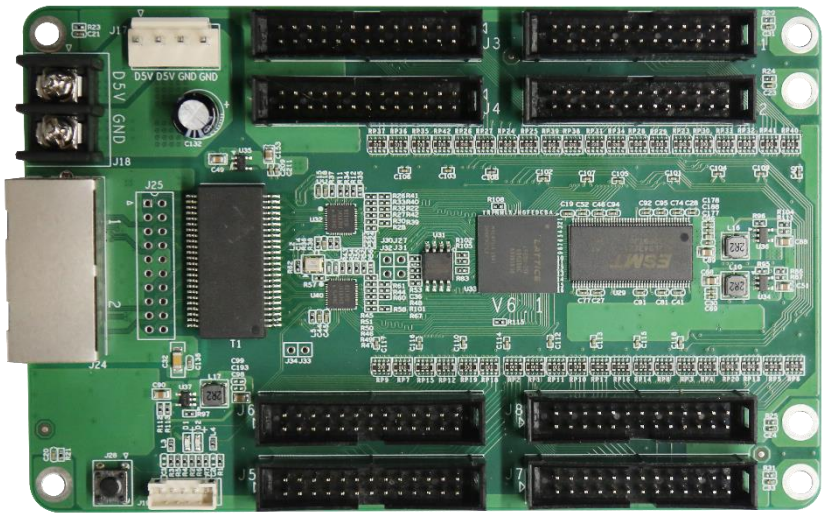
Colorlight

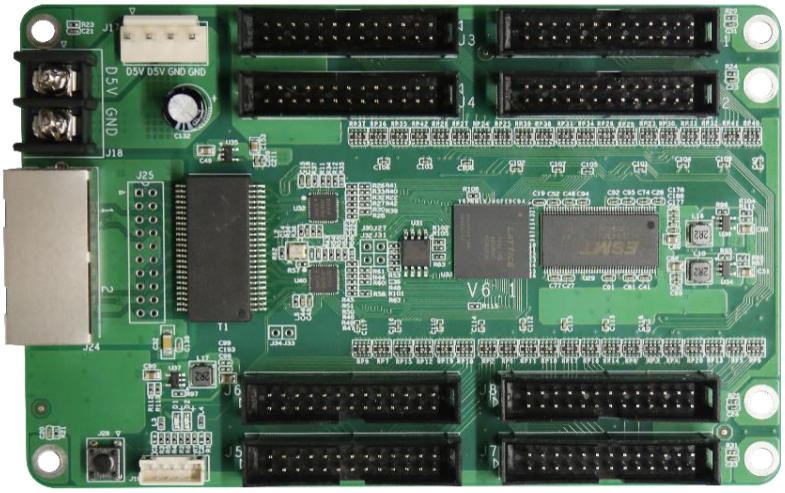


E320 Receiving Card

Specification

Colorlight (Shenzhen) Cloud Technology Co., Ltd.

E320 Receiving Card



Features

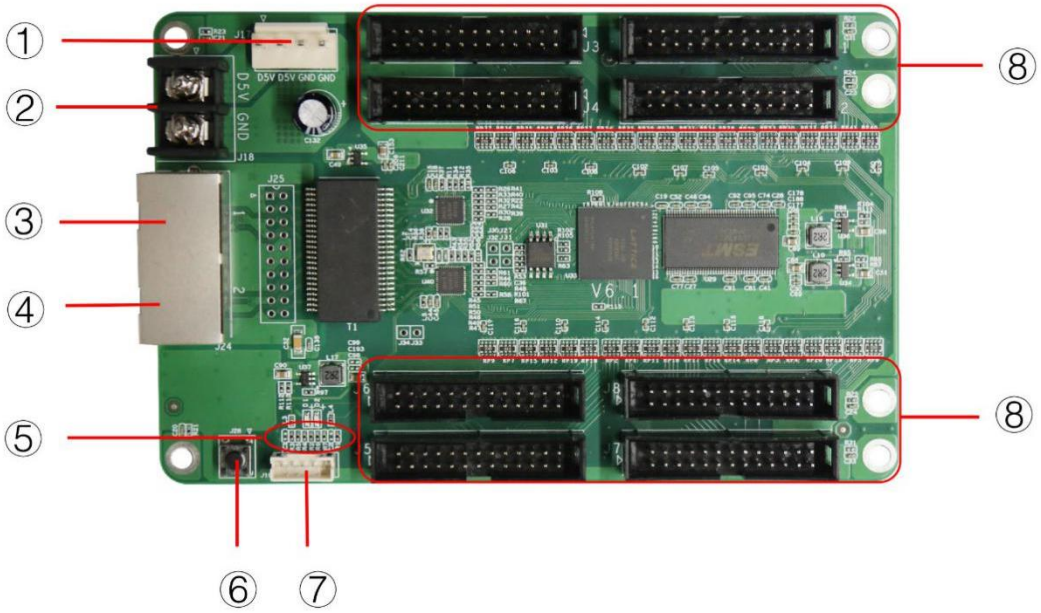
- Supports 32 groups of RGB signal output
- Loading capacity: 512×384 pixels
- Support brightness and chromaticity point-by-point calibration
- Supports better gray at low brightness and color temperature adjustment
- Supports seam compensation
- Supports any pumping row and pumping column
- Fast upgrades and fast sending out calibration coefficients
- Supports network cable status monitoring
- Supports any scan mode from static to 64 scan，and supports decoding IC like 74HC595
- Supports any pumping point and data arbitrary offset and realize various free-form display, spherical display, creative display, etc.
- Wide working voltage range with DC 3.3~6V
- Compatible with all series of Colorlight's sending devices

Specifications

Control System Parameters	
Sending device	All series of Colorlight's sending devices
Control area of every card	Full-color: 521×384 pixels
Control area of cascading	65536×65536 pixels
Network port exchange	Supported, arbitrary use
Gray level	Maximum 65536 levels
Display Module Compatibility	
Chip supports	Supports conventional chips, PWM chips, lighting chips and other mainstream chips
Scan mode	Two scanning methods to support refresh rate multiplier
Scan type	Supports any scan mode from static to 64 scans
Module Specifications	Support 8192 pixels within any row, any column
The direction of the cable	Supports route from left to right, from right to left, from top to bottom, from bottom to top.
Data Groups	32 sets of parallel RGB full color data, 32 sets of serial RGB data
Data folded	Supports 1~8 any discount to improve refresh rate
Data exchange	32 data groups for any exchange
Module snapshot	Supports any pumping point
Interface Type and Physical Parameters	
Communication distance	UTP cable≤140m CAT6 cable≤170m Optic fiber transmission distance unrestricted
Compatible with transmission equipment	Gigabit switch, fiber converter, optical switches
Size	143.64mm×91.69mm
Input voltage	DC 3.3V~6V
Rated current	0.6A
Rated power consumption	3W
Storage and transport temperature	-50℃~125℃
Operating Temperature	-25℃~75℃
Body static resistance	2KV

Weight	100g
Pixel level Calibration	
Brightness Calibration	Supported
Chromaticity Calibration	Supported
Other Features	
Hot backup	Supports loop backup, double sending card backup and seamless switching
Shaped screen	Supports various free-form display, spherical display, creative display, etc. through the data arbitrary offset

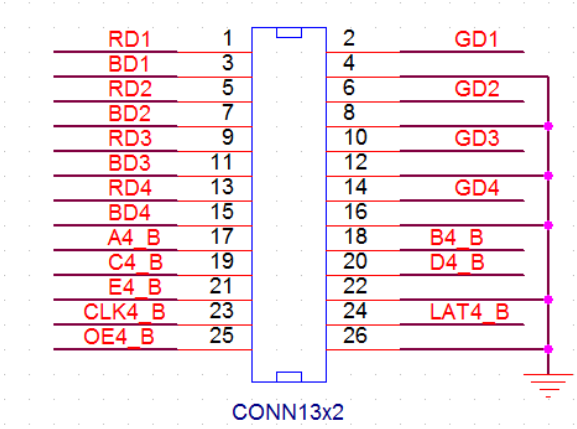
Hardware



1. Interface

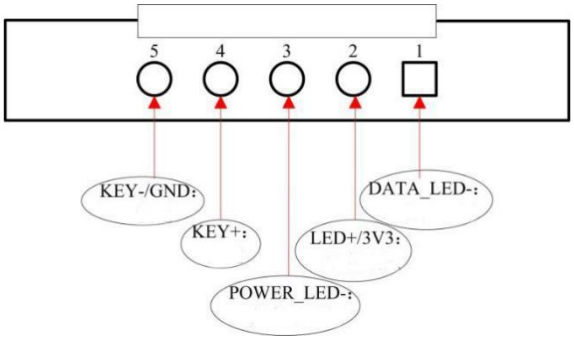
S/N	Name	Function	Remarks
1	Power 1	Connect DC 3.3～6V power supply for the receiving card	Only one is used.
2	Power 2	Connect DC 3.3～6V power supply for the receiving card	
3	Network port A	RJ45，for transmitting data signals	The dual network ports can achieve import/export at random, which can be identified in an intelligent way by the system.
4	Network port B	RJ45，for transmitting data signals	
5	Power/Signal indicator light	D1: power indicator light D2: signal indicator light	Red light: power Green light: signal
6	Test button	The attached test procedures can achieve four kinds of monochrome display (red, green, blue and white), as well as horizontal, vertical and other display scan modes	
7	External interfaces	For indicator light and test button	
8	HUB pins	HUB75 Interface, J1~J8 connected to display modules	

2. Definitions of HUB



Instructions	Definition	Pin No.		Definition	Instructions
Data signal	RD1	1	2	GD1	Data signal
	BD1	3	4	GND	Ground connection
	RD2	5	6	GD2	Data signal
	BD2	7	8	GND	Ground connection
	RD3	9	10	GD3	Data signal
	BD3	11	12	GND	Ground connection
	RD4	13	14	GD4	Data signal
	BD4	15	16	GND	Ground connection
Row decoding signal	A4_B	17	18	B4_B	Row decoding signal
	C4_B	19	20	D4_B	
	E4_B	21	22	GND	Ground connection
Serial clock	CLK4_B	23	24	LAT4_B	Signal lock
Display enable	OE4_B	25	26	GND	Ground connection

3. Definition of External Interface



4. Dimensions

Unit：mm