

- () Preliminary Specifications(V) Final Specifications

Module	14.0"(13.97") HD 16:9 Color TFT-LCD with LED Backlight design
Model Name	B140XW01 V9 (H/W:0A)
Note (🗭)	LED Backlight with driving circuit design

Customer	Date	Approved
		Bonnie Ch
Checked & Approved by	Date	Prepared
		Mendy Wa
Note: This Specification i without notice.	s subject to change	NBBU AU O _i

Approved by	Date			
Bonnie Chen	<u>10/28/2009</u>			
Prepared by	Date			
Mendy Wang	10/28/2009			
NBBU Marketing Division AU Optronics corporation				



Contents

	. Handling Precautions	
2.	. General Description	
	2.1 General Specification	
	2.2 Optical Characteristics	
	. Functional Block Diagram	
4.	. Absolute Maximum Ratings	12
	4.1 Absolute Ratings of TFT LCD Module	12
	4.2 Absolute Ratings of Environment	12
5.	. Electrical Characteristics	13
	5.1 TFT LCD Module	13
	5.2 Backlight Unit	15
6.	. Signal Interface Characteristic	16
	6.1 Pixel Format Image	16
	6.2 The Input Data Format	17
	6.3 Integration Interface Requirement	18
	6.4 Interface Timing	20
7.	. Panel Reliability Test	22
	7.1 Vibration Test	22
	7.2 Shock Test	22
	7.3 Reliability Test	22
8.	. Mechanical Characteristics	23
	8.1 LCM Outline Dimension	23
	8.2 Screw Hole Depth and Center Position	25
9.	. Shipping and Package	26
	9.1 Shipping Label Format	
	9.2 Carton Package	
	9.3 Shipping Package of Palletizing Sequence	
1 (Annendix: FDID Description	



Record of Revision

Ve	Version and Date Page Old description		Old description	New Description	Remark
0.1	2009/06/11	All	First Edition for Customer		
0.2	2009/07/20	5,6	White Luminance: 220 typ, 187 min	White Luminance: 200 typ, 170 min	
0.3	2009/8/13	30	EDID version name: V8	EDID version name: V9	
0.4	2009/9/28	24	LCM Outline Dimension		
1.0	2009/10/23	AII	Final Spec		
1.1	2009/10/28	20	Interface Timing change	Interface Timing change	



AU OPTRONICS CORPORATION

1. Handling Precautions

- 1) Since front polarizer is easily damaged, pay attention not to scratch it.
- 2) Be sure to turn off power supply when inserting or disconnecting from input connector.
- 3) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
- 4) When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth.
- 5) Since the panel is made of glass, it may break or crack if dropped or bumped on hard surface.
- 6) Since CMOS LSI is used in this module, take care of static electricity and insure human earth when handling.
- 7) Do not open nor modify the Module Assembly.
- 8) Do not press the reflector sheet at the back of the module to any directions.
- 9) At the insertion or removal of the Signal Interface Connector, be sure not to rotate nor tilt the Interface Connector of the TFT Module.
- 11)After installation of the TFT Module into an enclosure (Notebook PC Bezel, for example), do not twist nor bend the TFT Module even momentary. At designing the enclosure, it should be taken into consideration that no bending/twisting forces are applied to the TFT Module from outside. Otherwise the TFT Module may be damaged.
- 12) Small amount of materials having no flammability grade is used in the LCD module. The LCD module should be supplied by power complied with requirements of Limited Power Source (IEC60950 or UL1950), or be applied exemption.
- 13) Disconnecting power supply before handling LCD modules, it can prevent electric shock, DO NOT TOUCH the electrode parts, cables, connectors and LED circuit part of TFT module that a LED light bar build in as a light source of back light unit. It can prevent electrostic breakdown.



2. General Description

B140XW01 V9 is a Color Active Matrix Liquid Crystal Display composed of a TFT LCD panel, a driver circuit, and LED backlight system. The screen format is intended to support the 16:9 HD, 1366(H) x768(V) screen and 262k colors (RGB 6-bits data driver) with LED backlight driving circuit. All input signals are LVDS interface compatible.

B140XW01 V9 is designed for a display unit of notebook style personal computer and industrial machine.

2.1 General Specification

The following items are characteristics summary on the table at 25 $^{\circ}\mathrm{C}$ condition:

Items	Unit		Specifications				
Screen Diagonal	[mm]	354.95					
Active Area	[mm]	309.4 X173.95					
Pixels H x V		1366x3(RG	iB) x 768				
Pixel Pitch	[mm]	0.2265X0.2	2265				
Pixel Format		R.G.B. Ver	tical Stripe				
Display Mode		Normally W	/hite				
White Luminance (ILED=20mA) (Note: ILED is LED current)	[cd/m ²]	200 typ. (5 points average) 170 min. (5 points average)					
Luminance Uniformity		1.25 max. (5 points)				
Contrast Ratio		400 typ					
Response Time	[ms]	8 typ / 16 Max					
Nominal Input Voltage VDD	[Volt]	+3.3 typ.					
Power Consumption	[Watt]	3.8 max. (li	nclude Logi	ic and Blu po	wer)		
Weight	[Grams]	350 max.					
Physical Size	[mm]		Min.	Тур.	Max.		
Include bracket		Length			324		
		Width			192.5		
		Thickness 5.2					
Electrical Interface		1 channel LVDS					
Glass Thickness	[mm]	0.5					
Surface Treatment		AG, Hardness 3H,					
Support Color		262K colors	s (RGB 6-k	oit)			



Temperature Range Operating Storage (Non-Operating)	[°C] [°C]	0 to +50 -20 to +60
RoHS Compliance		RoHS Compliance

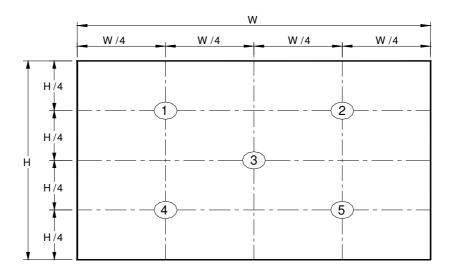
2.2 Optical Characteristics

The optical characteristics are measured under stable conditions at 25°C (Room Temperature):

Item		Symbol	Conditions	Min.	Тур.	Max.	Unit	Note
White Lumir			5 points average	170	200	-	cd/m ²	1, 4, 5.
Viewing Angle		θR θL	Horizontal (Right) CR = 10 (Left)	40 40	45 45	-	degree	
viewing Ai	igie	ф н ф ∟	Vertical (Upper) CR = 10 (Lower)	10 30	15 35	-		4, 9
Luminan Uniformi		δ _{5P}	5 Points	-	-	1.25		1, 3, 4
Luminan Uniformi		δ _{13P}	13 Points	-	-	1.50		2, 3, 4
Contrast R	Contrast Ratio			300	400	-		4, 6
Cross talk		%				4		4, 7
			Rising	-	-	-		
Response ⁻	Гime	T_f	Falling	-	-	-	msec	4, 8
		T _{RT}	Rising + Falling	-	8	16		
	Red	Rx		0.560	0.590	0.62		
	neu	Ry		0.315	0.345	0.375		
	Green	Gx		0.300	0.330	0.360		
Color / Chromaticity	Green	Gy		0.530	0.560	0.590		
Coodinates	Blue	Bx	CIE 1931	0.120	0.150	0.180		4
		Ву		0.110	0.140	0.170		
	White	Wx		0.283	0.313	0.343		
	wille	Wy		0.299	0.329	0.359		
NTSC		%		-	45	-		



Note 1: 5 points position (Ref: Active area)



Note 2: 13 points position (Ref: Active area)



Note 3: The luminance uniformity of 5 or 13 points is defined by dividing the maximum luminance values by the minimum test point luminance

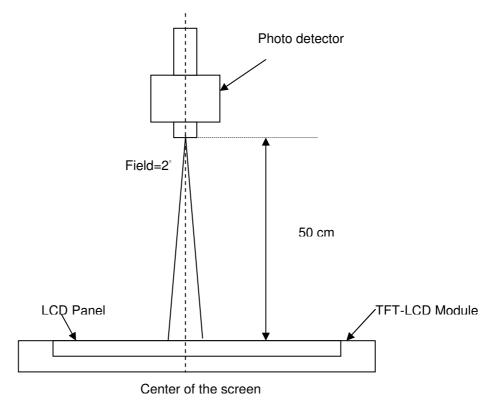
2	_	Maximum Brightness of five points
δ w5	= -	Minimum Brightness of five points
2		Maximum Brightness of thirteen points
δ w13	= '	Minimum Brightness of thirteen points

Note 4: Measurement method

The LCD module should be stabilized at given temperature for 30 minutes to avoid abrupt temperature change during measuring. In order to stabilize the luminance, the measurement should be executed after lighting



Backlight for 30 minutes in a stable, windless and dark room, and it should be measured in the center of screen.



Note 5: Definition of Average Luminance of White (Y_L):

Measure the luminance of gray level 63 at 5 points \cdot $Y_L = [L(1) + L(2) + L(3) + L(4) + L(5)] / 5$ L (x) is corresponding to the luminance of the point X at Figure in Note (1).

Note 6: Definition of contrast ratio:

Contrast ratio is calculated with the following formula.

Note 7: Definition of Cross Talk (CT)

$$CT = |Y_B - Y_A| / Y_A \times 100 (\%)$$

Where

Y_A = Luminance of measured location without gray level 0 pattern (cd/m₂)

Y_B = Luminance of measured location with gray level 0 pattern (cd/m₂)





Note 8: Definition of response time:

The output signals of BM-7 or equivalent are measured when the input signals are changed from "Black" to "White" (falling time) and from "White" to "Black" (rising time), respectively. The response time interval between the 10% and 90% of amplitudes. Refer to figure as below.





AU OPTRONICS CORPORATION

Note 9. Definition of viewing angle

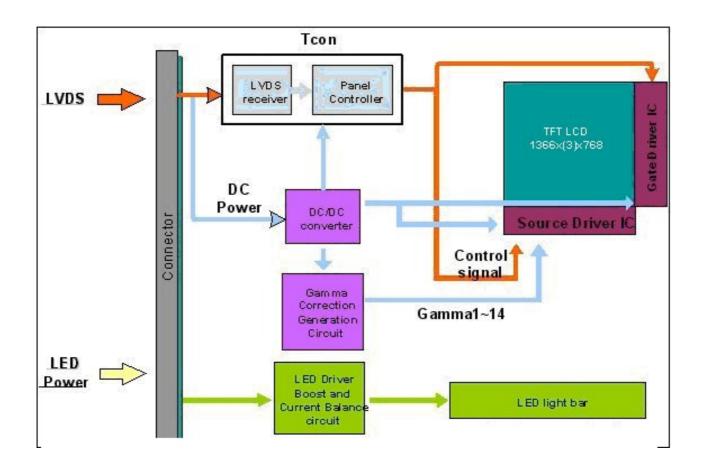
Viewing angle is the measurement of contrast ratio \geq 10, at the screen center, over a 180° horizontal and 180° vertical range (off-normal viewing angles). The 180° viewing angle range is broken down as follows; 90° (θ) horizontal left and right and 90° (Φ) vertical, high (up) and low (down). The measurement direction is typically perpendicular to the display surface with the screen rotated about its center to develop the desired measurement viewing angle.





3. Functional Block Diagram

The following diagram shows the functional block of the 14.0 inches wide Color TFT/LCD 40 Pin one channel Module





AU OPTRONICS CORPORATION

4. Absolute Maximum Ratings

An absolute maximum rating of the module is as following:

4.1 Absolute Ratings of TFT LCD Module

Item	Symbol	Min	Max	Unit	Conditions
Logic/LCD Drive Voltage	Vin	-0.3	+4.0	[Volt]	Note 1,2

4.2 Absolute Ratings of Environment

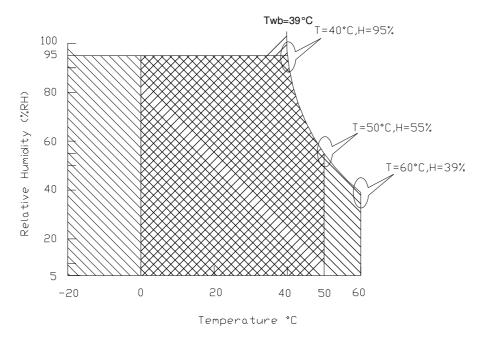
Item	Symbol	Min	Max	Unit	Conditions
Operating Temperature	TOP	0	+50	[°C]	Note 4
Operation Humidity	HOP	5	95	[%RH]	Note 4
Storage Temperature	TST	-20	+60	[°C]	Note 4
Storage Humidity	HST	5	95	[%RH]	Note 4

Note 1: At Ta (25°C)

Note 2: Permanent damage to the device may occur if exceed maximum values

Note 3: LED specification refer to section 5.2

Note 4: For quality performance, please refer to AUO IIS (Incoming Inspection Standard).



Operating Range

Storage Range

+

5. Electrical Characteristics

5.1 TFT LCD Module

5.1.1 Power Specification

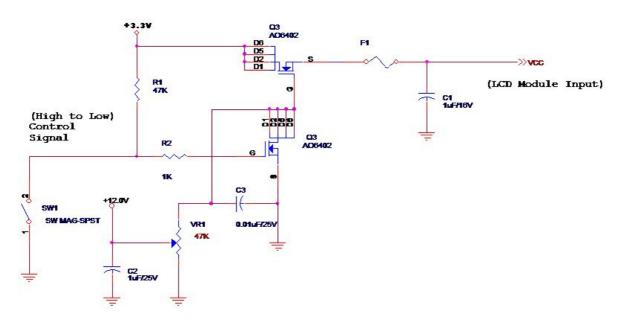
Input power specifications are as follows;

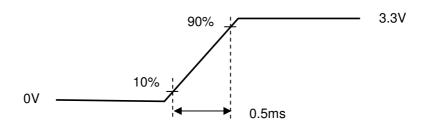
The power specification are measured under 25°C and frame frenquency under 60Hz

Symble	Parameter	Min	Тур	Max	Units	Note
VDD	Logic/LCD Drive Voltage	3.0	3.3	3.6	[Volt]	
PDD	VDD Power	_	0.8	1.0	[Watt]	Note 1
IDD	IDD Current	-	267	333	[mA]	Note 1
lRush	Inrush Current	-	ı	2000	[mA]	Note 2
VDDrp	Allowable Logic/LCD Drive Ripple Voltage	-	-	100	[mV] p-p	

Note 1 : Maximum Measurement Condition : Black Pattern at 3.3V driving voltage. (P_{max}=V_{3.3} x I_{black})

Note 2: Measure Condition





Vin rising time



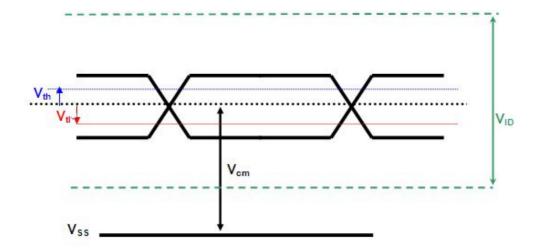
5.1.2 Signal Electrical Characteristics

Input signals shall be low or High-impedance state when VDD is off.

Signal electrical characteristics are as follows;

Parameter	Condition	Min	Max	Unit
V_{th}	Differential Input High Threshold (Vcm=+1.2V)		100	[mV]
V _{tl}	Differential Input Low Threshold (Vcm=+1.2V)	-100	-	[mV]
V _{ID}	Differential Input Voltage	100	600	[mV]
V _{cm}	Differential Input Common Mode Voltage	1.125	1.375	[V]

Note: LVDS Signal Waveform





5.2.1 LED characteristics

Parameter	Symbol	Min	Тур	Max	Units	Condition
Backlight Power Consumption	PLED	-	-	2.8	[Watt]	(Ta=25°C), Note 1 Vin =12V
LED Life-Time	N/A	10,000	-	-	Hour	(Ta=25°C), Note 2
						I _F =20 mA

Note 1: Calculator value for reference P_{LED} = VF (Normal Distribution) * IF (Normal Distribution) / Efficiency

Note 2: The LED life-time define as the estimated time to 50% degradation of initial luminous.

5.2.2 Backlight input signal characteristics

Parameter	Symbol	Min	Тур	Max	Units	Remark
LED Power Supply	VLED	6.0	12.8	21.0	[Volt]	
LED Enable Input High Level		2.5	-	5.5	[Volt]	
LED Enable Input Low Level	VLED_EN	-	-	0.8	[Volt]	
PWM Logic Input High Level	VPWM EN	2.5	-	5.0	[Volt]	Define as
PWM Logic Input Low Level		-	-	0.8	[Volt]	Connector Interface
PWM Input Frequency	FPWM	100	200	20K	Hz	(Ta=25°C)
PWM Duty Ratio	Duty	5		100	%	



6. Signal Interface Characteristic

6.1 Pixel Format Image

Following figure shows the relationship of the input signals and LCD pixel format.

	1						13	66	5
1st Line	R G B	R G B		R	G	В	R	G	В
	1	,						`	
			,		i			,	
			•		1			` `	
					•				
			;					` `	
			<u>;</u>		•			`	
	:				•			`	
	1	1	•		1			`	
768th Line	R G B	R G B		R	G	В	R	G	В



6.2 The Input Data Format

RxCLKIN		
RxIN0	G0 R5 R4 R3 R2	R1 R0
RxIN1	B1 B0 G5 G4 G3	G2 G1 X
RxIN2	DE VS HS B5 B4	B3 B2

Cianal Nama	Description	
Signal Name R5	Description Red Data 5 (MSB)	Red-pixel Data
R4	Red Data 4	Each red pixel's brightness data consists of
R3	Red Data 3	these 6 bits pixel data.
R2	Red Data 2	these o bits pixel data.
R1	Red Data 1	
R0	Red Data 0 (LSB)	
	(===)	
	Red-pixel Data	
G5	Green Data 5 (MSB)	Green-pixel Data
G4	Green Data 4	Each green pixel's brightness data consists of
G3	Green Data 3	these 6 bits pixel data.
G2	Green Data 2	
G1	Green Data 1	
G0	Green Data 0 (LSB)	
	Green-pixel Data	
B5	Blue Data 5 (MSB)	Blue-pixel Data
B4	Blue Data 4	Each blue pixel's brightness data consists of
B3	Blue Data 3	these 6 bits pixel data.
B2	Blue Data 2	·
B1	Blue Data 1	
B0	Blue Data 0 (LSB)	
	Blue-pixel Data	
RxCLKIN	Data Clock	The signal is used to strobe the pixel data and
		DE signals. All pixel data shall be valid at the
DE	Diaplay Timing	falling edge when the DE signal is high.
ן טב	Display Timing	This signal is strobed at the falling edge of RxCLKIN. When the signal is high, the pixel
		data shall be valid to be displayed.
VS	Vertical Sync	The signal is synchronized to RxCLKIN.
HS	Horizontal Sync	The signal is synchronized to PixCLKIN.
	1.15.1.25.11d. 0 j.110	o.ga.

Note: Output signals from any system shall be low or High-impedance state when VDD is off.



6.3 Integration Interface Requirement

6.3.1 Connector Description

Physical interface is described as for the connector on module.

These connectors are capable of accommodating the following signals and will be following components.

Connector Name / Designation	For Signal Connector
Manufacturer	STM or compatible
Type / Part Number	MSAK24025P40 or compatible
Mating Housing/Part Number	

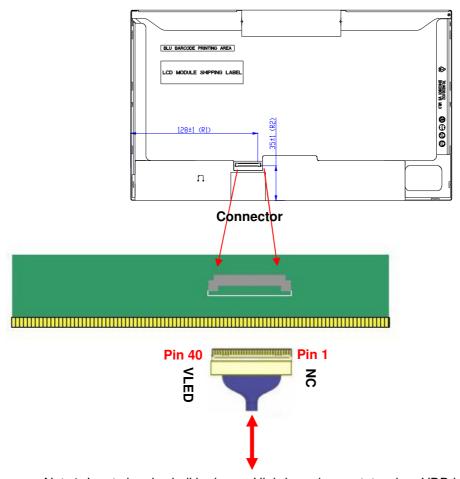
6.3.2 Pin Assignment

LVDS is a differential signal technology for LCD interface and high speed data transfer device.

PIN#	Signal Name	Description
1	NC	No Connection (Reserve)
2	VDD	Power Supply +3.3V
3	VDD	Power Supply +3.3V
4	VEDID	EDID +3.3V Power
5	NC	No Connect (Reserve)
6	CLK_EDID	EDID Clock Input
7	DAT_EDID	EDID Data Input
8	RxOIN0-	-LVDS Differential Data INPUT(Odd R0-R5,G0)
9	RxOIN0+	+LVDS Differential Data INPUT(Odd R0-R5,G0)
10	VSS	Ground
11	RxOIN1-	-LVDS Differential Data INPUT(Odd G1-G5,B0-B1)
12	RxOIN1+	+LVDS Differential Data INPUT(Odd G1-G5,B0-B1)
13	VSS	Ground
14	RxOIN2-	-LVDS Differential Data INPUT(Odd B2-B5,HS,VS,DE)
15	RxOIN2+	+LVDS Differential Data INPUT(Odd B2-B5,HS,VS,DE)
16	VSS	Ground
17	RxOCKIN-	-LVDS Odd Differential Clock INPUT
18	RxOCKIN+	-LVDS Odd Differential Clock INPUT
19	VSS	Ground
20	NC	No connection
21	NC	No connection
22	vss	Ground



	1	
23	NC	No connection
24	NC	No connection
25	VSS	Ground
26	NC	No connection
27	NC	No connection
28	VSS	Ground
29	NC	No connection
30	NC	No connection
31	VLED_GND	LED Ground
32	VLED_GND	LED Ground
33	VLED_GND	LED Ground
34	NC	No Connection (Reserve)
35	S_PWMIN	System PWM signal Input
36	BL_ON	LED enable pin(+3V input, +5V tolerance)
37	DBC_EN	Dynamic B/L Control enable(High enable)
38	VLED	LED Power Supply 6V - 21V
39	VLED	LED Power Supply 6V - 21V
40	VLED	LED Power Supply 6V - 21V



Note1: Input signals shall be low or High-impedance state when VDD is off.

B140XW01 V9 _Document Version: 1.1



AU OPTRONICS CORPORATION

6.4 Interface Timing

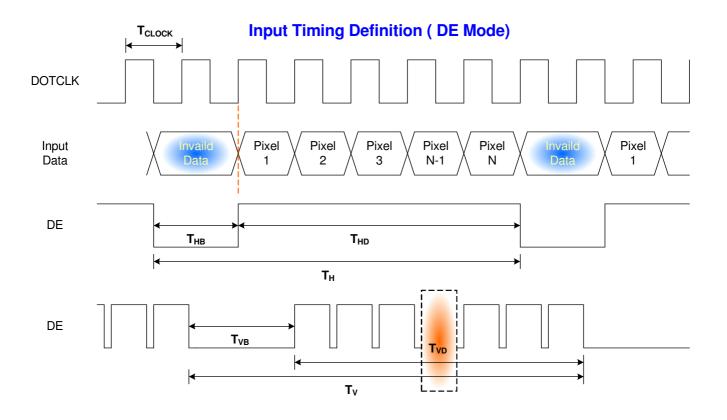
6.4.1 Timing Characteristics

Basically, interface timings should match the 1366x768 /60Hz manufacturing guide line timing.

Parameter		Symbol	Min.	Тур.	Max.	Unit
Frame Rate		-	-	60	-	Hz
Clock frequency		1/ T _{Clock}	50	69.3	80	MHz
	Period	T _V	776	803	1023	
Vertical Section	Active	T _{VD}		768		T_{Line}
	Blanking	T _{VB}	8	35	255	
	Period	T _H	1396	1436	2047	
Horizontal	Active	T _{HD}		1366		T _{Clock}
Section	Blanking	T HB	40	70	681	

Note: DE mode only

6.4.2 Timing diagram

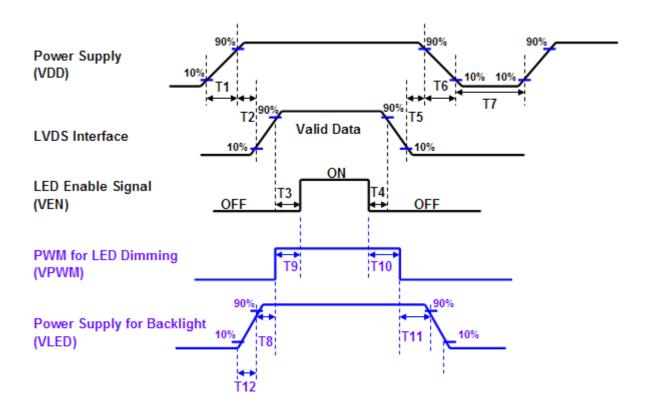




AU OPTRONICS CORPORATION

6.5 Power ON/OFF Sequence

Power on/off sequence is as follows. Interface signals and LED on/off sequence are also shown in the chart. Signals from any system shall be Hi-Z state or low level when VDD is off



Power Sequence Timing						
Parameter	Min.	Тур.	Max.	Units		
T1	0.5	-	10			
T2	0	-	50			
Т3	200	-	-			
T 4	200	-	-			
T 5	10	-	50			
Т6	0	-	10	me		
Т7	500	-	-	ms		
Т8	10	-	-			
Т9	10	-	180			
T10	10	-	180			
T11	10	-	-			
T12	0.5	-	10			

Note:If T3,T5,T6 couldn't match above specifications, must request <u>T3+T5+T6 > 200ms</u> at least



7. Panel Reliability Test

7.1 Vibration Test

Test Spec:

Test method: Non-Operation

Acceleration: 1.5 G

Frequency: 10 - 500Hz Random

Sweep: 30 Minutes each Axis (X, Y, Z)

7.2 Shock Test

Test Spec:

Test method: Non-Operation

Acceleration: 220 G, Half sine wave

Active time: 2 ms

Pulse: X,Y,Z .one time for each side

7.3 Reliability Test

Items	Required Condition	Note
Temperature Humidity Bias	Ta= 40℃, 90%RH, 300h	
High Temperature Operation	Ta= 50℃, Dry, 300h	
Low Temperature Operation	Ta= 0℃, 300h	
High Temperature Storage	Ta= 60℃, 35%RH, 300h	
Low Temperature Storage	Ta= -20℃, 50%RH, 250h	
Thermal Shock Test	Ta=-20℃to 60℃, Duration at 30 min, 100 cycles	
ESD	Contact : ±8 KV	Note 1
LSD	Air: ±15 KV	

Note1: According to EN 61000-4-2, ESD class B: Some performance degradation allowed. No data lost

. Self-recoverable. No hardware failures.

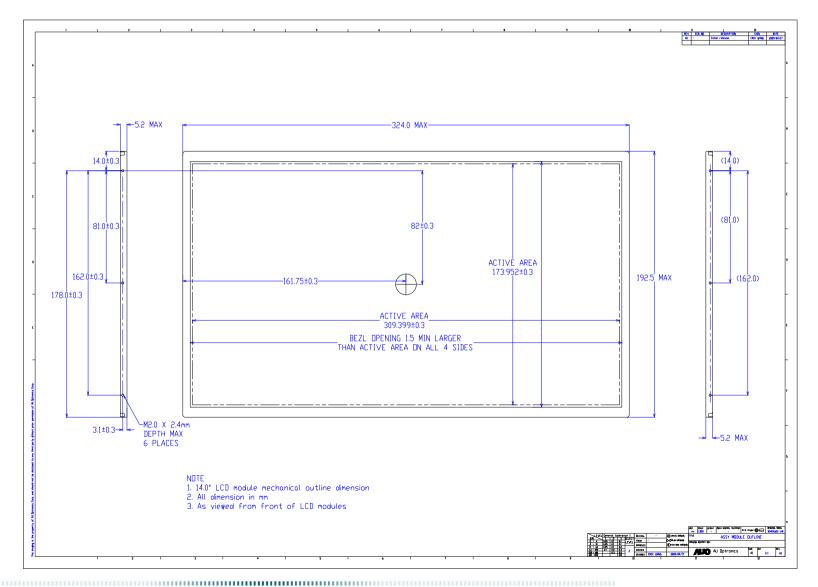
Remark: MTBF (Excluding the LED): 30,000 hours with a confidence level 90%



AU OPTRONICS CORPORATION

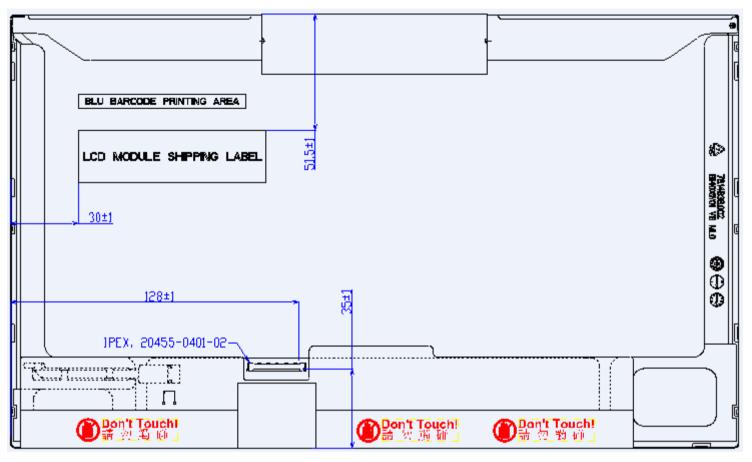
8. Mechanical Characteristics

8.1 LCM Outline Dimension





AU OPTRONICS CORPORATION



Note: Prevention IC damage, IC positions not allowed any overlap over these areas.

B140XW01 V9 __Document Version : 1.1 24 of 30

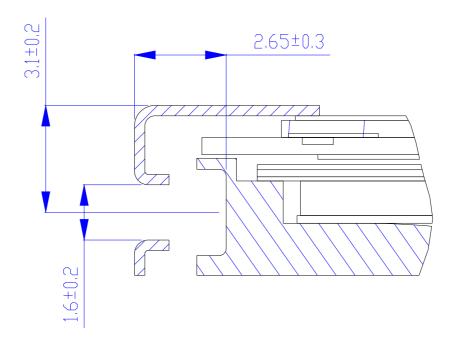


8.2 Screw Hole Depth and Center Position

Maximum Screw penetration from side surface is 2.3 mm

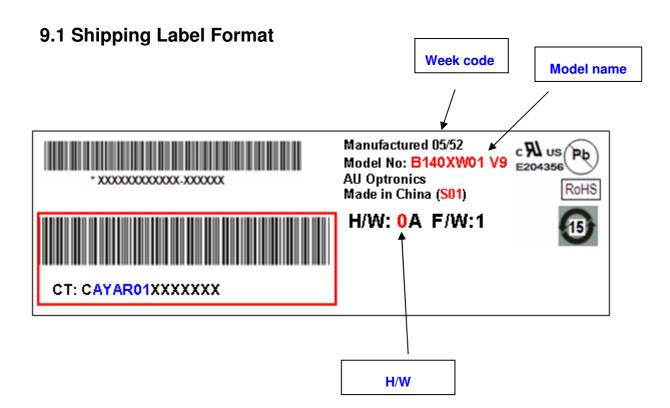
The center of screw hole center location is 3.1 \pm 0.2mm from front surface

Screw Torque: Maximum 2.5 kgf-cm





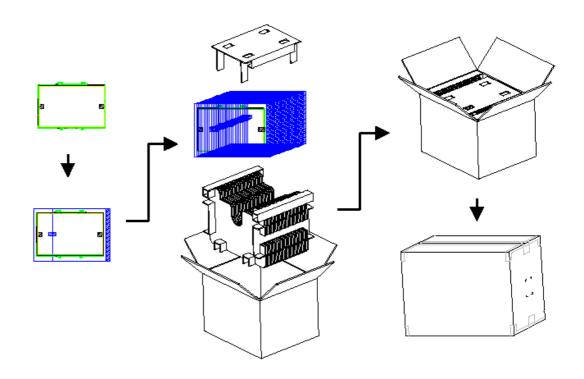
9. Shipping and Package



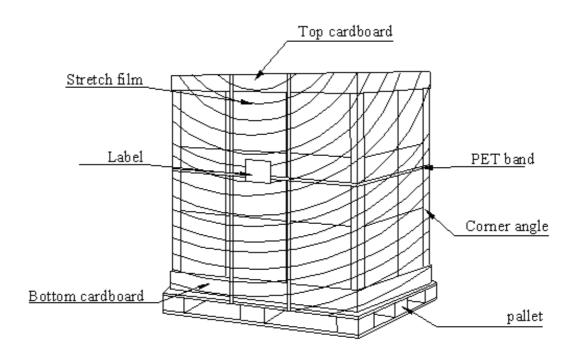
H/W	Source IC	Gate IC
0A	NOVATEK	Raydium



The outside dimension of carton is 454 (L)mm x 376 (W)mm x 302 (H)mm



9.3 Shipping Package of Palletizing Sequence





10. Appendix: EDID Description

Address	FUNCTION	Value	Value	Value	Note
HEX	. 5.15.15.1	HEX	BIN	DEC	1.0.0
00	Header	00	00000000	0	
01	1100001	FF	11111111	255	
02		FF	11111111	255	
03		FF	11111111	255	
04		FF	11111111	255	
05		FF	11111111	255	
06		FF	11111111	255	
07		00	00000000	0	
08	EISA Manuf. Code LSB	06	00000110	6	
09	Compressed ASCII	AF	10101111	175	
0A	Product Code	3C	00111100	60	
0B	hex, LSB first	19	00011001	25	
0C	32-bit ser #	00	00000000	0	
0D		00	00000000	0	
0E		00	00000000	0	
0F		00	00000000	0	
10	Week of manufacture	01	0000001	1	
11	Year of manufacture	13	00010011	19	
12	EDID Structure Ver.	01	0000001	1	
13	EDID revision #	03	00000011	3	
14	Video input def. (digital I/P, non-TMDS, CRGB)	80	10000000	128	
15	Max H image size (rounded to cm)	1F	00011111	31	
16	Max V image size (rounded to cm)	11	00010001	17	
17	Display Gamma (=(gamma*100)-100)	78	01111000	120	
40	Feature support (no DPMS, Active OFF, RGB, tmg	0.4	00001010	40	
18	Blk#1)	0A	00001010	10	
19	Red/green low bits (Lower 2:2:2:2 bits)	C8	11001000	200	
1A	Blue/white low bits (Lower 2:2:2:2 bits)	A5	10100101	165	
1B	Red x (Upper 8 bits)	9E	10011110	158	
1C	Red y/ highER 8 bits	57	01010111	87	
1D	Green x	54	01010100	84	
1E	Green y	92	10010010	146	
1F	Blue x	26	00100110	38	
20	Blue y	99	10011001	153	
21	White x	50	01010000	80	
22	White y	54	01010100	84	
23	Established timing 1	00	00000000	0	
24	Established timing 2	00	00000000	0	_
25	Established timing 3	00	00000000	0	
26	Standard timing #1	01	00000001	1	
27	Observational Mariners 40	01	00000001	1	
28	Standard timing #2	01	00000001	1	
29	0	01	00000001	1	
2A	Standard timing #3	01	0000001	1	



] OD		l 04	00000001	_	
2B	0. 1 1	01	00000001	1	
2C	Standard timing #4	01	00000001	1	
2D		01	00000001	1	
2E	Standard timing #5	01	00000001	1	
2F		01	00000001	1	
30	Standard timing #6	01	00000001	1	
31		01	00000001	1	
32	Standard timing #7	01	00000001	1	
33		01	0000001	1	
34	Standard timing #8	01	00000001	1	
35		01	00000001	1	
36	Pixel Clock/10000 LSB	12	00010010	18	
37	Pixel Clock/10000 USB	1B	00011011	27	
38	Horz active Lower 8bits	56	01010110	86	
39	Horz blanking Lower 8bits	46	01000110	70	
3A	HorzAct:HorzBlnk Upper 4:4 bits	50	01010000	80	
3B	Vertical Active Lower 8bits	00	00000000	0	
3C	Vertical Blanking Lower 8bits	23	00100011	35	
3D	Vert Act : Vertical Blanking (upper 4:4 bit)	30	00110000	48	
3E	HorzSync. Offset	26	00100110	38	
3F	HorzSync.Width	16	00010110	22	
40	VertSync.Offset : VertSync.Width	36	00110110	54	
41	Horz‖ Sync Offset/Width Upper 2bits	00	00000000	0	
42	Horizontal Image Size Lower 8bits	35	00110101	53	
43	Vertical Image Size Lower 8bits	AD	10101101	173	
44	Horizontal & Vertical Image Size (upper 4:4 bits)	10	00010000	16	
45	Horizontal Border (zero for internal LCD)	00	00000000	0	
46	Vertical Border (zero for internal LCD)	00	0000000		
47	Signal (non-intr, norm, no stero, sep sync, neg pol)			0	
	Detailed timing/monitor	18	00011000	24	
48	-	00	00000000	0	
49	descriptor #2	00	00000000	0	
4A		00	00000000	0	
4B		0F	00001111	15	
4C		00	00000000	0	
4D		00	00000000	0	
4E		00	00000000	0	
4F		00	00000000	0	
50		00	00000000	0	
51		00	00000000	0	
52		00	00000000	0	
53		00	00000000	0	
54		00	00000000	0	
55		00	00000000	0	
56			00000000	0	
		00			
57		00	00000000	0	
57 58 59					



5A	Detailed timing/monitor	00	00000000	0	
5B	descriptor #3	00	00000000	0	
5C		00	00000000	0	
5D		FE	11111110	254	
5E		00	00000000	0	
5F	Manufacture	41	01000001	65	Α
60	Manufacture	55	01010101	85	U
61	Manufacture	4F	01001111	79	0
62		0A	00001010	10	
63		20	00100000	32	
64		20	00100000	32	
65		20	00100000	32	
66		20	00100000	32	
67		20	00100000	32	
68		20	00100000	32	
69		20	00100000	32	
6A		20	00100000	32	
6B		20	00100000	32	
6C	Detailed timing/monitor	00	00000000	0	
6D	descriptor #4	00	00000000	0	
6E		00	00000000	0	
6F		FE	11111110	254	
70		00	00000000	0	
71	Manufacture P/N	42	01000010	66	В
72	Manufacture P/N	31	00110001	49	1
73	Manufacture P/N	34	00110100	52	4
74	Manufacture P/N	30	00110000	48	0
75	Manufacture P/N	58	01011000	88	Х
76	Manufacture P/N	57	01010111	87	W
77	Manufacture P/N	30	00110000	48	0
78	Manufacture P/N	31	00110001	49	1
79	Manufacture P/N	20	00100000	32	
7 A	Manufacture P/N	56	01010110	86	V
7B	Manufacture P/N	39	00111001	57	9
7C		20	00100000	32	
7D		0A	00001010	10	
7E	Extension Flag	00	00000000	0	
7F	Checksum	15	00010101	21	

30 of 30