

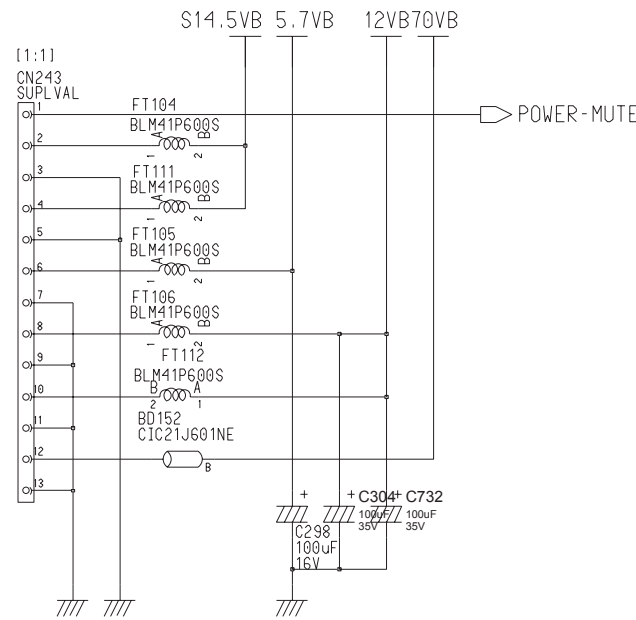
# 6. Schematic Diagrams

## 6-1 Analog

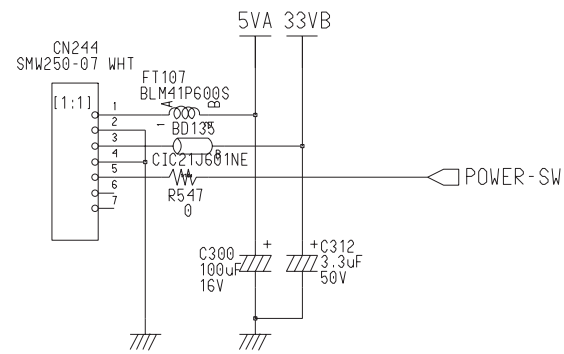
### 6-1-1 Power Regulator

This Document can not be used without Samsung's authorization.

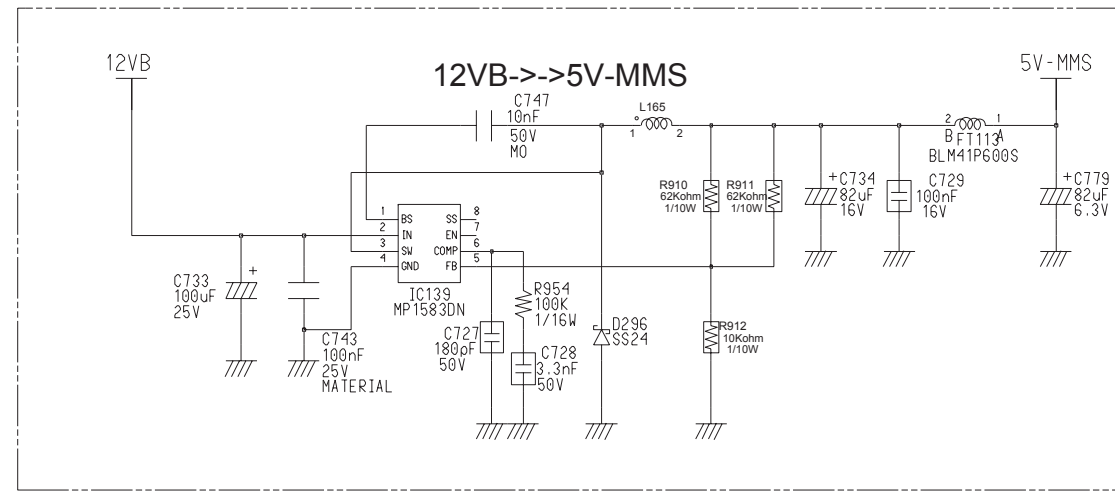
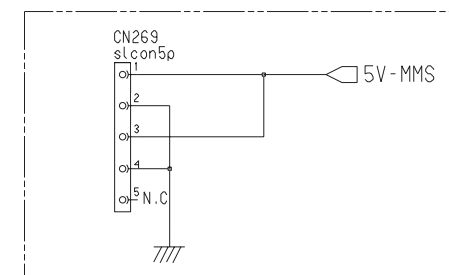
#### From SMPS Board



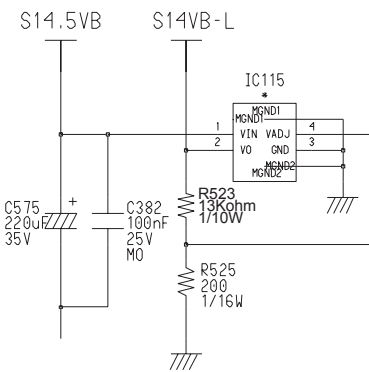
No.10 will be used in...  
 L3/DLP : 70V For Actuator  
 L3/3pLCD : 15.5V For Ballast  
 L7 : Power for front-LCD Module



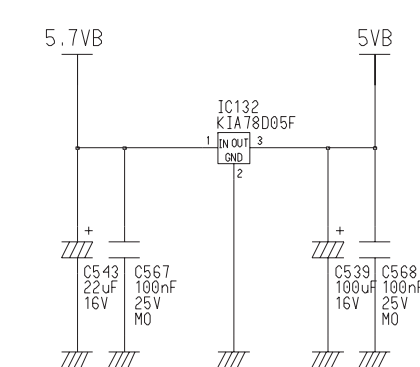
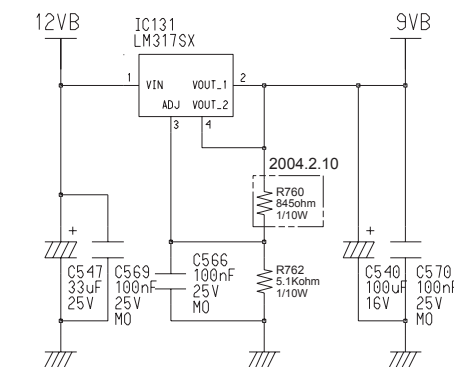
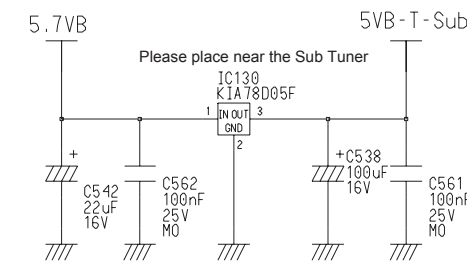
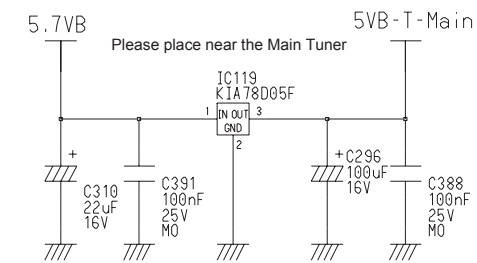
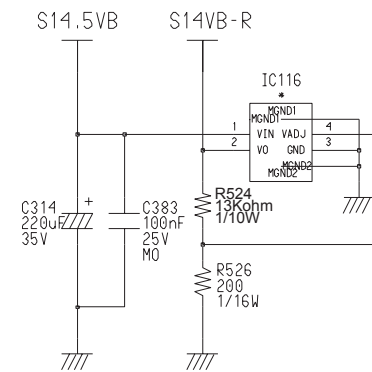
#### TO MMS



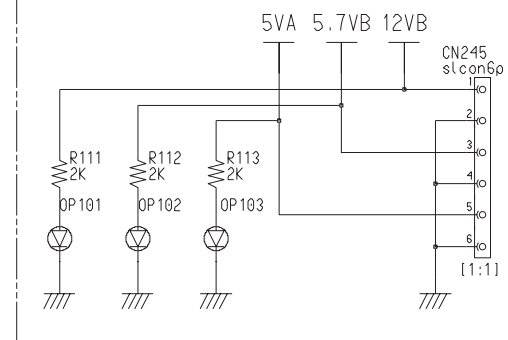
#### S14.5VB -> S14VB-L



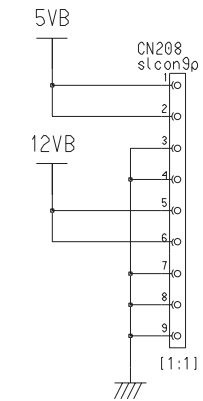
#### S14.5VB -> S14VB-R



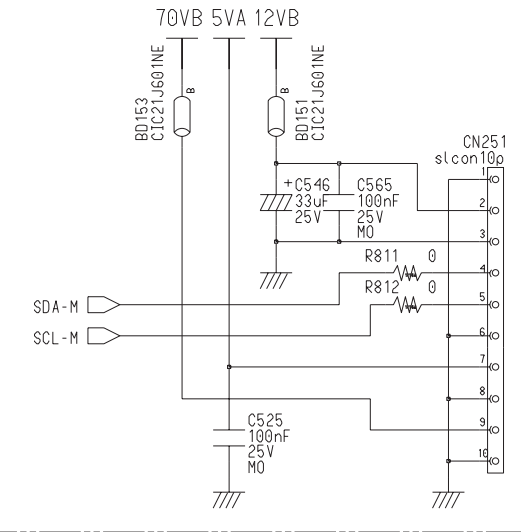
#### TO DIGITAL BOARD



#### TO DMD BOARD

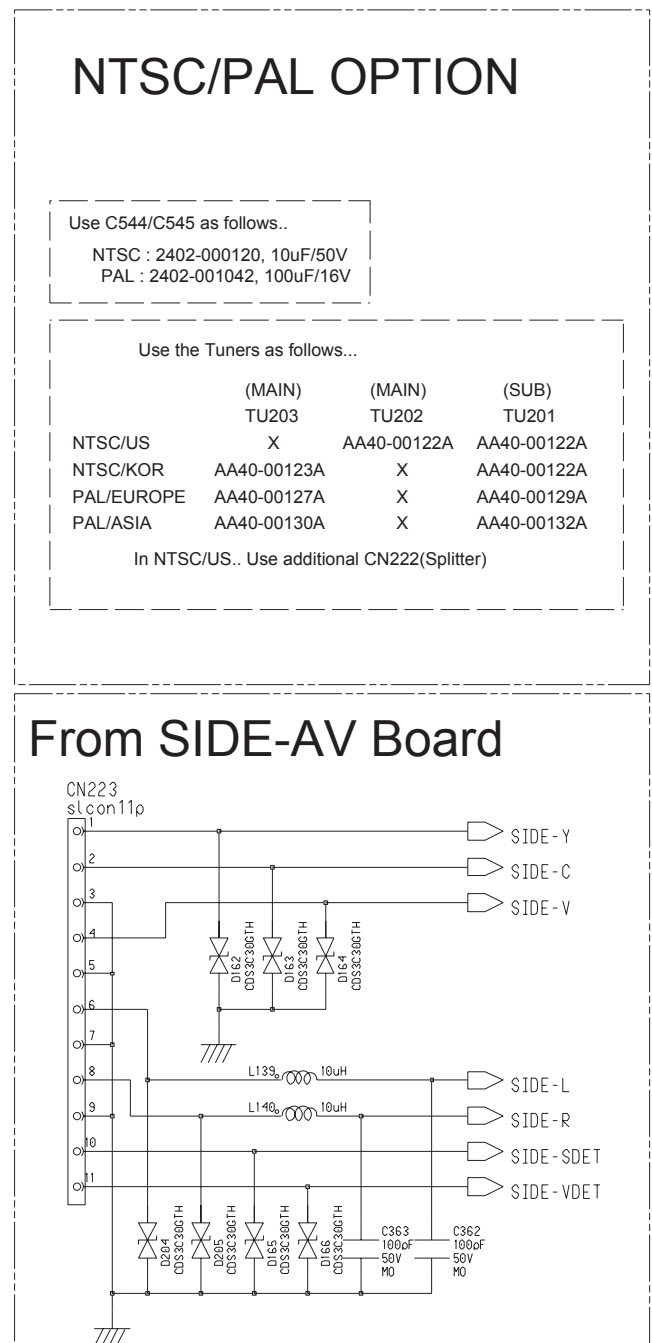
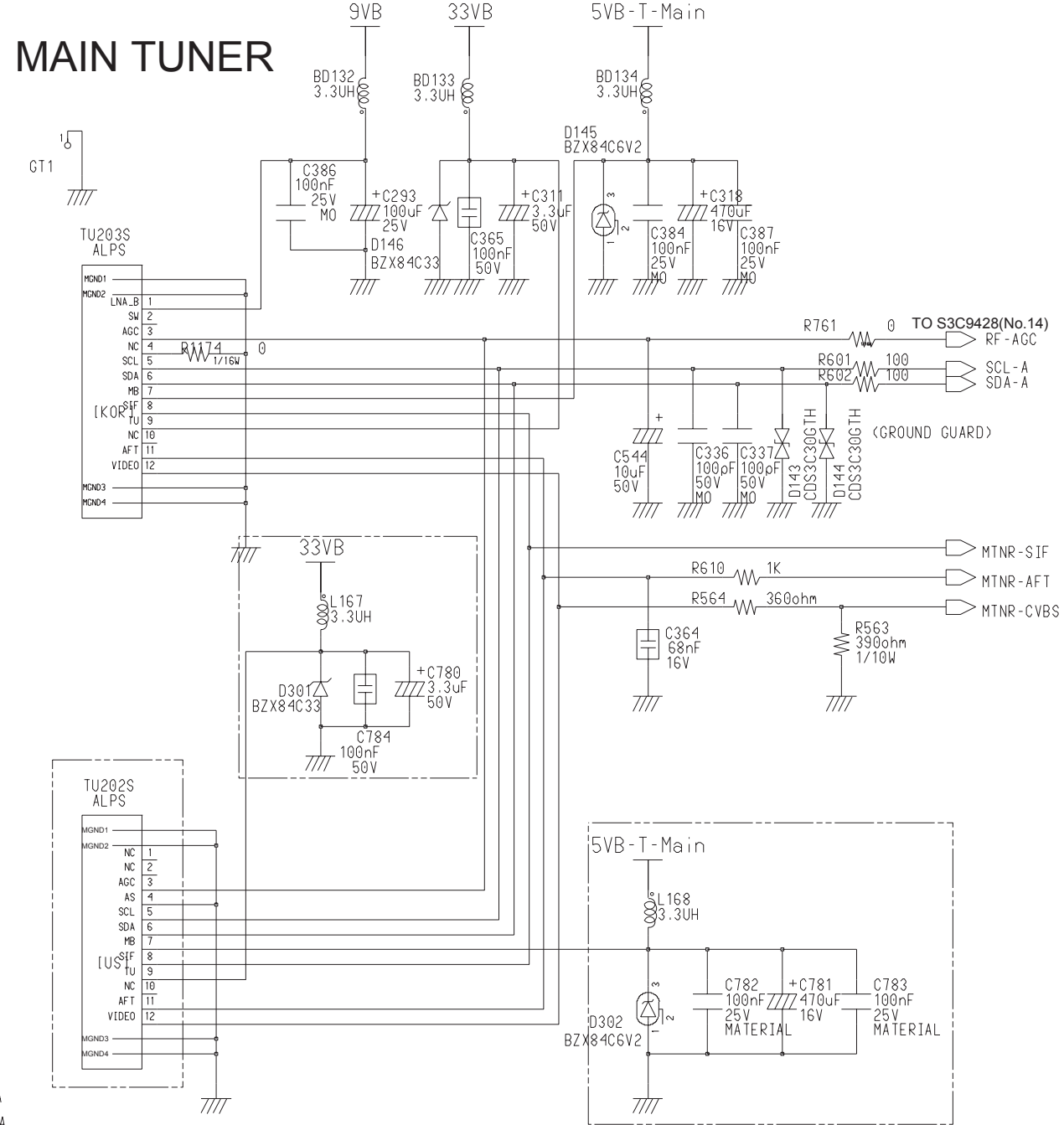
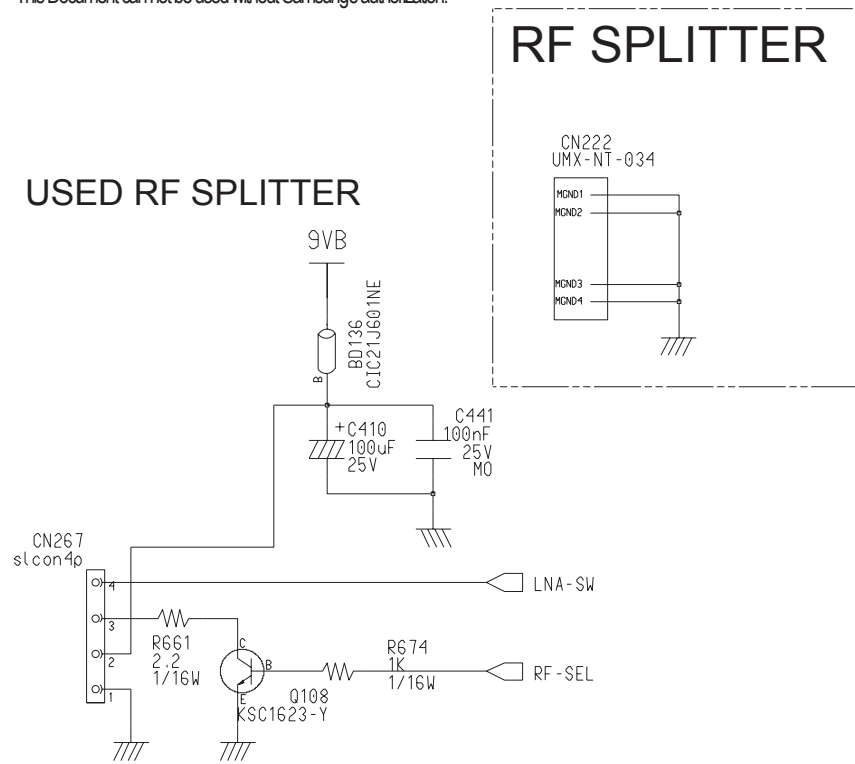


#### TO SUB DETECTOR / ACTUATOR



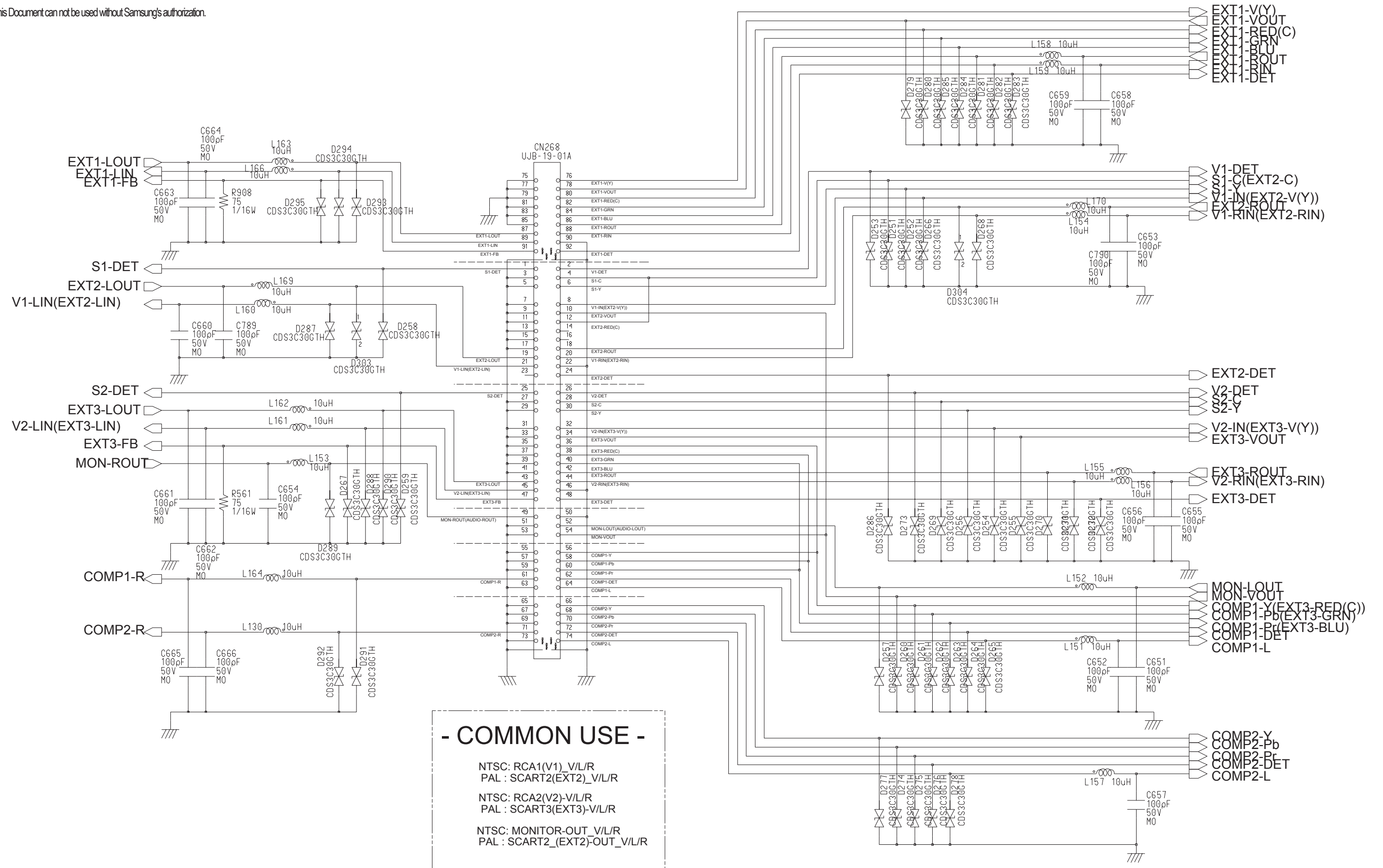
### 6-1-2 Tuner Splitter & Side AV

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6-1-3 AV IN\_OUT

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**- COMMON USE -**

NTSC: RCA1(V1)\_V/L/R  
 PAL : SCART2(EXT2)\_V/L/R

NTSC: RCA2(V2)-V/L/R  
 PAL : SCART3(EXT3)-V/L/R

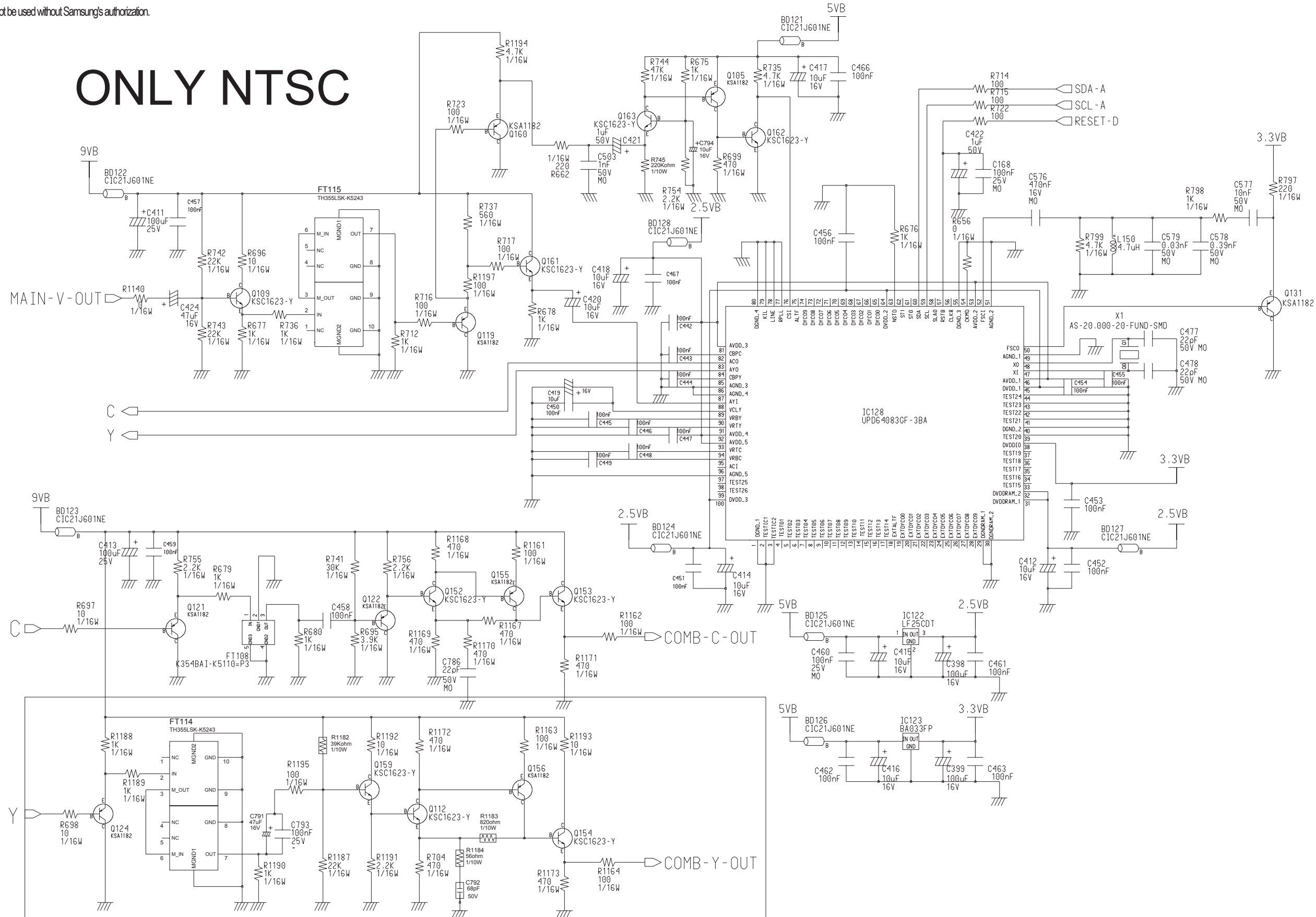
NTSC: MONITOR-OUT\_V/L/R  
 PAL : SCART2\_(EXT2)-OUT\_V/L/R



6-1-5 3D Comb

This Document can not be used without Samsung's authorization.

# ONLY NTSC



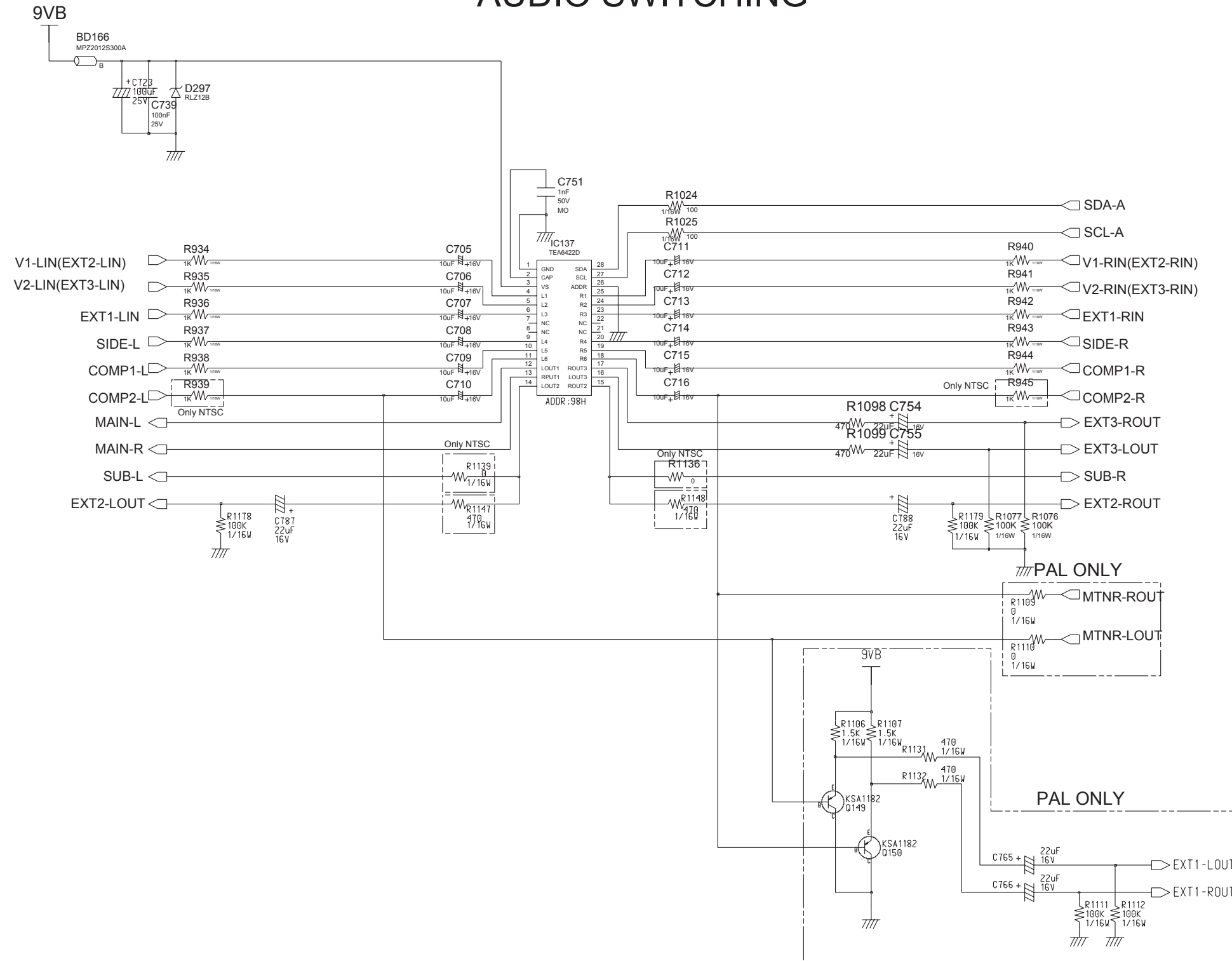




6-1-7 AV Switching\_Audio

This Document can not be used without Samsung's authorization.

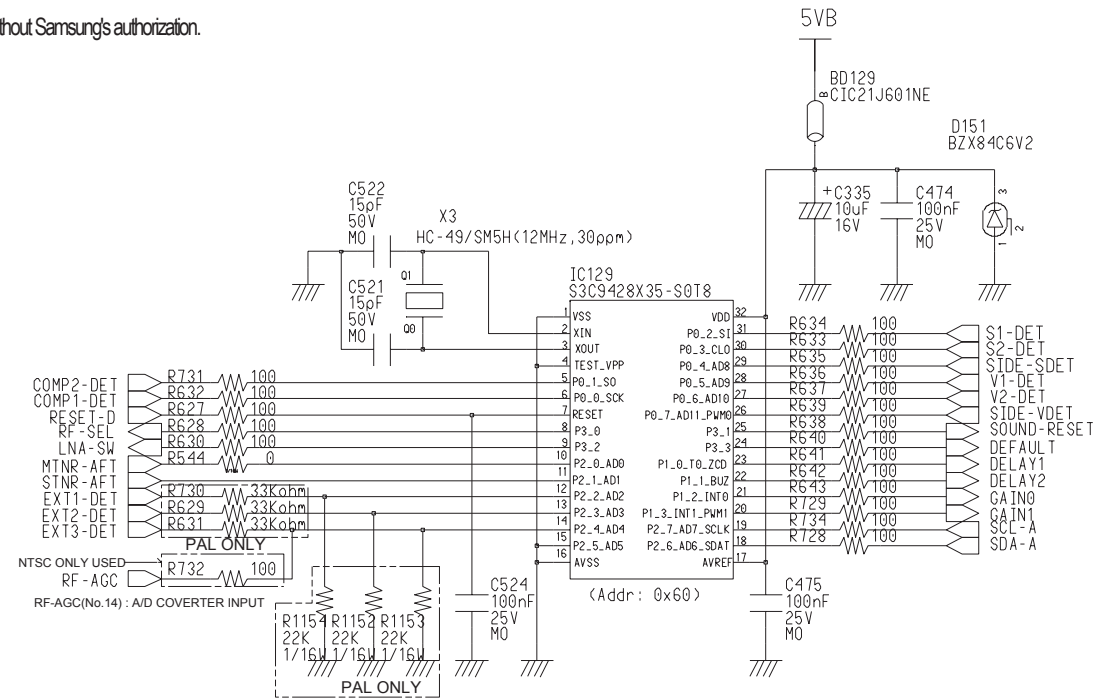
# AUDIO SWITCHING



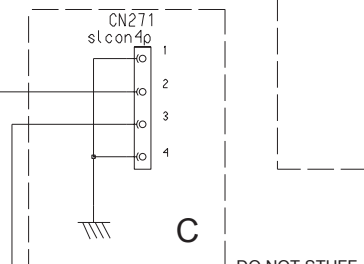
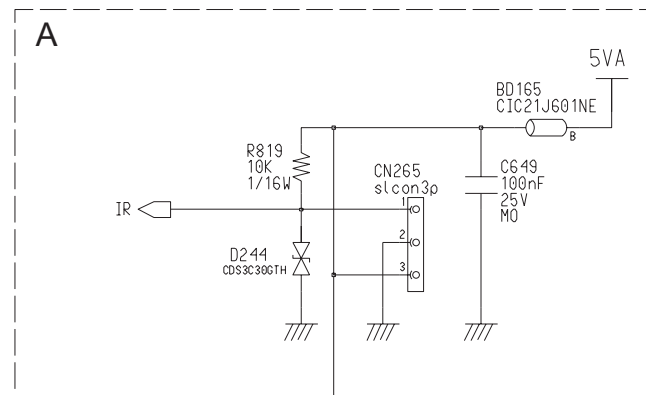
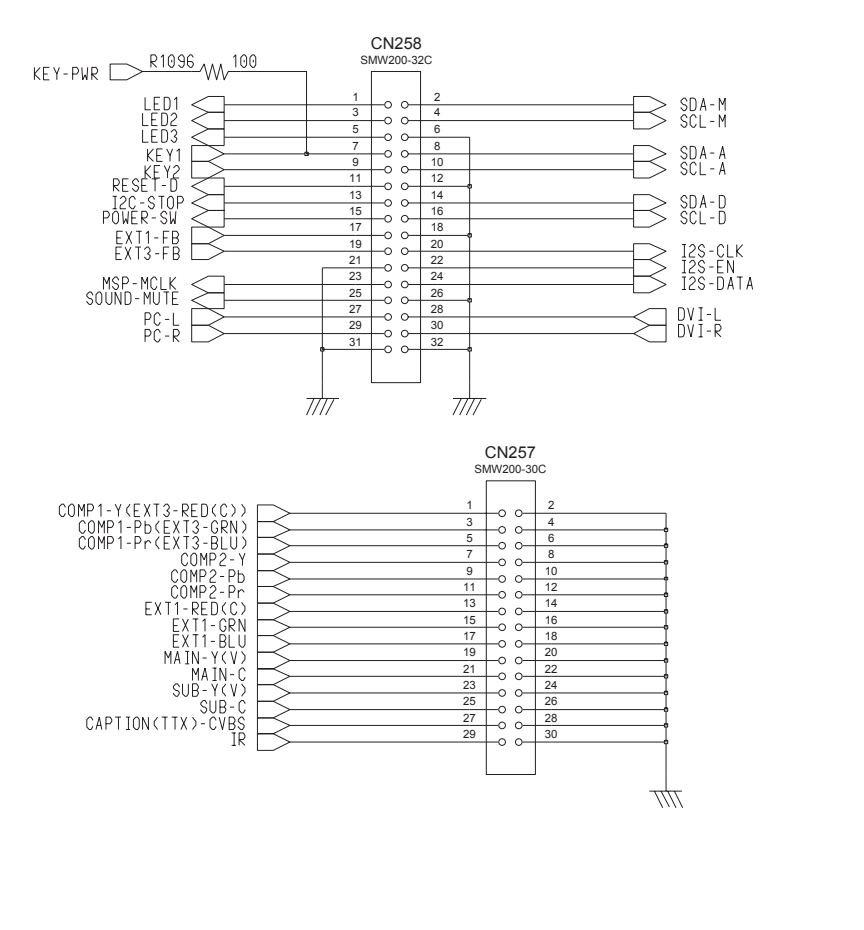
6-1-8 Expander & Signal connection

# I/O Expander, Signal Connection

This Document can not be used without Samsung's authorization.

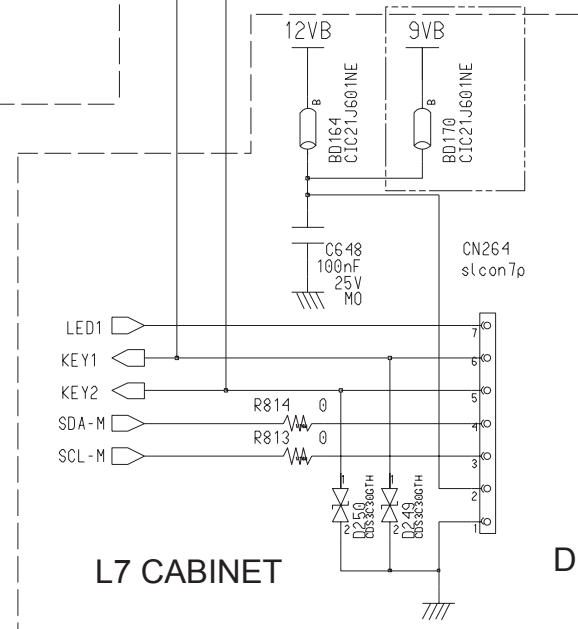
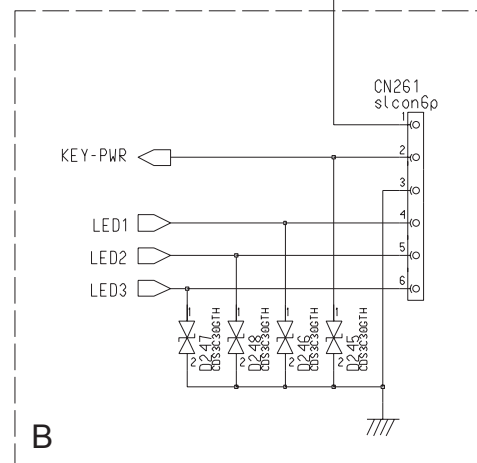


## TO DIGITAL BOARD



A	B	C	D
1. IR	1. 5VA	1. GND	1. LED1
2. GND	2. KEY-PWR	2. KEY1	2. KEY1
3. 5VA	3. GND	3. KEY2	3. KEY2
	4. LED1	4. GND	4. SDA-M
	5. LED2		5. SCL-M
	6. LED3		6. 5VB
			7. GND

Used as follows...  
 L3 : A+B, C  
 L5 : A, B, C  
 L7 : A, D



To use the lead connector which is combined in one to one correspondence, please change the number of the PIN

Actual PIN No.	PIN No. on Schematic
7	1
6	2
5	3
4	4
3	5
2	6
1	7

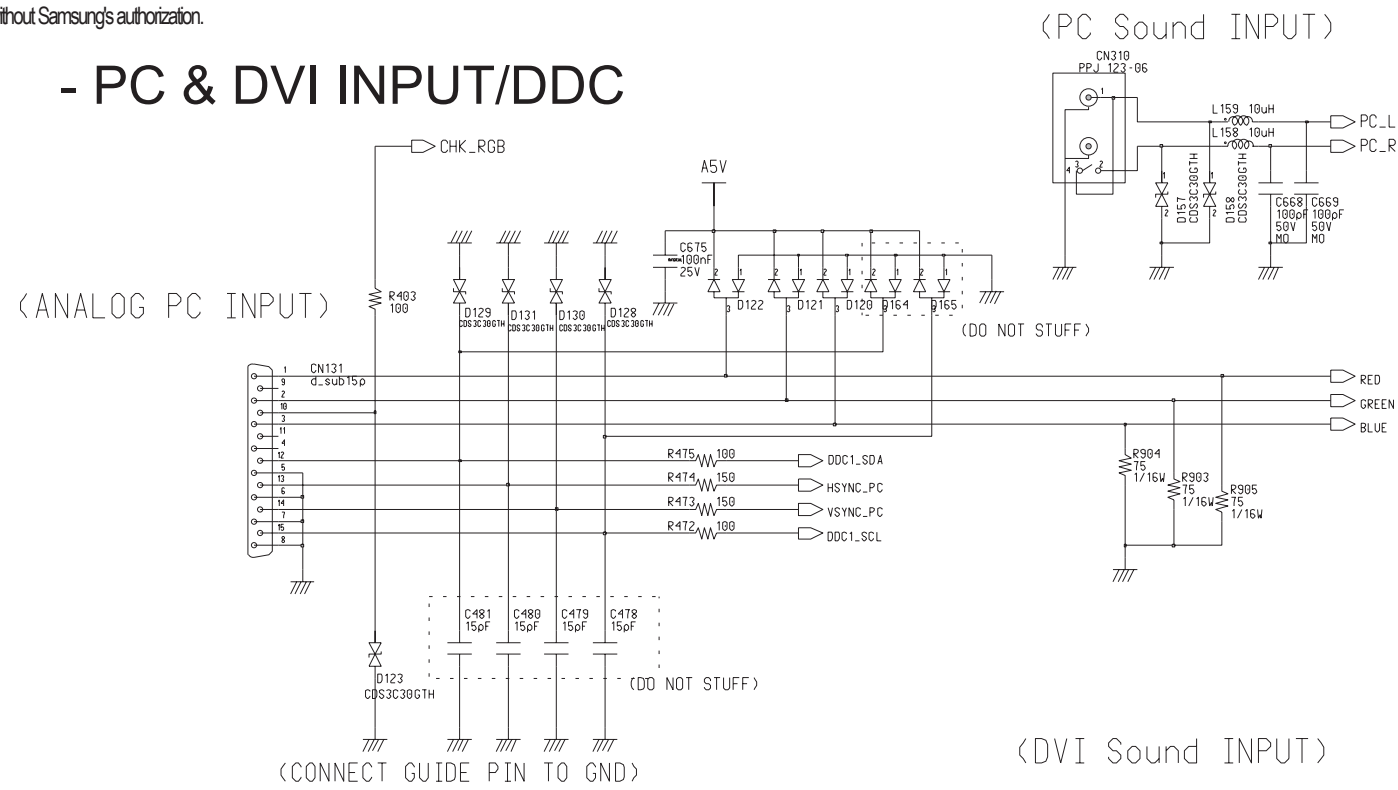




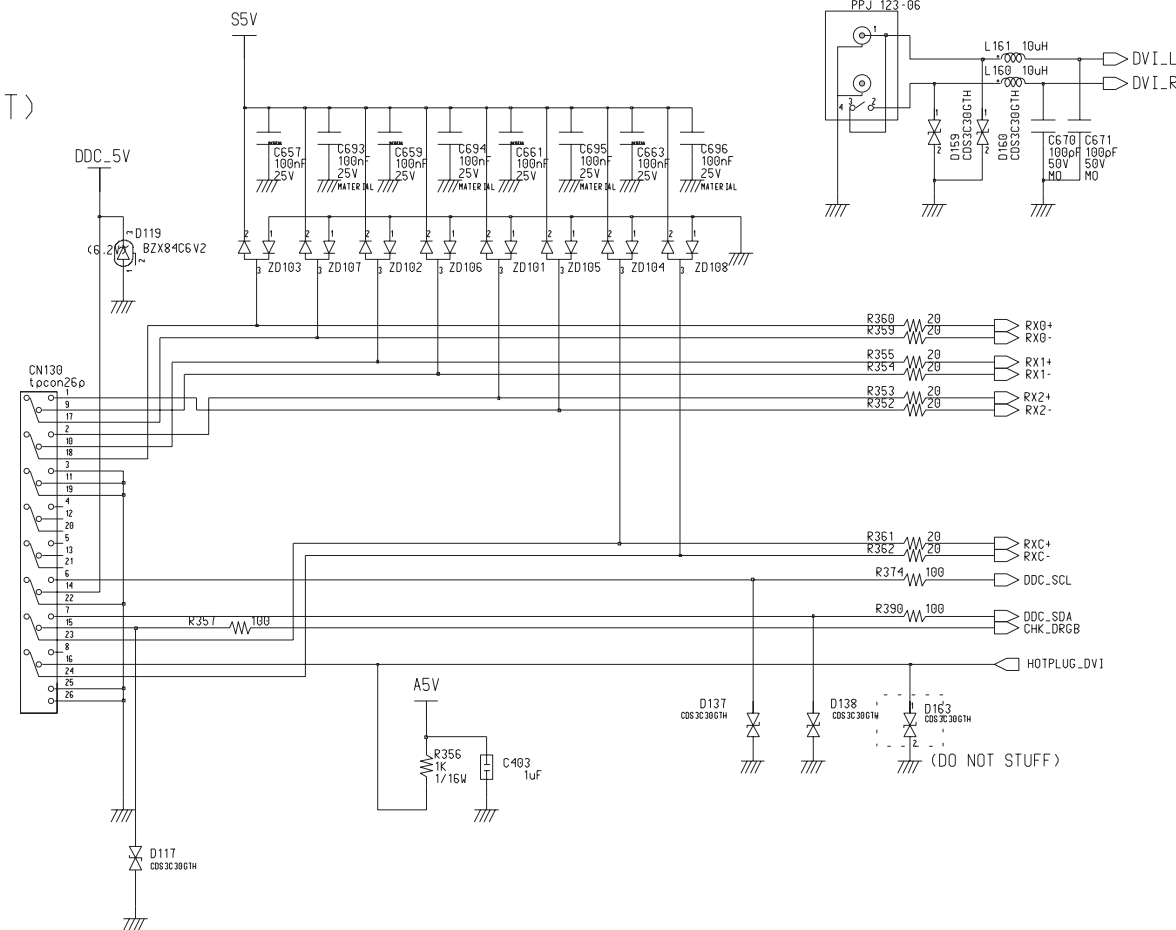
### 6-2-2 RGB\_INPUT

This Document can not be used without Samsung's authorization.

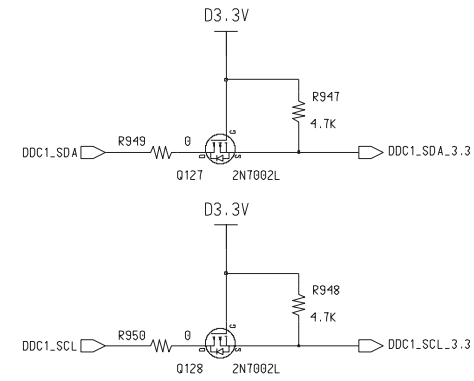
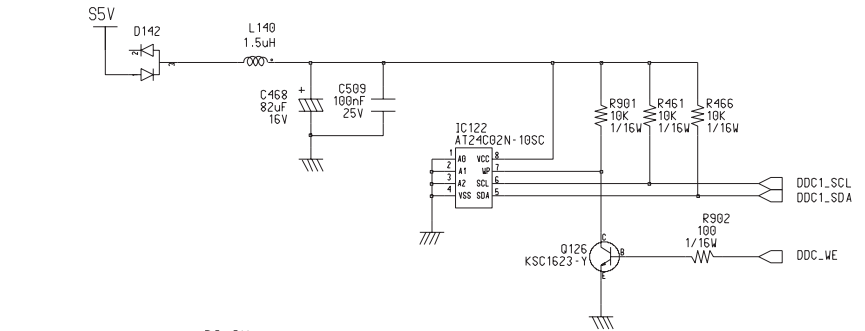
## - PC & DVI INPUT/DDC



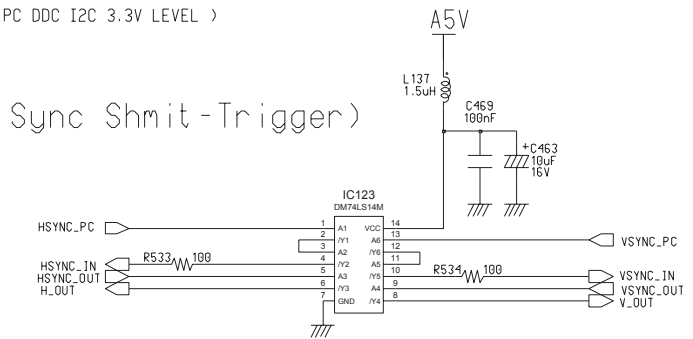
### (DVI INPUT)



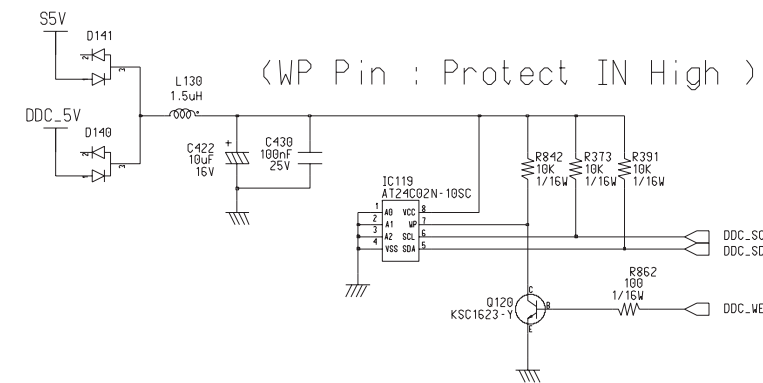
### (EDID OF ANALOG)



### (PC Sync Shmit-Trigger)

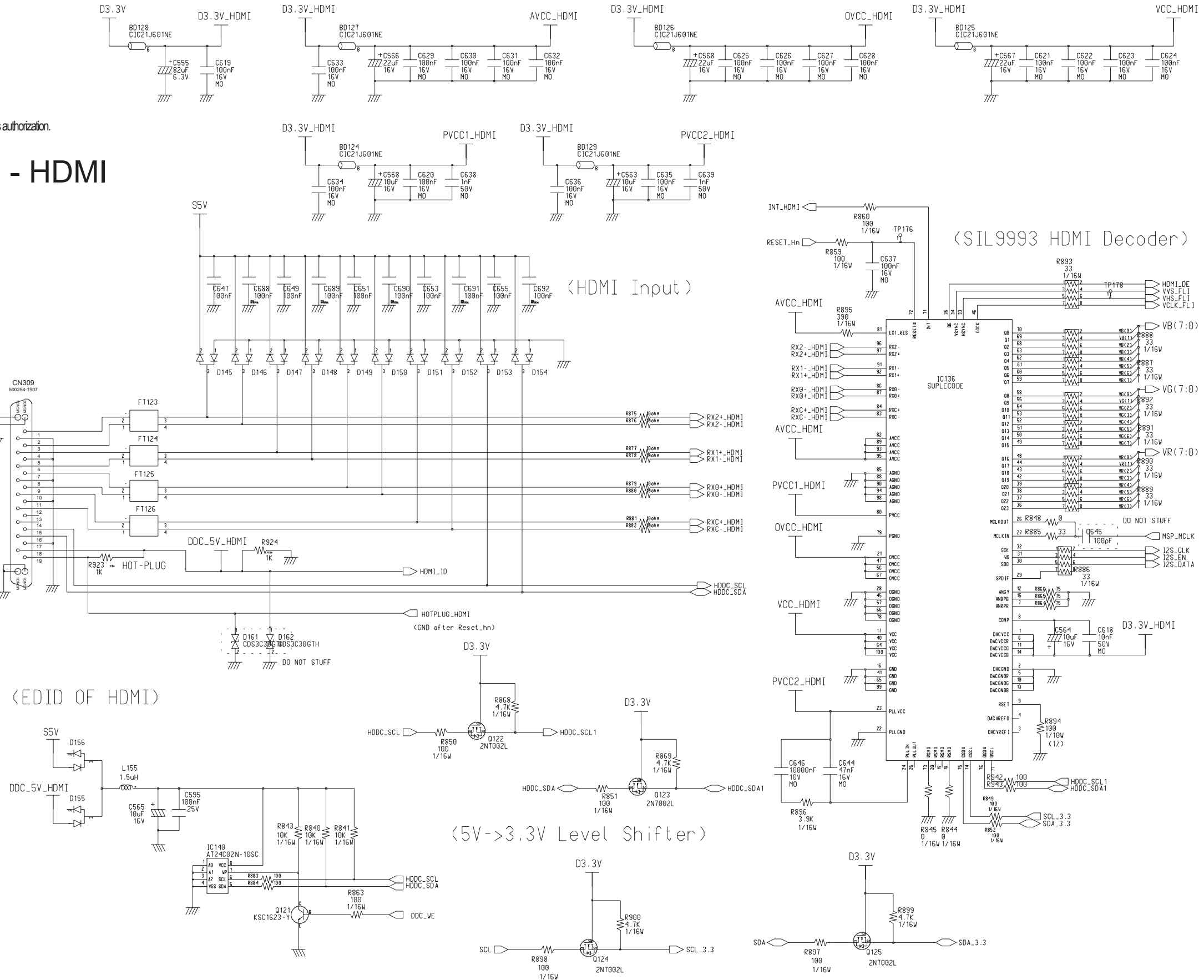


### (EDID OF DVI)



6-2-3 HDMI

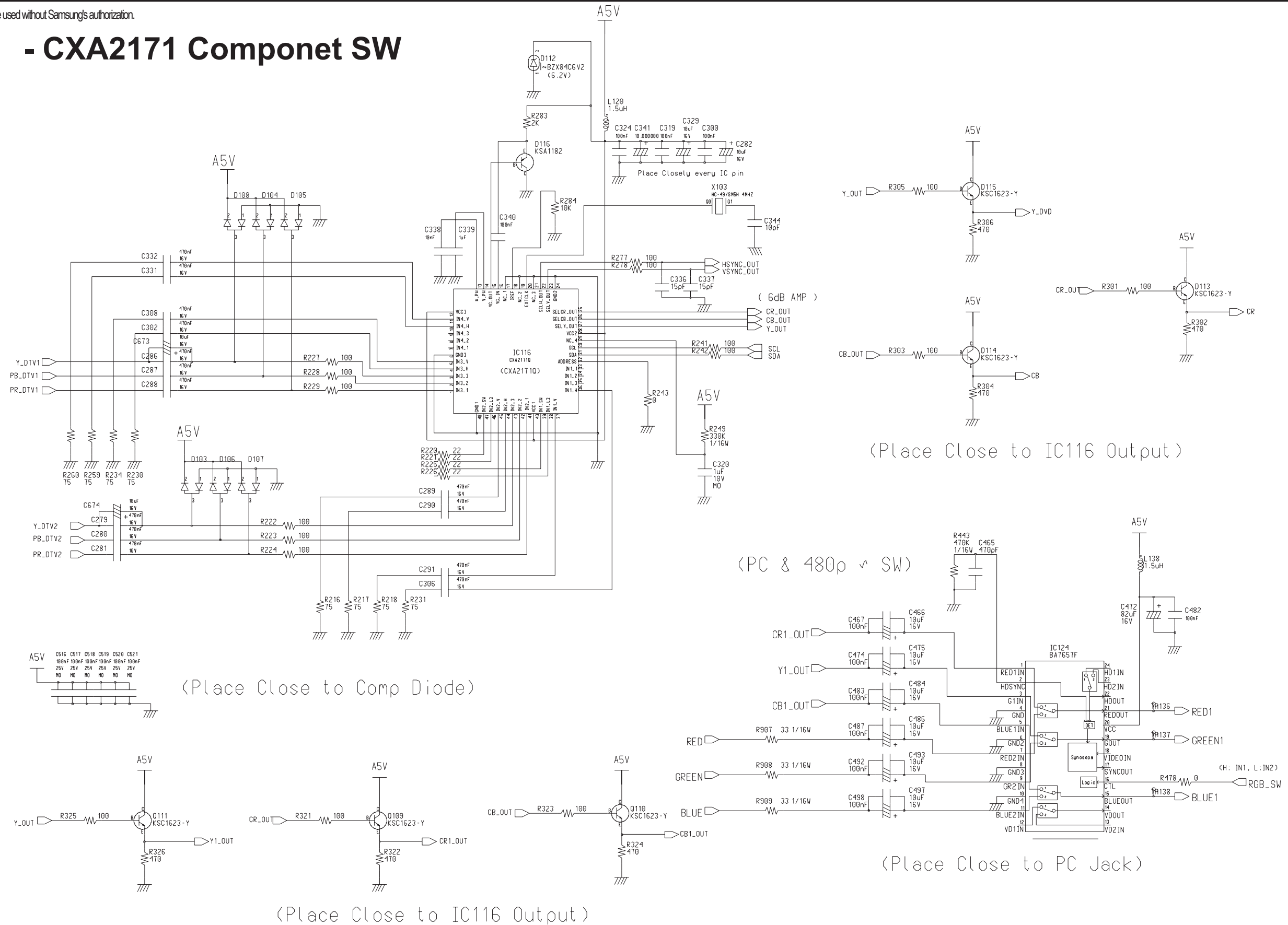
This Document can not be used without Samsung's authorization.



6-2-4 SIGNAL\_MUX

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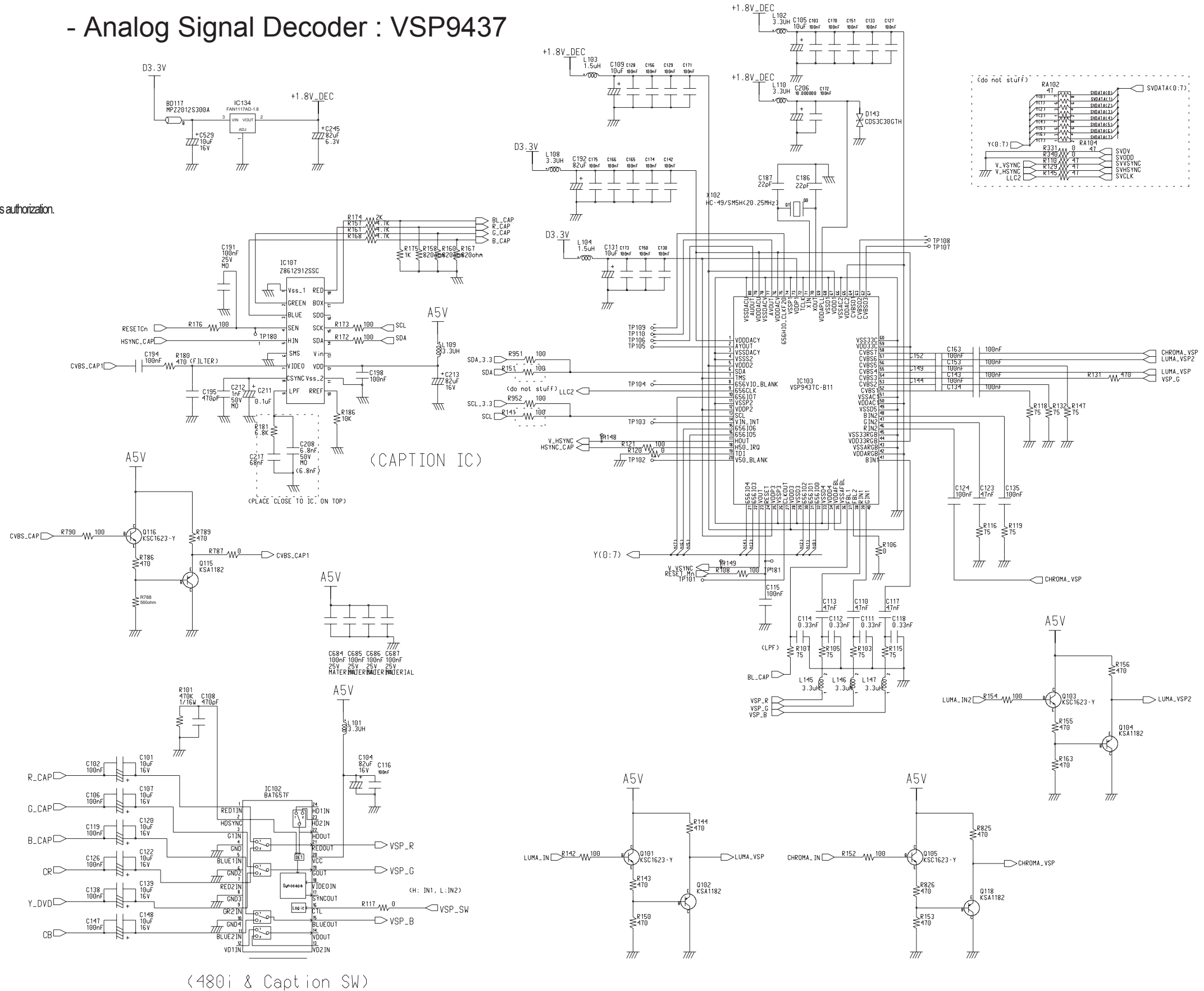
# - CXA2171 Componet SW



6-2-5 VSP9437B

- Analog Signal Decoder : VSP9437

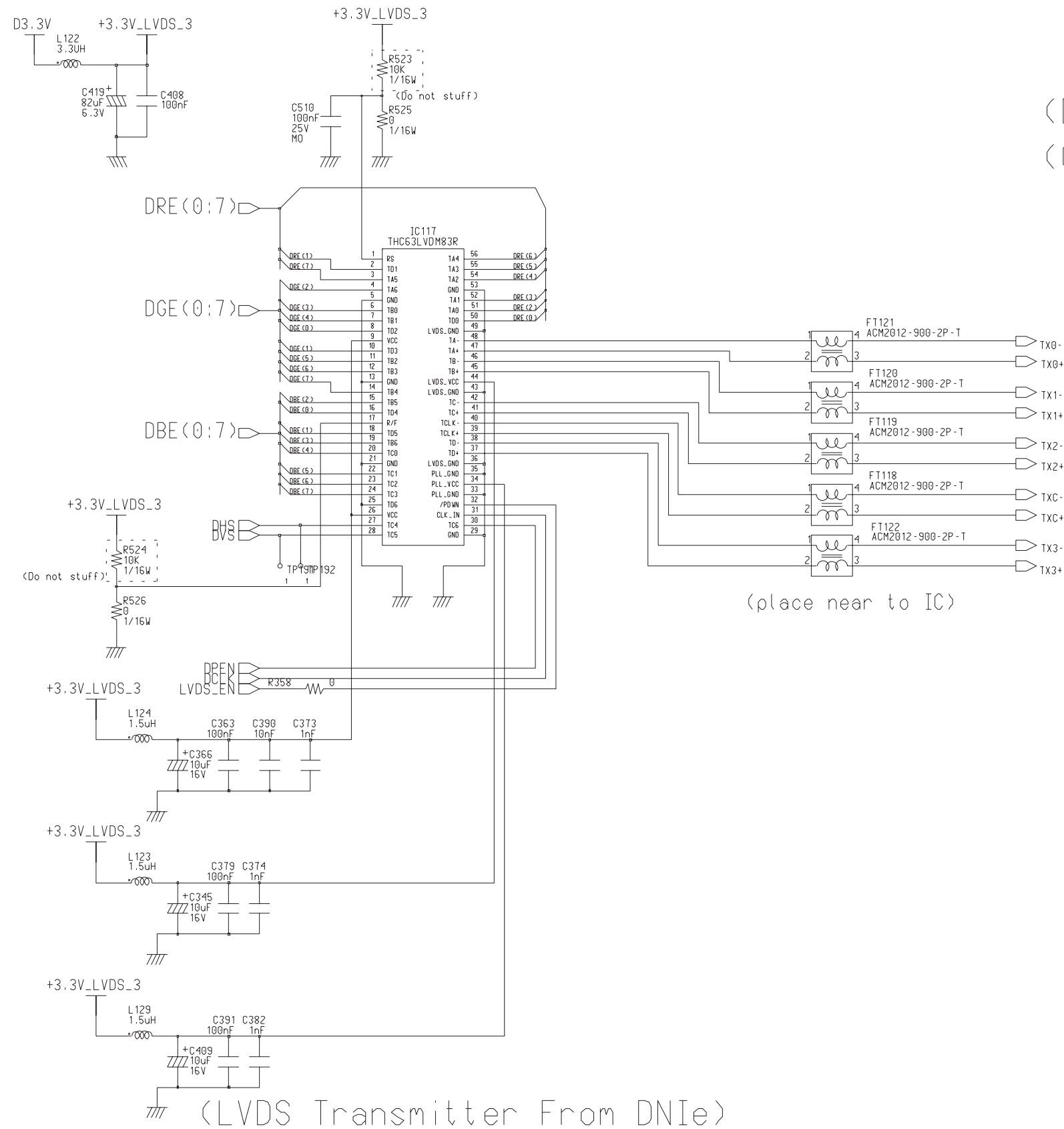
This Document can not be used without Samsung's authorization.



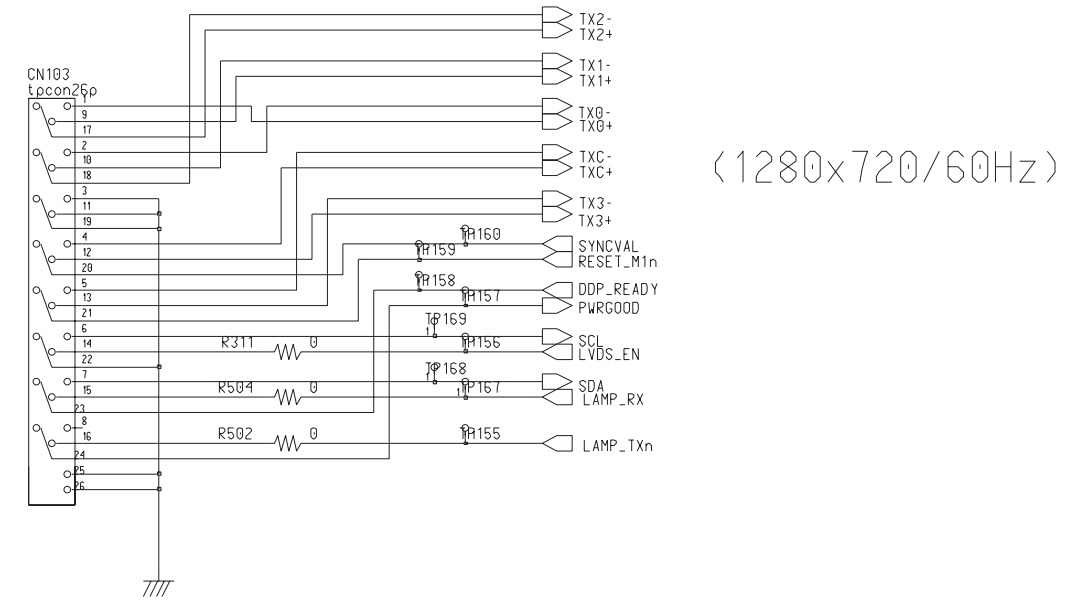
6-2-6 LVDS

# - LVDS Transmitter : TH63LVDM83R

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(DVI-D ANGLE TO DMD Board)  
(CONNECT GUARD PINS TO GROUND)



(place near to IC)

(LVDS Transmitter From DNIe)

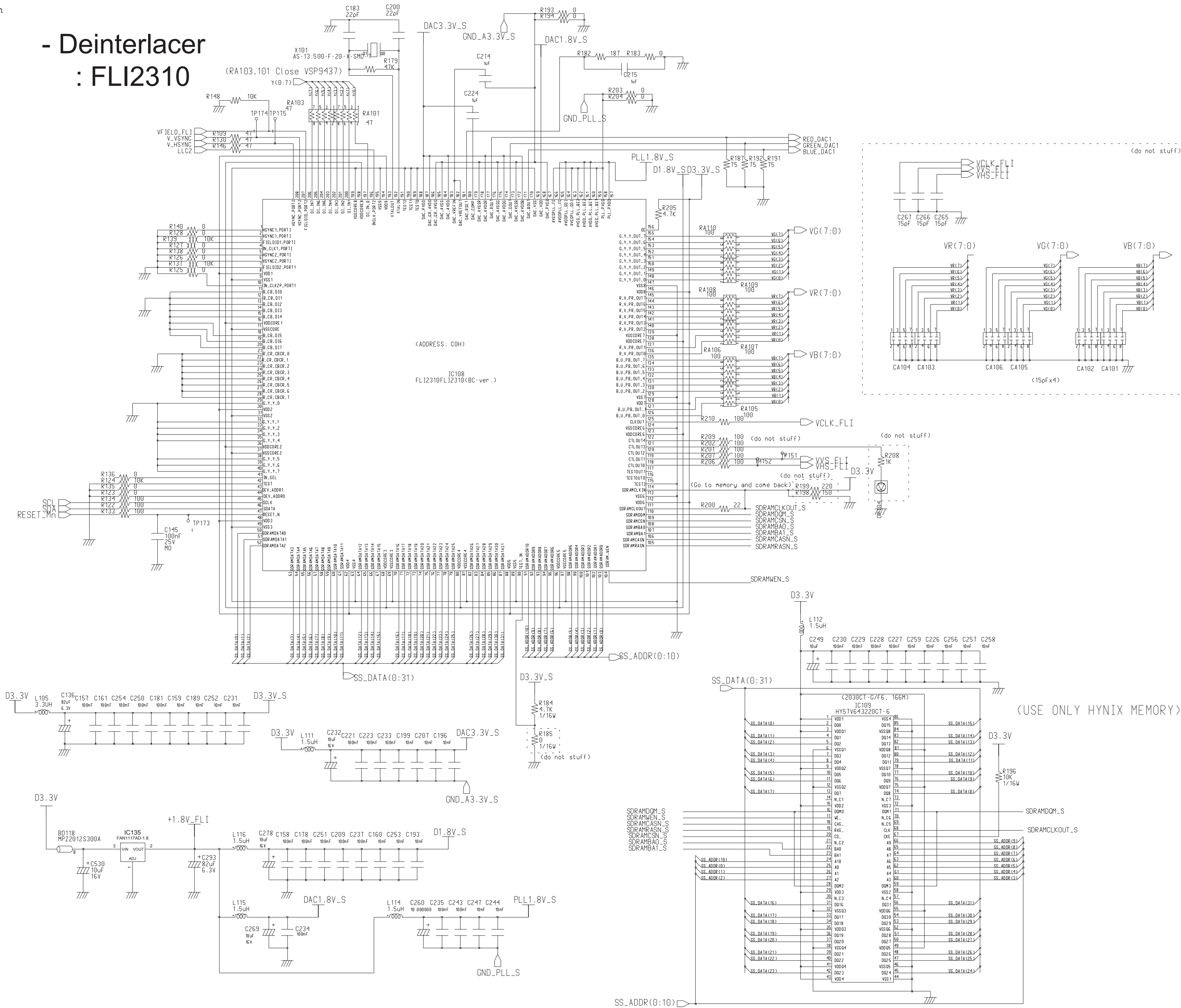




6-2-8 FLI2310

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# - Deinterlacer : FLI2310

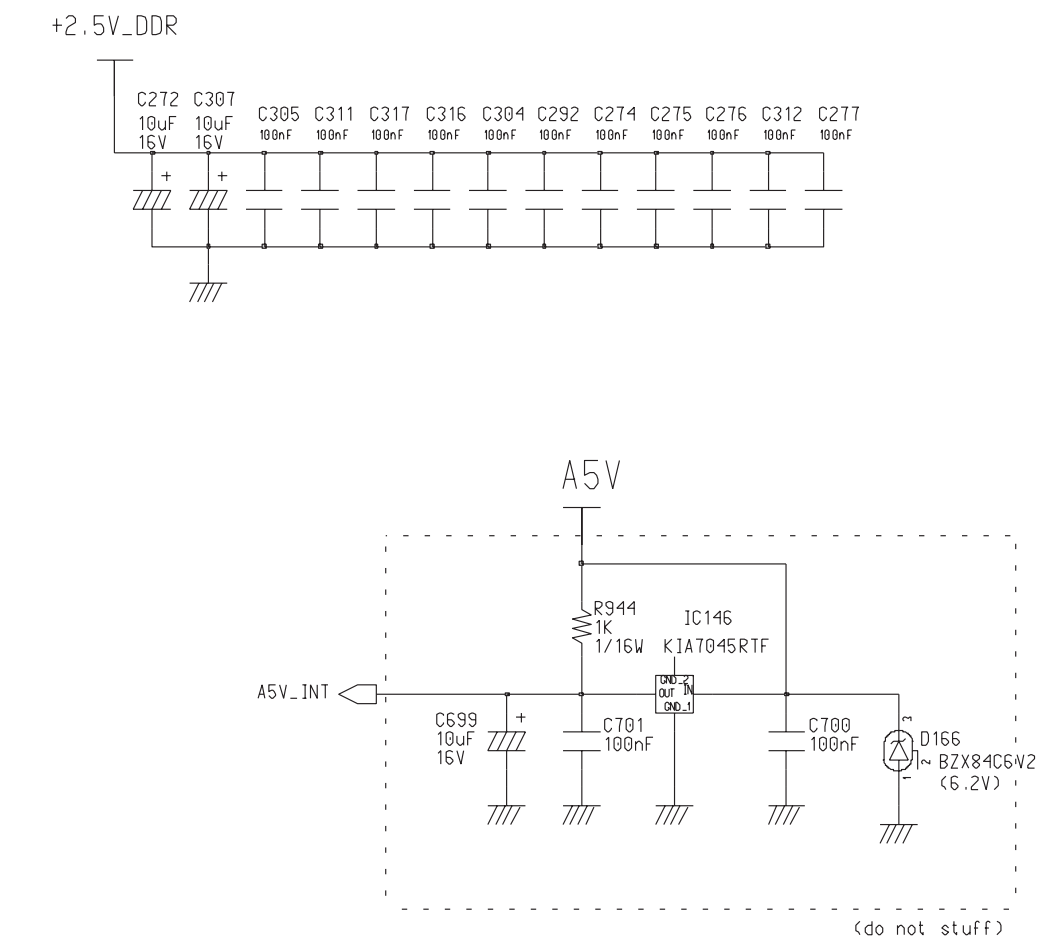
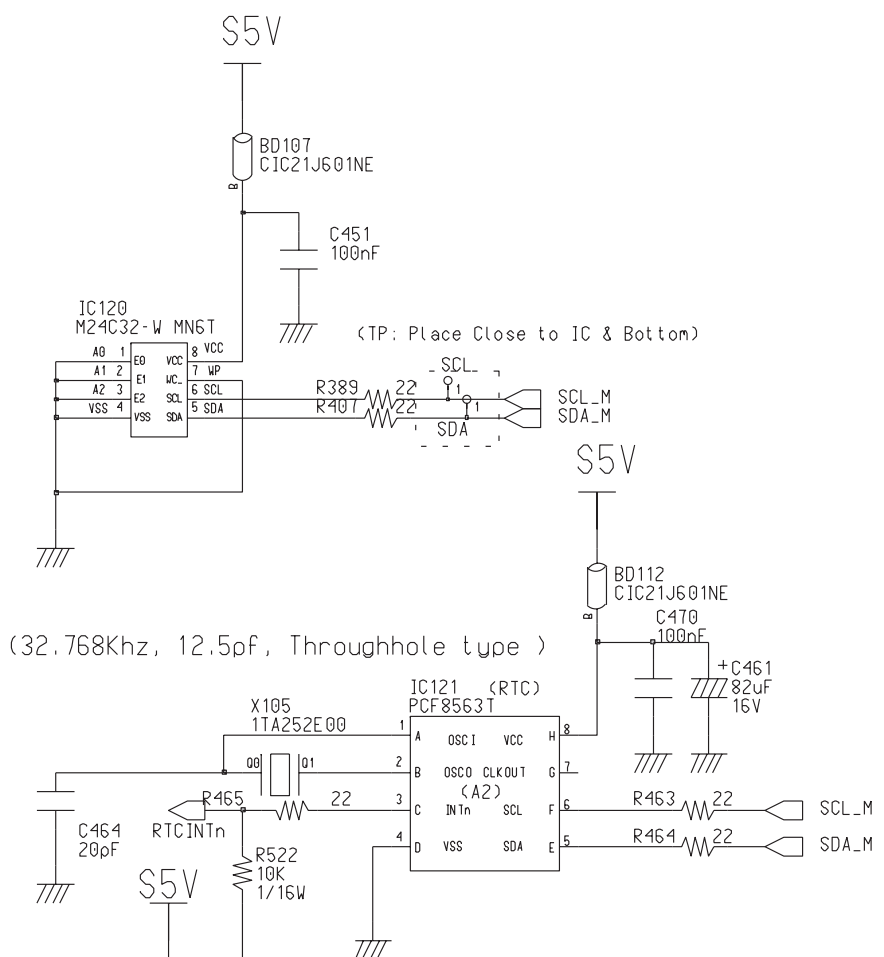
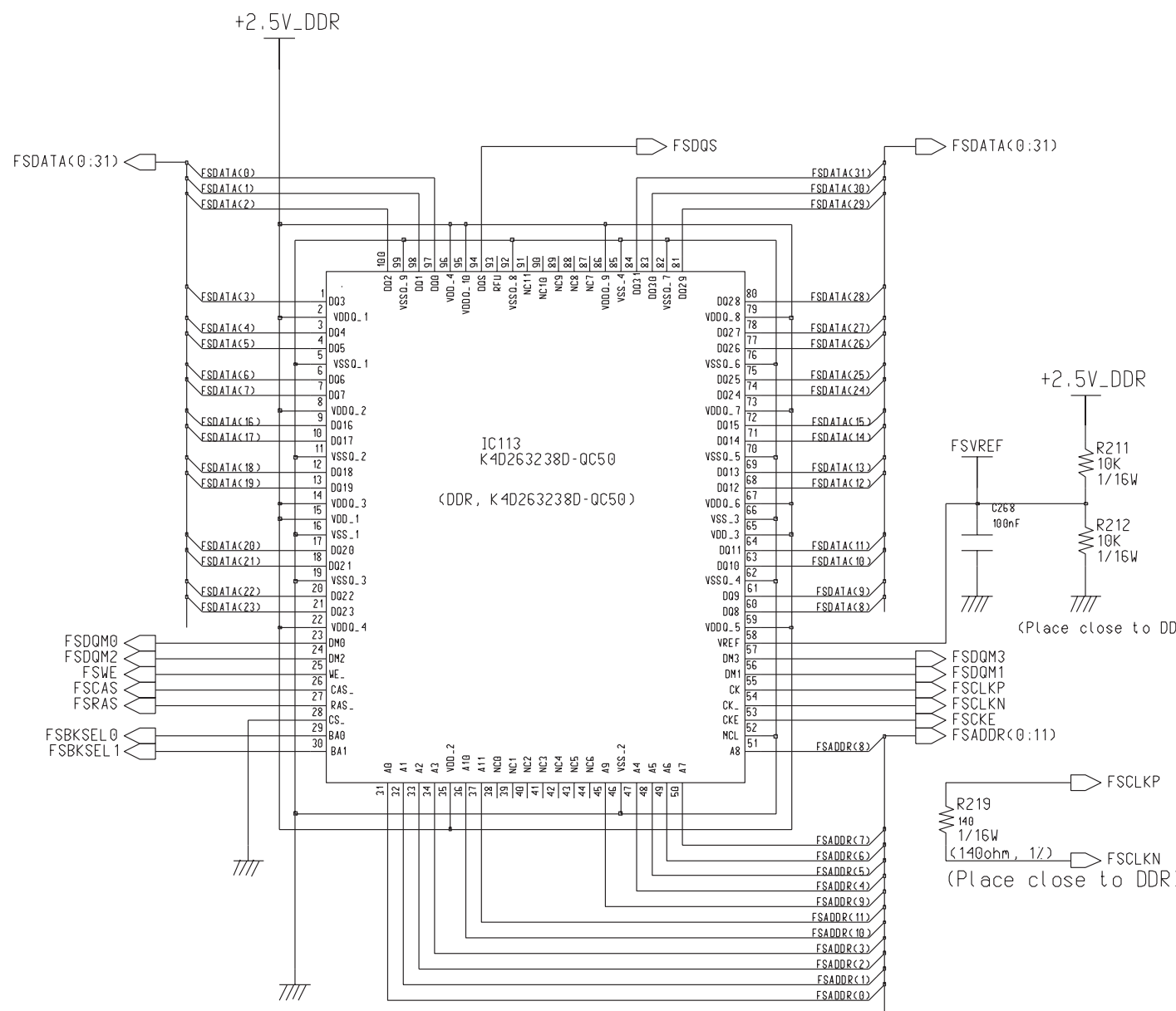




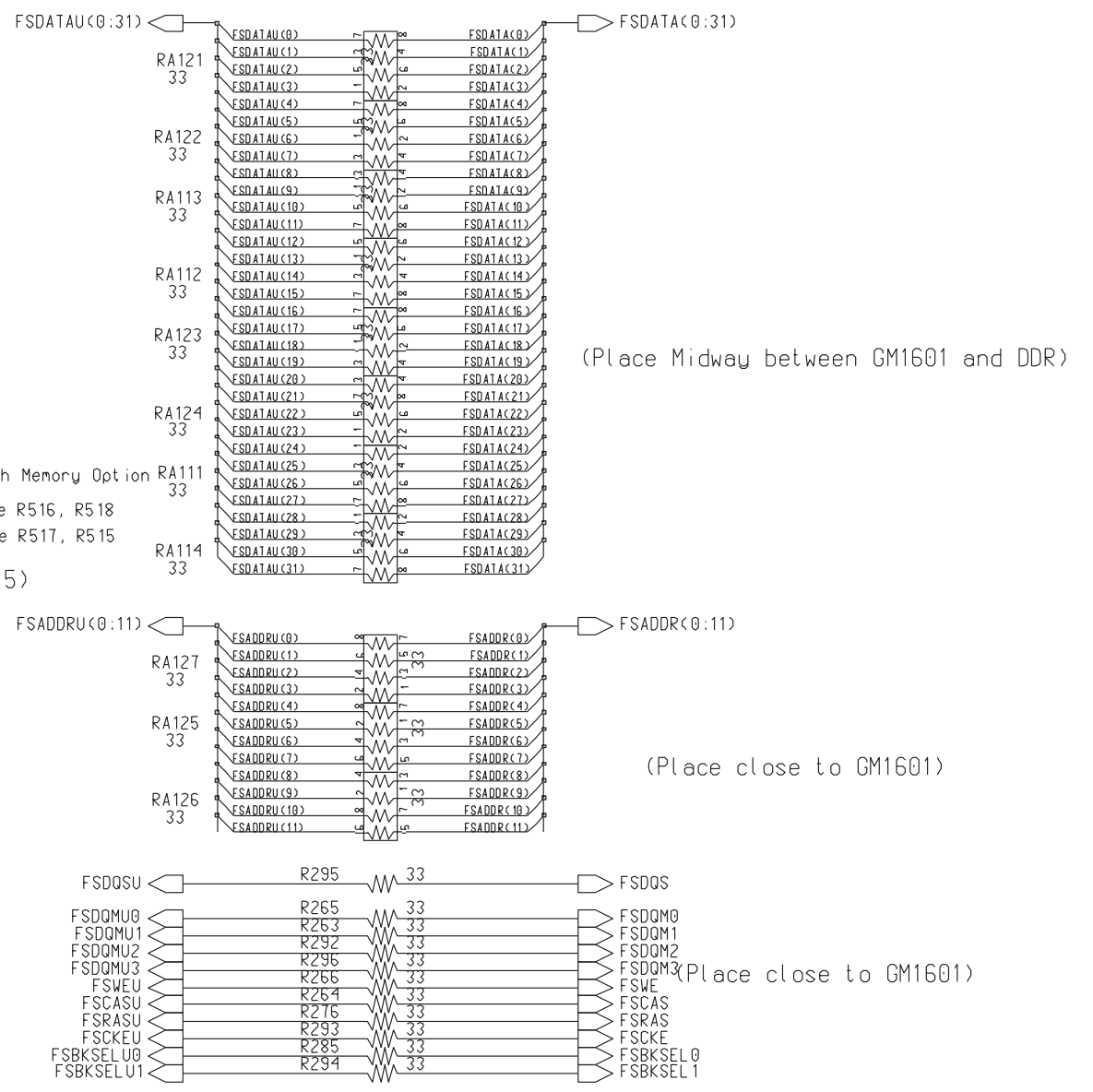
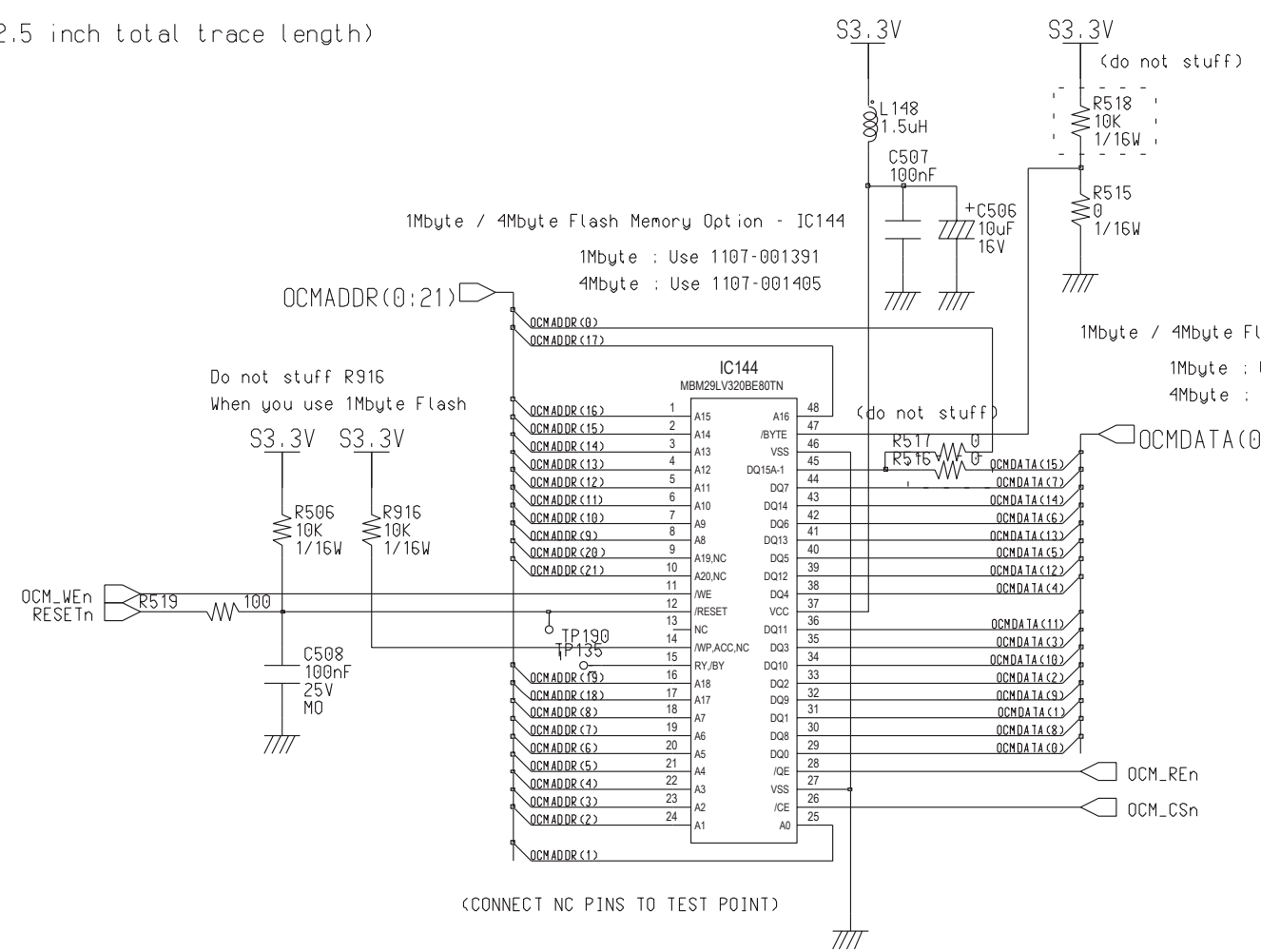
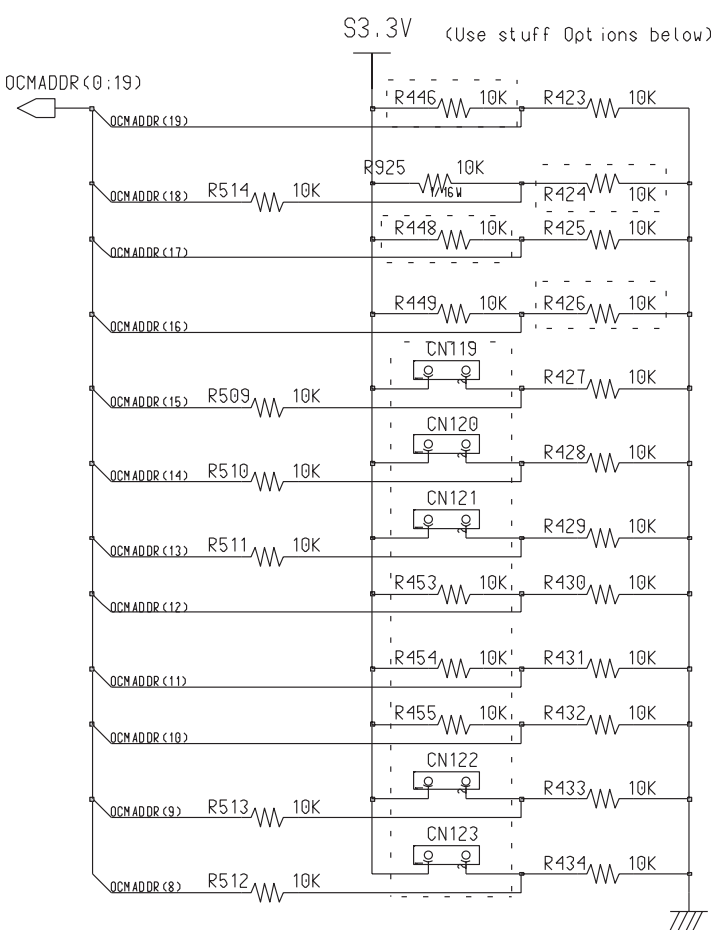
6-2-10 FLASH

# - Flash Memory & DDR RAM

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(Max trace length is 2.5 inches)  
 (Minimize trace length difference between DQS and data and among data lines)  
 (Unloaded trace impedance is 90 ohm)  
 (Loaded trace impedance with DDR load is 65 ohm for 2.5 inch total trace length)



(ADDR[19:8] = 000100000000 for 16bit flash)  
 (OCMADDR[13:15] = 001 FOR JTAG DEBUG)  
 (OCMADDR[18] = 1 FOR 4M Flash)  
 ( ADDR[15:13] = 110 FOR I2C DEBUG )  
 ( ADDR[18] = 1 FOR FIRMWARE BYPASS )  
 ( ADDR[19] = 1 FOR DDC2B1 )





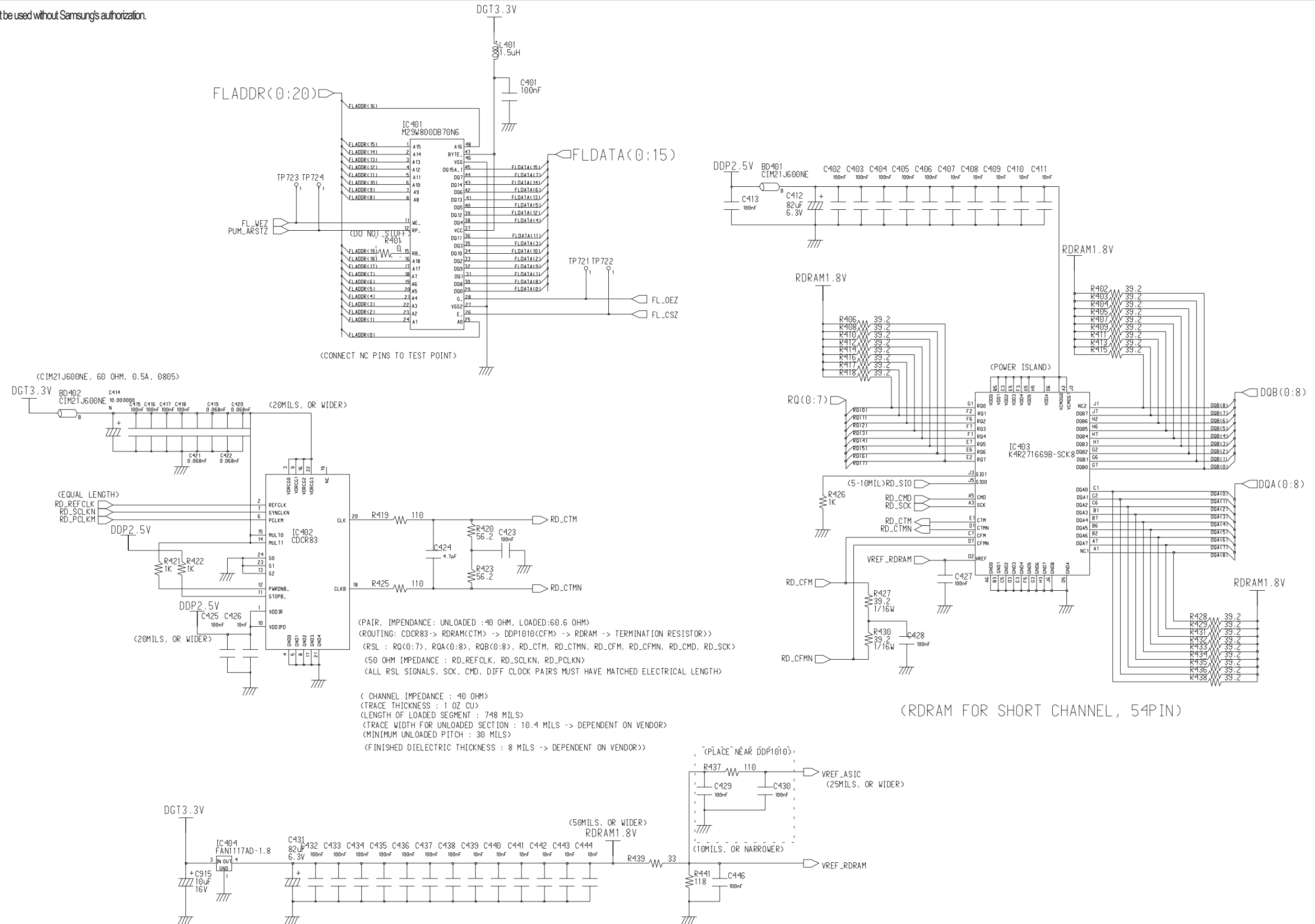






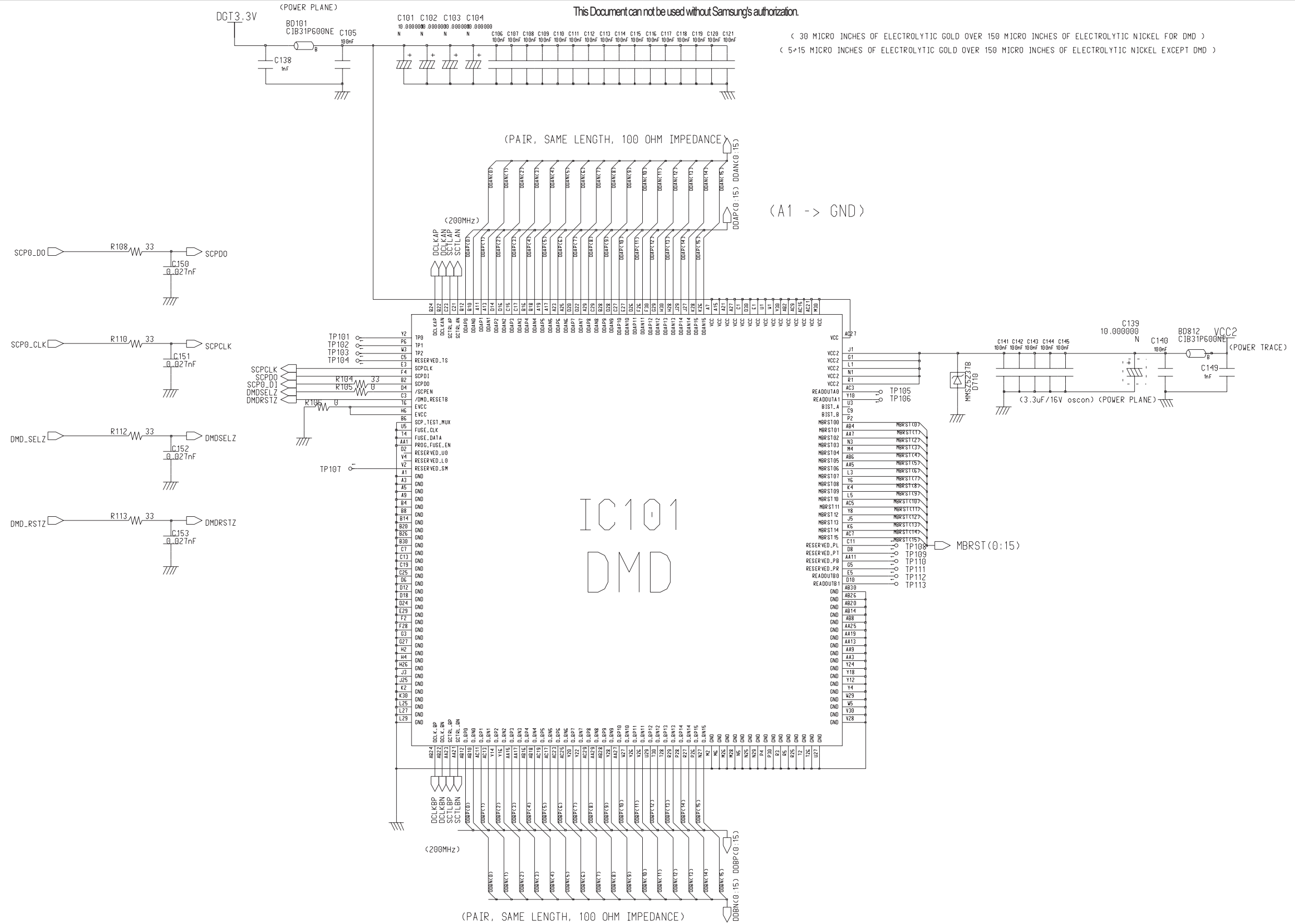
6-3-3 FLASH

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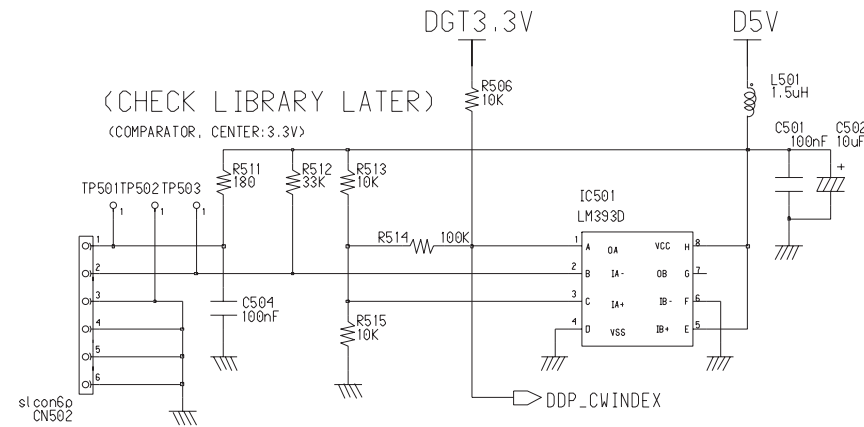
6-3-5 DMD



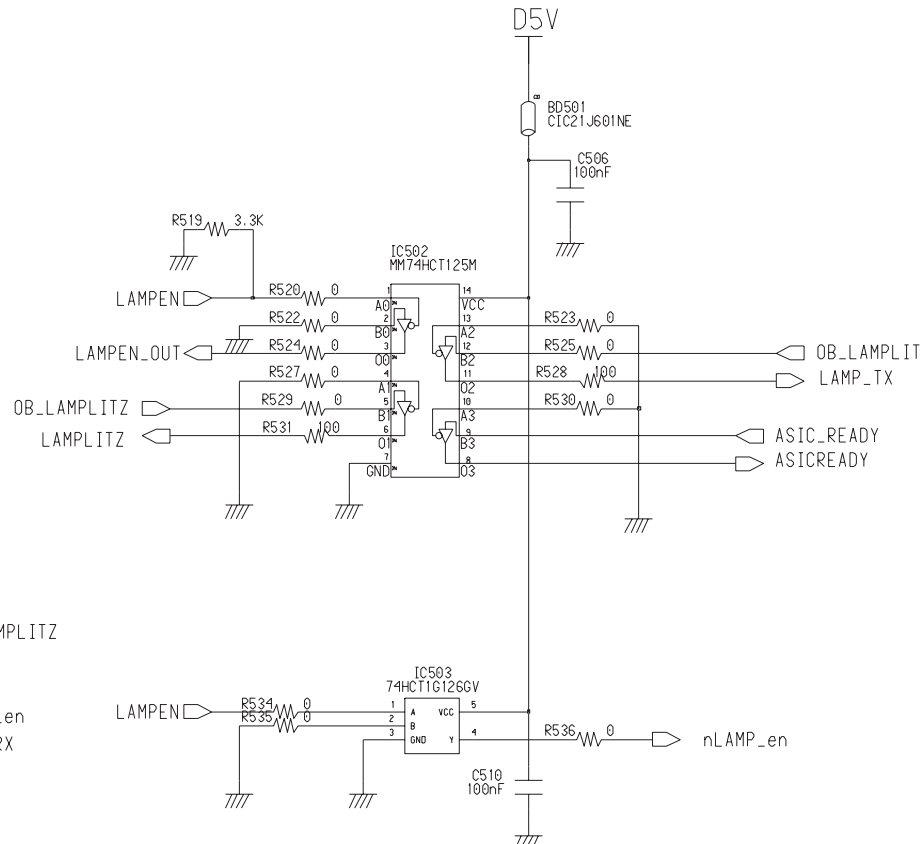
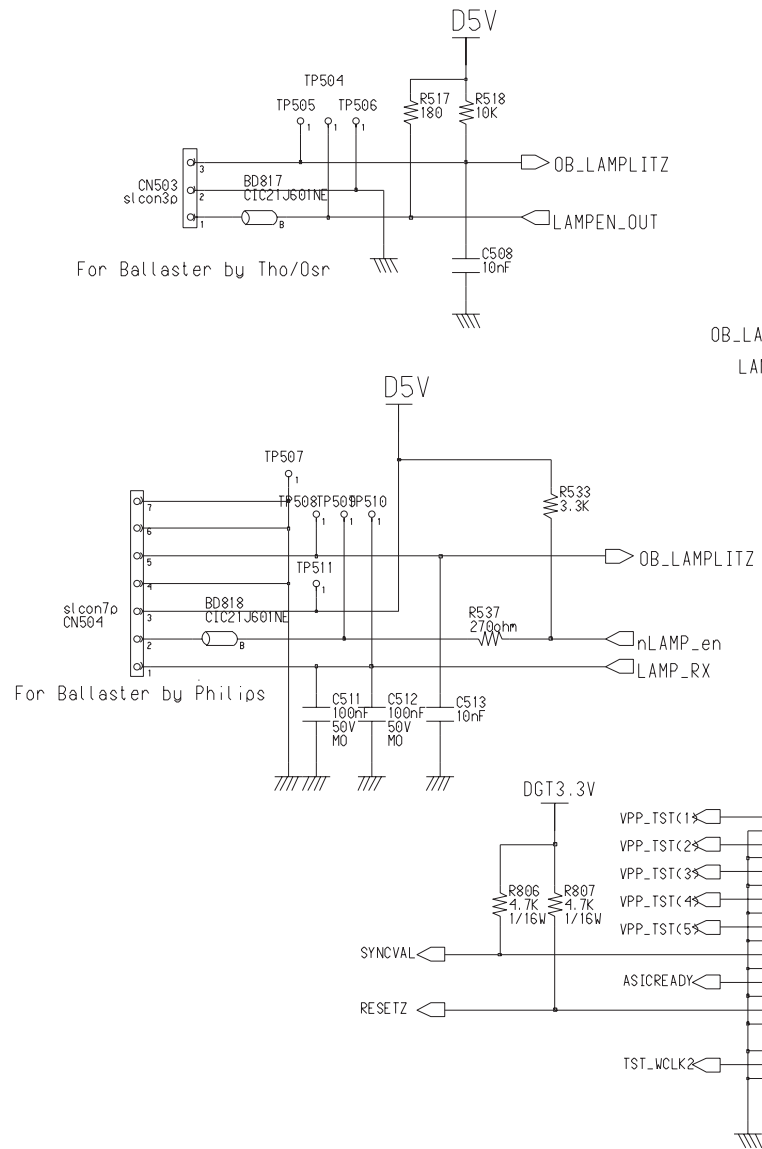
6-3-6 CW

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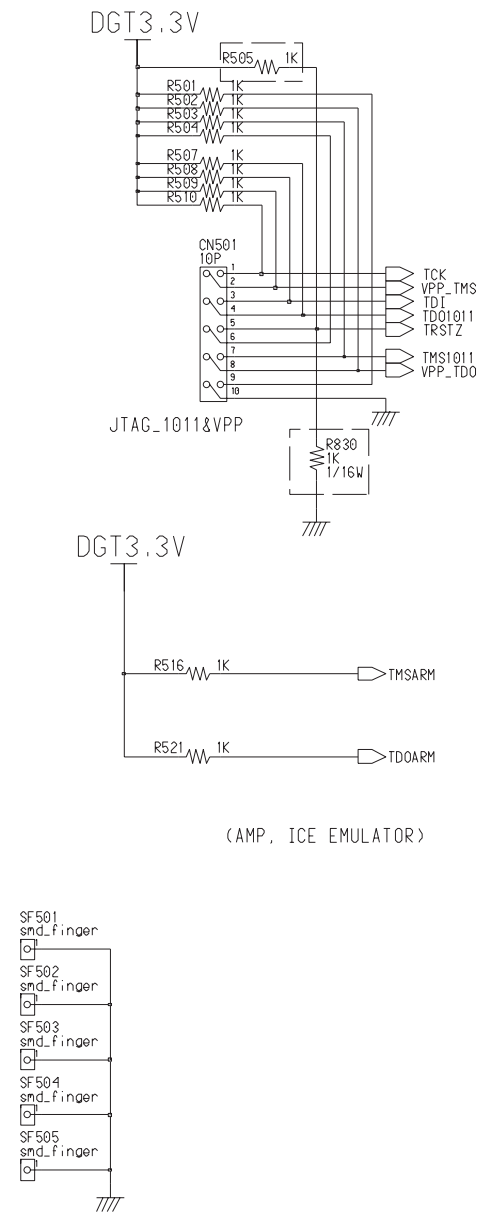
(COLOR WHEEL SENSOR DETECTION)



(LAMP CONTROL)



JTAG Configuration	R505	R830
Normal Operation	Not Installed	Installed
ARM-ICE Debug	Installed	Not Installed



(AMP, ICE EMULATOR)

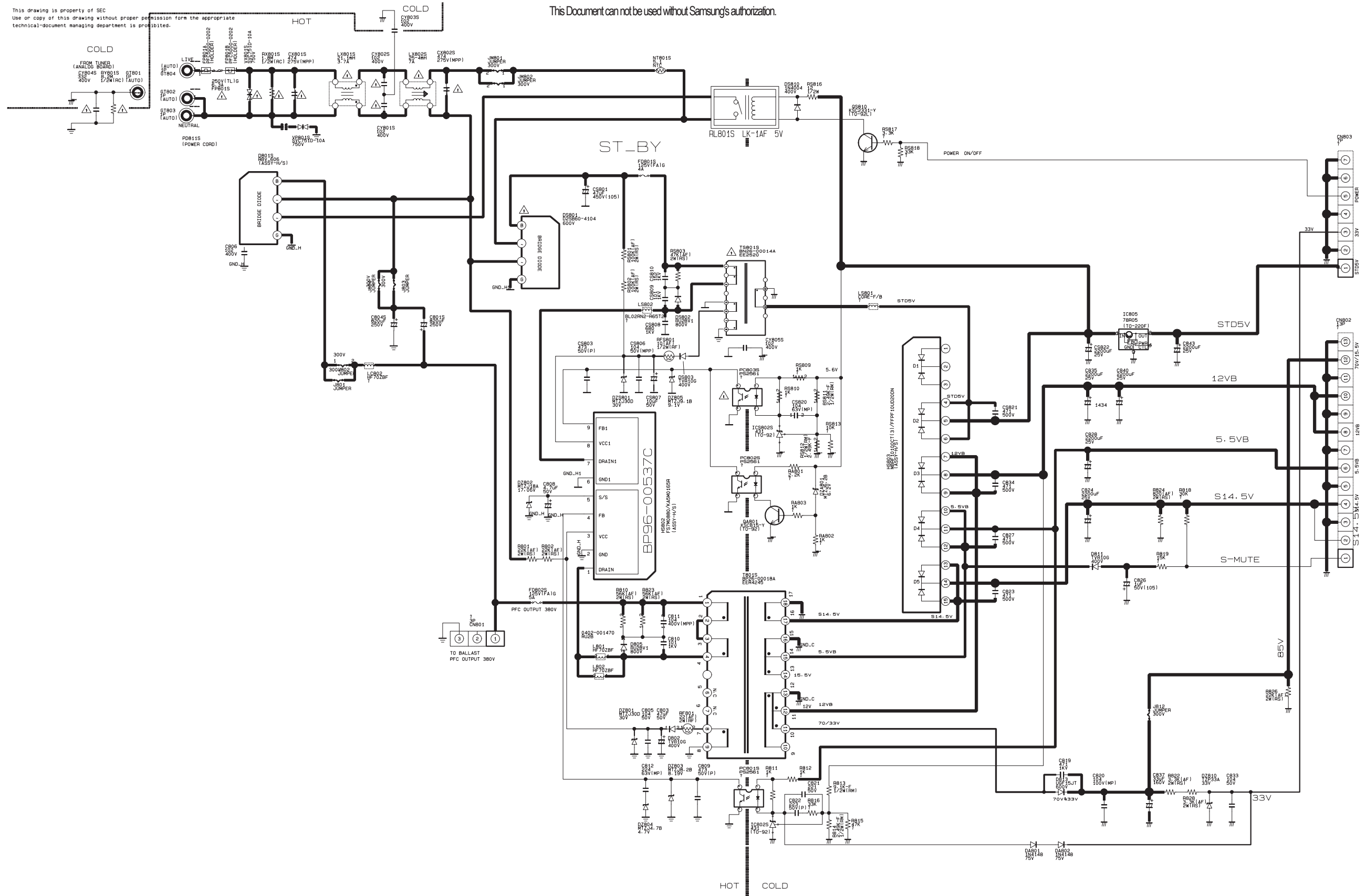






# 6-4 Power & Line Filter

## 6-4-1 Power

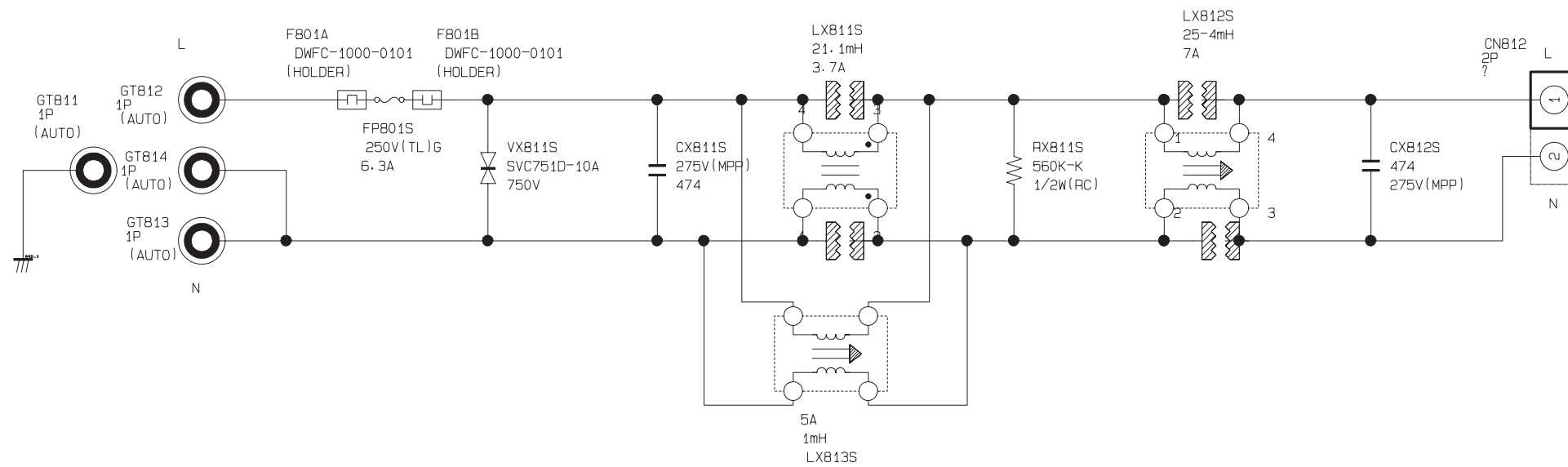


### 6-4-2 Line Filter

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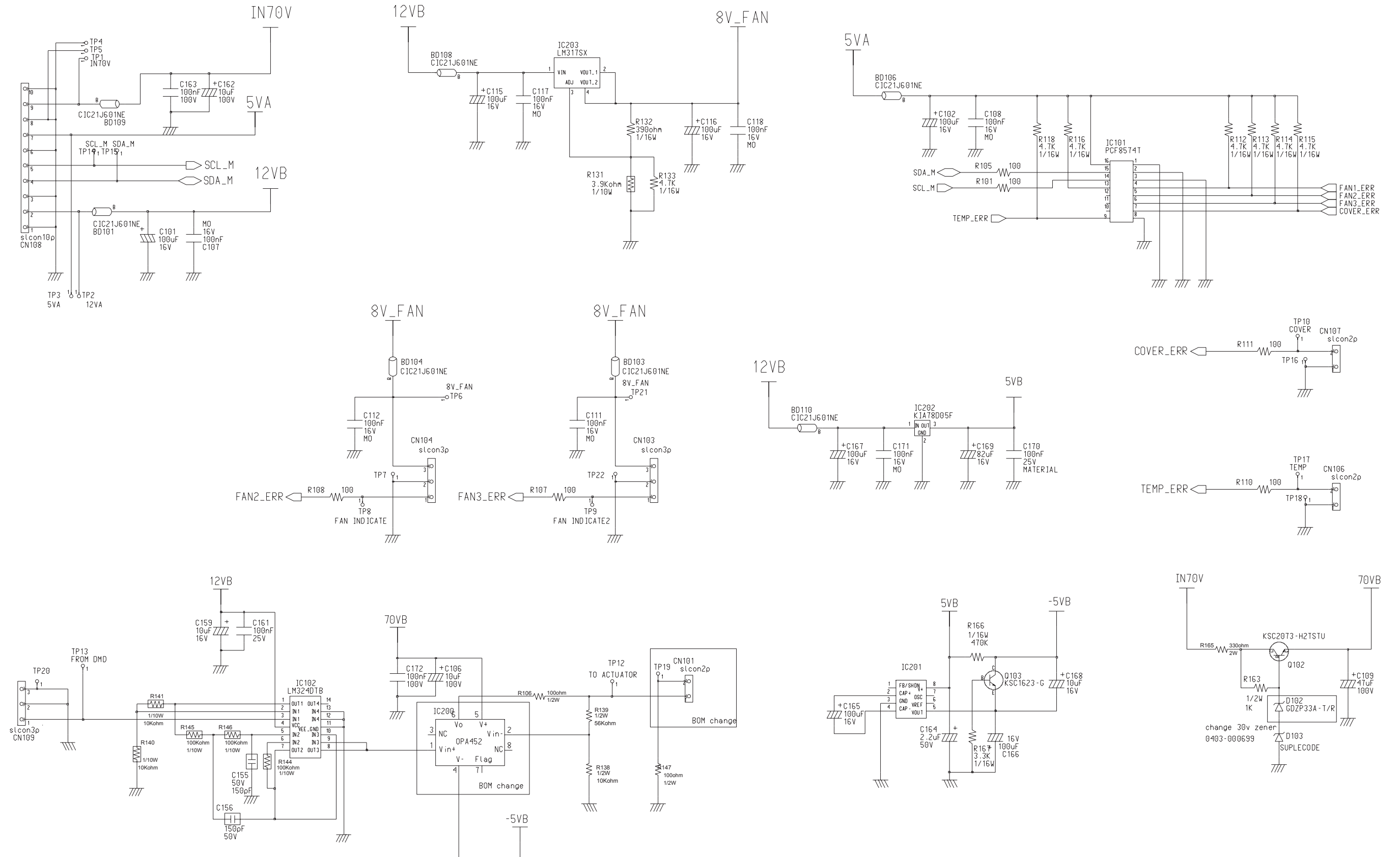
This drawing is property of SEC  
 Use or copy of this drawing without proper permission from the appropriate  
 technical-document managing department is prohibited.

## LINE-FILTER



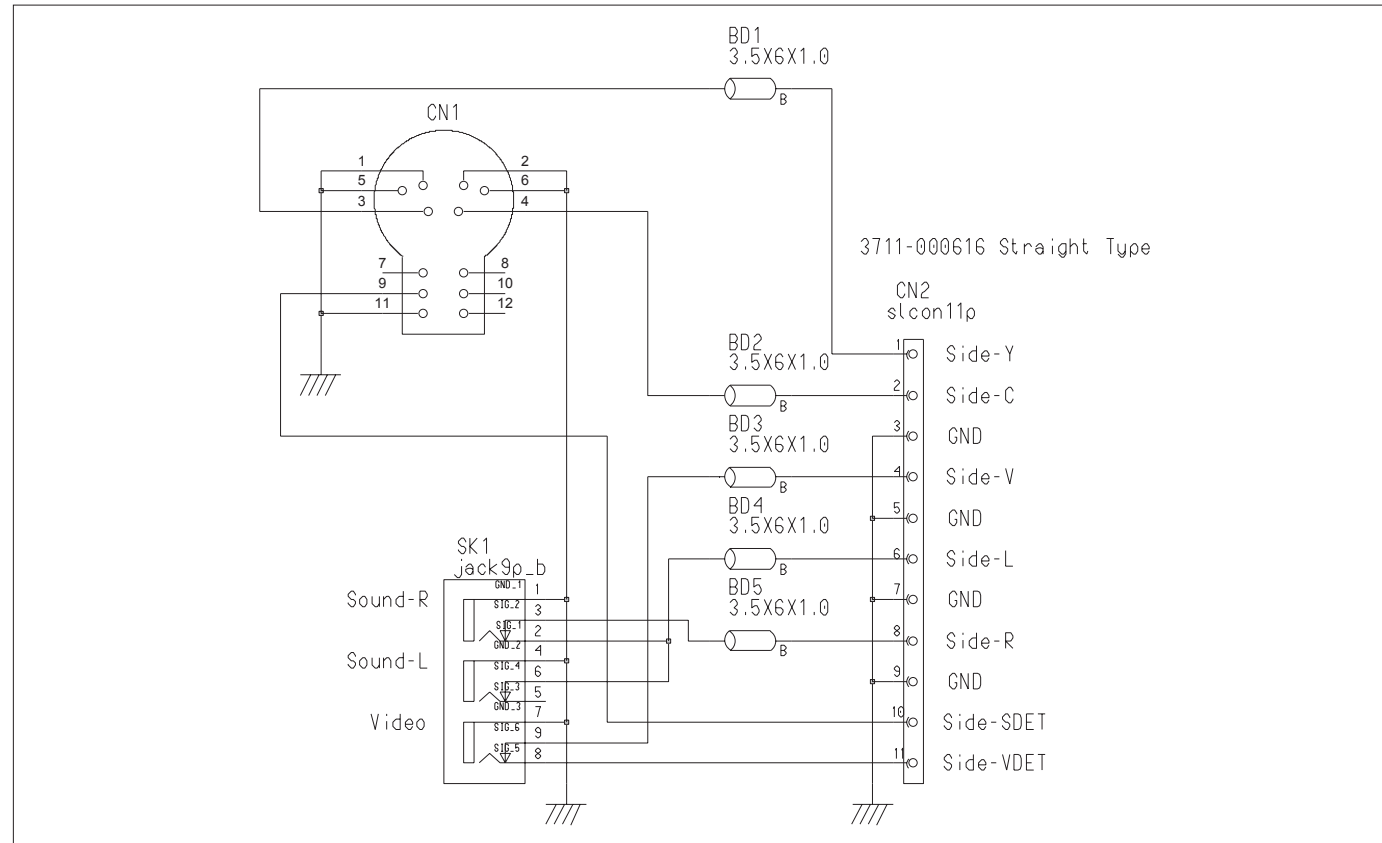
6-5 Actuator Driver/Sub Detector

( SIGNAL FROM ANALOG BOARD ) This Document can not be used without Samsung's authorization.



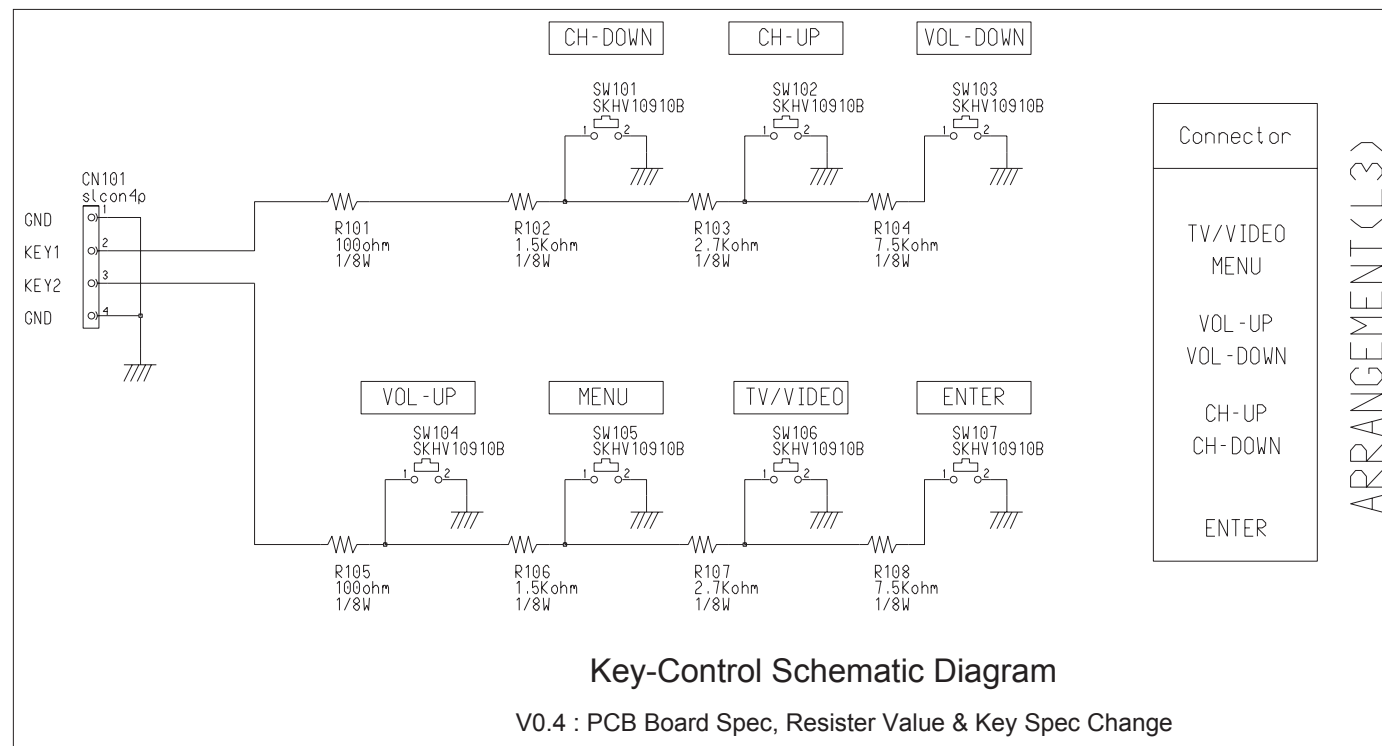
### 6-6 SIDE-AV

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### 6-7 Key Control

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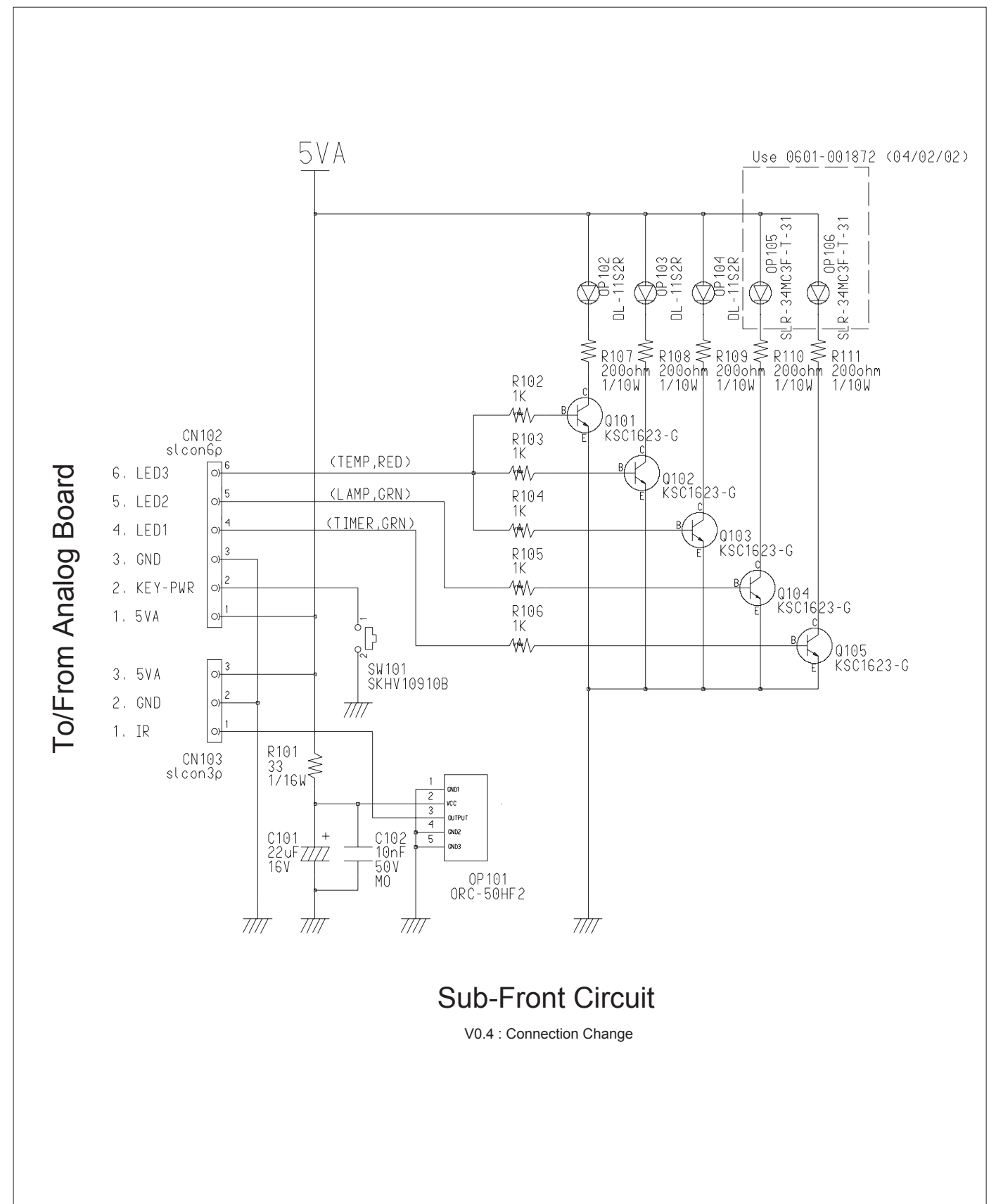


Key-Control Schematic Diagram

V0.4 : PCB Board Spec, Resister Value & Key Spec Change

### 6-8 RMC LED

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Sub-Front Circuit

V0.4 : Connection Change

### 6-9 Ballast

