Specification

Client:_____

Product: HD Android Decode Board

Model:YS-K18-V2

Date: 08-01-2017

Supplier	Confirm
Fiction:	**Qualified** ☐ **Not Qualified** ☐
Examine:	**Examine** :
Approval:	**Approval**:

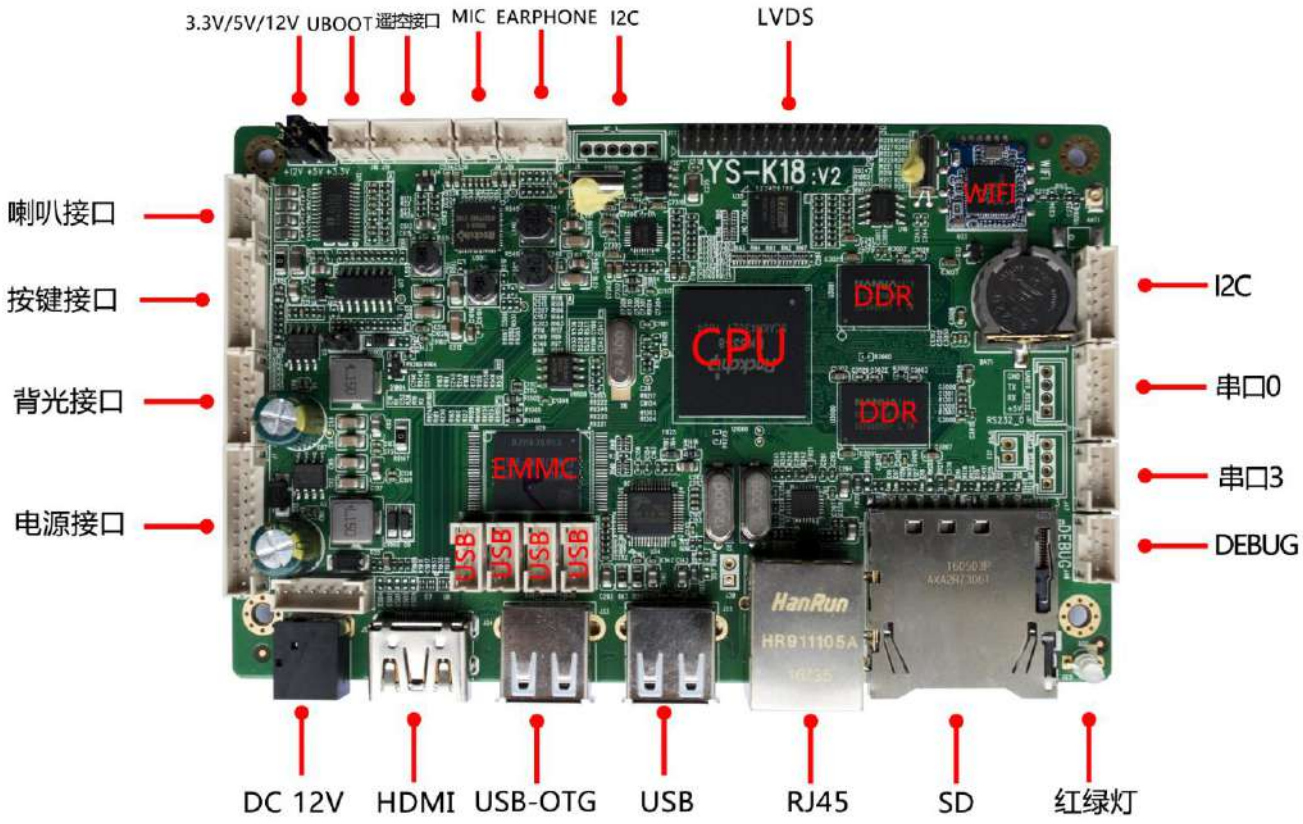
(Both parties must be signed and sealed)

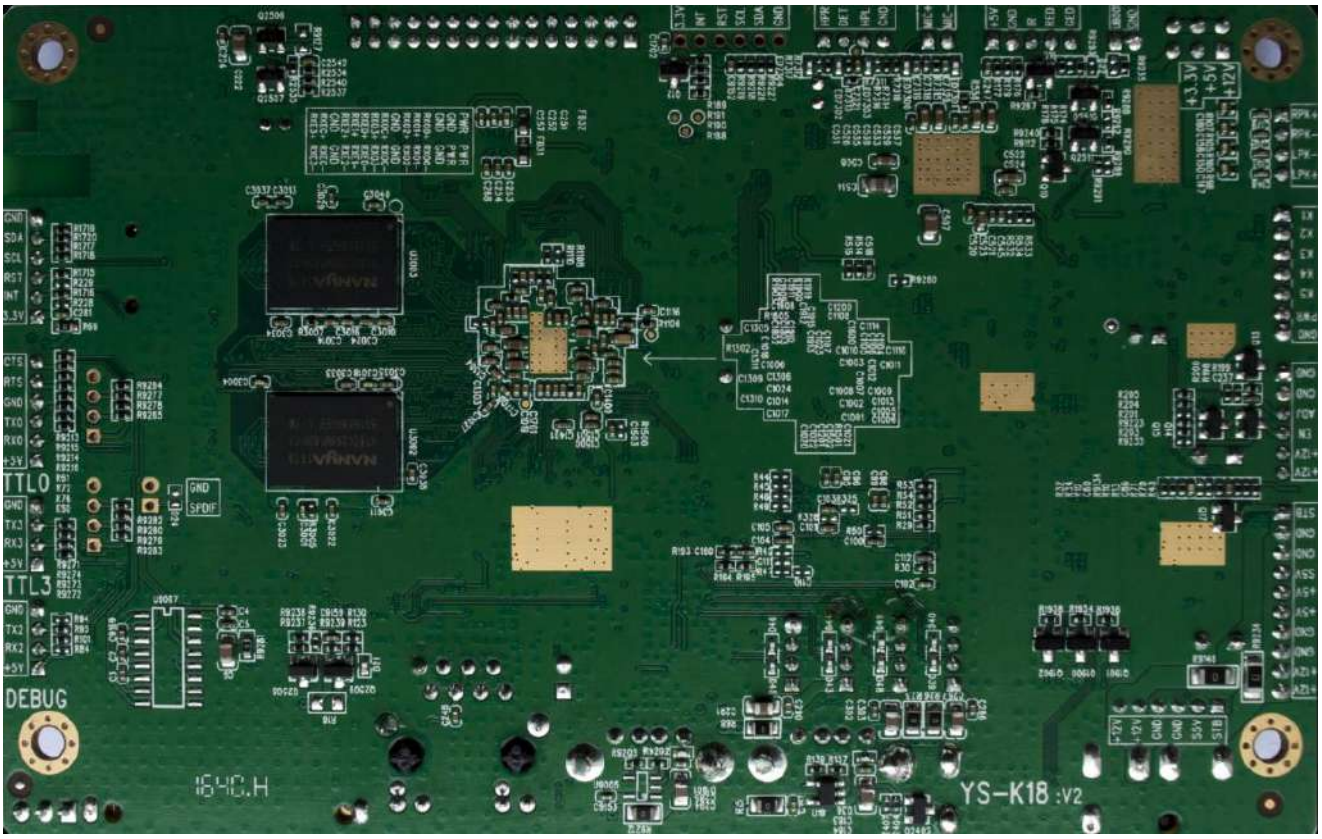
Contents

Chapter 1	**Product overview**
Chapter 2	**Features**
Chapter 3	**Functions**
Chapter 4	**PCBA dimension**
Chapter 5	**Working environment**
Chapter 6	**Connection definition**

Chapter 1. Product overview:

The PCBA software is pre-build Android OS 5.1.1, with Rockchip RK3368 which is Octa-Core and 1.5GHz, with 10 seconds to achieve ultra-fast start-up and 4K Ultra HD decoding ,with small size, high effective, low consumption,low price cost. Platform support 2160P Full HD display,Support LVDS connect to monitor, support HDMI2.0 output,, support infrared remote control, support touch screen, keyboard, mouse etc. To help user support the advertising application.





Chapter 2. Features:

Hardware specification	
CPU	RockchipRK3368, Octa-Core, 1.5GHz
RAM	2GB DDR3
Internal storage	8GB EMMC Flash (Extensible)
Decoding ability	MAX. 2160P
OS	Android 5.1.1
Network	Support Ethernet, WIFI
Video format	RM/RMVB,MKV,TS,FLV,AVI,VOB,MOV,WMV,MP4, etc
Audio format	MP3,WMA,APE,Flac, etc
Image format	BMP/JPEG/PNG/GIF, etc
USB2.0port	5 USB HOST,1 USB OTG/HOST
Ethernet	10M/100M self-adaption Ethernet
LVDS output	50/60Hz 6Bit/8Bit Dual Channel LVDS
HDMI putout	HDMI2.0,support 4K@60Hz output
Audio output	L&R audio-out（2X8Ω/10W speaker）
RTC	Available
Timing	Available
System update	Support USB update

Chapter 3. functions:

◆Use Rockchip RK3368 processor, platform use Android5.1.1 version; it can replace a desktop PC entertainment platform with standardized, open to the advantage.

◆Hardware platform:ARM Cortex-A53 1.5GHZ Octa-Core; RAM: 2GB FLASH(EMMC):8GB;

◆DC voltage input:DC+12V, working:<4.5W,standby:<0.3W;

◆Vedioformat:RMVB,FLV,MPEG1/2/4,AVI,DIVX,XDIV,WMV9,H.264@30FPS,H.265@60FPS,VC-1,MOV,MKV,MP4,TS,M2T,VOB;Multi-Audioformat:MP3,WMA,WAV,EAAC+,MP2dec,Vorbis(Ogg),AC3,FLAC,APE,BSAC; Image format,BMP/PNG/GIF/JPEG（8K*4K）;

◆Multi method input:1.Support multi touchscreen(infrared touch, capacitive touch, resistance touch,with calibration function;2.Support remote control function;3.Support USB mouse and keyboard input;

◆Timing function: save the power consumption and the lifetime;

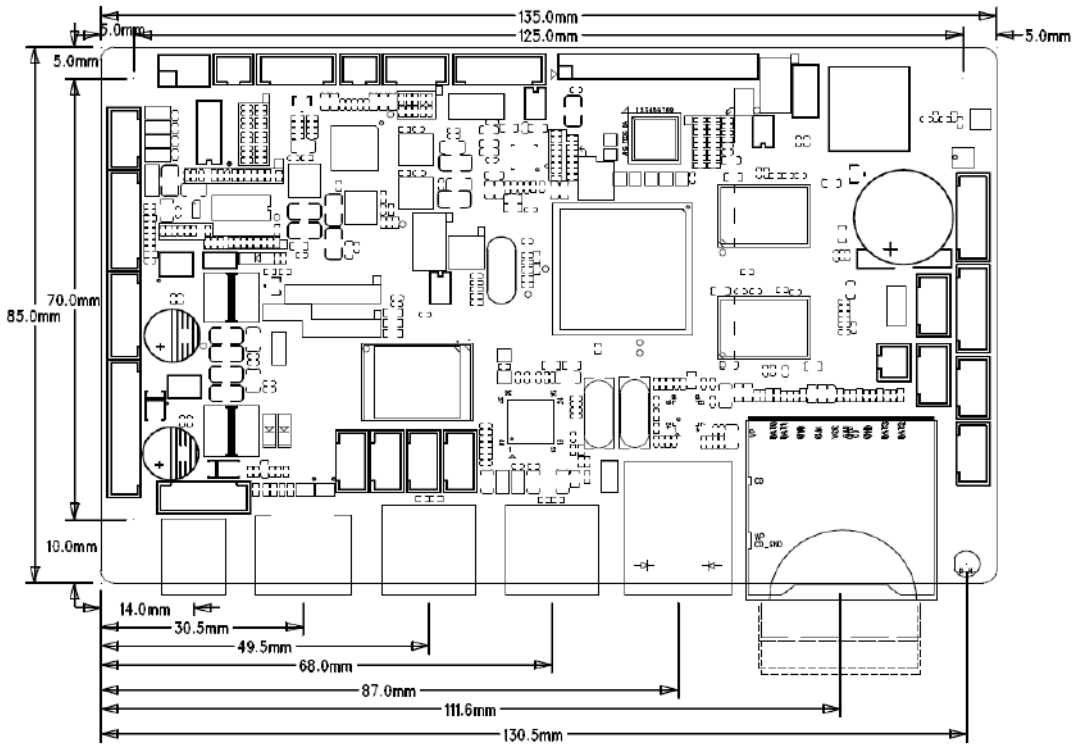
◆RTC: RTC IC inside,will get connection and synchronous with Internet and adjust by itself.

◆Multi network connection: Support Ethernet/WIFI;

Chapter 4.PCBA size

*PCBA height:15.8mm *PCB length:135.0mm

*PCB width:8.0mm *PCB screw hole:3.2mm x4



Chapter 5.Working environment

Relative humidity: ≤75％
Storage temperature:10°C to +40°C
Working temperature:0°C to +60°C
Please pay attention on destabilization during item installing and using.
No installation position request, only if the installation position will make the PCB comes warping.
The holes for terminal port can not be too small, especial for HDMI terminal port to avoid PCB comes warping during machine installation.
Display content will be disturbed if the transmission wire is too long.
Please make sure that all the connection wired cable is far away from the chipset.
For better EMC, please use shielded wire or add magnet ring on the cable near the board, between motherboard and panel.

Chapter 6.Ports definition

Specifications（The leftside on the white flag is the first Pin）

J7（10PIN/2.0）+12V input power port

Pin	Definition	Description
1	+12V	Power
2	+12V	Power
3	GND	Earth wired
4	GND	Earth wired
5	5V	Power
6	5V	Power
7	5VSTB	Standby mode 5V input
8	GND	Earth wired
9	GND	Earth wired
10	STB	Standby singal input

J24（6PIN/2.0）backlight power input

Pin	Definition	Description
1	+12V	Power
2	+12V	Power
3	ON/OFF	Backlight on/off
4	ADJ	Backlight adjustment
5	GND	Earth wired
6	GND	Earth wired

J13（2PIN/2.0）POWER KEY port

Pin	Definition	Description
1	GND	Earth wired
2	PWE_EN	POWER KEY
3	K5	K5
4	K4	K4
5	K3	K3
6	K2	K2
7	K1	K1

J15（4PIN/2.0） loud speaker port

Pin	Definition	Description
1	RSPK+	Right speaker+
2	RSPK-	Right speaker-
3	LSPK-	Left speaker-
4	LSPK+	Left speaker+

J16（2PIN/2.0）UBOOT port

Pin	Definition	Description
1	UBOOT	UBOOT
2	GND	Earth wired

J19（5PIN/2.0）IR control port

Pin	Definition	Description
1	LEDR	RED LED light
2	LEDG	GREEN LED light
3	IR	Remote control port
4	GND	Earth wired
5	+5V	Power

J9（2PIN/2.0）MIC port

Pin	Definition	Description
1	MICN	MIC-
2	MICP	MIC+

J10（4PIN/2.0）earphone port

Pin	Definition	Description
1	GND	Earth wired
2	HPL	Left channel
3	DET	Det
4	HPR	Right channel

J32（6PIN/2.0） capacitive touch screen port

Pin	Definition	Description
1	3.3V	Power
2	INT	Stop data transmission
3	RST	Recyle data
4	SCK	IIC CLK
5	SDA	IIC DATA
6	GND	Earth wired

J11（6PIN/2.0）Serial port 0

Pin	Definition	Description
1	CTS	Request to Send
2	RTS	Clear to Send
3	GND	Earth wired
4	TX0	Transmit Data 0
5	RX0	Receive Data 0
6	+5V	Power

J47（4PIN/2.0）Serial port 3

Pin	Definition	Description
1	GND	Earth wired
2	TX3	Transport 3
3	RX3	Receive 3
4	+5V	Power

J45（4PIN/2.0）Serial port 2

Pin	Definition	Description
1	GND	Earth wired
2	TX2	Transport 2
3	RX2	Receive 2
4	+5V	Power

J26（4PIN/2.0）inner 4 USB port (3port:J26 ,J30,J31,J35)

Pin	Definition	Description
1	GND	Earth wired
2	D+	DM
3	D-	DP
4	+5V	Power