MRV366

Receiving Card

V1.2.0 NS110100898

Specifications

Change History

Document Version	Firmware Version	Release Date	Description
V1.2.0	V4.6.1.0	2019-10-31	• Added the description of 1/64 scan display. • Added the function of individual Gamma adjustment for RGB.

Introduction

The MRV366 is a general receiving card that supports up to 1/64 scan. A single MRV366 loads up to 512×256 pixels (8bit) or 256×256 pixels (10bit/12bit). With various highlights such as 12-bit precision pixel level brightness and chroma calibration and individual Gamma adjustment for RGB, the MRV366 can greatly improve the display effect and user experience.

The MRV366 uses standard HUB75 connectors for communication, resulting in high stability and reliability. It supports up to 32 sets of parallel RGB data. Thanks to its EMC compliant hardware design, the MRV366 has improved electromagnetic compatibility and is suitable to many applications.

Features

Improvements to Display Effect

- Pixel level brightness and chroma calibration
  Working with NovaLCT and NovaCLB, the receiving card supports 12-bit precision brightness and chroma calibration on each LED, which can effectively remove color discrepancies and greatly improve LED display brightness and chroma consistency, allowing for better image quality.
- Quick seam correction
  Working with NovaLCT, the receiving card supports quick adjustment of bright and dark lines caused by splicing of cabinets and modules. This function is easy to use and the adjustment takes effect immediately.
- 3D function
  When the receiving card works with the independent controller which supports 3D function, users can enable the 3D function in NovaLCT or on operation panel of the controller, and set 3D parameters to allow for 3D display effects.
- Individual Gamma adjustment for RGB
  Working with NovaLCT (V5.2.0 or later) and the independent controller which supports this function, the receiving card supports individual adjustment of red Gamma, green Gamma and blue Gamma, which can effectively control image non-uniformity under low grayscale and white balance offset, allowing for a more realistic image.

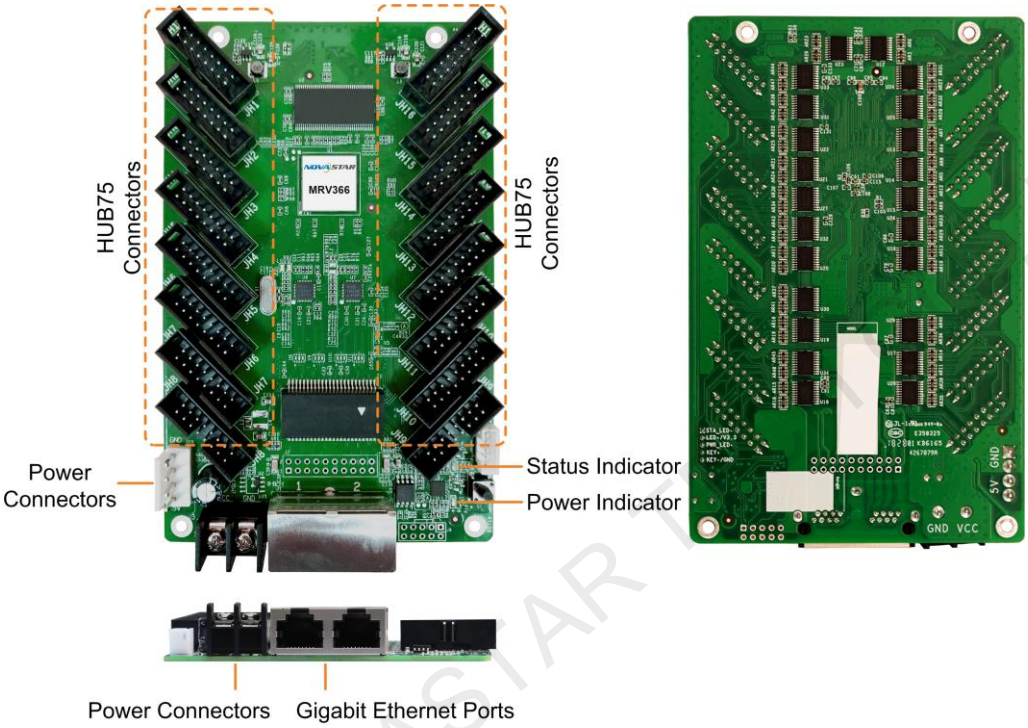
Improvements to Maintainability

- Mapping function
  After the Mapping function is enabled in NovaLCT, each of the target cabinets will display the receiving card number and Ethernet port information, allowing users to easily obtain the location and wiring route of receiving cards.
- Voltage and temperature monitoring
  The voltage and temperature of the receiving card can be monitored without using peripherals. The monitoring data can be checked in NovaLCT.
- Cabinet LCD
  The receiving card supports the LCD connected to the cabinet. The LCD can display temperature, voltage, single operating time and total operating time of the receiving card.
- Bit error rate monitoring
  The receiving card can work with NovaLCT (V5.2.0 or later) to monitor the network communication quality between sending device and receiving card, or between receiving cards, and record the number of erroneous packets to help troubleshoot network communication problems.
- Readback of firmware program
  In NovaLCT (V5.2.0 or later), the receiving card firmware program can be read back and saved to local computer.
- Readback of configuration parameters
  In NovaLCT, the receiving card configuration parameters can be read back and saved to local computer.

Improvements to Reliability

- Status monitoring of dual power supplies
  The receiving card supports dual power supplies and can detect whether their working statuses are normal.
- Loop backup
  The receiving card can improve the reliability for cascading of receiving cards through main and backup redundant mechanism. If either main or backup cascading lines fail, the other will begin to work to ensure uninterrupted operation of the display.
- Dual backup of program
  Two copies of application programs are saved in the receiving card at the factory to avoid the problem that the receiving card may get stuck due to program update exception.

Appearance

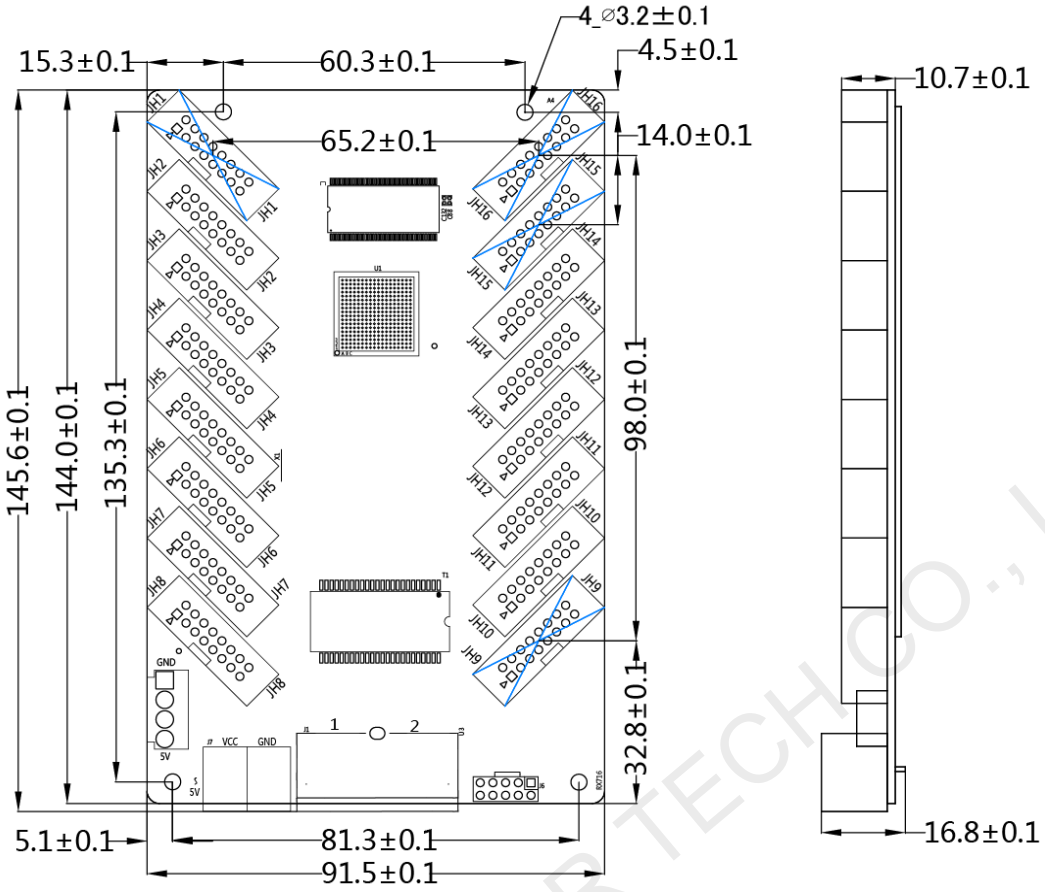


All product pictures shown in this document are for illustration purpose only. Actual product may vary.

Indicator Status

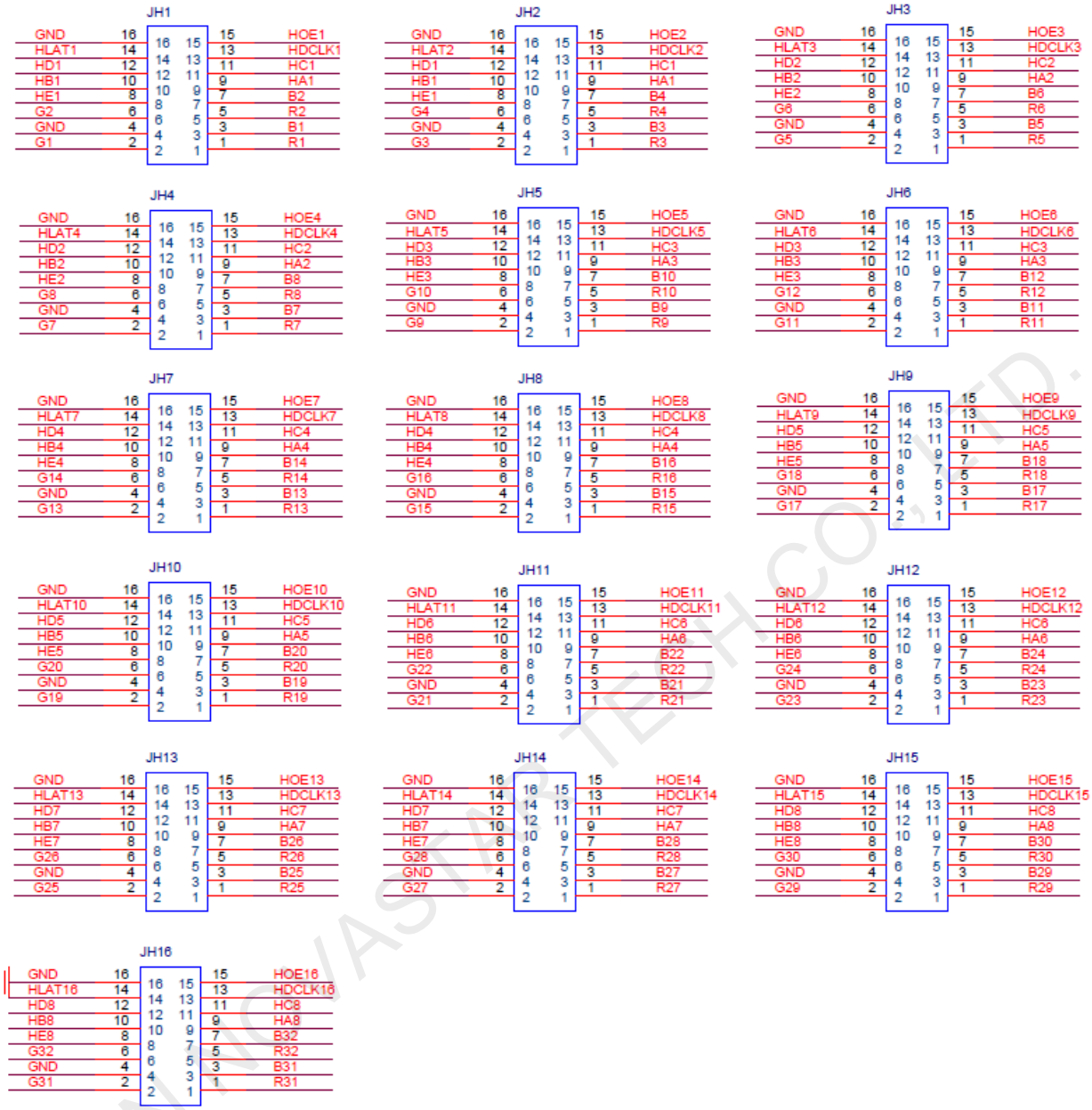
Indicator	Status	Description
Status indicator (Green)	Flashing every other 1s	Receiving card is functioning normally. Ethernet cable connection is normal, and video source input is available.
	Flashing every other 3s	Receiving card is functioning normally, but Ethernet cable connection is abnormal.
	Flashing 3 times every other 1s	Receiving card is functioning normally. Ethernet cable connection is normal, but no video source input is available.
	Flashing every other 0.2s	Program loading fails in normal operating state, currently loading backup operating program.
	Flashing 8 times every other 1s	Sending card's backup Ethernet port is now active. Receiving card is functioning normally.
Power indicator (Red)	Always on	It is always on after the power is supplied.

Dimensions



Unit: mm

Pins



Pins			
GND	16	15	HOE
HLAT	14	13	HDCLK
HD	12	11	HC
HB	10	9	HA
HE	8	7	B
G	6	5	R
GND	4	3	B
G	2	1	R

Specifications

Electrical Specifications	Input voltage	DC 3.3 V–5.0 V
	Rated current	0.5 A
	Rated power consumption	2.5 W
Operating Environment	Temperature	–20°C to +70°C
	Humidity	10% RH to 90% RH, non-condensing
Storage Environment	Temperature	–25°C to +125°C
	Humidity	0% RH to 95% RH, non-condensing
Physical Specifications	Dimensions	145.6 mm × 91.5 mm × 17.2 mm
	Net weight	100.1 g
Packing Information	Packing specifications	An antistatic bag and anti-collision foam are provided for each receiving card. Each packing box contains 100 receiving cards.
	Packing box dimensions	650.0 mm × 500.0 mm × 200.0 mm
Certifications	RoHS, EMC Class A	

Trademark

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Statement

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