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LED MODULE

OUTDOOR 16X8 P20mm.



ITEM	DESIGNED	INSPECTOR	APPROVED
SIGNATURE	<i>A. Ward</i>	<i>[Signature]</i>	<i>[Signature]</i>
DATE	2008/12/23	2008/12/23	2008/12/23

1.LED MODULE NAME : INDOOR 8X16 P20mm.

2.FEATURES

ITEM		DESCRIPTION
DISPLAY COLOR		Full Color(Red+Green+Blue)
WEIGHT		850(g)
DRIVE MODE		LATCH
APPLICATION		OUTDOOR
STRUCTURE	SIZE(WxHxD)	320x160x47(mm)
	DOT PITCH	20(mm)
	NUMBER OF DOTS	512 (16x8)DOTs
	LED PER DOT	Red(2)+Green+Blue

3.ABSOLUTE MAXIMUM RATING


ITEM	SYMBOL	VALUE	UNIT	REMARK
OPERATING TEMPERATURE	T_{op}	-40 ~ 60	°C	
STORAGE TEMPERATURE	T_{stg}	-40 ~ 80	°C	
SUPPLY VOLTAGE	V_{cc}	0 ~ +5.5	V	
SIGNAL INPUT VOLTAGELEVEL	V_{iH}, V_{iL}	-0.4 ~ $V_{cc}+0.4$	V	

4.RECOMMENDED OPERATING CONDITIONS

ITEM		SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
SUPPLY VOLTAGE	LED & LOGIC CIRCUIT	V_{cc}	4.75	5	5.25	V	
SIGNAL INPUT VOLTAGE LEVEL		V_{iH}	$0.7 \times V_{cc}$	-	V_{cc}		
		V_{iL}	0	-	$0.3 \times V_{cc}$		
OPERATING TEMPERATURE		T_{op}	0 ~ 60			°C	

5. ELECTRICAL CHARACTERISTICS (AT Ta = 25°C)

ITEM	SYMBOL	VALUE	UNIT	REMARK
CLOCK FREQUENCY	F	15	MHz	
CURRENT CONSUMPTION PER MODULE	I_{cc}	3.5	A	ALL ON

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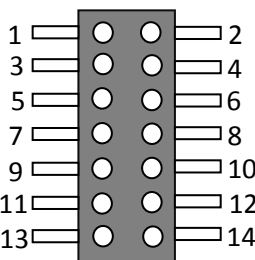
6. OPTICAL CHARACTERISTICS (AT Ta = 25°C)


ITEM		SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
BRIGHTNESS	RED	L_v	-	1750	-	cd/m^2	
	GREEN		-	4250	-		
	BLUE		-	1050	-		
	WHITE		-	7100	-		
WAVELENGTH	RED	λ_p		624		nm	
	GREEN			515			
	BLUE			470			
VIEWING ANGLE	HOR.	Angle		80		deg(°)	
	VER.			40			

7. SIGNAL FUNCTION

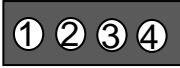
1) DATA SIGNAL CONNECTOR

Pin Map (IN)	Pin Number	Pin Name	Function Description
	1,2,4,8,10	GND	Ground of the Module
	3	RA	Data Input Red1 Color
	5	RB	Data Input Red2 Color
	6	Green	Data Input Green Color
	7	Blue	Data Input Blue Color
	9	OE	Brightness Control
	11	Latch	Data Strobe
	13	Clock	Shift Clock for Input Data
	12,14	No Name	Do Not Application

Pin Map (OUT)	Pin Number	Pin Name	Function Description
	1,2,4,8,10	GND	Ground of the Module
	3	Red1_Out	Data Output Red1 Color
	5	Red2_Out	Data Output Red2 Color
	6	Green_Out	Data Output Green Color
	7	Blue_Out	Data Output Blue Color
	9	OE_Out	Brightness Control
	11	Latch_Out	Data Strobe
	13	Clock_Out	Shift Clock for Output Data
	12,14	No Name	Do Not Application


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2) POWER CONNECTOR

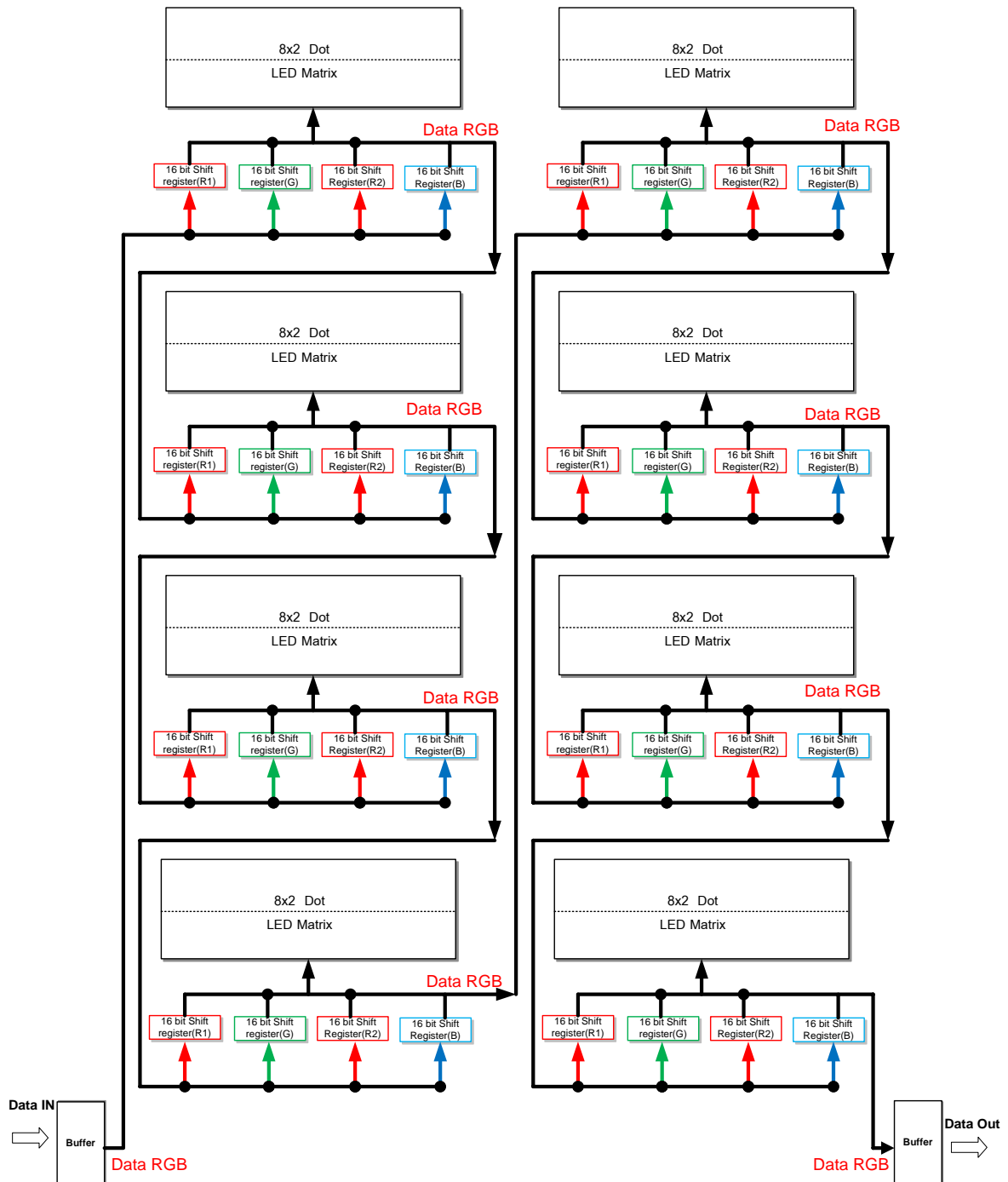
Pin Map (Power)	Pin Number	Pin Name	Function Description
	1	VLED	Supply Voltage for LED& Module
	2	GND	Ground of Module
	3	VCC	Supply Voltage for LED& Module
	4	GND	Ground of Module


3) CONNECTOR SPECIFICATION

ITEM	VENDOR	MODUL NO.	SPECIFICATION	HOUSING MODEL NO.
DATA CON	GTK	SCP14GS11	14Pin P2.54mm.	SC14TA11
POWER CON	GTK	111404ST	4Pin P5.08mm.	-

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8. BLOCK DIAGRAM



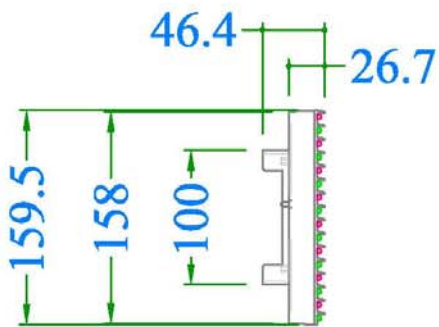
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9. DIMENSION

TOP VIEW



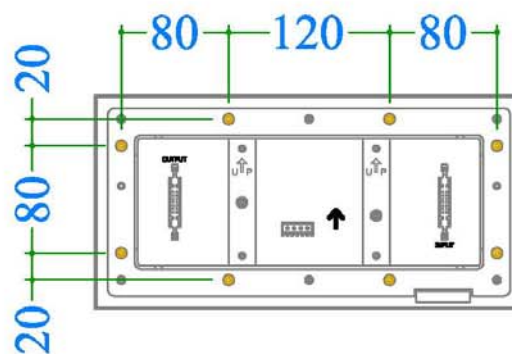
SIDE VIEW




FRONT VIEW



BACK VIEW



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