

Small Size Microcontroller Card

KD04

Specification

Statement

Dear user friend, thanks for choosing SHENZHEN SYSOLUTION TECHNOLOGY CO.,LTD (hereinafter referred to as Sysolution) as your LED advertising equipment control system. The main purpose of this document is to help you quickly understand and use the product. We strive to be precise and reliable when writing the document, and the content may be modified or changed at any time without notice.

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Update Record

No.	Version	Updates	Revision Date
1	V1.0	Initial Release	2024.04.03

The document is subject to change without prior notice.

Product Introduction

KD04 is a traffic signal screen controller developed by Sysolution company. It supports 3-channel 220V traffic light signal access and 1 group of straight ahead signal, mostly used for pedestrian crossing.

Product features

Rich interface. On board 2 groups of T12+1 group of T75, support horizontal screen vertical connection (Z-wire connection) function, can expand screen height pixels. Standard WiFi+RS485+RS232+Bluetooth communication interfaces on board; optional 100M network port. Support Chinese and English voice broadcasting function to meet the project voice requirements. On-board brightness sensor interface, support automatic brightness adjustment and time schedule brightness adjustment;

Support horizontal screen vertical connection. Support conventional linear wiring, also support the wire connection in vertical way, to achieve the expansion of the LED display height pixels by software configuration, the maximum load height is 768 pixels for RGB, single and dual-color 384 pixels. The alignment of vertical connection is Z-type alignment (snake alignment), more flexible to put the led modules together.

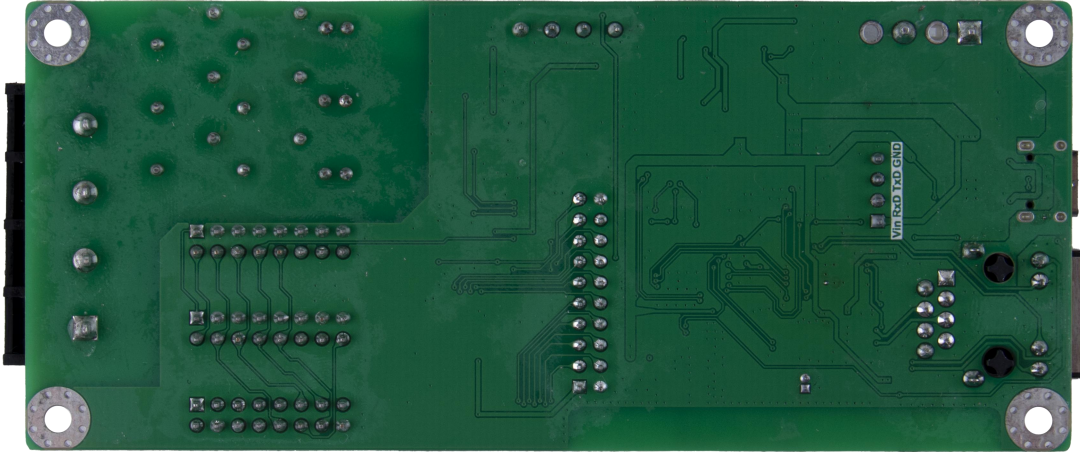
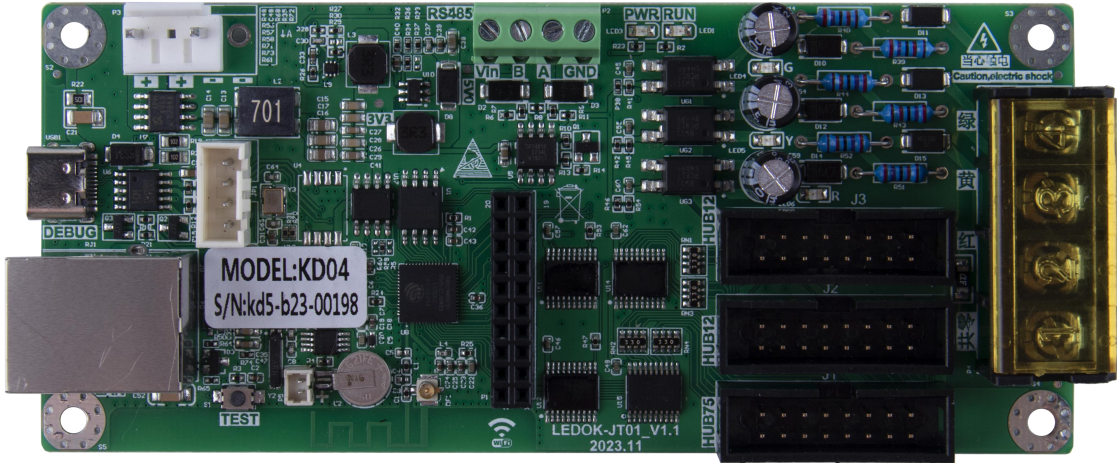
Support intelligent tracing point. Conveniently adapts to various special LED modules and full-color LED modules.

Two types of system accessing modes. Directly connect to 220V traffic light signals through the special signal light interface, automatically following the traffic light changes and switch the corresponding LED information display. Plug in and use, eliminating the development of

communication protocols with various traffic signaling machines; connect to the traffic signaling machine through the 100M network port or RS485 interface, adapt to the communication protocols, and receive instructions from the signaling machine to switch the corresponding LED information display.

Countdown Timer. Combined with the cell phone APP I LED's (iOS and Android phones are supported) traffic program configuration function, the controller can be connected with the traffic light hardware interface to receive the signal to switch the LED screen program and light strip color, also support the time countdown to remind pedestrians when crossing the road.

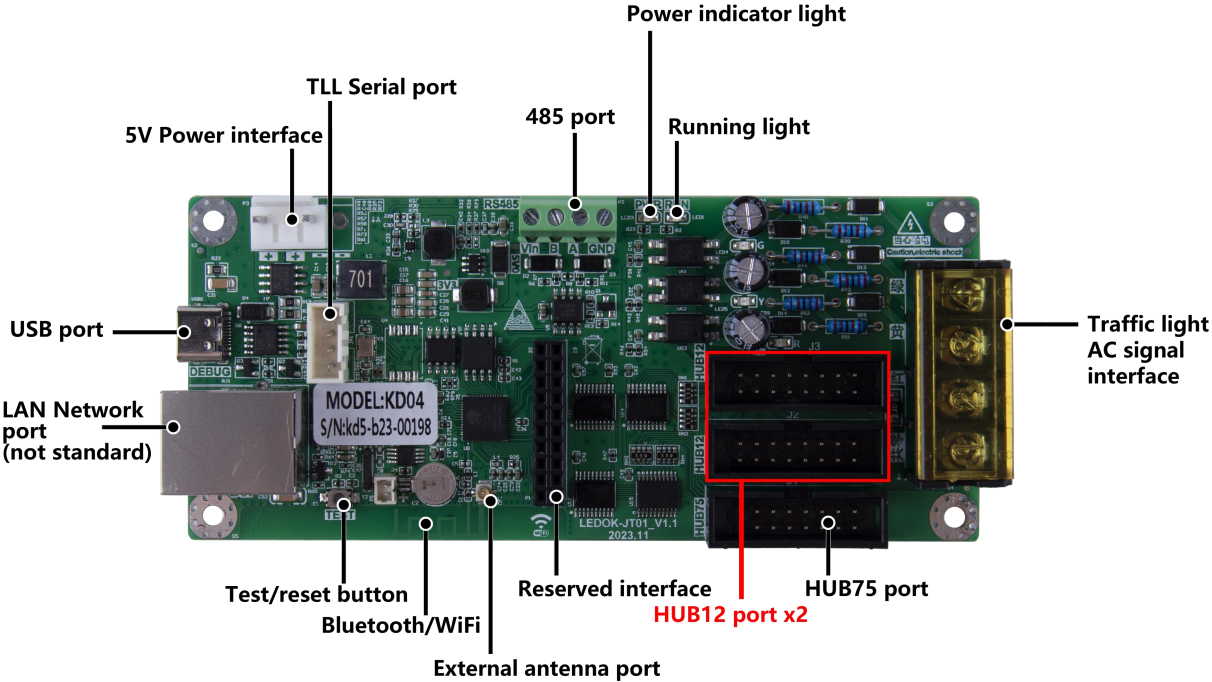
Product Picture



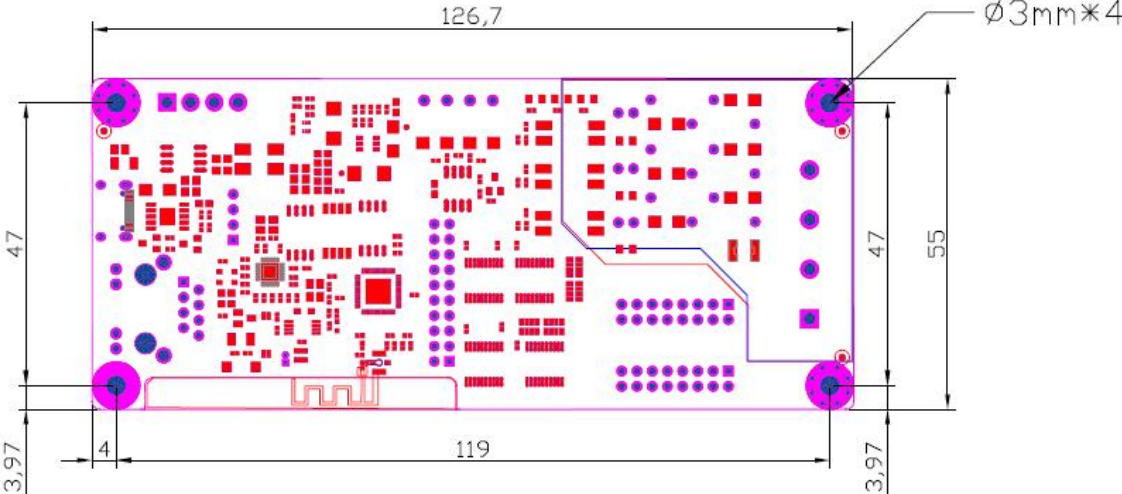
Product Parameter

Mode	Parameter
Loading capacity	Single/double/triple color 32000 pixels, width ≤ 2048
storage capacity	4MByte
Adaptation range	Single, dual and tri-color LED displays in a variety of sizes
Number of programs	Supports 128 programs, each divided into 24 zones
communication interface	On-board Bluetooth+RS232+RS485+USB+WiFi interfaces; optional network port, support mobile APP
display interface	2 groups of T12+1 group of T75, support horizontal and vertical connection (Z-connection) function, expand led screen in height pixels
Signal light interface	Support 3-way 220V traffic light signal access, support 1 group of straight signal, mostly used for pedestrian crossing
Sensor Support	On-board brightness sensor interface, RS485 environment sensor interface, IR remote interface
Whole machine specification	
Input Power	5V (4.5V~12.5V wide operating voltage), please strictly guarantee the power quality of KD-JT series.
Power Consumption	≤2W
operating temperature	-40°C ~ 80°C
power Relay with load parameters	220V AC/30V DC , can go through 3A

Interface Layout



Dimensioned Drawing



Unit: mm

Note: This is the latest version of the drawing. As the controller may involve a number of transitional versions before finalization, individual cases may appear customers get the controller installation dimensions and interfaces slightly different from this picture, in kind shall prevail. Please understand!

Precautionary

1. The power supply of this product has an input voltage of 5V and a voltage range of 4.5V~12.5V, please strictly guarantee the quality of the power supply of KD04.
2. When you want to connect or unplug any signal or control cable, please make sure all power cables have been unplugged beforehand.
3. When you want to add hardware devices to this product or remove hardware devices from this product, please make sure that all signal and power cables have been unplugged beforehand.
4. Before performing any hardware operation, turn off the power of the control card and discharge the static electricity on your body by touching a grounded surface.
5. Please use it in a clean, dry and ventilated environment, do not put this product into high temperature, humidity and other environments.
6. This product is an electronic product, please keep it away from fire source, water source and flammable and explosive dangerous goods.
7. There are high-voltage parts inside the product, please do not open the chassis or repair the equipment by yourself.
8. If you find any smoke, odor or other abnormalities, please turn off the power switch immediately and contact your dealer.