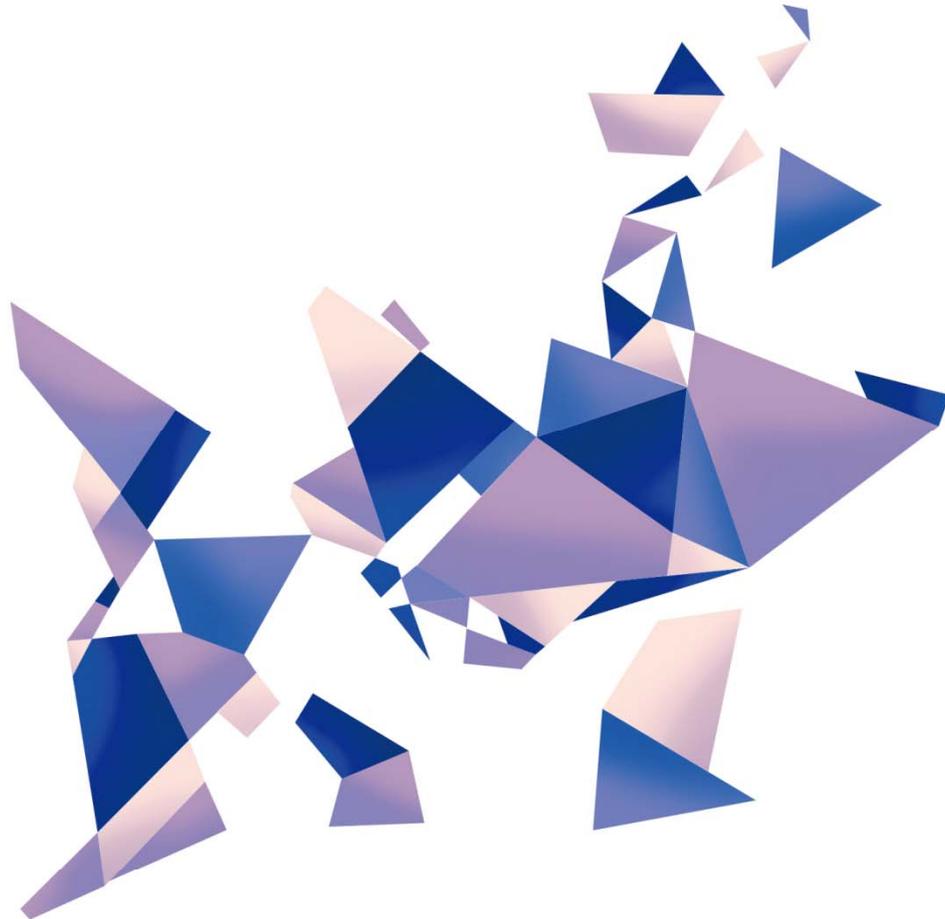


KPB12

Pandora series

Version: v2.0

release date: February 2023



Specification



TEL 400 159 0808
Web: www.kystar.com.cn

Beijing KYSTAR Technology Co., Ltd.

Professional Ultra HD Video Display
Control system integrated solution and service provider

Version record

Version number	Change details	Release time
V1.0	First release	2022.9.2
V1.1	Modify some parameters and add level networking interface	2022.11.2
V2.0	Update the picture of main board	2023.02.10

Pandora KPB12 Product Specification

Overview

KYSTAR Pandora KPB12 is a new generation of LED multimedia playback card that integrates sending card, receiving card and playback terminal; compared with the traditional synchronous playback solution, it can reduce the need for a computer playback terminal, and it is easy to control at any time. A receiving card can be directly connected to the screen; support functions such as 60Hz frame rate output, stable word movement and remote control of power supply

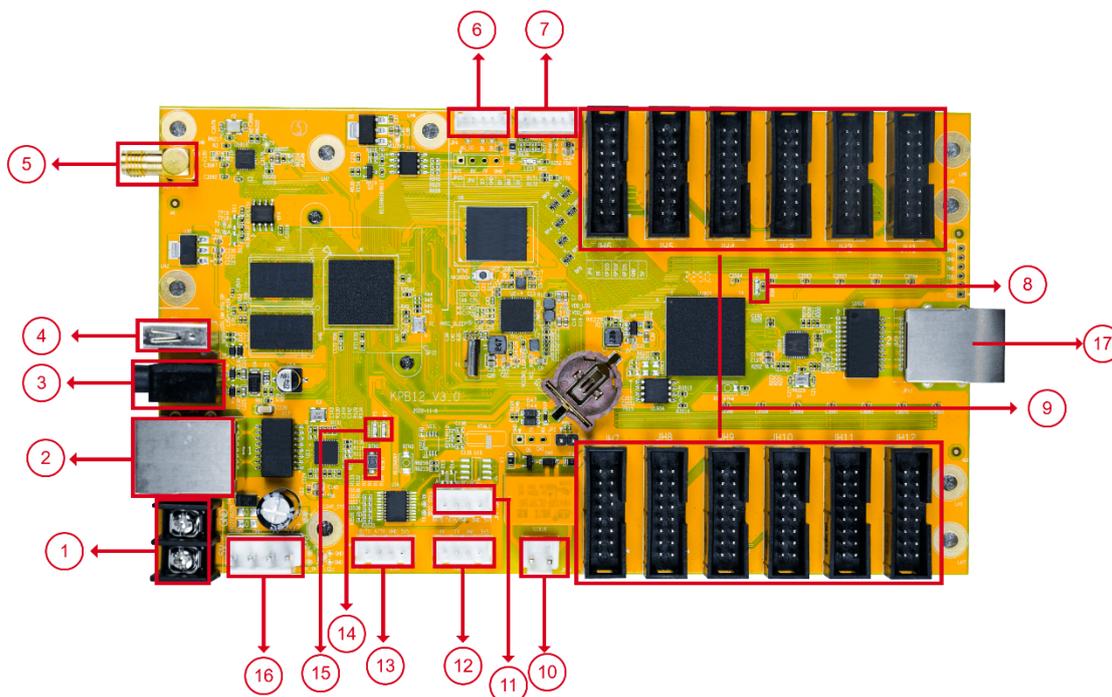
Widely used in advertising display fields such as light pole screen, door head screen, car screen and so on.



Features

- It comes with 12 pcs HUB75E ports, the single card carries 200000 pixels, supports level-connected card receiving, and the maximum load is 600000 pixels
- Support discounted playback , the maximum width is 16384 pixel, and the maximum is 8192 pixel
- WIFI, Ethernet port, U disk multiple communication methods
- Built-in 8GB (users can use 4G), support U disk expansion
- 3.5mm audio output, audio and video synchronization output
- Support high-definition video hard decoding, 60Hz frame rate output is stable
- support multiple windows and multiple materials to play on the screen at the same time
- One group of relay controllers is standard, which can remotely control the power supply.
- Support 4G access to the Internet (optional) , support Kares cloud publishing system
- Onboard brightness sensor interface, automatically adjust screen brightness according to ambient brightness
- Support secondary development and can meet the needs of various scenarios
- The new Kommander PE program editor, drag and drop operation, do what you want
- The concise APP fully controls screen adjustment, editing, and management, and you can play with the big screen at your fingertips.

Interface Description



SN	Name	Function Description
1	POWER	5V DV input ;
2	Input network port	Connect to a debugging computer for debugging or publishing programs; LAN/Internet network connection Port
3	Audio output	3.5mm audio output
4	USB port	USB2.0 *1, update programs through U disk, expand storage space
5	WIFI	Wifi Antenna interface
6	4G interface	4G module can be externally connected to provide control card networking (4G module optional)
7	Relay external expansion interface	Relay external expansion interface
8	Receiving card indicator	Always on: normal work Flashing: in program B Off: working abnormally
9	HUB75E interface	It is connected to the module by flat cable
10	Relay control interface	The power interface of the relay can control the external power switch DC: maximum voltage 30V, maximum current 3A AC: maximum voltage 250V, maximum current 3A Note: It is recommended to use DC power, and it is not recommended that relays directly control AC power. If you need to control AC power, it is recommended to use the wiring method shown in the figure below

11	RS485(Temperature and humidity sensor interface)	External temperature and humidity sensor module (module is an optional)
12	RS232 (GPS interface)	External GPS module (module is an optional device)
13	RS485 (Brightness sensor interface)	External brightness sensor module (module is an optional device)
14	RESET	Restore factory settings, long press for 5 seconds to take effect
15	indicator light	<p>SYS running status indicator</p> <p>The system and app start normally, and the sys is always on;</p> <p>When the player app is abnormal, sys flashes once per second</p> <p>System upgrade process, sys flashes rapidly, 4 times per second</p> <p>NET connection status indicator</p> <p>When the client is connected, the NET light will be on, otherwise it will not be on;</p> <p>When connecting to the cloud platform, NET flashes once per second;</p> <p>Upload program, NET flashes fast, 4 times per second</p>
16	Anti-freeze power port	5V DC power interface, with foolproof design, works with 1's 5V DC binding post can be the same
17	Ethernet port	Output to the next receiving card

Specifications

External interface type	
Audio output port*1	1/8" (3.5mm) TRS plug output
USB2.0*1	Support storage expansion (U disk or SD card, up to 128G)
100m input network port *1	Access LAN, cluster control
WIFI	WiFi AP+STA dual WiFi mode, which can be used as a hotspot for mobile phones and computers to connect
LIGHT(Optional)	The external brightness sensor controls the screen brightness according to the ambient brightness (the module needs to be purchased separately)
TEMP (Optional)	External temperature and humidity sensor to obtain ambient temperature and humidity (modules need to be purchased separately)
Relay (optional)	It can be used to control the external power switch (the module needs to be purchased separately)
4G (optional)	Access to Wan (modules need to be purchased separately)
GPS (optional)	Precise positioning, precise timing, multi screen synchronization (modules need to be purchased separately)
DC Power input	DC 5V/2A power supply

Performance parameter	
Hardware performance	1.6GH, quad core CPU, 3D GPU 1GB@600MHz DDR3 high speed memory Support 1080p@60fps Hard decoding playback Support 1080p@30fps Hardware coding
Storage	Built in 8GB storage (5 g for users)
Load	With 12 hub75E interfaces, the whole machine carries 25W points, with a maximum width of 1920 and a maximum of 1080
WiFi connection distance	20 m (unobstructed)

Support multimedia format	
Video format	AVI,WMV,MPG, RM/RMVB, VOB,MP4,FLV and other common video formats ; It can support multiple videos playing at the same time
Audio format	MPEG-1 Layer III , AAC etc
Picture format	Support bmp、 jpg、 png etc
Text form	Single line text, static text, multi line rolling text, office, etc
Clock	Real time clock, multi region clock display and management
OSD	It supports 32bit really color OSD, can be displayed in any position, supports video / text mixing, and can overly picture and text on video.

