

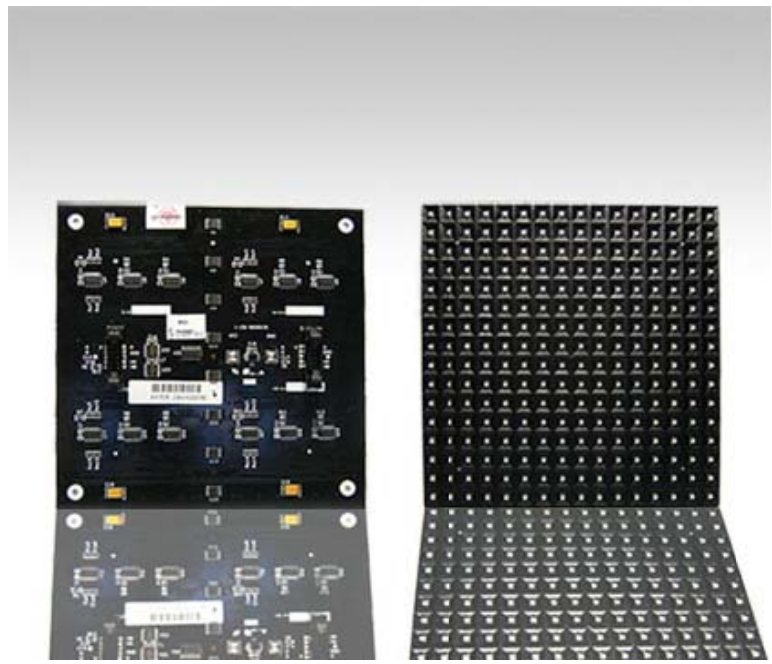


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LED MODULE

INDOOR 16X16 P12mm.



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 : INDOOR 16X16 P12mm.

2.FEATURES

ITEM		DESCRIPTION
DISPLAY COLOR		Full Color(Red+Green+Blue)
WEIGHT		175(g)
DRIVE MODE		1/4 DUTY DRIVE
APPLICATION		INDOOR
STRUCTURE	SIZE(WxHxD)	192x192x34(mm)
	DOT PITCH	12(mm)
	NUMBER OF DOTS	256(16x16)DOTs
	LED PER DOT	3in1(Red+Green+Blue) LED SMD

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}	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 ~ 45			°C	

5. ELECTRICAL CHARACTERISTICS (AT $T_a = 25^\circ\text{C}$)

ITEM	SYMBOL	VALUE	UNIT	REMARK
CLOCK FREQUENCY	F	15	MHz	
CURRENT CONSUMPTION PER MODULE	I_{cc}	4	A	ALL ON

	LED MODULE	REV.NO	DATE	PAGE
	INDOOR P12mm.	0	2008.12.23	1/5

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

ITEM		SYMBOL	MIN.	TYP.	MAX.	UNIT	REMARK
BRIGHTNESS	RED	L_v	-	340	-	cd/m^2	
	GREEN		-	960	-		
	BLUE		-	200	-		
	WHITE		-	1500	-		
WAVELENGTH	RED	λ_p		617		nm	
	GREEN			528			
	BLUE			470			
VIEWING ANGLE	HOR.	Angle		120		deg(°)	50% Brightness
	VER.			120			

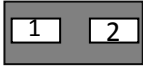
7. SIGNAL FUNCTION

1) DATA SIGNAL CONNECTOR

Pin Map (IN)	Pin Number	Pin Name	Function Description
	1	Red	Data Input Red Color
	2	Green	Data Input Green Color
	3	Blue	Data Input Blue Color
	4,6	GND	Ground of the Module
	5	Clock	Shift Clock for Input Data
	7	Latch	Data Strobe
	8	A	2 bit line Address
	10	B	
	9	OE	Brightness Control

Pin Map (OUT)	Pin Number	Pin Name	Function Description
	1	Red_Out	Data Output Red Color
	2	Green_Out	Data Output Green Color
	3	Blue_Out	Data Output Blue Color
	4,6	GND	Ground of the Module
	5	Clock_Out	Shift Clock for Output Data
	7	Latch_Out	Data Strobe
	8	A_Out	2 bit line Address
	10	B_Out	
	9	OE_Out	Brightness Control

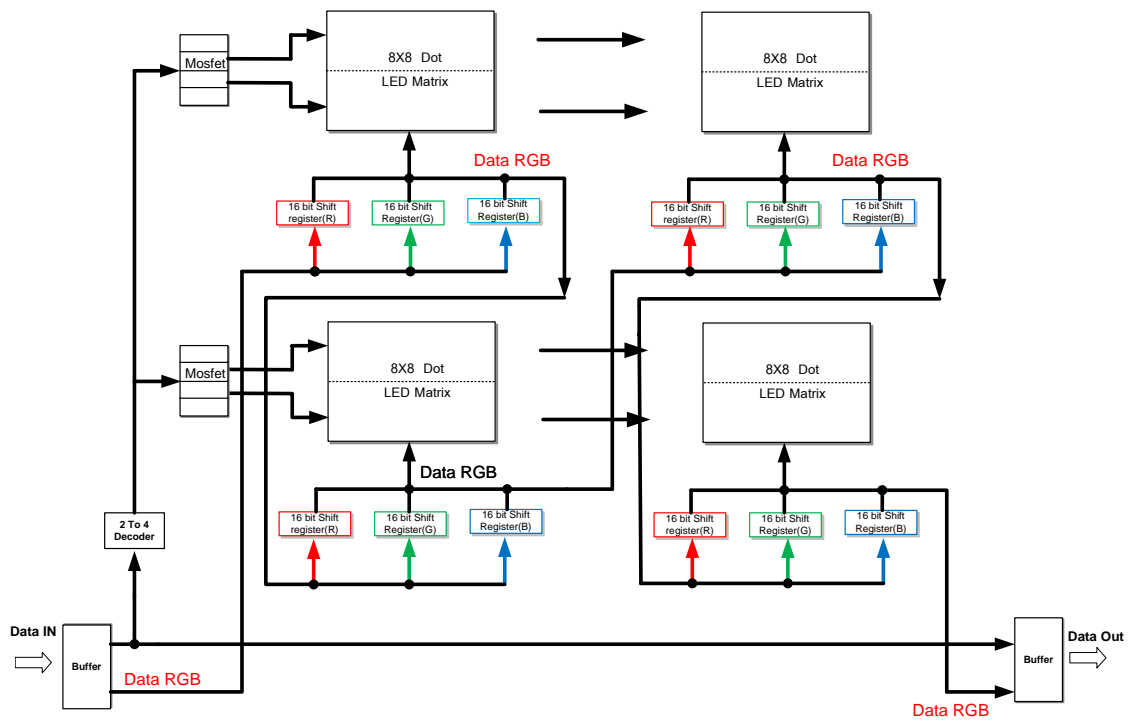
2) POWER CONNECTOR


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

3) CONNECTOR SPECIFICATION

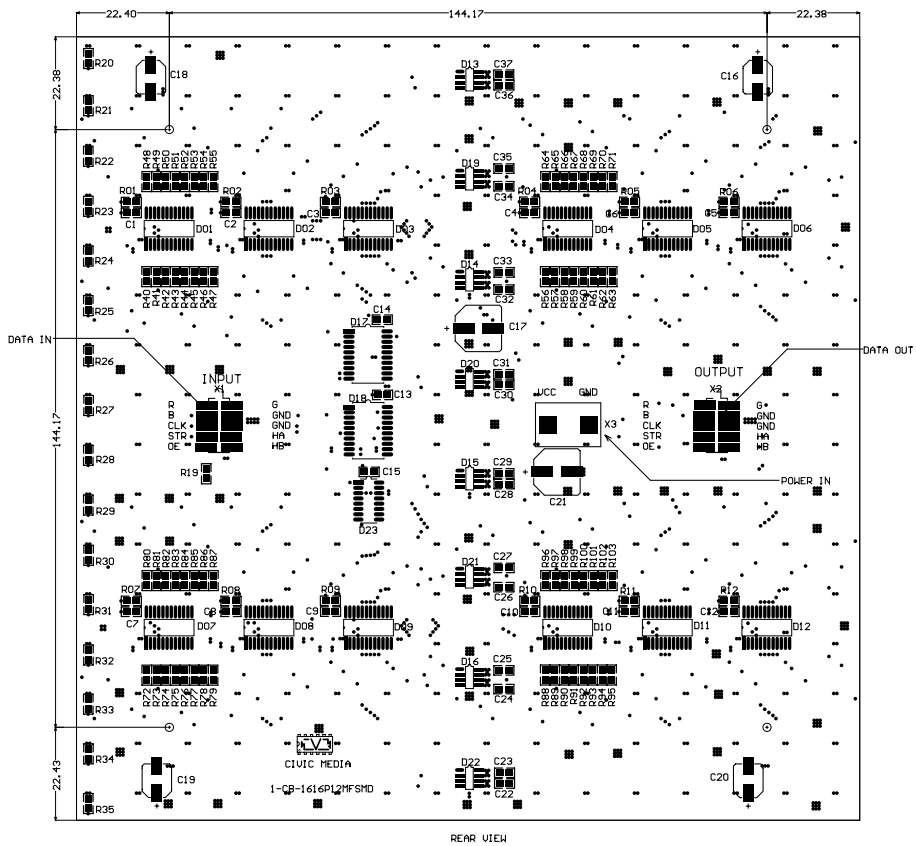
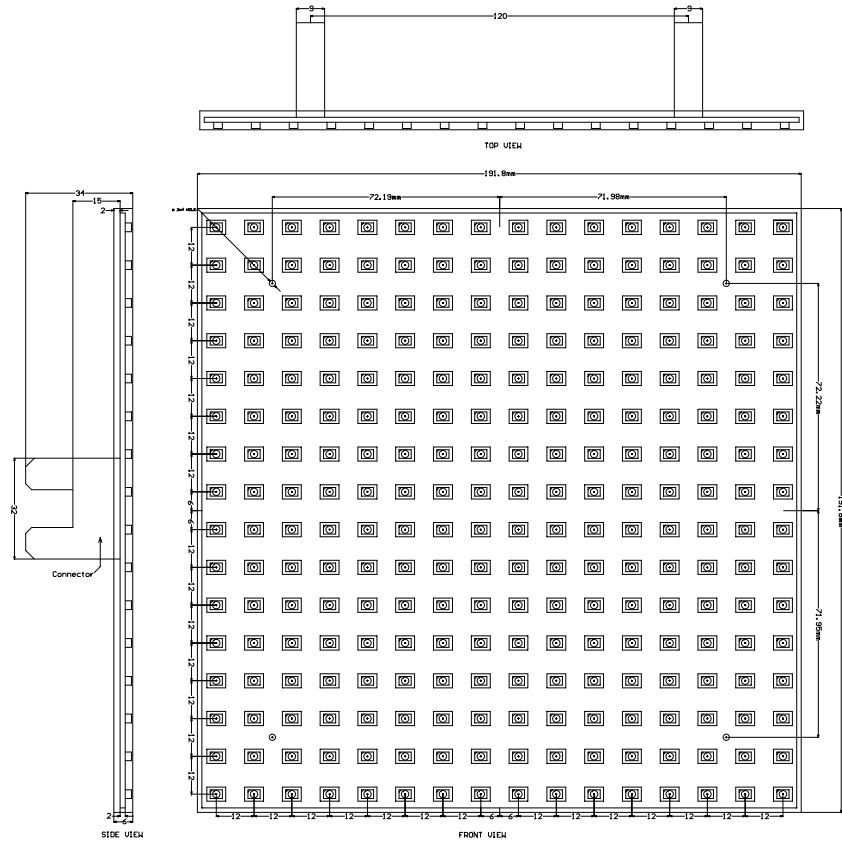
ITEM	VENDOR	MODUL NO.	SPECIFICATION	HOUSING MODEL NO.
DATA CON	GTK	SCP10GS11	10Pin P2.54mm.	SC10TA11
POWER CON	-	-	CABLE	-


8. BLOCK DIAGRAM



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	INDOOR P12mm.	0	2008.12.23	4/5

9. DIMENSION



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