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P/D No.:

Revision

[illegible]

Uptmate Intelligence Co., LTD

立峴智能有限公司

UA-76XX

Product Specification

Hardware Version:

Firmware Version:

Department	RD/PM
Prepared by	
Approved by	

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Office:

Address: No. 549, Section 1, Wanshou Rd, Guishan District,
Taoyuan City, 33350, Taiwan (R.O.C)

Tel: +886-2-82090011

Fax: +886-2-82090099

Service Center:

Taiwan	sales@uptmate.com.tw
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UA-76XX series have passed the FCC and the FCC ID could be seen on our products. (Bottom side)

FCC ID: 2AGFN-UPTMATEUA7600

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED,
INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE
OPERATION.

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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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1. Product Descriptions

UA-76XX series belong to middle-end signage solution in Uptmate's product line, and the extended version of UA-72XX series. Comparing to UX-85XX series adopt ARM Corex A9 platform instead of x86 platform. The most important feature is UA-76XX series will be a FHD signage player with internet function. That means UA-76XX can easily play up to 2 x FHD video (1920*1080) simultaneously. And comparing to UA-6866, UA-76XX series will support U-Quick3.0 P2P management software and U-Poster1.0 Content Publishing Software. That means UA-76XX series can be controlled and managed via U-Quick3.0 or deploy Content via U-Poster1.0. Not only displaying multi-zone with different widget modules, UA-76XX series will be more powerful in other aspects such as web contents with HTML5, JAVA Applet and flash support. On the other hand, UA-76XX series will provide "Video-in" and "Dual Screen" capability for much high-end market. In conclusion, UA-76XX series will be the most up-to-date FHD internet signage solution in the world.

2. Features

➤ Video Performance

- Mpeg1/Mpeg2/Mpeg 4/DiVX/ H.264/Flash Video(flv) FHD Signage Player
- Video Output Resolution up to HDTV(1080P) in HDMI
- Video Decode Resolution up to HDTV(1080P)

➤ Web Content Support

- HTML5
- JAVA Applet
- Flash

➤ Video & Audio Output

- HDMI Output
- VGA I/F (D-sub 15P)

PS: Dual Output (HDMI & VGA) with same screen

- Stereo Audio Output (Phone Jack)
- LVDS (Reserved for LCD Panel)
- Audio Power Amplifier I/F (Compatible to UA-686X Audio Board)

➤ Video & Audio Input

- Composite Input (CVBS) with stereo audio input(2ch)
- HDMI Input

➤ Storage Device

- Memory Card/SD-Card(SDXC)
- eMMC – OS code (4GB)
- SPI Flash memory – Boot code(2MB)
- USB 2.0 External * 2 (Type A connector)
- USB 2.0 Internal * 2 (4P Wafer)
- SATA II I/F (SATADOM/Optional)
- Mini-PCle I/F (Optional)

➤ Memory

- DDR III (2Gb*4/1600)

➤ Control & Command

- RS-232 (D-Sub 9P)
- UART (RJ11 & Internal 4P wafer)

➤ Power Input

- DC 12V/1.6A Power Input (DC Jack)
- Typical power consumption is around 7W(12V/0.6A).

➤ Software Feature

- U-Poster1.0 (Uptmate Content Publishing Software) PC Software
- U-Quick3.0 Signage Management Software
- Clock/Timer Function by internal RTC
- Firmware update via USB and SD card

➤ Mini-PCle Interface(Internal)

- Embedded a WiFi 802.11ac/b/g/n 1T1R module

➤ Ethernet

- 10/100/1000 Mbps
- USB WiFi Function (Internal reserved)

➤ RoHS

3. Comparison Lists of U-Poster1.0 and U-Quick3.0

Model	U-Poster 1.0	U-Quick 3.0
Operation Scenario	Content Publish Software	Central Management Software
Basic Function	(Off-Line)	(On-Line)
1. Auto Play (after Power On)/ Plug & Play	●	●
2. File auto sync via USB zip	○	●
3. F/W auto upgrade via SD Card with security	●	●
4. Remote FW Upgrade via Dropbox	●	●
5. FHD player with Video/Photo in turn	●	●
6. Transition Effect in Photo Slideshow	●	●
7. Scheduling Power ON/OFF (Standby mode)	●	●
8. Booting Animation Effect	●	●
9. Scheduling Playback by Playlist	●	●
10. Landscape or Portrait	●	●
Content Delivery		
11. Auto files sync with FTP Server	●	●
12. Auto files sync with Dropbox	●	●
13. Http Download Support	○	●
Signage Widget in Multi-Zone		
14. Media (Video & Photo) Module	●	●
15. Logo Module	●	●
16. Rolling Text Module (Instant Message or RSS News)	●	●
17. Digital Clock Module (Date & Time)	●	●
18. Photo Slideshow Module w/ Background Music	●	●
19. Weather Module	●	●
20. Info Board Module (Text as Bulletin or RSS News Board)	●	●
21. Background (Photo)	●	●
22. HTML5 in Web	●	●
23. ppt zone	○	●
24. pdf zone	○	●
Management Software		
25. Layout Editor	●	●
26. Multi-Language (translation by customer)	●	●
27. Uptmate Push Notification Service	○	●
28. Auto Search for Easy Installation	○	●
29. Built-in ftp Server	●	●
30. Instantly Content Publish	●	●
31. Layout Change Immediately	●	●
32. Android/iOS Mobile Management Software	○	●

4. Media Formats (Please refer to support lists for details)

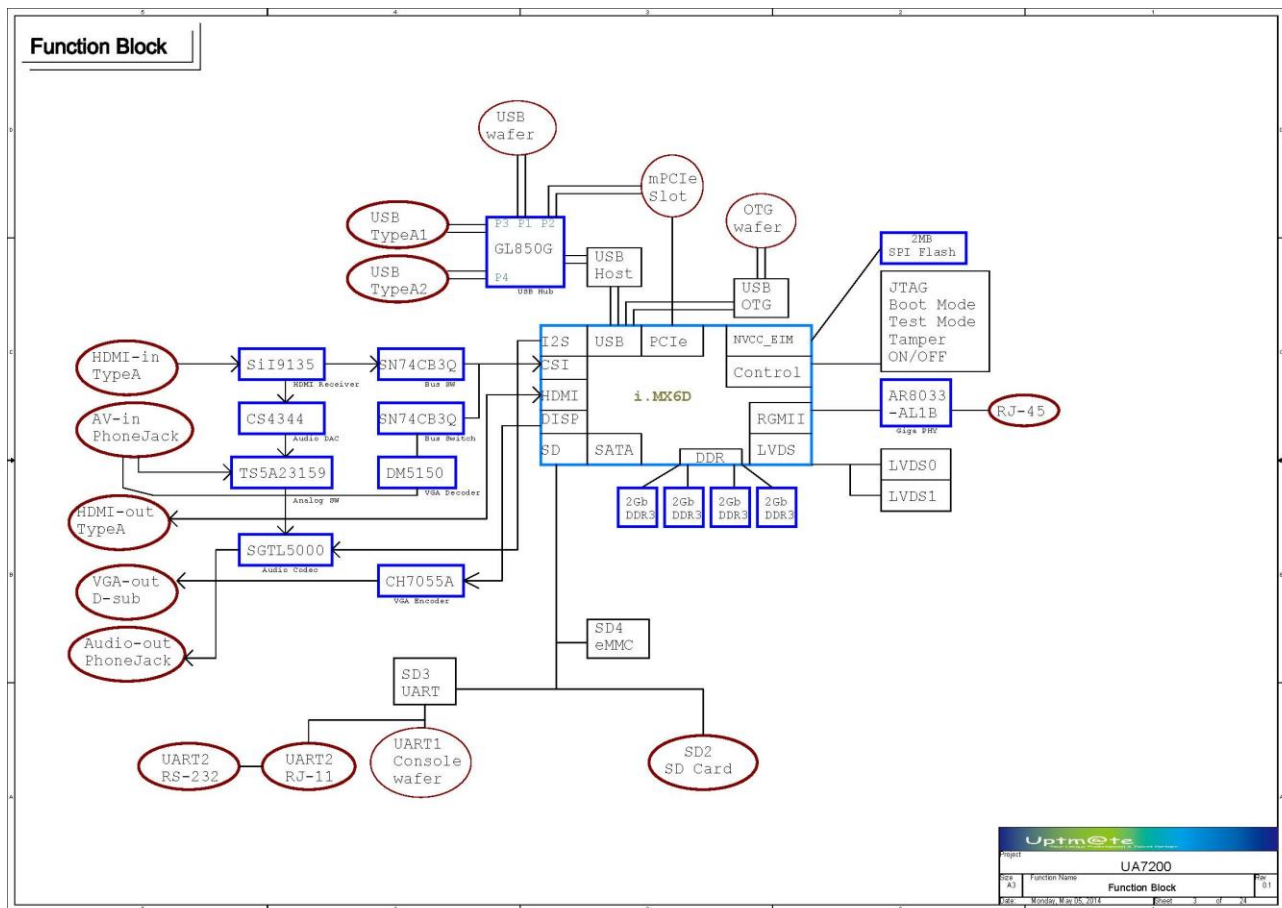
- Photo: JPEG(67MPixel), TIFF, BMP, GIF, PNG
- Audio: MP3, OGG, WMA, AAC, ADPCM, AMR
- Video: MPEG1, MPEG2, MPEG4 SP/ASP, Divx 4.x/5.x/6.x, Xvid, M-JPEG, WMV, H.263, H.264, VC1
- Video file extension for instance: avi, asf, mp4, 3GP, dat, vob, mpg
(It must depend on the actual format which encodes)

5. Main Controller and Key Components

- Media Processor : Freescale i.MX6 Dual
- Memory Card I/F : SD (SDXC)
- USB 2.0
- RTC battery: CR2032

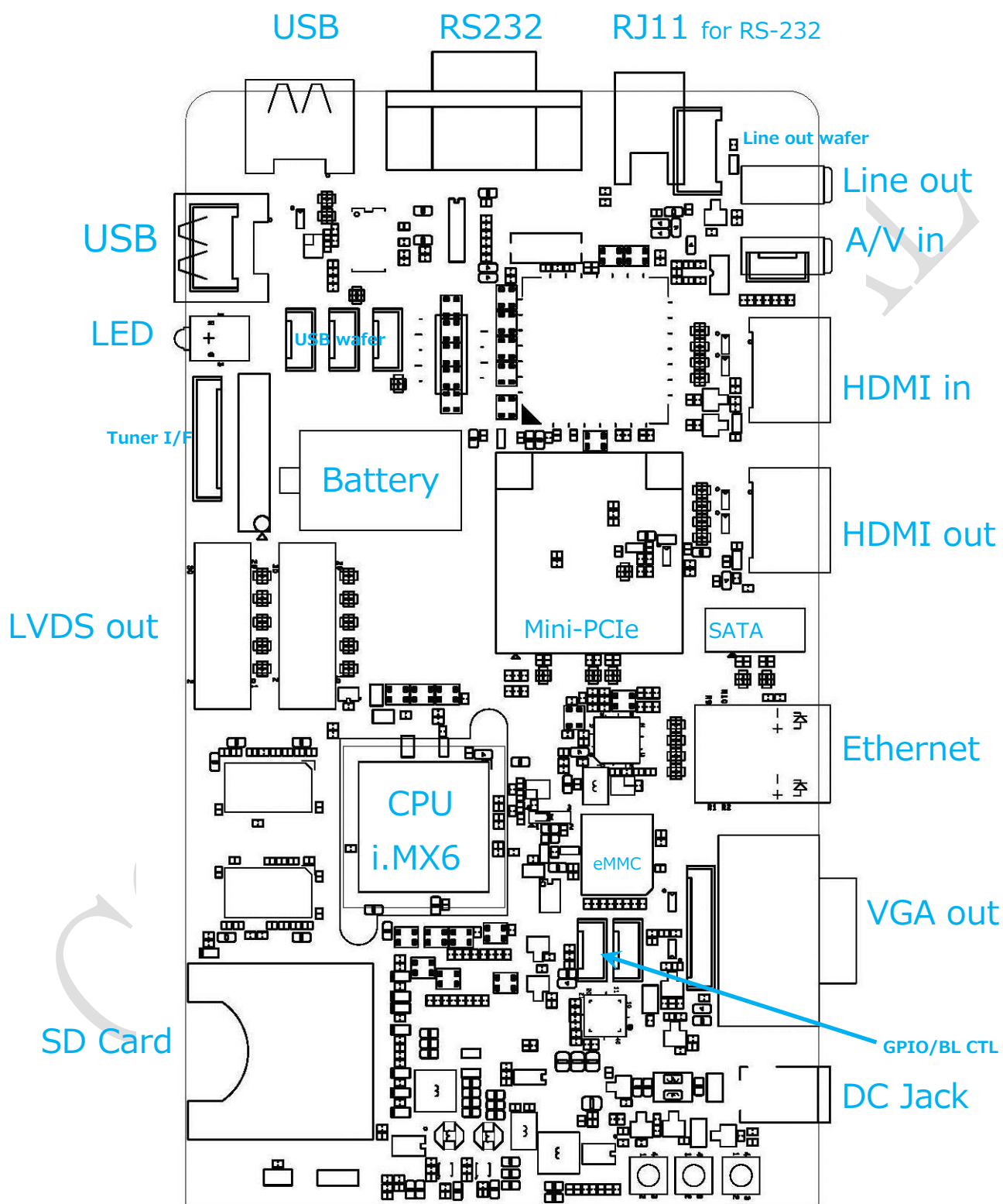
6. Hardware Architecture

➤ Block Diagram



7. Layout:

- Main Board Drawing (Dimension 180*102 mm)



Interface Overview

■ Main Board

Components	Function Descriptions
J1	Power Input (12V/DC Jack)
JP3	Power On Jumper(Internal)
JP1	Boot Setting Jumper(SD or SPI)
J22	USB Host/OTG (Wafer)
J17	USB Host (Wafer)
J20(J25)	USB External #1
J21(J25)	USB External #2
J16	Ethernet(RJ45)
J13(J3)	A/V in (Phone Jack - CVBS & Audio in)
J27	Line out (Wafer 6P)
J14	Line out (Phone Jack)
J24	VGA Out (D-Sub15)
J26	VGA Out (Wafer)
J6	Tuner Interface (Wafer)
J8	LVDS out(Wafer 1 st)
J9	LVDS out(Wafer 2 nd)
SW2	Reset Botton(Internal)
SW4	Volume Up(Internal)
SW5	Volume Down(Internal)

CN3	RS-232 (D-Sub 9P)
JP4	FW update Jumper(Internal)
JP7	Mode(HDMI/AV input switch) Jumper(Internal)
J15	UART (Wafer)
CN5	UART (RJ11)
J4	SD Socket (SDXC)
J7	Mini-PCle Socket
J5	SATA II (7-pin w/ +5V)
J11	HDMI In(Socket 19P)
J10	HDMI Out(Socket 19P)
J23	Backlight control wafer(Internal)
D2	Power LED Indicator(Green/Red)
J12	GPIO Wafer(GPIO1~3)
BT1	Battery Holder(CR2032)

8. External Connectors

➤ J4 :Memory Card

- SD Card (SDXC)

➤ J20 & J21: USB 2.0

- USB 2.0 Host (Standard A type Female)

- J16: Ethernet (RJ45)
- J14 : Line out (ψ 3.5 mm Phone Jack)
- J24: VGA out(D-Sub 15 pin)
- J10: HDMI Out(HDMI V1.4 Compatible)
- J13(J3): A/V in (ψ 3.5 mm Phone Jack)
 - Composite(CVBS) input
 - Stereo Audio (R&L) input
- J11: HDMI In
- CN3: RS-232 (D-Sub9)
- CN5: UART (RJ11)
- J1:DC Jack (12V Power Jack with inner diameter = ψ 2.0 mm)
- J5: SATA II (7-pin)
- J7: Mini-PCle Socket (Embedded a Wifi module)
- BT1: RTC Battery Holder (CR2032)

9. Internal Connectors

➤ Analog Video Interface (VGA & Tuner)

J26: VGA Output (9 pin 2.0mm Wafer)

Pin 1: G

Pin 2: GND

Pin 3: R

Pin 4: GND

Pin 5: B

Pin 6: DDC_SCL

Pin 7: Vsync

Pin 8: Hsync

Pin 9: DDC_SDA

J6: Tuner Input (9 pin 2.0mm Wafer)

Pin 1: +5V Power Supply

Pin 2: +3.3V Power Supply

Pin 3: GND

Pin 4: Tuner_CVBS Input

Pin 5: GND

Pin 6: I2C_SCL

Pin 7: I2C_SDA

Pin 8: Tuner_RESET

Pin 9: Tuner_RF_SW

➤ Interface Audio Output

J3: Tuner Audio Input (4 pin 2.5mm Wafer)

Pin 1: Tuner_L_IN

Pin 2: GND

Pin 3: GND

Pin 4: Tuner_R_IN

J27: Audio Line Output (6pin 2.0mm Wafer)

Pin 1: Audio-L

Pin 2: GND

Pin 3: Audio-Amp-ON/FF

Pin 4: 12V power supply

Pin 5: GND

Pin 6: Audio-R

➤ Control & Command

J15: UART for Internal Control (4 pin 2.0mm Wafer)

Pin 1: GND

Pin 2: RX

Pin 3: TX

Pin 4: +3.3V Power Supply

J23: Backlight Control (4 pin 2.0mm Wafer)

Pin 1: +5V Power Supply (Optional)

Pin 2: On/OFF (CMOS 3.3V)

Pin 3: PWM output (CMOS 3.3V)

Pin 4: GND

J12: GPIO interface (4 pin 2.0mm Wafer)

Pin 1: GND

Pin 2: GPIO1 (Reserved)

Pin 3: GPIO2 (Reserved)

Pin 4: GPIO3 (Reserved)

➤ Internal USB (Reserved for WiFi Dongle or GPS)

J22: HOST/OTG (4pin 2.0mm Wafer)

Pin 1: GND

Pin 2: USB+

Pin 3: USB-

Pin 4: +5V Power Supply

J17: (4pin 2.0mm Wafer)

Pin 1: GND

Pin 2: USB+

Pin 3: USB-

Pin 4: +5V Power Supply

J25: (6pin 2.0mm Wafer/Optional)

Pin 1: +5V Power Supply

Pin 2: USB+

Pin 3: USB-

Pin 4: USB+

Pin 5: USB-

Pin 6: GND

➤ Digital Video Interface – LVDS

J8/J9: 2CH LVDS output

1	GND
2	NC
3	RXIN0-
4	GND
5	RXIN0+
6	GND
7	GND
8	GND
9	RXIN1-
10	GND
11	RXIN1+
12	GND
13	GND
14	GND
15	RXIN2-
16	GND
17	RXIN2+
18	GND
19	GND
20	GND
21	RXCLKIN-
22	VCC
23	RXCLKIN+
24	VCC
25	GND
26	VCC
27	RXIN3-
28	VCC
29	RXIN3+
30	VCC

10. Firmware Requirements

■ Firmware Upgrade

- SD
- USB Device

■ OSD

- *Uptmate* Standard UI
- Language
 - ◆ Android Multi-Language

■ Timer Function

- Standby Mode
- Auto Power On

■ USB/Memory Card Hot Plug

■ USB Auto Backup to SD Card

■ FW Upgrade Security Protection

■ Auto & Program Play

- Auto Play after Boot
- Program Play
 - ◆ PC Utility

11. Performance & Compatibility

■ Video Performance

- Refer to Freescale i.MX6

■ MPEG 4 Compatibility

- Refer to Freescale i.MX6

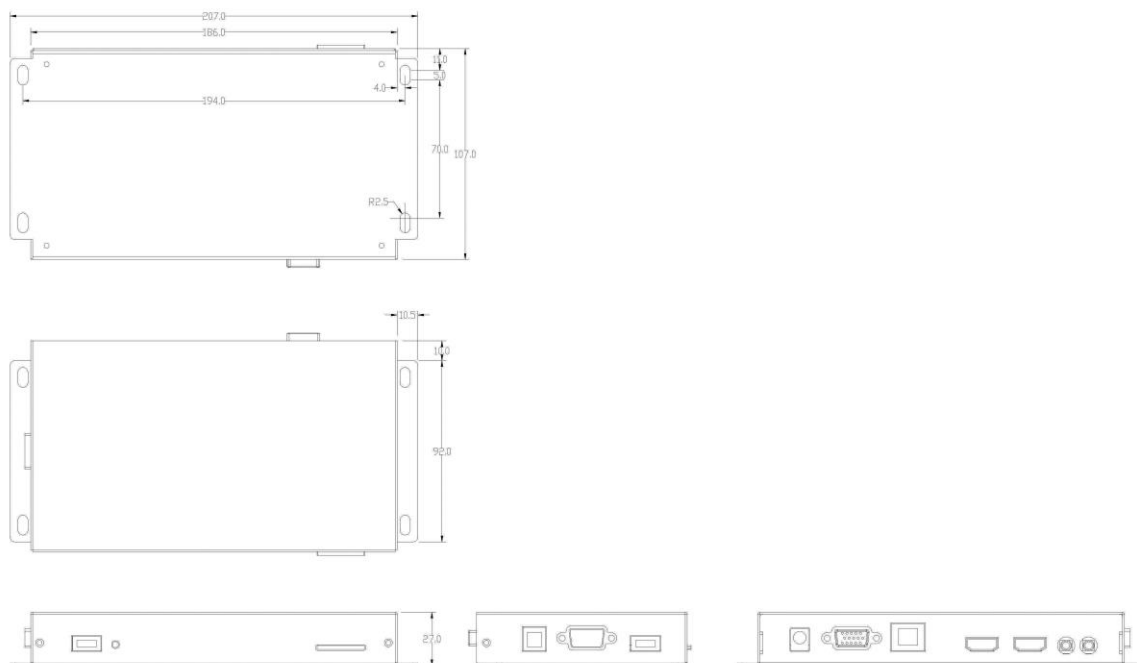
12. PCBA Dimensions (180mm*102mm)

13. Mechanical Drawing

- Dimension: 186mm(L) x 107mm(W) x 27mm(H)
- Material: Sheet Metal (1mm thickness)
- Weight: 0.6 kg
- Mounting Holes: 194mm*75mm (70mm (Min.) ~ 80mm (Max.))



■ Detailed Outline Dimensions:



14. Package

- Uptmate Standard Package w/ White Box
- Bulk Package in PCBA

15. Accessories (Optional)

- 12V/1.6A Power Adaptor