

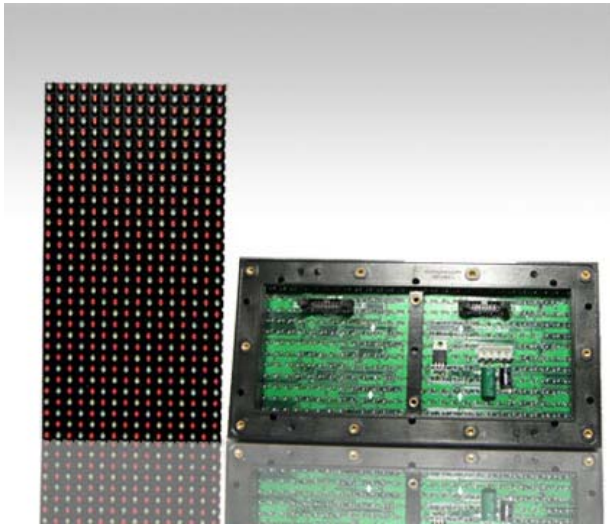


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# LED MODULE

## OUTDOOR 16X8 P16mm.



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

1.LED MODULE NAME : OUTDOOR 8X16 P16mm.

## 2.FEATURES

ITEM		DESCRIPTION
DISPLAY COLOR		Full Color(Red+Green+Blue)
WEIGHT		480(g)
DRIVE MODE		LATCH
APPLICATION		OUTDOOR
STRUCTURE	SIZE(WxHxD)	256x128x35(mm)
	DOT PITCH	16(mm)
	NUMBER OF DOTS	512 (16x8)DOTs
	LED PER DOT	Red(2),Green, Blue

## 3.ABSOLUTE MAXIMUM RATINGS


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

## 4.RECOMMENDED OPERATING CONDITIONS

ITEM		SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
SUPPLY VOLTAGE	LED	$V_{LED}$	3.75	4	4.25	V	
	CIRCUIT	$V_{cc}$	3	3.3	3.6		
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	$I_{cc}$	8	A	ALL ON

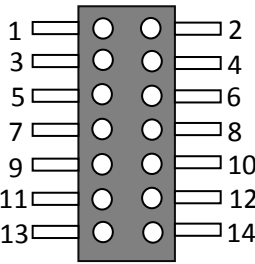
	LED MODULE	REV.NO	DATE	PAGE
	OUTDOOR P16mm.	0	2008.12.23	1/5

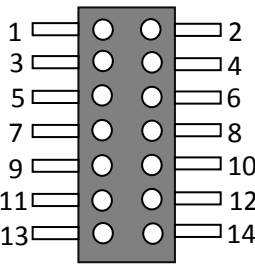
## 6. OPTICAL CHARACTERISTICS (AT Ta = 25°C)

ITEM		SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
BRIGHTNESS	RED	$L_v$	-	3600	-	$cd/m^2$	
	GREEN		-	11200	-		
	BLUE		-	2800	-		
	WHITE		-	17600	-		
WAVELENGTH	RED	$\lambda_p$		630		nm	
	GREEN			525			
	BLUE			470			
VIEWING ANGLE	HOR.	Angle		40		deg(°)	
	VER.			40			

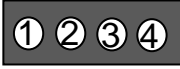
## 7. SIGNAL FUNCTION

### 1) DATA SIGNAL CONNECTOR

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

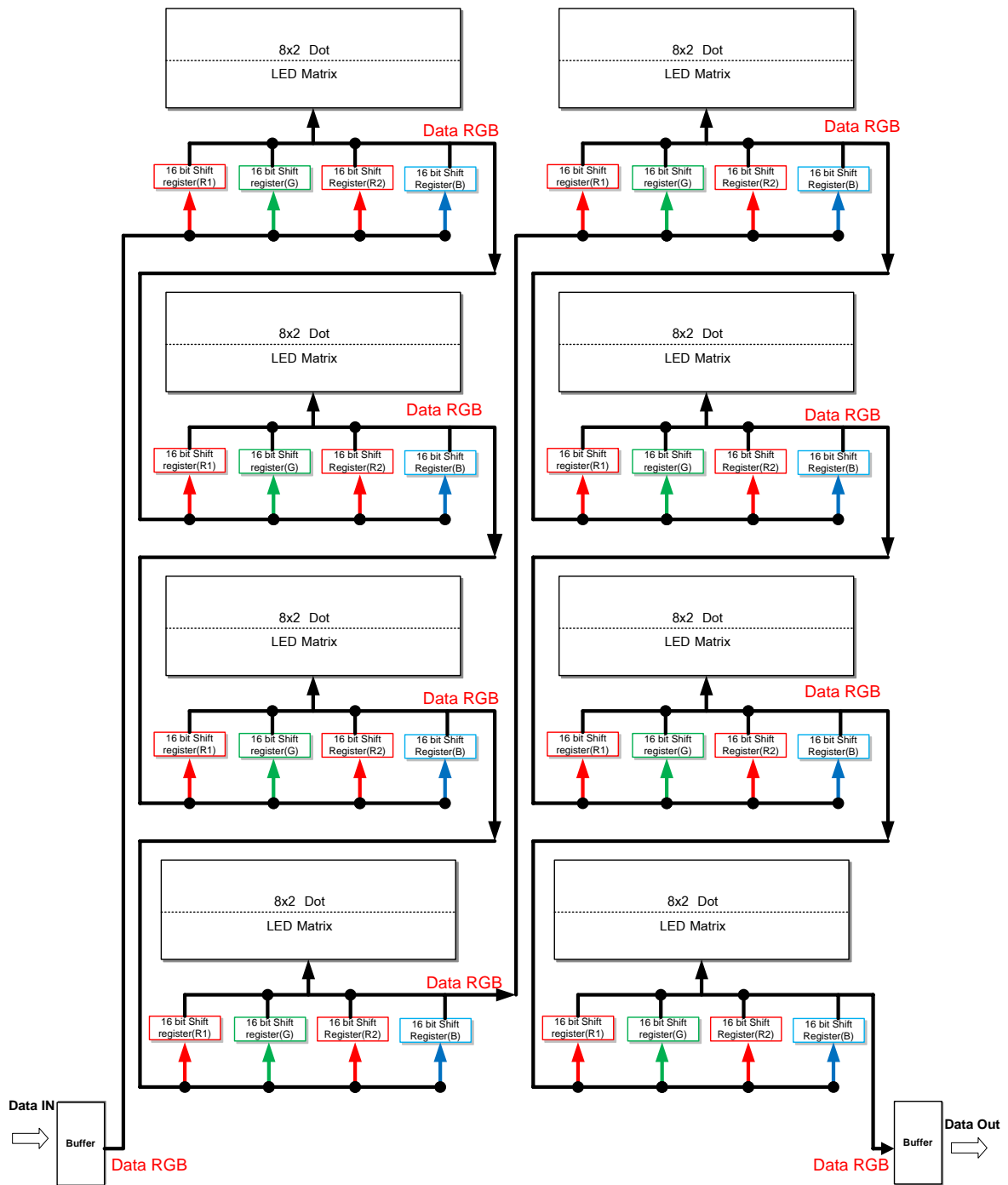
2) POWER CONNECTOR


Pin Map (Power)	Pin Number	Pin Name	Function Description
	1	4V	Supply Voltage for LED& Module
	2	GND	Ground of Module
	3	3.3V	Supply Voltage for LED& Module
	4	GND	Ground of Module

3) CONNECTOR SPECIFICATION

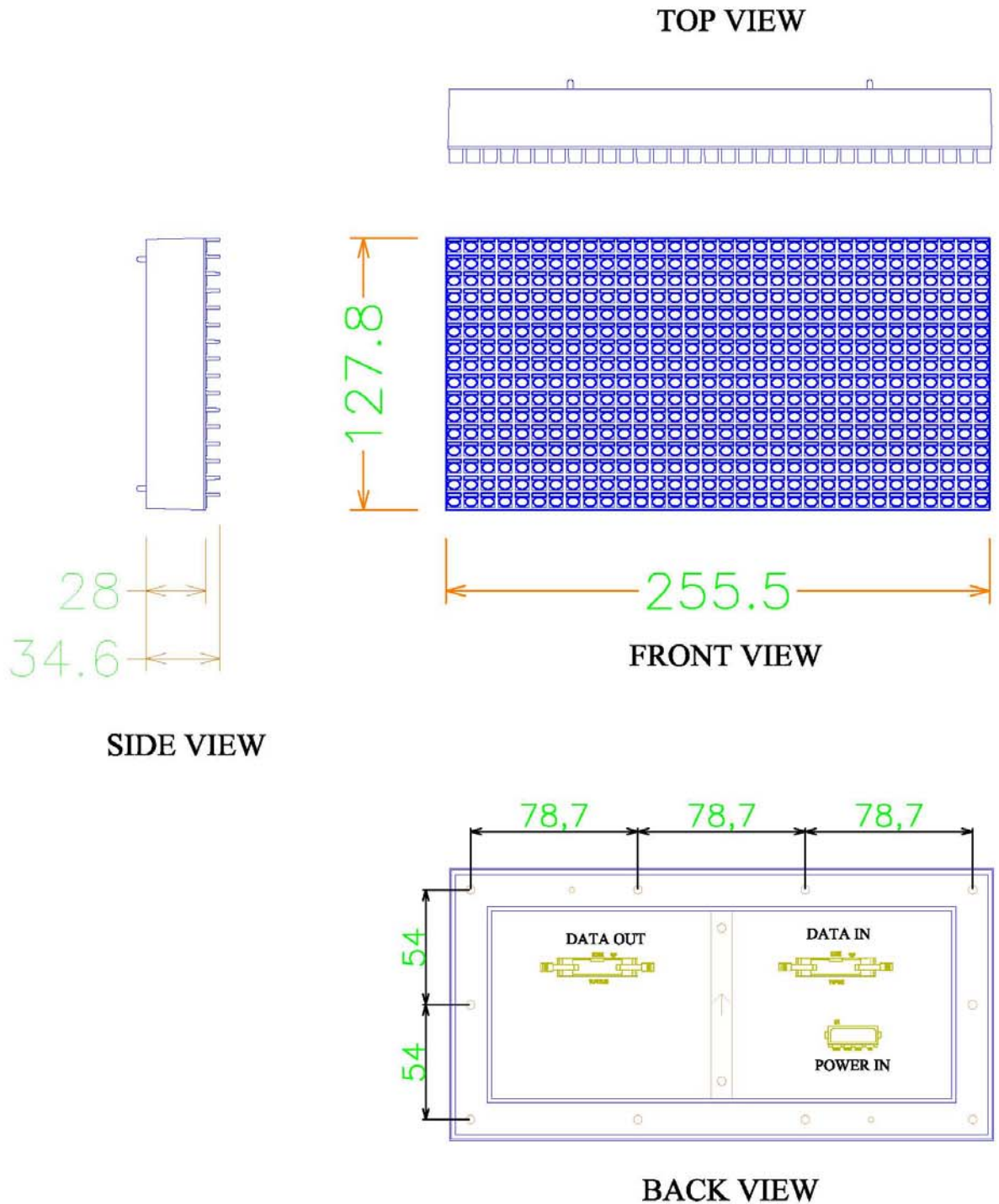
ITEM	VENDOR	MODUL NO.	SPECIFICATION	HOUSING MODEL NO.
DATA CON	GTK	SCP14GS11	14Pin P2.54mm.	SC14TA11
POWER CON	GTK	111404ST	4Pin P5.08mm.	


## 8. BLOCK DIAGRAM



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## 9. DIMENSION



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