MRV336

Receiving Card

Specifications

Change History

Document Version	Release Date	Description
V1.2.0	2024-05-28	Updated load capacity information.
V1.1.5	2022-08-31	• Added the table of appearance description. • Updated the input voltage. • Updated the packing information.
V1.1.4	2022-03-26	• Added the certifications description. • Added the dimensions diagram description. • Updated the pins section.
V1.1.3	2021-02-06	• Updated the product introduction. • Updated the certification information.
V1.1.2	2020-09-18	• Optimized the product introduction. • Optimized the feature description. • Optimized the legends in the appearance diagram. • Optimized the indicator description. • Optimized the dimensions diagram. • Optimized the pin description. • Optimized the specifications table.

Introduction

The MRV336 is a general receiving card developed by NovaStar. A single MRV336 supports resolutions up to 256×256@60Hz. Supporting various functions such as pixel level brightness and chroma calibration, the MRV336 can significantly improve the display effect and user experience.

The MRV336 uses 12 standard HUB75E connectors for communication, resulting in high stability. It supports up to 24 groups of parallel RGB data. Thanks to its EMC Class B compliant hardware design, the MRV336 has improved electromagnetic compatibility and is suitable for various on-site setups.
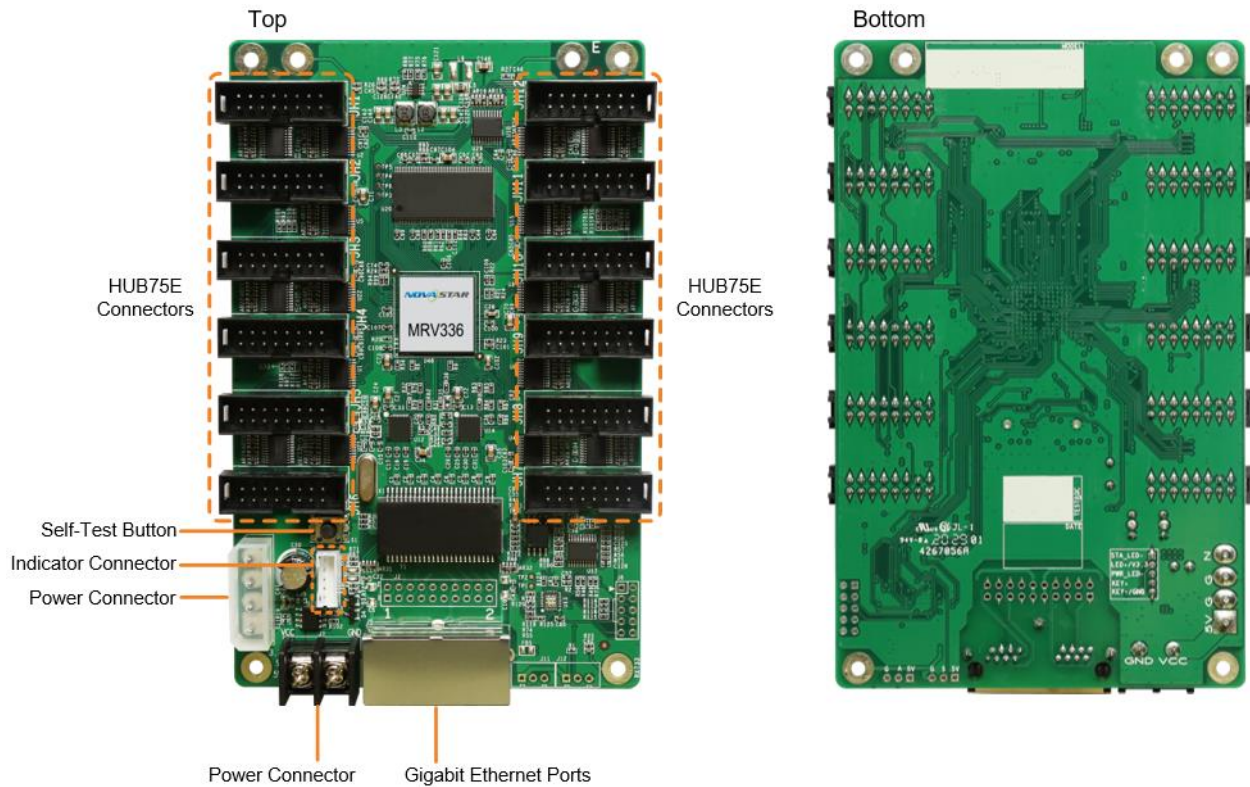
Certifications

RoHS, EMC Class B

If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact NovaStar to confirm or address the problem. Otherwise, the customer shall be responsible for the legal risks caused or NovaStar has the right to claim compensation.

Features

- Support for 1/32 scan
- Pixel level brightness and chroma calibration
- Support for setting of a pre-stored image in receiving card
- Configuration parameter readback
- Temperature monitoring
- Ethernet cable communication status monitoring
- Power supply voltage monitoring

Appearance

All product pictures shown in this document are for illustration purpose only. Actual product may vary.
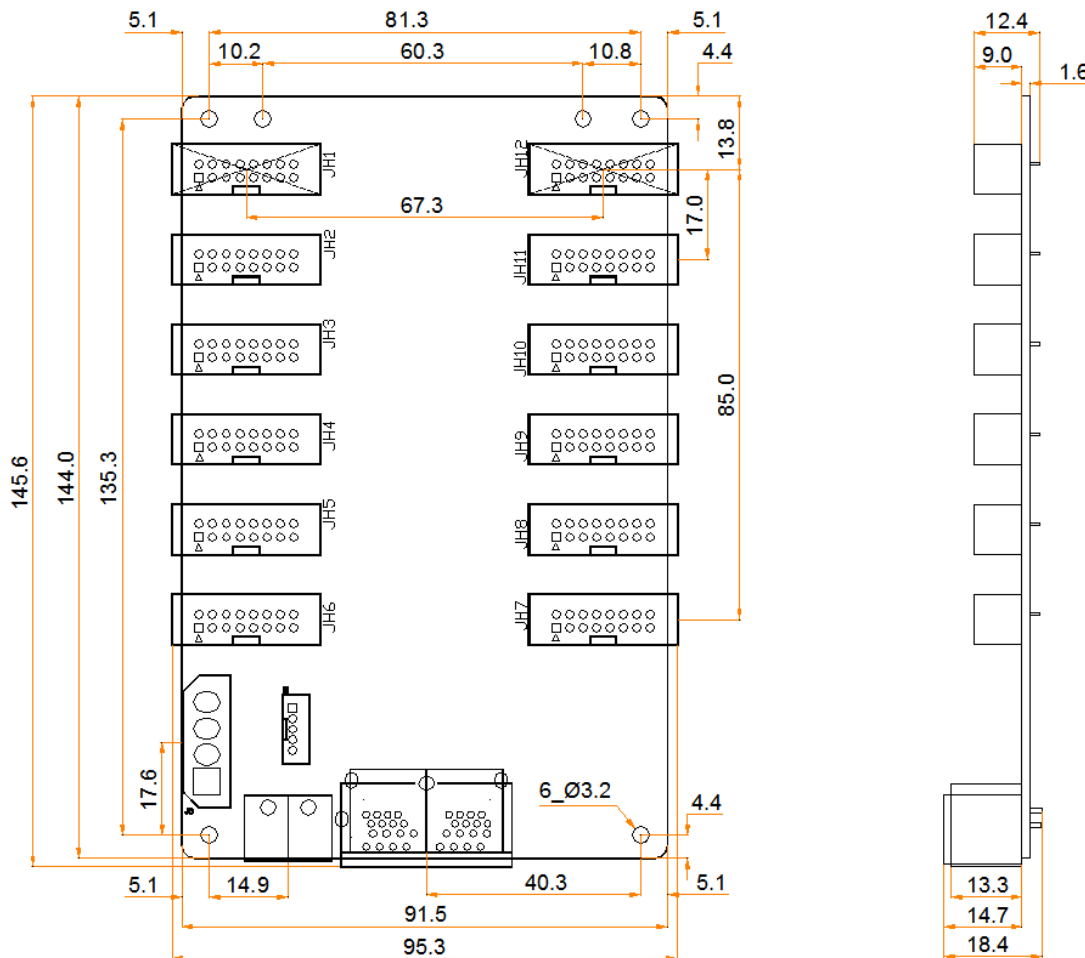
Name	Description
HUB75E Connectors	Connect to the module.
Power Connector	Connect to the input power. Either of the connectors can be chosen.
Gigabit Ethernet Ports	Connect to the sending card, and cascade other receiving cards. Each connector can be used as input or output.
Self-Test Button	Set the test pattern. After the Ethernet cable is disconnected, press the button twice, and the test pattern will be displayed on the screen. Press the button again to switch the pattern.
Indicator Connector	Definition of the indicator connector (J9): • 1: STA_LED • 2: LED+/3.3V • 3: PWR_LED- • 4: KEY+ • 5: KEY-/GND

Indicators

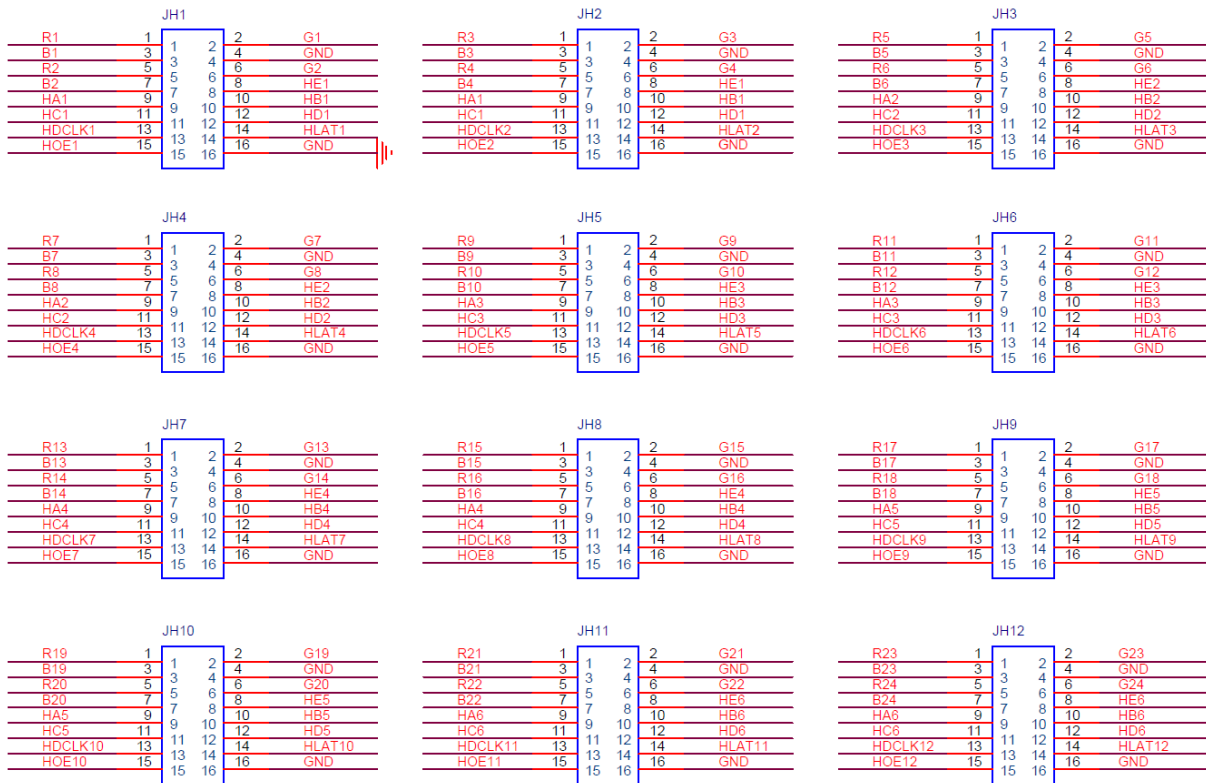| Indicator	Color	Status	Description
Running indicator	Green	Flashing once every 1s	The receiving card is functioning normally. Ethernet cable connection is normal, and video source input is available.
		Flashing once every 3s	Ethernet cable connection is abnormal.
		Flashing 3 times every 0.5s	Ethernet cable connection is normal, but no video source input is available.
		Flashing once every 0.2s	The receiving card failed to load the program in the application area and is now using the backup program.
		Flashing 8 times every 0.5s	A redundancy switchover occurred on the Ethernet port and the loop backup has taken effect.
Power indicator	Red	Always on	The power supply is normal.

Dimensions

The board thickness is not greater than 2.0 mm, and the total thickness (board thickness + thickness of components on the top and bottom sides) is not greater than 19.0 mm. Ground connection (GND) is enabled for mounting holes.

Tolerance: ±0.3   Unit: mm

To make molds or trepan mounting holes, please contact NovaStar for a higher-precision structural drawing.

Pins

Pin Definitions (Take JH1 as an example)					
/	R1	1	2	G1	/
/	B1	3	4	GND	Ground
/	R2	5	6	G2	/
/	B2	7	8	HE1	Line decoding signal
Line decoding signal	HA1	9	10	HB1	Line decoding signal
Line decoding signal	HC1	11	12	HD1	Line decoding signal
Shift clock	HDCLK1	13	14	HLAT1	Latch signal
Display enable signal	HOE1	15	16	GND	Ground

Specifications

Maximum Resolution	256×256@60Hz	
Electrical Specifications	Input voltage	DC 3.8 V to 5.5 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 × 95.3 mm × 18.4 mm
Packing	Packing specifications	An antistatic bag and anti-collision foam are provided for each

Information		receiving card. Each packing box contains 100 receiving cards.
	Packing box dimensions	625.0 mm × 180.0 mm × 470.0 mm

The amount of current and power consumption may vary depending on various factors such as product settings, usage, and environment.

Official website
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Technical support
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