

# Android digital signage media player Specification

Model:DDW-ADBK18V6

Date: 01-08-2016

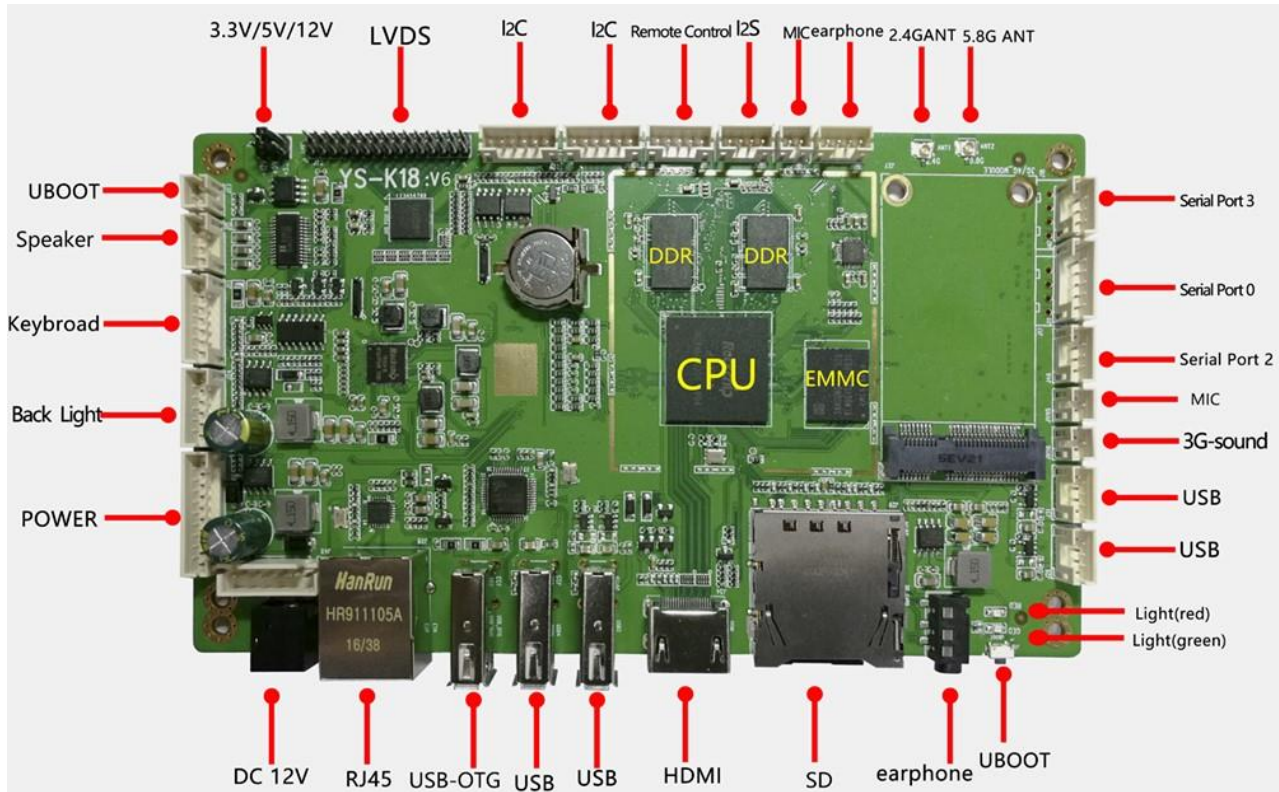
## Contents

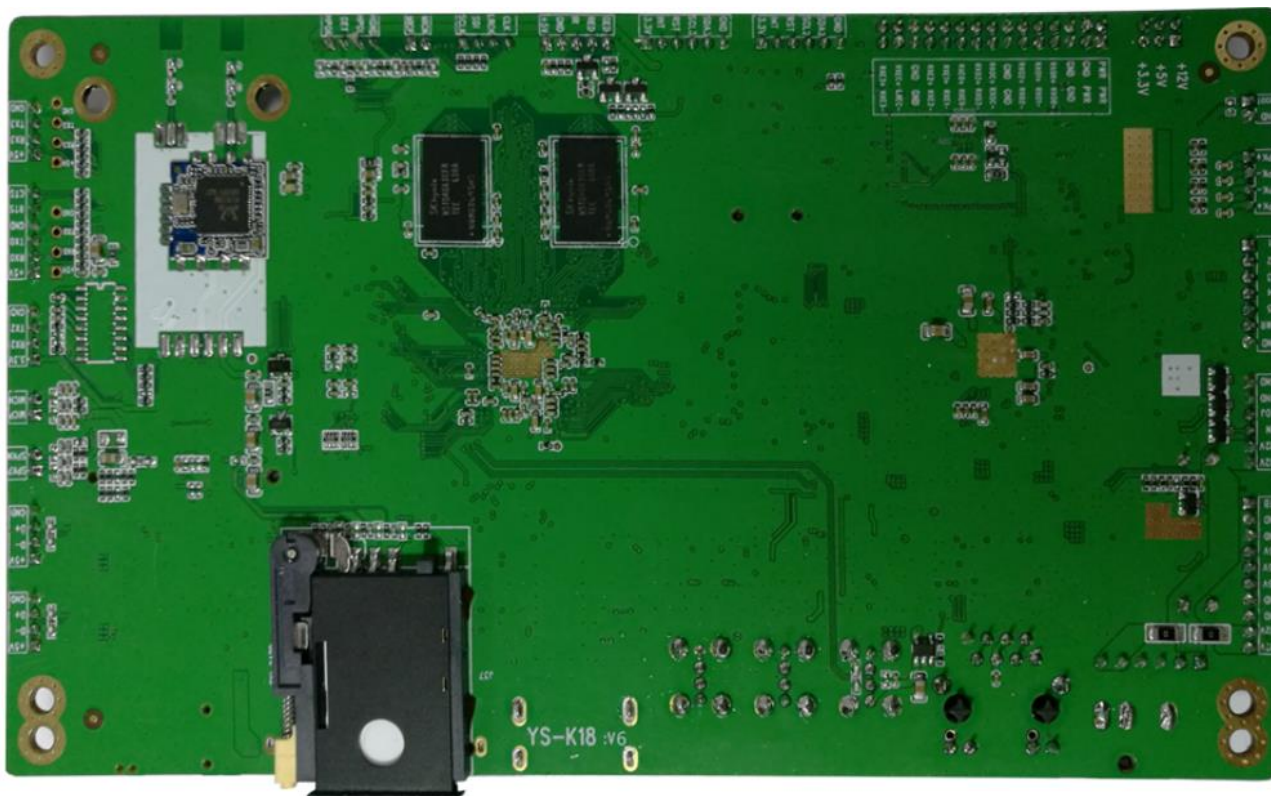
Chapter 1	PCBA overview
Chapter 2	Parameters
Chapter 3	Functions
Chapter 4	PCBA dimension
Chapter 5	Working environment
Chapter 6	Connection definition

## Chapter 1. PCBA 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 HDMI 2.0 output, support 3G/4G network, support Bluetooth 4.1, support infrared remote control, support touch screen, keyboard, mouse etc. To help user support the advertising application.

## PCBA Layout





## Chapter 2. Parameters

Parameters	
CPU	Rockchip RK3368, Octa-Core, 1.8GHz
RAM	2GB DDR3
Internal storage	8GB EMMC Flash (Extensible)
Decoding ability	MAX. 2160P
OS	Android 5.1.1
Network	Support Ethernet, WIFI,3G/4G
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
USB2.0 port	5 USB HOST,1 USB OTG/HOST
Ethernet	10M/100M self-adaption Ethernet
LVDS output	50/60Hz 6Bit/8Bit Dual Channel LVDS
HDMI outout	HDMI 2.0,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 1.8GHZ Octa-Core; RAM: 2GB FLASH(EMMC):8GB;
- ◆ DC voltage input: DC+12V, working:<4.5W,standby:<1.0W;
- ◆ Videoformat: RMVB,FLV,MPEG1/2/4,AVI,DIVX,XDIV,WMV9,H.264@30FPS,H.265@60FPS, VC1,MOV,MKV,MP4,TS,M2T,VOB;MultiAudioformat: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. PCB dimension

\*PCB height:15.8mm

\*PCB length:168.0mm

\*PCB width:97.0mm

\*PCB screw hole:3.2mm



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

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+

## J32 (6PIN/2.0 ) capacitive touch screen port

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

## J9108 (6PIN/2.0 ) I2C port

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

## J9109 (2PIN/2.0) MIC port

Pin	Definition	Description
1	MICN	MIC-
2	MICP	MIC+

## J47 (4PIN/2.0 ) Serial port 3

Pin	Definition	Description
1	GND	Earth wired
2	TX	transport
3	RX	receive
4	+5V	Power

## 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

**J46 (4PIN/2.0 ) Serial port 2**

Pin	Definition	Description
1	GND	Earth wired
2	TX	transport
3	RX	receive
4	+5V	Power

**J9115 (2PIN/2.0 ) MIC port**

Pin	Definition	Description
1	MICN	MIC-
2	MICP	MIC+

**9116 (2PIN/2.0 ) Speaker port**

Pin	Definition	Description
1	SPKN	SPK-
2	SPKP	SPK+

**J31 (4PIN/2.0) USB**

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

**J26 (4PIN/2.0) USB**

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

**Remarks:**

- 1, Multiple functions & configs, customization are available
- 2, Product design and configuration will be subject to change without notice