

Product Specification

8.4" COLOR TFT-LCD MODULE

MODEL NAME: C084XAT01.0

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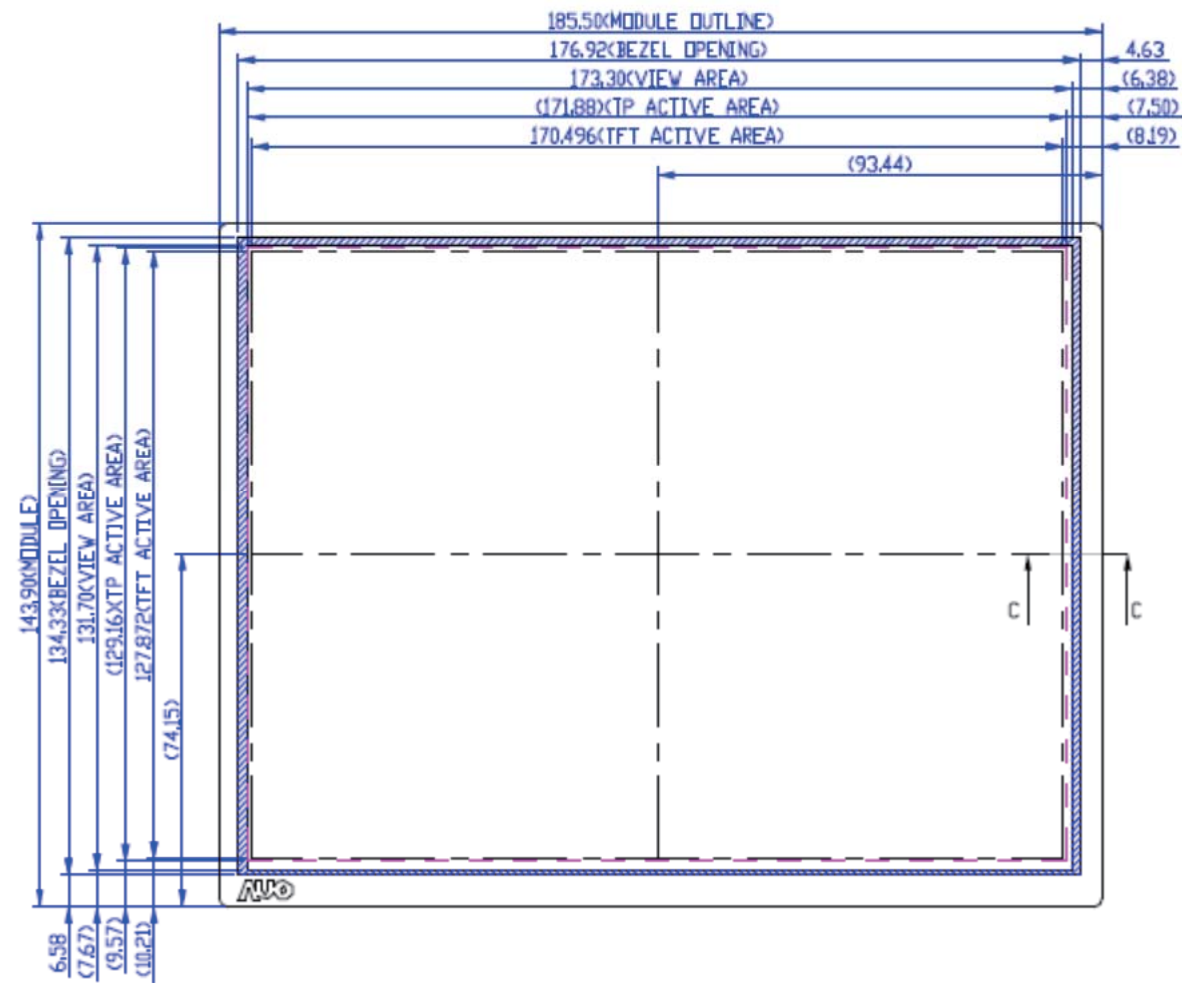
C. Physical Specifications

1. TFT LCD Panel

NO.	Item	Unit	Specification	Remark
1	Display Resolution	dot	1024 (H) x 768 (V)	
2	Active Area	mm	170.496 (H) x 127.872 (V)	
3	Screen Size	inch	8.4 (Diagonal)	
4	Dot Pitch	μm	166.5	
5	Color Configuration	—	R. G. B. Stripe	
6	Color Depth	—	16.7M colors	
7	Overall Dimension	mm	185.5 (H) x 143.9 (V) x 9.5 (T)	Note. 1
8	Weight	g	420 g +/-10%	
9	Display Mode	—	Normally Black	Note. 2
10	Surface Treatment	—	AGLR	
11	Surface Reflection	—	<3.2% (SCI)	Note. 3

Note 1: PCBA is excluded

Note 2: Below figure shows absorbing axis



E. Electrical Specifications

1. TFT LCD Panel Pin Assignment

Recommended Connector: FH52-40S-0.5SH

TP IC: ATMXT641TATES

No.	Pin Name	I/O	Description	Remarks
1	VCC_D	PI	Display power (3.3 V)	
2	VCC_D	PI	Display power (3.3 V)	
3	VCC_D	PI	Display power (3.3 V)	
4	VCC_T	PI	CTP power (3.3 V)	
5	VCC_T	PI	CTP power (3.3 V)	
6	GRB	I	Global reset	
7	GND	G	GND	
8	GND	G	GND	
9	GND	G	GND	
10	GND	G	GND	
11	GND	G	GND	
12	RESET	I	CTP Controller Reset	
13	C_SCL	I	CTP I2C Clock	
14	C_SDA	I/O	CTP I2C Data	
15	CHG	O	CTP State change interrupt	
16	GND	G	GND	
17	GND	G	GND	
18	GND	G	GND	
19	GND	G	GND	
20	AB_IND	O	Abnormal signal detection. Combine the source driver & gate driver detection result. AB_IND = "H", IC is at normal operation. AB_IND = "L", IC is at abnormal states.	Note 1

21	VESA_EN	I	JEIDA/VESA format setting VESA_EN = *H*, VESA format. (Default) VESA_EN = *L*, JEIDA format.	
22	GND	G	GND	
23	NIND0	I	Negative LVDS differential data input	
24	PIND0	I	Positive LVDS differential data input	
25	GND	G	GND	
26	NIND1-	I	Negative LVDS differential data input	
27	PIND1+	I	Positive LVDS differential data input	
28	GND	G	GND	
29	NIND2-	I	Negative LVDS differential data input	
30	PIND2+	I	Positive LVDS differential data input	
31	GND	G	GND	
32	CLKN-	I	Negative LVDS differential clock input	
33	CLKP+	I	Positive LVDS differential clock input	
34	GND	G	GND	
35	NIND3-	I	Negative LVDS differential data input (Odd data)	
36	PIND3+	I	Positive LVDS differential data input (Odd data)	
37	GND	G	GND	
38	SHLR	I	Horizontal scan direction control. *H* Left to Right; *L* Right to Left.	Note 2
39	UPDN	I	Vertical scan direction control. *H* Down to Up; *L* Up to Down.	Note 2
40	GND	G	GND	

F. Optical specifications (Note 1, 2)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Remark
Response Time (25 °C)	Tr +Tf	$\theta = 0^\circ$	-	-	30	ms	Note 3, 4
Response Time (-30 °C)	Tr +Tf	$\theta = 0^\circ$	-	-	400	ms	
Contrast ratio	CR	$\theta = 0^\circ$	800	-	-		Note 5, 6,
Viewing Angle Top Bottom Left Right		$\theta = 20^\circ, \Phi = 90^\circ$ $\theta = 20^\circ, \Phi = 270^\circ$ $\theta = 40^\circ, \Phi = 180^\circ$ $\theta = 40^\circ, \Phi = 0^\circ$	CR $\geq$ 600	-	-	deg.	Note 5, 6, 7, 9
Viewing Angle Top Bottom Left Right		$\theta = 60^\circ, \Phi = 90^\circ$ $\theta = 60^\circ, \Phi = 270^\circ$ $\theta = 60^\circ, \Phi = 180^\circ$ $\theta = 60^\circ, \Phi = 0^\circ$	CR $\geq$ 100	-	-	deg.	Note 5, 6, 7, 9

G. Reliability Test Items (Note 1 – 5)

No.	Test items	Conditions		Remark
1	High temperature storage	Ta= 95 °C	240 Hrs	
2	Low temperature storage	Ta= -40 °C	240 Hrs	
3	Low temperature operation	Ta= -30 °C	240 Hrs	
4	High temperature operation	Ta= 85 °C	1000 Hrs	Note 5
5	High temperature and high humidity	Ta= 65 °C, 90% RH	1000 Hrs	Note 5
6	Thermal Shock	-40 °C ~ 85 °C / 632 cycles 1 Hrs/cycle		Note 5
7	Power Temperature Cycling	-30 °C ~ 85 °C / 3hr/cycle / 211 hrs		Note 5
8	Humid Heat Cyclic	-10 °C / +65 °C, 10 days		Note 5