



GUOYEXING OPTOELECTRONICS CO.LTD

SPECIFICATION

FOR APPROVAL

ISSUED DATE :

CUSTOMER :

DESCRIPTION :

MODEL NO.: P10F01D - 44S - V1.0

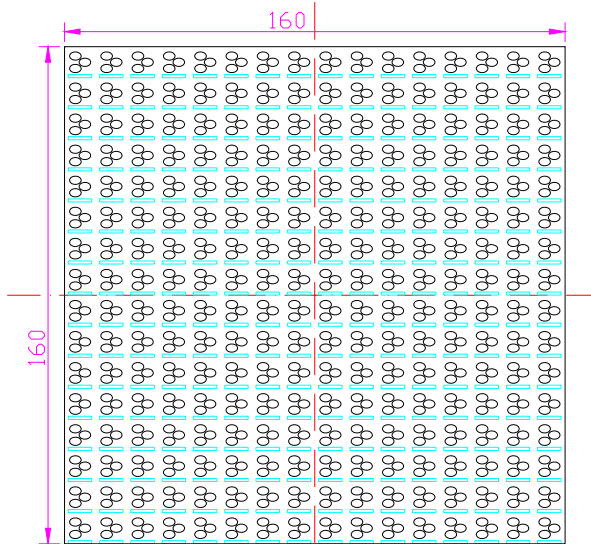
DOCUMENTNO. :

[GUOYEXING TECH.]

ISSUE	REVIEW	APPRL

[CUSTOMER APPROVAL]

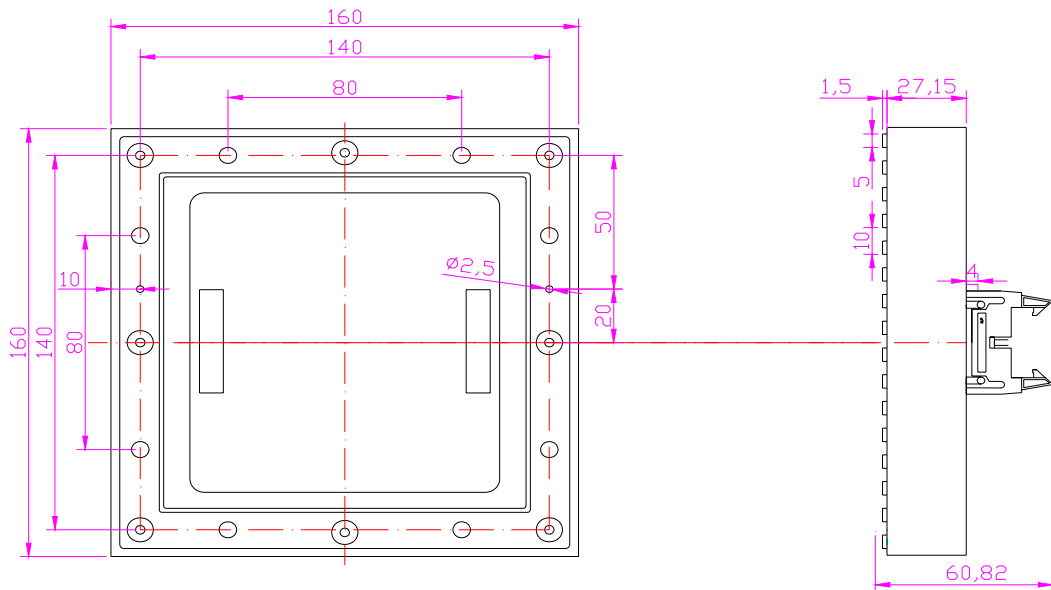
***DATE—CONNECTOR (JIN1、JOUT1)**



PIN NO	SIGNAL	PIN NO	SIGNAL
1	R	2	G
3	B	4	GND
5	R1	6	G1
7	B1	8	GND
9	A0	10	A1
11	CLK	12	GND
13	STB	14	GND
15	OE	16	GND

***POWER CONNECTOR (J POWER1)**

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

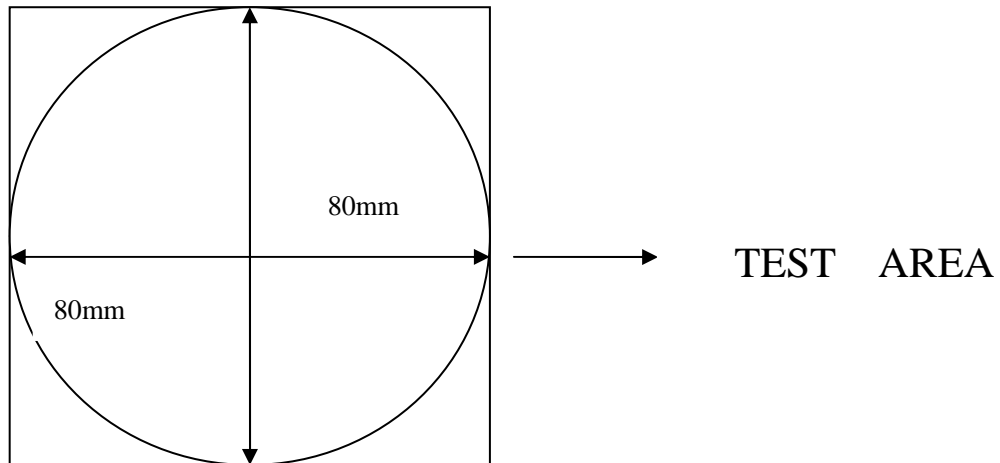


5、 OPTICAL CHARACTERISTICS

Ta=25°C

TTEM	SYMBOL	COND	MIN.	TYP	MAX	UNIT
Brightness	RED	IVr	700	750	800	MCD
	GREEN	IVg	750	850	950	
	BLUE	IVb	200	225	250	
	WHITE	IVa	4700	5000	5300	CD/m²
Wavelength	RED	Dr	—	630	—	Nm
	GREEN	Dg	—	525	—	
	BLUE	Db	—	470	—	

(*1)



6、 ELECTRICAL CHARACTERISTICS

6-1.Voltage-Current Characteristics

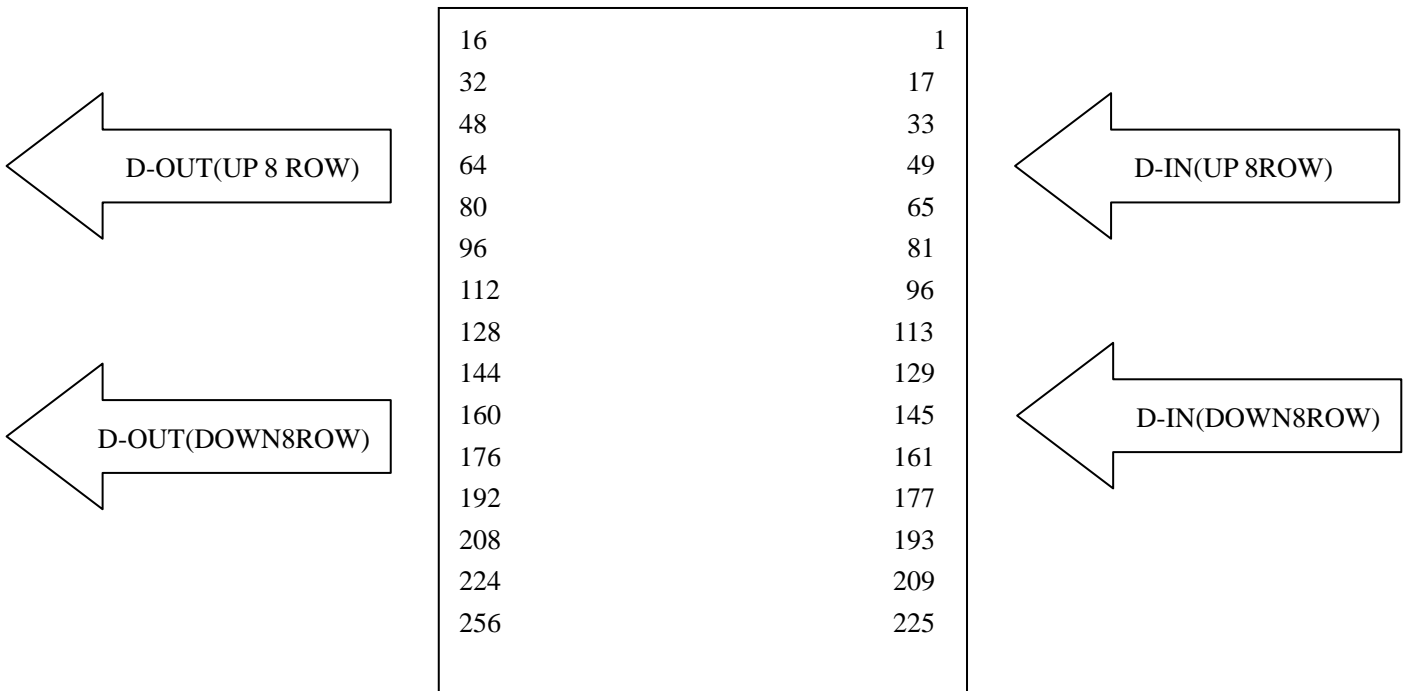
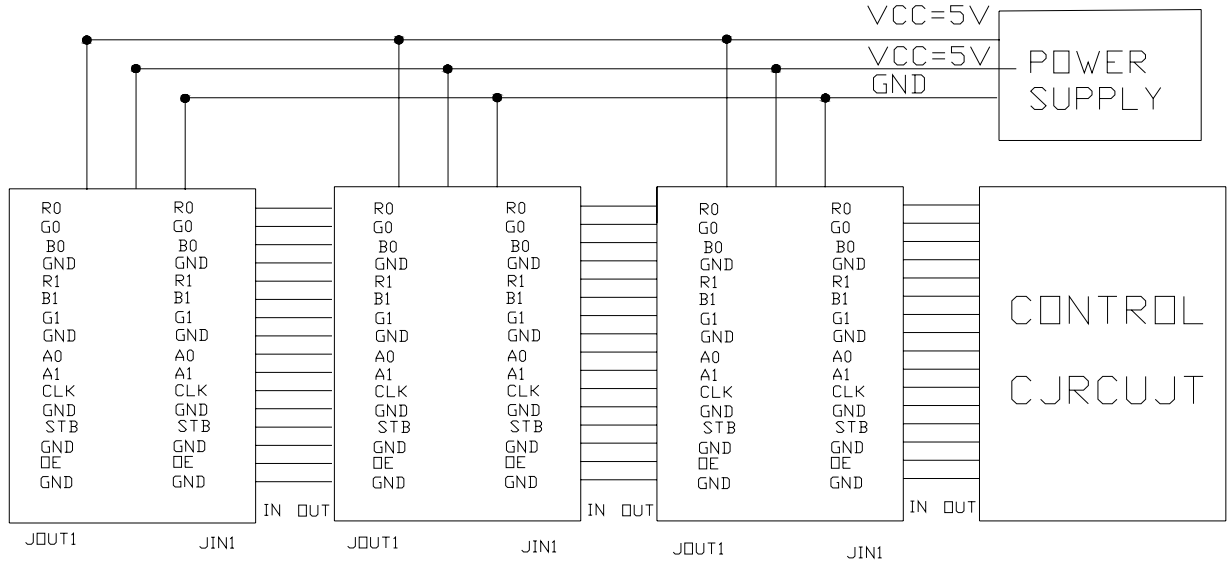
Ta=25°C

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	ILEDr	Lighting —all	3.84		A
	GREEN	ILEDg				
	BLUE	ILEDb				



7. OTHER ITEM

7-1. Connection example between products



8. INTERFACE

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

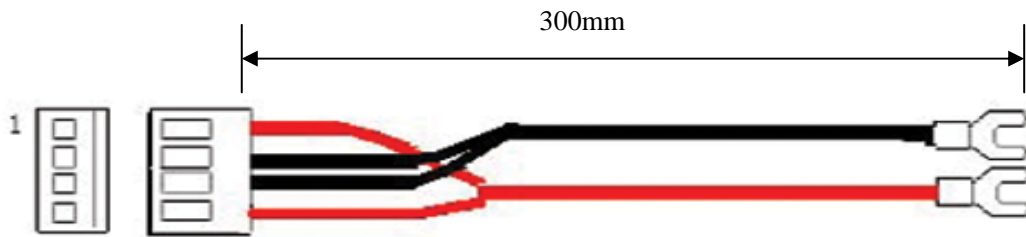
PORT	Pin No.	SIGNAL	SIGNAL-FUNCTION
INPUT/ OUTPUT SIGNAL (IN)	1	R0	RED DATA (UP 8 ROW)
	2	G0	GREEN DATA (UP 8 ROW)
	3	B0	BLUE DATA (UP 8 ROW)
	4	GND	GROUND
	5	R1	RED DATA (DOWN 8 ROW)
	6	G1	GREEN DATA (DOWN 8 ROW)
	7	B1	BLUE DATA (DOWN 8 ROW)
	8	GND	GROUND
	9	A0	HORIZONTAL SCAN ADDRESS 0
	10	A1	HORIZONTAL SCAN ADDRESS 1
	11	CLK	SHIFT CLOCK
	12	GND	GROUND
	13	STB	DATA LATCH
	14	GND	GROUND
	15	OE	OUTPUT ENABLE
	16	GND	GROUND

8-2. Power connector pin number & signal function

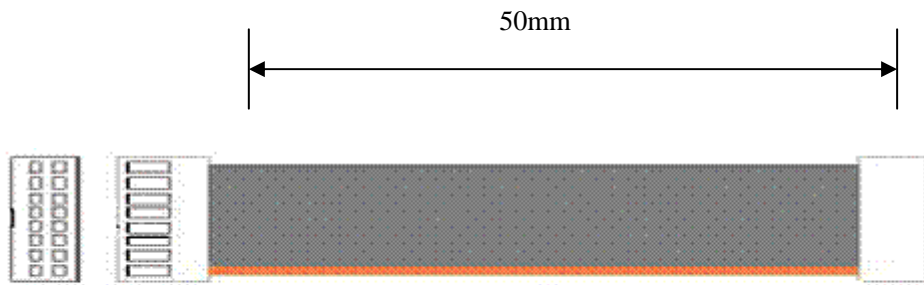
NO	SIGNAL	LEVEL	FUNCTION	WIRE
1	VCC	5 (V)	LOGIC	RED
2	GND	0 (V)	GROUND	BLACK
3	GND	0 (V)	GROUND	BLACK
4	VDD	5 (V)	POWER OF LED	RED

9.CABLE SPEC

<POWER CABLE>

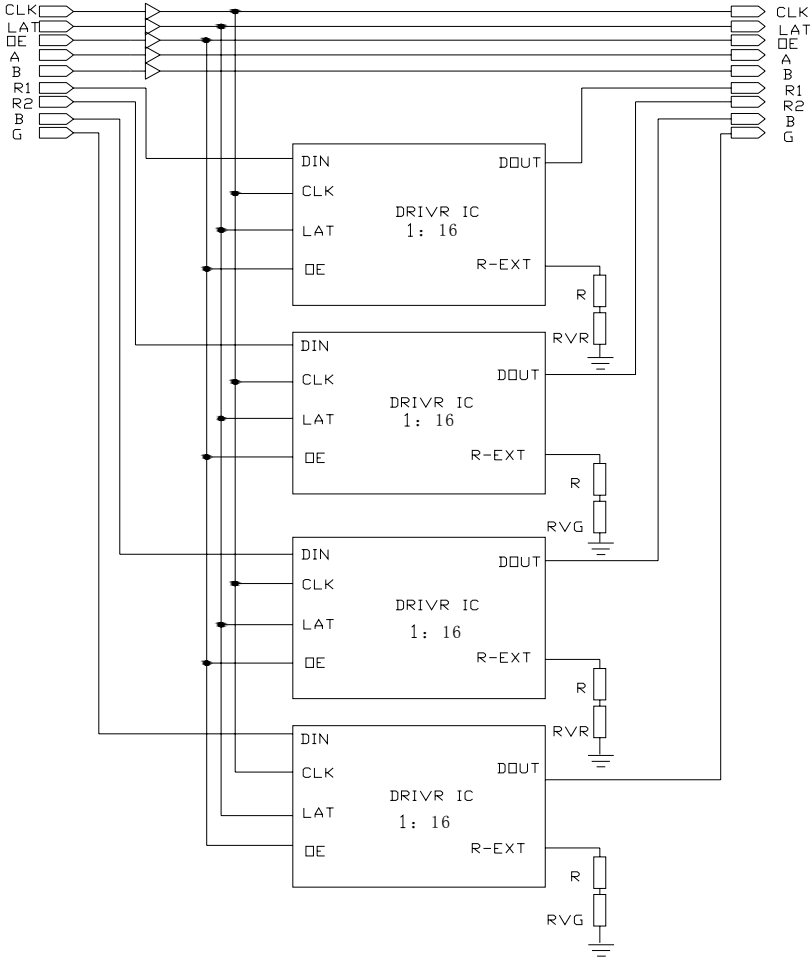


<SIGNAL CABLE>



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

10. principle drawing



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

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11. .PART LIST

NO	PART LIST	DWG NO	QUAN.	TYPE	PART NAME	MAKER	NOTE
1	RED LED		256				
2	GREEN LED		256				
3	BLUE LED		256				
4	PCB(Display)		1	2Layer/1.6t			160mm*160mm
5	DRIVE IC		12	SSOP-24	MBI5026C(GF)		
6	IC		2	SOJ-20	74AHC245D		
7	IC		1	SO-16	74HC138D		
8	IC		8	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		32	0805	510 ϕ		
13	CHIP RESISTOR		2	0805	100 ϕ		
14	CHIP RESISTOR		1	0805	1K ϕ		
15	CHIP RESISTOR		1	0805	51 ϕ		
16	CHIP RESISTOR		1	0805	82 ϕ		
17	CHIP RESISTOR		1	0805	82 ϕ		
18	VAR RESISTOR		11	0805	104 ϕ		
19	POWERHOUSING		1	DIP	XH 4*4 p		

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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 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.
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