



C10S

Receiving Card

Specification V4.0



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1 Update Records

File Version	Hardware Version	Release Time	Update Records
V4.0	C10S (V4.0)	2025-11-19	First Time

2 Product Introduction

The C10S is an independently developed ultra-compact receiving card supporting 100Mbps bidirectional communication and monitoring system status functions, with a maximum load capacity of 1024 pixels. Featuring powerful processing capabilities, exceptional stability, and outstanding cost-effectiveness, it quickly gains user favor. It is widely applicable in building illumination LED strip screen projects or scenarios with stringent space constraints.

3 Product Features

3.1 Product Function

- Features bidirectional communication capabilities, supporting online upgrades, status readback, and automatic restart after upgrades without power interruption.
- Supports brightness calibration, chromaticity calibration, and rapid calibration.
- Incorporates secure upgrade functionality with separation of bootloader and application programs.
- Utilizes a next-generation image processing core for significantly enhanced display performance.
- Strong LED driver chip compatibility, fully supporting all LED driver chips.
- Supports arbitrary position offset for individual cards and content rotation per card, enabling irregularly shaped screens.
- Reduces cable and connector usage, simplifying LED display structure design. Signal transmission requires only 4-core Category 5e twisted pair cable.

3.2 Display Effects

- Low Latency. Reduces video source delay at the receiver card, achieving latency as low as 1 frame (for light boards using driver ICs with built-in RAM).
- Independent RGB Gamma Adjustment. When paired with independent controllers and software supporting separate RGB gamma adjustment, it effectively controls issues like low-gray unevenness and white balance drift by adjusting “Red,” “Green,” and “Blue” individually, delivering more realistic visuals.
- Multiple Display Effect Solutions. Achieves refresh-priority and grayscale-priority effects when paired with AutoLED3.xxx.xxx or higher software.
- 90° Multiplier Screen Rotation. Achieves 90° multiplier screen rotation (0°, 90°, 180°, 270°) when paired with AutoLED3.xxx.xxx or higher software.

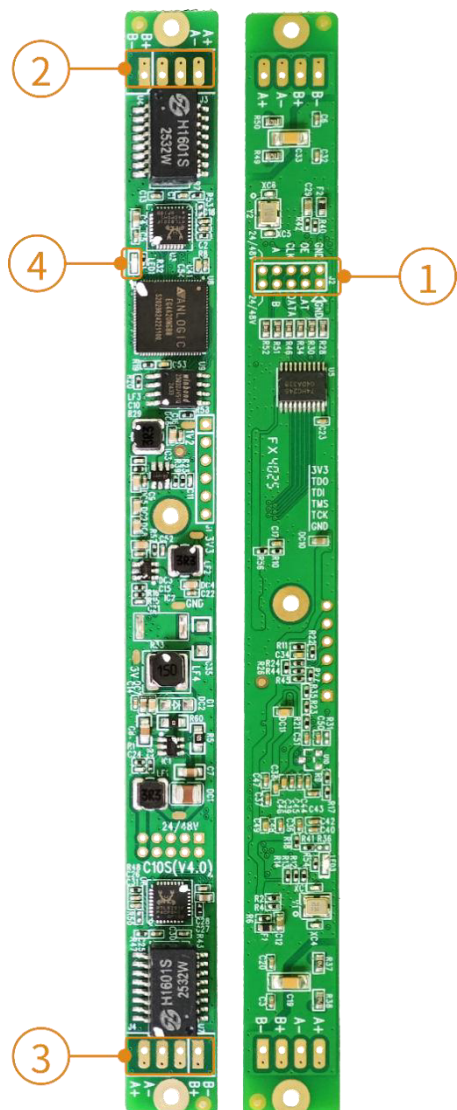
3.3 operational feasibility

- Customizable Data Interface. Compatible with AutoLED 3.xxx.xxx or higher software, enabling detection and editing of receiver card output data.
- Construct Complex Modules. Within the advanced layout feature of AutoLED3.xxx.xxx or later software, modules can be rapidly arranged and constructed in any configuration.
- Construct Complex Displays. Within the complex display connection feature of AutoLED3.xxx.xxx or later software, modules can be rapidly arranged and constructed in any configuration.

3.4 Hardware Stability

- Loop Backup. Network ports are connected via primary and backup cables in a loop configuration to enhance the reliability of serial-connected display cards. Within the primary-backup serial circuit, should one cable fail, the other ensures uninterrupted display operation.

4 Product Appearance



Product photos are for reference only. Actual product may vary.

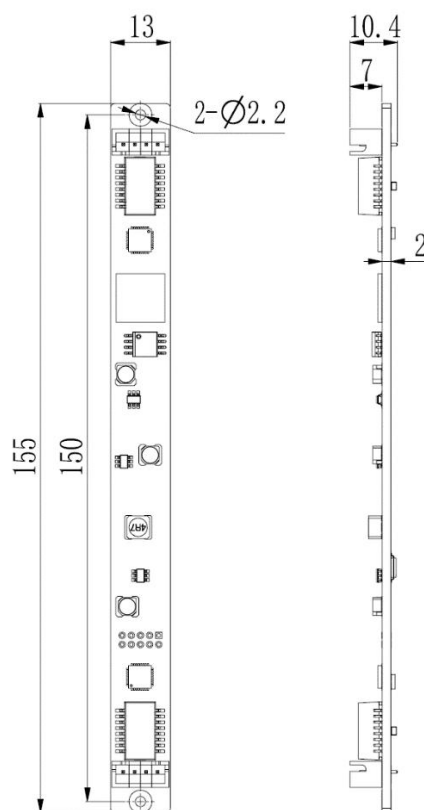
4.1 Data Interface Illustrations

#	Position	Illustration
1	J2	Signal interface for output to display, featuring a 24–48V power supply interface
2	JP1	100Mbps signal input TX interface, signal input from splitter SH100
3	JP2	100Mbps signal output RX interface, cascaded output to the next receiver card
4	D1	Status indicator

4.2 Indicator Illustration

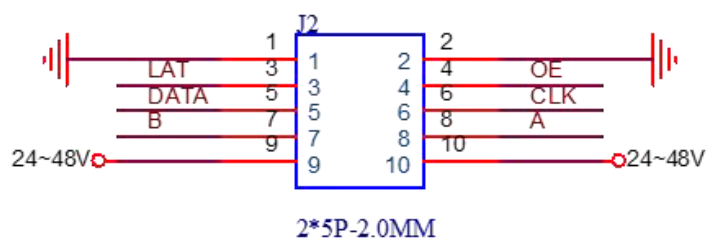
Indicator	Position	Status	Illustration
Status Indicator (Green)	D1	Uniform slow flash	The receiver card is functioning normally, and the network cable is properly connected.
		Uniform fast flash	No DVI signal input.
		Constant off	The receiver card is functioning normally, and the network cable is properly connected.
		4-second interval with 2 fast flashes	DVI signal input present.
Status Indicator (Red)	D2	Constant on	No network signal.

4.3 Dimension


Tolerance: ± 0.3 Size: mm

4.4 Output Interface Illustration

Interface Definition



JP2 Interface Definition

Illustration	Definition	Pin	Pin	Definition	Illustration
Ground	GND	1	2	GND	Ground
Latch signal	LE	3	4	OE	Display Enable
Serial data	DATA	5	6	CLK	Serial Clock
Row decode signal	B	7	8	A	Row Decoder Signal
24~48V	VCC	9	10	VCC	24~48V

5 Product Specification

5.1 Basic Parameter

Serial (RGB)/Parallel	Maximum Load Capacity (Pixels)	Brightness Calibration with Load (Pixels)	Color calibration with load (pixels)
1 Group	1024	1024	1024
Number of Cascade Cards		Supports scanning rows	
≤256PCS		1-4 Line	

5.2 Specification

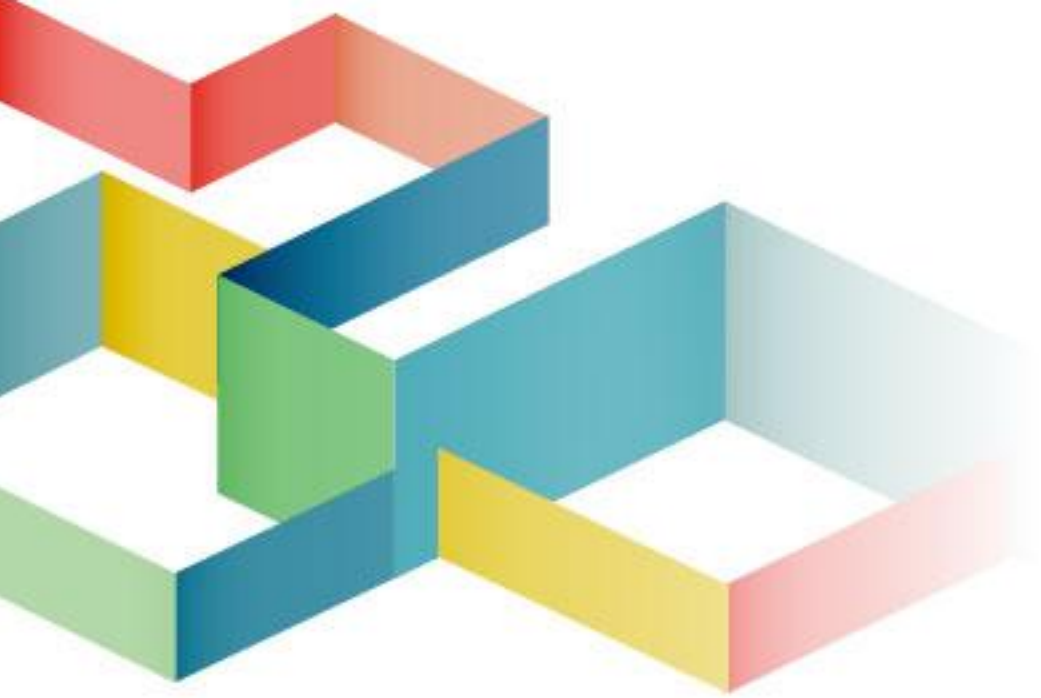
Electrical Parameters	Input Voltage	24~48V
	Rated Current	0.03mA

	Rated Power	1.5W
Operating Environment	Operating Temperature	-20°C - 70°C
	Operating Humidity	10%RH-90%RH
Storage Environment	Temperature	-25°C~125°C
Board Dimensions	155mmX13mm	
Net Weight	14g Note: Weight per sheet	
Outer Packaging Dimensions	490×335×120mm	
Gross Weight	2.52kg Note: Includes cables and accessories (packaged weight)	
Packaging Method	100 PCS/Carton	
Certification Information	Complies with RoHS standards, complies with CE-EMC standards	

*Current consumption and power usage may vary depending on factors such as product usage, environment, and settings.

6 Precautions

- The installation process must be completed by professionals.
- Must be antistatic.
- Please pay attention to waterproof and dust removal.



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