Product Information

Issue Date: April 3, 2008

Model: SL153-0607

Note: The product and specification are subject to change without prior notice. Please contact your sales representative for the most current specifications.

26180 Enterprise Way | Bldg 100
Lake Forest, CA 92630
USA

Tel: 949.458.1080
Fax: 949.458.1081
www.lcdsolar.com

Contents

1. Revision History

Date	Rev No	Page	Summary
April 03, 2008	001	All	Rev 1.0 was issued.

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2. Overview

This document provides the technical data and theory of operation, which should be helpful in the repair of the SL153-0607. All components in the manufacture of LCD Modoule are RoHS Directive compliant.

Items	Specification	Unit	Note
Module dimension	396(W)*124.9(H)	mm	
Display area	376(W)*100(H)	mm	-
Display colors	16.7M	colors	-
Number of pixels	1280(H) x 336(V)	dot	-
Pixel arrangement	RGB. Strip	-	-
Display mode	Transmissive mode, (Normally black)	-	-
Surface treatments	Hard coating (3H), Haze 44%		-
Viewing angle(CR>10)	Viewing Angle Free [R/L 178(Typ.), U/D 178(Typ.)]		
Brightness	230	cd/m²	
Interface	LVDS		
Backlight	CCFL		

3. Absolute Maximum Rating

Item	Symbol	Value	Unit	Comment
Power Input-ON	VCC	-0.5~12	Vdc	
Operating Temperature	Top	0 ~ 50°C	°C	
Operating Humidity	Hop	10 ~ 90	%RH	Note
Storage Temperature	Tst	-20 ~ 60°C	°C	
Storage Humidity	Hst	10 ~ 90	%RH	

Note. Temperature and relative humidity range are shown in the figure below.

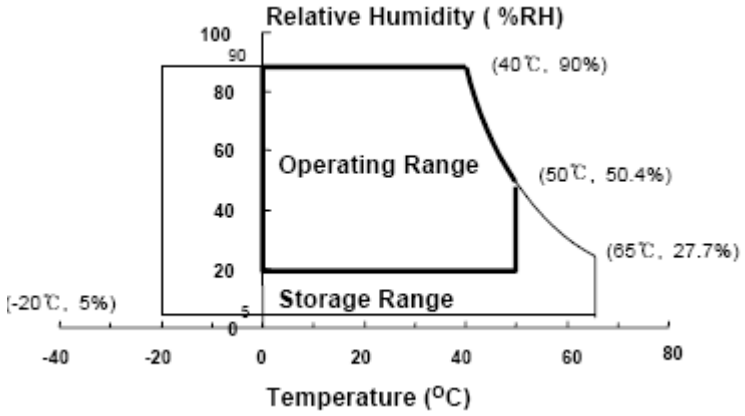


Figure.

4. Optical Characteristics

Item		Symbol	Condition	Min.	Typ.	Max.	Unit	Note
Viewing Area		θx	Φ=0˚, K≥5.0	85	89	-	deg	
		θx	Φ=180˚, K≥5.0	85	89	-	deg	
		θy	Φ=90˚, K≥5.0	85	89	-	deg	
		θy	Φ=270˚, K≥5.0	85	89	-	deg	
Contrast Ratio		K	Φ=0˚, θ=0˚	600	800	-	-	
Response Time	Rising	Tr	Φ=0˚, θ=0˚	-	15	-	ms	
	Falling	Tf		-	10	-		
Color Tone (Primary Color)	Red	x	Φ=0˚, θ=0˚	-	0.640	-		
		y			0.330			
	Green	x			0.300			
		y			0.600			
	Blue	x			0.150			
		y			0.060			
	White	x			0.281			
		y			0.311			

5. Electrical Characteristics

5.01. Electrical Characteristics of TFT LCD Module

Ta=25℃, VSS=OV

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Power Supply Input Voltage	VCC	-	4.5	5	5.5	V
Interface Type	LVDS	DS90C383/385/387, DSC386 Pair				
Power Supply Input Current	Icc		0.7	0.8	1.05	A
Power Consumption	Pc	-	-	5.5	5.8	Watt

5.02. Electrical Characteristics of CCFL

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Operating Frequency	fV	-	40	60	70	KHz
Discharge Stabilization Time	Ts				3	Min
Power consumption of Lamp	Pbl			19.65	21.62	Watt
Operating Voltage of Lamp	Vbl		645	655	790	V
Operating Current of Lamp	Ibl		8.0	7.5	3.0	mA
Established Starting Voltage	Vs	At 25 °C			1100	Vrms
Life Time			40,000			Hrs

6. Input Signal Assignment

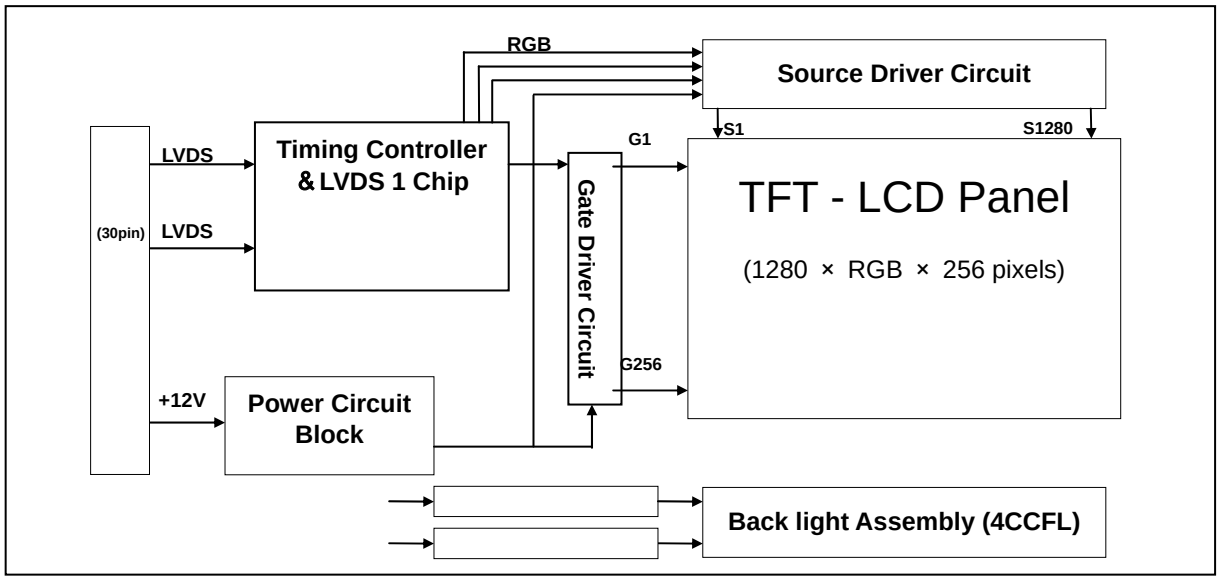
(Connector : Uju IN-30-OB100 or equivalent)

Pin No	Symbol	Description
1	RxO0-	LVDS Signal of Odd Channel 0(-)
2	RxO0+	LVDS Signal of Odd Channel 0(+)
3	RxO1-	LVDS Signal of Odd Channel 1(-)
4	RxO1+	LVDS Signal of Odd Channel 1(+)
5	RxO2-	LVDS Signal of Odd Channel 2(-)
6	RxO2+	LVDS Signal of Odd Channel 2(+)
7	GND	Ground
8	RxOC-	LVDS Signal of Odd Channel Clock(-)
9	RxOC+	LVDS Signal of Odd Channel Clock(+)
10	RxO3-	LVDS Signal of Odd Channel 3(-)
11	RxO3+	LVDS Signal of Odd Channel 3(+)
12	RxE0-	LVDS Signal of Even Channel 0(-)
13	RxE0+	LVDS Signal of Even Channel 0(+)
14	GND	Ground
15	RxE1-	LVDS Signal of Even Channel 1(-)
16	RxE1+	LVDS Signal of Even Channel 1(+)
17	GND	Ground
18	RxE2-	LVDS Signal of Even Channel 2(-)
19	RxE2+	LVDS Signal of Even Channel 2(+)
20	RxEC-	LVDS Signal of Even Channel Clock(-)
21	RxEC+	LVDS Signal of Even Channel Clock(+)
22	RxE3-	LVDS Signal of Even Channel 3(-)
23	RxE3+	LVDS Signal of Even Channel 3(+)
24	GND	Ground
25	NC	No connection
26	NC	No connection
27	NC	No connection
28	VCC	Power supply (5V Typ.)
29	VCC	Power supply (5V Typ.)
30	VCC	Power supply (5V Typ.)

7. Timing Characteristics of Input Signals

Item		Symbol	Min.	Typ.	Max.	Unit	Remark
DCLK	Frequency	fCLK	45.0	54.0	68.4	MHz	
Hsync	Period	tHP	672	844	1022	tCLK	
	Width	tWH	8	56			
Vsync	Period	tVP	1034	1066	1320	tHP	
	Width	tWV	2	3	24		
Data Enable	Horizontal back porch	tHBP	8	124		tCLK	
	Horizontal front porch	tHFP	8	24			
	Vertical back porch	tVBP	5	38	124	tHP	
	Vertical front porch	tVFP	1	1			

8. Block Diagram



9. Outline Dimensions