



# GUOYEXING OPTOELECTRONICS CO.LTD

## SPECIFICATION

FOR APPROVAL

ISSUED DATE :

CUSTOMER :

DESCRIPTION :

MODEL NO.: GYX-1388ASRG-MZ

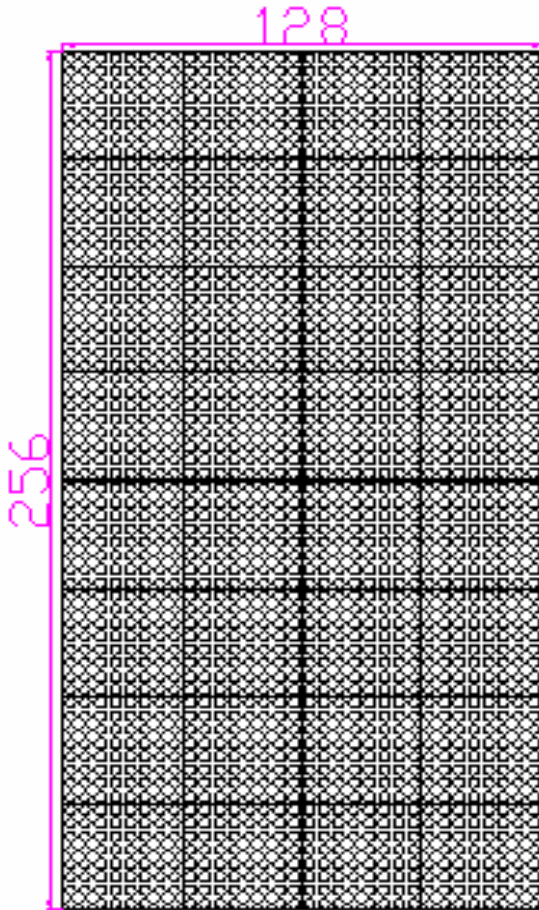
DOCUMENTNO. :

[ GUOYEXING TECH. ]

ISSUE	REVIEW	APPRL

[ CUSTOMER APPROVAL ]

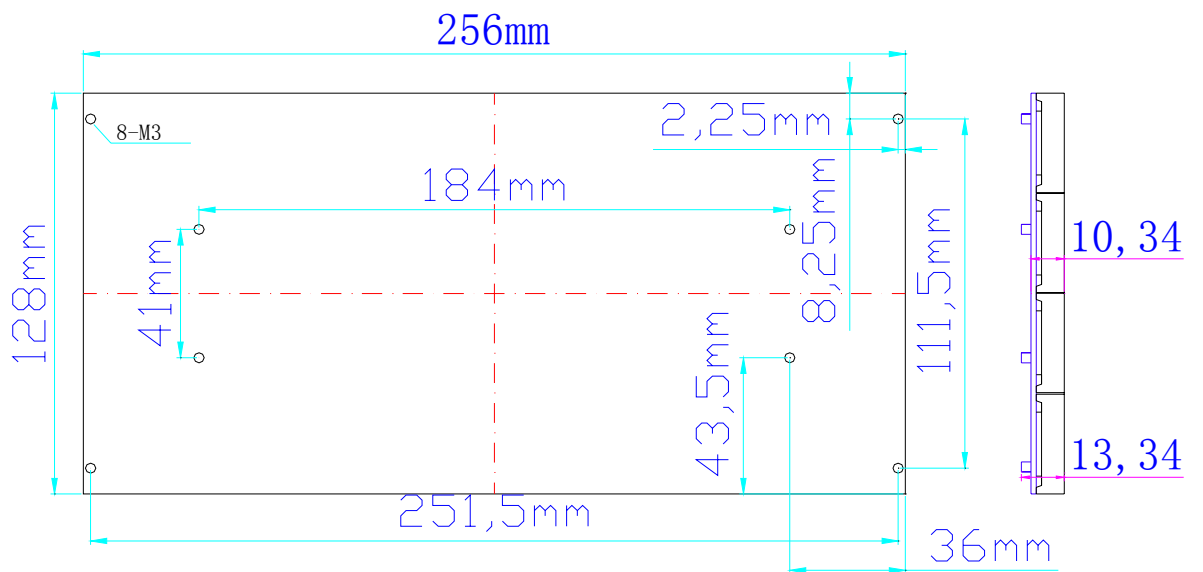

**\*DATE—CONNECTOR (JIN1, JOUT1)**



PIN NO	SIGNAL	PIN NO	SIGNAL
1	GND	2	A
3	GND	4	B
5	GND	6	C
7	EN	8	D
9	R1	10	G1
11	R2	12	G2
13	GND	14	LT
15	GND	16	SK

**\*POWER CONNECTOR (J POWER1)**

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



This module designed for light emitting display device. Organize with 32x64 matrix combination with 2048of Red(1), YG(1), lamps , for indoor use.

### 1、 FEATURE

Active display size	128mm×256mm
Dot size	3mm
Dot pitch	3.75mm
Display color	Red, Y-Green
Drive type	1/16SCAN
Dot matrix	2048(32×64)
Weight	410g

### 2、 ABSOLUTE MAXIMUM RATINGS

Ta=25℃

ITEM	SYMBOL	RATING	UNIT	COND
Power dissipation	PD	35W	W	
Supply voltage	Vcc	5	V	
Operating Temp	Topr	-20~+60	℃	
Storage Temp	Tstg	-20~+65	℃	

### 3、 GUARANTEE TEMPERATURE FOR OPERATING

ITEM	ATMOSPHERIC TEMP	REMARK
Work Temp	-20~+53℃(Max)	50% Lit
Storage Temp	-20~+60℃(Max)	25% Lit

### 4、 DISPLAY CHARACTERISTICS

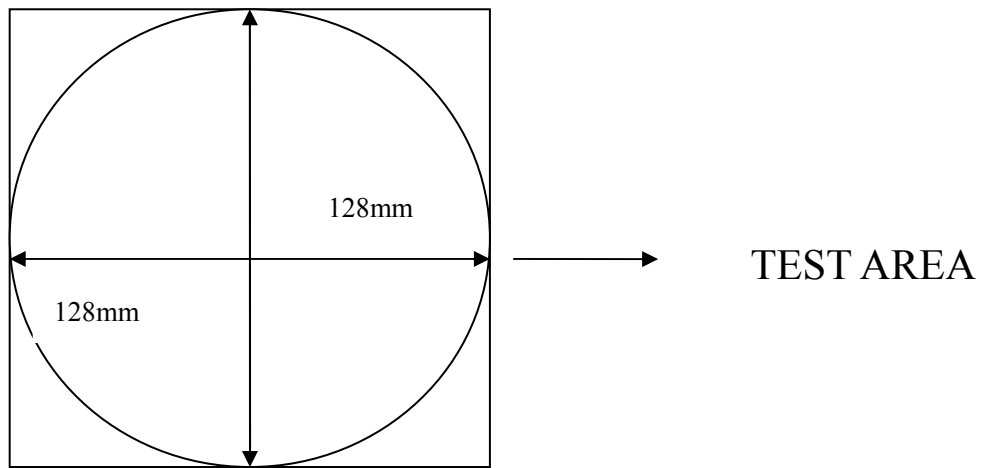
- 4-1. Half viewing angle —————±50° /25°
- 4-2. Brightness of emission area.(when black-out) —————Clear
- 4-3. Brightness of non-emission area —————Black

**5、 OPTICAL CHARACTERISTICS**

Ta=25°C

ITEM		SYMBOL	COND	MIN.	TYP	MAX	UNIT
Brightness	RED	IVr	Vcc=5V	70	90	110	Cd/m <sup>2</sup>
	Y-GREEN	IVg					

(\*1)

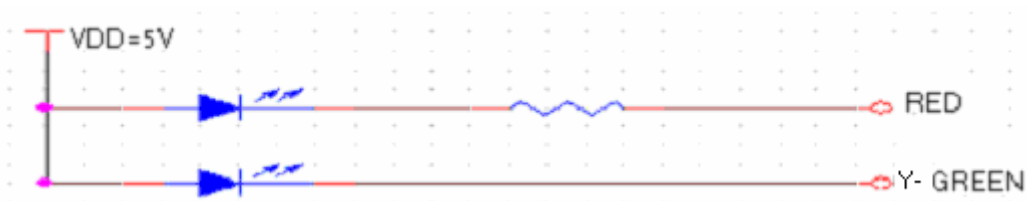


**6、 ELECTRICAL CHARACTERISTICS**

**6-1.Voltage-Current Characteristics**

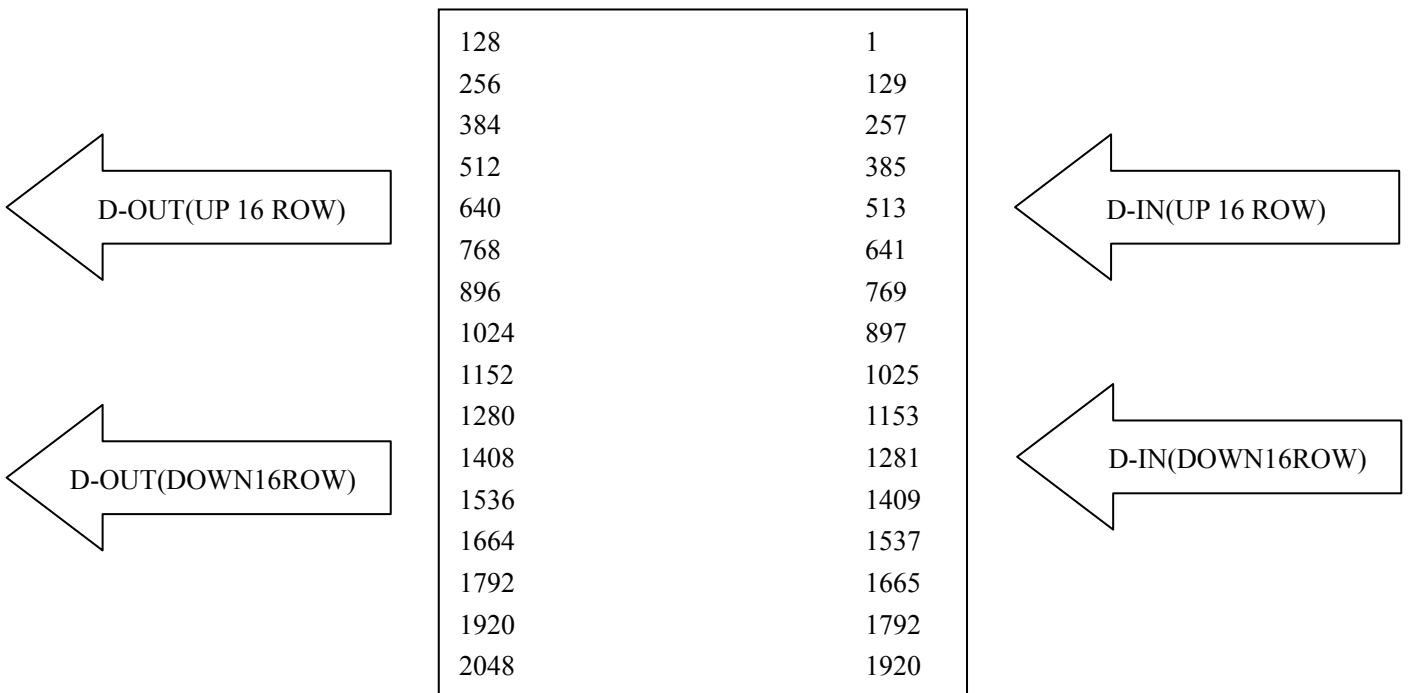
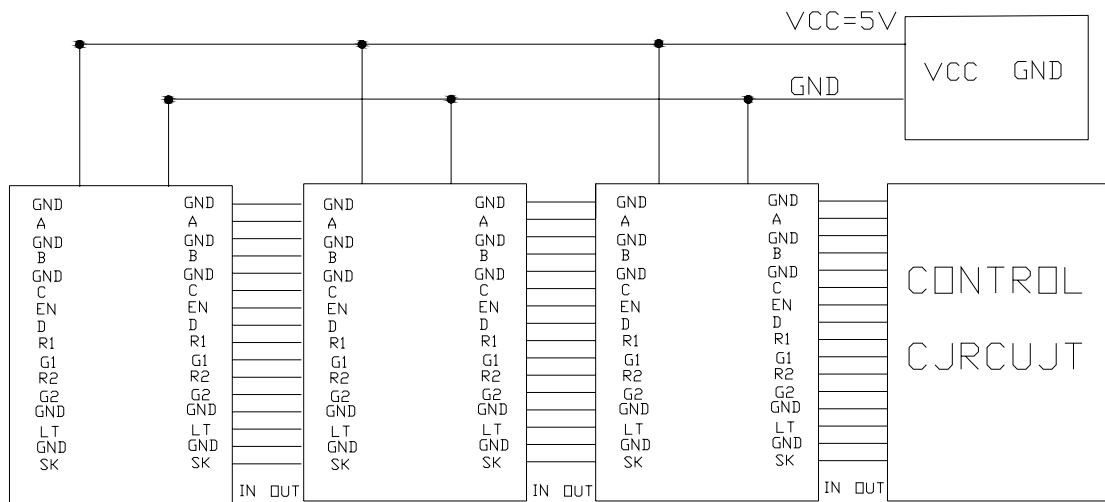
Ta=25°C

ITEM	SYMBOL	COND	MIN	TYP.	MAX	UNIT
Supply voltage(LOGIC)	Vcc	—		5		V
Supply current(LOGIC)	Icc	Vcc=5V	—	200		mA
Supply current(LED)	Iled			7		A



**7. OTHER ITEM**

**7—1. Connection example between products**



## 8. INTERFACE

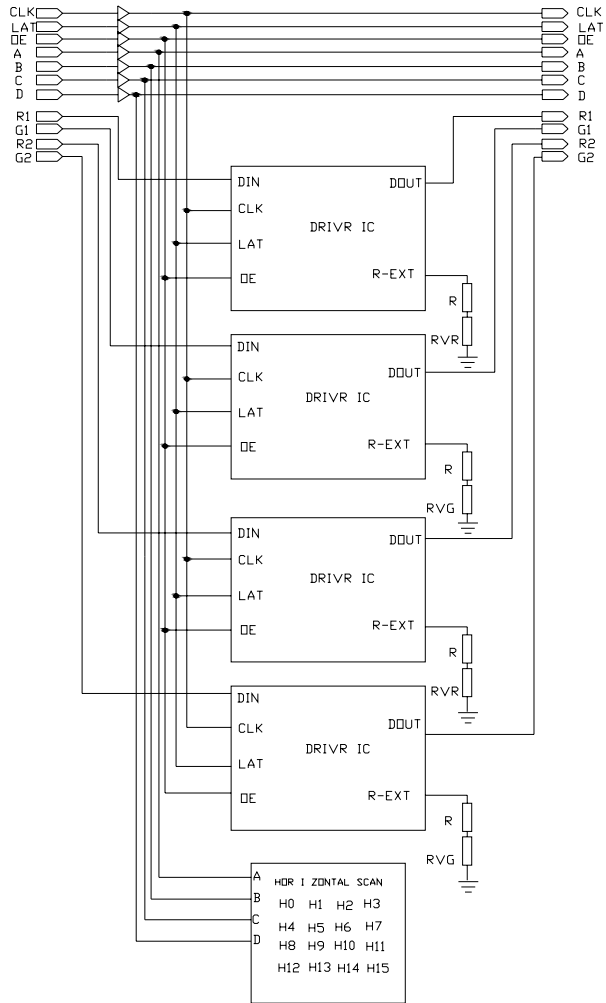
### 8-1.IN/OUT PUT connector pin number & signal function

PORT	Pin No.	SIGNAL	SIGNAL-FUNCTION
INPUT/ OUTPUT SIGNAL (IN)	1	GND	GROUND
	2	A	HORIZONTAL SCAN ADDRESS 0
	3	GND	GROUND
	4	B	HORIZONTAL SCAN ADDRESS 1
	5	GND	GROUND
	6	C	HORIZONTAL SCAN ADDRESS2
	7	EN	OUTPUT ENABLE
	8	D	HORIZONTAL SCAN ADDRESS 3
	9	R1	RED DATA (UP 8 ROW)
	10	G1	GREEN DATA (UP 8 ROW)
	11	R2	RED DATA (DOWN 8 ROW)
	12	G2	GREEN DATA (DOWN 8 ROW)
	13	GND	GROUND
	14	LT	DATA LATCH
	15	GND	GROUND
	16	SK	SHIFT CLOCK

### 8-2. Power connector pin number & signal function

NO	SIGNAL	LEVEL	FUNCTION	WIRE
1	VCC	5 [V]	POWER OF LED	RED
2	GND	0 [V]	GROUND	BLACK

9.BLOCK DIAGRA

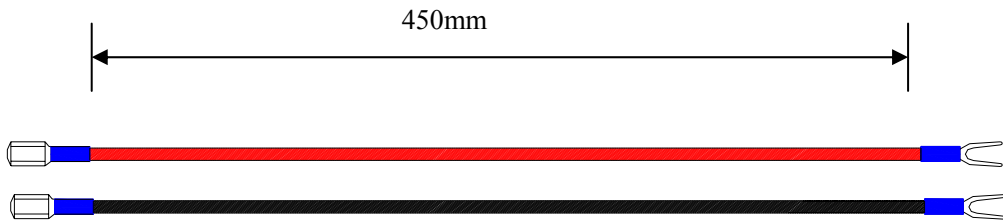


ROUT1	ROUT2	ROUT3	ROUT4
{1:1G}	{1:1G}	{1:1G}	{1:1G}
<b>LED ARRAY</b>			
<b>(32×64)</b>			
GCUF1	GCUF2	GCUF3	GCUF4
{1:1G}	{1:1G}	{1:1G}	{1:1G}

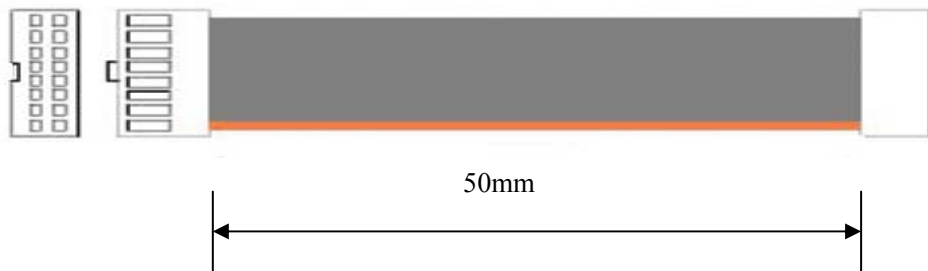
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10. CABLE SPEC

<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	

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11. PART LIST

NO	PART LIST	QUAN.	TYPE	PART NAME	MAKER	NOTE
1	MODULE	32	1388ASRG			
2	PCB(Display)	1	GYX1388ASRGPCB			128mm*256mm
3	DRIVE IC	32	SOP-16	74HC595		
4	IC	2	SOP-20	74HC245D		
5	IC	2	SOP-16	74HC138D		
6	IC	1	SOP-14	74HC04D		
7	TRANSISTOR	8	SOP-8	CEM4953		
8	CAPACITANCE	2	DIP	470uF/16V		POWER
9	CAPACITANCE	37	SMC	104		
10	RESISTANCE	2	SMC	4.7K $\Omega$		
11	RESISTANCE	16	SMC	100 $\Omega$		
12	EXCLUSION	2	SMC	1K $\Omega$		
13	filling-in bits	8		M3*10		
14	SCREW	8		$\phi$ 3		
15	POWER LINE	1		2.5*2*450mm		

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## 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 SO<sub>2</sub> 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.
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