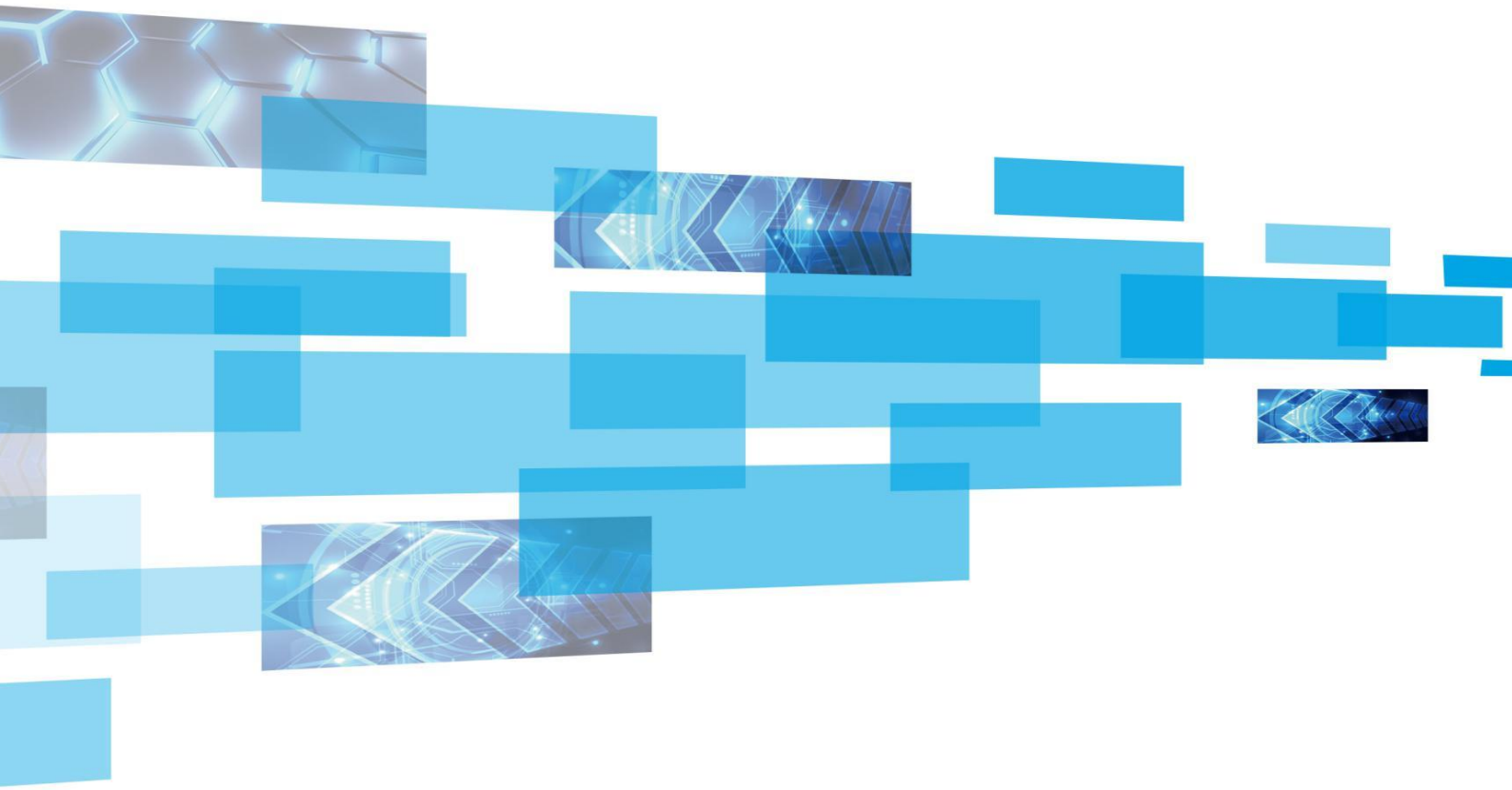
SYSOLUTION

FPGA Receiving Card

D60-320



Product Specification

Version： Ver.1.0

Statement

Dear user friend, thanks for choosing Shanghai Xixun Electronic Technology Co., Ltd. (hereinafter referred to as Xixun Technology) as your LED advertising equipment control system. The main purpose of this document is to help you quickly understand and use the product. We strive to be precise and reliable when writing the document, and the content may be modified or changed at any time without notice.

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Update Record

NO.	Version No.	Upadates	Revision Date
1	Ver.1.0	Initial issue	2022.11.09

The document is subject to change without prior notice.

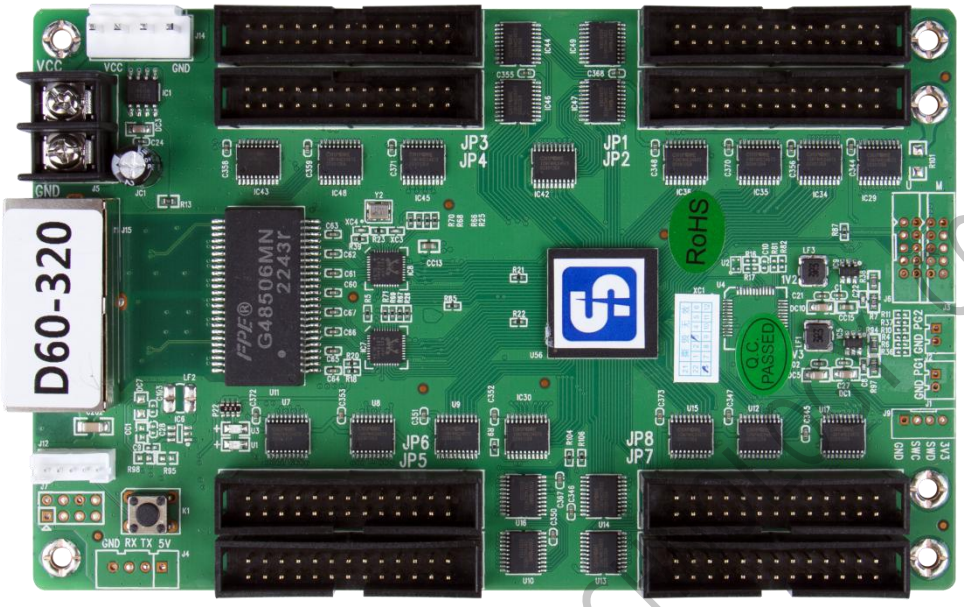
Product Introduction

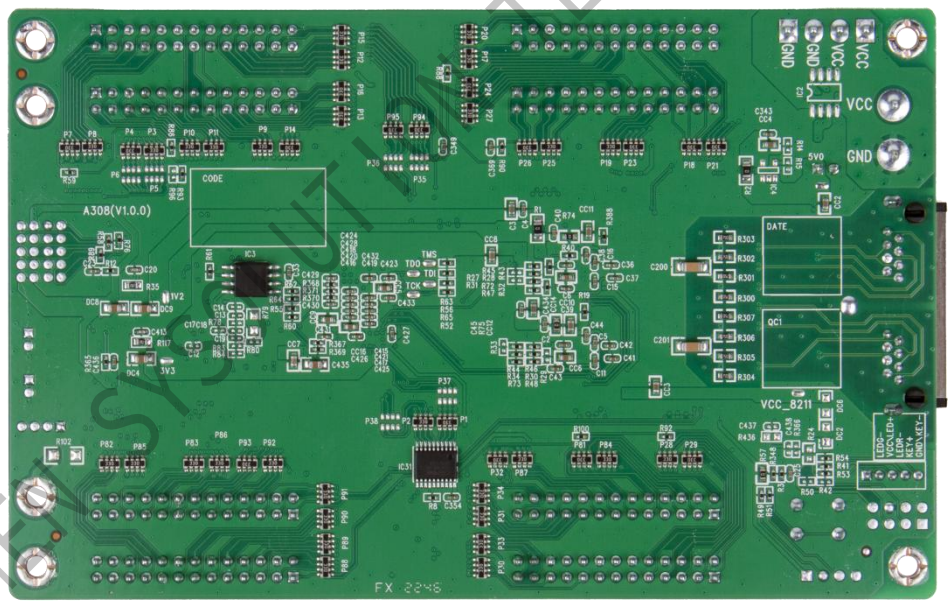
Sysolution D60-320 is a small pitch receiving card. It adopts 8 standard HUB320 (26Pin) interfaces, and supports maximum 32 groups of the RGB parallel data. The maximum loading capacity could reach up to 512x640 pixels; with powerful processing ability, super reliability and high competitive price.

Application Scenarios

It could be widely used for high-end small pixels pitch LED display area that requires high standards, and has significant advantages in the application scenarios such as command centre, monitoring centre, large conference, live TV station and hotel exhibition projects.

Product Picture





Loading Capacity

(RGB) RGB Parallel	Data interfaces/Number	Driver	The Maximum Loading Capacity (Pixel s)	Loading Capacity(Pixels) Loading Capacity After lightness Calibrating (Pixels)	Loading Capacity after Color Calibrating (Pixels)
32 Groups	HUB75E/8 interfaces	Normal	512*640	512*640	512*512
		PWM	512*640	512*640	512*512

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

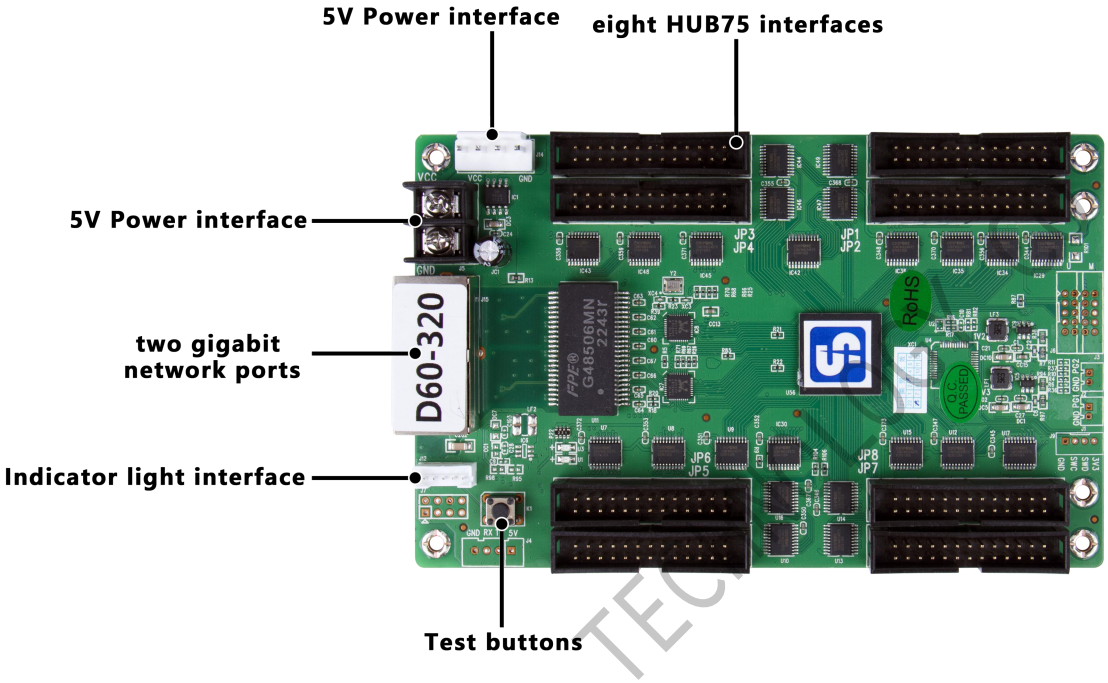
Function Introduction

Functions	Introduction
Improved display	1. Supports point-to-point brightness and chroma calibration: With the Calibration software, it can calibrate each one of the pixels on its brightness and chroma of the large screen, so as to effectively eliminate colour differences, enhance consistency of the brightness and chroma to reach a high level, and improve the quality of the display. 2. Support multiple solutions of the display effects: with LedSet4.0 software, its refresh and greyscale performances are able to take the precedence over other settings. 3. Support 90 degree screen rotation of the led screen: with LedSet4.0 software, the screen of the receiving card can be rotated by 90 degree. 4. Support screen zoom: with LedSet4.0 software, the pixels on the receiver card can be scaled in multiples to zoom in and out of the display.

Improved operability	1. Support detection of the receiving card sequence number: with network port testing function on the LedSet4.0 software, the target box will display the receiving card serial number and the network port information. User will able to know thelocations of the receiving cards as well as its Connection diagram. 2. Support data port user-definition: with LedSet4.0 software, users can detect and edit the output data of the receiving cards. 3. Support the construction of complicated boxes: with the 'Advanced Setting' on the LedSet 4.0 software, users can quickly arranged and constructed the box modules in any way. 4. Support the construction of complicated and large screens: with "Complicated Led Screen Connection" on the LedSet 4.0 software, users can quickly arranged and constructed the boxes in any way.
Hardware Stability	1. Network Cable Backup: The network port is connected via a main and backup network loop to increase the reliability of the receiving card's

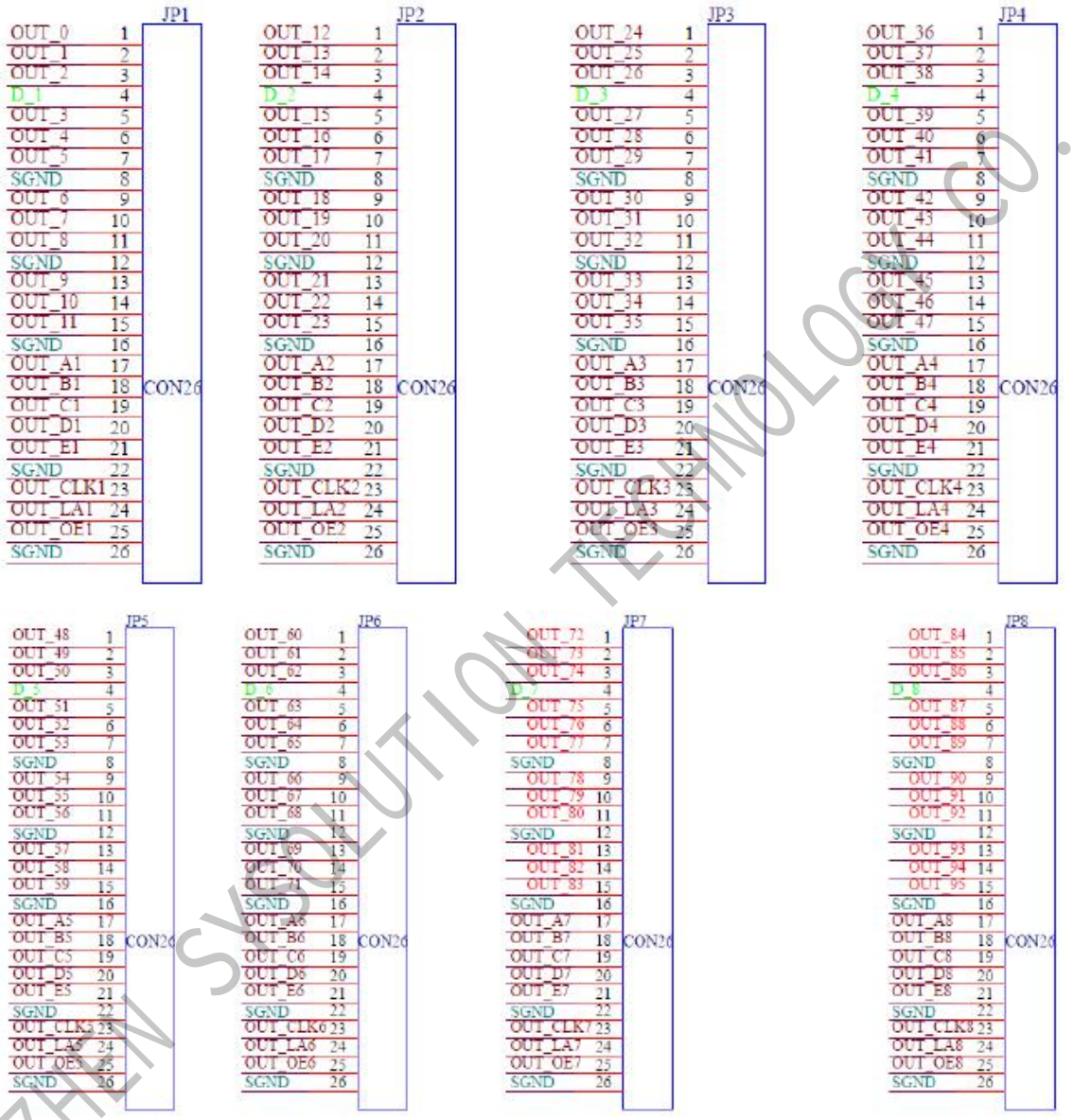
	serial connection. When one of the main and backup serial lines fails, the other one will take its job to keep the led display working properly.
Smart software	1. Support reading back the configuration parameters of the receiver card: with LedSet 4.0 software, users can read back the current configuration parameters of the receiver card. 2. Support network cable BER detection: with LedSet 4.0 software, users can monitor the communication signal quality of the network cable connected to the system hardware in real time so as to quickly determine whether the network cable is good or bad and then get rid of any errors immediately. 3. Support communication monitor: with LedSet 4.0 software, users can monitor the Real-time working status of the receiver card.

Interfaces Definition

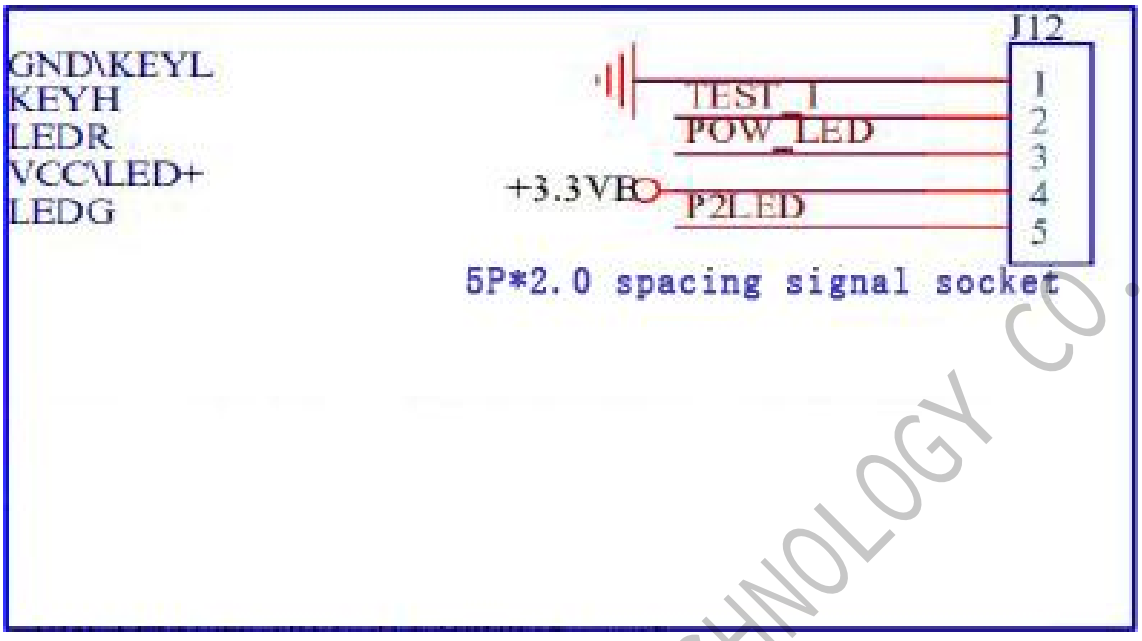


Output Port Definition

Port Definition of the 32 Groups of parallel connection data



External interfaces



1. TEST_1，Normally high level, when low level is detected, output test signal
2. LEDR，On when turn on power normally
3. LEDG,When the signal is fed from the PO port, the light flashes faster；When the signal is fed from the PI port, the light flashes slower.

Definition of the external interfaces between the LED and the button	
NO.	**Type**
1	GND Negative pole of the switch
2	Positive pole of the external switch
3	Negative pole of the external red light, illuminated when powered on
4	+3.3V voltage
5	negative poke of the external green light

JP1—JP8 PIN definition

Definition	PIN	PIN	Definition
R	1	2	6
B	3	4	D_x (Read storage)
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	OUT_B1
OUT_C1	19	20	OUT_D1
OUT_E1	21	22	GND
OUT_CLK1	23	24	OUT_LA1
OUT_OE1	25	26	GND

J6 PIN Definition

PIN	1	2	3	4
Definition	GND	SWCLK	SWDIO	+3.3V

J11 PIN Definition

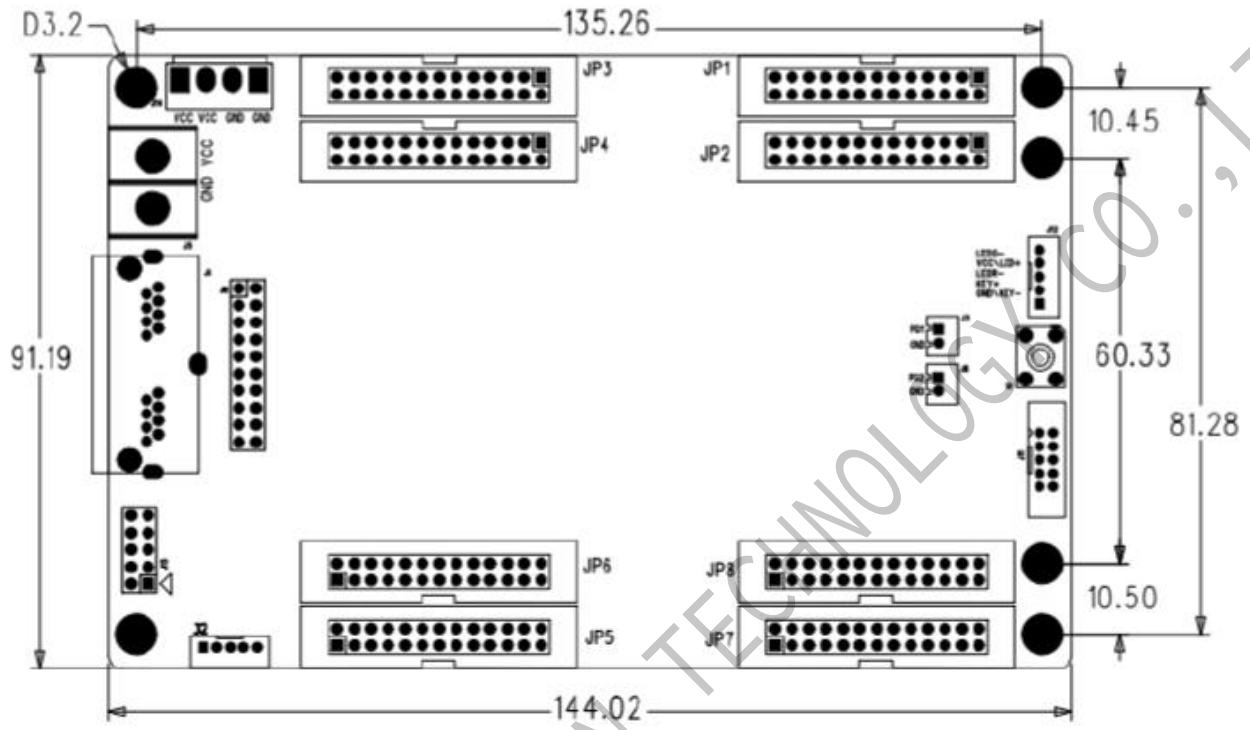
Definition	VBB	GND	FLS_S	FLS_DO	FLS_CLK
Pin	1	2	3	4	5
Pin	10	9	8	7	6

Definition	VBB	GND	mCONF_DONE	PROGRAM_B	FLS_DI

Indicator Illustration

Indicator	Position	Status	Illustration
Status indicator(green)	U6	Flickering Slowly at a constant	It means the receiving card is working properly, the Ethernet Cable Connection is fine and there is no DVI Signal Input.
		Flickering Fast at a constant	It means the receiving card is working properly, the Ethernet Cable Connection is fine, and there is DVI Signal Input.
		It goes out	It means there is No Gigabit Ethernet Signal.
		Fast Flickering 3 Tunes	It means the receiving card is working properly, the Ethernet Cable Loop Connection is fine, and there is DVI Signal Input.
Status indicator (red)	U5	solid On	It means the power is On

Dimensions



Unit: mm

Working Parameter

Electric Parameters	Input Voltage	DC3.5-5.5V
	Rated Current	0.6A
	Rated Power	3W
Electric Parameters	Operating Temperature	-20℃-70℃
	Operating Humidity	10%RH-90%RH
Storage Environment	Temperature	-25℃～125℃
Board card dimensions	144.02mmX91.19mm	
Net Weight	110g	
Certifications	It conforms to RoHS and CE-EMC standards.	

Precautions

1. The testing (debugging) and installation should be done by the qualified professionals .
2. Must be anti-Static.
3. Must be Water-Proof and Dust-Proof.