



BX-I2 SPECIFICATION

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Instruction

Thank you for purchasing our LED control card. Hope you can enjoy the excellent performance of this product. The LED control card is designed to meet international and industry standards, but if not properly operated, it may cause personal injury and property damage. In order to avoid possible hazards of the equipment and to benefit from your equipment as much as possible, please follow the instructions in this manual when installing and operating the product.

About software

It is not allowed to change, decompilation, disassemble, decrypt or reverse engineer the software installed on this product. All the above acts are illegal.

Features

- ◆ Size small , suitable for various transparent screens.
- ◆ Support MY9866, HBS1910, MT1804, MT1805, TX1816 etc normal chip

GUIDING

Safety notification

- ◆ This product rated working voltage 5V, voltage range 4V ~ 5.5V, please strictly guarantee the BX-I series power quality
- ◆ When you want to connect or unplug any signal cord or control cord, make sure all power cords are unplugged beforehand.
- ◆ When you want to add hardware devices to the product or remove hardware devices from the product, please confirm all signal lines and electricity
- ◆ The source line has been removed beforehand.
- ◆ Before any hardware operation, please turn off the LED control card power and release the LED control card by touching the ground surface
- ◆ Static electricity.
- ◆ Please use the product in a clean, dry and ventilated environment. Do not use the product in a high temperature or humidity environment.
- ◆ This product is an electronic product, please keep away from fire, water and inflammable and explosive dangerous goods.
- ◆ This product contains high pressure components. Please do not open the case or repair the equipment by yourself.
- ◆ Please turn off the power switch immediately and contact the dealer if you find any abnormal situation such as smoking or peculiar smell.

FUNCTIONS

Bx-i2 receiving card is a high-end receiving card with small size and large load, which is suitable for all kinds of full-color LED display screens and supports mainstream LED screen driver chips. It adopts the hub board with double 42P pin connected to the display screen, which is dust-proof and shockproof, with high stability and reliability..Support Gigabit network playback mode, support asynchronous player YQ series products, with BX-VS/VSM and other sending card to present the best display effect. The new high refresh technology allows you to have ultra HD picture quality experience.Product structure is simple, easy to install, Easy operation is to achieve the best results, no need training.BX-I2 receiving card hardware system can be upgraded online to maximize user benefits.

Easy installation

Unified interface standard, the unified specification of the installation hole, support the connection of the external operation indicator lamp and the test button;2nos double Gigabit network port, support arbitrary exchange of input and output, convenient installation cascade.

Flexible interface

It adopts the hub board with double 42P pin connected to the display screen, which supports E-signal, 64 sweeps at most, 24 parallel RGB signals or 64 serial outputs at most. Support any interface display data group exchange, RGB color sequence exchange, convenient customers flexible adjustment module line.

More folio modes

Support 2 folio, 3 folio, 4 folio, folio width can be different.For example, 2 folio: 128 points in front, 64 points behind;Folio: 128 points in front, 128 points in the middle and 64 points behind.

Variable data trends

Normal data flow from right to left by default. Data flow direction can be set as left to right, top to bottom and bottom to top according to the actual use of the customer site. Specific use, and LED module alignment direction corresponding. Right-to-left and top-down modes are recommended.

Support irregular screen

Support display data line offset, can be flexibly adjusted within the range of 0 to 511 points, depending on the specific load width, the maximum can be set 384 line height display offset or data path as the unit of offset, convenient configuration for irregular screen.

More scan mode

Match with LedshowTV software, support 32 scan, 16 scan, 8 scan, 4 scan and other kinds of straight and folding scanning fast configuration; Support no 138 line decoding, 595 line decoding, RT5958 line decoding and so on. Through intelligent scan function, support static screen, any scan mode from 2 scan to 32 scan.

Compatible with more chips

Dual 42p pins are used to connect the hub board of the display screen, which supports E-signal, 64 scan maximum, 24 RGB signal parallel output or 64 channel serial output at most. Support any interface display data group exchange, RGB color sequence exchange, convenient for customers to adjust module wiring flexibly.

Superior display effect

Adopt new high brush technology, support high refresh high grayscale display effect, Can support 256, 512, 1024, 2048, 4096, 8192, 16384, 32768, 65536 grayscale display. Flexible display mode selection, suitable for outdoor, indoor various applications. work with LedshowTV software, through adjusting the display refresh rate, display mode and display ratio and other parameters, further improve the display quality, to meet customer shooting effect.

Adjust clock

Support shift clock from 10.42MHz to 31.25MHz self-regulation, adjustable duty cycle, clock phase, etc. It can satisfy the cascading characteristics of different modules, eliminate the rising points generated when some modules are cascading, and increase the loading width as much as possible on the premise of guaranteeing the refresh rate.

Blanking adjustment

By adjusting the line blanking time, line breaking time, level 1 graying and other features, further eliminate the effect of LED screen's virtual brightness, and perfectly display the text content.

Easy maintenance

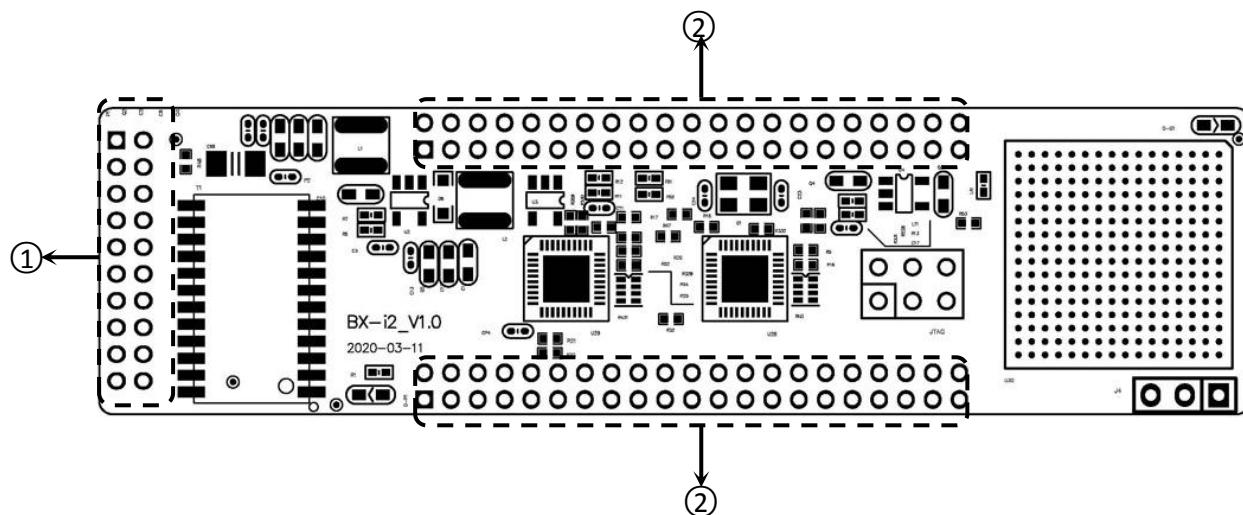
The receiving card supports configuration parameter read-back function, single point parameter setting and query read-back, and supports online upgrade, which is convenient for customer system upgrade and maintenance.

TECHNICAL PARAMETERS

SCREEN INDEX	
Parameters	Specification
Minimum size	32 x 32
Control size	256*512
Total pixels	128*1024
Row offset range	0-511
Row offset height	Max 384, setup the row height or data unit
Cascade quantity	Single LAN cable cascade receiving cards≤1024
Gray level	≤65536
Refresh rate	Support 5000Hz, will be changed with the control width.
Application	All kinds of full color LED screens
Chips	All kinds of main stream full color LED chips
Interface	2 nos of high-density connector interfaces, 24 nos of RGB data
Brightness	256 grade

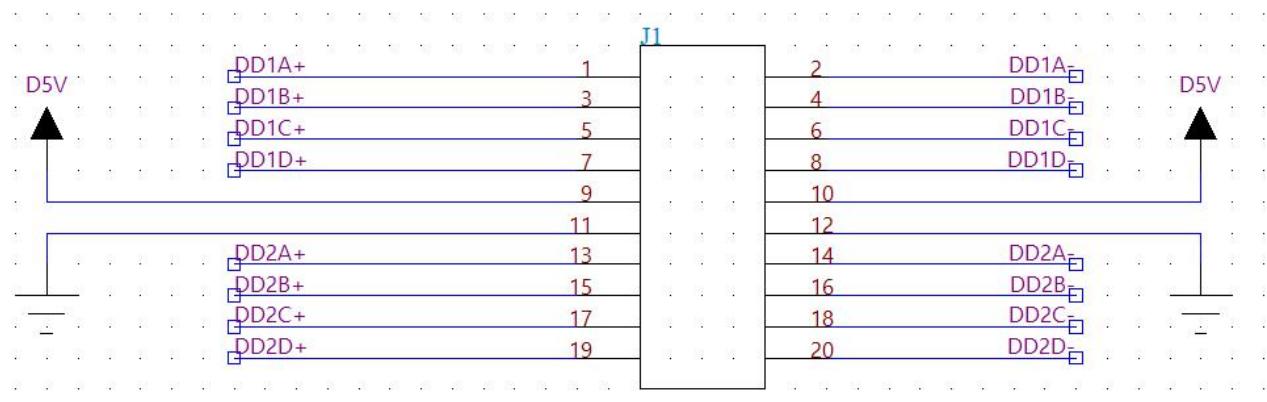
Details	
Input power supply	4V ~ 5.5V ; Please make sure the quality of power supply.
Power Dissipation	≤5W
Temperature	-40°C ~ 80°C
Size	86mmØ22.9mm

INTERFACE DIAGRAM



Interface		Note
1	Power	5Vpower interface ,DC volts, standard 5V ,support 3.6V-5.5V
	1000M	RJ45x2 , connect with sending card Regardless of input and output
2	Double 42P Pin	Connect with hub

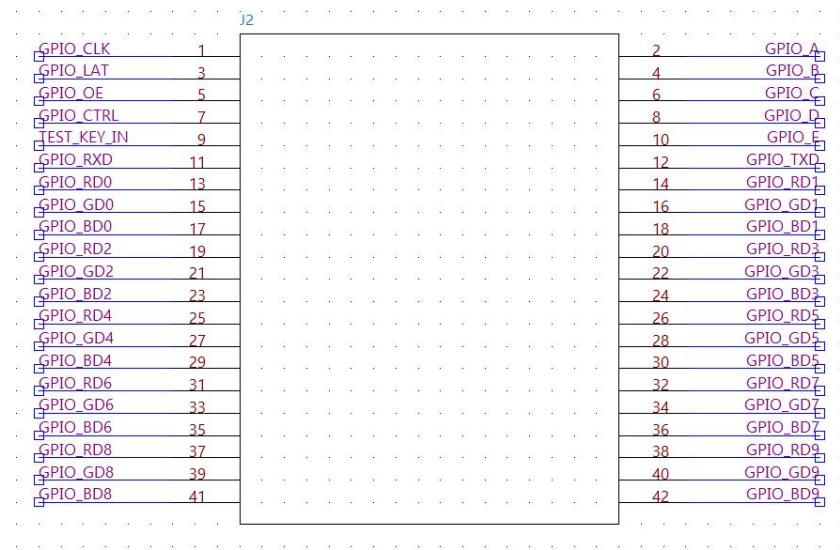
Interface definition



Instructions	Function	PIN NUMBER	Function	Instructions
Ethernet port1	DD1A+	1	2	DD1A-
	DD1B+	3	4	DD1B-
	DD1C+	5	6	DD1C-
	DD1D+	7	8	DD1D-
DC input	DC_IN	9	10	DC_IN
Shield grounding	GND	11	12	GND
Ethernet port2	DD2A+	13	14	DD2A-
	DD2B+	15	16	DD2B-
	DD2C+	17	18	DD2C-
	DD2D+	19	20	DD2D-

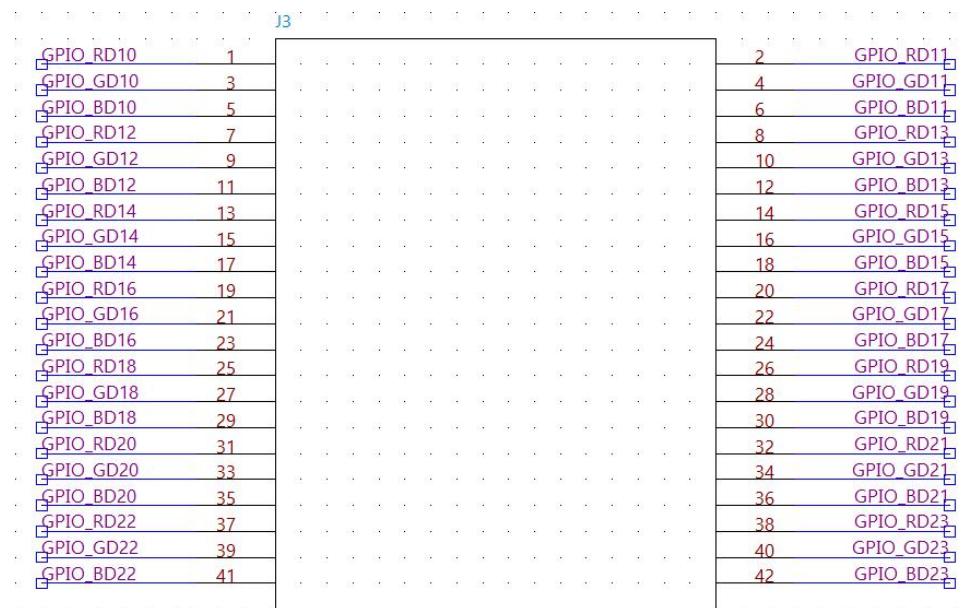
42P Pin definition

1. 24 Group Parallel Data



J2					
instructions	Function	Pin no		Function	instruction
Clock signal	CLK	1	2	A	Line coding signal
Latch	LAT	3	4	B	
Independent clock	OE	5	6	C	
Blanking signal	CTRL	7	8	D	
Test button	TEST_KEY	9	10	E	
Reserved	RXD	11	12	TXD	Reserved
RGB output	RD0	13	14	RD1	RGB output
	GD0	15	16	GD1	
	BD0	17	18	BD1	
	RD2	19	20	RD3	
	GD2	21	22	GD3	
	BD2	23	24	BD3	
	RD4	25	26	RD5	
	GD4	27	28	GD5	
	BD4	29	30	BD5	
	RD6	31	32	RD7	

	GD6	33	34	GD7	
	BD6	35	36	BD7	
	RD8	37	38	RD9	
	GD8	39	40	GD9	
	BD8	41	42	BD9	



J3					
INSTRUCTION	Function	Pin no		Function	INSTRUCTION
RGB output	RD10	1	2	RD11	RGB output
	GD10	3	4	GD11	
	BD10	5	6	BD11	
	RD12	7	8	RD13	
	GD12	9	10	GD13	
	BD12	11	12	BD13	
	RD14	13	14	RD15	
	GD14	15	16	GD15	
	BD14	17	18	BD15	
	RD16	19	20	RD17	
	GD16	21	22	GD17	
	BD16	23	24	BD17	
	RD18	25	26	RD19	
	GD18	27	28	GD19	
	BD18	29	30	BD19	
	RD20	31	32	RD21	
	GD20	33	34	GD21	
	BD20	35	36	BD21	
	RD22	37	38	RD23	

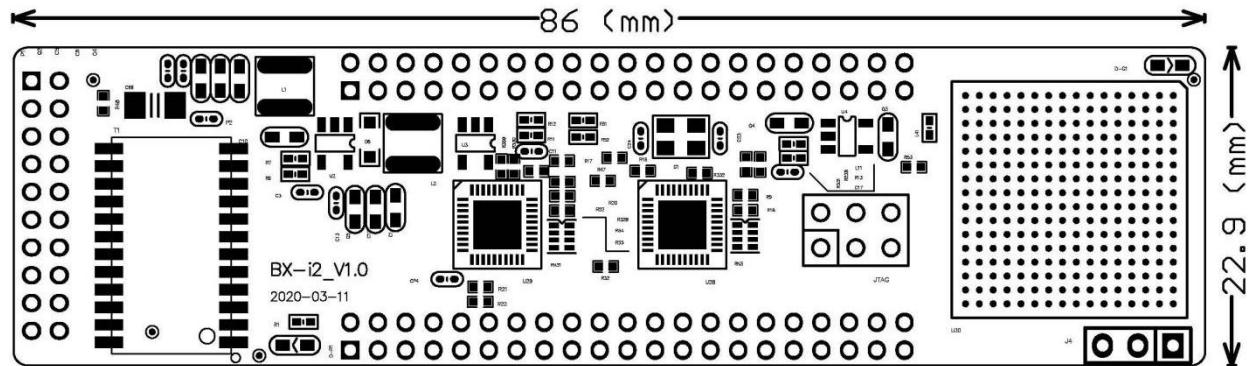
	GD22	39	40	GD23	
	BD22	41	42	BD23	

2. 64-Group Parallel Data

J2					
Instructions	Function	Pin no		Function	Instructions
Clock signal	FCLK	1	2	FA	Line coding signal , FA means low , FE means high
Latch	FLAT	3	4	FB	
Independent clock	FOE	5	6	FC	
Blanking signal	CTRL	7	8	FD	
Test button	TEST_KEY	9	10	FE	Serial port sender RGB output
Serial port receiver	EX_RXD	11	12	EX_TXD	
RGB output	DATA0	13	14	DATA3	
	DATA1	15	16	DATA4	
	DATA2	17	18	DATA5	
	DATA6	19	20	DATA9	
	DATA7	21	22	DATA10	
	DATA8	23	24	DATA11	
	DATA12	25	26	DATA15	
	DATA13	27	28	DATA16	
	DATA14	29	30	DATA17	
	DATA18	31	32	DATA21	
	DATA19	33	34	DATA22	
	DATA20	35	36	DATA23	
	DATA24	37	38	DATA27	
	DATA25	39	40	DATA28	
	DATA26	41	42	DATA29	

J3					
Instructions	Function	Pin number		Function	Instructions
RGB output	DATA30	1	2	DATA33	RGB output
	DATA31	3	4	DATA34	
	DATA32	5	6	DATA35	
	DATA36	7	8	DATA39	
	DATA37	9	10	DATA40	
	DATA38	11	12	DATA41	
	DATA42	13	14	DATA45	
	DATA43	15	16	DATA46	
	DATA44	17	18	DATA47	
	DATA48	19	20	DATA51	
	DATA49	21	22	DATA52	
	DATA50	23	24	DATA53	
	DATA54	25	26	DATA57	
	DATA55	27	28	DATA58	
	DATA56	29	30	DATA59	
	DATA60	31	32	DATA63	
	DATA61	33	34	/	
	DATA62	35	36	/	
	/	37	38	/	
	/	39	40	/	
	/	41	42	/	

DEMENSION



Contact Us

Shanghai ONBON Technology Co.,ltd (Headquarters)

Address: 7 Floor, Tower 88, 1199#, North Qinzhou Road, Xuhui District, Shanghai City, China

Tel Phone: 086-21-64955136

Fax: 086-21-64955136

Website: www.onbonbx.com

ONBON (Jiangsu) Optoelectronic Industrial Co.,LTD

Address: 1299#, Fuchun Jiang Road, Kunshan City, Jiangsu Province, China

Sales Contacts

Tel: 0086-15921814956 0086-15800379719

Email: onbon@onbonbx.com

Second Development

Tel: 0512-66589212

Email: dev@onbonbx.com

iLEDCloud

Website: <http://www.iledcloud.com/>



Public Wechat



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