LG.PHILIPS LCD

LG.PHILIPS LCD Module

SERVICE MANUAL

MODEL : LP141WP1 - TLA1 [Lead Free]

CAUTION

BEFORE SERVICING THE MODULE, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.

Fun & Smart Service

SAFETY PRECAUTIONS

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it.
To avoid potential hazards, use this product only as specified.
Only qualified personnel should perform service procedures.
LCD Module is a display device to be divided into Board Ass'y and Backlight Ass'y. Board Ass'y consists of electric circuitry, PCB and two sheets of glass. Polarizer films are attached on each surface. The space between two sheets of glass are filled with Liquid Crystal. And the Backlight Ass'y includes Lamp Ass'y, optical sheets(Diffuser, Prism), LGP(Light Guide Panel), supporter main.
When using / handing this LCD Module, pay attention to the below warning and cautions.

⚠ Warning?

Warning statements identify conditions or practices that could result in injury or loss of life if the warning is ignored and the product is handled incorrectly.

⚠ Caution?

Caution statements identify conditions or practices that could result in damage to this product or other property if the caution is ignored and the product is handled incorrectly.

Ⅰ. WARNING

(1) Do not supply a voltage higher than that specified to this product. This may damage the product and may cause a fire.

(2) Do not use this product in locations where the humidity is extremely high, where it may be splashed with water, or where flammable materials surround it.

(3) Do not install or use the product in a location that dose not satisfy the specified environmental conditions. This may damage the product and may cause a fire.

(4) If a foreign substance (such as water, metal, or liquid)gets inside the product, immediately turn off the power. Continuing to use the product and cause fire or electric shock.

(5) If the product emits smoke or abnormal noise, immediately turn off the power. Continuing to use the product cause fire or electric shock.

(6) Do not disconnect or connect the connector while the power is on.

(7) Do not pull out or insert the power cable from/to an outlet with wet hands. It may cause electric shock.

(8) If the power cable is damaged or the connector is loose, do not use the product : otherwise this can lead to fire or electric shock.

(9) Backlight Inverter uses a high voltage for Lamp. Do not touch circuit substrate and caution on electric shock when handling the LCD Module Backlight Inverter unit.

Ⅱ. CAUTION

(1) Do not place this product in a location that is subject to heavy vibration, or an unstable surface such as an inclined surface. The product may fall off or fall over, causing injuries.

(2) Before disconnecting cable from the product, be sure to turn off the power. Be sure to hold the connector when disconnecting cables. Pulling a cable with excessive force may cause the core of the cable to be exposed or break the cable, and this can lead to fire or electric shock.

(3) This product contains glass. If shock, vibration, heat or distortion is applied to the product, the glass may be broken.

(4) If glass surface of the display breaks or is scratched, do not touched the broken pieces or the scratched with bare hands. You may be injured.

(5) LCD Module requires to be handled with special care. LCD Module is not to be touched with metal or hard materials. Must not be stressed by heat or mechanical impact.

(6) There are some particular components on the rear panel of this product. Skin contact with these components may cause an electric shock. So, handle with care.

(7) While moving the product, be sure to turn off the power, disconnect all cables and watch your step. Dropping the product may cause injuries from electric shock. So, while moving the product handle with care.

(8) When cleaning the panel is necessary, wipe it with a soft and moistened cloth a neural detergent. Caution on connector area. Do not use chemicals such as thinner or benzene.

(9) LCD Module emits heat from the Lamp, Backlight lamp, component parts. Therefore, the environmental temperature must not exceed 50 ℃. LCD Module Backlight Inverter system is driven by high voltage, so it must avoid conductive materials.

(10) If repairing components with a lead line, high voltage or high temperature components must be put out from a lead line and fix.

(11) Do not place an object on the surface of the display. The glass may break or be scratched.

(12) This product may be damaged if it is subject to excessive stresses (such as excessive voltage, current, or temperature). The absolute maximum ratings specify the limits of these stresses.

(13) Do not cover or wrap with any covering materials while power is applied to the product.

(14) This product is made from various material such as glass, metal, and plastic. When discarding it, be sure to contact a purchase place.

(15) If a discrepancy occurs due to any arbitrary modification or disassembly, LG.Philips LCD is not responsible for function, quality or other items.

(16) Within the warranty period, general faults may be charged for depending on responsibility for the faults. You handle with care.

SERVICING PRECAUTIONS

Color TFT LCD Module is apt to be damaged by both electrical and mechanical stresses.
Users, therefore, are requested to follow the “Servicing precautions of color TFT LCD Module” on the followings.

Ⅰ. System Assembler

(1) Follow power sequence.
· Abnormal power sequence may cause critical malfunction or electrical damage.

(2) Prevent physical stress.

(3) Prevent overheat.
· High temperature on the surface of the screen may cause poor quality. Please make LCD Module used on specified temperature.
· Low temperature under 10℃makes LCD Module respond slowly, make Backlight worse operated and shorten very much the lifetime accordingly.

(4) Keep LCD Module dust-free.
· LCD Module is sensitive against dust.
Dust can cause visual or functional problem.

(5) Do not touch TCP area.
· Do not touch TCP area at any case. It causes Driver IC crack, film crack etc. TCP is the weakest point of LCD Module.

(6) Do not pull Backlight wire.
· Please do not pull the Backlight wire it can cause the wire disconnected or damaged.

(7) Check a connection of the Inverter & Backlight connectors.
· Incomplete connection with can cause burnt in Backlight connector or damage the inverter.

(8) Handle with care.
· Please do not drop, bend or hit the LCD Module. Physical stress can cause the defect such as broken.

(9) Keep mounting screw length and motor driver’s torque.
· Strong weaken motor driver’s torque can make a mechanical defect on LCD Module. Please keep the specification.

(10) Do not operate for a long time under the same pattern.
· Operating LCD Module for a long time under the same pattern can cause image persistence and can damage it.

(11) Defect panel also handled with care.
· To prevent making another defect, please handle the defective LCD Module as a good one.
· Defective LCD Module should be repaired.

(12) Do not stack LCD Modules.
· LCD Module consists of fragile components such as TCPs or Glasses.
· Stacking LCD Module can cause undesired defects.

(13) Do not provide strong pressure at connecting.

· Strong pressure can transfer the force to TCP which is the weakest parts of LCD Module. Eventually can make TCP crack or other unexpected defect.

(14) Let the Backlight Wire backside of LCD Module.

· If let the Backlight wire front side of LCD Module, the Backlight connector can hurt the surface of polarizer.

(15) Never connect/disconnect at power on.

· LCD Module consists of CMOS which is known as weak component against EOS. It can hurt the product.

(16) Electro-static discharge can make damage.

· Semi-assembled product should be handled with wrist strap.
· Earth human body when handle the LCD Module.
Please do not touch the interface connector pin.

Ⅱ. System Assembler/End User

(1) Keep clean the surface.

· Please wear rubber glove when touch the surface of LCD Module screen.
· Please use soft and anti-static material with n-Hexane as cleaner.

(2) Be careful not to make polarizer scratch.

· Surface of polarizer is soft, so it's easily scratched.
· Please do not touch, press or rub on polarizer surface with materials over HB hardness.

(3) Be careful swift Temperature & Humidity change.

· Swift temperature and or humidity change can make dew condensation or ice which cause nonconformance such as malfunction.

(4) Keep out of water.

· Water on in the LCD Module can cause electrical short or corrosion.
· Please wipe out or dry water carefully.

(5) Keep LCD Module corrosive gases free.

· Corrosive gas makes the polarizer and the circuitry parts chemical damages and eventually cause defects.

(6) Keep the suitable temp. & suitable humidity.

· High temp. & high humidity shorten the lifetime.

CONTENTS

1. Product Overview

General Description

TFT-LCD is made up of the lower plate glass with TFT, the upper plate glass with color filter, the middle Liquid Crystal. TFT convey and control the signal and the Liquid Crystal control transmitted ray as molecular structure different by admitted volt. And as the ray pass color filter, show up the wanted color and picture.

The LP141WP1-TLA1 is 14.1 inches diagonally measured active display area with WXGA+ resolution(900 vertical by 1440 horizontal pixel array). Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 6-bit gray scale signal for each dot, thus, presenting a palette of more than 262,144 colors.

The LP141WP1-TLA1 has been designed to apply the interface method that enables low power, high speed, low EMI.

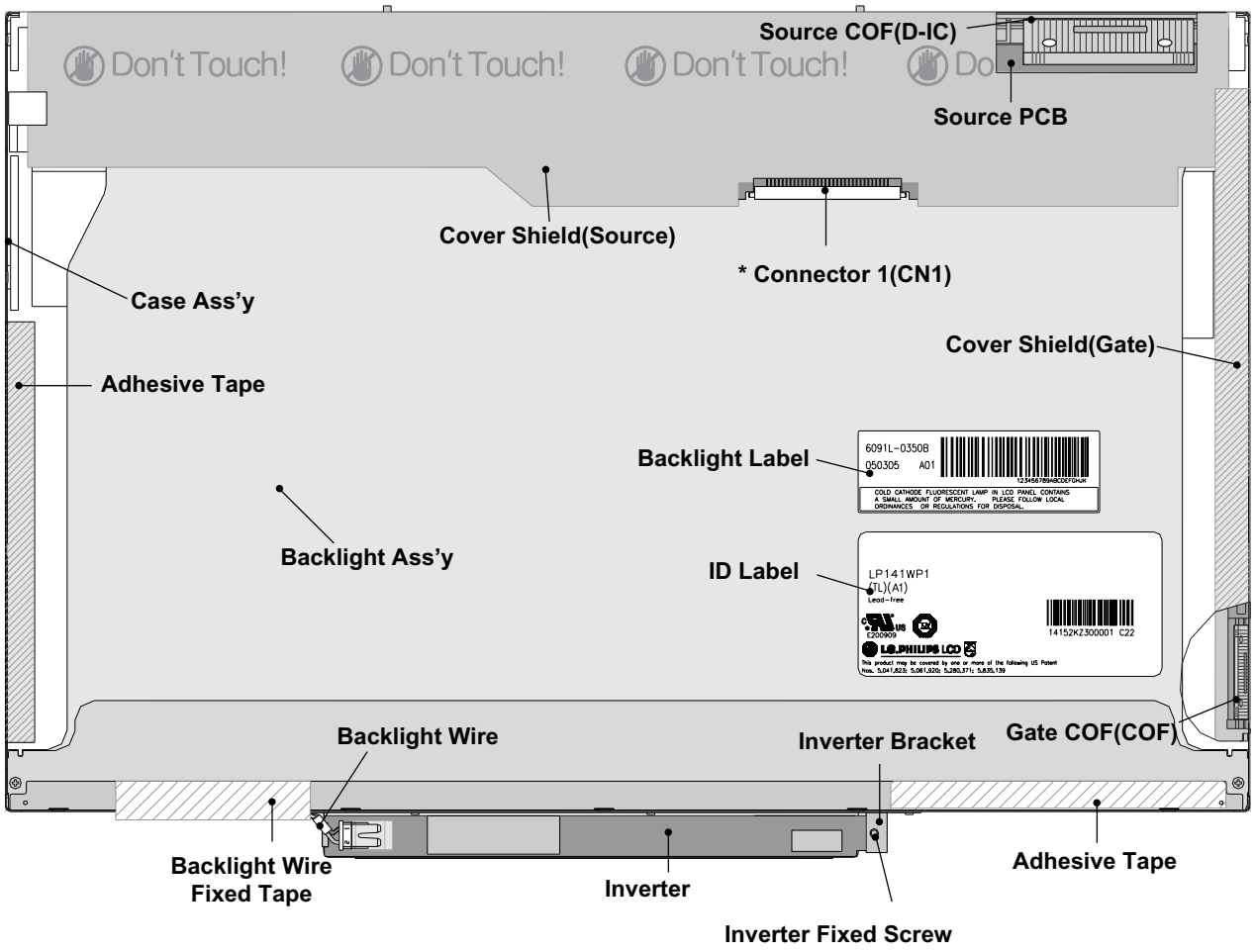
The LP141WP1-TLA1 is intended to support applications where thin thickness, low power are critical factors and graphic display are important. In combination with the vertical arrangement of the sub-pixels, the LP141WP1-TLA1 characteristics provide an excellent flat display for office automation products such as Notebook PC.

General Features

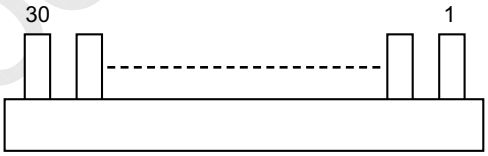
Active Screen Size	14.1 inches diagonal
Outline Dimension	320(H) × 206(V) × 5.5(D, max)mm
Pixel Pitch	0.2109 mm × 0.2109 mm
Pixel Format	1440 horiz. By 900 vert. Pixels RGB strip arrangement
Color Depth	6-bit, 262,144 colors
Luminance, White	220 cd/m^2(Typ. 5point)
Power Consumption	Total 6.0 Watt(Typ.)
Weight	435g (Max.), 425g(Typ.)
Display Operating Mode	Transmissive mode, normally white
Surface Treatment	Anti-glare treatment of the front polarizer

2. Module Formation

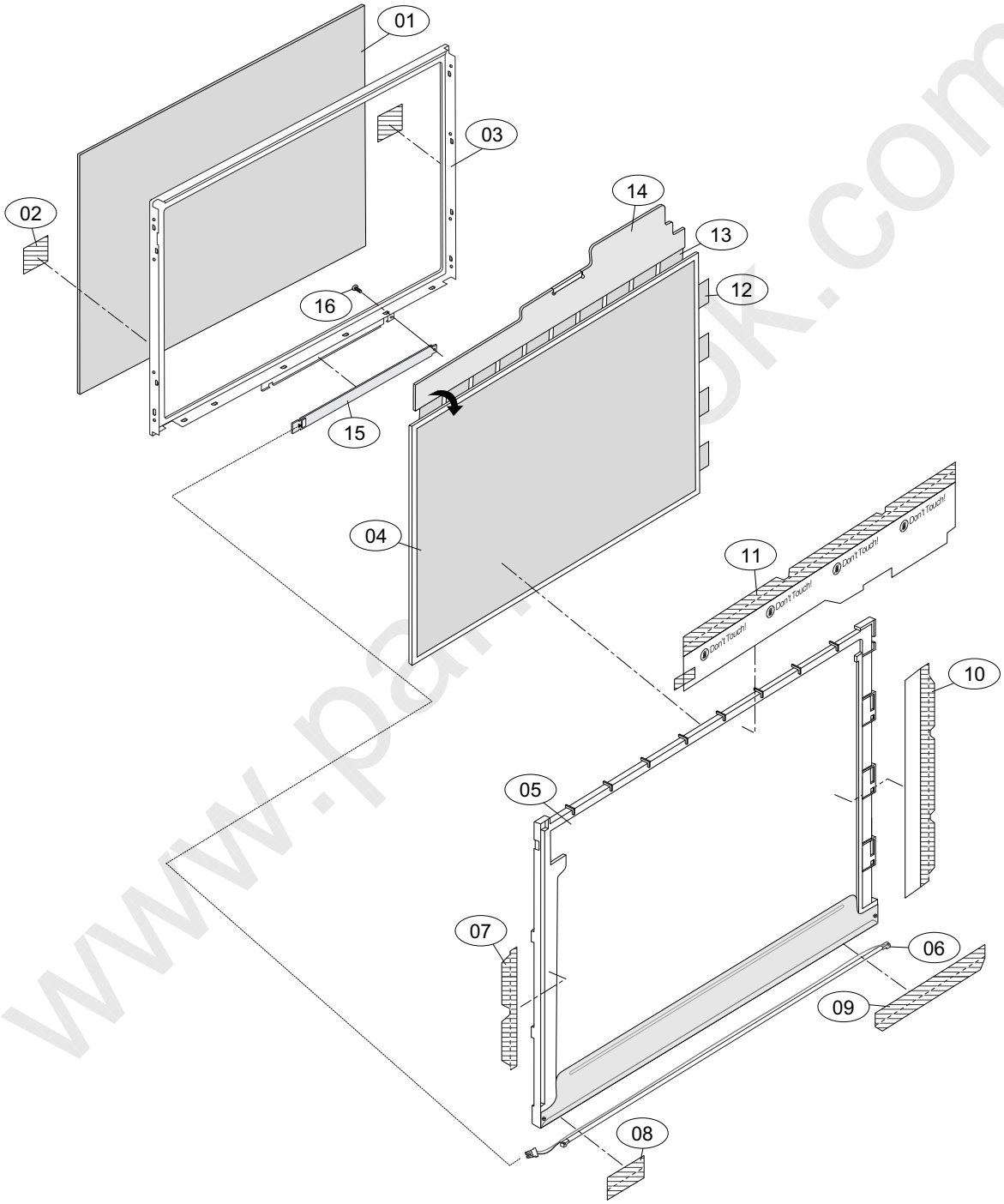
* Connector 1(CN1) : User Connector



Module Connector Pin configuration(CN1)

NO	Symbol	Description	Notes
1	GND	Ground	1. Interface chips 1.1 LCD : DAWIN,DTML012(LCD Controller) including LVDS Receiver (DAWIN co., LVD4107 x 2each) 1.2 System : It must include international standard LVDS Trasmitter. * Pin to Pin compatible with LVDS 2. Connector 2.1 LCD : GT101-30S-HR11,LGC or its compatibles. 2.2 Mating : FI-X30M or equivalent. 2.3 Connector Pin arrangement [LCD Module Rear View] 
2	VCC	Power Supply, 3.3V Typ.	
3	VCC	Power Supply, 3.3V Typ.	
4	V EEDID	DDC 3.3V power	
5	BIST	Reserved for LCD supplier test point	
6	Clk EEDID	DDC Clock	
7	DATA EEDID	DDC Data	
8	RA1-	Negative LVDS differential data input,R0-G5,G0	
9	RA1+	Positive LVDS differential data input,R0-G5,G0	
10	GND	Ground	
11	RB1-	Negative LVDS differential data input,G1-G5,B0-B1	
12	RB1+	Positive LVDS differential data input,G1-G5,B0-B1	
13	GND	Ground	
14	RC1-	Negative LVDS differential data input,B2-B5,HS/VS/DE	
15	RC1+	Positive LVDS differential data input,B2-B5,HS/VS/DE	
16	GND	Ground	
17	RCLK1-	Negative LVDS differential clock input	
18	RCLK1+	Positive LVDS differential clock input	
19	GND	Ground	
20	RA2-	Negative LVDS differential data input,R0-G5,G0	
21	RA2+	Positive LVDS differential data input,R0-G5,G0	
22	GND	Ground	
23	RB2-	Negative LVDS differential data input,G1-G5,B0-B1	
24	RB2+	Positive LVDS differential data input,G1-G5,B0-B1	
25	GND	Ground	
26	RC2-	Negative LVDS differential data input,B2-B5,HS/VS/DE	
27	RC2+	Positive LVDS differential data input,B2-B5,HS/VS/DE	
28	GND	Ground	
29	RCLK2-	Negative LVDS differential clock input	
30	RCLK2+	Positive LVDS differential clock input	

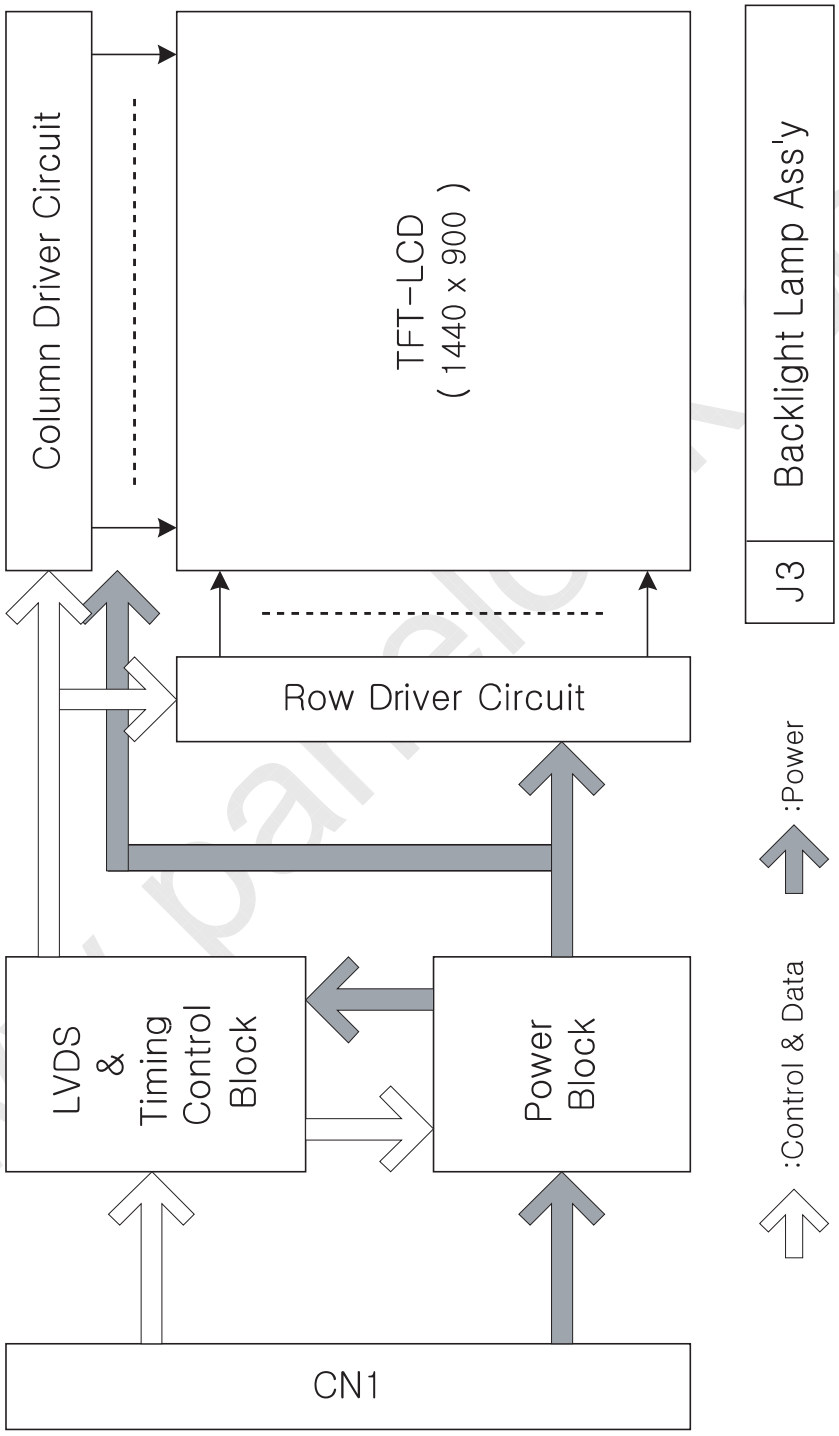
3. Exploded View



4. Exploded View Parts List

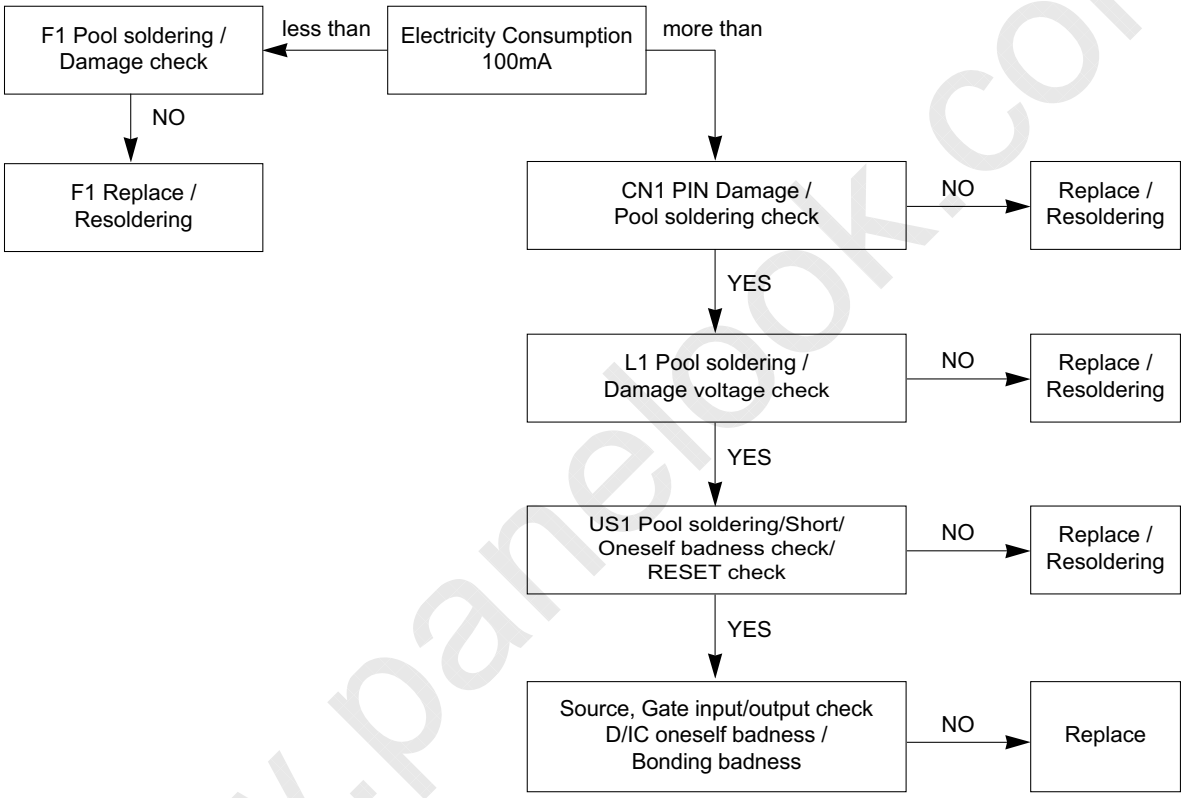
No.	PART NO.	DESCRIPTION
1	5135L-0011V	Protect Film
2	7250L-0023A	Masking, Tape
3	3111L-0149A	Case Ass'y
4	6308L-0039A	POLARIZER(TOP)
	6308L-00657A	POLARIZER(BOTTOM)
5	6091L-0350A	BACKLIGHT Ass'y
6	6913L-0260C	Lamp Ass'y
7	7250L-0080D	Tape, Adhesive
8	7250L-0077A	Tape, Teraoka
9	7250L-0074C	Tape, Teraoka
10	3550S-0271A	Cover shield , Gate
11	3550S-0263A	Cover shield , Source
12	0IOKL-0039A	TCP (D-IC, Gate)
13	0IHYL-0105A	TCP (D-IC, Source)
14	6871L-0785A	PWB(PCB) Ass'y , Source
15	6632L-0263A	INVERTER
16	1STZL-0002B	Screw

5. Block Diagram



6. Trouble shooting

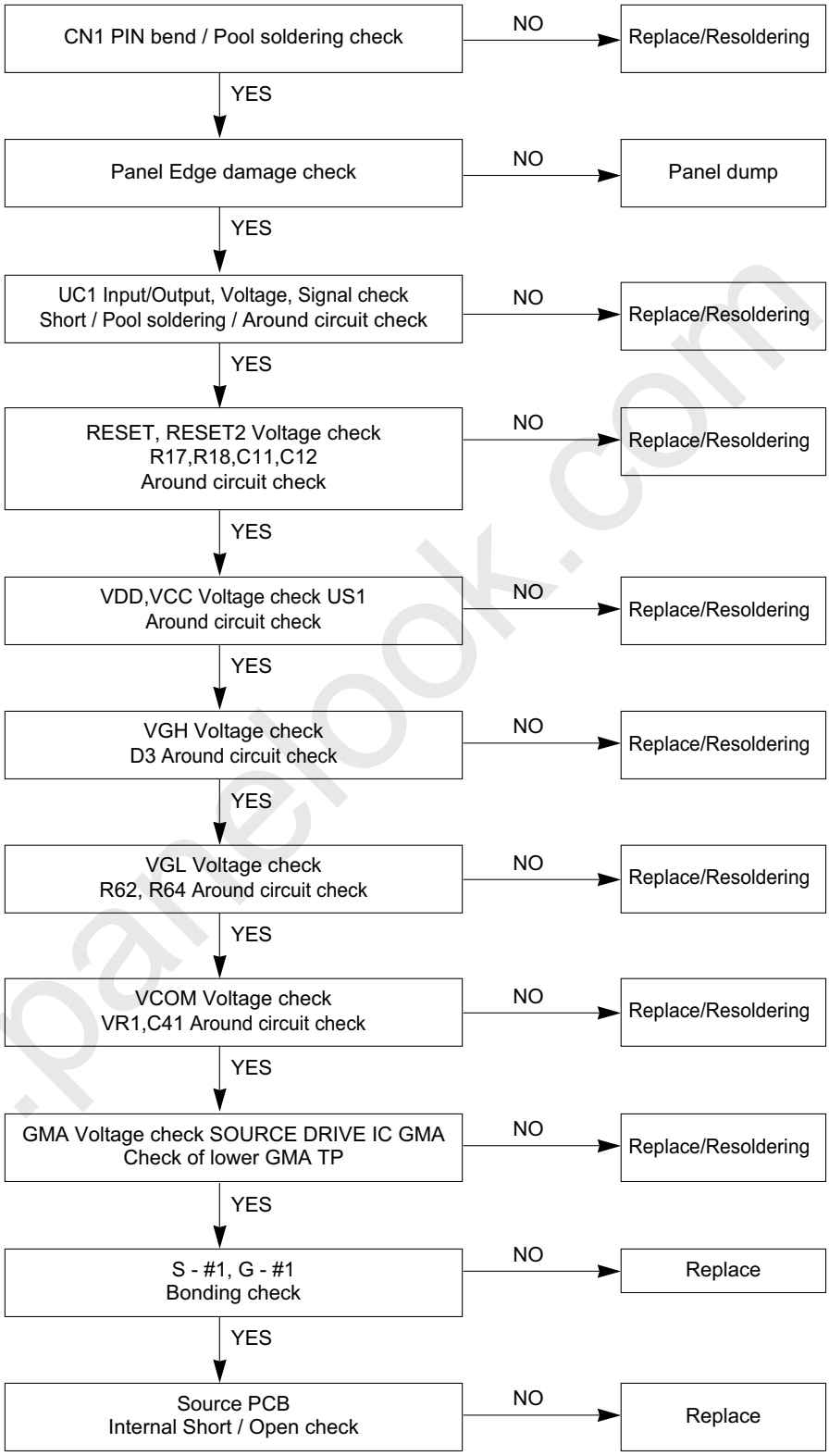
1 No Display : Means that the screen is not affected by the signal data when you connect the product to Backlight or user connector and then 3.3V(Vcc) input power ON/OFF.



* Notes : It can use a Power IC(US1), One Chip.

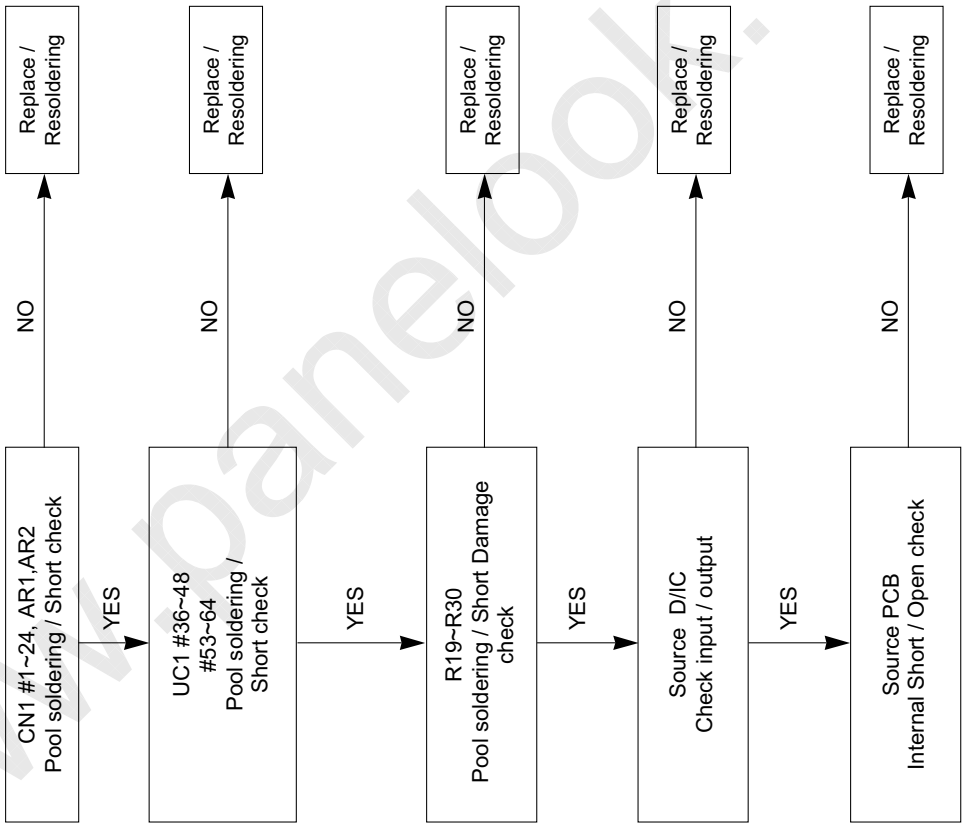
2 Abnormal Display

Means that the screen is affected by the signal data when you connect the product to Backlight or user connector and then turn 3.3V(Vcc) input power ON/OFF.



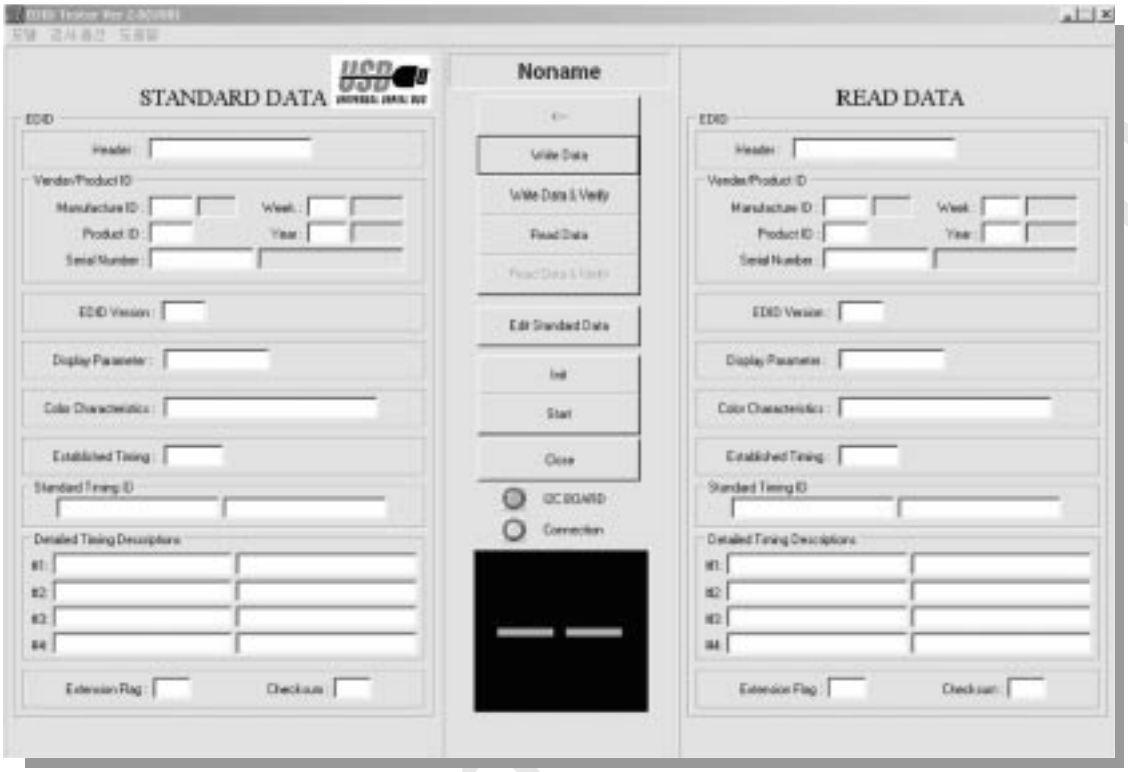
3 Abnormal Color

Means that the abnormal screen displays at specified color when you connect the product to Backlight or user connector and then turn 3.3V(Vcc) input power ON/OFF.



* Notes : Applied with mini LVDS T-con : RGB signal and Clock are not divided.

4 EDID Operation Screen



How to use Button

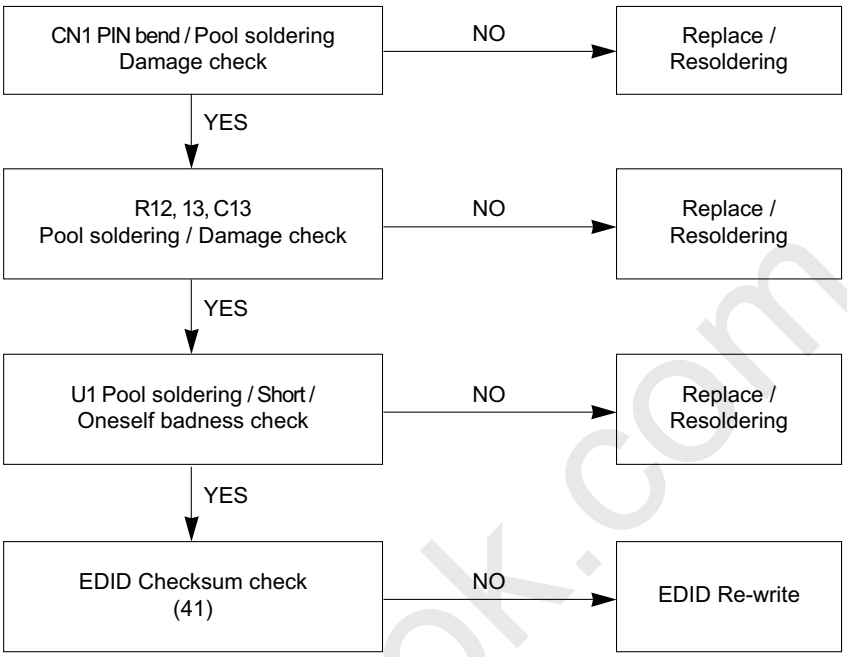
(1) < Write Data > : Write EDID Data(Standard Data at the left> on EEPROM.
(2) < Write Data&Verify > : After confirming EDID Data, mark the OK, NG.
(3) < Read Data > : Read and mark EDID Data to the EEPROM.
(4) < Read Data&Verify > : Altering marking EDID Data by EEPROM, compare with standard data to mark OK, NG.
(5) < Init > : Initializing board => **OK : GREEN, NG : RED**
When board displays RED, After click the inspection option <MENU>, check the address.
(6) < Start > : After connecting the Module, confirm connected state => **OK : GREEN, NG : RED**
When board displays RED contact connector or confirm power(3.3V).
(7) < Close > : End the program.

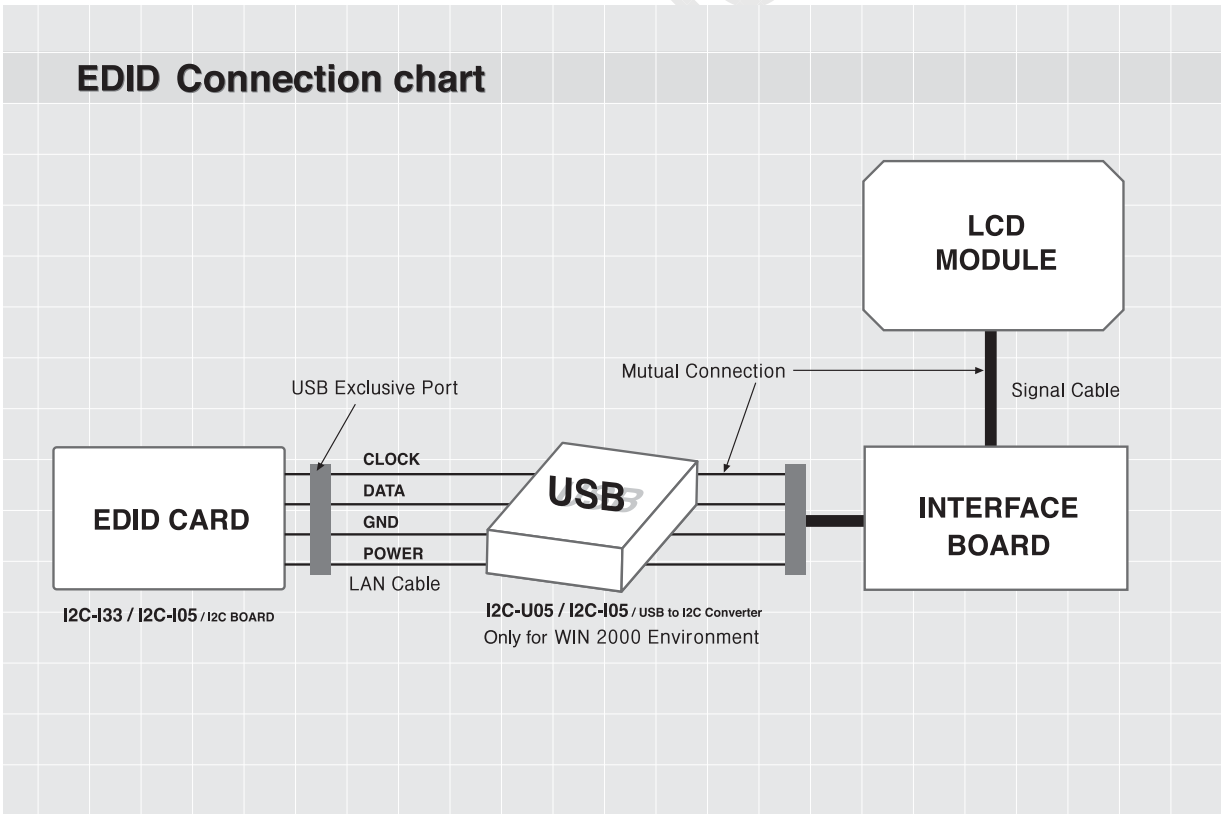
How to work

(1) Operate the program.
(2) Click the <Init> button.
(3) Open the wanted model data, If not, program is edited.
(4) After connecting Module, confirm power(3.3V).
(5) Progress the wanted one(Write & Read).

5 EDID Badness

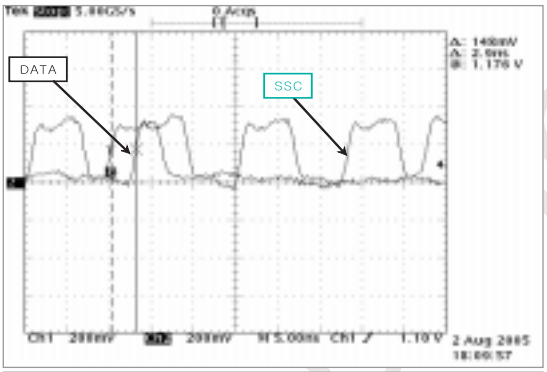
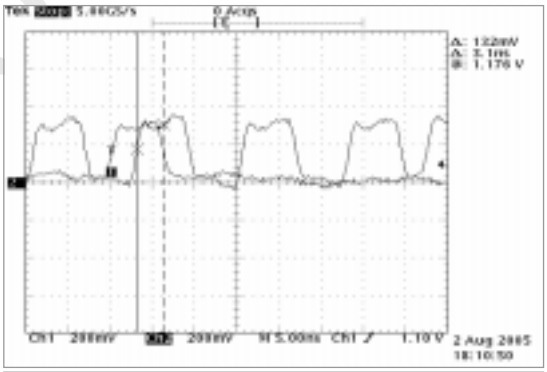
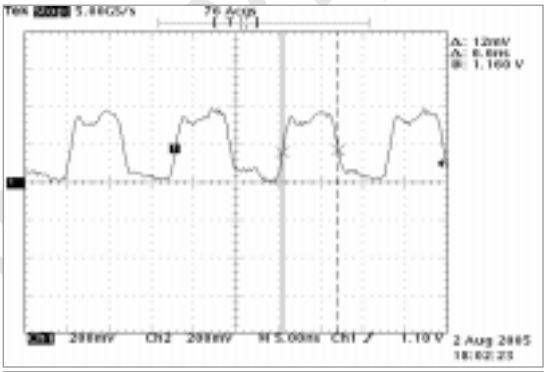
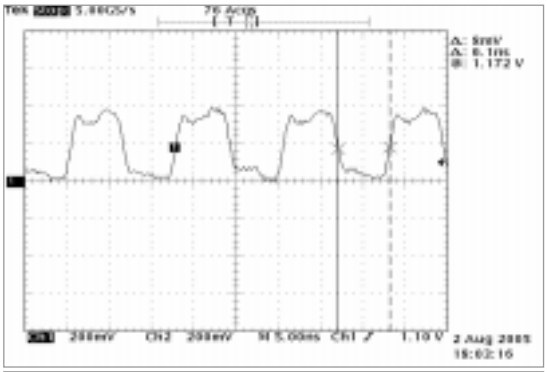
On the test - screen, when comparing, standard data with Read data, If it is failed, it is displayed NG on the test-screen.



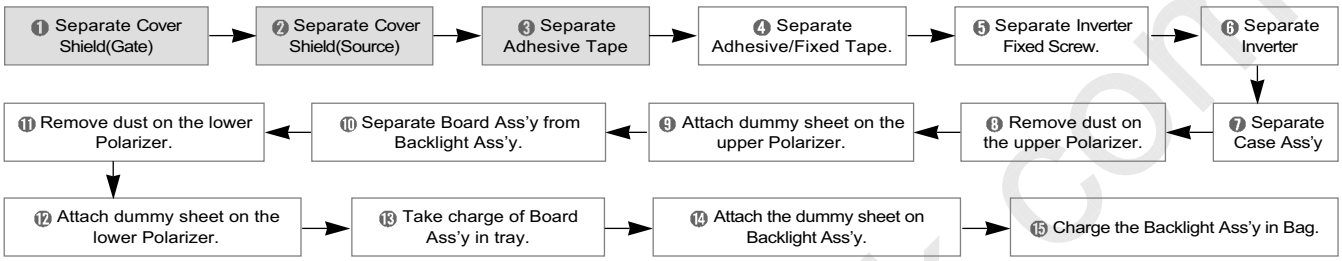


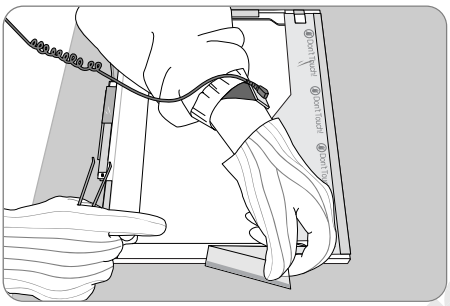
7. Timing Check Sheet

Condition : (VCC = 3.3V)

DATA _ Setup		**DATA _ Hold**	
	DATA_S = 2.9ns		DATA_H = 3.5ns
SSC _ High		**SSC _ Low**	
	SSC_H = 6.3ns		SSC_L = 5.9ns

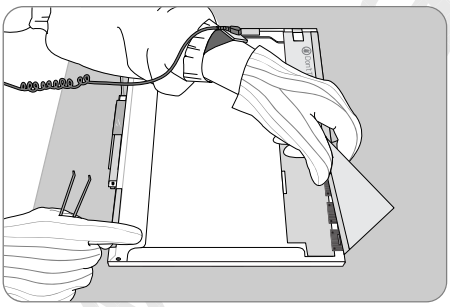
8. Disassembly



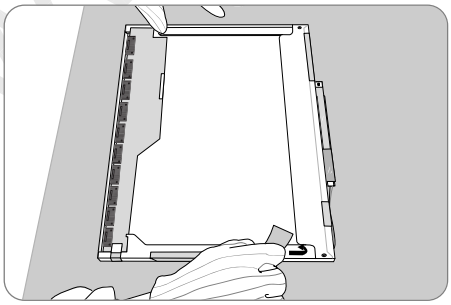


❶ Separate the Cover Shield(Gate).

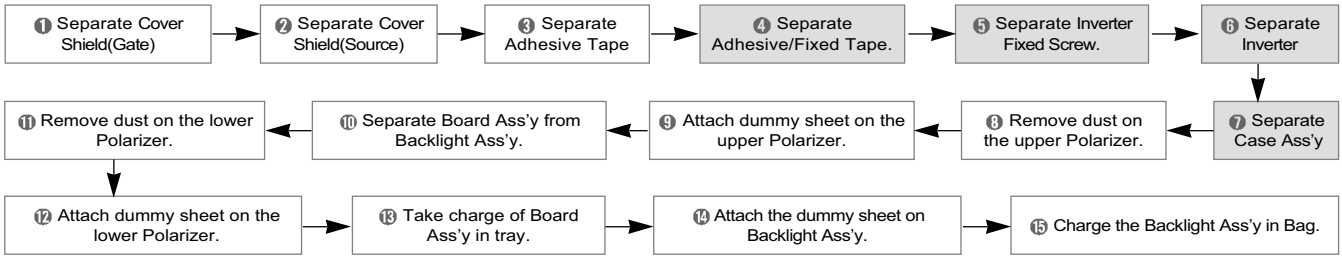
※ Should be put on (electro static) wrist strap.
※ Should be cleared the bottom.
※ Light the Ion Blower.

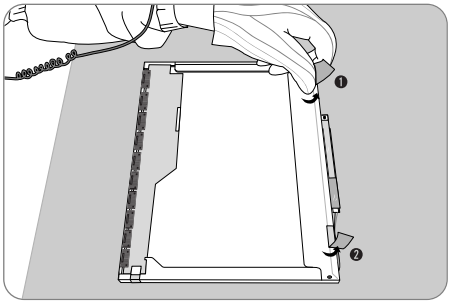


❷ Separate the Cover Shield(Source).

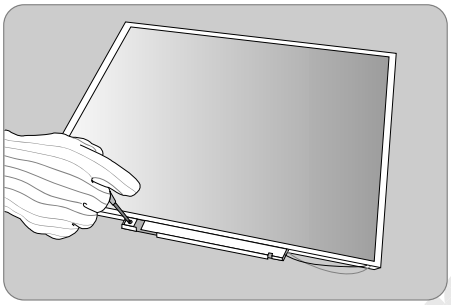


❸ Separate the Adhesive Tape of the opposite Gate.

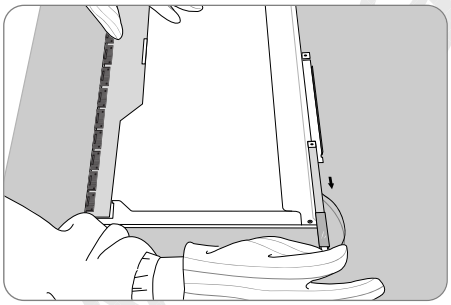




❹ Separate the
① Adhesive Tape &
② Backlight Wire fixed Tape of the opposite Source PCB.

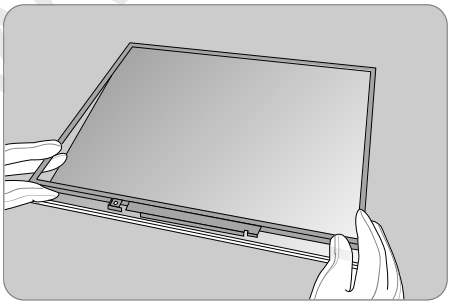


❺ Separate the fixed screw of Inverter.

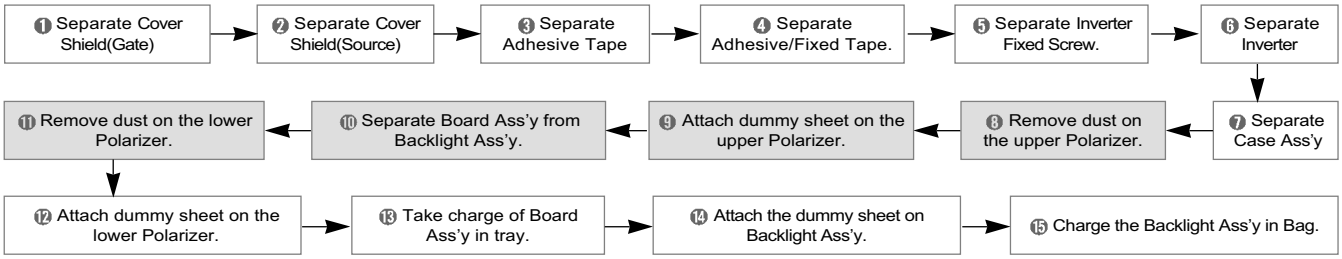


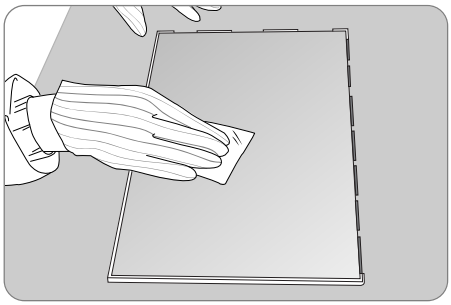
❻ Separate the Inverter.

※ If you need to replace the Inverter, separate the Inverter.
It' s unnecessary to repair the normal TCP / Polarizer.

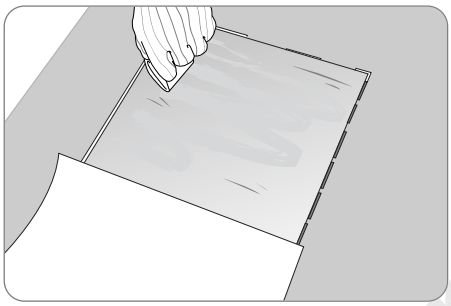


❼ Separate the Case Ass'y.

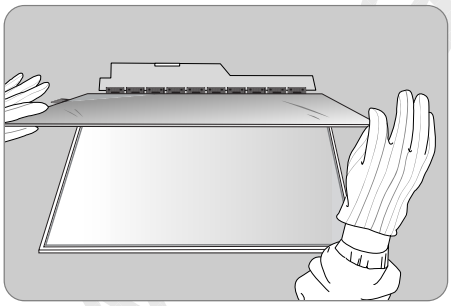




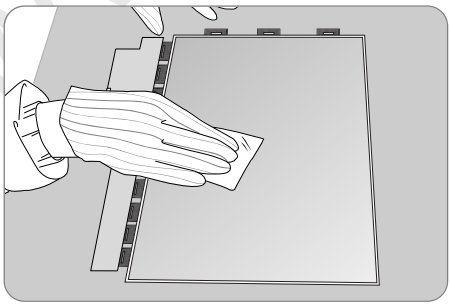
❽ Remove dust on the upper Polarizer.



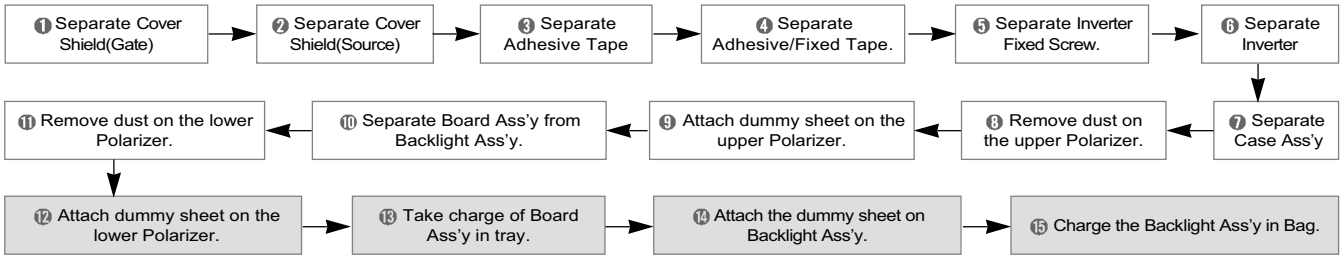
❾ Attach the dummy sheet on the upper Polarizer.

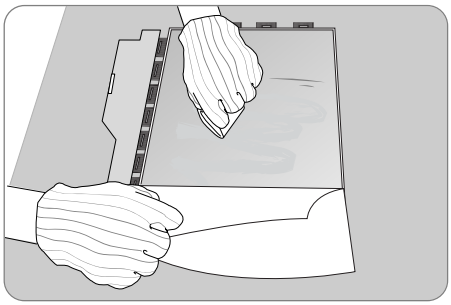


❿ Separate the Board Ass'y from Backlight Ass'y.

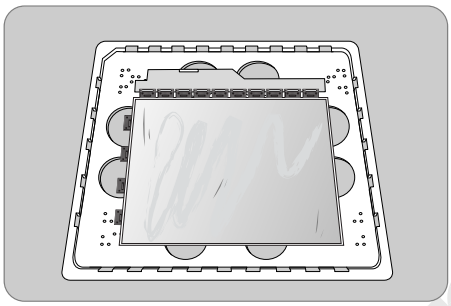


⓫ Remove dust on the lower Polarizer.

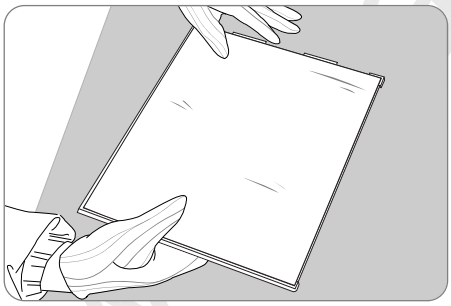




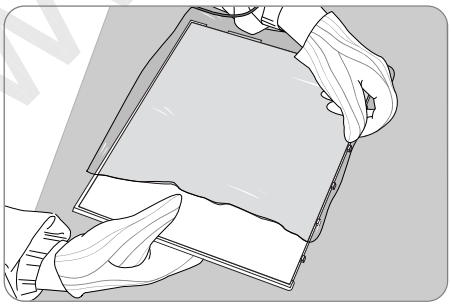
⓬ Attach the dummy sheet on the lower Polarizer.



⓭ Take charge of the Board Ass'y in tray.

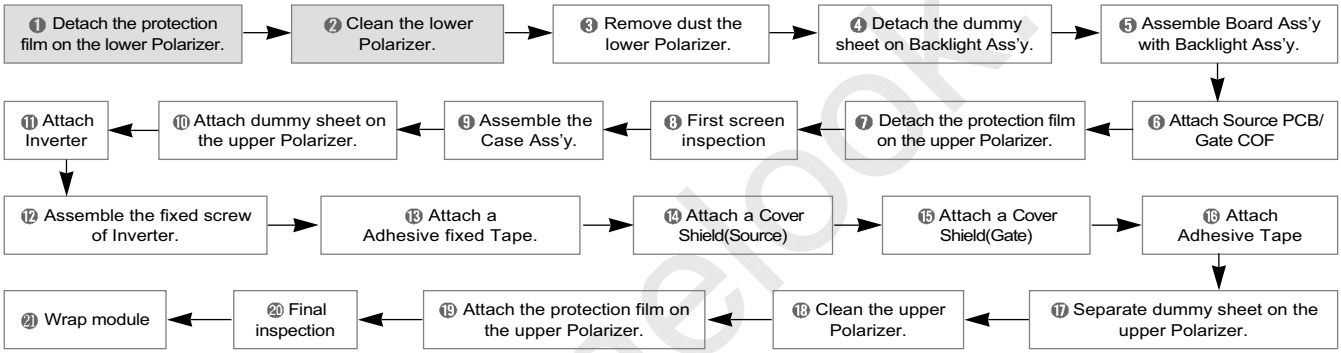


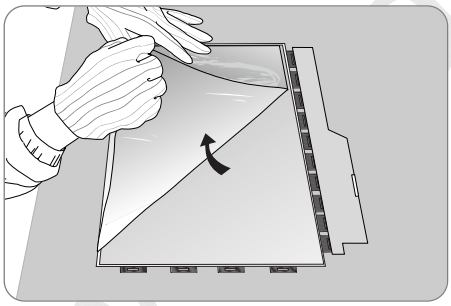
⓮ Attach the dummy sheet on Backlight Ass'y.



⓯ Take charge of the Backlight Ass'y in Bag.

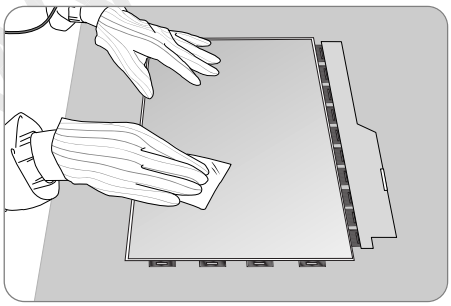
9. Assembly



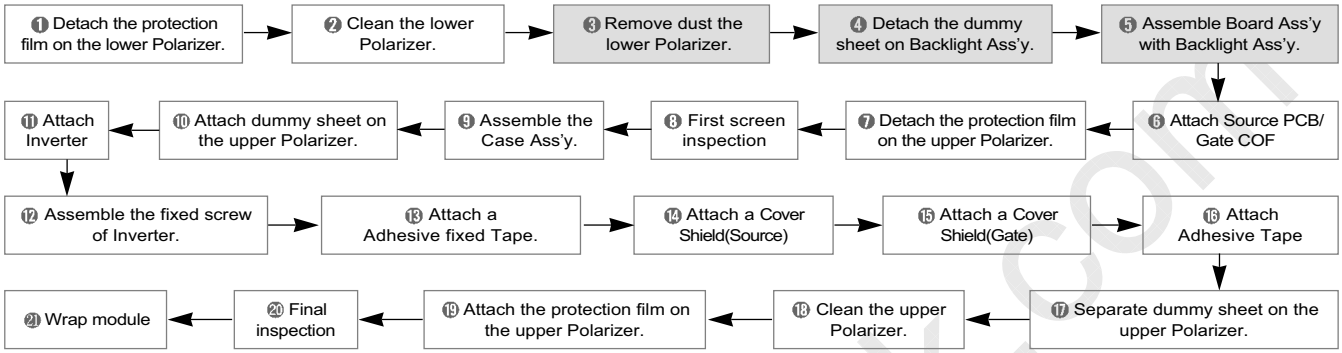


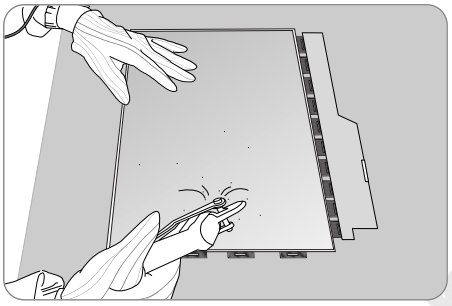
❶ Detach the protection film on the lower Polarizer.

※ Detach it to opposite direction for preventing static electricity.
※ Should be put on (electro static) wrist strap.
※ Should be cleared the bottom.
※ Light the Ion Blower.

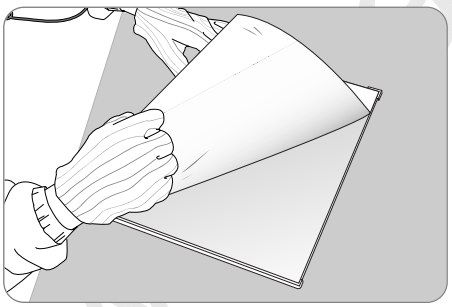


❷ Polish the lower Polarizer with soft wiper.

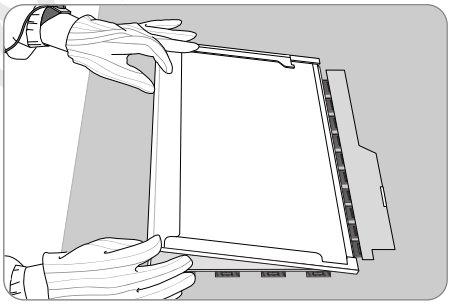




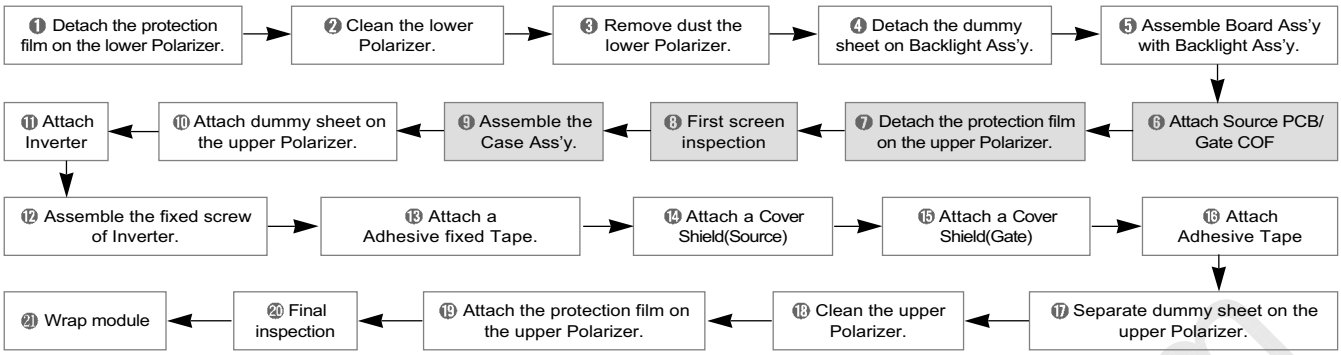
❹ Remove dust of lower Polarizer with a Air Gun.

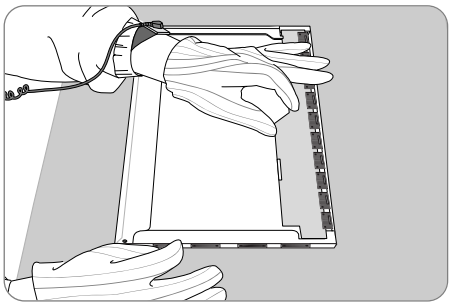


❹ Detach the dummy sheet on Backlight Ass'y.



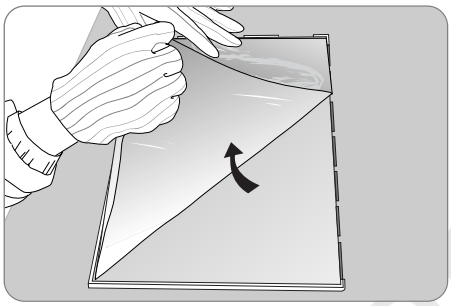
❺ Assemble the Board Ass'y with Backlight Ass'y.



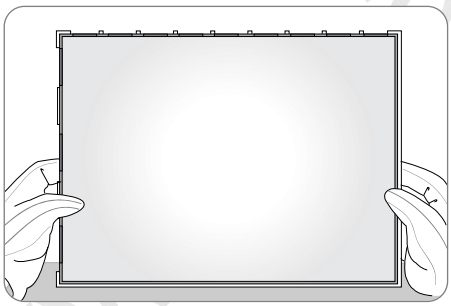


❻ Attach and fold up Source PCB / Gate COF into Backlight Ass'y bottom.

※ Be careful TCP(Tape Carrier Package), COF(Chip On Film)crack.

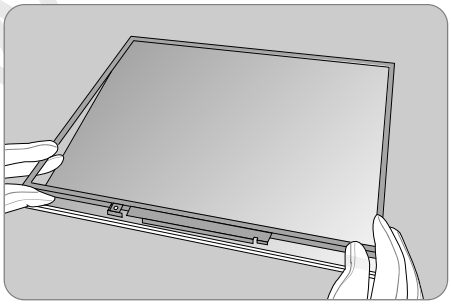


❼ Detach the protection film on the upper Polarizer.

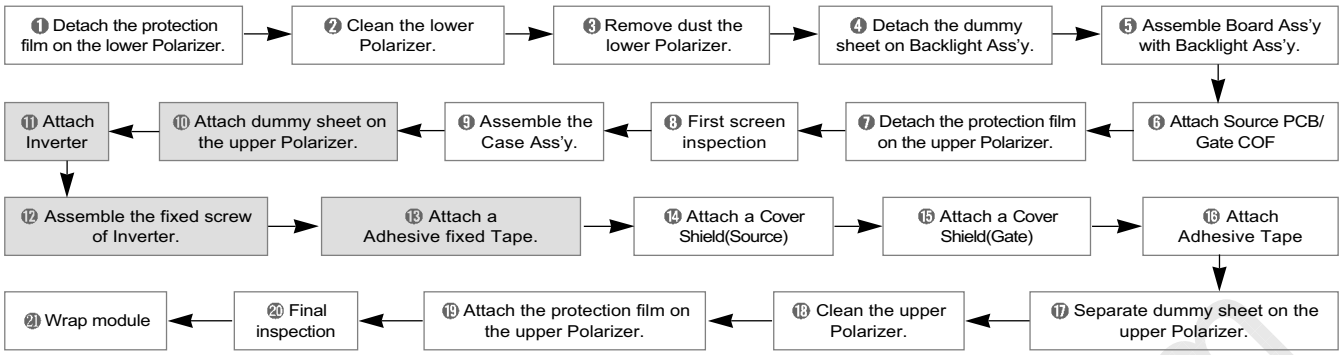


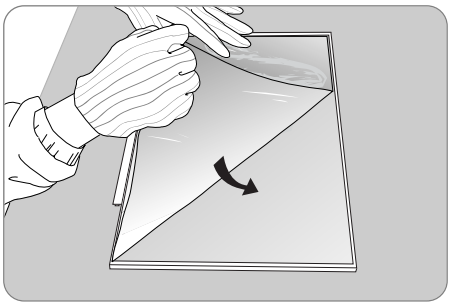
❽ Take a first screen inspection the Backlight.

※ Check the Backlight dust.

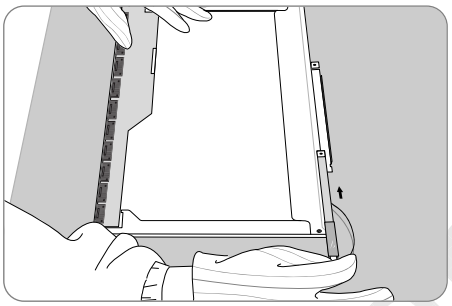


❾ Assemble the Case Ass'y.



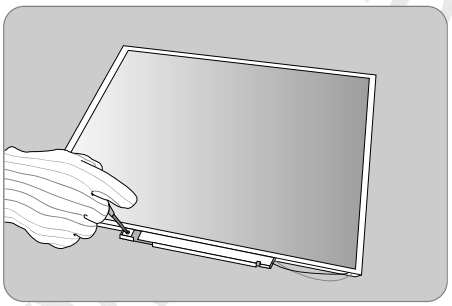


⓾ Attach the dummy sheet on the upper Polarizer.

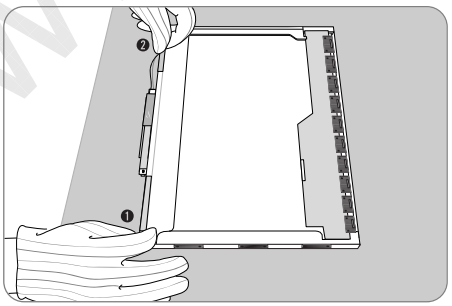


⓫ Attach the Inverter.

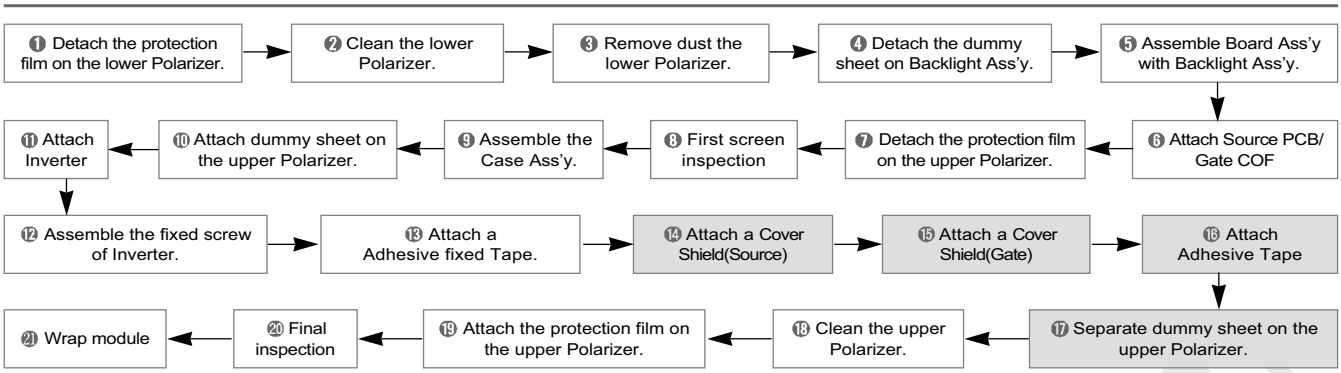
※ If you need to replace the Inverter, separate the Inverter. It's unnecessary to repair the normal TCP / Polarizer.

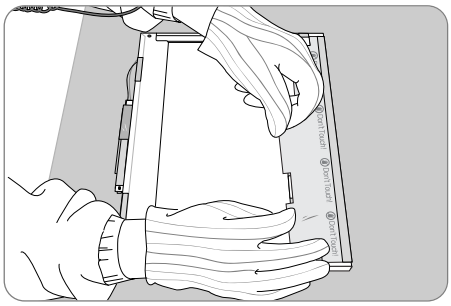


⓬ Assemble the fixed screw of Inverter.



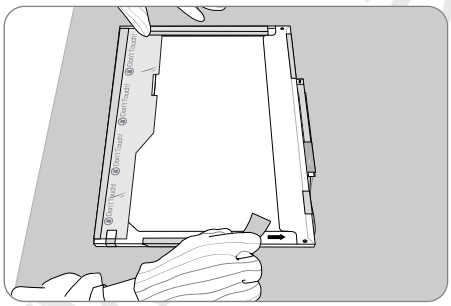
⓭ Attach the
① Adhesive Tape &
② Backlight Wire fixed Tape of the opposite Source PCB.



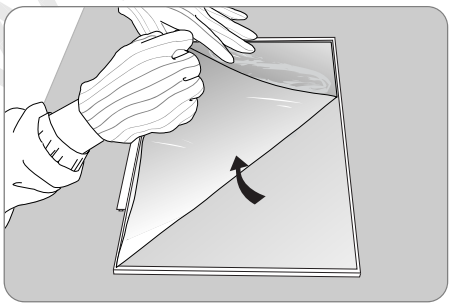


⓮ Attach the Cover Shield(Source).

⓯ Attach the Cover Shield(Gate).

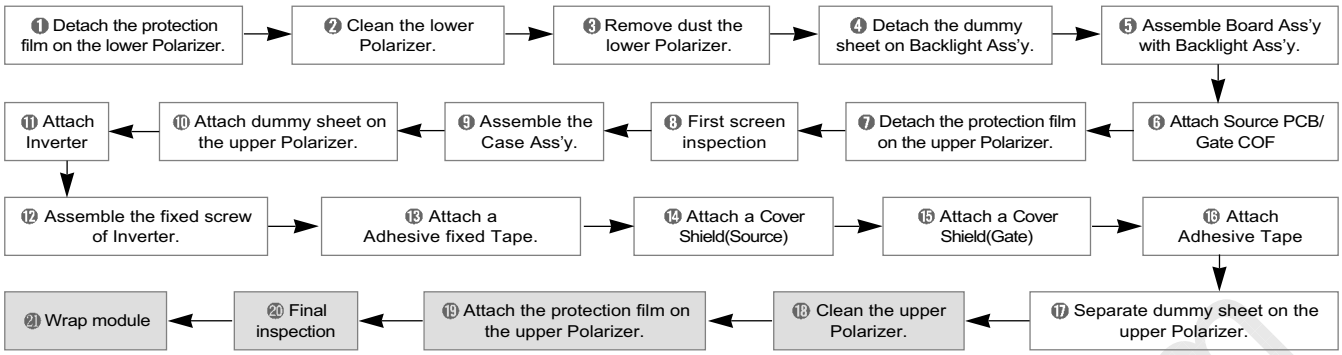


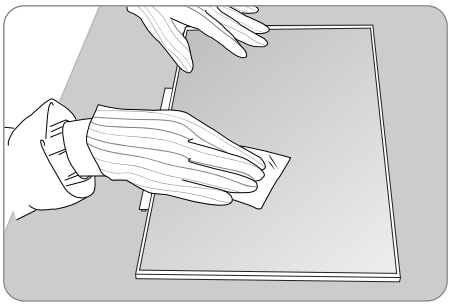
⓰ Attach the Adhesive Tape of the opposite Gate.



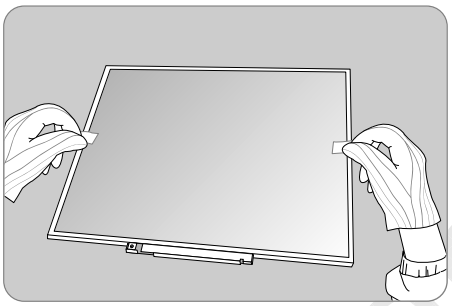
⓱ Separate the dummy sheet on the upper Polarizer.

※ Detach it to opposite direction for preventing static electricity.

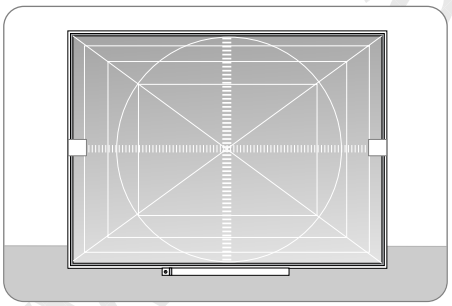




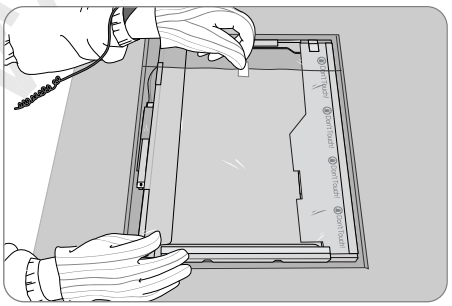
⓲ Polish the upper Polarizer with soft wiper.



⓳ Attach the protection film on the upper Polarizer.



⓴ Take a final inspection.



㉑ Wrap the module up in Shielding Bag.

10. Parts List

* Specified parts list is subject to change.

PART No.	DESCRIPTION	SPECIFICATION	LOCA. No.
6871L-0785A	PWB(PCB) ASSY	Source, LP141WP1-TLA1-C11, SURFACE MOUNTING	
		CIRCUIT_CAPACITOR	
0CHZL-0018A	CAPACITOR,	47N F, 25 Volt, M PER, X7R(JB), 3216 R/TP	AC10
0CH2472K562	CAPACITOR,CHIP[CERAMIC	4.7NF 50V K X 1608 R/TP	C1
0CH2104K562	CAPACITOR,CHIP[CERAMIC	0.1UF 50V K X7R 1608 R/TP	C10,C104,C105,C106,C11,C114,C115,C116, C12,C13,C14,C15,C16,C26,C35,C45,C5,C7
0CH2A-0023A	CAPACITOR,	0.1U F, 25 Volt, K PER, X7R(JB), 1608 R/TP, T=0.9(MAX)	C22
0CH2A-0006A	CAPACITOR,	4.7U F, 16 Volt, K PER, X5R(JB), 3216 R/TP, T=1.0(MAX)	C25,C3,C34,C36,C37,C38,C4,C41,C47,C50
0CH2A-0011A	CAPACITOR,	10U F, 16 Volt, K PER, X5R(JB), 3216 R/TP, T=0.95(MAX)	C27
0CH2A-0015A	CAPACITOR,	1U F, 25 Volt, K PER, X5R(JB), 1608 R/TP, T=0.9(MAX)	C28
0CH2104H942	CAPACITOR,CHIP[CERAMIC	0.1UF 25V Z F 1608 R/TP	C30,C51,C54
0CH5681K412	CAPACITOR,CHIP[CERAMIC	680PF 50V J NP0 1608 R/TP	C31
0CH2223H562	CAPACITOR,CHIP[CERAMIC	22NF 25V K X 1608 R/TP	C52,C53
0CH2103K942	CAPACITOR,CHIP[CERAMIC	10NF 50V Z F 1608 R/TP	C6,C8,C9
		CIRCUIT_CONNECTOR	
6630L-0167B	CONNECTOR	MDF76LBRW-30S-1H, HIROSE, 30 Pin, 1.0 mm	CN1
		CIRCUIT_DIODE	
0DHZL-0004A	DIODE	Schottky, BAT750-7-F(0.75A), DIODES, R/TP, SOT-23	D1
0DHZL-0008A	DIODE	Switching, BAV99-7-F, DIODES, R/TP, SOT-23	D2,D3,D4
		CIRCUIT_IC	
0IDAL-0010A	IC	DTML012, 0IDAL-0010A, 100 Pin, TQFP, Tray, LVDS	UC1
0ICS240200E	IC,CATALYST	CAT24WC02Y(CAT24FC02Y), 8 Pin, TSSOP, R/TP, EEPROM	U1
0IMXL-0004A	IC,MAXIM	MAX8758ETG+T, 24 Pin, QFN-24, R/TP, PWM,OP-AMP	US1
		CIRCUIT_RESISTOR	
0RHZL10005A	RESISTOR,CHIP	100OHM 5% 1/16W 3216 R/TP	AR1,AR2
0RH0000C622	RESISTOR,CHIP	0 OHM 1/16W 1608 5% D R/TP	R11,R3,R8,R101,R103,R105,R31, R4,R44,R46,R5,R50,R6,R62,R64
0RH4701C422	RESISTOR,CHIP	4.7K OHM 1/16W 1608 1% D R/TP	R12,R13
0RH2202C422	RESISTOR,CHIP	22K OHM 1/16W 1608 1% D R/TP	R14
0RH1002C422	RESISTOR,CHIP	10K OHM 1/16W 1608 1% D R/TP	R15,R16,R52,R61
0RH3303C422	RESISTOR,CHIP	330K OHM 1/16W 1608 1% D R/TP	R17
0RH3903C422	RESISTOR,CHIP	390K OHM 1/16W 1608 1% D R/TP	R18
0RH1000C422	RESISTOR,CHIP	100 OHM 1/16W 1608 1% D R/TP	R22,R23,R24,R25,R26,R27,R28,R29,R30, R93,R19,R20,R21
0RH5603C422	RESISTOR,CHIP	560K OHM 1/16W 1608 1% D R/TP	R40,R48
0RH2701C422	RESISTOR,CHIP	2.7K OHM 1/16W 1608 1% D R/TP	R42
0RH1003C422	RESISTOR,CHIP	100K OHM 1/16W 1608 1% D R/TP	R43,R60
0RH1803C422	RESISTOR,CHIP	180K OHM 1/16W 1608 1% D R/TP	R49
0RH5602C422	RESISTOR,CHIP	56K OHM 1/16W 1608 1% D R/TP	R51
0RH7501C422	RESISTOR,CHIP	7.5K OHM 1 / 16 W 1608 1% D R/TP	R53

PART No.	DESCRIPTION	SPECIFICATION	LOCA. No.
0RH3901C422	RESISTOR,CHIP	3.9K OHM 1/16W 1608 1% D R/TP	R54
0RH1001C422	RESISTOR,CHIP	1K OHM 1/16W 1608 1% D R/TP	R58
0RH0562C422	RESISTOR,CHIP	56 OHM 1/16W 1608 1% D R/TP	R63
0RH2201C422	RESISTOR,CHIP	2.2K OHM 1/16W 1608 1% D R/TP	R65
0RH3300C422	RESISTOR,CHIP	330 OHM 1/16W 1608 1% D R/TP	R70
0RH3002C422	RESISTOR,CHIP	30K OHM 1/16W 1608 1% D R/TP	R71
0RH2401C422	RESISTOR,CHIP	2.4K OHM 1/16W 1608 1% D R/TP	R74
0RH8201C422	RESISTOR,CHIP	8.2K OHM 1/16W 1608 1% D R/TP	R75
0RH1202C422	RESISTOR,CHIP	12K OHM 1/16W 1608 1% D R/TP	R79
0RH1802C422	RESISTOR,CHIP	18K OHM 1/16W 1608 1% D R/TP	R80
0RH1602C422	RESISTOR,CHIP	16K OHM 1/16W 1608 1% D R/TP	R82,R83
0RH1302C422	RESISTOR,CHIP	13K OHM 1/16W 1608 1% D R/TP	R87
0RH5601C422	RESISTOR,CHIP	5.6K OHM 1/16W 1608 1% D R/TP	R88,R59
		CIRCUIT_MISCELLANEOUS	
6110L-P102A	VOLUME	PANASONIC, 1K ohm, EVM3WSX80B13	VR1
0LC6012101A	INDUCTOR,CHIP	PLN6012T-100MR80 TDK R/TP	L1

PART No.	ITEM	DESCRIPTION
		BACKLIGHT & INVERTER
6091L-0350A	BACKLIGHT ASSY	LP141WX1, TL01-C11, HEESUNG PRECISION, PRISM
6913L-0260C	LAMP ASSY	LP141WX1-TL01-C11
4930L-0397A	HOLDER	LAMP(H), SILICON
4930L-0398A	HOLDER	LAMP(G), SILICON
3022L-0307A	DIFFUSER	UP, 125TL2, LP141WX1-TL01
3034L-0208A	REFLECTOR	RP17N(0.22T)
3032L-0236A	PRISM	UP, M268YK(MRC)
3923L-0454A	INNER PACKING	LP141WP1-TLA1-C11
6632L-0263A	INVERTER	YPNL-N021A, LGIT, LP141WP1-TLA1/LP141WX1-TL04
6632L-0266B	INVERTER	K08I026.01, AMBIT, LP141WP1-TLA1/LP141WX1-TL04
		DRIVE IC
0IOKL-0039A	IC,OKI	ML9132DVVCZ01L, 300 Pin, C-F, R/TP, GATE, 270/300CH, 2VGL
0IHYL-0105A	IC,MAGNACHIP	HM10SS639A-C3L, 705/720 Pin, C-B, R/TP, SOURCE
		POLARIZER
6308L-0658A	POLARIZER	LNC-TEGH2MP-E1032T, 310.14X195.24X0.13T, Nitto, TOP
6308L-0657A	POLARIZER	LNB-TEGAPMP-E1031B, 307.1X193.3X0.245T, Nitto, BOTTOM
6308L-0740A	POLARIZER	LGC-TSTH2LP-141E1034T, 310.14 X 195.24 X 0.135T
		LABEL
3850L-0034A	LABEL	PALLET YUPO 102X165
3850L-0077A	LABEL	BOX ART 100X100
3850L-0087A	LABEL	BOX YUPO 152X102
3850L-0088A	LABEL	ID YUPO 78X37 (TUV PS)
3850L-0085A	LABEL	B/L YUPO 62X21
		PACKING & BOX
3880L-0013D	BAG	LDPE 240X370
3920L-0389A	PACKING	TOP EPS LP141WX1
3920L-0390A	PACKING	BOTTOM EPS LP141WX1
3921L-0147B	PACKING ASSY	LP141WX1(DELL)
3930L-0007C	PALLET	WOOD 1040X900X150
3931L-0196B	PALLET ASSY	LP141WX1(DELL)
3000L-0016Q	ANGLE	COVER, DW3 1040X900X100
3000L-0013H	ANGLE	PACKING DW3 875X1022X831
		MISCELLANEOUS
6884L-0038A	ACF	CP5420ISL,L=1.5MMX200M, T=20UM,SONY
6884L-0027B	ACF	DP2252KSL, L=2MM*200M, SONY
6884L-0018B	ACF	CP9220IS L=1.5X200 T=15UM SONY
3890L-0035T	BOX	SWR4 420X324X269
3111L-0149A	CASE ASSY	LP141WX1-TL04/LP141WP1-TLA1
3110T-0138A	CASE, TOP	SUS304(0.3T), LP141WX1-TL01
3550B-0148A	COVER, BOTTOM	AL5050 H38(0.3T), LP141WX1
3550S-0263A	COVER, SHIELD	(S), SR93+TERAOKA 631S
3550S-0271A	COVER, SHIELD	(G),SR93+TERAOKA631S LP141WX1
6071L-0547A	POL ASSY	SE1W03-AAA
5135L-0011V	PROTECT FILM	SKYROL SH92,T=0.1,LP141WX1
1STZL-0002B	SCREW	T/TS PI2,L3(K0.2)
7250L-0041A	TAPE(RAW)	OPP 70MMX300M(LG,PHLIPS LCD)
7250L-0023A	TAPE(RAW)	MASKING 20MMX50M
7250L-0074C	TAPE(RAW)	TERAOKA(631S)+AL35FR
7250L-0080D	TAPE(RAW)	ADHESIVE, TERAOKA631S(0.05T)
7250L-0023A	TAPE(RAW)	MASKING 20MMX50M
7250L-0077A	TAPE(RAW)	TERAOKA 631S #25, 20MMX50M
7250L-0045L	TAPE(RAW)	(ADHESIVE) PVC T=0.15
7250L-0045Z	TAPE(RAW)	ADHESIVE PVC0.15T(LP150X08-A2)

11. Records of Revision

No.	Date	Contents	Board	Part Number	Customer P/N	Note

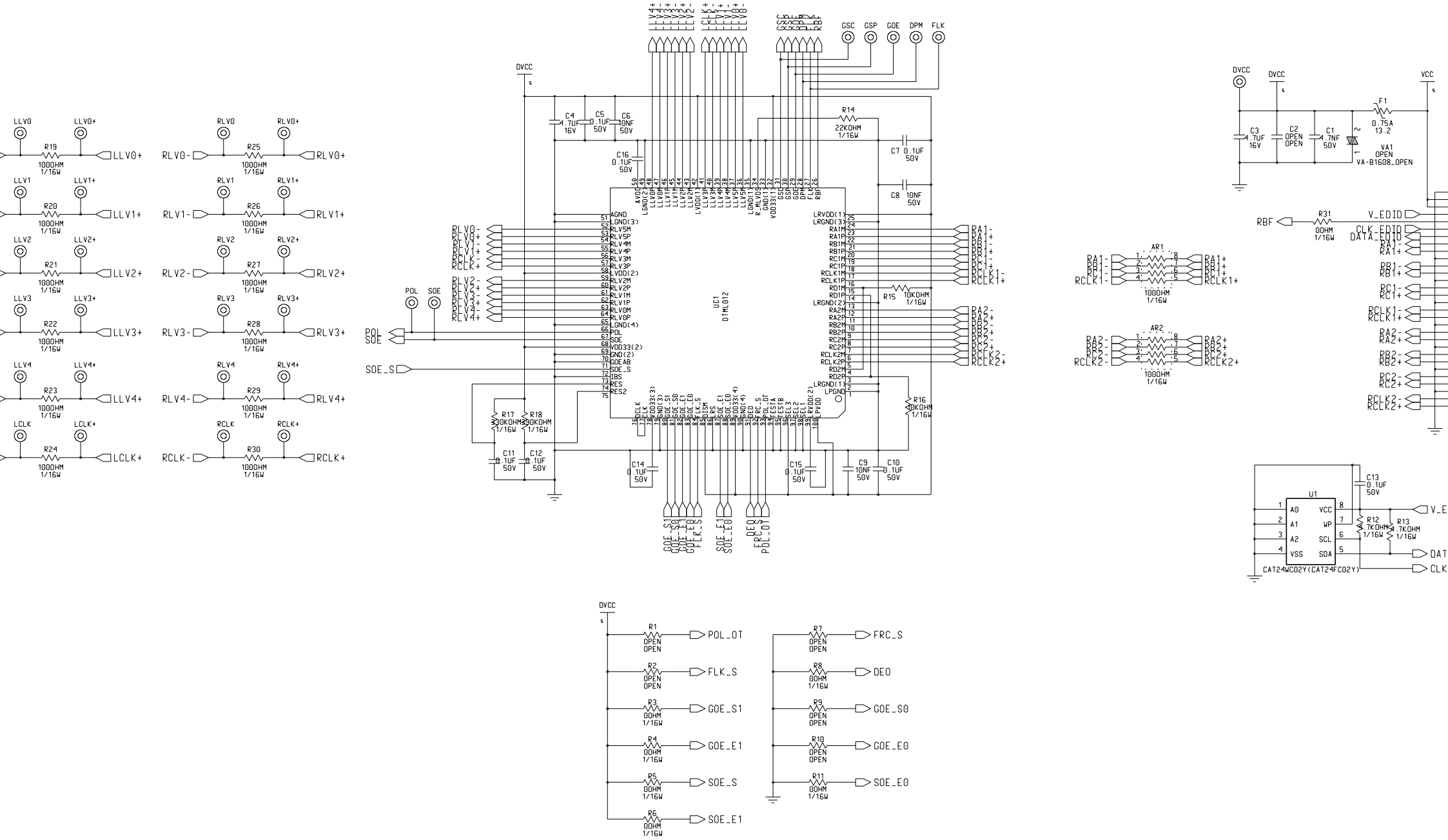
12. Derivative description

▷ **Base Model :**

▷ **Derivative description of Model**

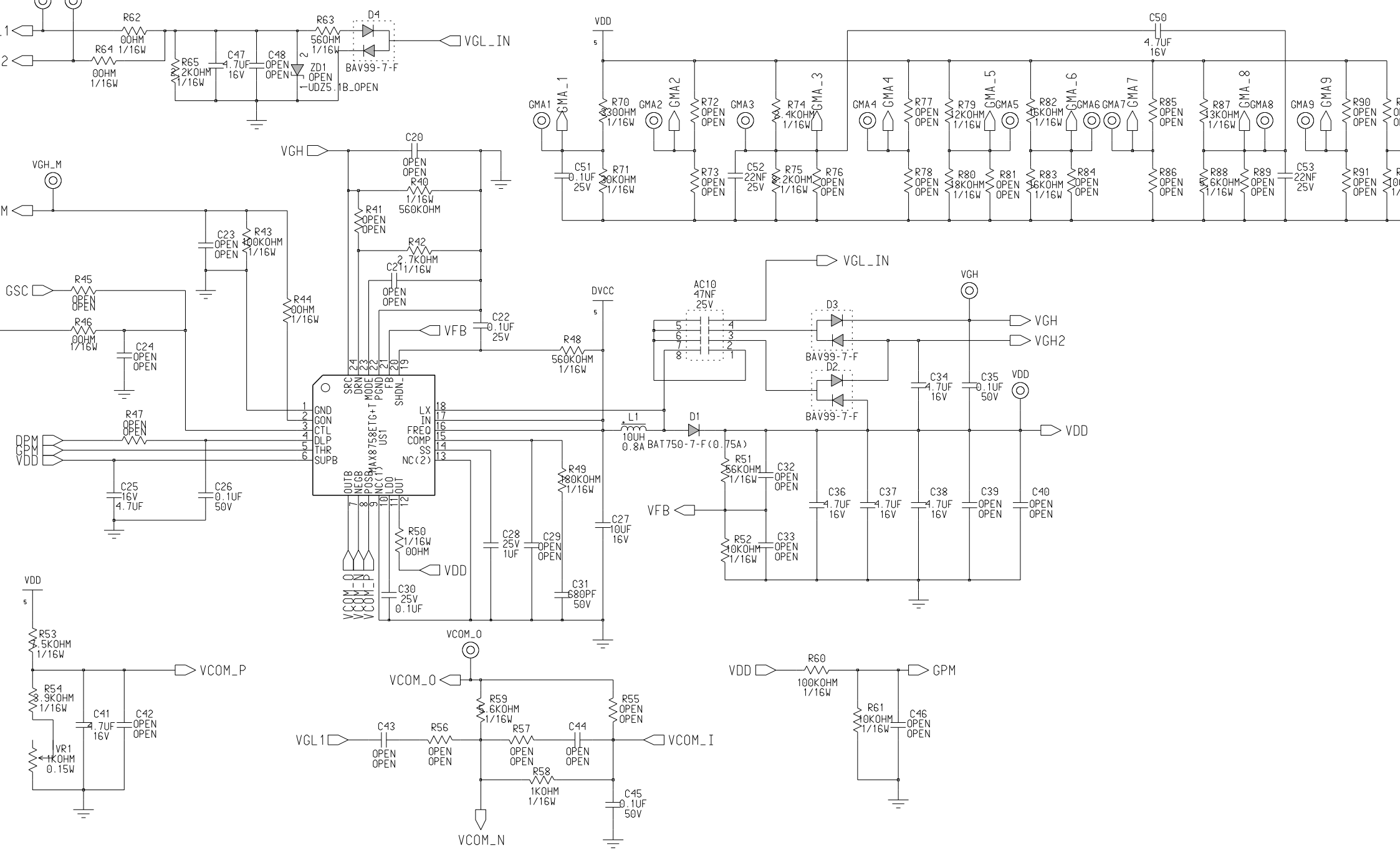
No.	Contents	Part Number		Note
		Before	After	

MEMO



SOURCE SCHEMATIC

LP141WP1-TLA



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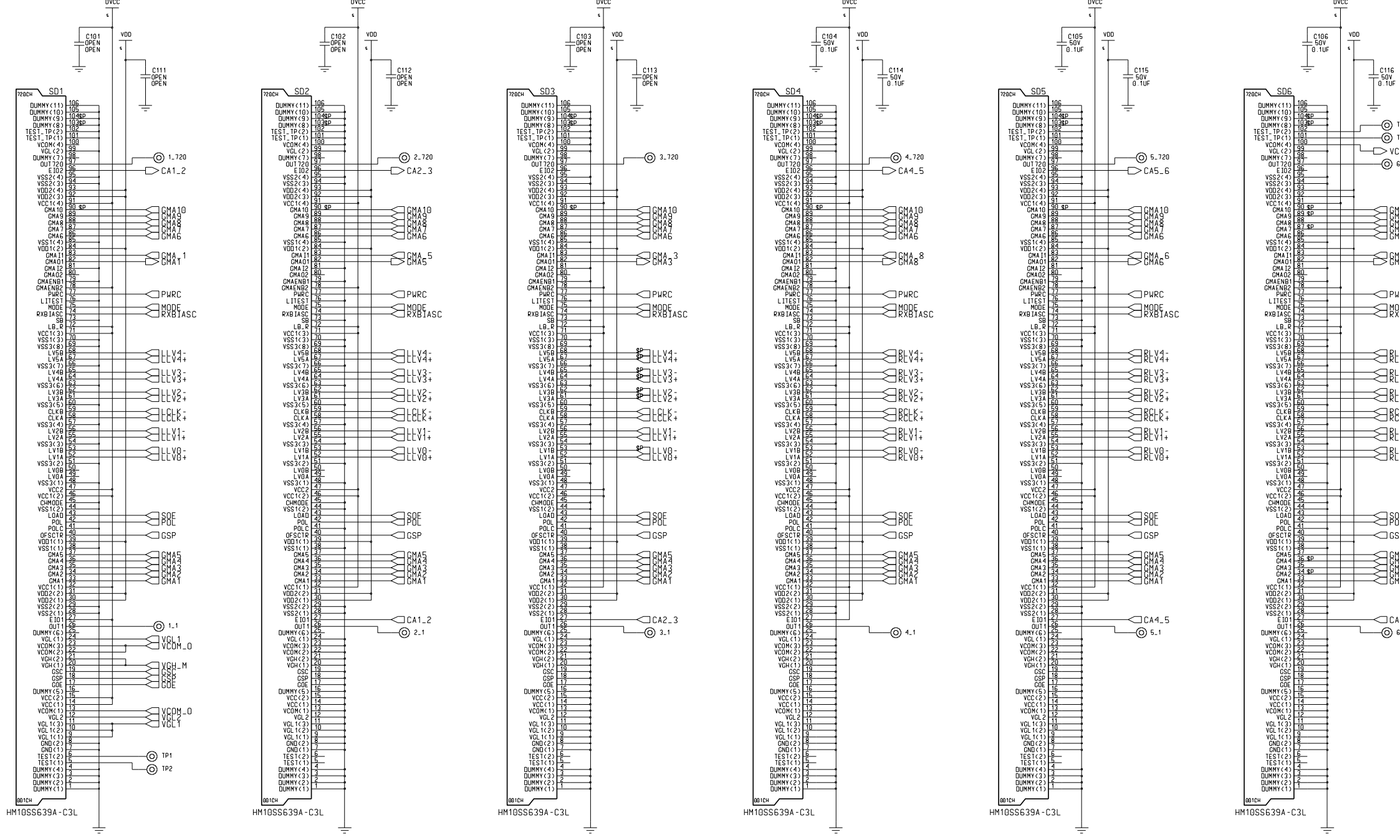

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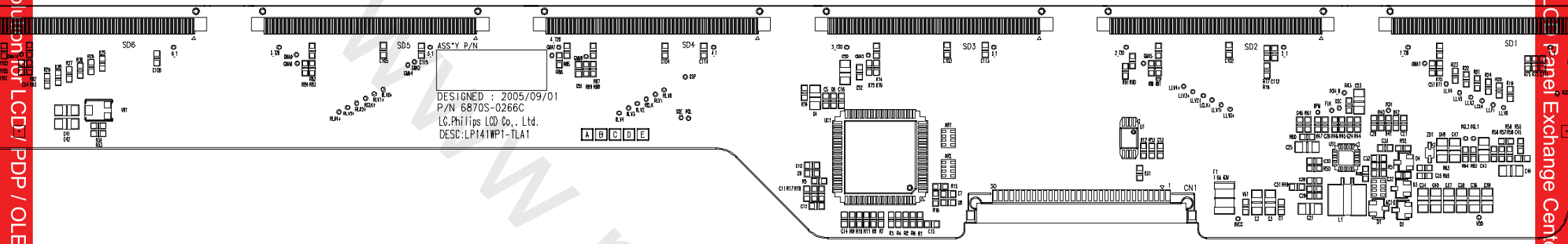

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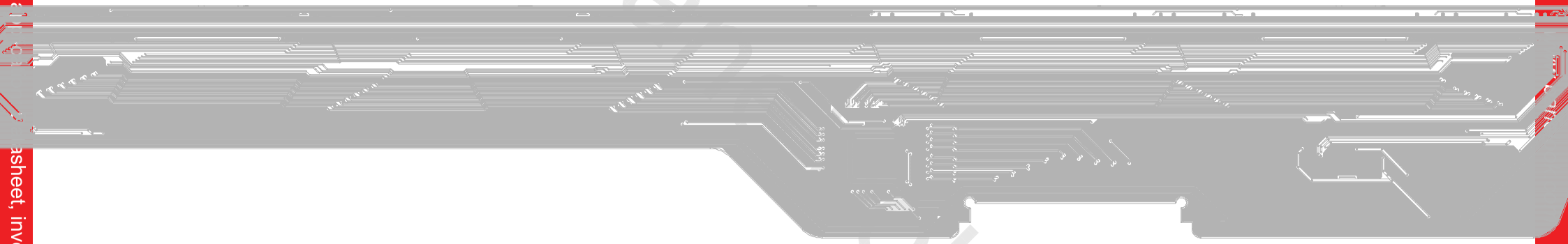

LG.PHILIPS LCD

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MODEL : LP141WP1 - TLA1

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