



GUOYEXING OPTOELECTRONICS CO.LTD

SPECIFICATION

FOR APPROVAL	
ISSUED DATE :	
CUSTOMER :	
DESCRIPTION :	
MODEL NO.:	GYX-XNP12-2R1G1B-LAMP-QD-4s
DOCUMENTNO. :	

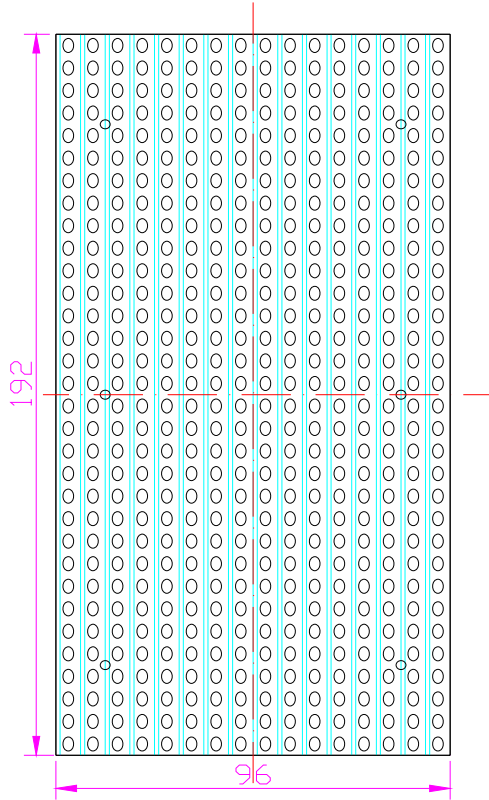
[GUOYEXING TECH.]

ISSUE	REVIEW	APPRL

[CUSTOMER APPROVAL]

MODEL NO	PAGE
GYX-XNP12-2R1G1B-LAMP-QD-4s	1/9

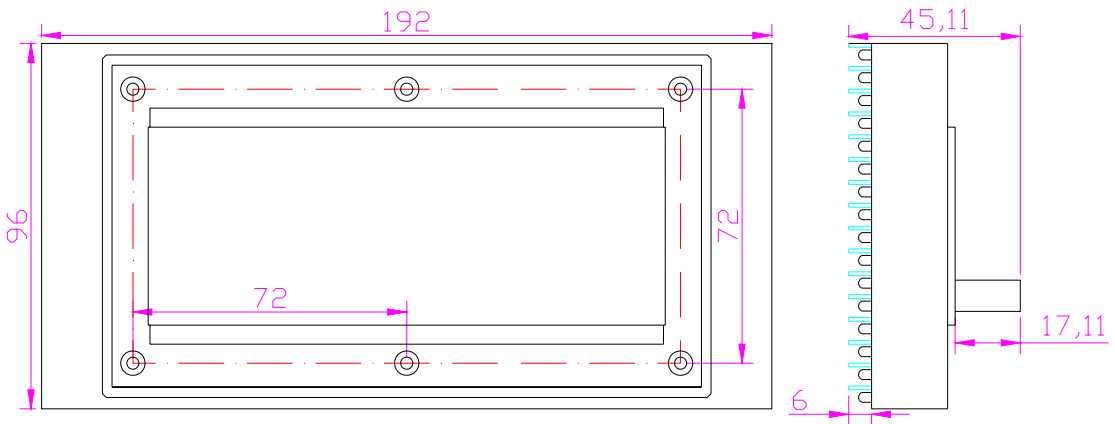
***DATE—CONNECTOR (JIN1、JOUT1)**



PIN NO	SIGNAL	PIN NO	SIGNAL
1	R1	2	R2
3	B	4	G
5	GND	6	GND
7	GND	8	GND
9	CLK	10	GND
11	STB	12	GND
13	OE	14	GND
15	A	16	B

***POWER CONNECTOR (J POWER1)**

NO	SIGNAL	LEVEL
1	GND	0 (V)
2	GND	0 (V)
3	VDD	5 (V)
4	VCC	5 (V)

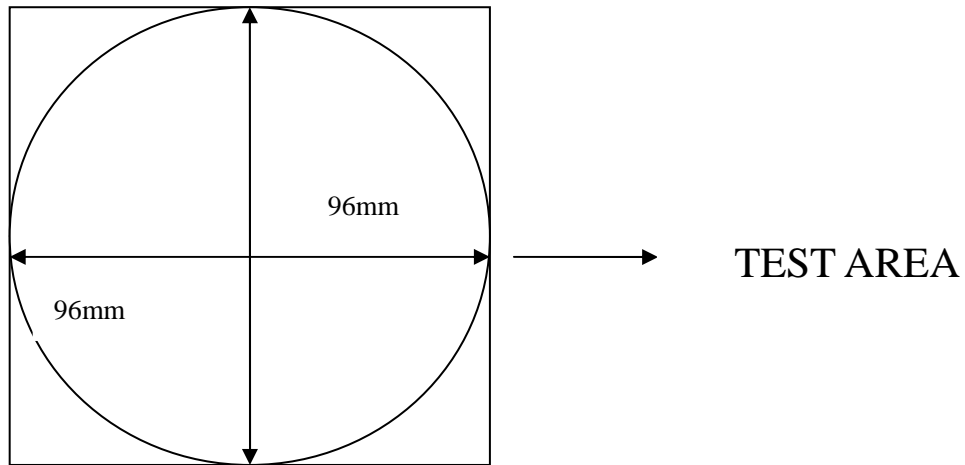


5、 OPTICAL CHARACTERISTICS

Ta=25°C

TTEM	SYMBOL	COND	MIN.	TYP	MAX	UNIT
Brightness	RED	Vcc=5V VDD=5V	420	535	650	MCD
	P-GREEN		1190	1367.5	1545	
	BLUE		350	385	420	
	WHITE		4800	5000	5200	CD/m²
Wavelength	RED	—	—	625	—	Nm
	GREEN		—	525	—	
	BLUE		—	468	—	

(*1)

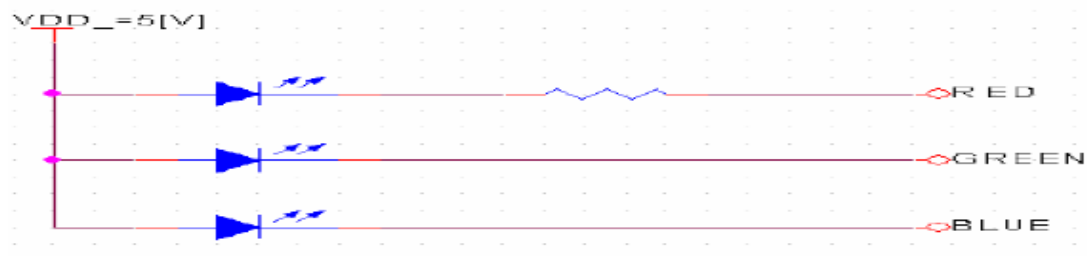


6、 ELECTRICAL CHARACTERISTICS

6-1.Voltage-Current Characteristics

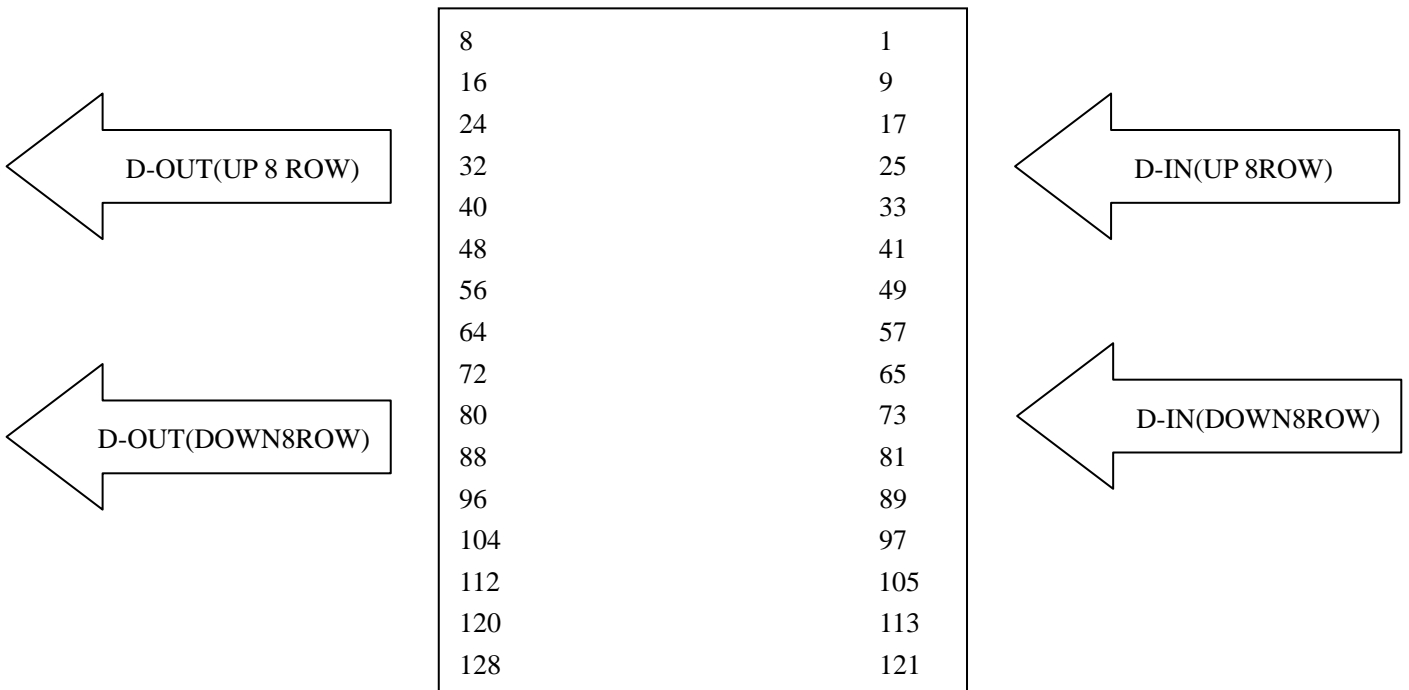
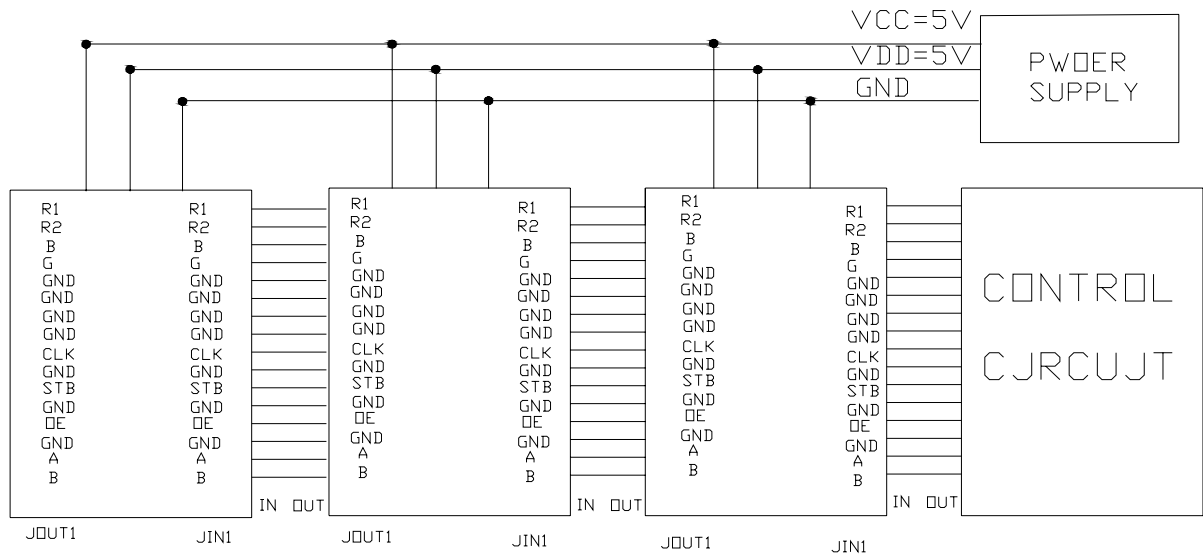
Ta=25°C

ITEM	SYMBOL	COND	MIN	TYP.	MAX	UNIT
Supply voltage(LOGIC)	Vcc	—		5		V
Supply voltage(LED)	Vdd	—		5		V
Supply current(LOGIC)	Icc	Vcc=5V	—	200		mA
Supply-current	RED	Lighting —all		1.92		A
	GREEN					
	BLUE					



7. OTHER ITEM

7-1. Connection example between products



8. INTERFACE

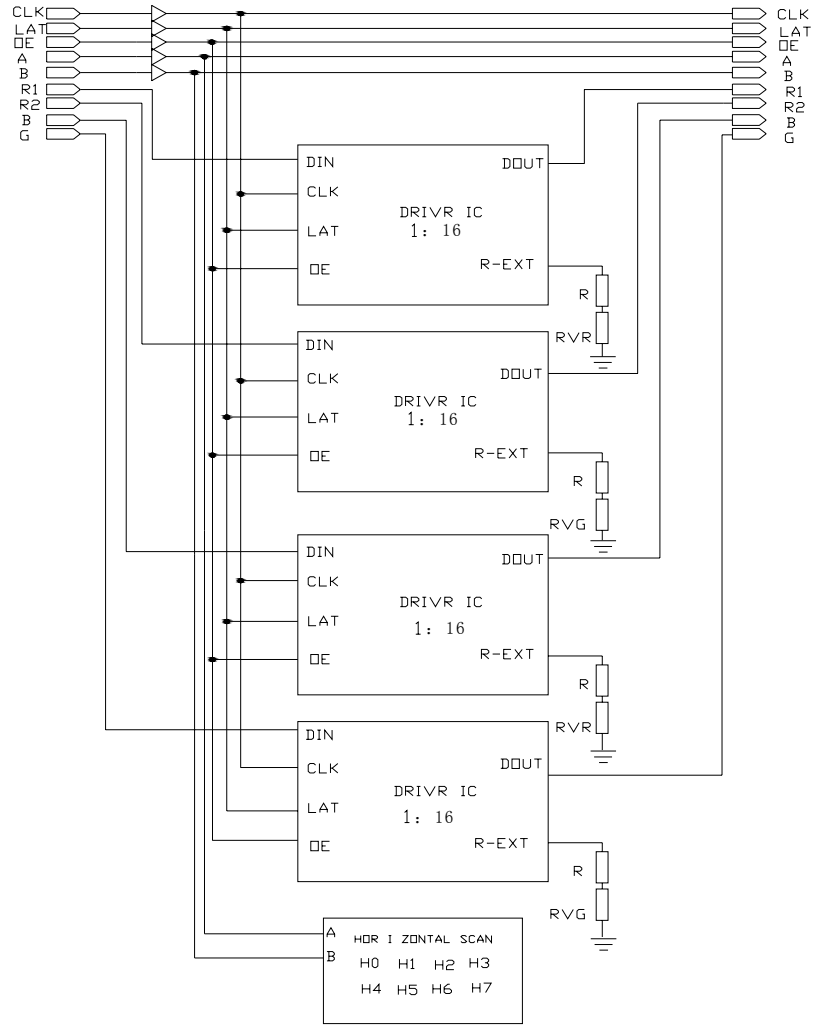
8-1.IN/OUT PUT connector pin number & signal function

PORT	Pin No.	SIGNAL	SIGNAL-FUNCTION
INPUT/ OUTPUT SIGNAL (IN)	1	R1	RED1 DATA
	2	R2	RED2 DATA
	3	B	BLUE DATA
	4	G	GREEN DATA
	5	GND	GROUND
	6	GND	GROUND
	7	GND	GROUND
	8	GND	GROUND
	9	CLK	SHIFT CLOCK
	10	GND	GROUND
	11	STB	DATA LATCH
	12	GND	GROUND
	13	OE	OUTPUT ENABLE
	14	GND	GROUND
	15	A	HORIZONTAL SCAN ADDRESS 0
	16	B	HORIZONTAL SCAN ADDRESS 1

8-2. Power connector pin number & signal function

NO	SIGNAL	LEVEL	FUNCTION	WIRE
1	GND	0 (V)	GROUND	BLACK
2	GND	0 (V)	GROUND	BLACK
3	VDD	5 (V)	POWER OF LED	RED
4	VCC	5 (V)	LOGIC	RED

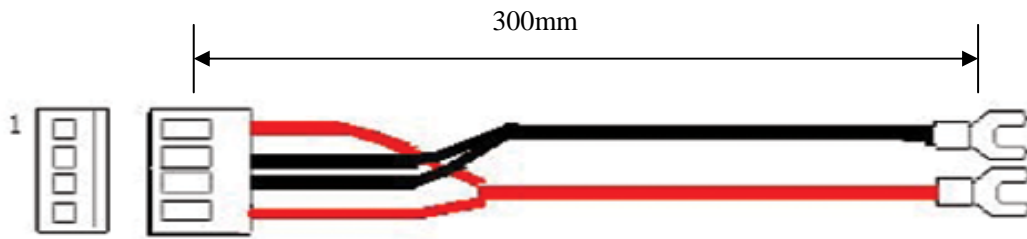
9. Principle drawing



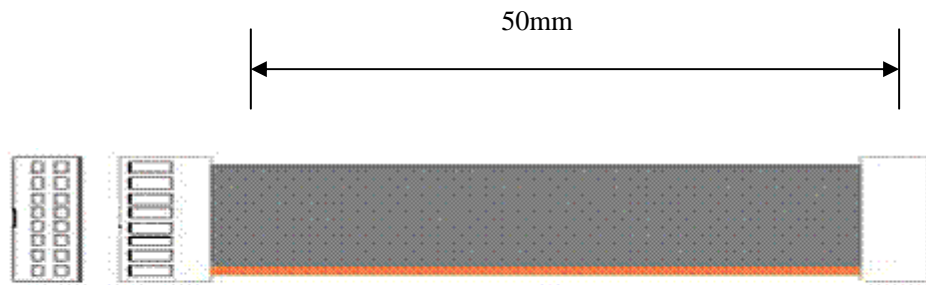
ROUT1 {1:16}	ROUT2 {1:16}	ROUT3 {1:16}	ROUT4 {1:16}	GOUT1 {1:16}
LED ARRAY (16×32)				GOUT2 {1:16}
				GOUT3 {1:16}
BOUT1 {1:16}	BOUT2 {1:16}	BOUT3 {1:16}	BOUT4 {1:16}	GOUT4 {1:16}

10..CABLE SPEC

<POWER CABLE>



<SIGNAL CABLE>



PART NO.	STANDARD	VENDOR
FL01-14D-50mm	2.54mm PITCH 16 P WIRE (FLAT CABLE/50mm)	
Gu396-0418-300R	4mm PITCH 4 P WIRE	

MODEL NO GYX - XNP12 - 2R1G1B - LAMP-QD-4S	PAGE 8/9
--	--------------------

11 .PART LIST

NO	PART LIST	DWG NO	QUAN.	TYPE	PART NAME	MAKER	NOTE
1	RED LED		256		GL-3K0URCD-T		
2	P/G LED		128		GL-3K0UGDD-T		
3	BLUE LED		128		GL-3K0MBDD-T		
4	PCB(Display)		1	2Layer/1.6t			128mm*256mm
5	DRIVE IC		8	SSOP-24	MBI5026C(GF)		
6	IC		2	SOJ-20	74AHC245D		
7	IC		1	SO-16	74HC138D		
8	IC		4	SOP-8	CEM4953		
9	CONDENSER		1	DIP	1000uF/16V		POWER
10	CHIP SEAMIC CON.		14	0805	0.1 uF		DRIVE
11	CHIP SEAMIC CON.		1	0805	0.1 uF		POWER
12	CHIP RESISTOR		8	0805	470 ϕ		
13	VAR RESISTOR		11	0805	104		

MODEL NO GYX - XNP12 - 2R1G1B - LAMP-QD-4S	PAGE 9/9
---	---------------------------

12. INSTALLATION NOTICES

1) Please apply this modules at a safe surrounding against noise because the error or mis-operation may occur at fragile place of noise.

2) Check surely the power condition to operation test in order to prevent module damage which might be caused by the excessive power.

3) Modules should be set up within the guarantee limitation and especially kept away from salt dust, soot and SO₂ gas etc.

4) When there is no data transmission at operation test just turn power off immediately. Otherwise operating gets damaged.

5) Please apply this product under the range of guarantee, considering the sufficient radiation in case of the assembled multi-module.

6) V led is recommended the maximum of rating voltage for best result under the low temperature such as -15° C below.

7) Please check the insert direction when you attach SIGNAL CONNECTOR or link the power.

13 .REFERENCES

1) Check SYSTEM weight before apply modules into housing.

2) Operation test or anti-static electricity need for the COMS attached in circuit board.

3) Sufficient power capability is necessary to deal with the excessive power which might be drastically caused depending on the condition of the on/off of unit.(peak current times 1.5 and higher)

4) power for logic or LED requires Switching Mode Supply.

5) Use power bus bar when connecting power. It helps power to keep from falling down..

6) Please don't change "switch was set as outgoing" The switch was set as out-going.

7) Any further question or trouble herein will be worked out mutually by customer and supplier through sales manager.
