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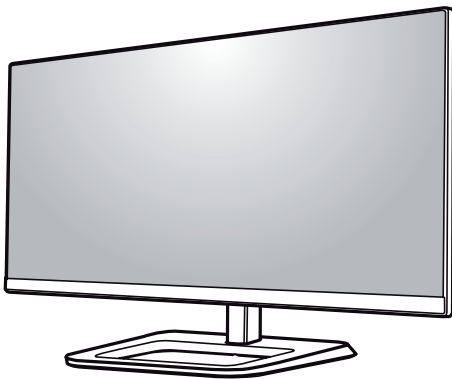
IPS LED MONITOR SERVICE MANUAL

CHASSIS : LM13T

MODEL : 29EB73 29EB73-PC

CAUTION

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



P/NO : MFL63731143 (1306-REV00)

Printed in Korea

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SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by $\triangle$ in the Schematic Diagram and Exploded View.

It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent Shock, Fire, or other Hazards.

Do not modify the original design without permission of manufacturer.

General Guidance

An **isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and its components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1 W), keep the resistor 10 mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

Leakage Current Cold Check(Antenna Cold Check)

With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.

If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1 M Ω and 5.2 M Ω .

When the exposed metal has no return path to the chassis the reading must be infinite.

An other abnormality exists that must be corrected before the receiver is returned to the customer.

Leakage Current Hot Check (See below Figure)

Plug the AC cord directly into the AC outlet.

Do not use a line Isolation Transformer during this check.

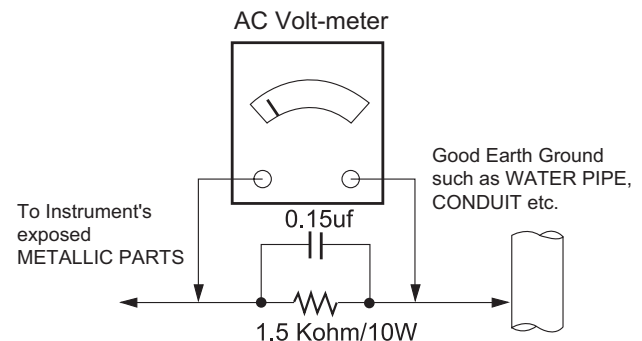
Connect 1.5 K / 10 watt resistor in parallel with a 0.15 uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.

Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which corresponds to 0.5 mA.

In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

Leakage Current Hot Check circuit



When 25A is impressed between Earth and 2nd Ground for 1 second, Resistance must be less than 0.1

*Base on Adjustment standard

SPECIFICATION

NOTE : Specifications and others are subject to change without notice for improvement.

1. Application range

This spec sheet is applied all of the Monitor with LM13T chassis.

2. Requirement for Test

Each part is tested as below without special appointment.

- (1) Temperature: 25 °C ± 5 °C(77 °F ± 9 °F), CST: 40 °C ± 5 °C
- (2) Relative Humidity: 65 % ± 10 %
- (3) Power Voltage
 - : Standard input voltage (AC 100-240 V~, 50/60 Hz)
 - * Standard Voltage of each products is marked by models.
- (4) Specification and performance of each parts are followed each drawing and specification by part number in accordance with BOM.
- (5) The receiver must be operated for about 5 minutes prior to the adjustment.

3. Test method

- (1) Performance: LGE TV test method followed
- (2) Demanded other specification
 - Safety : MIC Class A
 - EMC : MIC Class A

4. Module General Specification

No	Item		Content	Remark
1	Customer		BRAND	
2	User Model Name		29EB73	
3	Sale region		Refer to Suffix standard	
4	Feature		29" Wide LCD MONITOR	
5	Chassis Name		LM13T	
6	General Scope	External SW & Adj.	Menu, ◀, ▶, OK, Power	
		Function	OSD, DDC2B, DDC2AB, HDCP, Control Lock, Original Ratio / Wide, Black level, Super Energy Saving	
7	Power Code		Length : 1.5 ± 0.05 M Shape : Wall-out Color : Black	Refer to Suffix standard and BOM
8	Cable	DVI	Length : 1.5m Shape : Detachable Type Color : Black Pin : Triple Row, 24-Position DVI-D	Support
		MHL to HDMI	Length : , Shape : , Color: , Pin	Do not Support
		USB	Length : , Shape : , Color: , Pin	Do not Support
		Audio	Length : 1.5m Shape : Detachable Type Color : Black Pin : Stereo 1P	Support
		TV	Length : , Shape : , Color: , Pin	Do not Support
9	Power(Power Update)		Input: AC90~264V 47~630Hz Output: DC 19.5V 3.42A Adapter	65W
10	Applying module list		P/No	Specification
			EAJ62348402	LM290WW1-SSA1

ADJUSTMENT INSTRUCTION

1. Application Range

This spec. sheet applies to LM13T chassis applied Monitor all models manufactured in TV factory.

2. Designation

- (1) The adjustment is according to the order which is designated and which must be followed, according to the plan which can be changed only on agreeing.
- (2) Power Adjustment: Free Voltage
- (3) Magnetic Field Condition: Nil.
- (4) Input signal Unit: Product Specification Standard
- (5) Reserve after operation: Above 5 Minutes (Heat Run)
Temperature : at 25 °C ± 5 °C
Relative humidity : 65 % ± 10 %
Input voltage : 100 V~ 240 V, 50/60Hz
- (6) Adjustment equipments: Color Analyzer (CA-210 or CA-110), DDC Adjustment Jig equipment,

3. Main PCB check process

* APC - After Manual-Insult, executing APC

3.1. ADC Process

- (1) 29EB73 doesn't need ADC process because it has only digital input like DisplayPort, Dual-link DVI and HDMI.

3.2. EDID Process

3.2.1. EDID Download

F/W includes default EDID for All input ports, aging on Mode If AC ON, default EDID is automatically loaded to EEPROM.

* Caution : Never connect DVI Cable when execute NVRAM Init and AC On at first for downloading DVI EDID automatically.

No	Item	Content	16 Data
1	Manufacturer ID	GSM	1E 6D
2	Product ID	(Digital) (HDMI) (Display Port)	23024 (59 F0) 23025 (59 F1) 23026 (59 F2)
3	Year	2013	
4	Version	1	01
5	Revision	Analog : 3 HDMI : 3 DP : 4	03 04
6	Serial Number	*	*
7	Week	**	**
8	Model Name	LG UTRAWIDE	--
9	Check Sum	****	****
10	Special Item	Need to Input Serial Number	

** Protocol : DDC 2AB

3.2.2. Data (128 Bytes)

EDID Ver. 1.3 FOR DIGITAL (128Byte)

128 B	Summary 256 Byte EDID															
	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07	0x08	0x09	0x0A	0x0B	0x0C	0x0D	0x0E	0x0F
0x00	00	FF	FF	FF	FF	FF	FF	00	1E	6D	F0	59	01	01	01	01
0x01	01	17	01	03	80	43	1C	78	EA	CA	95	A6	55	4E	A1	26
0x02	0F	50	54	A5	4B	80	71	4F	81	80	81	C0	A9	C0	B3	00
0x03	01	01	01	01	01	01	7E	48	00	E0	A0	38	1F	40	40	40
0x04	3A	00	A5	22	21	00	00	18	02	3A	80	18	71	38	2D	40
0x05	58	2C	45	00	A5	22	21	00	00	1E	00	00	00	FC	00	4C
0x06	47	20	55	4C	54	52	41	57	49	44	45	0A	00	00	00	FD
0x07	00	38	4B	1E	5A	18	00	0A	20	20	20	20	20	20	00	87

3.2.3. EDID Ver. 1.3 FOR HDMI 1 (256Byte)

128 B	256 B	Summary	256 Byte EDID													
	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07	0x08	0x09	0x0A	0x0B	0x0C	0x0D	0x0E	0x0F
0x00	00	FF	FF	FF	FF	FF	FF	00	1E	6D	F1	59	01	01	01	01
0x01	01	17	01	03	80	43	1C	78	EA	CA	95	A6	55	4E	A1	26
0x02	0F	50	54	A5	4B	80	71	4F	81	80	81	C0	A9	C0	B3	00
0x03	01	01	01	01	01	01	7E	48	00	E0	A0	38	1F	40	40	40
0x04	3A	00	A5	22	21	00	00	18	02	3A	80	18	71	38	2D	40
0x05	58	2C	45	00	A5	22	21	00	00	1E	00	00	00	FC	00	4C
0x06	47	20	55	4C	54	52	41	57	49	44	45	0A	00	00	00	FD
0x07	00	38	4B	1E	5A	18	00	0A	20	20	20	20	20	20	01	85

128 B	256 B	Summary	256 Byte EDID													
	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07	0x08	0x09	0x0A	0x0B	0x0C	0x0D	0x0E	0x0F
0x00	02	03	1D	F1	4A	90	04	03	22	14	12	05	1F	01	13	23
0x01	09	07	07	83	01	00	00	65	03	0C	00	20	00	02	3A	80
0x02	18	71	38	2D	40	58	2C	45	00	56	51	21	00	00	1E	01
0x03	1D	80	18	71	1C	16	20	58	2C	25	00	56	51	21	00	00
0x04	9E	01	1D	00	72	51	D0	1E	20	6E	28	55	00	56	51	21
0x05	00	00	1E	8C	0A	D0	8A	20	E0	2D	10	10	3E	96	00	56
0x06	51	21	00	00	18	00	00	00	00	00	00	00	00	00	00	00
0x07	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	78

3.2.4. EDID Ver. 1.3 FOR HDMI 2 (256Byte)

128 B	256 B	Summary	256 Byte EDID													
	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07	0x08	0x09	0x0A	0x0B	0x0C	0x0D	0x0E	0x0F
0x00	00	FF	FF	FF	FF	FF	FF	00	1E	6D	F1	59	01	01	01	01
0x01	01	17	01	03	80	43	1C	78	EA	CA	95	A6	55	4E	A1	26
0x02	0F	50	54	A5	4B	80	71	4F	81	80	81	C0	A9	C0	B3	00
0x03	01	01	01	01	01	01	7E	48	00	E0	A0	38	1F	40	40	40
0x04	3A	00	A5	22	21	00	00	18	02	3A	80	18	71	38	2D	40
0x05	58	2C	45	00	A5	22	21	00	00	1E	00	00	00	FC	00	4C
0x06	47	20	55	4C	54	52	41	57	49	44	45	0A	00	00	00	FD
0x07	00	38	4B	1E	5A	18	00	0A	20	20	20	20	20	20	01	85

128 B	256 B	Summary	256 Byte EDID													
	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07	0x08	0x09	0x0A	0x0B	0x0C	0x0D	0x0E	0x0F
0x00	02	03	1D	F1	4A	90	04	03	22	14	12	05	1F	01	13	23
0x01	09	07	07	83	01	00	00	65	03	0C	00	20	00	02	3A	80
0x02	18	71	38	2D	40	58	2C	45	00	56	51	21	00	00	1E	01
0x03	1D	80	18	71	1C	16	20	58	2C	25	00	56	51	21	00	00
0x04	9E	01	1D	00	72	51	D0	1E	20	6E	28	55	00	56	51	21
0x05	00	00	1E	8C	0A	D0	8A	20	E0	2D	10	10	3E	96	00	56
0x06	51	21	00	00	18	00	00	00	00	00	00	00	00	00	00	00
0x07	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	68

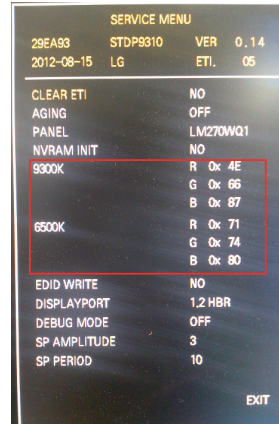
3.2.5. EDID Ver. 1.4 FOR Display Port (256Byte)

128 B	256 B	Summary	256 Byte EDID
0x00	00 FF FF FF FF FF FF	0x01	01 17 01 04 A5 43 1C 78 9E CA 95 A6 55 4E A1 26
0x02	0F 50 54 A5 4B 80 71 4F 81 80 81 C0 A9 C0 B3 00	0x03	01 01 01 01 01 01 7E 48 00 E0 A0 38 1F 40 40 40
0x04	3A 00 A5 22 21 00 00 18 02 3A 80 18 71 38 2D 40	0x05	58 2C 45 00 A5 22 21 00 00 1A 00 00 00 FC 00 4C
0x06	47 20 55 4C 54 52 41 57 49 44 45 0A 00 00 00 FD	0x07	00 38 4B 1E 5A 18 00 0A 20 20 20 20 20 20 01 AE

128 B	256 B	Summary	256 Byte EDID
0x00	02 03 1C 71 49 90 04 03 14 12 05 1F 01 13 23 09	0x01	07 07 83 01 00 00 65 03 0C 00 10 00 02 3A 80 18
0x02	71 38 2D 40 58 2C 45 00 56 51 21 00 00 1E 01 1D	0x03	80 18 71 1C 16 20 58 2C 25 00 A5 22 21 00 00 9E
0x04	01 1D 00 72 51 D0 1E 20 6E 28 55 00 A5 22 21 00	0x05	00 1E 8C 0A D0 8A 20 E0 2D 10 10 3E 96 00 A5 22
0x06	21 00 00 18 00 00 00 00 00 00 00 00 00 00 00	0x07	00 00 00 00 00 00 00 00 00 00 00 00 00 00 BC

* Note : Manual W/B process

- (1) Push the "OK" key for 3 sec.
- (2) and push the "LEFT" or "RIGHT" Key.
- (3) In Service Menu.

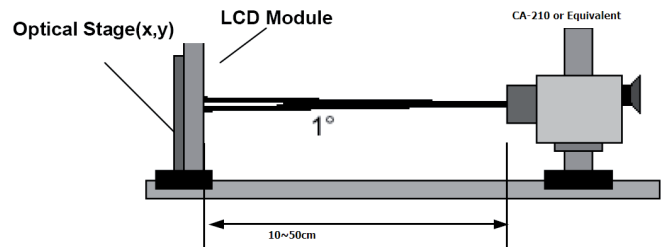


3.3. Function Check

3.3.1. Check Screen

- Check input and signal items. (cf. work instructions)
- 1. DisplayPort1.2 (2560 x 1080 @60Hz)
- 2. Dual-link DVI (2560 x 1080 @60Hz)
- 3. HDMI1/2 (2560 x 1080 @60Hz)
 - HDMI2(MHL) (1920 x 1080 @ 30Hz)
- 4. USB 3.0 / 2.0 check

* When doing Adjustment, Please make circumstance as below.



4. Total Assembly line process

4.1. White Balance Adjustment

4.1.1. Gains and Offsets are fixed data

- Insert DVI-D Jack which is connected with PC for White Balance or equivalent device.
- > Total Assembly line should be check whether the color coordinate(x,y) data refer to below table were meet or not.

[Color Temperature]

Cool	9,300k	°K	X=0.283 (±0.03) Y=0.298 (±0.03)	<Test Signal> Inner pattern (255gray,100IRE)
Medium	8,000k	°K	X=0.295 (±0.03) Y=0.305 (±0.03)	
Warm	6,500k	°K	X=0.313 (±0.03) Y=0.329 (±0.03)	

[Luminance(cd/m²)]

Cool	Min : 170	<Test Signal> Inner pattern (255gray,100IRE)
Medium	Min : 200	
Warm	Min : 250	

* Note : x,y coordinates are drifted about 0.007 after 30 mins heat-run. So checking color coordinate within 5-min at total assembly line, consider x,y coordinates might be up to 0.007 than x,y target of each color temperature.

4.2. DPM Operation check

- Measurement Condition: 100~240V@ 50/60Hz
- (1) Set Input to DVI-D, DisplayPort, HDMI1, HDMI2
- (2) Turn off the source device.
- (3) Check DPM operation refer to the below table.

Operating Condition	Sync (H/V) or Video	EUT (MSPG6100)	LED (SET)	Wattage (W)
Sleep mode	Off/Off	Off	RED blinking	1.2
Off mode	-	-	Off	0.5

5. Signal composition for adjustment

5.1. I2C (100K BPS)

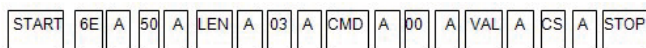
5.2. COMMUNICATION START



Until ACK BIT goes LOW, Repeat it.

5.3. Command form.

Command form use DDC2AB standard communication protocol.



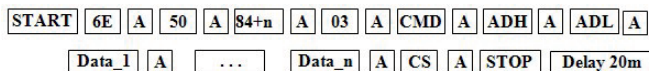
- a. LEN : DATA BYTE number to send.
- b. CMD : Command language that monitor executes.
- c. VAL : FOS DATA
- d. CS : Dada's CHECHSUM that transmit
- e. DELAY : 50MS
- f. A : Acknowledge

5.4. Screen adjust command (LENGTH = 84)

No.	Adjustment contents	CMD(hex)	ADR	VAL(hex)	Explanation
1	EEPROM ALL INITIAL	E4	00	00	adjustment initialization
2	EEPROM READ	E7	Slave add		At EEPROM Read
3	EEPROM WRITE	E8	Slave add	Data	Write data at EEPROM
4	R GAIN	16	00	00-64	Tune Gain
5	G GAIN	18	00	00-64	
6	B GAIN	1A	00	00-64	
7	BRIGHT(Backlight)	10	00	00-64	Tune Analog Bright
8	FACTORY RESET	F0	00	00	Factory reset
9	COLOR_MODE_CHANGE	F2	00	01	6500K
				02	9300K
10	Elapsed time Clear	E9	00	00	Aging off & Clear elapsed time
11	Aging On/Off	F3	00	FF/00	FF:ON / 00:OFF
12	Input Select	F4	00	0x80 0xD0 0x90 0x91	1: DVI DIGITAL 2: DisplayPort 3: HDMI1 4: HDMI2
13	SYSTEM RESET	F5	00	00	Restart System
14	Select Language	68	00	0x00 ~ 0x0F	00: English, 01: German 02: French 03: Spanish 04: Italian 05: Swedish, 06: Finnish 07: Portuguese 08: Brazil 09: Polish 0A: Russian 0B: Greek 0C: Ukrainian 0D: Chinese 0E: Japanese 0F: Korean
	EDID SN UPDATE	0x77	0	0x01~0x02	0x02: DisplayPort 0x01: HDMI
	Debug Mode Control	0xE0	0	0x00~0x01	0x00: OFF 0x01: ON

5.5. EEPROM Data Write

5.5.1 SignaI TABLE



LEN : 84h+Bytes

CMD : E8h

ADH : E2PROM Slave Address(A0,A2,A4,A6,A8,AA,AC,AE),
Not 00h(Reserved by Buffer To EEPROM)

ADL : E2PROM Sub Address(00~FF)

Data : Write data

Delay : 20ms

5.5.2. Command Set

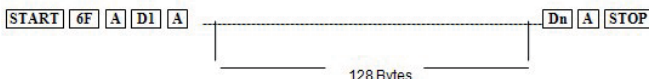
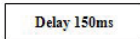
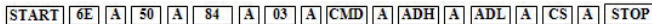
No.	Adjustment contents	CMD(hex)	LEN	Explanation
1	EEPROM WRITE	E8	94	16-Byte Write
2			(84+n)	n-byte Write

* Use

■ FOS Default write :

<14mode data> write
SyncFlags, HPeriodH, HPeriodL, VtotalH, VtotalL,
SrcHTotalH, SrcHTotalL
SrcHStartH, SrcHStartL, SrcVStartH, SrcVStartL,
HsyncPhase

■ Temporary Data write: Write to particular address of EEPROM.



5.6. E²PROM Data Read

5.6.1. Signal TABLE

START 6E A 50 A 84 A 03 A CMD A ADH A ADL A CS A STOP

Delay 150ms

START 6F A D1 A 128 Bytes Dn A STOP

5.6.2. COMMAND SET

No.	Adjustment contents	CMD (hex)	ADH (hex)	ADL (hex)	Explanation
1	EEPROM READ	E7	A0	0	0-Page 0~7F Read
2				80	0-Page 80~FF Read
3			A2	0	1-Page 0~7F Read
4				80	1-Page 80~FF Read
5			A4	0	2-Page 0~7F Read
6				80	2-Page 80~FF Read
7			A6	0	3-Page 0~7F Read
8				80	3-Page 80~FF Read
9			A8	0	4-Page 0~7F Read
10				80	4-Page 80~FF Read
11			AA	0	5-Page 0~7F Read
12				80	5-Page 80~FF Read
13			AC	0	6-Page 0~7F Read
14				80	6-Page 80~FF Read
15			AE	0	7-Page 0~7F Read
16				80	7-Page 80~FF Read

5.6.3. Use

Read E²PROM's specific area as unit of 128(80h)-byte. (84h)

5.6.4 EDID Write

EEPROM access by using DDC2B protocol

■ 1-Byte write

START A0 A L A D A STOP

L : 0x00~0x7F

D : data

■ 8-byte write

START A0 A L A Data1 A A Data8 A STOP

L : 0x00,0x10,...,0x70

5.6.5. EDID Read

- DDC2B Command.(A0/A1)

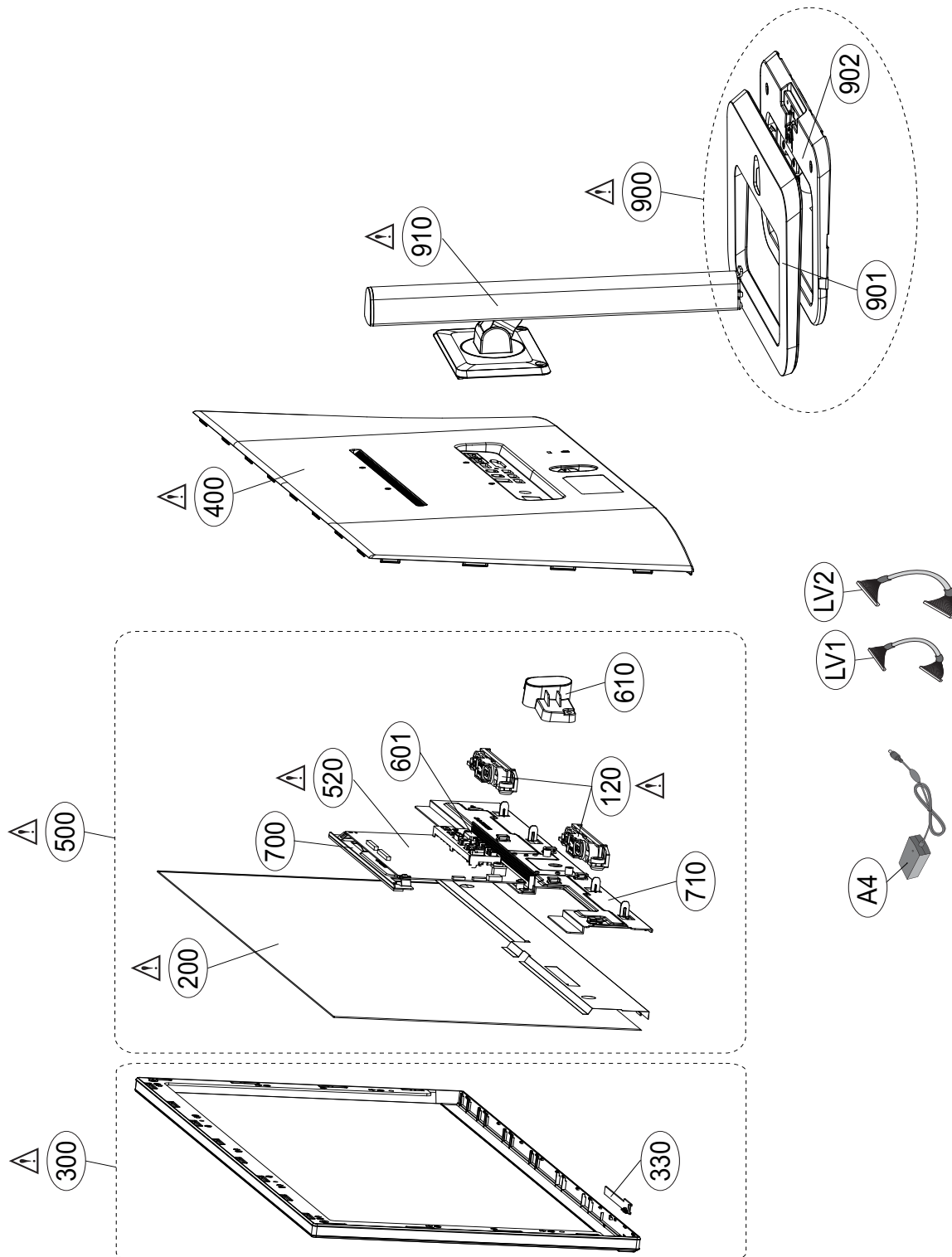
START A0 A 00 START A1 A Data1 ... Data128 A CS A STOP

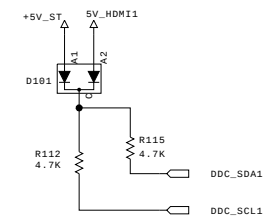
- 128 Byte transfer of EDID Buffer of MICOM

EXPLODED VIEW

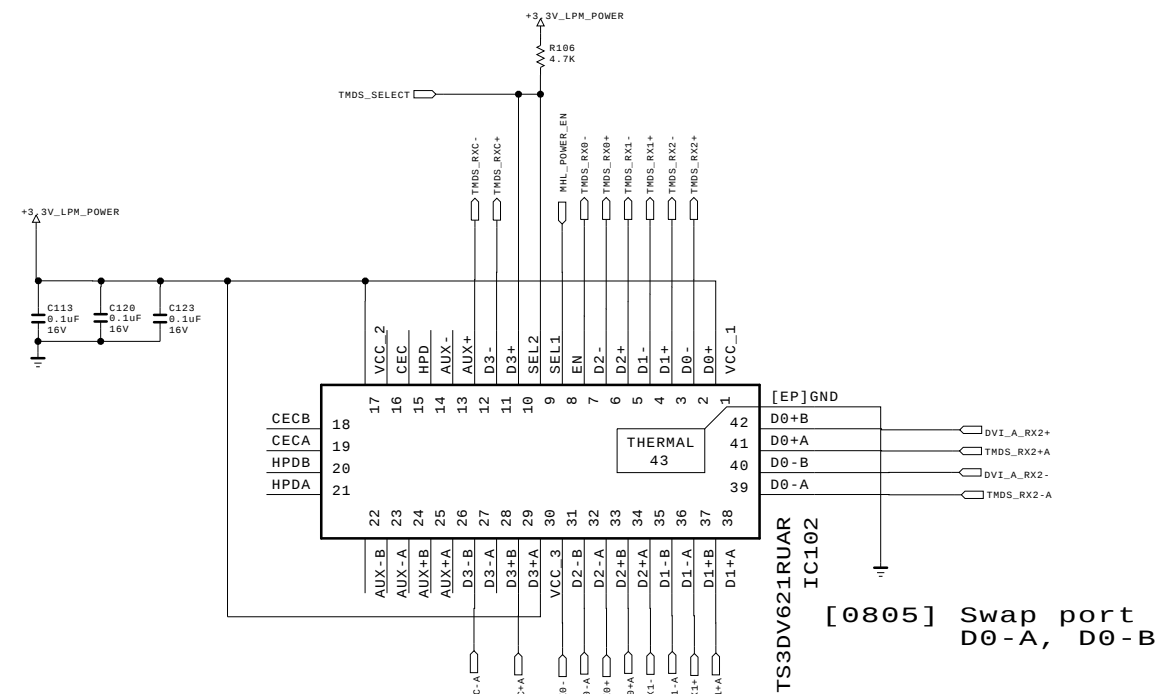
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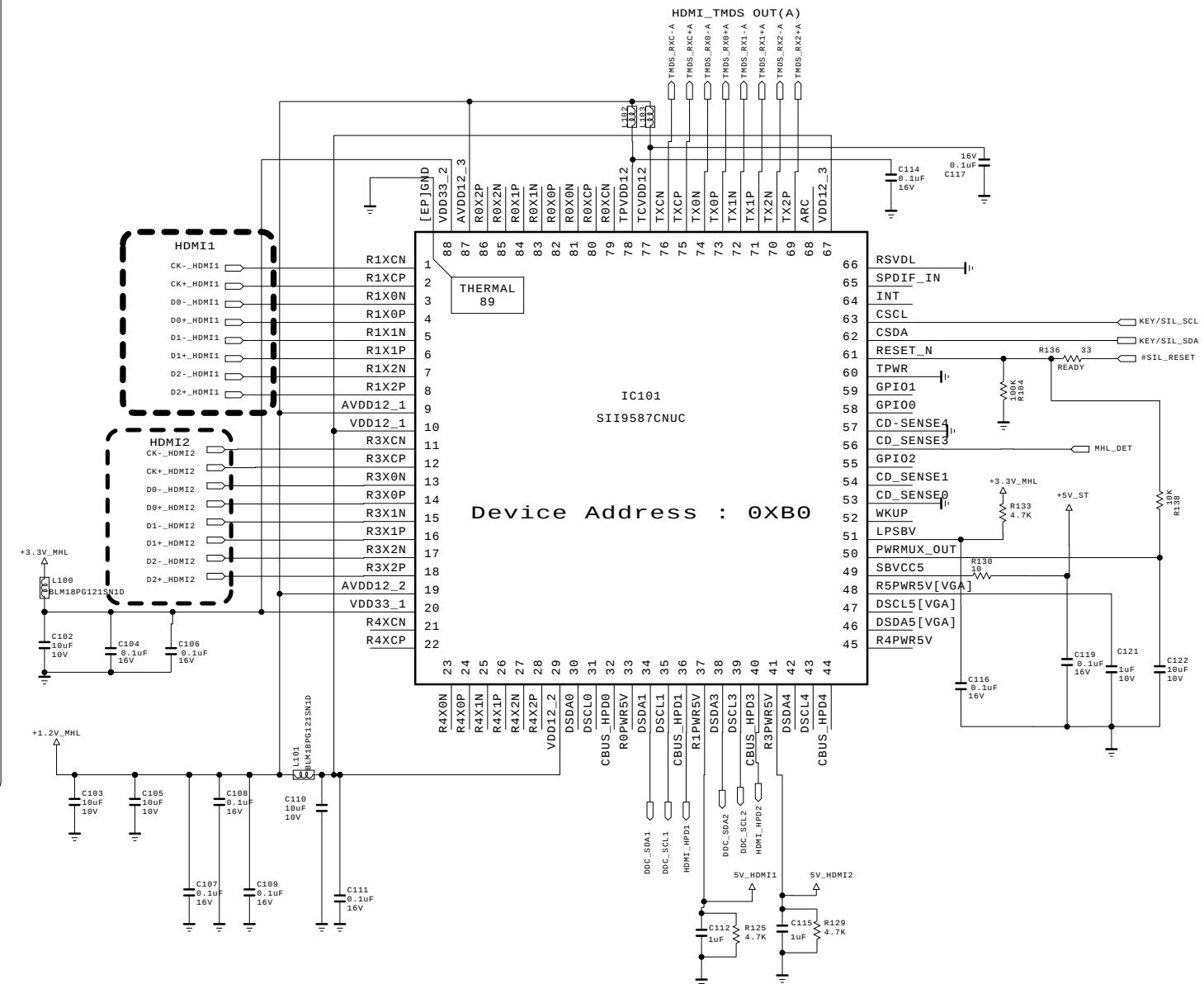


[illegible]

SECRET
LGElectronics

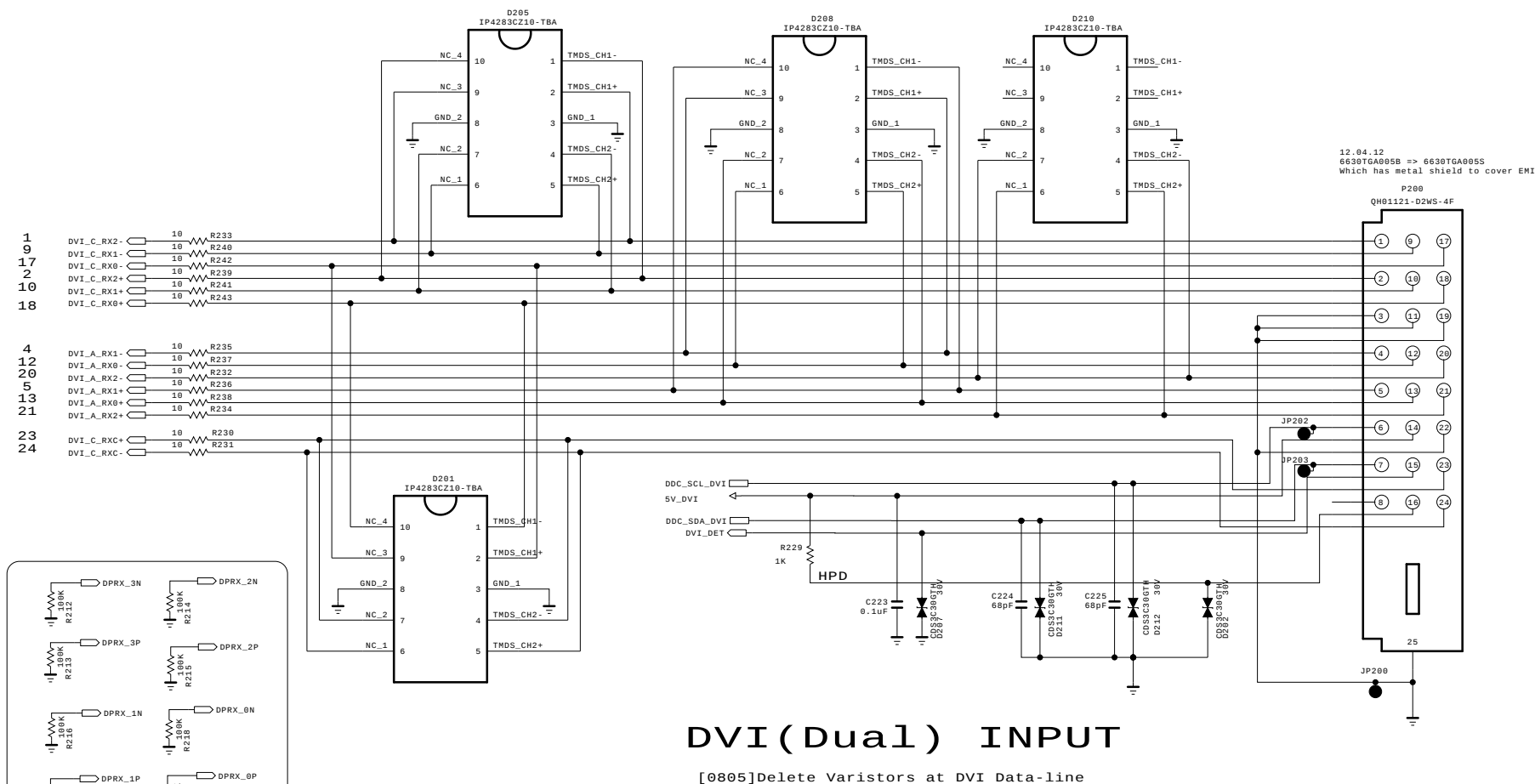
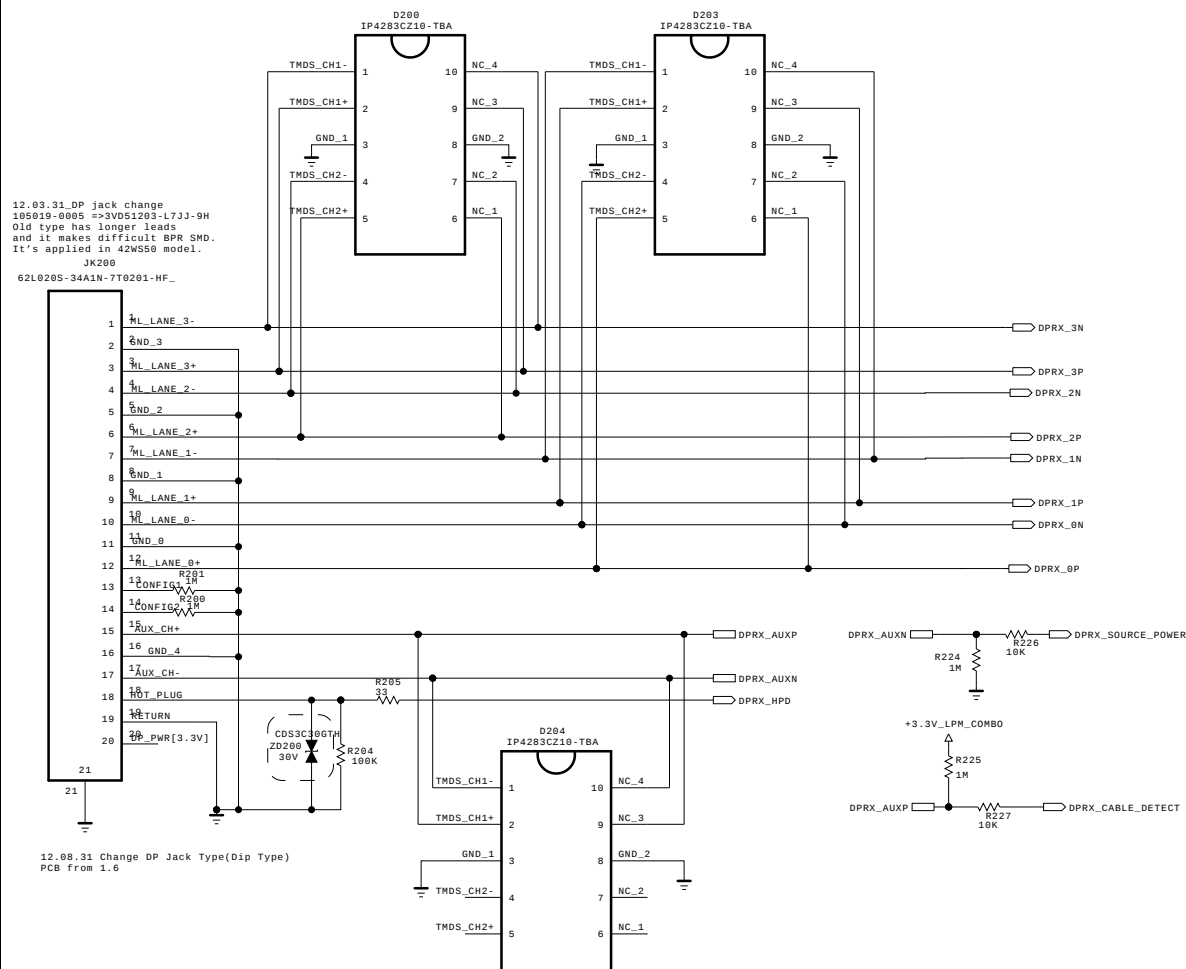


```
[0805] Swap port
        D0-A, D0-B
```



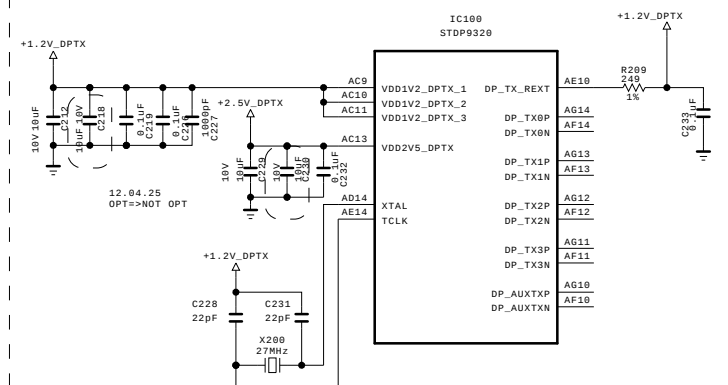
DP INPUT

[13.01.22]HW SON_Add ESD Diode at DVI Input



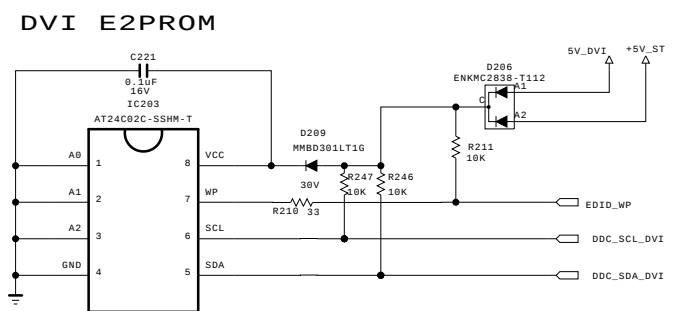
DP OUTPUT

To Module



10. DisplayPort Output

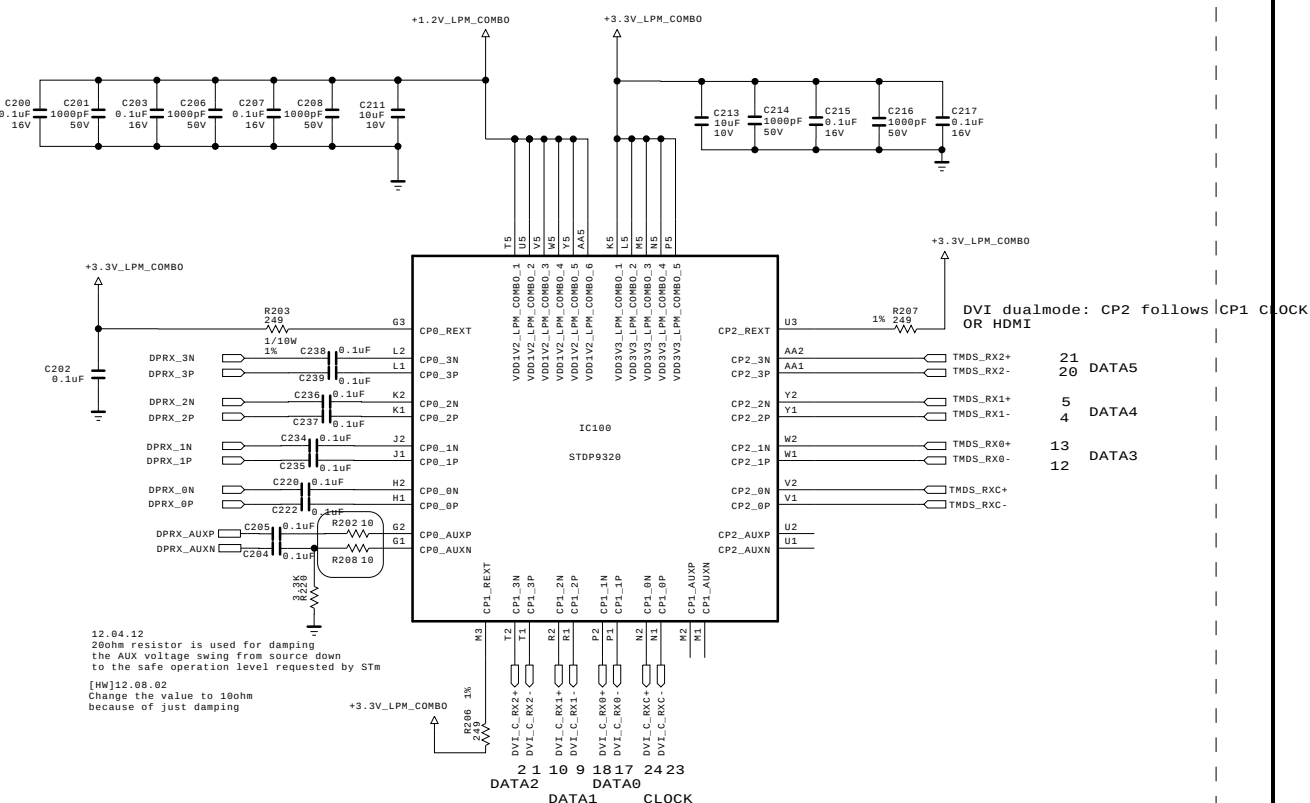
12.08. : MODIFIED GRID



5. DisplayPort Input

Combo-PHY0 Input

```
6. Dual_DVI
   Combo-PHY1  Input
   Combo-PHY2  Input
```



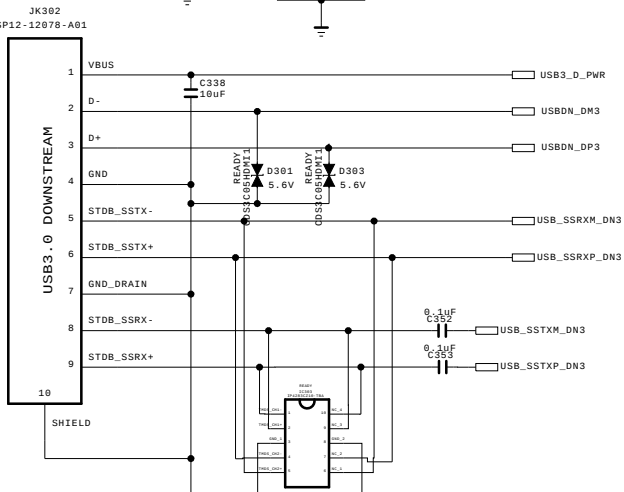
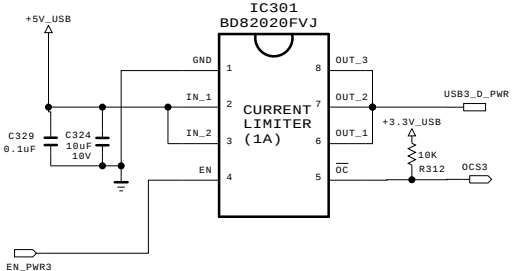
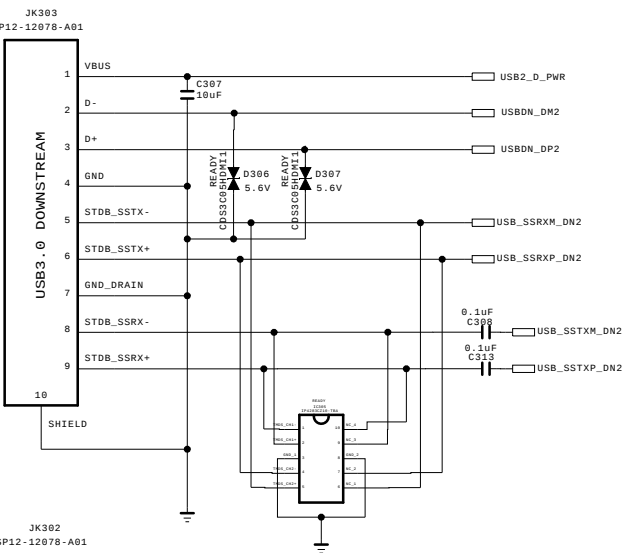
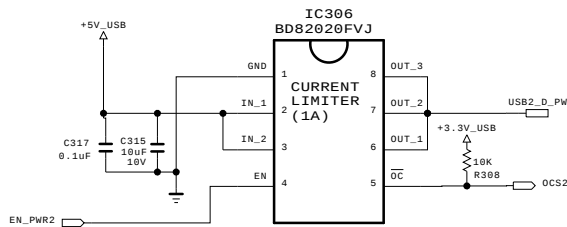
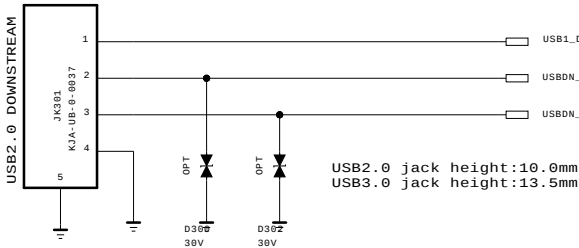
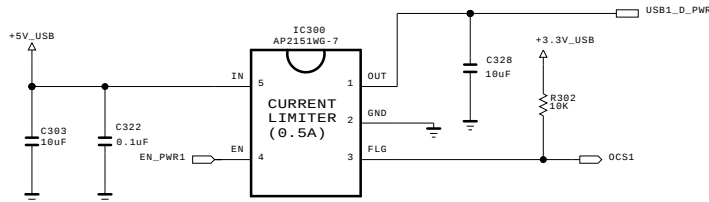
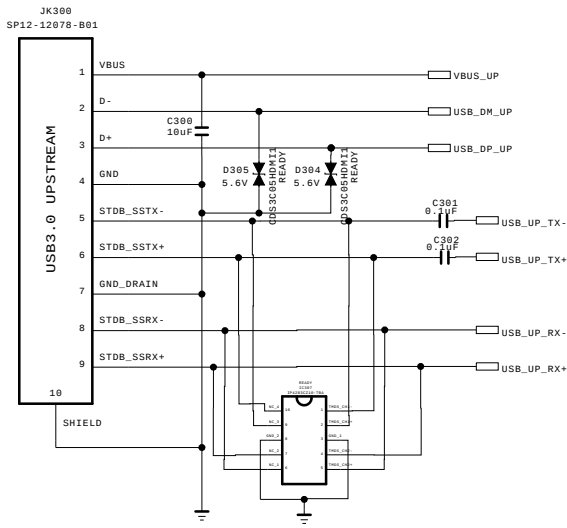
THE ⚠ SYMBOL MARK OF THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION. FILRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IF IS ESSENTIAL THAT ONLY MANUFACTURES SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE ⚠ SYMBOL MARK OF THE SCHEMATIC.

SECRET

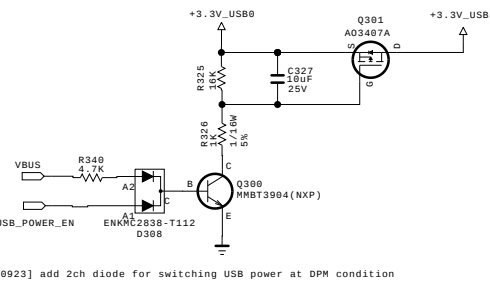
LG Electronics



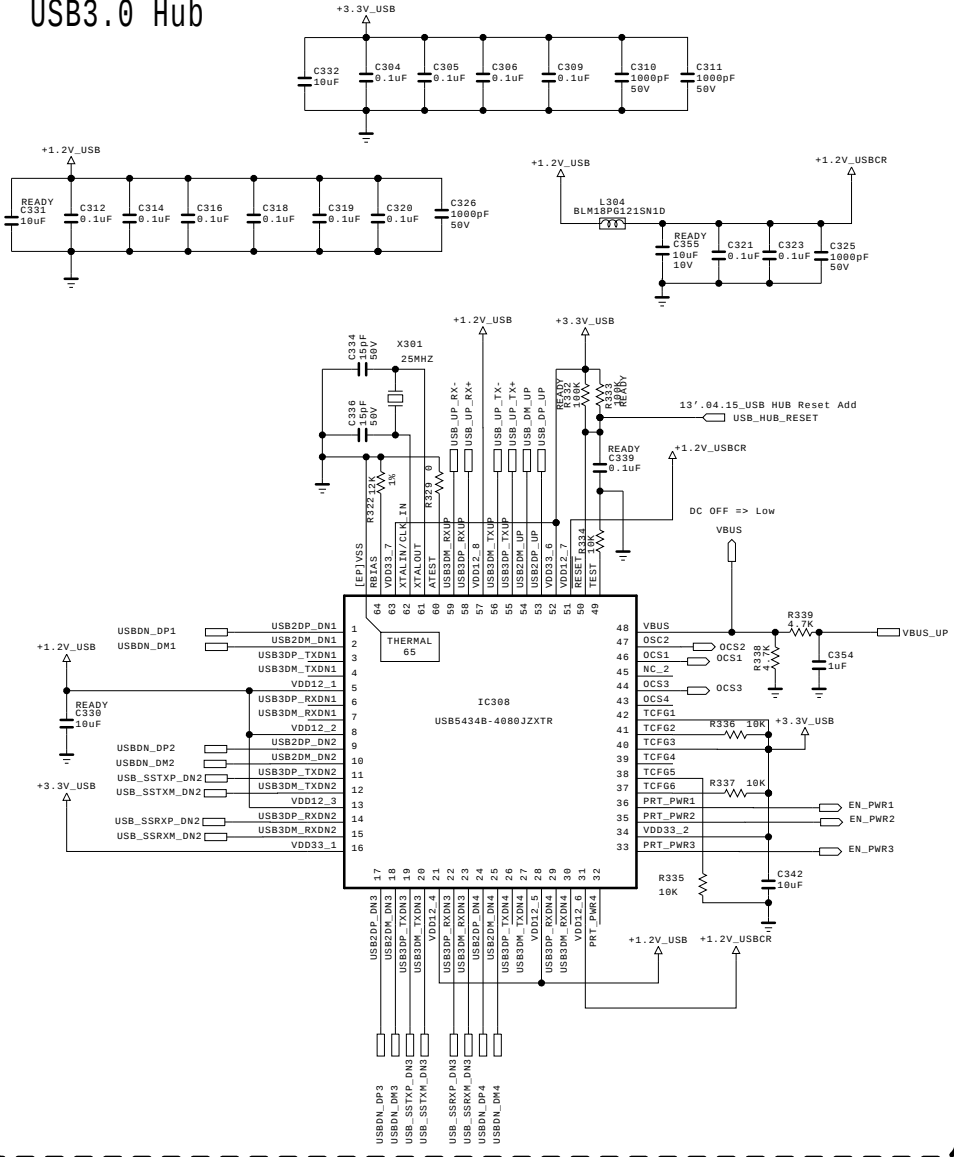
MODEL	29EB93	DATE	12.11.24
BLOCK	DP/DVI	SHEET	2 / 9



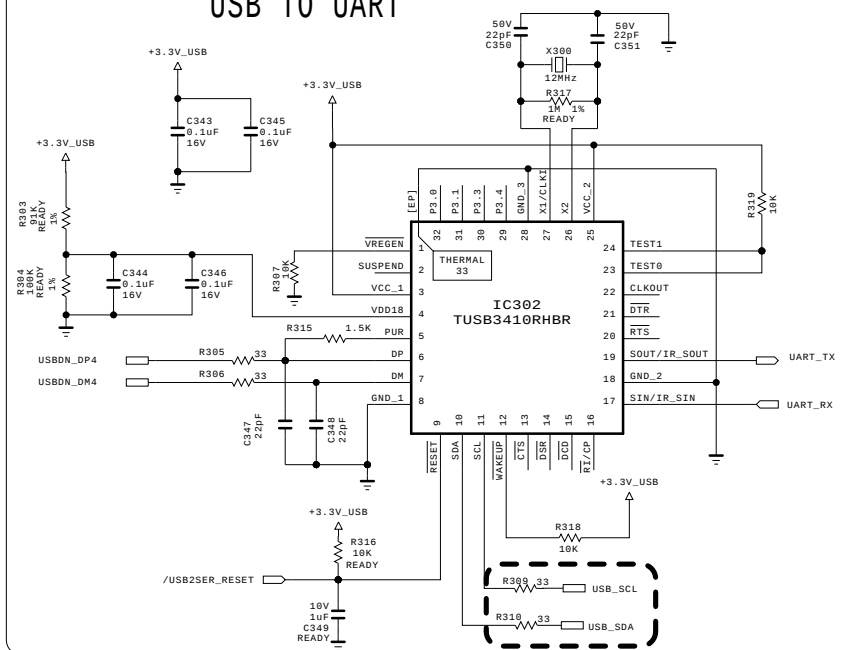
USB Power Control



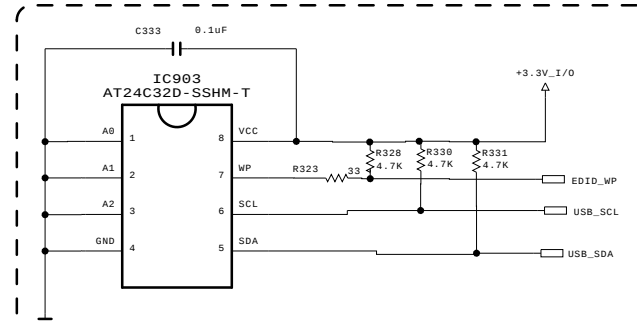
USB3.0 Hub



USB TO UART



EEPROM for USB



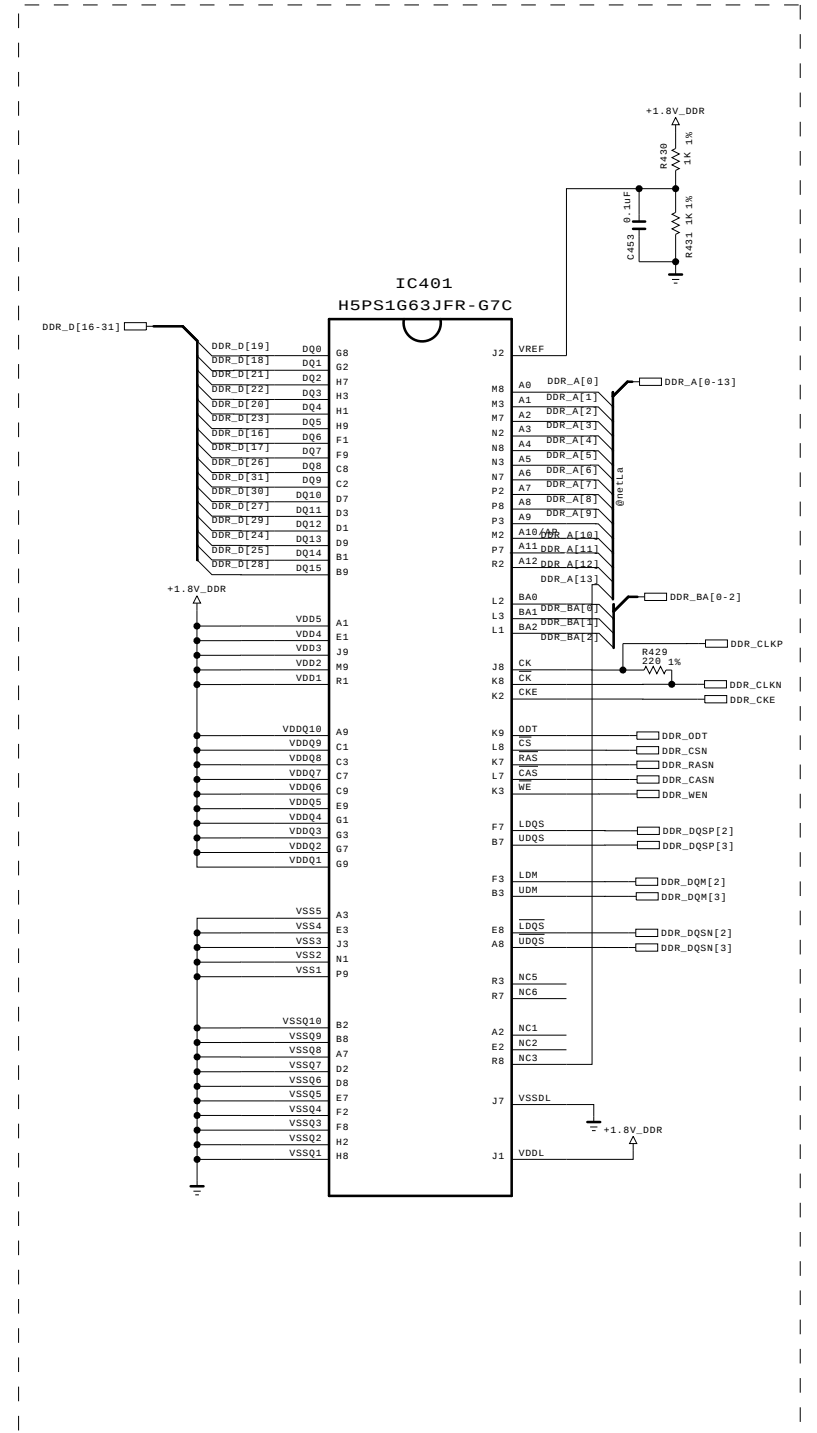
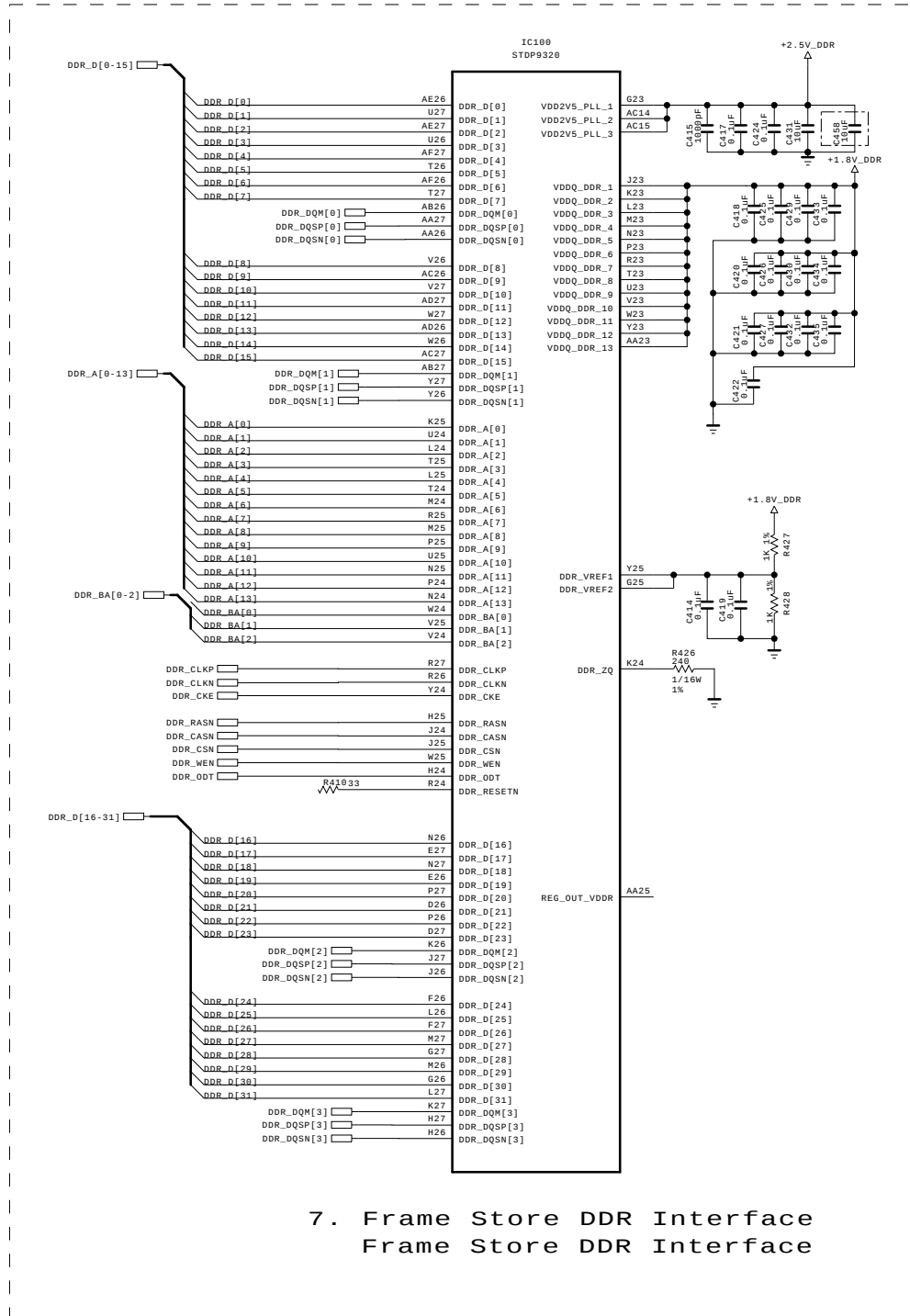
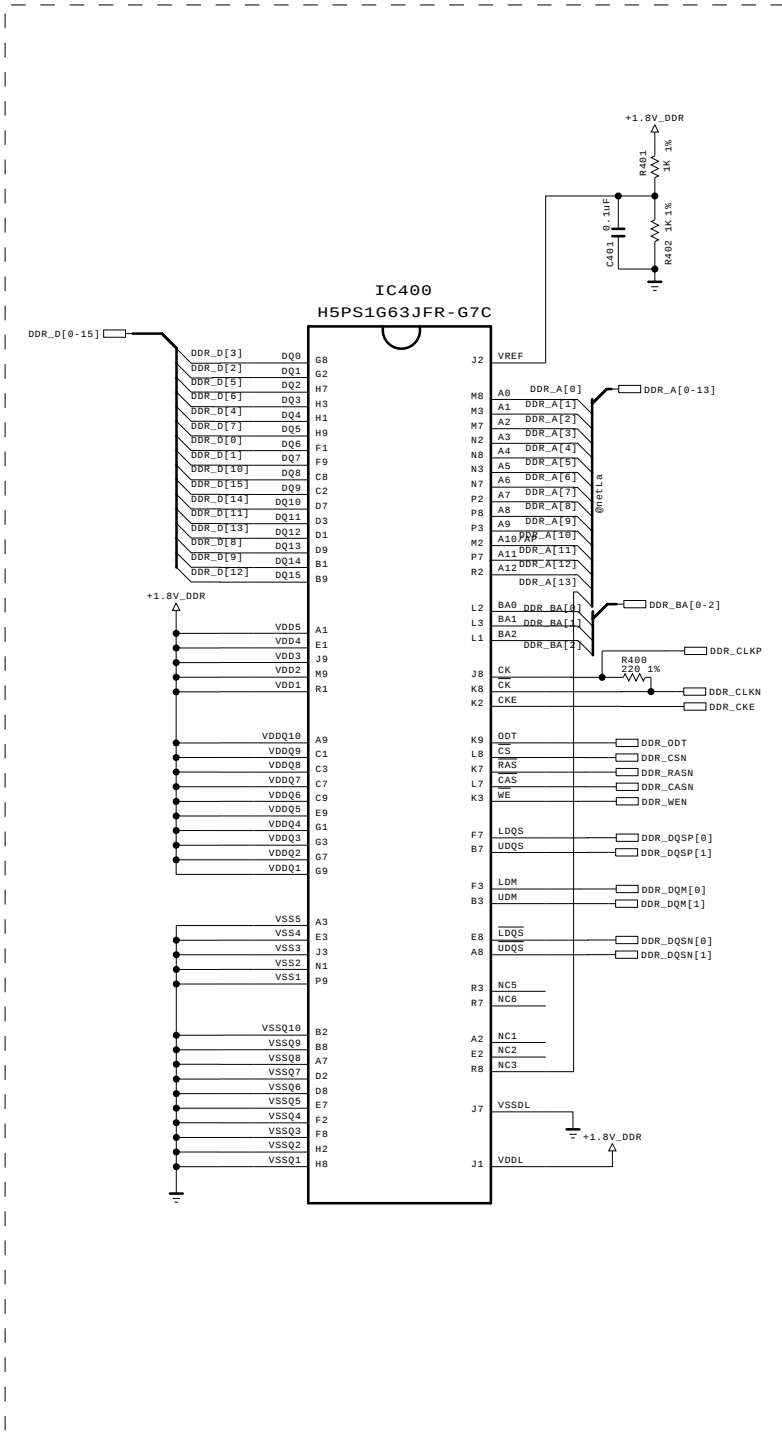
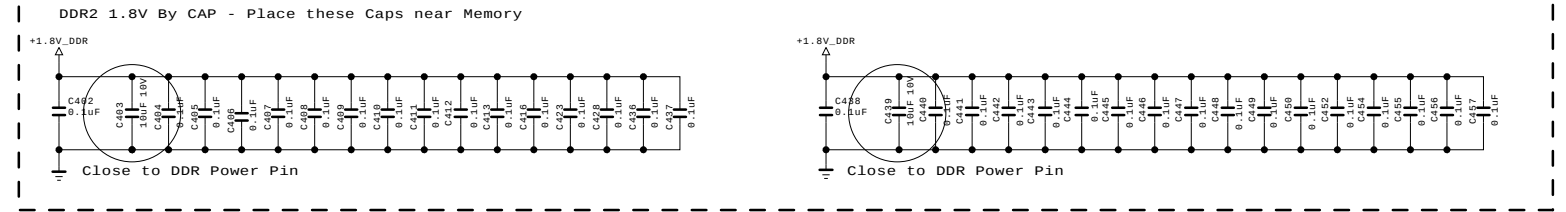
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BLOCK	USB3.0	SHEET	3 / 9

DDR MEMORY



7. Frame Store DDR Interface
Frame Store DDR Interface

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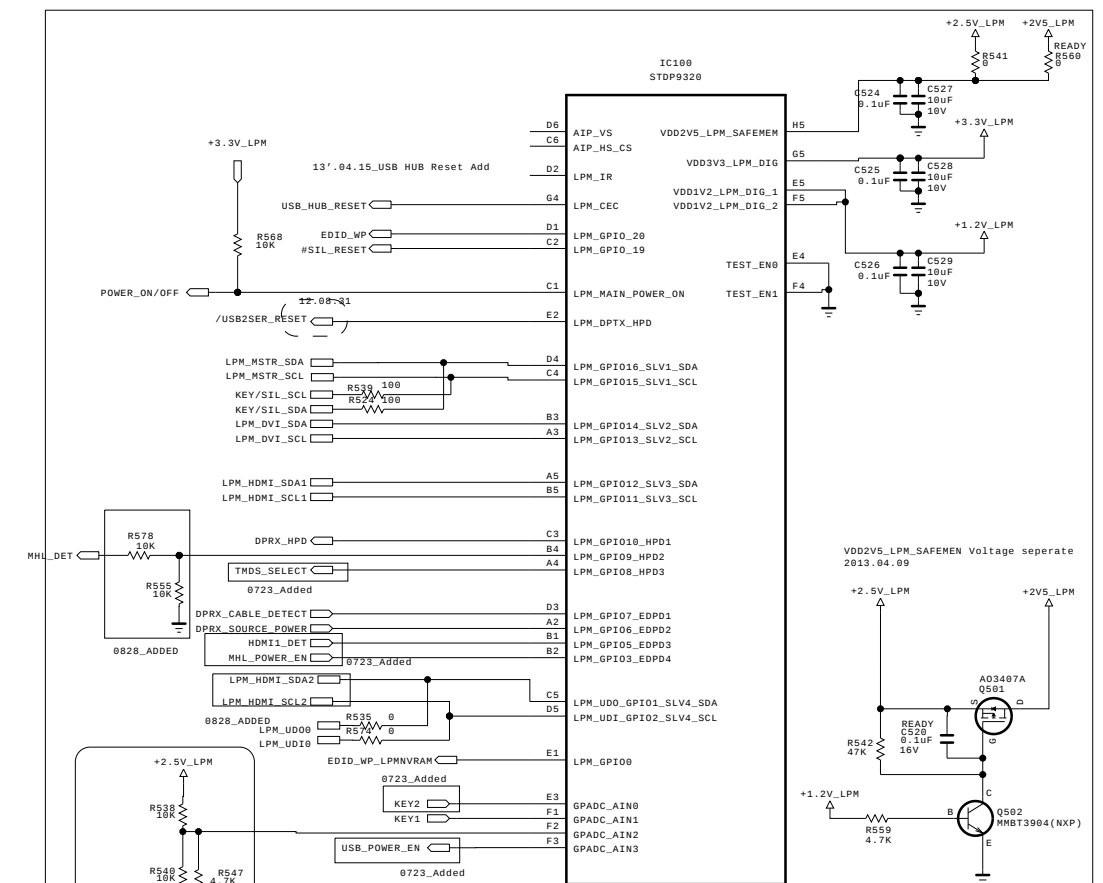


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BLOCK	DDR2	SHEET	4 / 9

DEBUG FOR MISSION(Engineering,Delete from MP)

The schematic diagram illustrates the PCA9306DCTR circuit, which is used for software download via DVI. The circuit includes the following components and connections:

- Power Supply:** A +3.3V_I/O supply is connected to the circuit through a 10K resistor (R530).
- Transistor:** A 2N3875S (ALY) transistor (Q500) is used as a switch. Its base is connected to the +3.3V_I/O supply through a 4.7K resistor (R525). The emitter is grounded, and the collector is connected to the +5V_ST supply through a 10K resistor (R536).
- Resistors:** A 220K resistor (R534) is connected between the +5V_ST supply and the VREF2 pin (pin 7) of the PCA9306DCTR. Two 33 ohm resistors (R532 and R533) are connected between the DDC_SDA_DV1 and DDC_SCL_DV1 signals and the SDA2 (pin 5) and SCL2 (pin 6) pins of the PCA9306DCTR, respectively.
- IC:** The PCA9306DCTR (IC506) is the central component. Its EN pin (pin 8) is connected to the +5V_ST supply. Its VREF1 pin (pin 2) is connected to the +3.3V_LPM supply. Its SCL1 (pin 3) and SDA1 (pin 4) pins are connected to the OCM_UD00 and OCM_UD10 signals, respectively.
- Capacitors:** Two 0.1uF capacitors (C512 and C519) are connected to ground from the VREF2 pin (pin 7) and the SDA1 pin (pin 4), respectively.

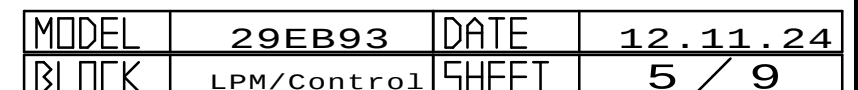


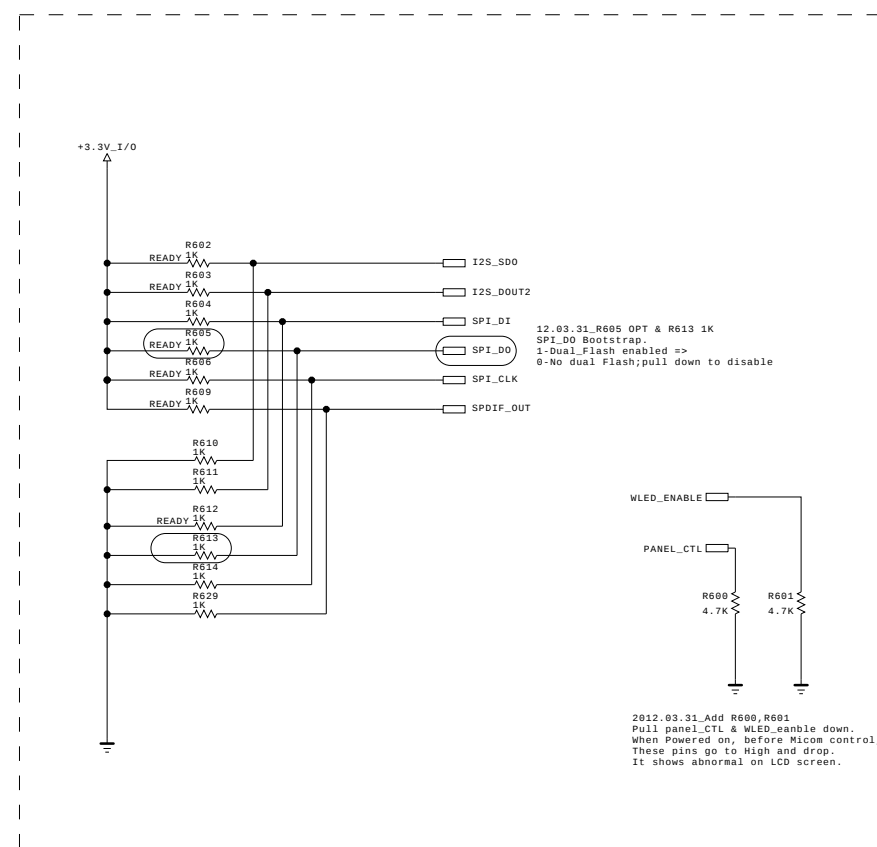
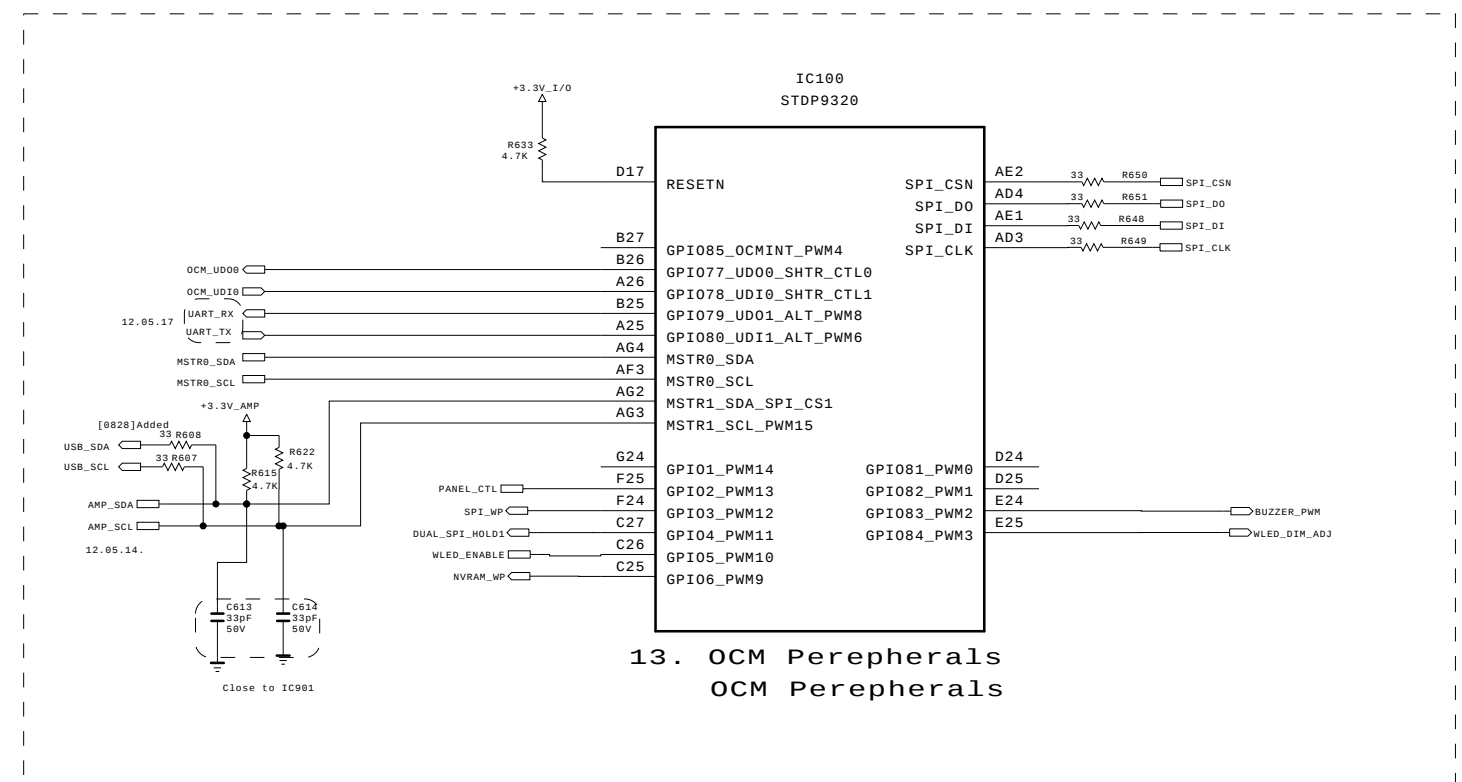
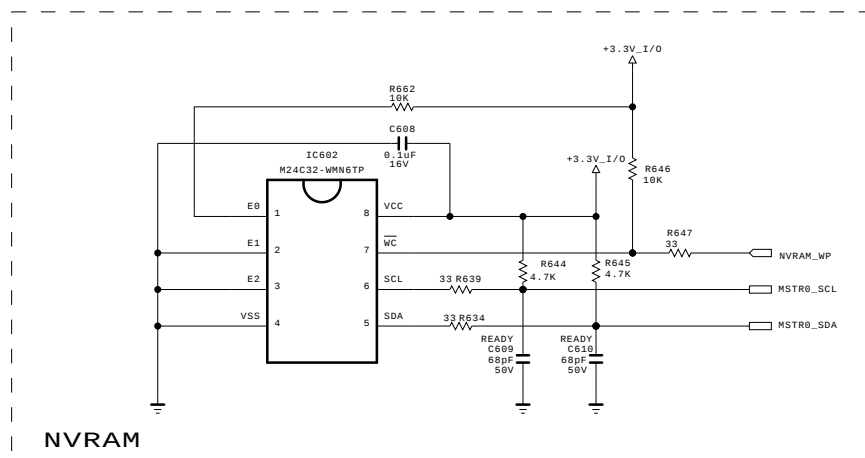
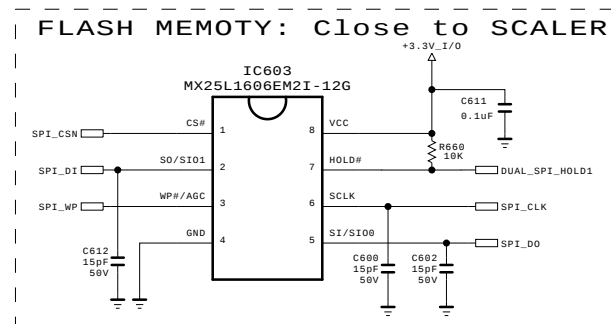
HDMI2 DET : ADC Level=1.25V
DVI DET : ADC Level=0.8V
If HDMI2/DVI are connected together,
ADC level is 0.6V

Control

The diagram shows the control circuitry for the P592 SHAW280-66. It features a +3.3V_LPM supply connected to a network of resistors (R508, R509, R576, R577, R485) and capacitors (C522, C532, C521, C531). The circuit includes four 30V diodes (D082, D083, D084, D085) and two 30V capacitors (C531, C532). The output is connected to a 6-pin connector labeled 1 through 6. A component labeled L500 BLM18PG121SM1D is also present.

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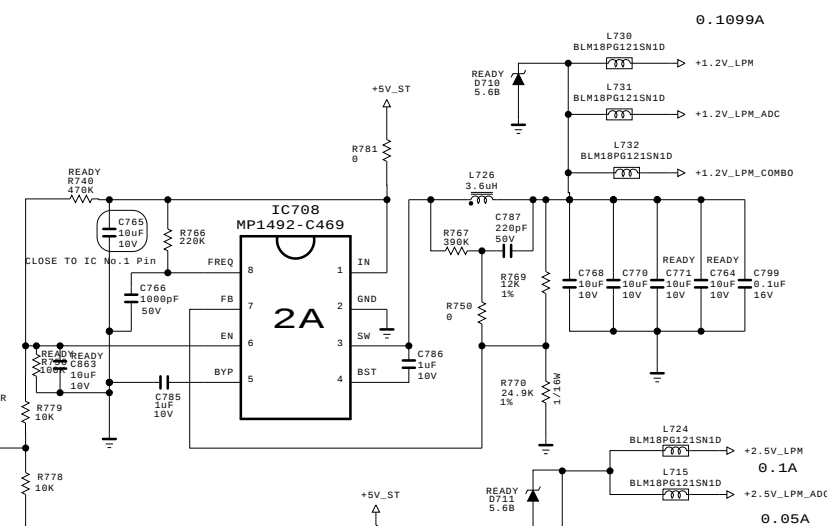
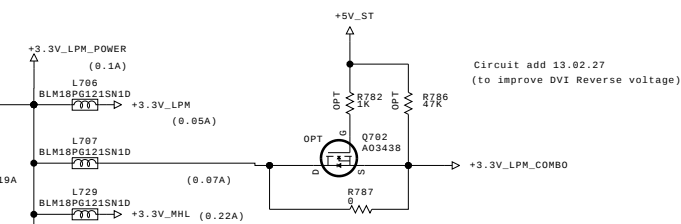
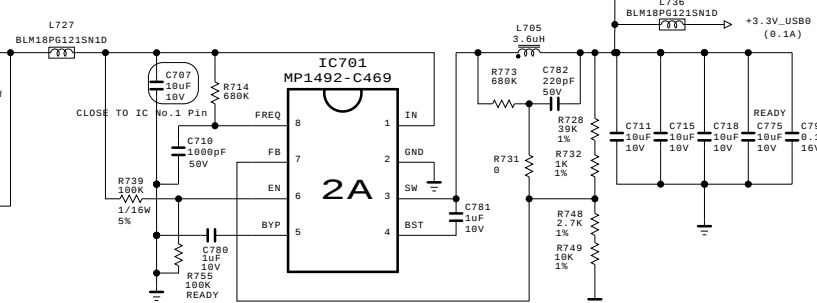
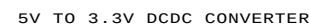
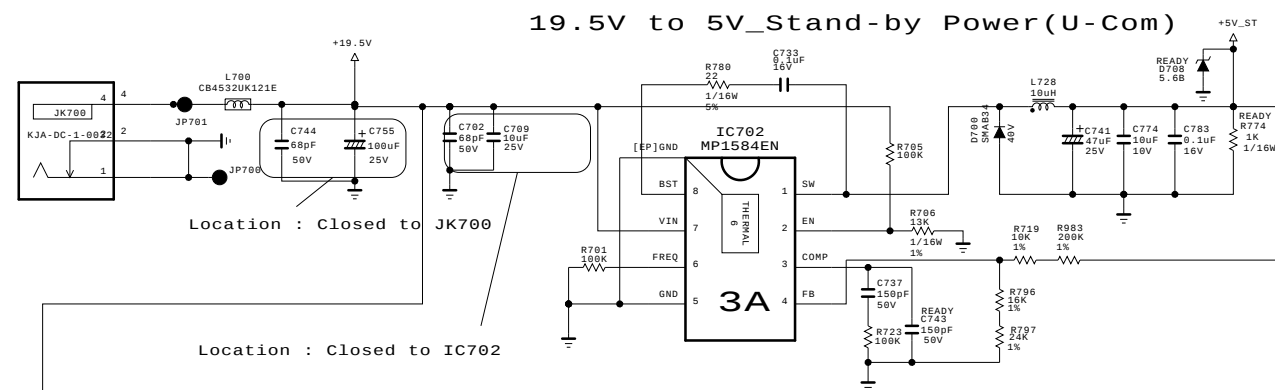
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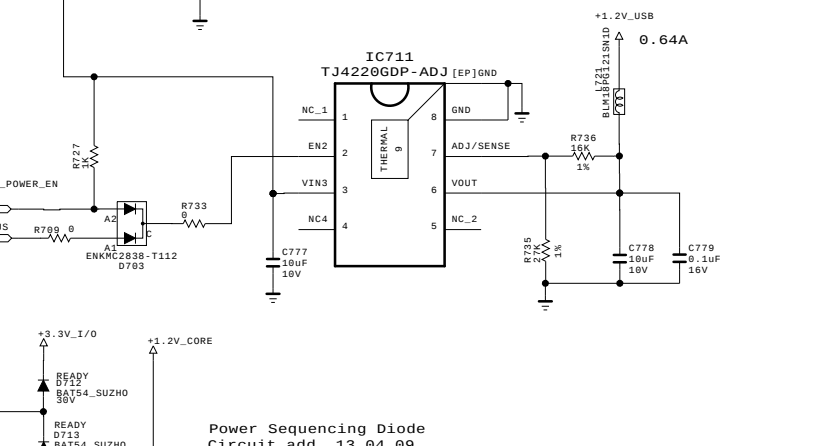
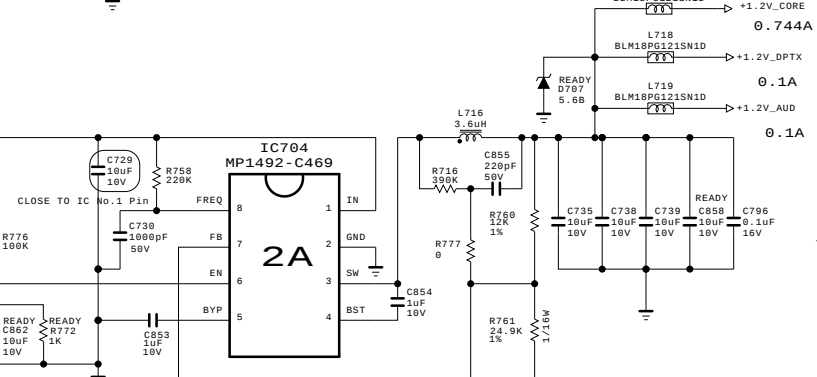
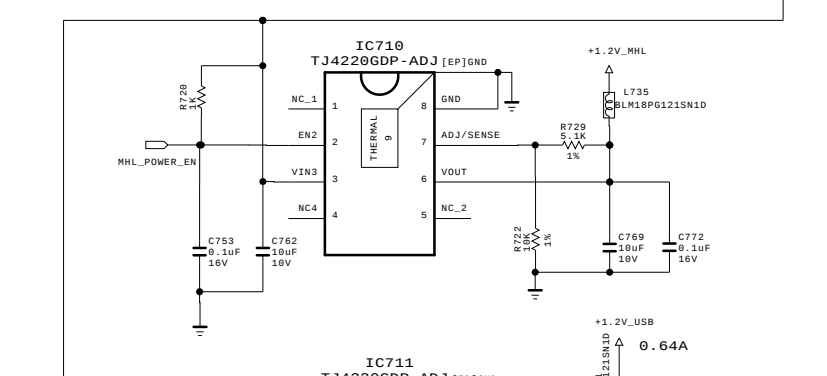
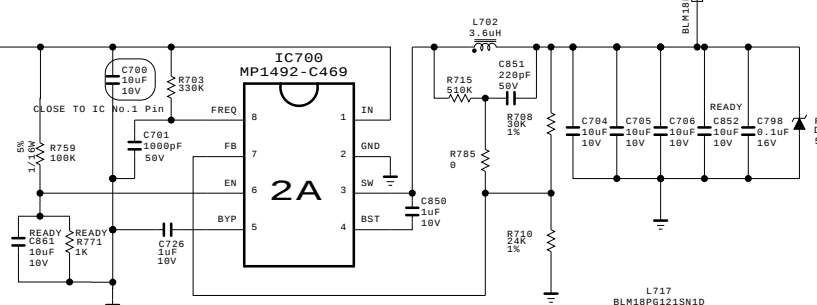
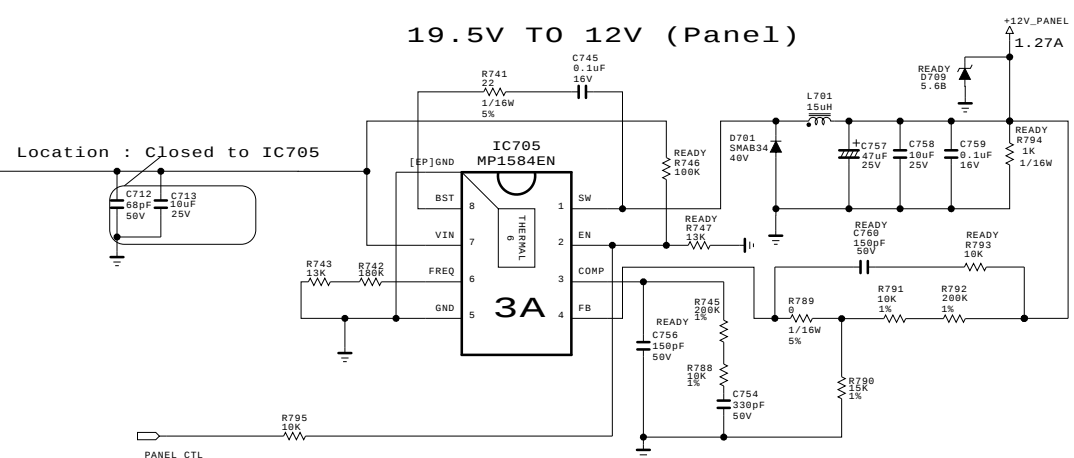
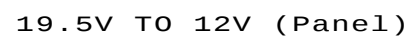
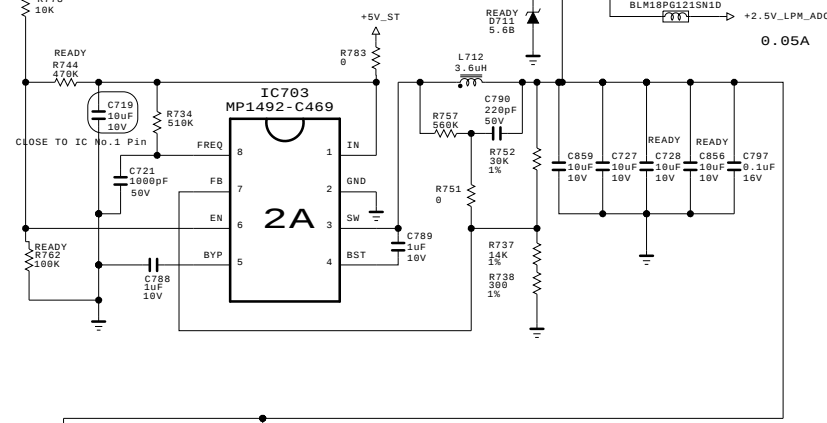
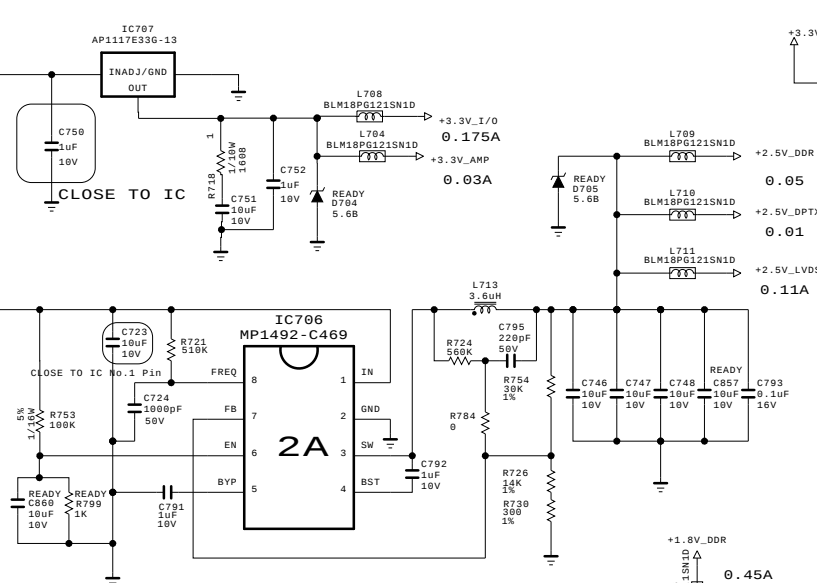
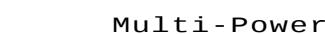
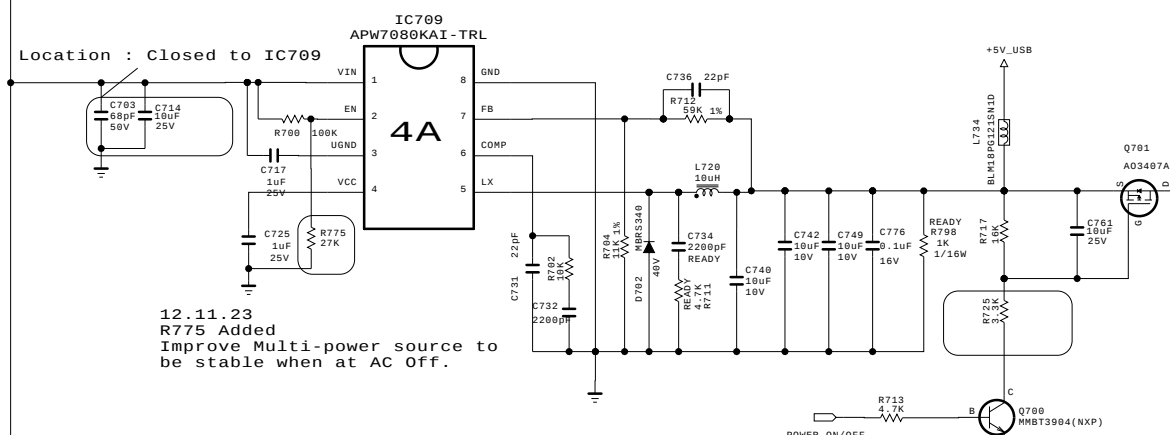


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BLOCK	Flash/OCM	SHEET	6 / 9

DC-DC Re design (ANPEC ==> MPS 13.02.27)_F



USB Power/Multi Power



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Power Sequence

3.3V_LPM => 2.5V_LPM => 1.2V_LPM
-> 3.3V_SW => 2.5V_SW => 1.8V_DDR => 1.2V_CORE

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MODEL	29EB93	DATE	12.11.24
BLOCK	POWER	SHEET	7 / 9

