



ELECTRONICS

## Product Information

*SAMSUNG TFT-LCD*

**MODEL NO. : LTN141P1-L01**

**SAMSUNG ELECTRONICS CO. LTD.**

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# GENERAL DESCRIPTION

## DESCRIPTION

LTN141P1-L01 is a color active matrix TFT (Thin Film Transistor) liquid crystal display (LCD) that uses amorphous silicon TFT as a switching devices. This model is composed of a TFT LCD panel, a driver circuit and a backlight system. The resolution of a 14.1" contains 1400 x 1050 pixels and can display up to 262,144 colors. 6 O'clock direction is the Optimum viewing angle.

## FEATURES

- Thin and light weight
- High contrast ratio
- SXGA-Plus((1400x1050) pixels) resolution
- Low power consumption
- DE (Data enable) only mode.

## APPLICATIONS

- Notebook PC and desktop monitors
- Display terminals for AV application products
- Monitors for Industrial machine
- If the usage of this product is not for PC application, but for others, please contact SEC

## GENERAL INFORMATION

ITEM	SPECIFICATION	UNIT	NOTE
Display area	285.6(H)X214.2(V) (14.1"diagonal)	mm	
Driver element	a-Si TFT active matrix		
Display colors	262,144		
Number of pixel	1400 x 1050	pixel	
Pixel arrangement	RGB vertical stripe	mm	
Pixel pitch	0.204(H) x 0.204(V) (TYP.)		
Display Mode	Normally white		
Surface treatment	HAZE (25), HARD-COATING (3H)		

## Mechanical Information

ITEM		MIN.	TYP.	MAX.	NOTE
Module size (mm)	Horizontal (H)	298.0	298.5	299.0	
	Vertical (V)	226.0	226.5	227.0	
	Depth (D)	-	5.9	TBD	
Weight		-	540	TBD	

# INPUT Interface Connection

## LVDS

Connector : UJ-FI-SEB-20P-HF13

Mating Connector : JAE FI-SE20M-HF

PIN NO	SYMBOL	FUNCTION	POLARITY	REMARK
1	VDD	POWER SUPPLY +3.3V		
2	VDD	POWER SUPPLY +3.3V		
3	GND	GROUND		
4	GND	GROUND		
5	O_RxIN0-	LVDS Differential Data INPUT	Negative	Odd channel 0
6	O_RxIN0+	LVDS Differential Data INPUT	Positive	Odd channel 0
7	O_RxIN1-	LVDS Differential Data INPUT	Negative	Odd channel 1
8	O_RxIN1+	LVDS Differential Data INPUT	Positive	Odd channel 1
9	O_RxIN2-	LVDS Differential Data INPUT	Negative	Odd channel 2
10	O_RxIN2+	LVDS Differential Data INPUT	Positive	Odd channel 2
11	O_RxCLK-	LVDS Differential Data INPUT	Negative	Odd Clock
12	O_RxCLK+	LVDS Differential Data INPUT	Positive	Odd Clock
13	E_RxIN0-	LVDS Differential Data INPUT	Negative	Even channel 0
14	E_RxIN0+	LVDS Differential Data INPUT	Positive	Even channel 0
15	E_RxIN1-	LVDS Differential Data INPUT	Negative	Even channel 1
16	E_RxIN1+	LVDS Differential Data INPUT	Positive	Even channel 1
17	E_RxIN2-	LVDS Differential Data INPUT	Negative	Even channel 2
18	E_RxIN2+	LVDS Differential Data INPUT	Positive	Even channel 2
19	E_RxCLK-	LVDS Differential Data INPUT	Negative	Even Clock
20	E_RxCLK+	LVDS Differential Data INPUT	Positive	Even Clock

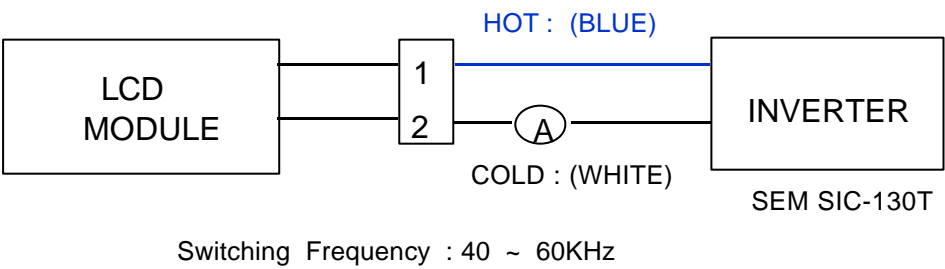
# BACK-LIGHT UNIT

The backlight system is an edge - lighting type with a single CCFT.

Ta = 25 ± 2 °C

ITEM	SYMBOL	MIN.	MAX.	UNIT	NOTE
Lamp Current	IL	3.0	6.0	mArms	(1)
Lamp frequency	FL	40	680	kHz	(1)

Note 1) Permanent damage to the device may occur if maximum values are exceeded  
Functional operation should be restricted to the conditions described under normal operating condition

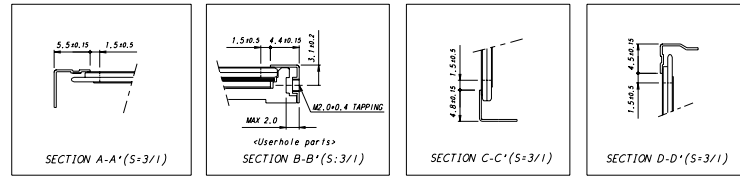
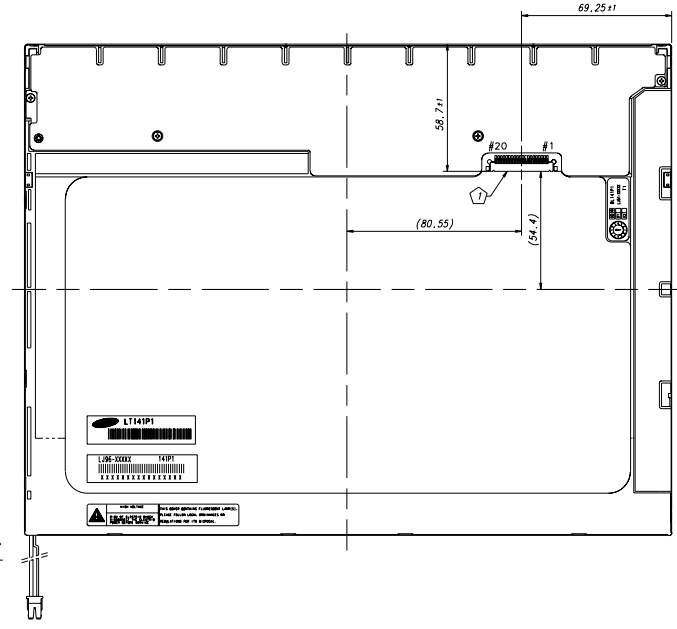
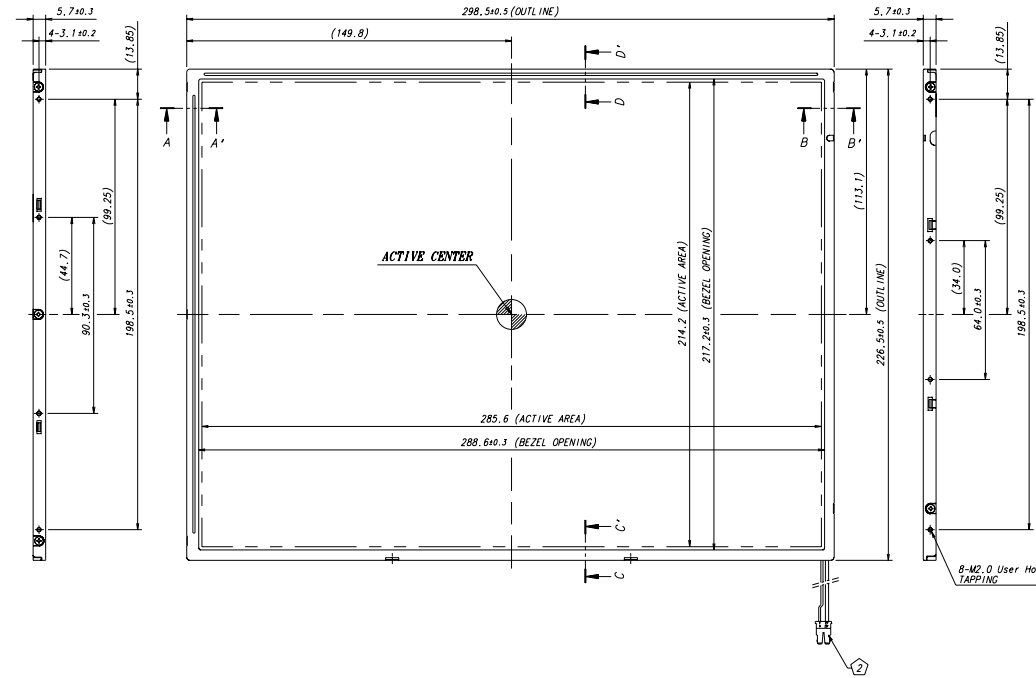


Connector : JST BHSR - 02VS -1  
Mating Connector : SM02B-BHSS-1(JST)

## BACKLIGHT CONNECTOR PIN CONFIGURATION

Pin NO.	Symbol	Color	Function
1	HOT	Blue	High Voltage
2	COLD	White	Low Voltage

NO	PART NAME	CODE NO	SPECIFICATION	Q'TY	WEIGHT		REMARK
					UNIT	VALUE	



\* NOTE

- ① SIGNAL INTERFACE CONNECTOR TO BE SPECIFIED AS BELOW.  
- MAKER : JAE  
- PART NO : F1-SEB20P-HF10
- ② COFT CONNECTOR FOR BACKLIGHT TO BE SPECIFIED AS BELOW.  
- MAKER : JST  
- PART NO : BHSR-02VS-1  
- LAMP DIAMETER :  $\phi 2.0$
- ③ THE LENGTH OF WIRE CAN BE CHANGED BY CUSTOMER REQUIREMENT.

GENERAL TOLERANCE				REVISION				REASON		CHK'D BY	EON
STEP	LEVEL 1	LEVEL 2	LEVEL 3	REV	DATE	DESCRIPTION	BY	DATE	REASON		
0 x X x 4	±0.05	±0.1	±0.2	1	2011.01.11	DESIGN BY DESIGNED BY	CHK'D BY	APP'D BY	MODEL NAME	LT141P1	
4 x X x 16	±0.05	±0.1	±0.3	2		SCALE 1/1	M.S.#111		PART NAME	OUTLINE DIMENSION	SHEET 1/1
16 x X x 64	±0.12	±0.25	±0.5	3		TOLERANCE			SPEC. NO.		
64 x X x 256	±0.25	±0.4	±0.8						CODE NO.		REV. 00