

Spec of PD-BE26AU-OKAVU

MODEL: CL2683AT

MONITOR W/ 3M CPACITIVE TOUCH INTEGRATION

Date : 22. September 2010

Version: A.0

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Customer approval:

(Signature)

REVISION HISTORY

Version	Date	Page	Section	Description
A.0	2010/09/22	ALL	ALL	New Release
A.1	2011/05/25	ALL	ALL	Overall update

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1 GENERAL

1.1 PRODCUT DESCRIPTION

The product is designed for Richardson. It will use AUO 26" T260XW04 V7 Panel, supporting 1360x768 resolution. This specification only supports CL2683AT, basic features as below:

- Use RTD2555 Scaler Chpset, RTD2120L MCU
- Resolution up to 1360x768
- Input signal: VGA

1.2 TIMING

Timing		Dot Clock MHz	Signal Polarity		Frequency	
			H	V	FH (kHz)	FV (Hz)
VGA	640×480	25.2	-	-	31.5	60
VGA	640×480	31.5	-	-	37.5	75
SVGA	800×600	40.0	+	+	37.9	60.
SVGA	800×600	49.5	+	+	46.875	75
XGA	1024×768	65.0	-	-	48.3	60.
WXGA	1360x768	85.5	+	+	47.7	60.0

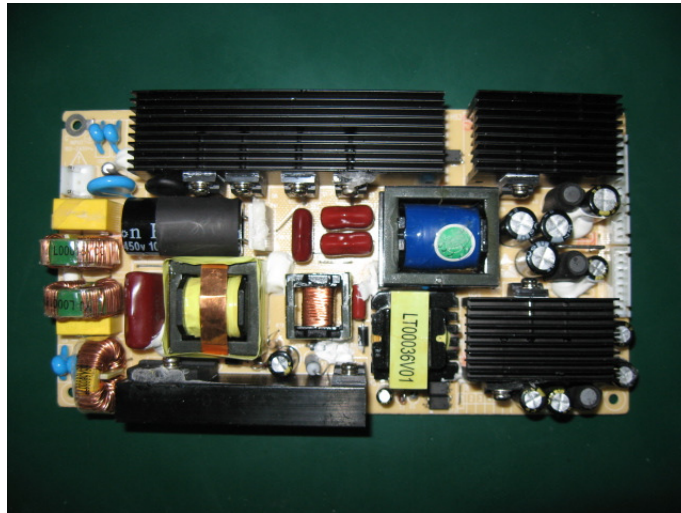
2 FEATURES

2.1 LCD PANEL

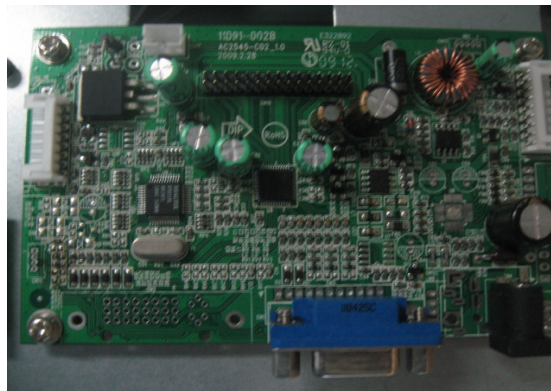
Item	Description
Type	26inch
Display area	575.769 (H) x 323.712(V) mm
Native resolution	1366(H) x 768(V)
Pixel Pitch	0.4215 (H) x 0.4215 (W) mm
Color depth	16.7M colors (8bit)
Brightness	420cd/m ² typ; w/ touch ~315cd/m ²
Contrast ratio	3000:1 Min.
Viewing angle	178° V/H @ contrast ratio > 10

2.2 POWER SUPPLY

POWER FOR A/D BOARD	
AC-input	90~264VAC 2.5A 50/60Hz
DC-output	12V/2A 24V/4.5A 5V/4A
Power consumption	152W max.



2.3 ADBOARD



2.3.1 General Description

Chipset	SCALER	RTD2555
	MCU	RTD2120L
Signal Input	VGA	Analog RGB (0.7Vp-p , 75ohm) , Separate Sync (TTL)
	DVI	TMD5 (Single)
	Horizontal Frequency	31.5-80.0KHz
	Vertical Frequency	60-75Hz
	Support Model	640x480 60Hz, 720x400 60Hz, 800x600 60Hz, 1024x768 60Hz, 1360x768 60Hz
Signal Output	Signal	R,G,B 8bit LVDS
	Color	24bit
	Panel	26" LVDS
Power Characteristic	Power Input	12 ± 0.5V DC,4A
	Power Consumption	<3W (Power Saving)
	Panel Input	5V
	Power Management	Support VESA DPMS ^T
Backlight Control	Control Signal	0.0V~4.8V
	Adjust Type	DC Control

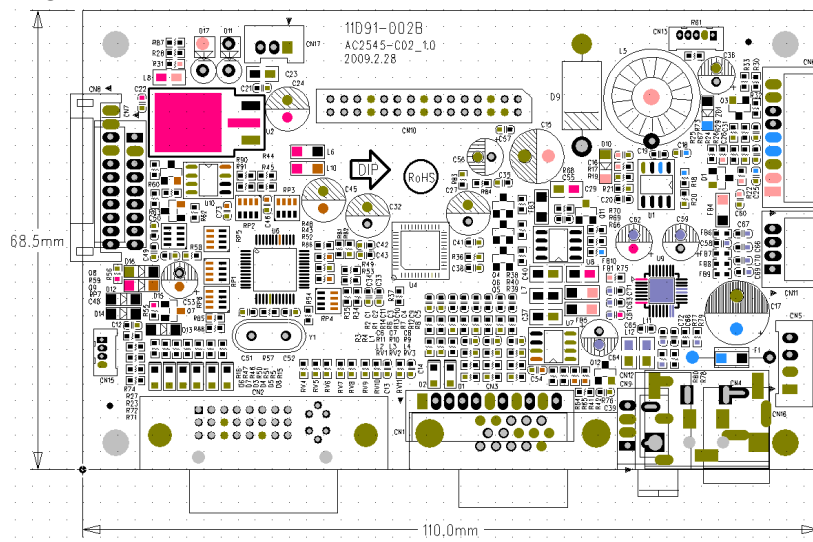
2.3.2 SIGNAL INPUT

Signal LEV level : 0.7Vp-p positive (R, G, B)

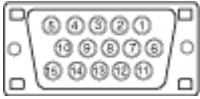
Signal Sync. : Independent Horizontal Frequency, Vertical Frequency, TTL LEV level

Input Impedance : 75Ω

2.3.3 SILKSCREEN TOP



2.3.4VGA Signal Input



VGA Signal Input , Use 15pin D-sub horizontal VGA Connector

Pin#	Definition	Pin#	Definition
1	Red Video	2	Green Video
3	Blue Video	4	GND
5	Ground	6	Red Ground
7	Green Ground	8	Blue Ground
9	PC_5V	10	VGA_DE
11	GND	12	SDA
13	H-Sync	14	V-Sync
15	SCL		

2.3.5CN6 INVERTER INTERFACE

INVERTER Interface, Connect INVERTER and A/D Board, Connect Type PH2.0-9Pin 90°JACK

Pin#	Definition	Description
1	5V	NC (Internal 5V Power Input)
2	5V	NC (Internal 5V Power Input)
3	GND	Ground
4	12V	INVERTER 12V Power Supply
5	12V	INVERTER 12V Power Supply
6	ON/OFF	Inverter On/Off Switch
7	PWM	Brightness Adjustment
8	GND	Ground
9	GND	Ground

2.3.6CN8 KEYBOARD INTERFACE

Keyboard Interface , connect OSD adjustment and A/D Board , Connect Type PH2.0-8 Pin 90°JACK

Pin#	Definition	Description
1	LEDG	Green LED Indicator
2	GND	Ground
3	LEDR	Red LED Indicator
4	MENU	OSD Menu Keyboard
5	LEFT	Left Keyboard
6	RIGHT	Right Keyboard
7	AUTO	Exit/ Auto Adjust
8	ON/OFF	Power On/Off keyboard

2.3.7CN10 LVDS INPUT INTERFACE

LVDS Input interface, Connect PANEL, Connector Type: 2.0mm Spacing, 90°double row, 30Pin

1	VCC	Panel 12V Power Input	2	VCC	Panel 12V Power Input
3	VCC	Panel 12V Power Input	4	GND	Ground
5	GND	Ground	6	GND	Ground
7	RXE3-	LVDS EVEN 3- Signal	8	RXE3+	LVDS EVEN 3+ Signal
9	RXEC-	LVDS Clock - Signal	10	RXEC+	LVDS Clock + Signal
11	RXE2-	LVDS EVEN 2- Signal	12	RXE2+	LVDS EVEN 2 + Signal
13	RXE1-	LVDS EVEN 1- Signal	14	RXE1+	LVDS EVEN 1+ Signal
15	GND	Ground	16	GND	Ground
17	RXE0-	LVDS EVEN 0- Signal	18	RXE0+	LVDS EVEN 0+ Signal
19	RXO3-	LVDS Signal of Odd Channel 3-	20	RXO3+	LVDS Signal of Odd Channel 3+
21	RXOC-	LVDS Signal of Odd Channel Clock-	22	RXOC+	LVDS Signal of Odd Channel Clock+
23	GND	Ground	24	GND	Ground
25	RXO2-	LVDS Signal of Odd Channel 2-	26	RXO2+	LVDS Signal of Odd Channel 2+

27	RX01-	LVDS Signal of Odd Channel 1-	28	RX01+	LVDS Signal of Odd Channel 1+
29	RX00-	LVDS Signal of Odd Channel 0-	30	RX00+	LVDS Signal of Odd Channel 0+

2.3.8 MAJOR COMPONENT LIST

N O	Item	Name	Spec./Standard	Suppliers
1	U1	Converter	ACT4060	Active
2	U2	Regulator	AIC1084-33PM	AIC
3	U4	SCALER	RTD2555	REALTEK
4	U6	MCU	RTD2120L	REALTEK
5	F1	FUSE	20S - 070L 7A	Haolilai
6	CN10	30PINJack	30PIN 2.0mm	Shenzhen Ting Ye Technology
7	CN1	VGA Jack	15PIN (1-1734530-1)	AMP
8	CN2	DVIL Jack	AMP1734148 (DVI-I)	AMP
9	Y1	Crystal	24MHz	Yantai yuke
10	L5	Inductance	33uH	Tinglei(chuangding)

2.4 TOUCH SENSOR

With 3M capacitive touch sensor 17-9091-205

2.4.1 FEATURES

ITEM		Specification
1	Type	Capacitive touch
2	Input Mode	Finger
3	Tail Connection	Solder-less design

2.4.2 GENERAL SPECIFICATION

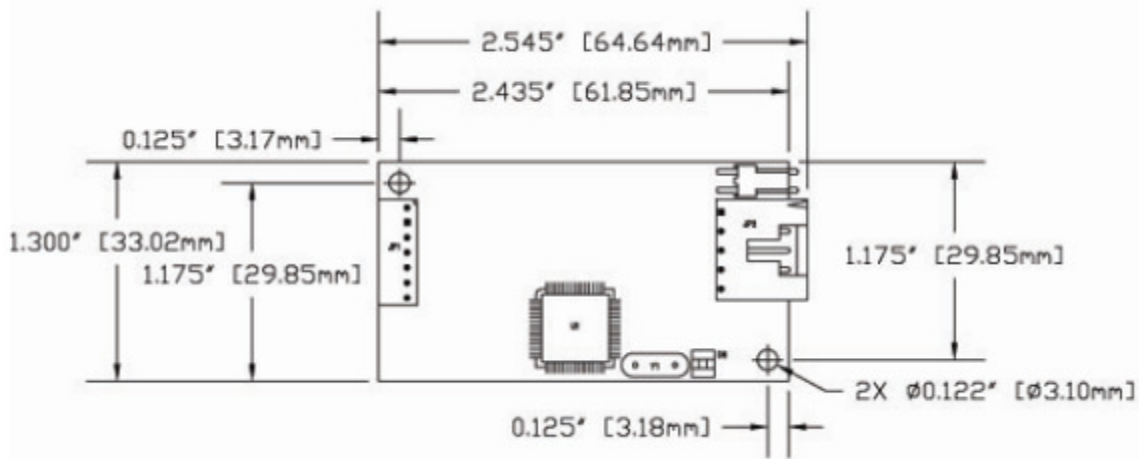
Item		Specification
1	Frame size	625.22 x 355.52 mm
2	View Area	607.35 x 330.63
3	Active Area	572.34 x 312.23
4	Total Thickness	3.18±0.25 mm

2.4.3 OPTICAL CHARACTERISTICS

Item		Specifications
1	Transparency	91.5% ($\pm 1.5\%$)
2	Accuracy	>98.5% of true position

2.5 TOUCH CONTROLLER

The EXII-7760UC controller is available in a variety of sizes, for use on a variety of displays.



2.5.1 ELECTRICAL CHARACTERISTICS

Item	Specification	
1	Dimensions	0.80" (20.32 mm) x 1.90" (48.26 mm) REF
2	Operating Current	25 mA (typical)
3	Power Connection	USB BUS (5V)
4	Connectors	5-pin AMP (Touch side)
5	ESD	$\pm 8\text{KV}$ Contact, $\pm 20\text{KV}$ Air.

2.5.2 SOFT SPECIFICATIONS

The touch driver supports operation systems, including Windows 2000, Windows XP, windows XP embedded, Windows Vista.

3 ELECTRICAL CHARACTERISTICS AND PERORMANCE

3.1 WHITE BALANCE ADJUSTMENT

For NORMAL PRESET:

6500°K	X = 0.313 +/- 0.015
	Y = 0.329 +/- 0.015
9300 °K	X = 0.283 +/- 0.015
	Y = 0.297 +/- 0.015

Note: Use Minolta CA-210 for color coordinates and luminance checking.

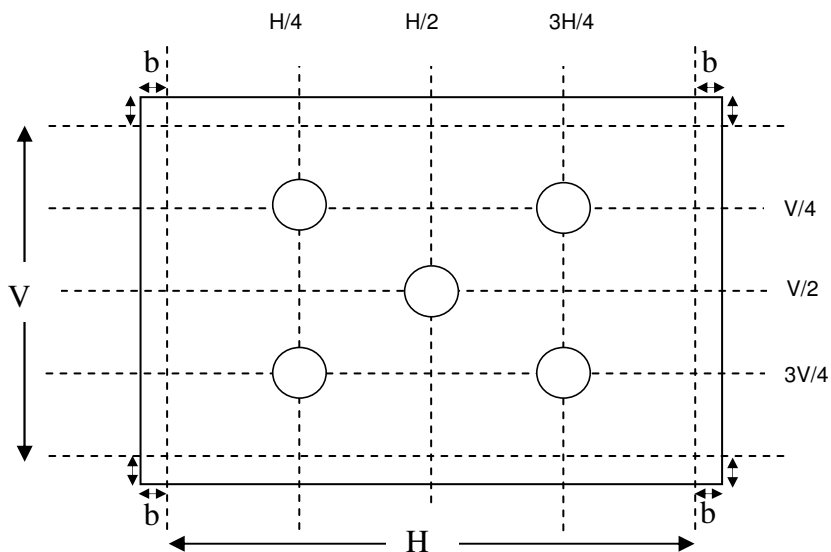
3.2 WHITE BALANCE ADJUSTMENT

Set contrast at 50% and turn the brightness to 100%. (at original panel color)

apply the pattern 1, it should comply with the following formula:

$$\frac{\text{Maximum luminance of five points (brightness)}}{\text{Minimum luminance of five points (brightness)}} < 1.3$$

Pattern 1: Brightness and Uniformity



3.3 CONTRAST RATIO

Apply a 1360X768@60Hz signal with white pattern, Set contrast at 50% and turn the brightness to 100% , measure luminance at full white (Lw) and full black (Lb) should be comply with (CR = Lw / Lb)

CR: 3000 : 1

4 OSD MENU

Main Menu	Sub Menu	Reference
Image Setting	Auto Adjust	Scan 5.3 Screen Adjustment
	H.position	
	V.position	
	Clock	
	Phase	
LockFun	ON/OFF	Selection for lock function or not
Gamma	Gamma 1	Choose suitable mode according to different application
	Gamma 2	
	Gamma 3	
	Gamma 4	
	Gamma 5	
	Gamma 6	
	Gamma 7	
Color temp	9300	Choose suitable color temp according to different application
	6500	
	User	
Zoom	Full	Choose suitable ZOOM according to different application
	5:4	
	4:3	
	User	
Default		Backlight,Contrast,Gamma,Sharpness ,Dbrightness,Colortemp
Exit		Close the OSD menu

Note : if you want key locked, please let "lockfun" on. Then press AUTO key delay 10s.the screen display "Key locked".

If you want key unlocked, please let "lockfun" off. When the key is locked(the screen display "Key locked"),you should press AUTO key delay 10s.the screen display "KEY unlocked".

5 ENVIRONMENTAL CONDITIONS

Operation

Temperature	0°C ~ 40°C
Humidity	20 to 70%
Air pressure	795-1013 mbar

Storage

Temperature	-20°C to 60°C
Humidity	5- 95% (non -condensing)
Air pressure	300-1013 mbar

Transport

Temperature	-40°C to 65°C
Humidity	5- 95% (non -condensing)
Air pressure	300-1013 mbar

6 DRAWING

See separate file

7 PACKING

1pcs/carton, carton dimension: 751(W)x 238(D)x506(H) mm, 13.0Kg/carton.

Accessories:
Power cable (EU)
VGA cable
USB cable
User Manual
Touch drive CD

8 APPROVALS

Rohs, CE approval for Mass Production Units

Vendor:

Europe:

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