

TOSHIBA

FILE NO. 810-200896GR

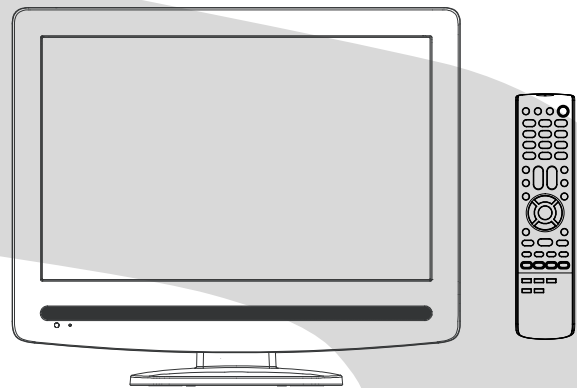
SERVICE MANUAL



19-inch Diagonal LCD TV/DVD COMBINATION

19DV550P

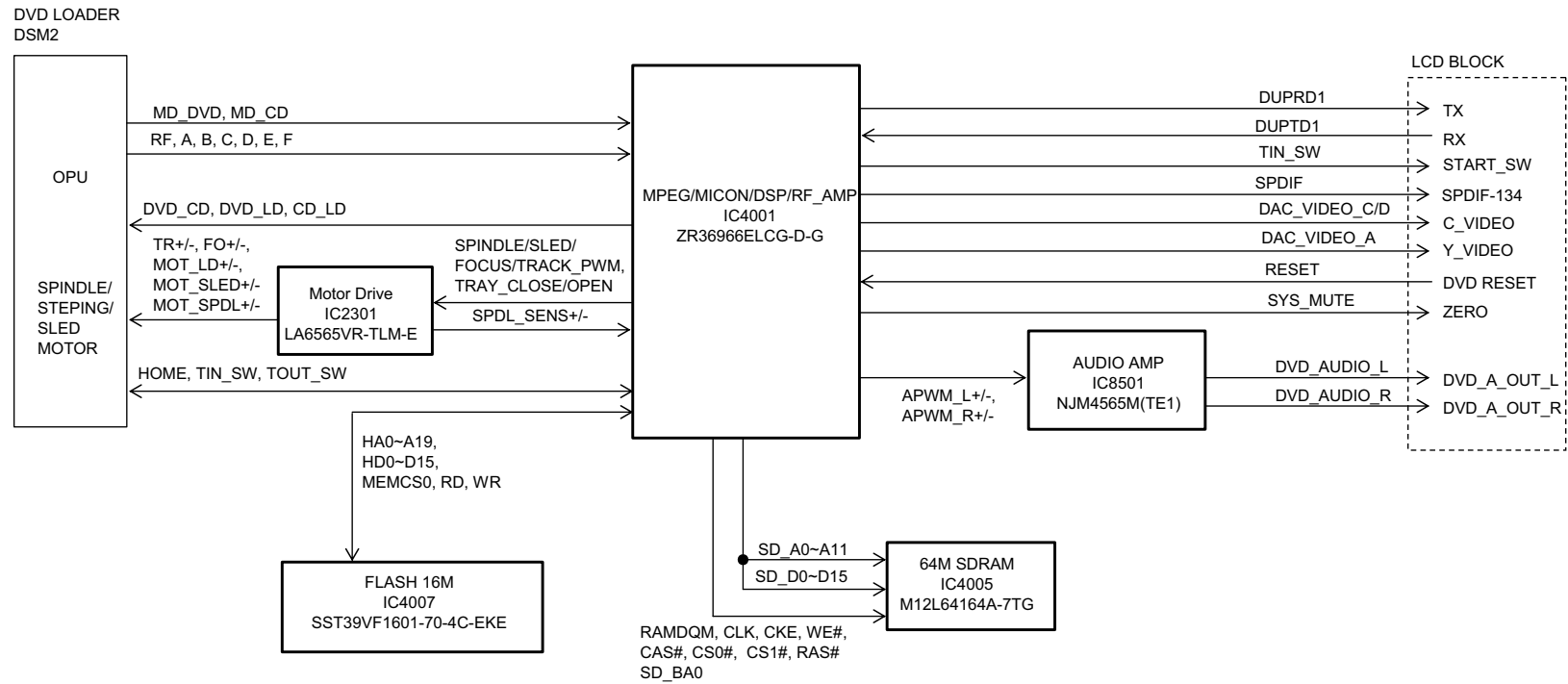
19DV551P



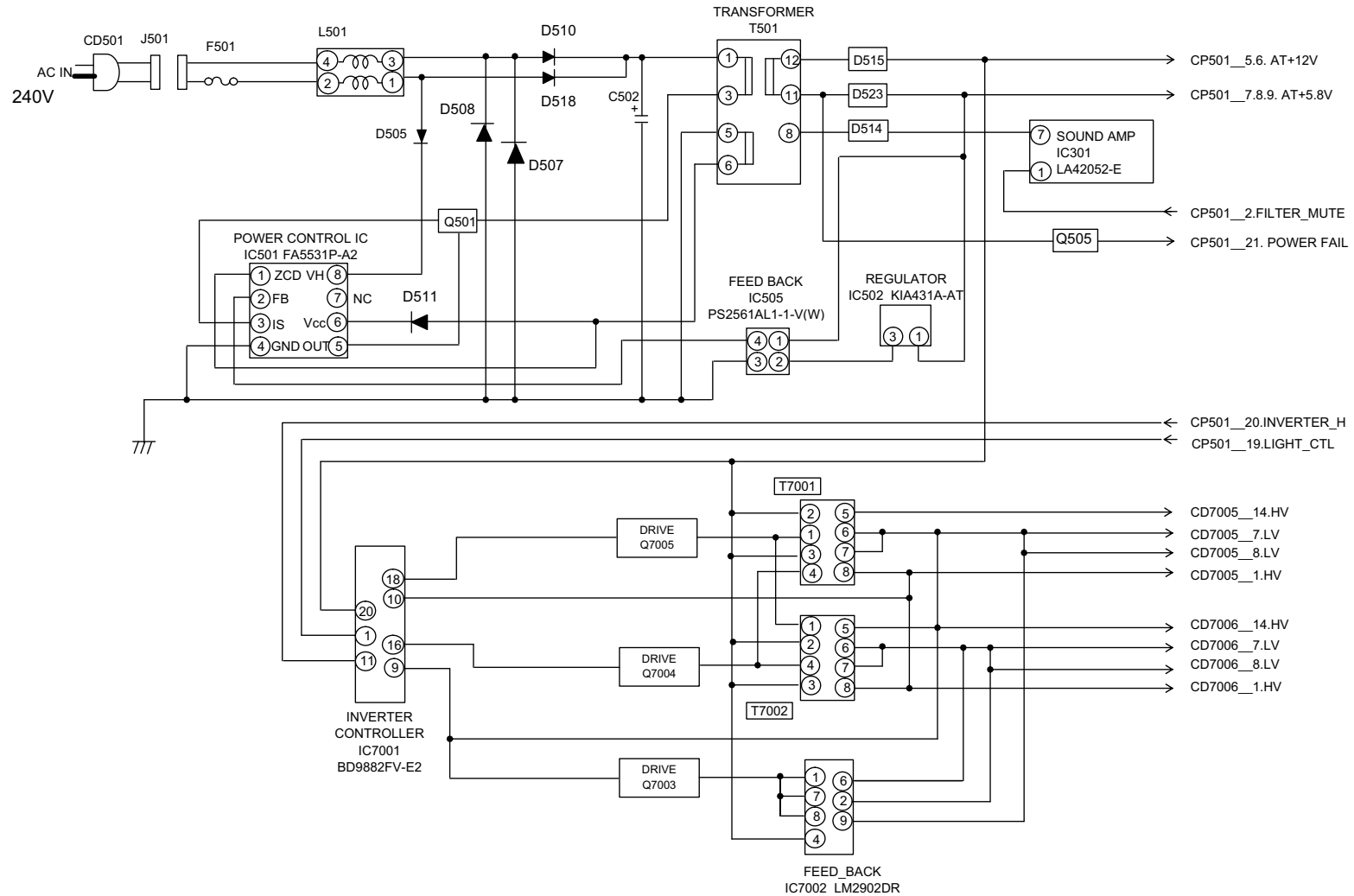
The above models are classified as green products (*1), as indicated by the underlined serial numbers. This Service Manual describes replacement parts for the green products. When repairing these green product(s), use the part(s) described in this manual and lead-free solder (*2).

For (*1) and (*2), see the next page.

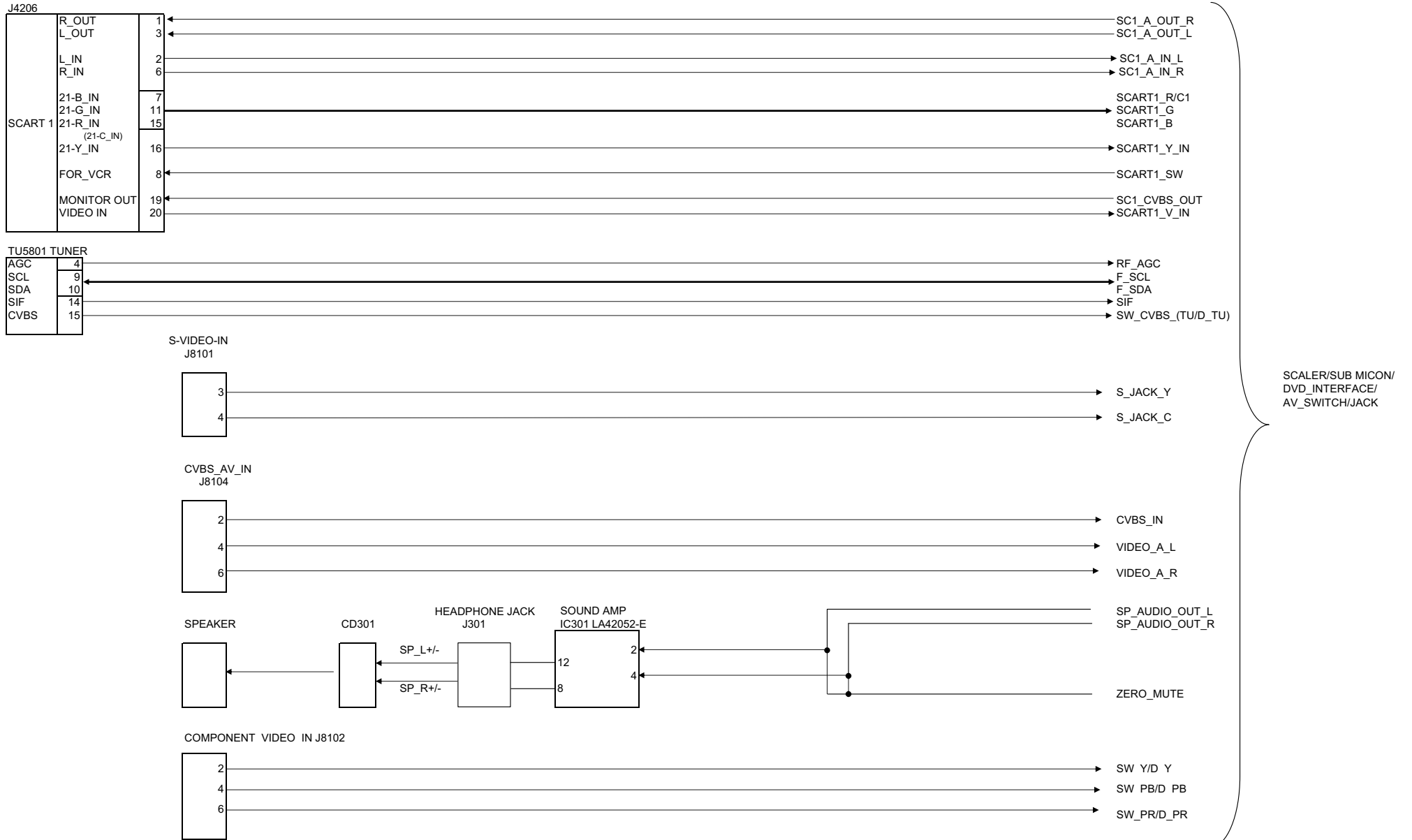
DVD BLOCK DIAGRAM



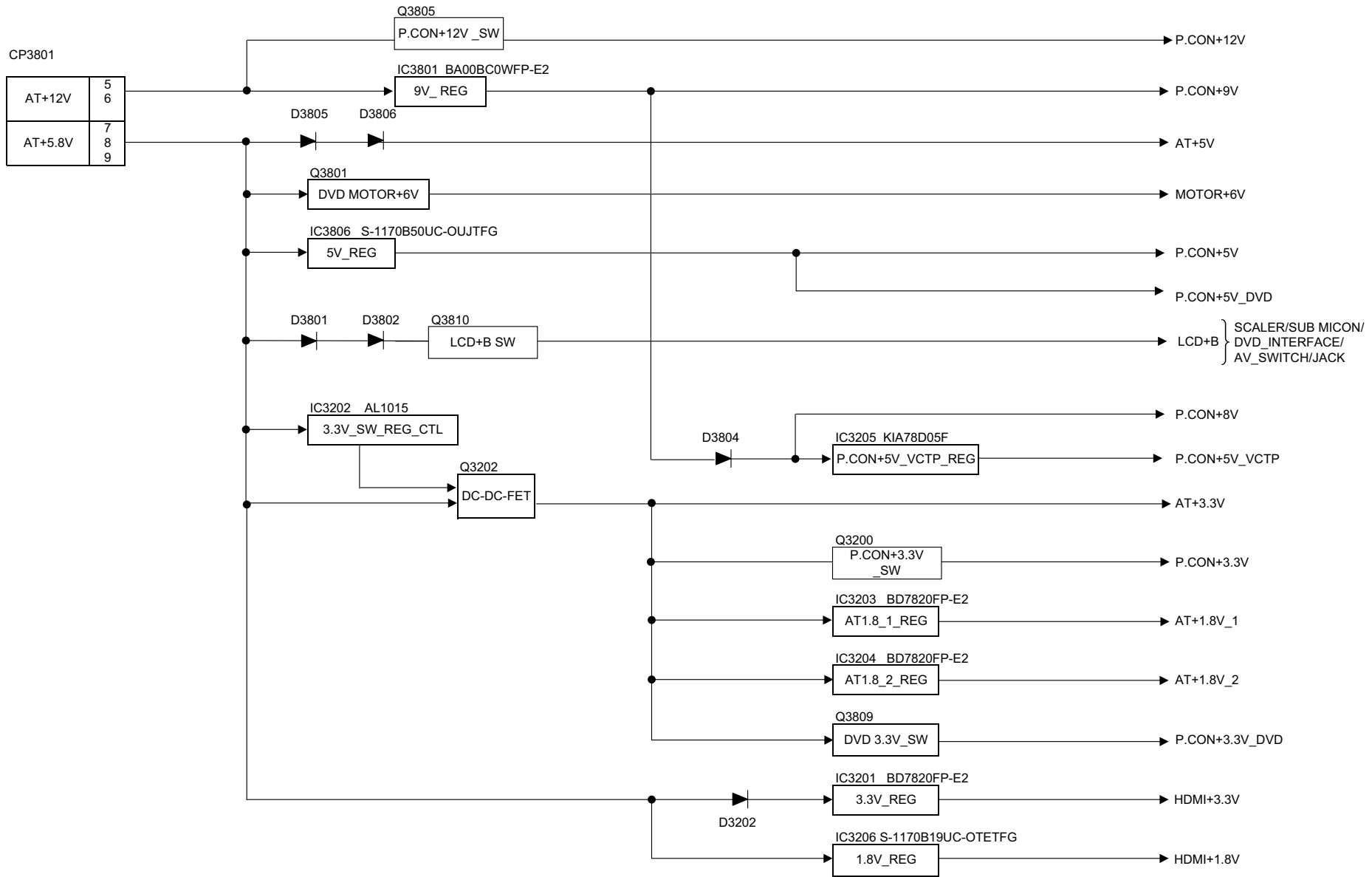
POWER BLOCK DIAGRAM



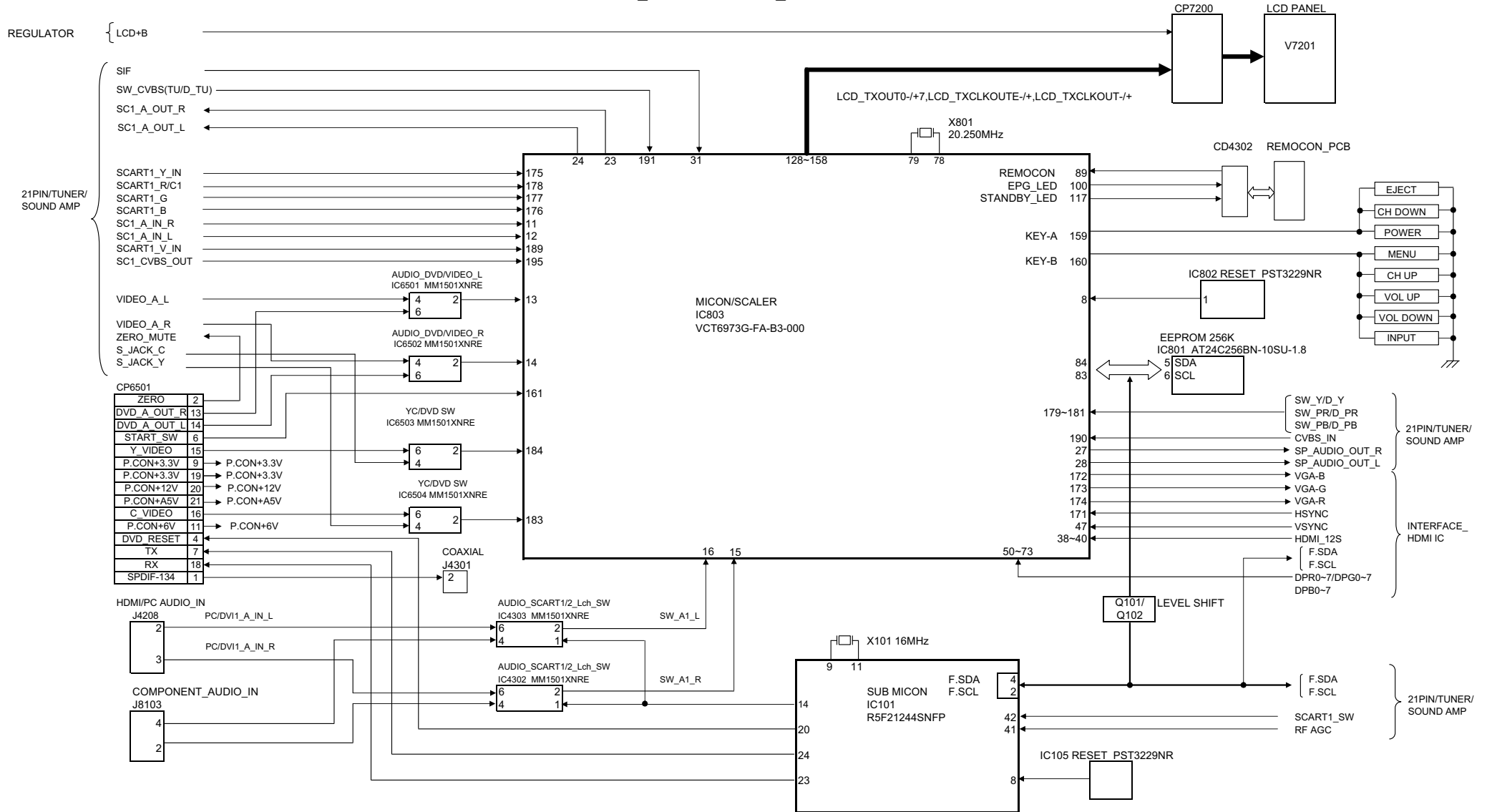
21PIN/TUNER /SOUND AMP BLOCK DIAGRAM



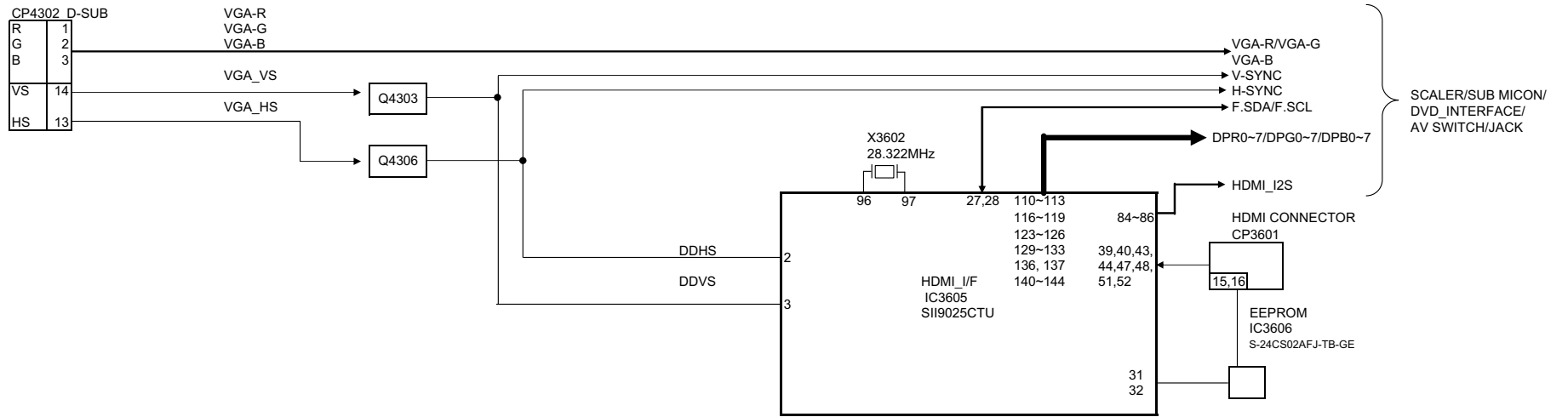
REGULATOR BLOCK DIAGRAM



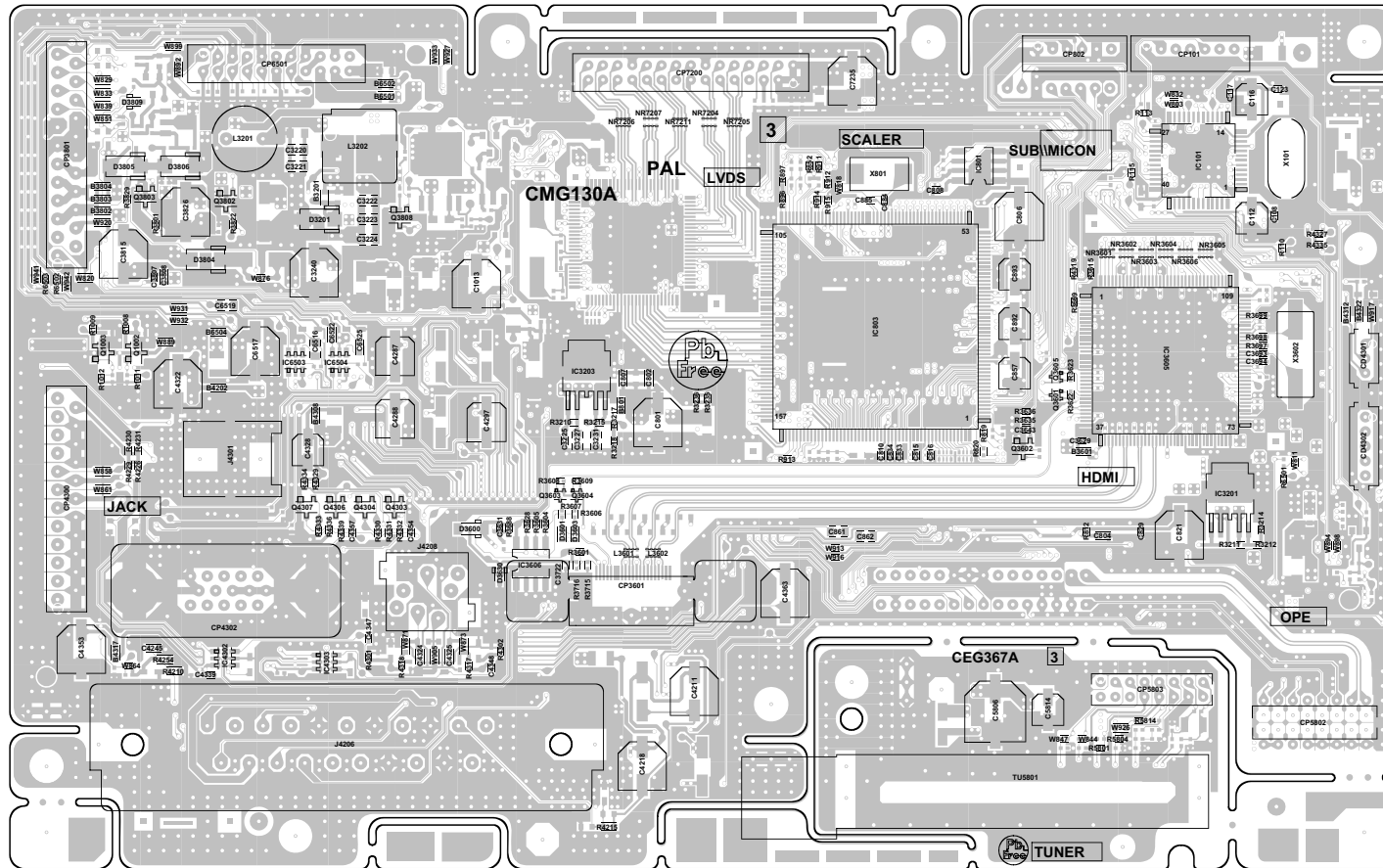
SCALER/SUB MICON/DVD_INTERFACE/AV_SWITCH/JACK BLOCK DIAGRAM



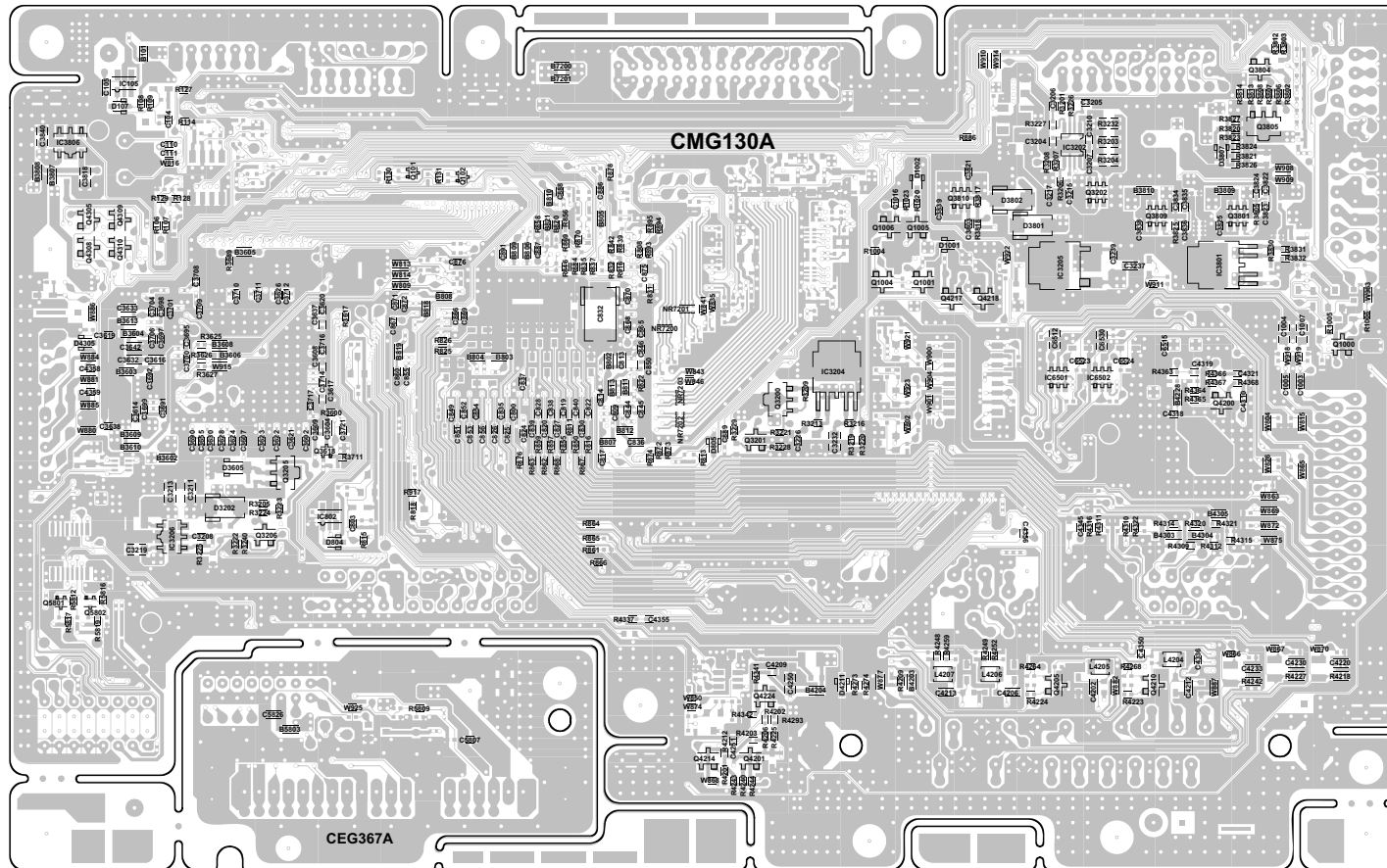
INTERFACE_HDMI IC BLOCK DIAGRAM



PRINTED CIRCUIT BOARDS MAIN/TUNER (TOP SIDE)

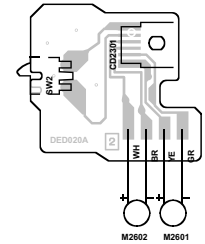
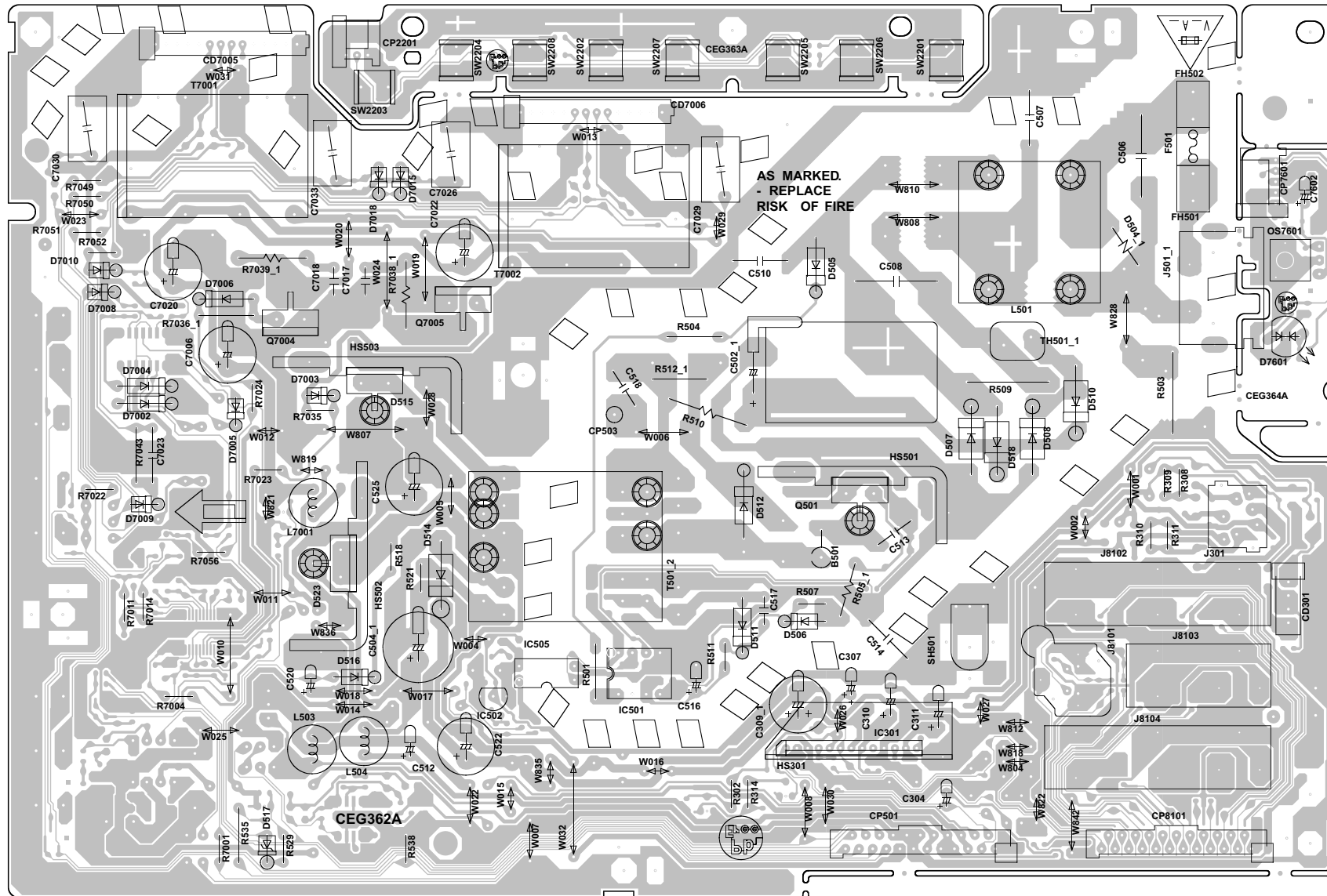


PRINTED CIRCUIT BOARDS
MAIN/TUNER (BOTTOM SIDE)

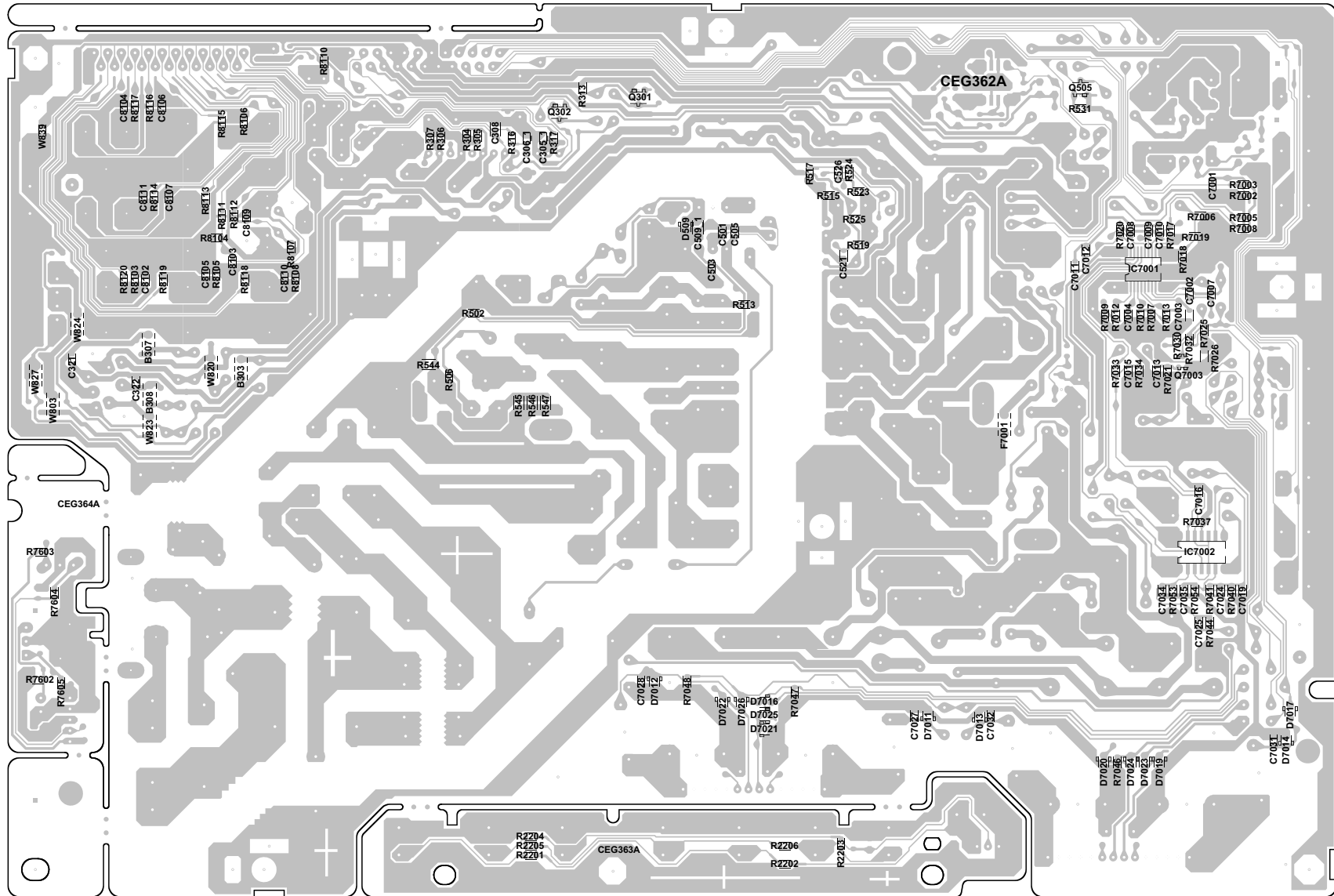


PRINTED CIRCUIT BOARDS
POWER/OPERATION/REMOCON (INSERTED PARTS)
SOLDER SIDE

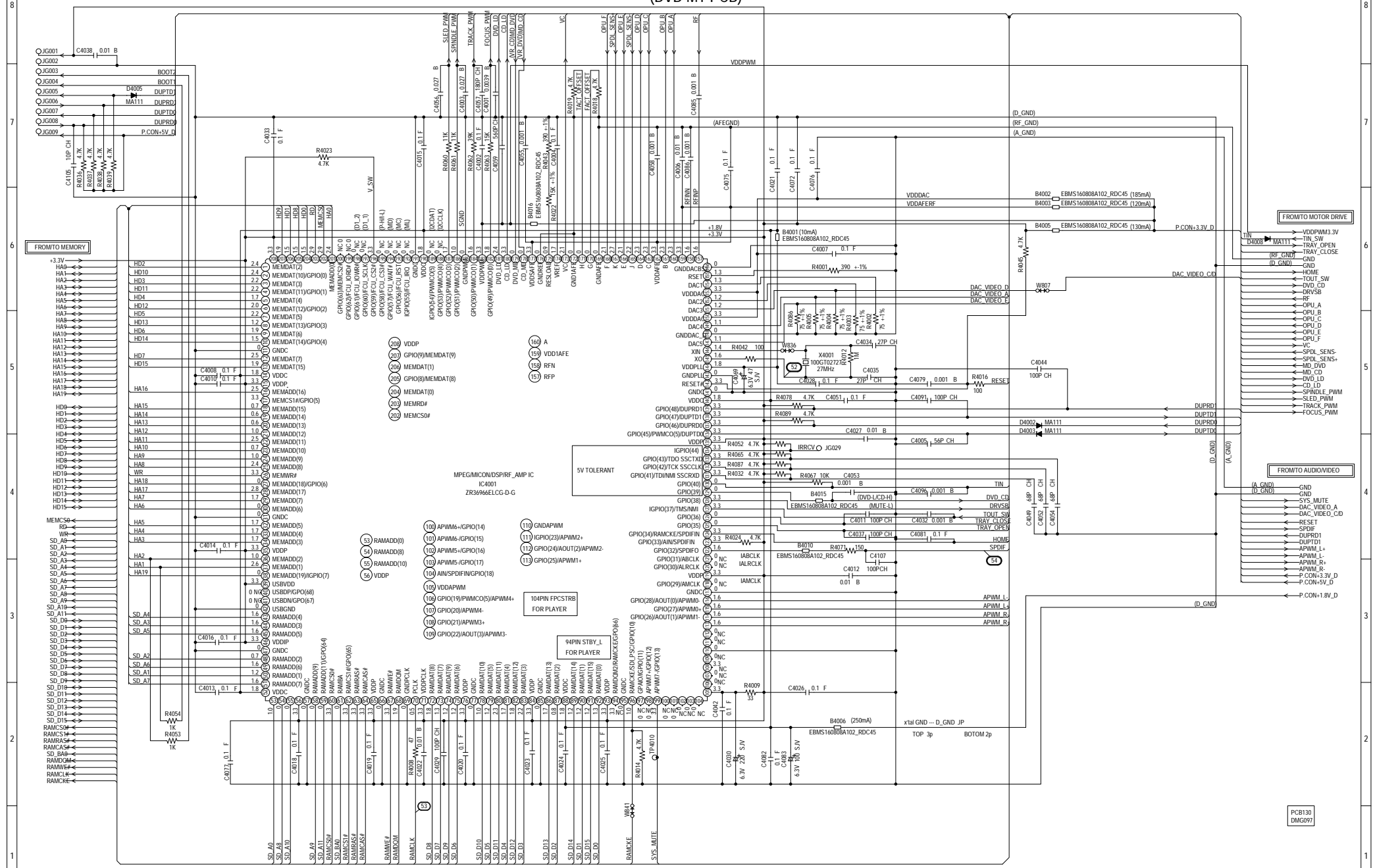
SW
SOLDER SIDE



**PRINTED CIRCUIT BOARDS
POWER/OPERATION/REMOCON (CHIP MOUNTED PARTS)
SOLDER SIDE**



MPEG/MICON/DSP/RF_AMP SCHEMATIC DIAGRAM (DVD MT PCB)

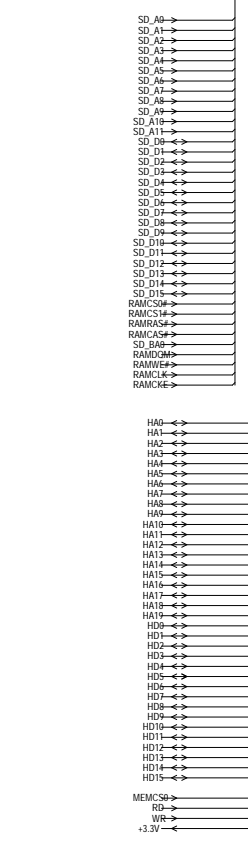


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

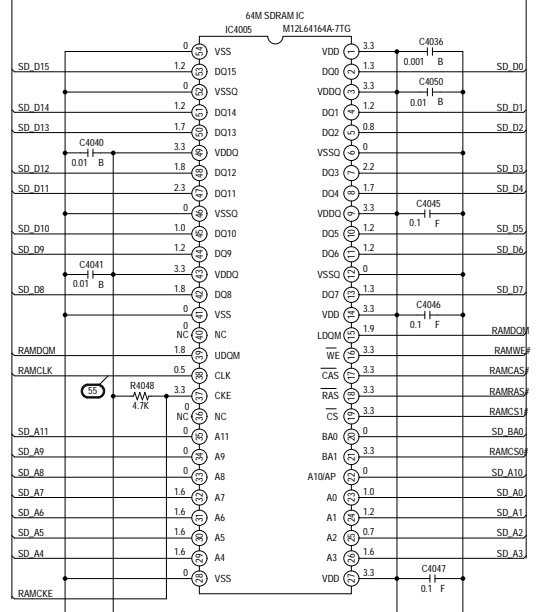
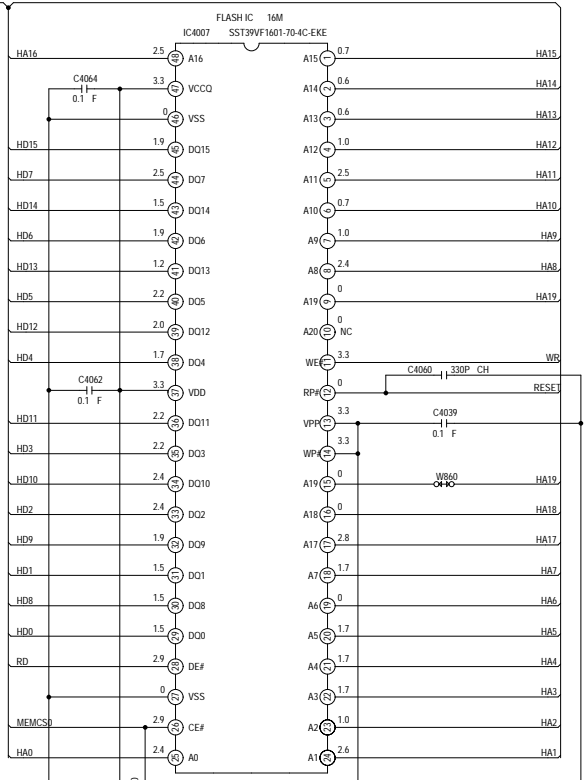
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

MEMORY SCHEMATIC DIAGRAM (DVD MT PCB)

FROM/TO MPEG/MICRO/DSP/RF_AMP



FROM AUDIO/VIDEO
RESET
P.CON+3.3V_D
GNB_GND

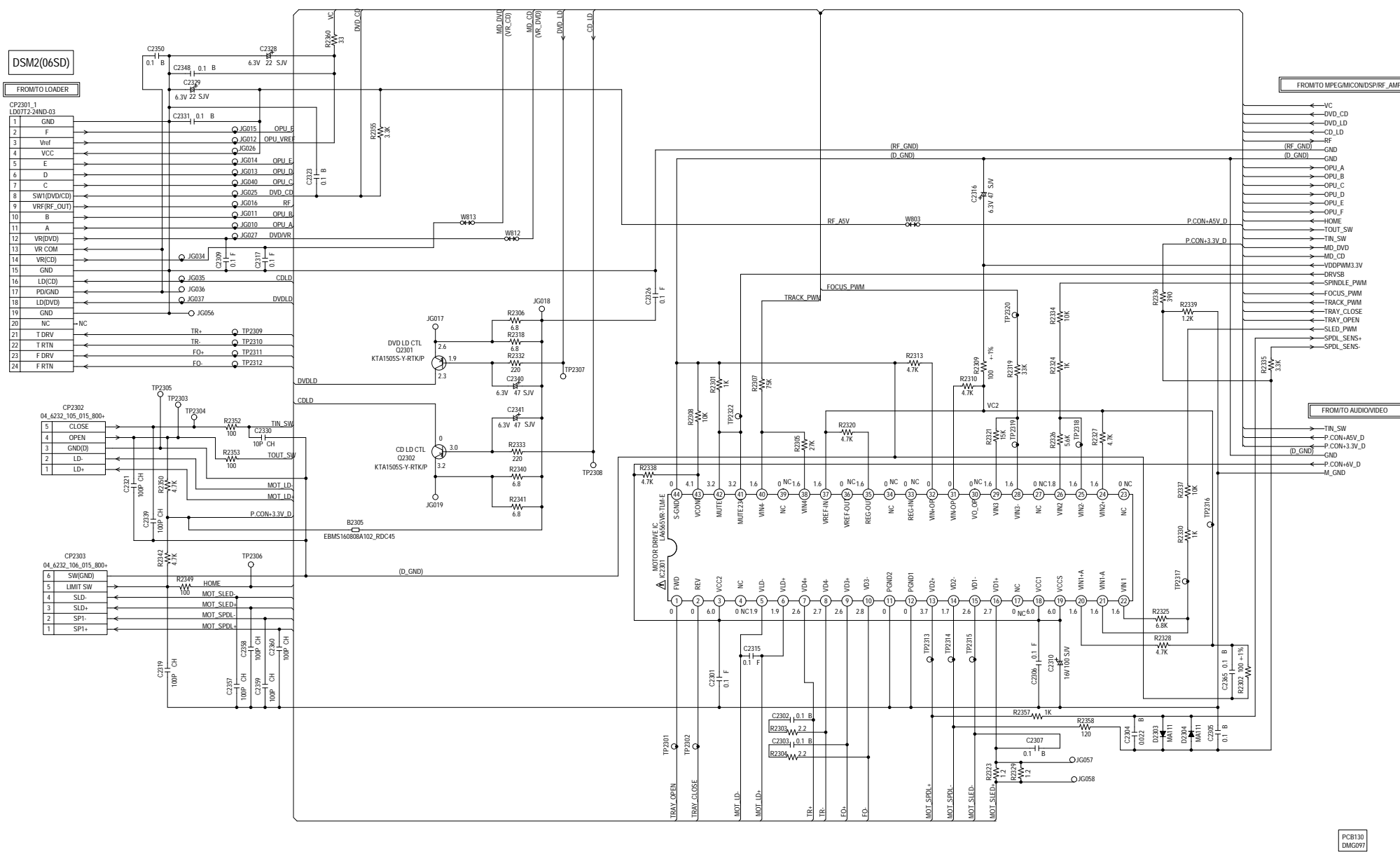


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

PCB130
DMG097

MOTOR DRIVE SCHEMATIC DIAGRAM (DVD MT PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

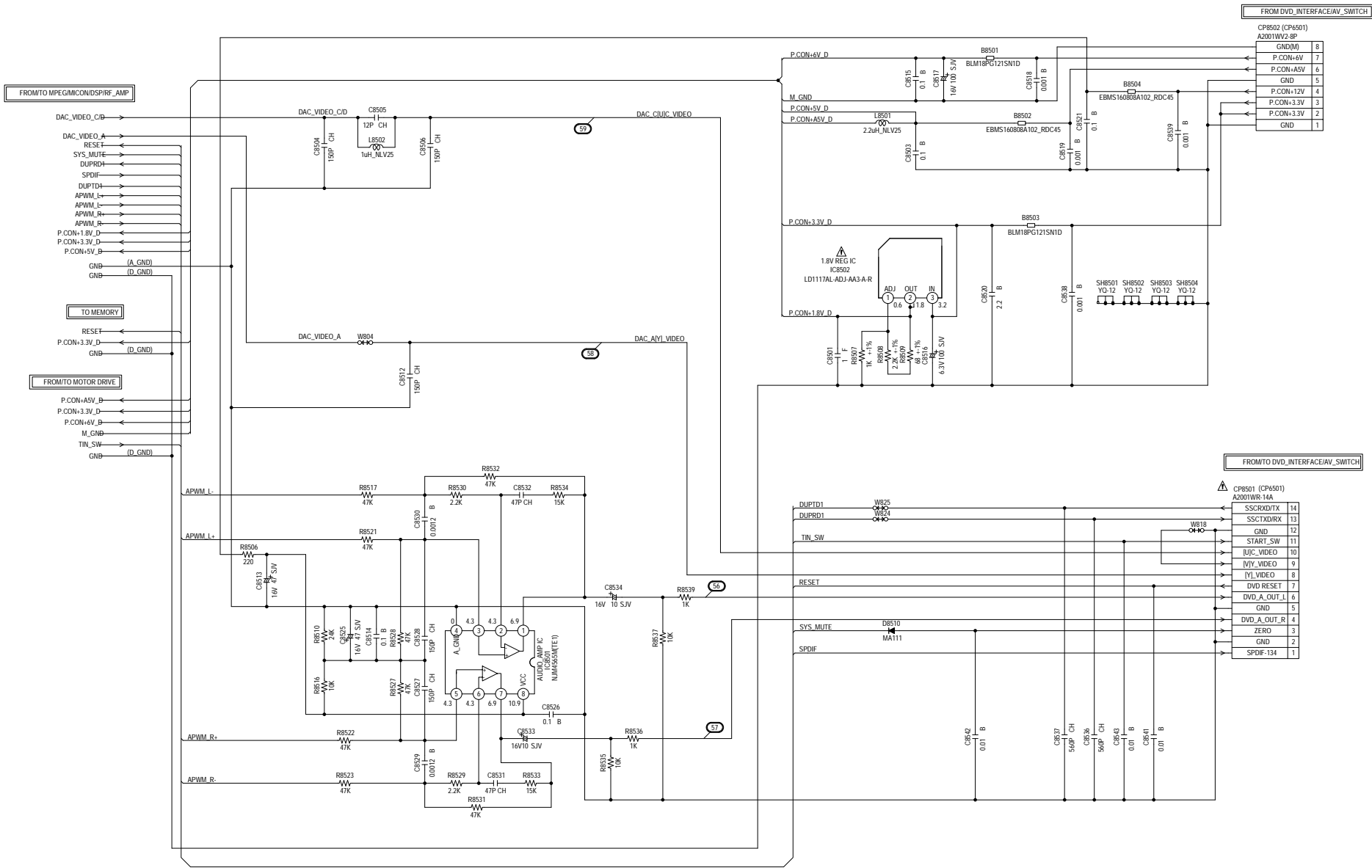
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLES DECRITES DANS LA NOMENCLATURE DES PIÈCES

PCB130 DMG097

AUDIO/VIDEO SCHEMATIC DIAGRAM (DVD MT PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

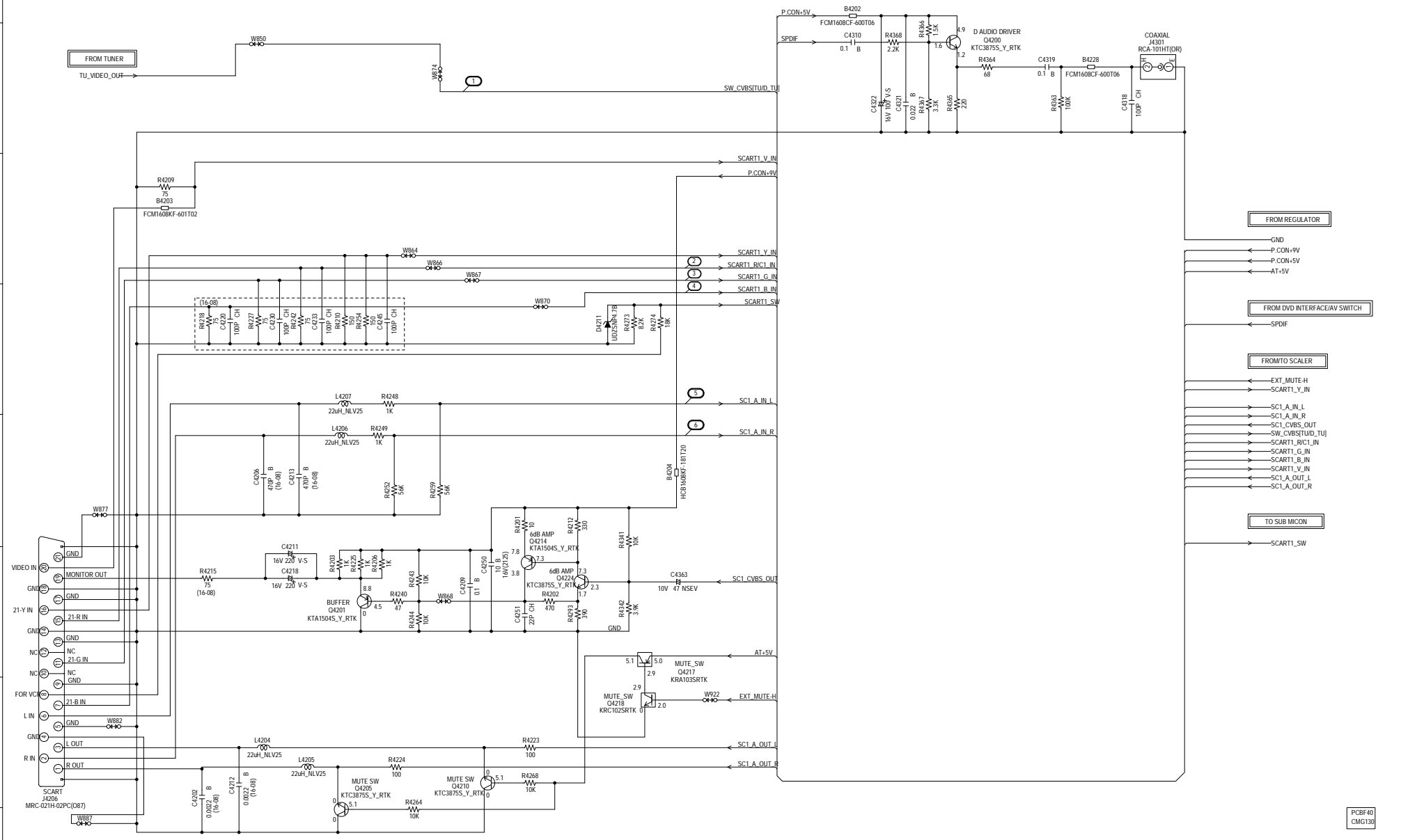
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES

PCB130
DMG091

21PIN SCHEMATIC DIAGRAM (MAIN PCB)

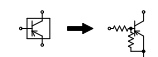
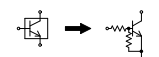


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

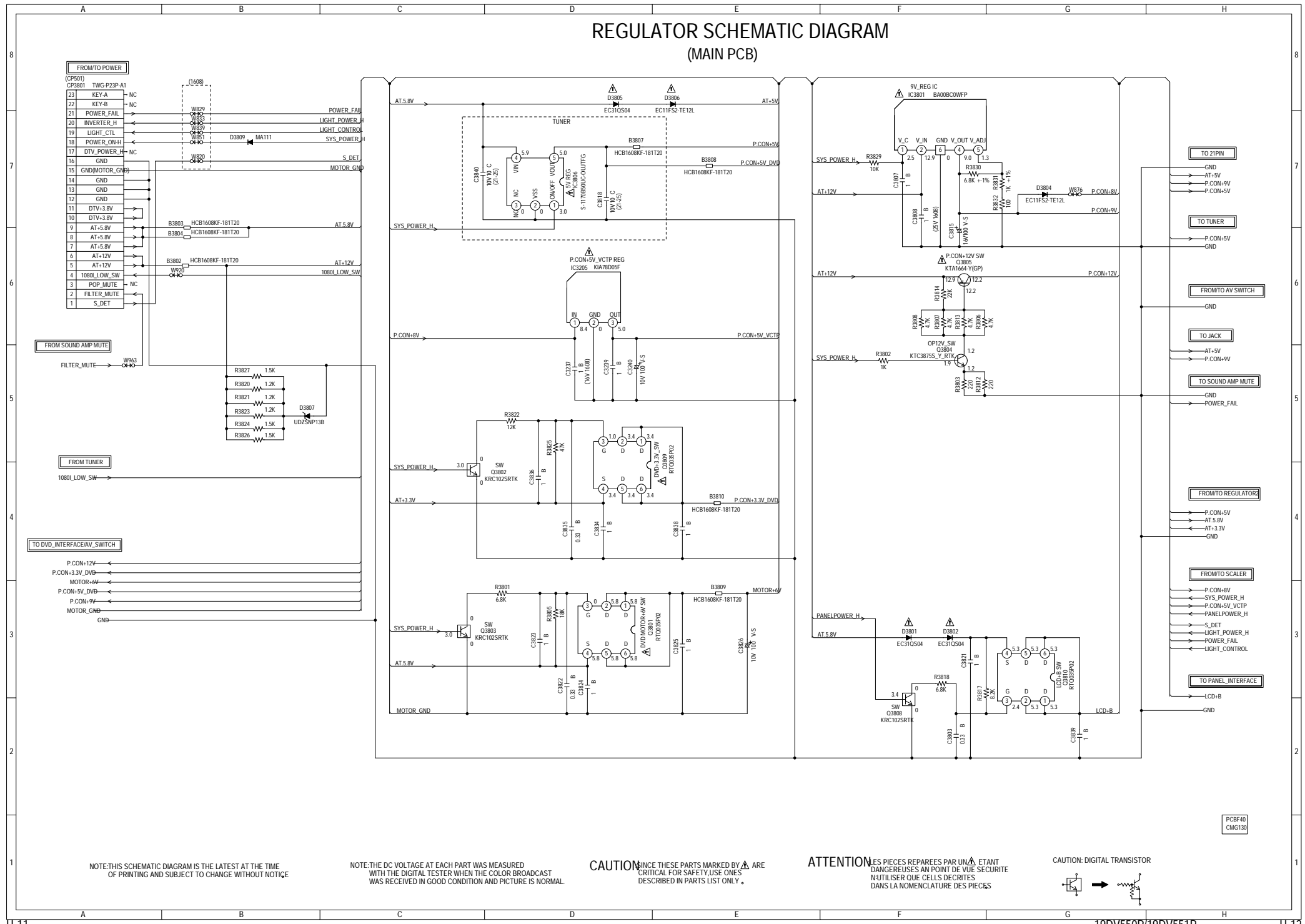
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR



REGULATOR SCHEMATIC DIAGRAM (MAIN PCB)



FROM/TO POWER

CP501	TWG-P23P-A1
23	KEY-A
22	KEY-B
21	POWER_FAIL
20	INVERTER_H
19	LIGHT_CTL
18	POWER_ON-H
17	DTV_POWER_H
16	GND
15	GND(MOTOR_GND)
14	GND
13	GND
12	GND
11	DTV+3.8V
10	AT+3.8V
9	AT+5.8V
8	AT+5.8V
7	AT+5.8V
6	AT+12V
5	AT+12V
4	1080I_LOW_SW
3	POP_MUTE
2	FILTER_MUTE
1	S_DET

FROM SOUND AMP MUTE

W963	FILTER_MUTE
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FROM TUNER

1080I_LOW_SW	
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TO DVD_INTERFACE/AV_SWITCH

P.CON+12V	
P.CON+3.3V_DVD	
MOTOR+5V	
P.CON+5V_DVD	
P.CON+9V	
MOTOR_GND	
GND	

TO 21PIN

GND	
AT+5V	
P.CON+9V	
P.CON+5V	

TO TUNER

P.CON+5V	
GND	

FROM/TO AV SWITCH

GND	
TO JACK	
AT+5V	
P.CON+9V	

TO SOUND AMP MUTE

GND	
POWER_FAIL	

FROM/TO REGULATOR

P.CON+5V	
AT+5.8V	
AT+3.3V	
GND	

FROM/TO SCALER

P.CON+8V	
SYS_POWER_H	
P.CON+5V_VCTP	
PANELPOWER_H	
POWER_FAIL	
LIGHT_POWER_H	
LIGHT_CONTROL	

TO PANEL_INTERFACE

LCD-B	
GND	

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL

CAUTION SINCE THESE PARTS MARKED WITH Δ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

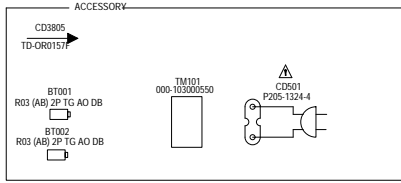
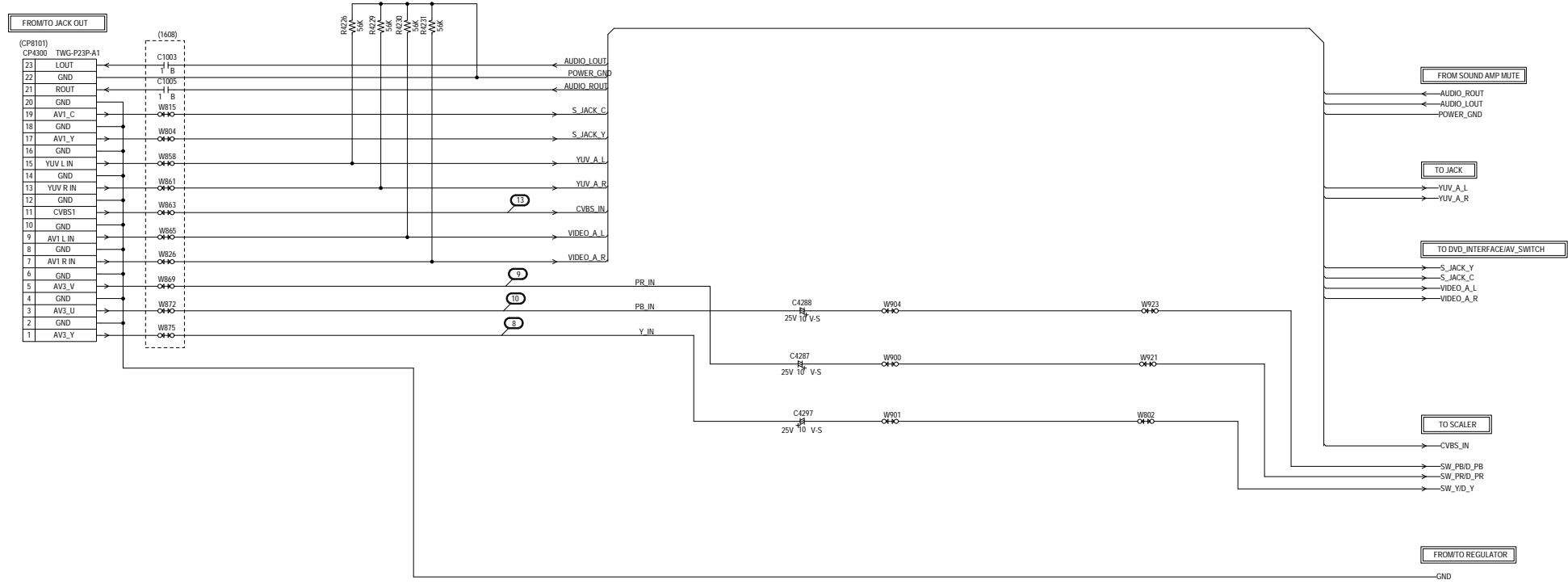
ATTENTION LES PIÈCES RÉPARÉES PAR UN Δ ÉTANT DANGEREUSES AN POINT DE VUE SECURITE UTILISER QUE CELLES DECRITES DANS LA NOMENCLATURE DES PIÈCES

CAUTION: DIGITAL TRANSISTOR



PCBF40
CMG130

AV SWITCH SCHEMATIC DIAGRAM (MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

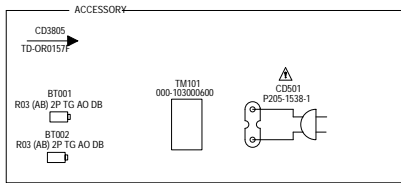
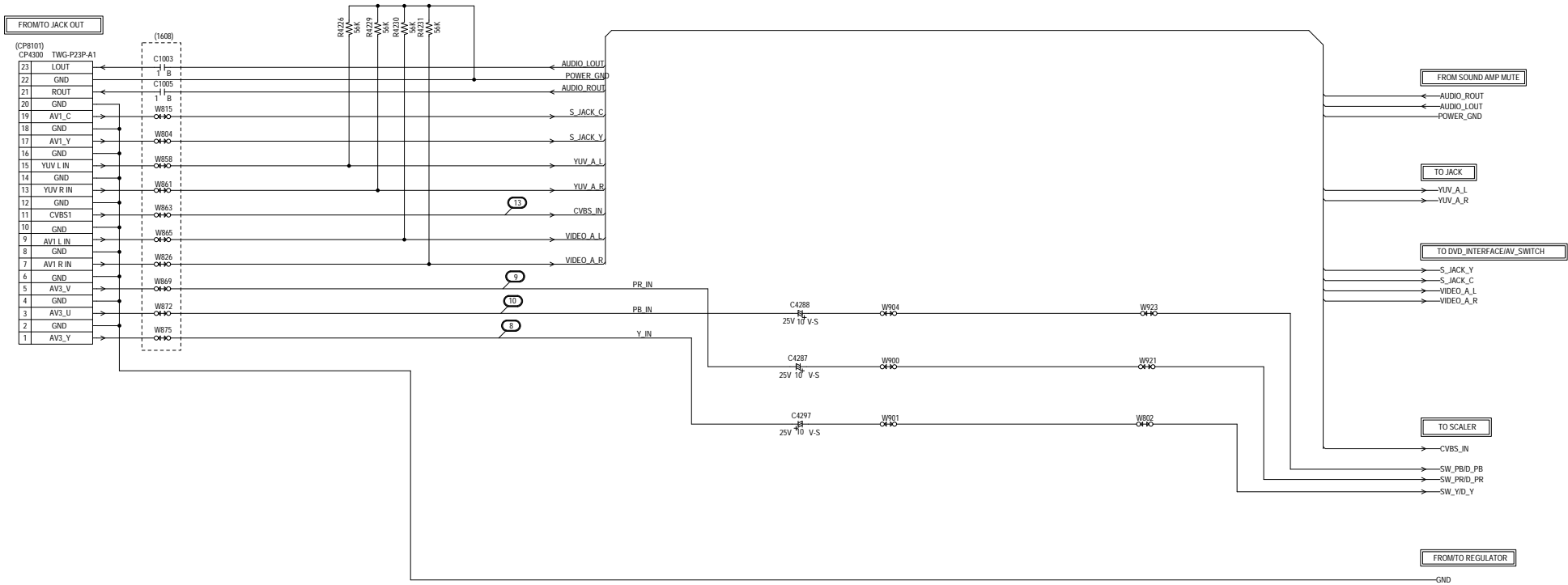
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION LES PIECES REPARÉES PAR UN ETANT DANGEREUSES AN POINT DE VUE SECURITE UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES

PCBF40
CMG130

AV SWITCH SCHEMATIC DIAGRAM (MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

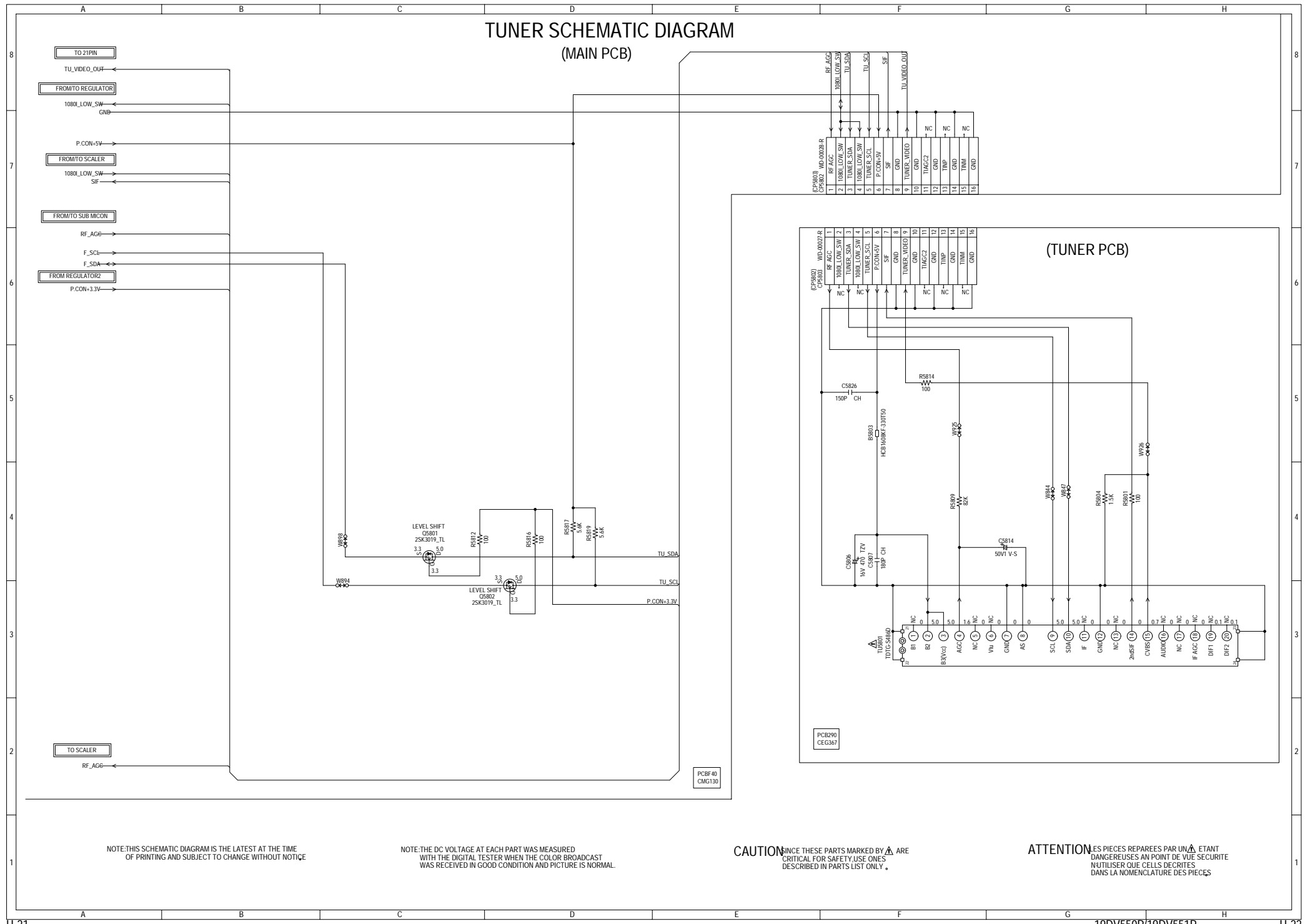
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

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PCBF40
CMG130

TUNER SCHEMATIC DIAGRAM (MAIN PCB)



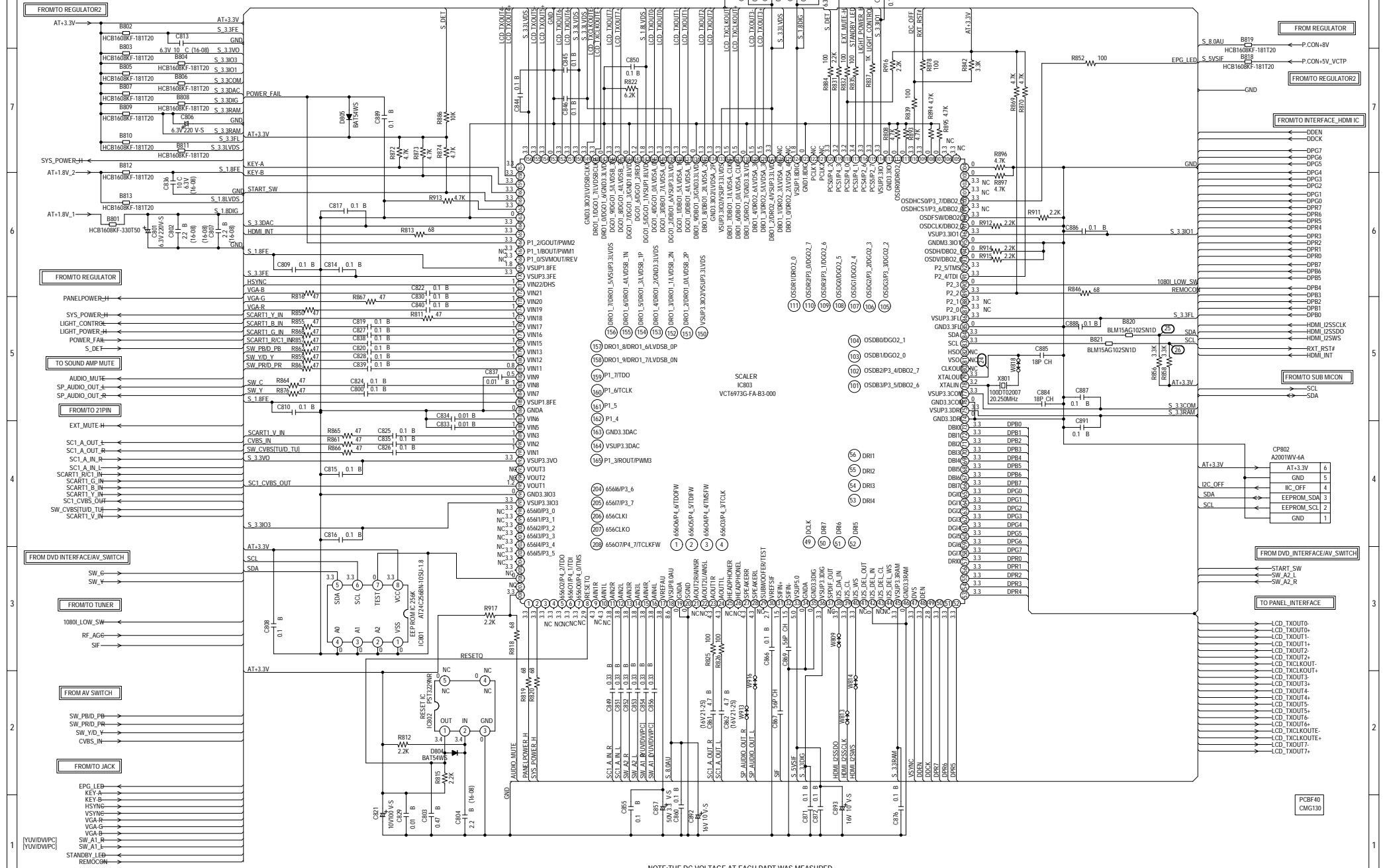
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SÉCURITÉ, UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

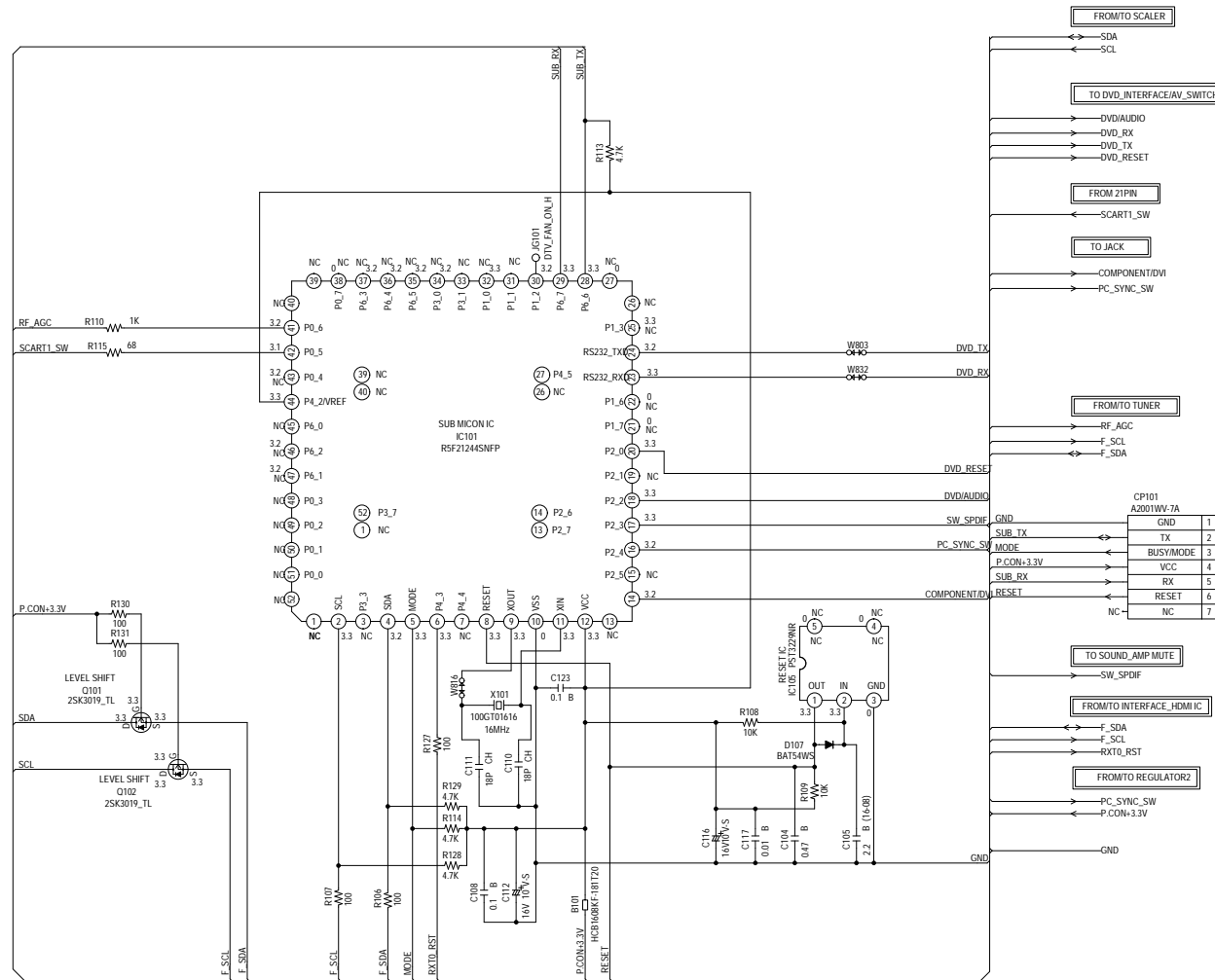
SCALER SCHEMATIC DIAGRAM (MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

SUB MICON SCHEMATIC DIAGRAM (MAIN PCB)

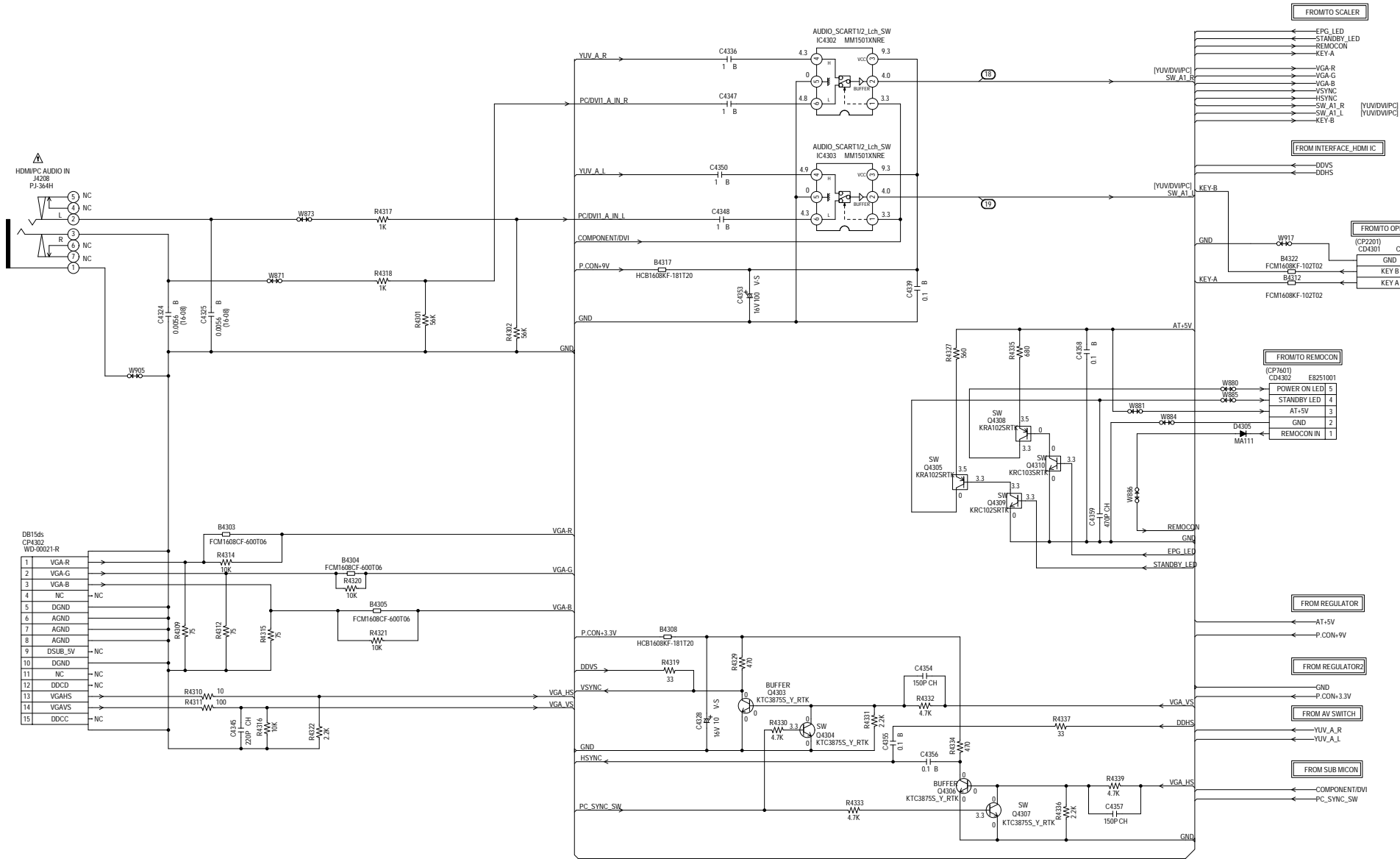


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PCBF46
CMG130

JACK SCHEMATIC DIAGRAM (MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

ATTENTION LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIÈCES

CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

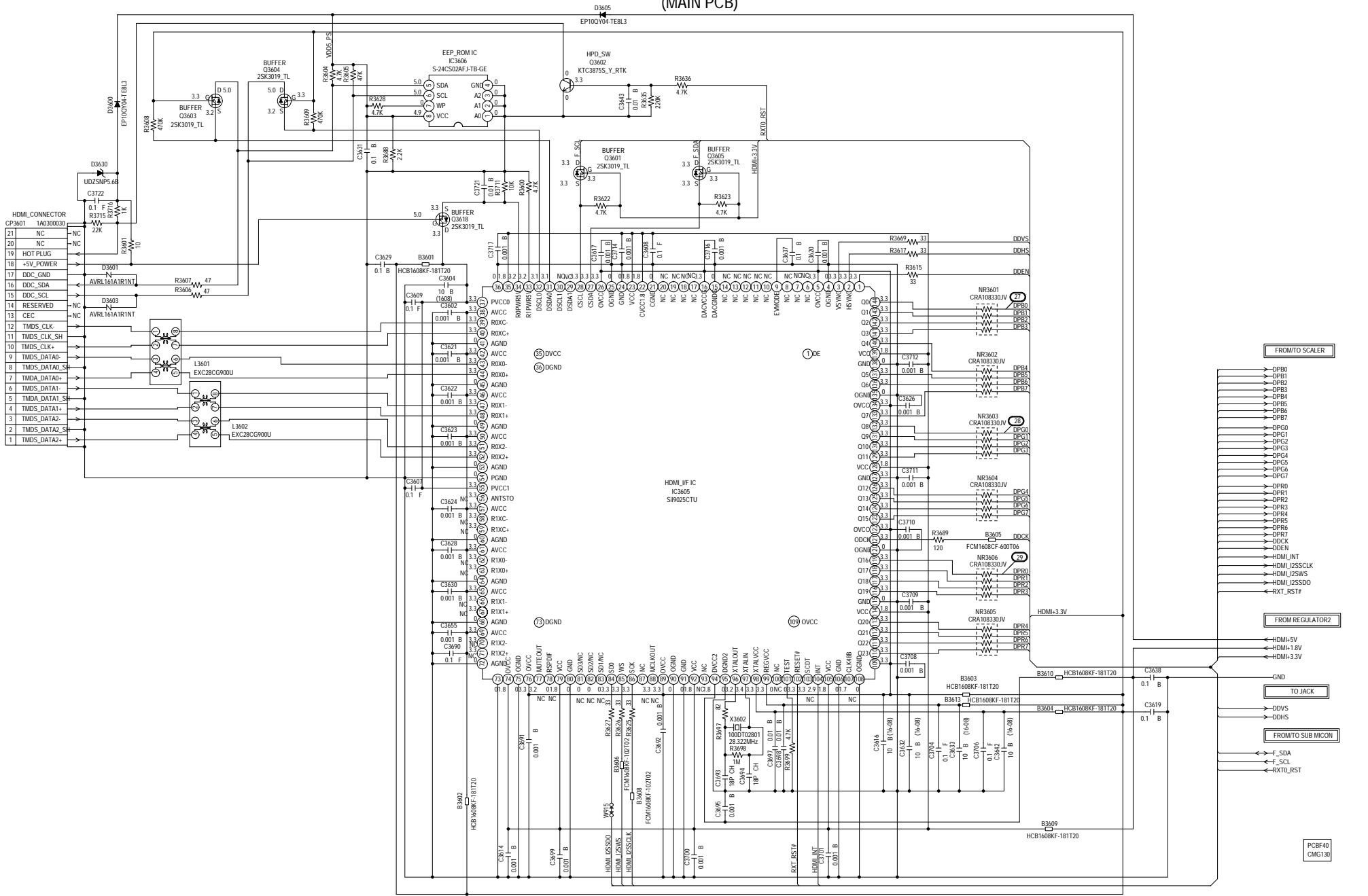
CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR



PCB#40
CMG130

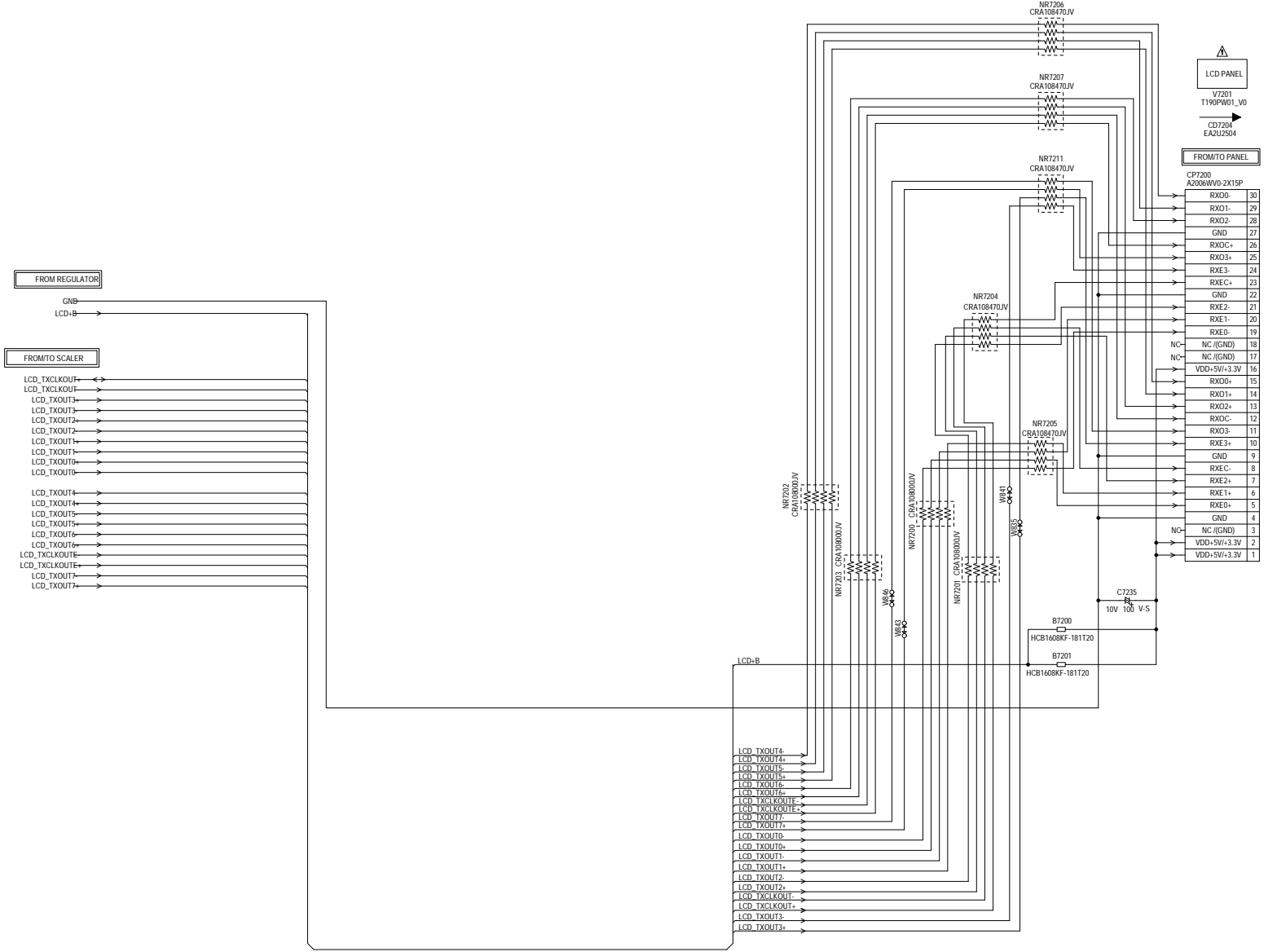
INTERFACE_HDMI IC SCHEMATIC DIAGRAM (MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PANEL_INTERFACE SCHEMATIC DIAGRAM (MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

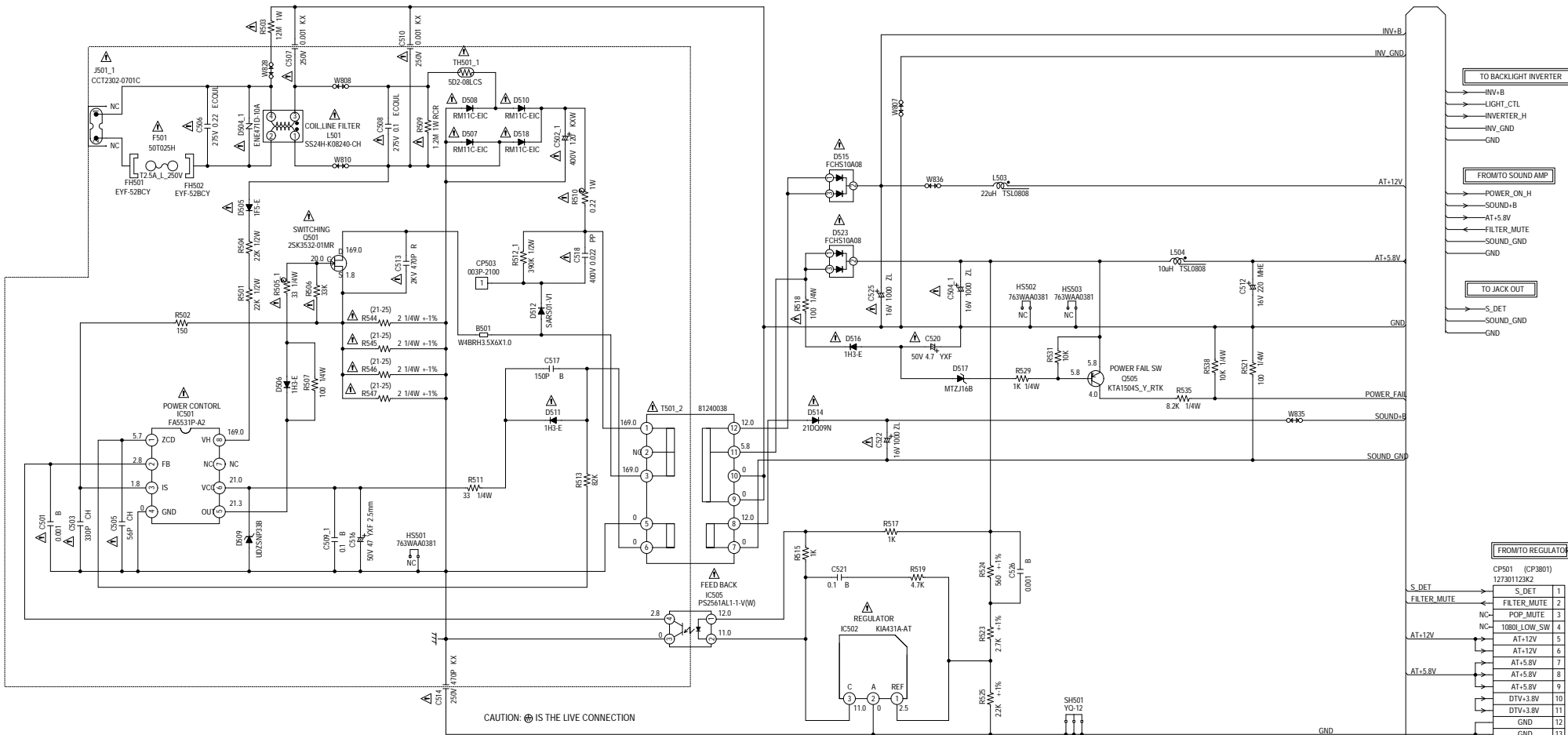
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION SINCE THESE PARTS MARKED BY Δ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

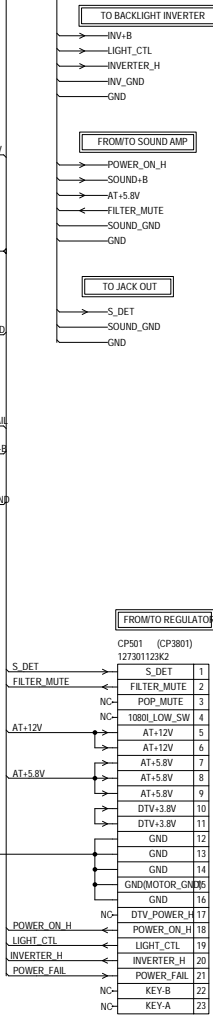
ATTENTION LES PIÈCES RÉPARÉES PAR UN Δ ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES

PCBF40
CMG130

POWER SCHEMATIC DIAGRAM (POWER PCB)



CAUTION: ⚡ IS THE LIVE CONNECTION



PCB240
CEC340

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

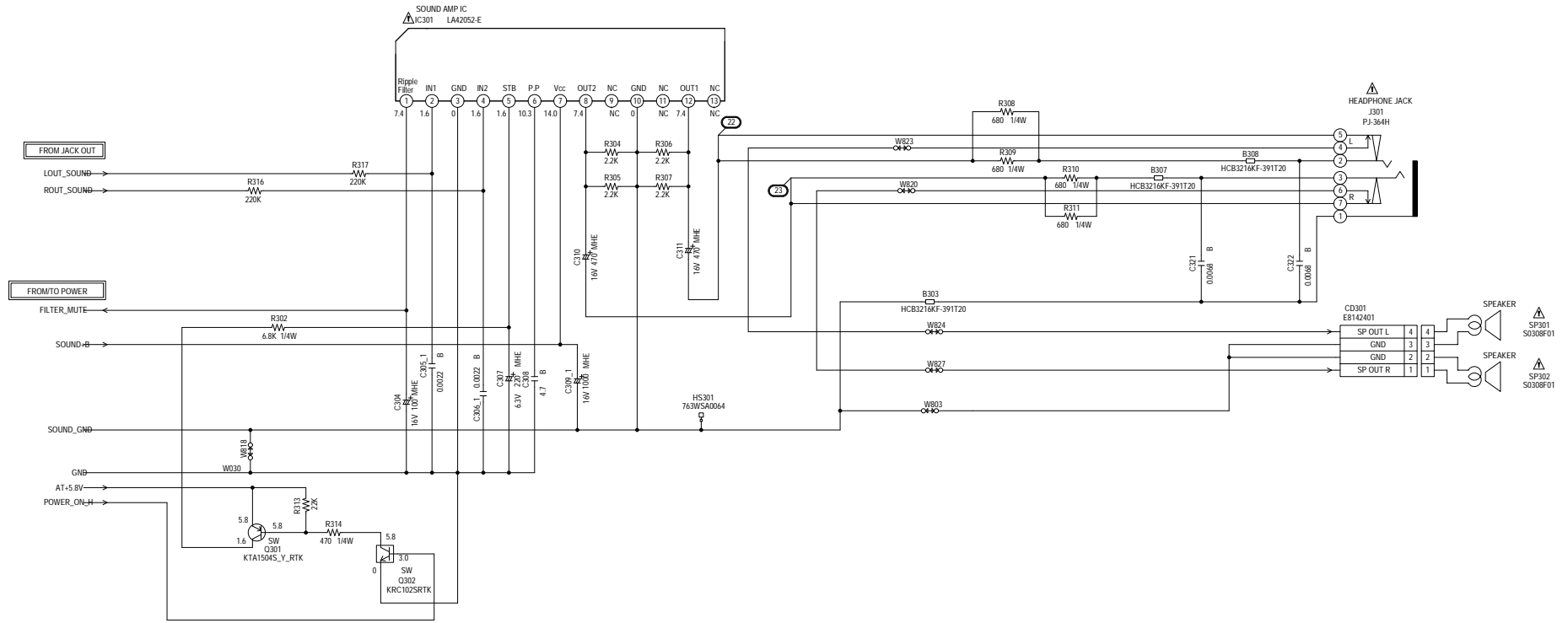
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

ATTENTION: CES PIÈCES RÉPARÉES PAR UN AÉTANT DANGEREUSES AN POINT DE VUE SECURITE UTILISER QUE CELLES DECRIRES DANS LA NOMENCLATURE DES PIÈCES

CAUTION: SINCE THESE PARTS MARKED BY ⚡ ARE CRITICAL FOR SAFETY USE ONES DESCRIBED IN PARTS LIST ONLY.

SOUND AMP SCHEMATIC DIAGRAM (POWER PCB)



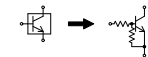
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

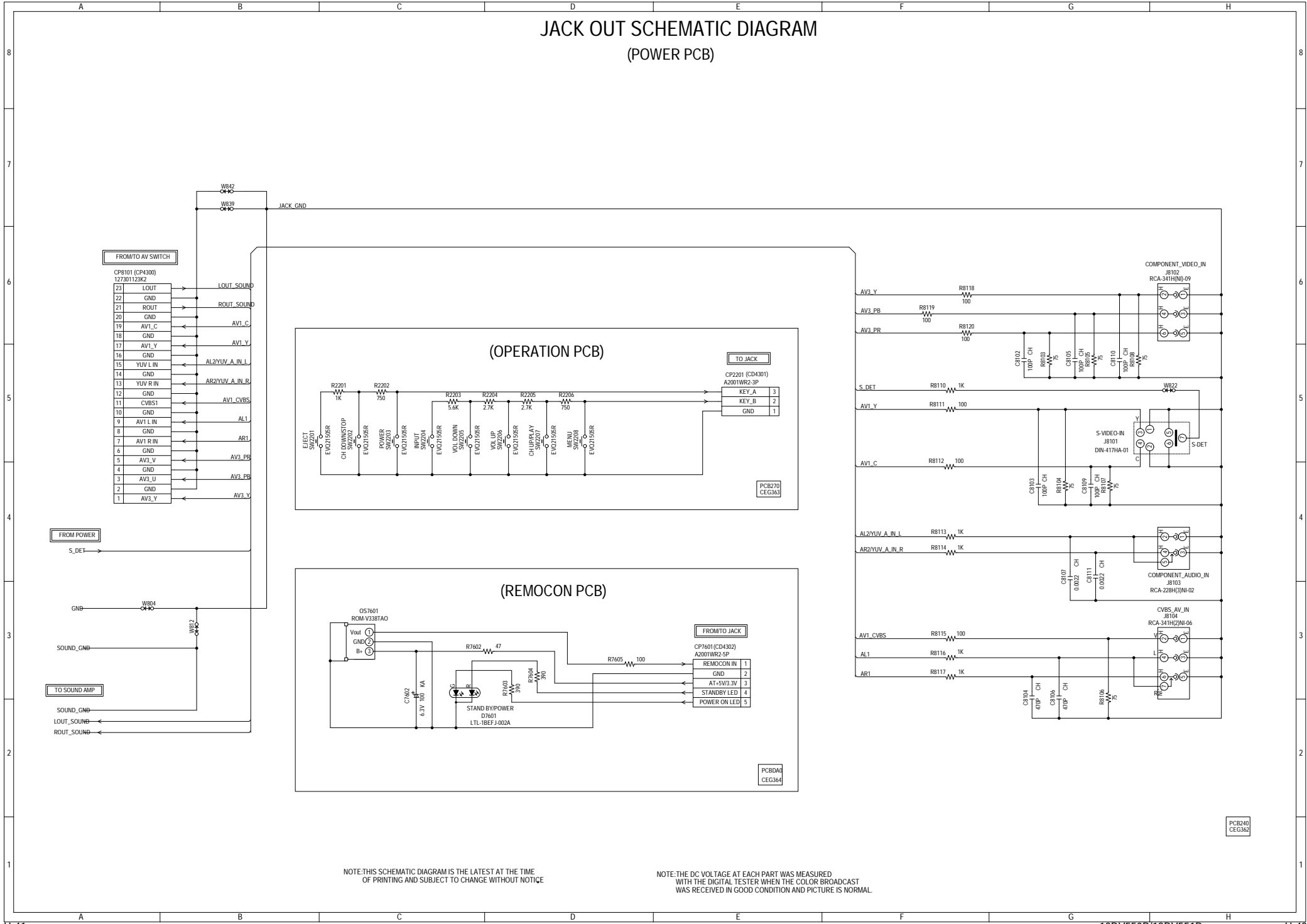
ATTENTION: LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SÉCURITÉ, N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

CAUTION: DIGITAL TRANSISTOR



PCB240
CE3242

JACK OUT SCHEMATIC DIAGRAM (POWER PCB)

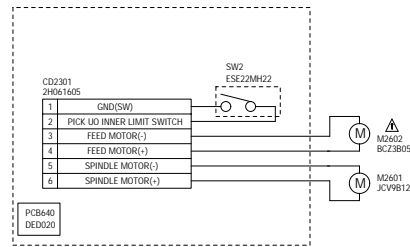


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

SW SCHEMATIC DIAGRAM

(SW PCB)

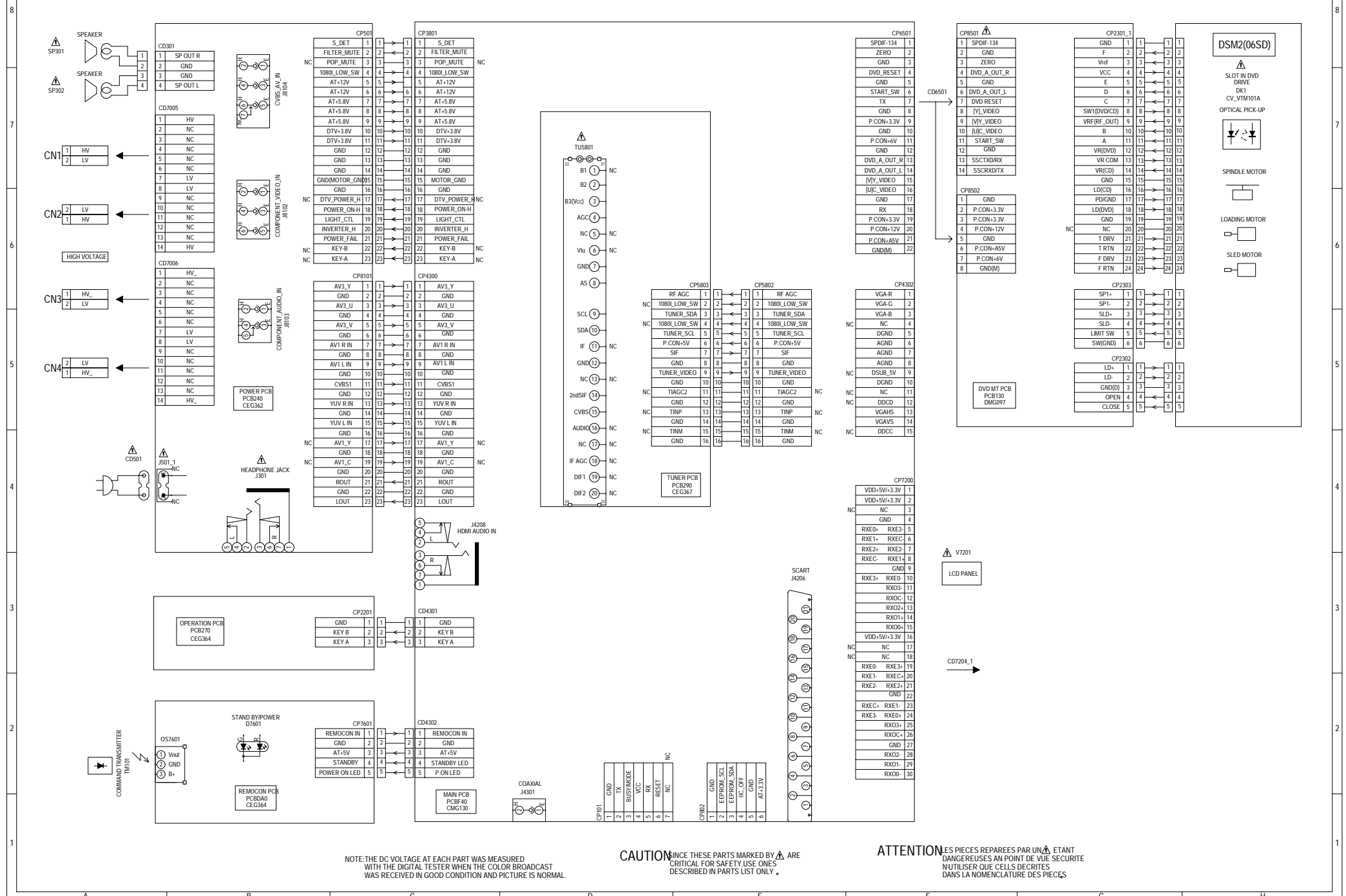


CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY USE ONES DESCRIBED IN PARTS LIST ONLY

ATTENTION LES PIECES REPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE. N'UTILISER QUE CELLES DECRITES DANS LA NOMENCLATURE DES PIECES

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

INTERCONNECTION DIAGRAM



NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

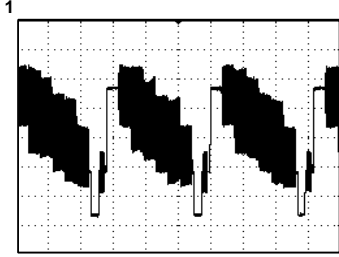
CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY USE ONLY DESCRIBED IN PARTS LIST ONLY.

ATTENTION LES PIÉCES RÉPARÉES PAR UN ÉTANT DANGEREUSES À L'UN POINT DE VUE ÉCRITURE N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÉCES

WAVEFORMS

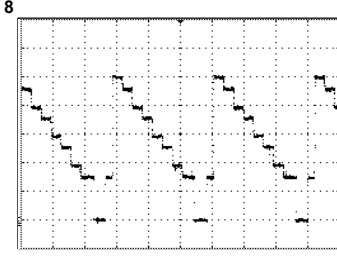
21PIN

20µs
200mV

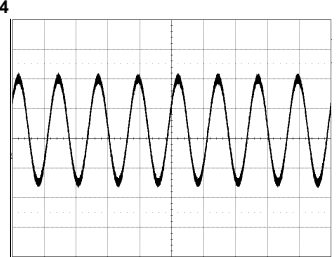


AV SWITCH

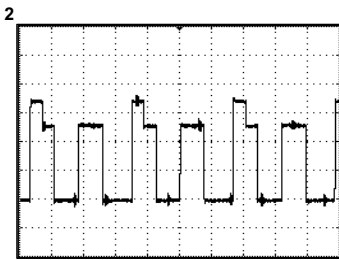
10µs
200mV



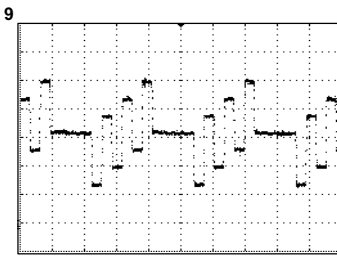
14
2ms
500mV



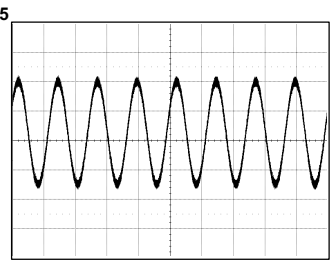
20µs
200mV



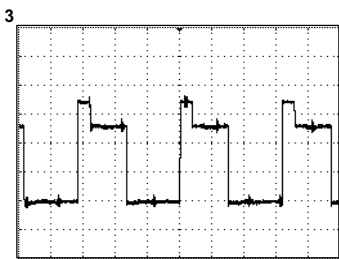
10µs
200mV



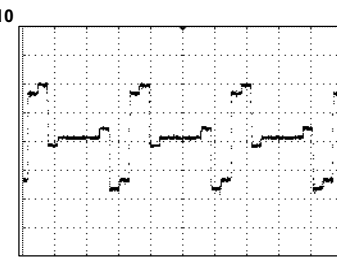
15
2ms
500mV



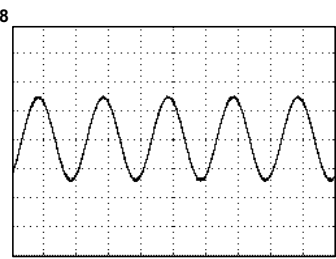
20µs
200mV



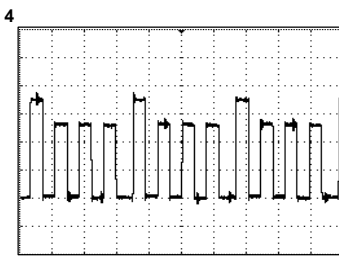
10µs
200mV



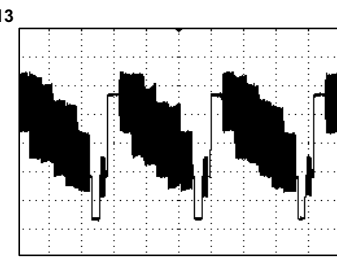
JACK
18
2ms
500mV



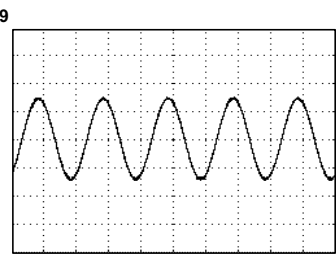
20µs
200mV



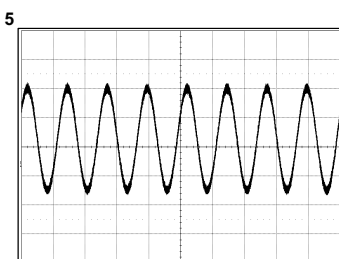
20µs
200mV



19
2ms
500mV

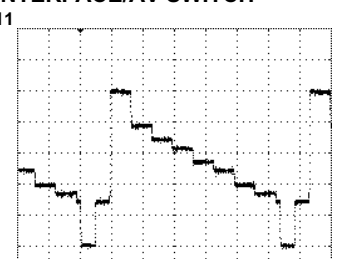


2ms
500mV



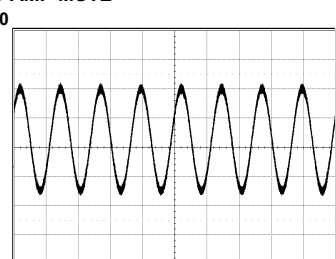
DVD INTERFACE/AV SWITCH

10µs
200mV

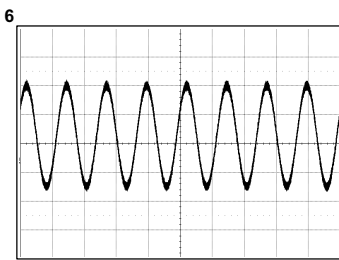


SOUND AMP MUTE

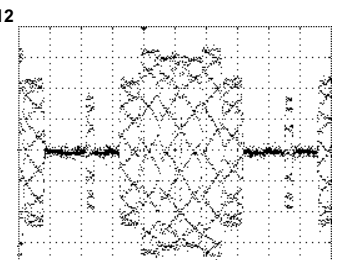
2.0ms
1V



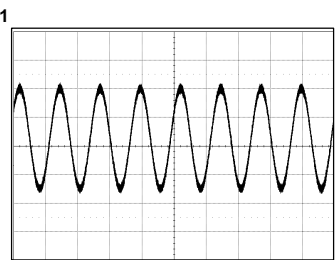
2ms
500mV



10µs
100mV



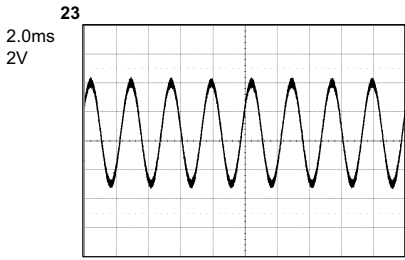
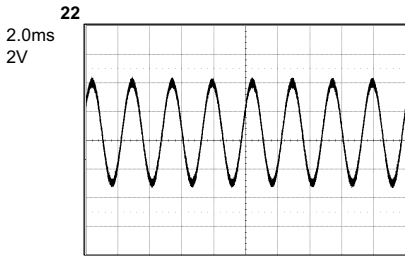
2.0ms
1V



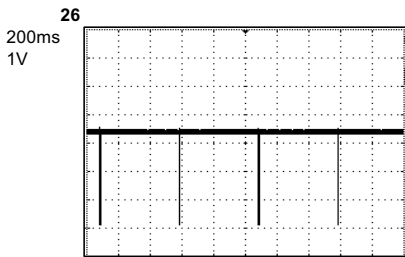
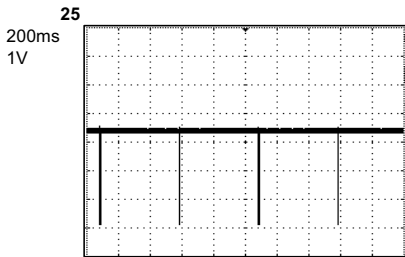
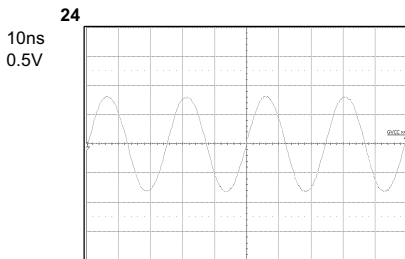
NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

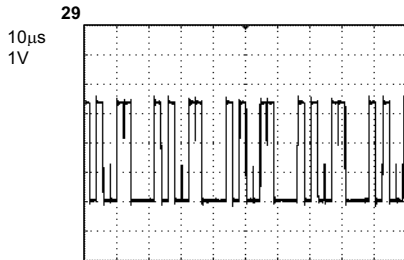
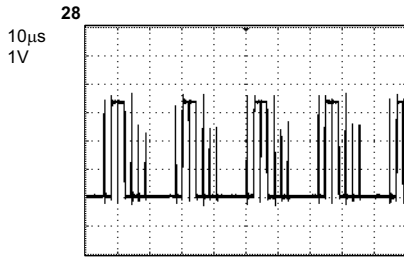
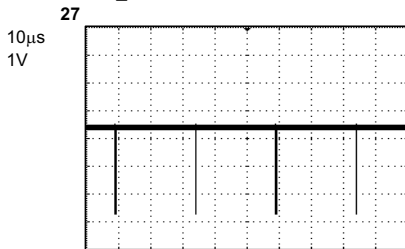
SOUND AMP



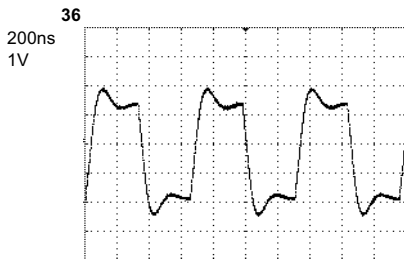
SCALER



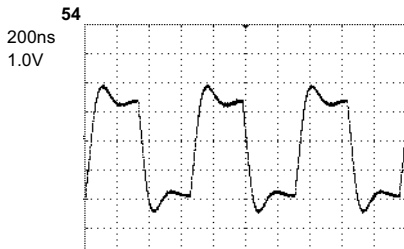
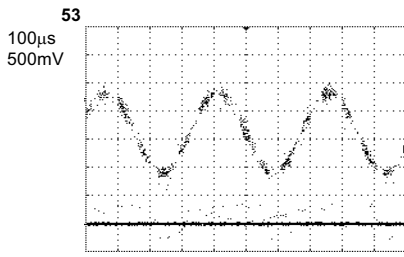
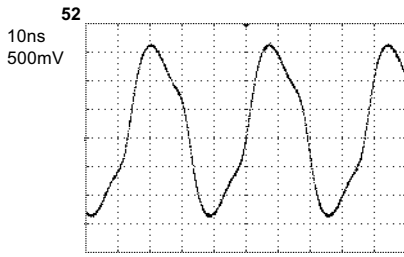
INTERFACE_HDMI IC



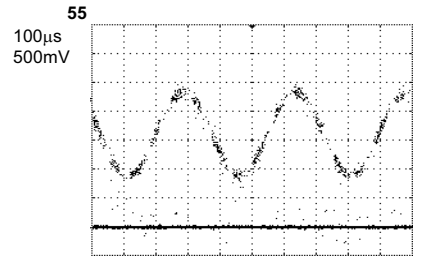
DVD INTERFACE/AV SWITCH



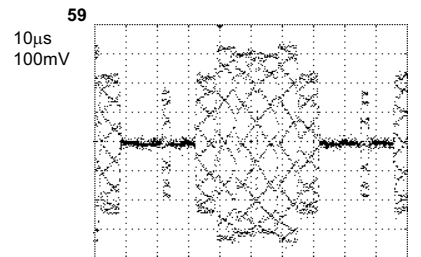
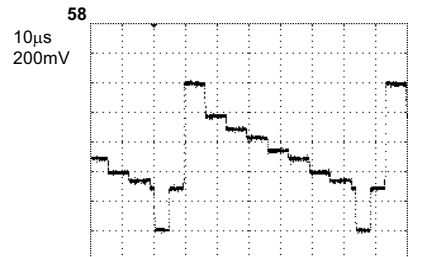
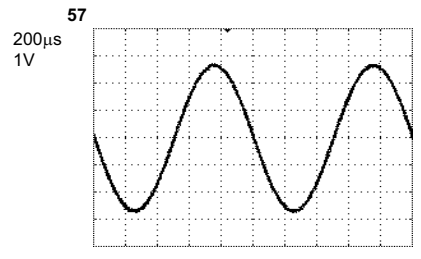
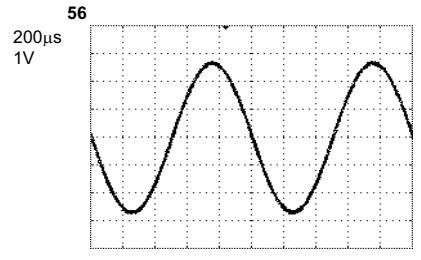
MPEG/MICON/DSP/RF_AMP



MEMORY



AUDIO/VIDEO



NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.