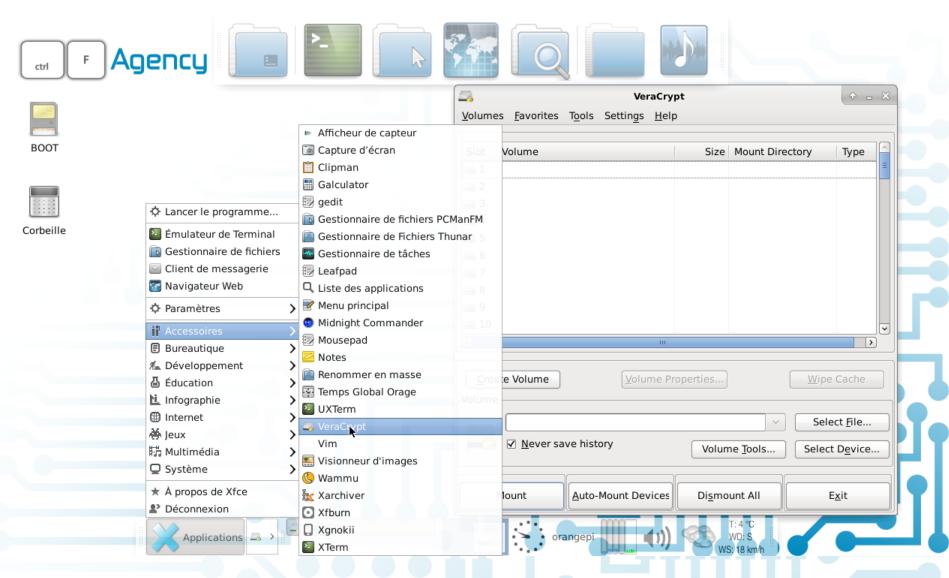




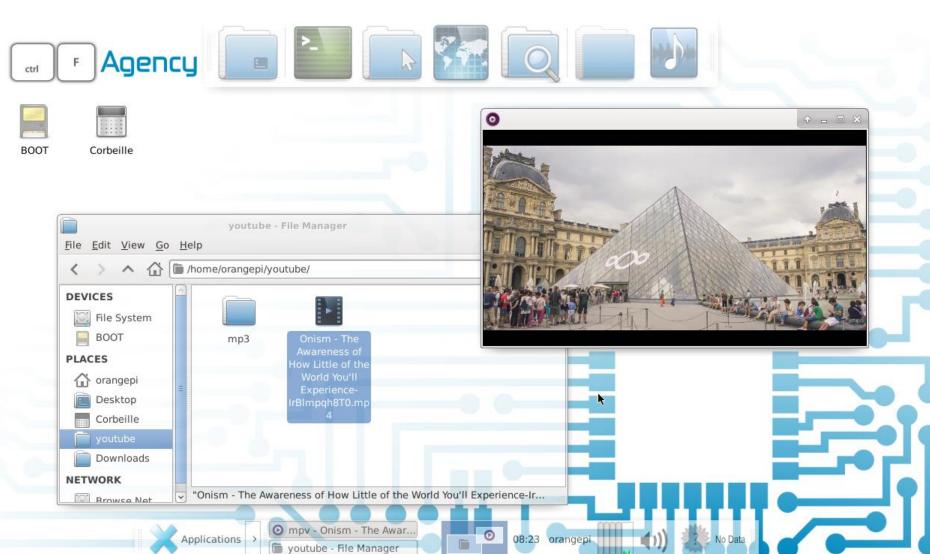












This operating system is fitting into this following profiles :

- **DIT** student
- **DRisk Manager**
- **DICT** engineer
- Osoftware engineer
- **DIT** consultant
- **UHardware engineer**
- **Big Data Analyst**
- **UStatistician**
- **Web Developper**
- Dend User

### Proposed services

The services proposed with this device:

- Prototyping
- **Web server hardening**
- **DSMS** server
- UVPN
- **Billboard**
- DRisk Analysis / Risk management
- **OThreat Intelligence**
- DIDS, NAS, IPS, SAN
- DEnvironnemental Control / Monitoring
- **URole based Trainings**

For further informations regarding the price and services feel free to contact me there :

contact@ctrlfagency.com