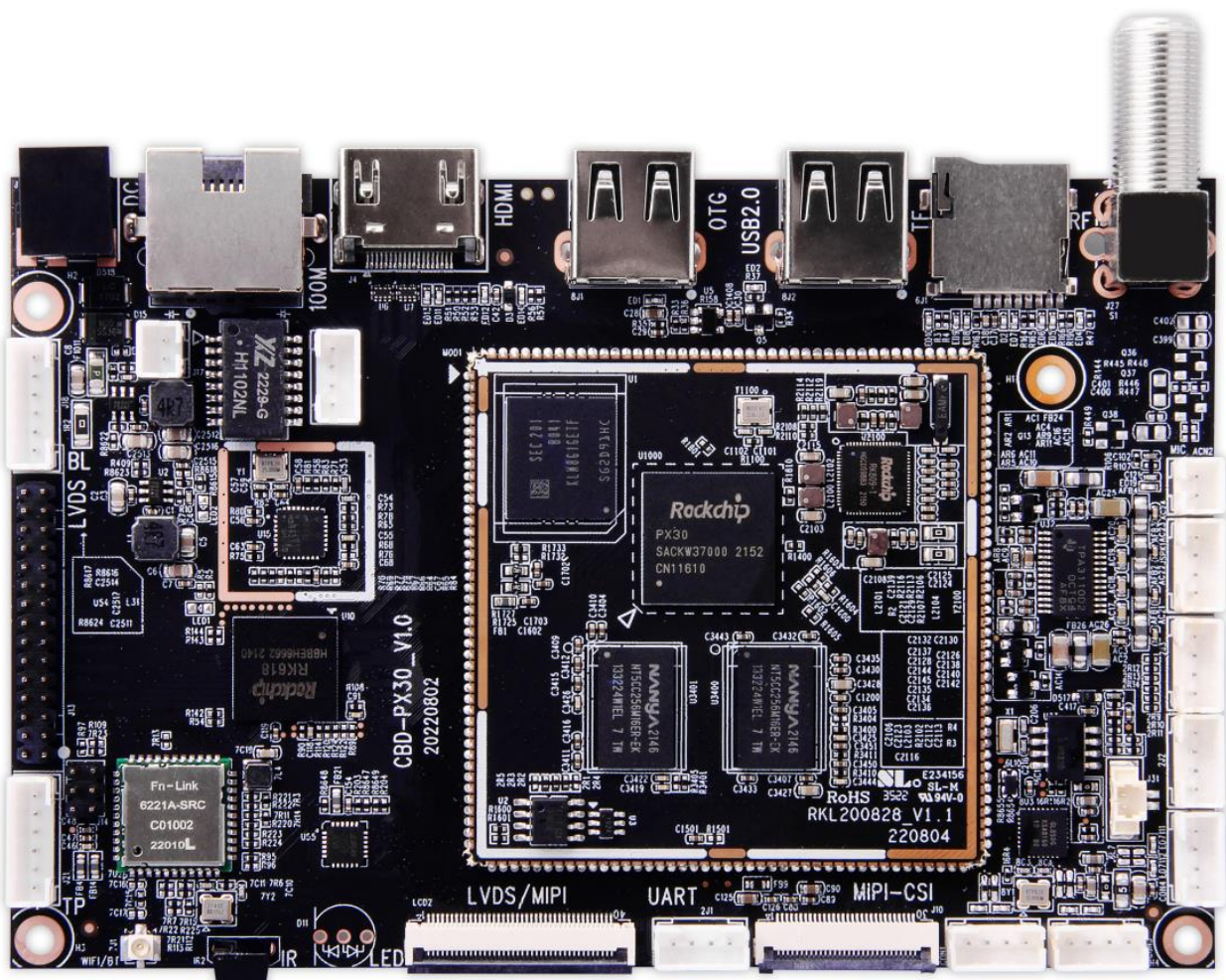


SPECIFICATION

MODEL:DB-PX30



Confirmation

REVISION HISTORY					
VERSION	DATE	BOARD ID	PAGE	DESCRIPTION	AUTHOR
V1.0	2020/11/17	CBD-PX30	8	specification	

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CONTENT

1. General description	1
2. Product pictures	1
3. Board view	2
4. Extension I/O definition	3
5. Features	4
6. Support Formats	5
7. Precautions for use	5

1. General description

DB-PX30 is development board based on PX30 developed by Rockchip. PX30 industrial-grade 64-bit low-power processor, with powerful hard decoding capability and rich interfaces, can quickly realize project research and production only by expanding the functional baseplate, which can be applied to AIOT Internet of Things equipment, vehicle-mounted central control, entertainment/game equipment, commercial display equipment and other application fields. Below is the detailed specification:

(I) Rockchip PX30 with Quad-core Cortex-A35 and dual-core Mali-G31 GPU

(II) 2GB RAM, 16GB eMMC flash

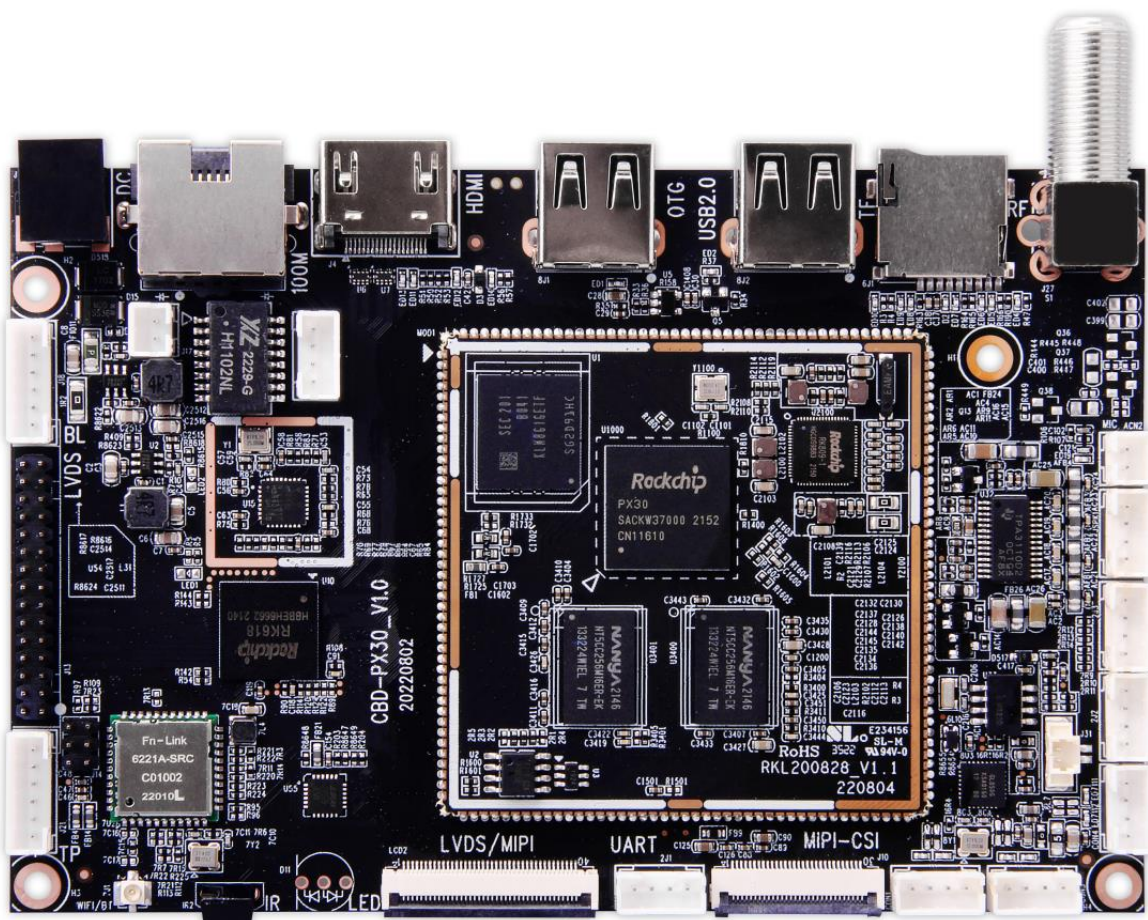
(III) Interface: USB2.0*2, HDMI Out, TF Card slot, RJ45

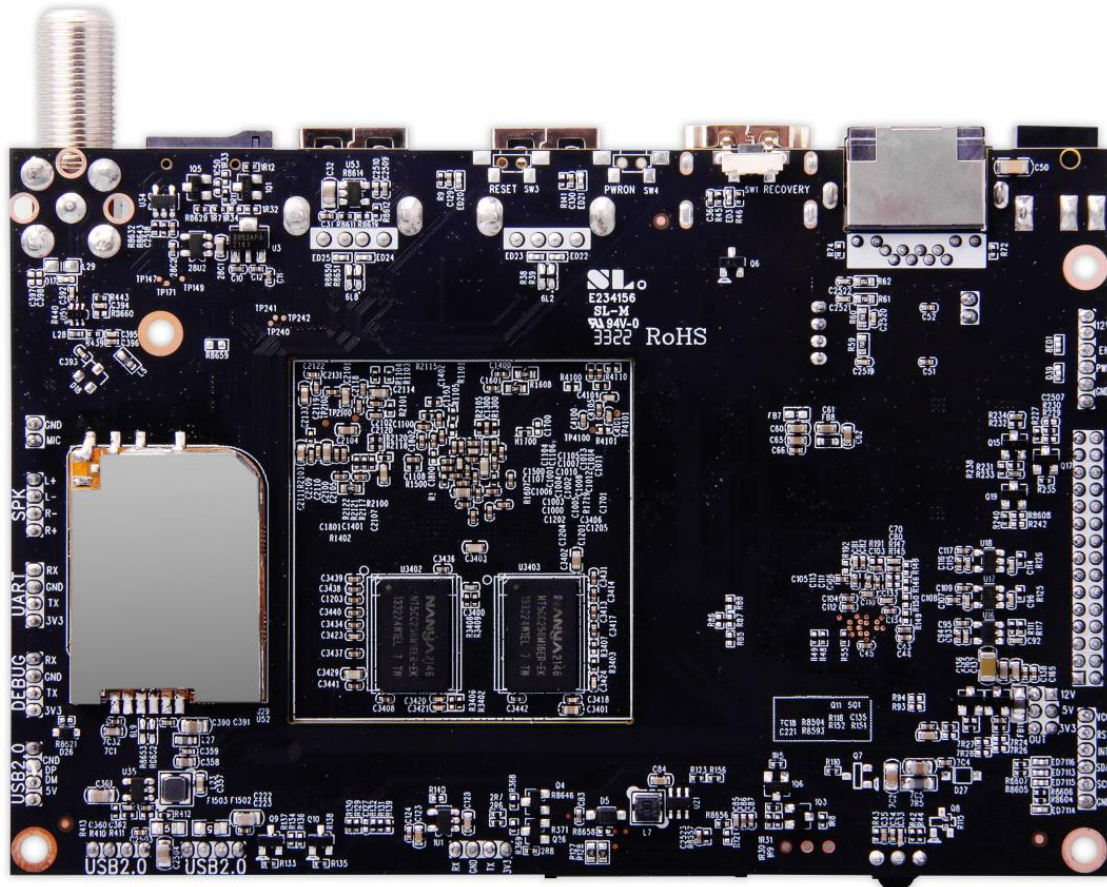
(IV) Build-In Wifi, 2.4G/5G, 10/100M Ethernet

(V) Dimensions:140*113mm

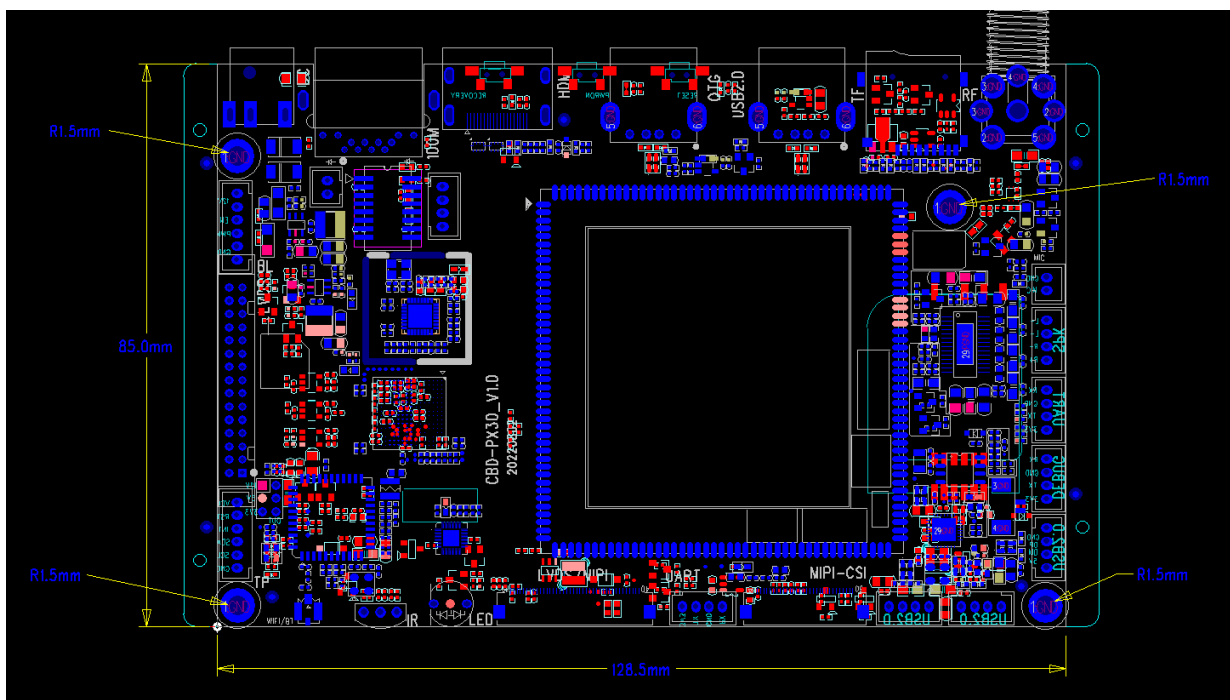
2. Product pictures

Below pictures are for reference only:

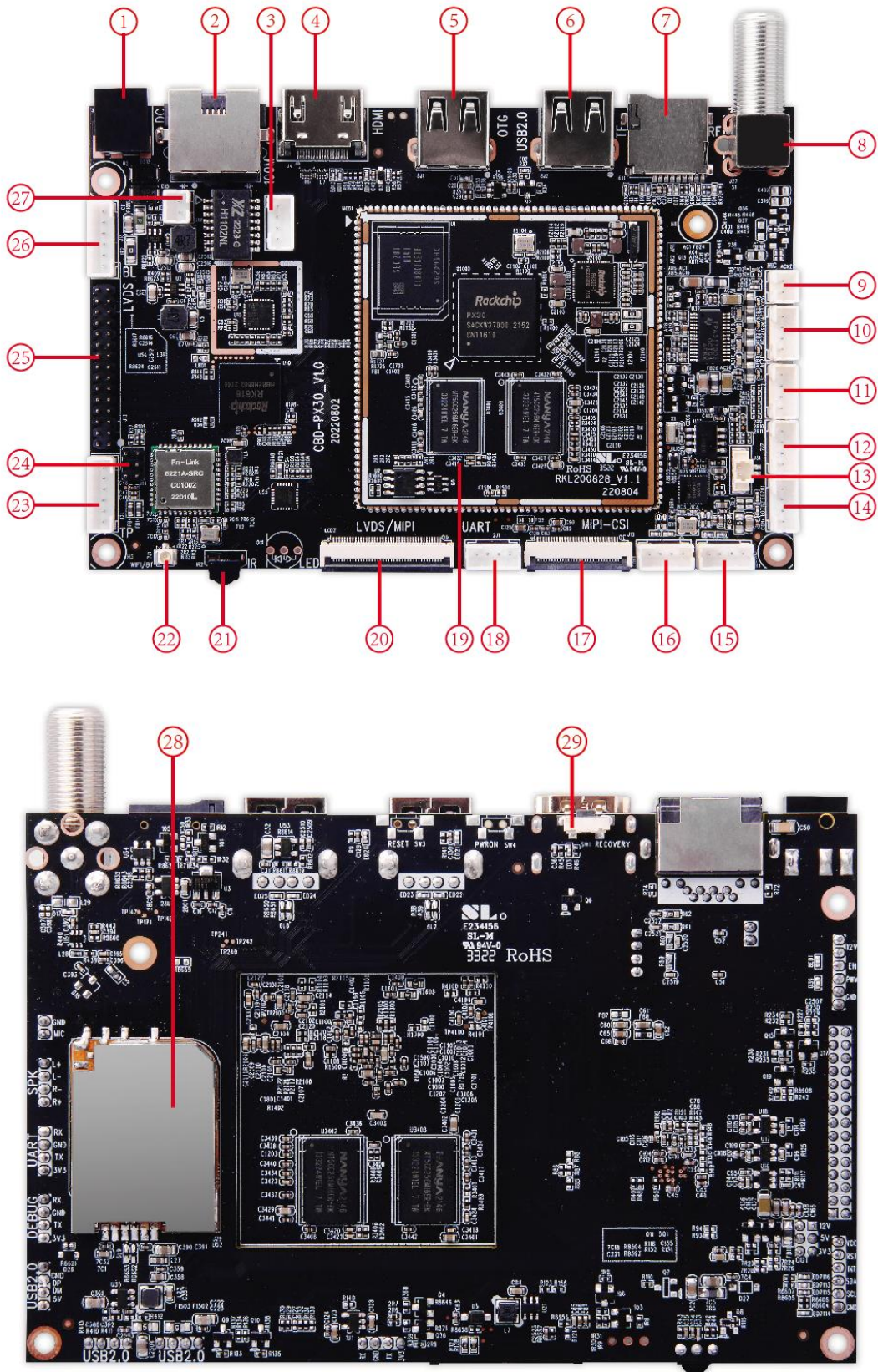




3. Board view



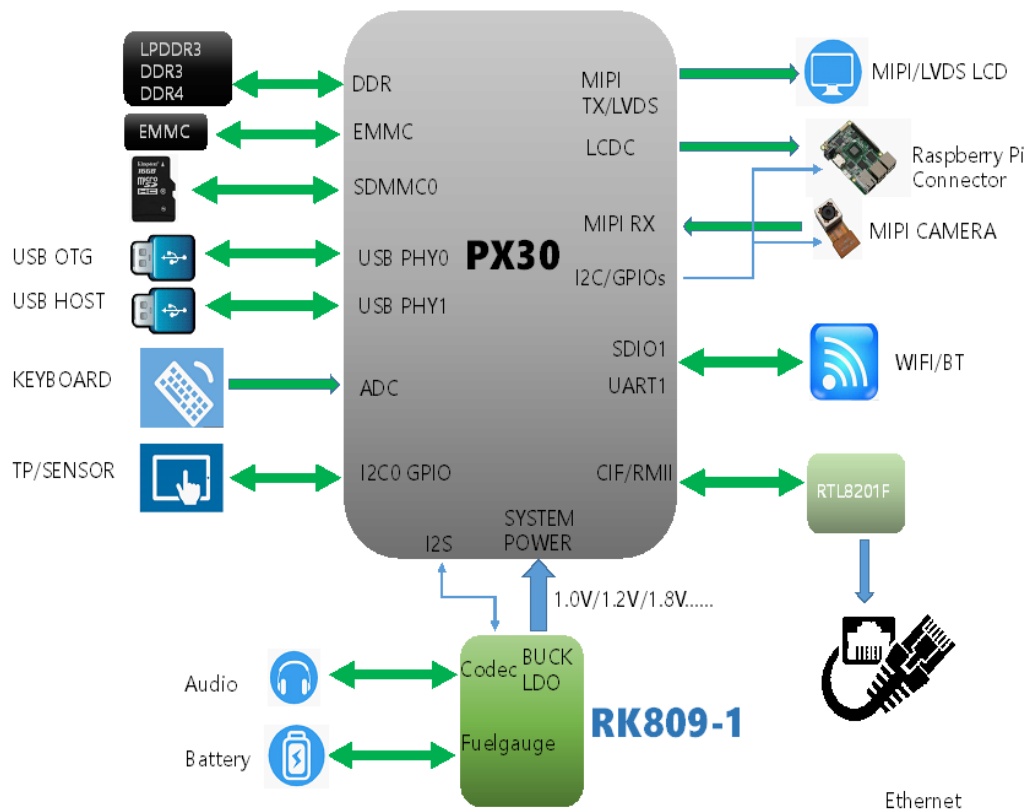
4. Extension I/O definition



No.	Name	Description	No.	Name	Description
1	DC IN	Power input: 12V/2A	2	RJ45	10/100M Ethernet
3	PoE	Input 4Pin 2.0	4	HDMI OUT	Up to HDMI 2.0a
5	USB	USB 2.0 HOST	6	USB	USB 2.0 HOST
7	MicroSD Card Slot	Up to 128GB	8	RF Interface	TV Tuner RF Input
9	MIC	1*2Pin2.0mm	10	SPK	1*4Pin2.0mm
11	UART	1*4Pin2.0mm	12	DEBUG	1*4Pin2.0mm
13	RTC Battery	1*2Pin 2.0mm	14	USB2.0	1*USB2.0 4Pin 2.0mm
15	USB2.0	1*USB2.0 4Pin 2.0mm	16	USB2.0	1*USB2.0 4Pin 2.0mm
17	MIPI CSI	4Lane	18	UART	1*4Pin2.0mm
19	SoM-PX30	172Pin 1.0mm	20	MIPI DSI	4Lane
21	IR	IR Reception	22	WIFI ANT	1*IPXE Port
23	TP Interface	1*6Pin2.0mm	24	LCD Voltage choose	1*(3*2Pin 2.0mm)
25	LVDS	Up to 1280*800 1*(2*15Pin2.0mm)	26	LCD Voltage	1*6Pin2.0mm
27	PoE	2Pin2.0 12V	28	TV Tuner Module	USB2.0 Interface
29	Key	RECOVERY			

5. Features

Chipset	Rockchip PX30	
Market area	Global	
OSD Language	English/Chinese(multi language OSD)	
Processor	CPU	Quad-core Cortex-A35
	GPU	Mali-G31 GPU
	DDR	2GB
	EMMC FLASH	8GB(16G/32G Optional)
Network	Ethernet	RJ45, 10/100M
	WiFi	Dual Band Wifi 2.4G/5G
	BT	BT4.0(Build-in wifi module)
USB	1 x OTG, 1 x USB2.0 Host	
Dimensions	140 mm * 113 mm	
Adapter	DC input 12V/2A	



6. Support Formats

Video Decoder

- Real-time decoding of MPEG-4, H.264, H.265/HEVC, VP8, VC-1
- H.264/AVC Base/Main/High@level4.2; up to 1080P@60fps
- H.265/HEVC Main10 profile@level4.2; up to 1080P@60fps
- VP8, up to 1080P@60fps
- MPEG-4, ISO/IEC 14496-2, SP@L0-3, ASP@L0-5, up to 1080P@60fps
- VC-1, SP@ML, MP@HL, AP@L0-3, up to 1080P@60fps
- MVC is supported based on H.264 or H.265, up to 1080P@60fps

Video Encoder

- Support H.264 video encoder at BP/MP/HP@level4.1
- Resolution and frame rate are up to 1920x1080@30FPS
- 1x1080p@30fps or 2x720p@30fps encoding

7. Precautions for use

1. Relative humidity: 10% ~ 90% .
2. Storage temperature: -10 ~ 125 °C
3. Operation temperature: 0 ~ 80 °C

4. Do not squeeze、 distort or disassemble the board.
5. Keep the board away from static electricity .
6. Keep the board away from water and other liquid.
7. Clean the board with soft and clean dry cloth when it's dirty.
8. Don't use long connect wires which may affect performance and image quality.