



A308 Receiving Card

Specification V3.5

Shenzhen Mooncell Electronics Co., Ltd

1 Product Overview

Product Introduction

A308 is a receiving card that fully researched and developed by Mooncell; it adopted 8x HUB320(26 PIN) interfaces; it can supports the maximum 32 groups of the parallel connection data;the maximum loading capacity could reach up to 512*384 pixels; with strong processing ability, supper reliability and high competitive price.

Application Scenarios

It could be widely used for high-end LED display area that requires high standards; and has significant advantages in application scenarios such as led rental display, TV Broadcast, LED display for respectable Event,High-end project,etc.

2 Function Introduction

Displaying Effect

It supports pixel level brightness and Chroma Calibration	Using it with the Mooncell Calibration Software to calibrate each one of the pixels on its brightness and Chroma. It can effectively eliminate the Chromatic aberration so as to enhance its consistency of the brightness and Chroma to a high level and result in a better displayed effects.
Multiple Solutions of the Displayed Effects are Supported	Using it with Monncell AutoLED Software, the Refresh and Grey Scale performances are able to take the precedence over other settings.
The Images on the led screen can be rotated 90 degree in a factor of multiple times	Using it with Mooncell AutoLED Software.
The images can be zoomed in or out	Using it with Mooncell AutoLED
Support low brightness and high gray (18bit +)	Improve the effect of low gray display, smoother screen transition
Support low latency	Support low-delay control and display of the receiving card, that is, on the basis of using the sending card, the time delay between the output of the signal source and the display of the light board is 2 frames
Support RGB standalone gamma	Can independently customize the GAMMA value of RGB

Enhanced Operability:

The Receiving Card is Supported to detect its own Sequence number	Using the Network Port testing function on Mooncell AutoLED Software, the receiving card serial number and the Network Port Information will be displayed on the target cabinet. Users will be able to get to know the locations of the receiving cards as well as its Connection diagram.
Data Port User-Defined is supported	Using it with the Mooncell AutoLED Software, you can detect and edit the output data of the receiving cards.
To build up a complicated cabinet is supported	On AutoLED Software, there is an 'Advanced Setting', from here you can quickly arrange or structure the modules at your option.
To structure a complicated Led Screen is supported	On AutoLED Software, there is a "Complicated Led Screen Connection", from here you can quickly arrange or structure the cabinet modules on your option.

Hardware Stability

Ethernet Cable Backup(Hot Backup)	The main cable will be having the loop connection. If there's one cable breaks then still there will have another one to make sure the led display work properly.
	Dual receiving cards backup is supported(Dual Circuit backup design) Customized :when the main working receiving card fails, the other one (backup) will take its job to keep the led display working properly.
It supports to detect the voltage(customized)	It will detects the voltage status of the receiving cards.

It supports to detect the temperature(customized)	The operating temperature of the receiving cards could be detected.
It supports to detect the power status(customized)	The power status of the power supplies could be detected.

Smart Software and Hardware Stability

The receiving card can read the configuration data back from where it has been stored	You will be able to do this on Mooncell AutoLED Software.
It supports to detect the error rates of the network cable	On the Mooncell AutoLED Software, you can detect the network cable connectivity in real time to tell the condition of the network cables, so that you can get rid of any errors immediately.
Communication Monitoring Function	On Mooncell AutoLED Software, you can monitor the Working Status of the receiving cards in real time.

Extended functionality (customization)

Record of power-up times	Record the number of times the receivingcard has been powered up, cumulative calculation
Running time record	Record the running time of the receiving card, and the software can view the time record.
LCD screen	Support box LCD liquid crystal display, used to display the temperature, voltage, single run time and total run time of the receiver card.

3 Product Parameters

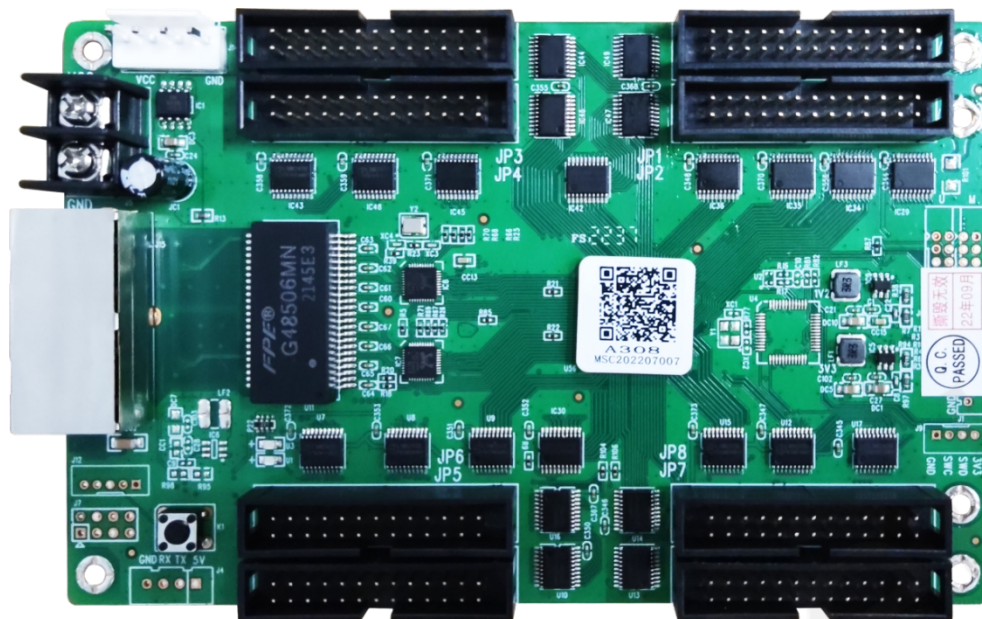
Basic information

RGB Parallel	Data Ports/ Interfaces/ QTY	Driver IC	The Maximum Loading Capacity (Pixels)	Loading Capacity After lightness Calibrating (Pixels)	Loading Capacity after Color Calibrating (Pixels)
24 Groups	HUB320/8	Conventional	512*384	512*384	480*160
		PWM	512*512	512*384	480*160

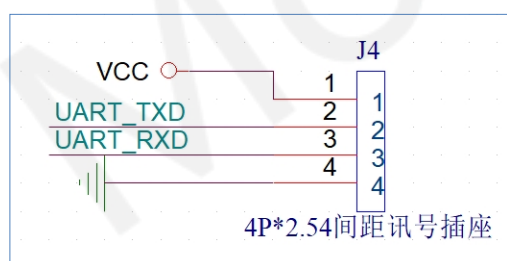
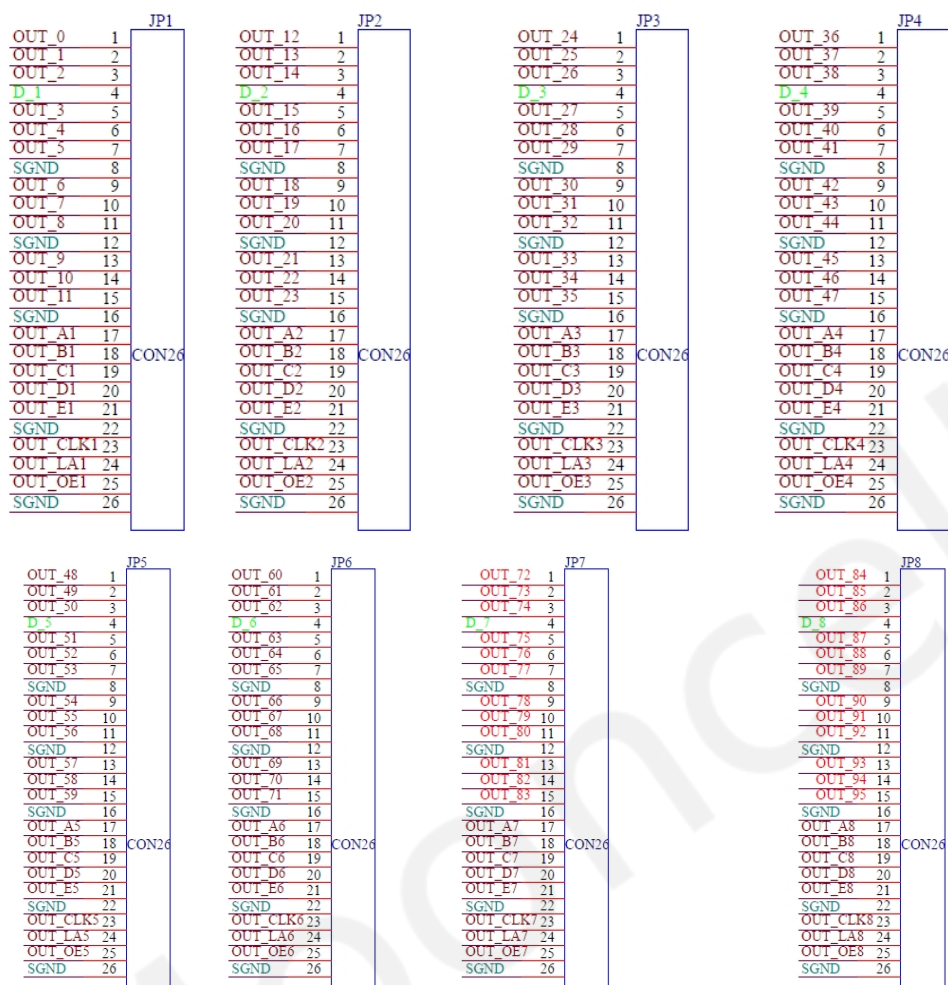
Basic Parameters

Single Network Pot Cascading Quantity	Scanning Lines Supported		
≤1000PCS	1-64 Scan		

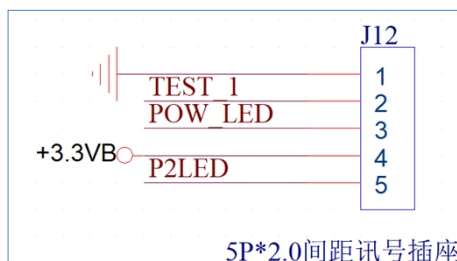
Product Appearance:



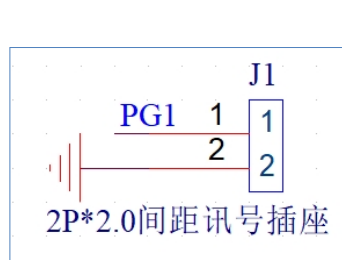
32 Groups of Parallel Data PIN Definition:



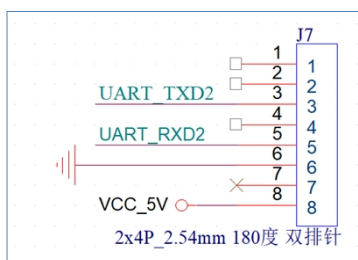
Serial interface



External indicator light, button interface



Power detection interface



External LCD interface

Definition	Pin	pin	Illustration
R	1	2	G
B	3	4	GND
R	5	6	G
B	7	8	GND
R	9	10	G
B	11	12	GND
R	13	14	G
B	15	16	GND
OUT_A1 17	18	18	OUT_LA1
OUT_C1 19	20	20	OUT_D1
OUT_E1 21	22	22	GND
OUT_CLK1	23	24	OUT_LA1
OUT_OE1	25	26	GND

JP1-JP8 Pin Definition

Indicator Illustration

Indicator	Position	Status	Illustration
Status Indicator (Green)	U1	Flickering Slowly at a constant speed	The receiving card is working properly, The Ethernet Cable Connection is fine, No DVI Signal
		Flickering Fast at a constant speed	The receiving card is working properly, The Ethernet Cable Connection is fine, with DVI Signal
		It goes out	No Gigabit Ethernet Signal
		Fast Flickering 3 Tunes	The receiving card is working properly, The Ethernet Cable Loop Connection is fine, DVI Signal Input

Status Indicator	U3	Long Lasting On	Power is On
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4 Product Specifications

Specifications

Electric Parameters	Input Voltage	DC3.5-5.5V
	Rated Current	0.6A
	Rated Power	3W
Operating Environment	Operating Temperature	-20℃ - 70℃
	Operating Humidity	10%RH-90%RH
Storage Environment	Temperature	-25℃~125℃
Dimensions	144.02mmX91.19mm	
Net Weight	99.5g	
Certifications	It conforms to RoHS and CE-EMC standards.	

Attentions:

- 1. The testing (debugging) and installation should be done by the qualified professionals**
- 2. Anti-Static, Water-Proof and Dust-Proof Required**