

SERVICE MODE LIST

This unit provided with the following SERVICE MODES so you can repair, examine and adjust easily.

To enter SERVICE MODE, Unplug AC cord till lost actual clock time. Then press and hold Vol (-) button of main unit and remocon key for more than 2 seconds.

The both pressing of set key and remote control key will not be possible if clock has been set. To reset clock, either unplug AC cord and allow at least 30 minutes before Power On or alternatively, discharge backup capacitor.

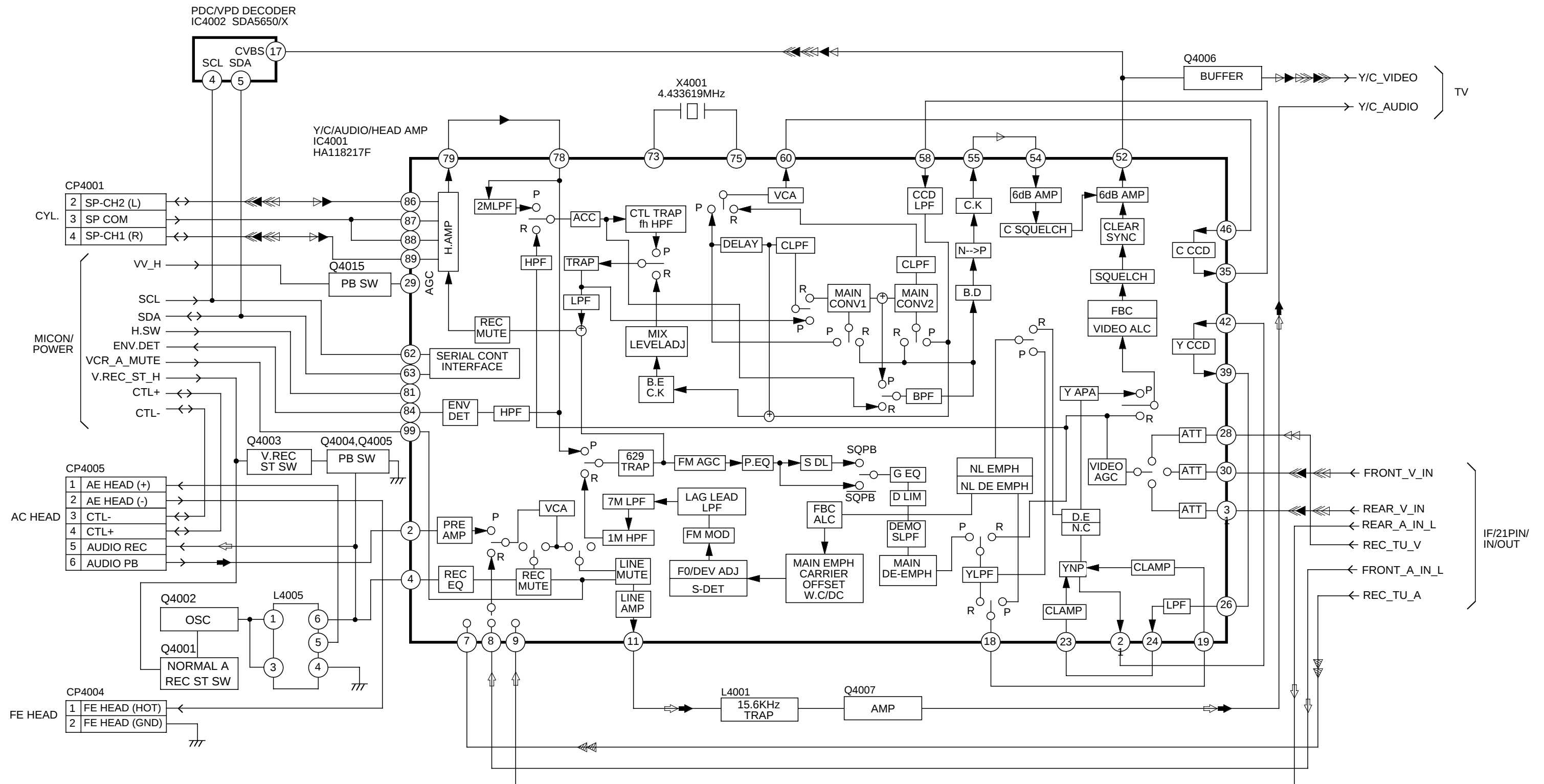
Set Key	Remocon Key	Operations
VOL. (-) MIN	1	Initialization of the factory. NOTE: Do not use this for the normal servicing. If you set a factory initialization, the memories are reset such as the clock setting, the channel setting, the POWER ON total hours, and PLAY/REC total hours.
VOL. (-) MIN	2	Horizontal position adjustment of OSD. NOTE: Also can be adjusted by using the Adjustment MENU. Refer to the "ELECTRICAL ADJUSTMENT" (OSD HORIZONTAL).
VOL. (-) MIN	3	Adjust the PG SHIFTER automatically. Refer to the "ELECTRICAL ADJUSTMENT" (PG SHIFTER).
VOL. (-) MIN	4	Adjust the PG SHIFTER manually. Refer to the "ELECTRICAL ADJUSTMENT" (PG SHIFTER).
VOL. (-) MIN	5	Adjusting of the Tracking to the center position. NOTE: Also can be adjusted by pressing the ATR button for more than 2 seconds during PLAY.
VOL. (-) MIN	6	POWER ON total hours and PLAY/REC total hours are displayed on the screen. Refer to the "PREVENTIVE CHECKS AND SERVICE INTERVALS" (CONFIRMATION OF HOURS USED). Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
VOL. (-) MIN	8	Writing of EEPROM initial data. NOTE: Do not use this for the normal servicing.
VOL. (-) MIN	9	Display of the Adjustment MENU on the screen. Refer to the "ELECTRICAL ADJUSTMENT" (On-Screen Display Adjustment).

Method	Operations
Press the ATR button on the remote control for more than 2 seconds during PLAY.	Adjusting of the Tracking to the center position. Refer to the "MECHANICAL ADJUSTMENT" (GUIDE ROLLER) and "ELECTRICAL ADJUSTMENT" (PG SHIFTER).
Make the short circuit between the test point of SERVICE and the GND.	The BOT, EOT, and the Reel Sensor do not work and the deck can be operated without a cassette tape. Refer to the "PREPARATION FOR SERVICING"

H-1

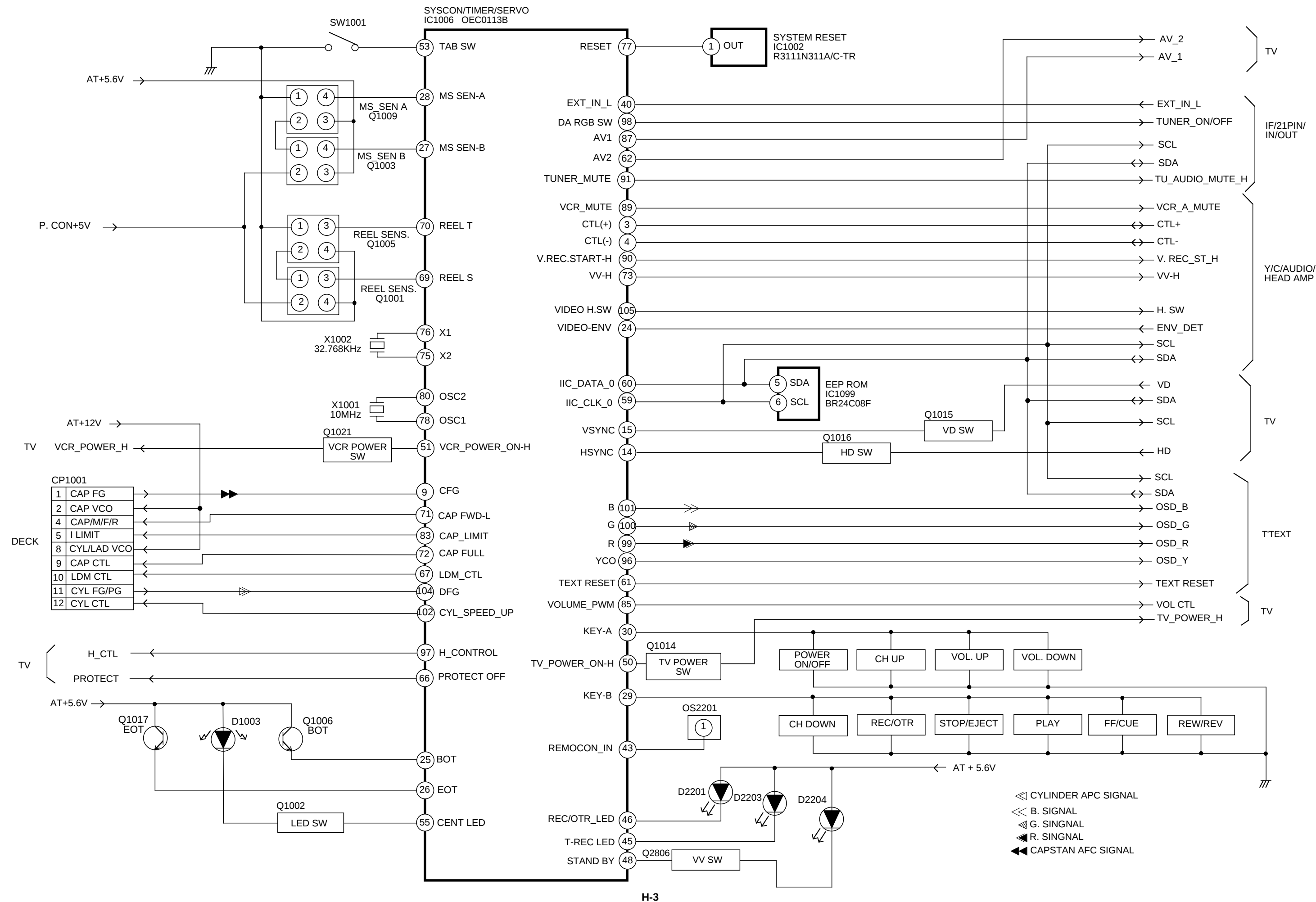


Y/C/AUDIO/HEAD AMP BLOCK DIAGRAM

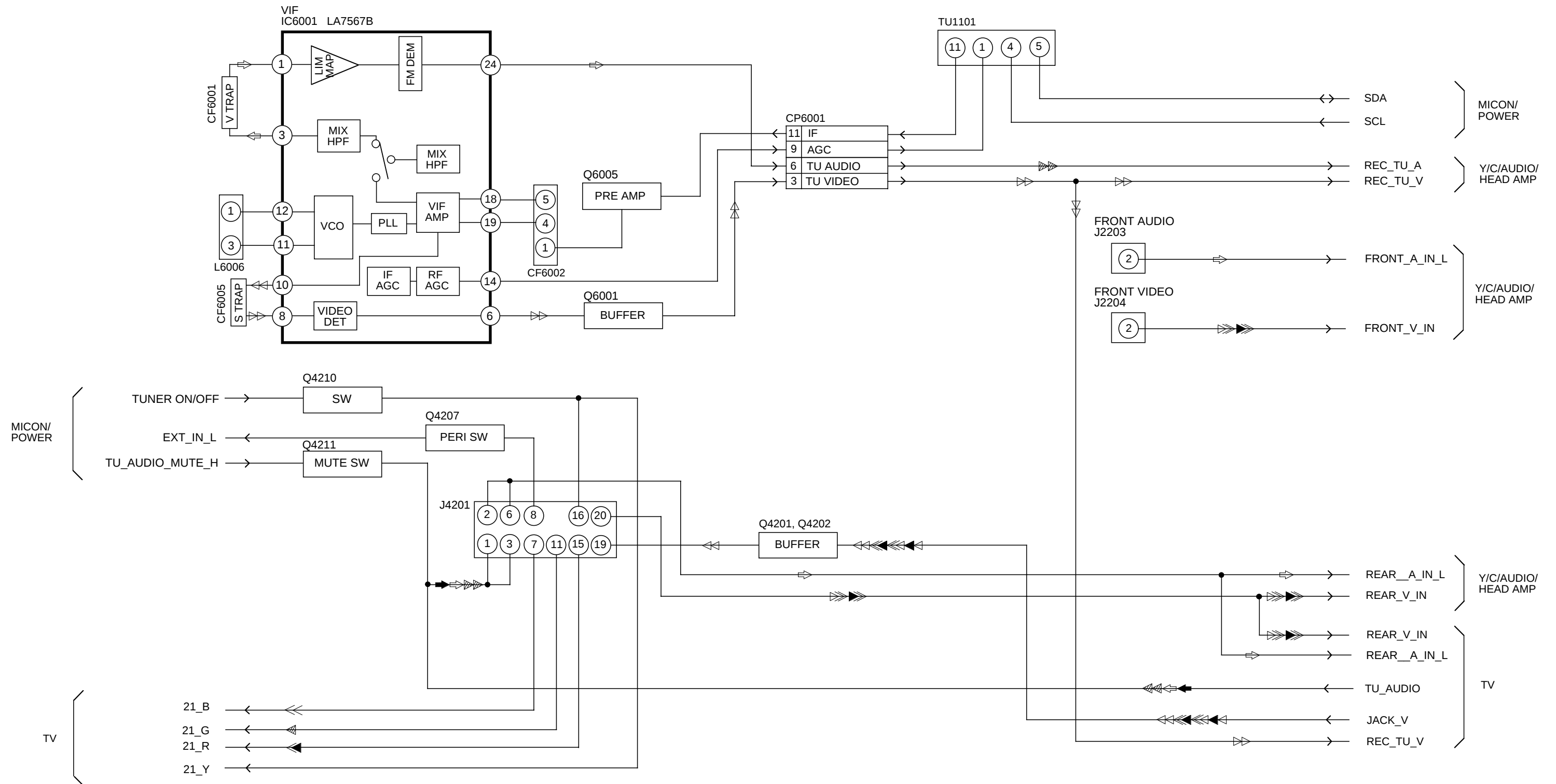


- ◀ TUNER VIDEO SIGNAL
- ▶ TUNER AUDIO SIGNAL
- ◀ PLAYBACK COLOR SIGNAL
- ▶ PLAYBACK LUMINANCE SIGNAL
- ◀ RECORD LUMINANCE SIGNAL
- ▶ RECORD COLOR SIGNAL
- ◀ AUDIO SIGNAL (PB)
- ▶ AUDIO SIGNAL (REC)

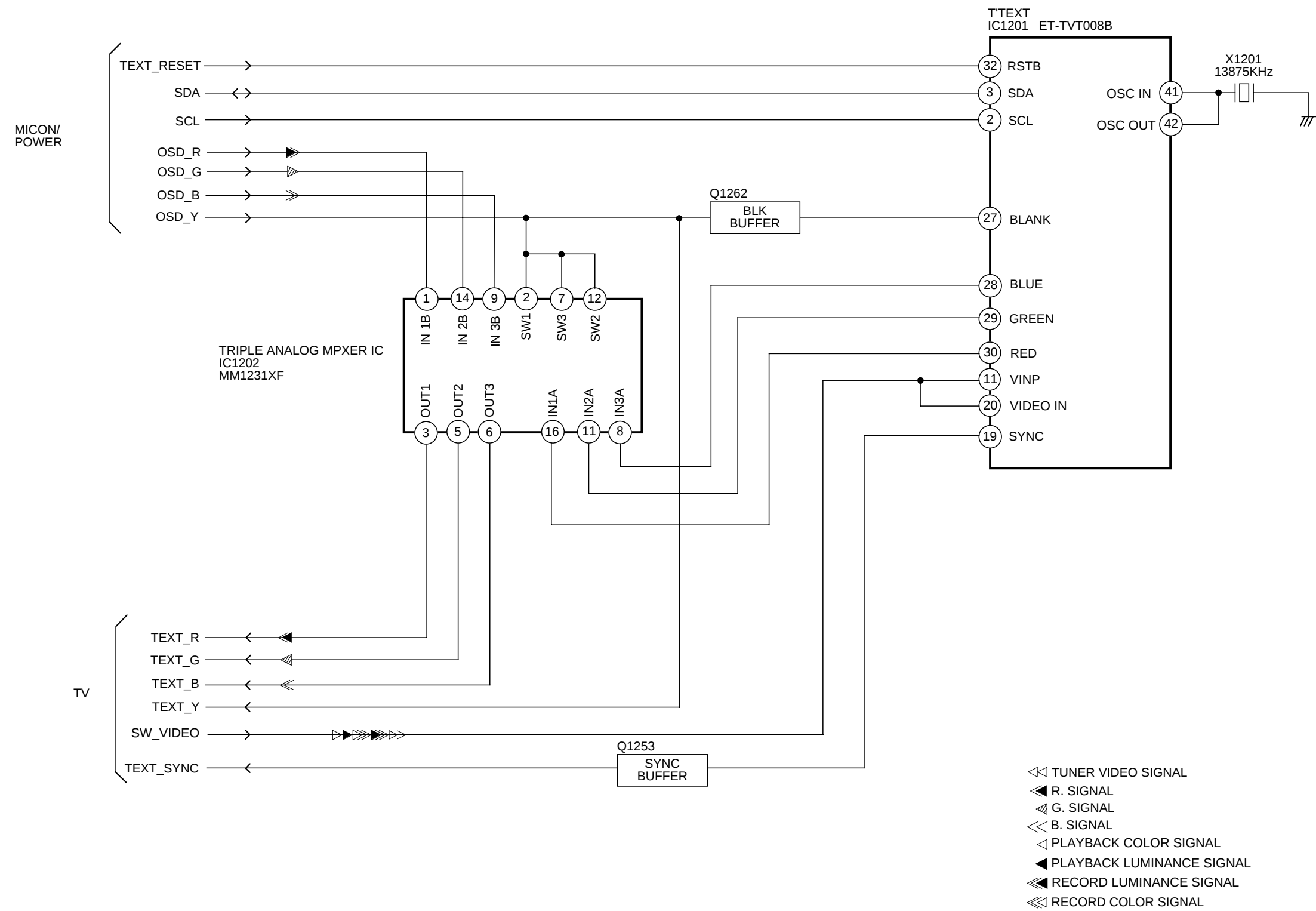
MICON/POWER BLOCK DIAGRAM



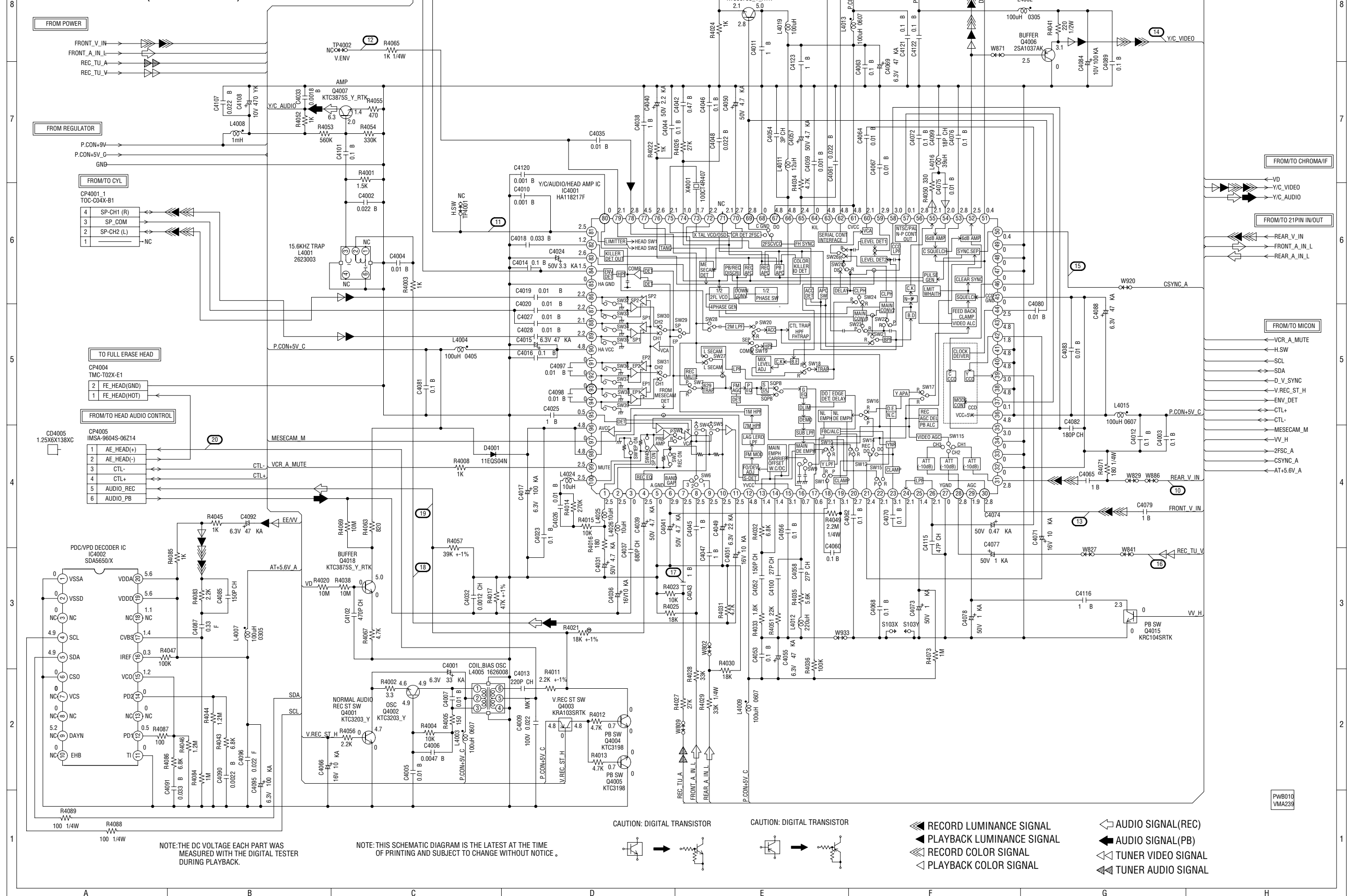
IF/21PIN/IN/OUT BLOCK DIAGRAM



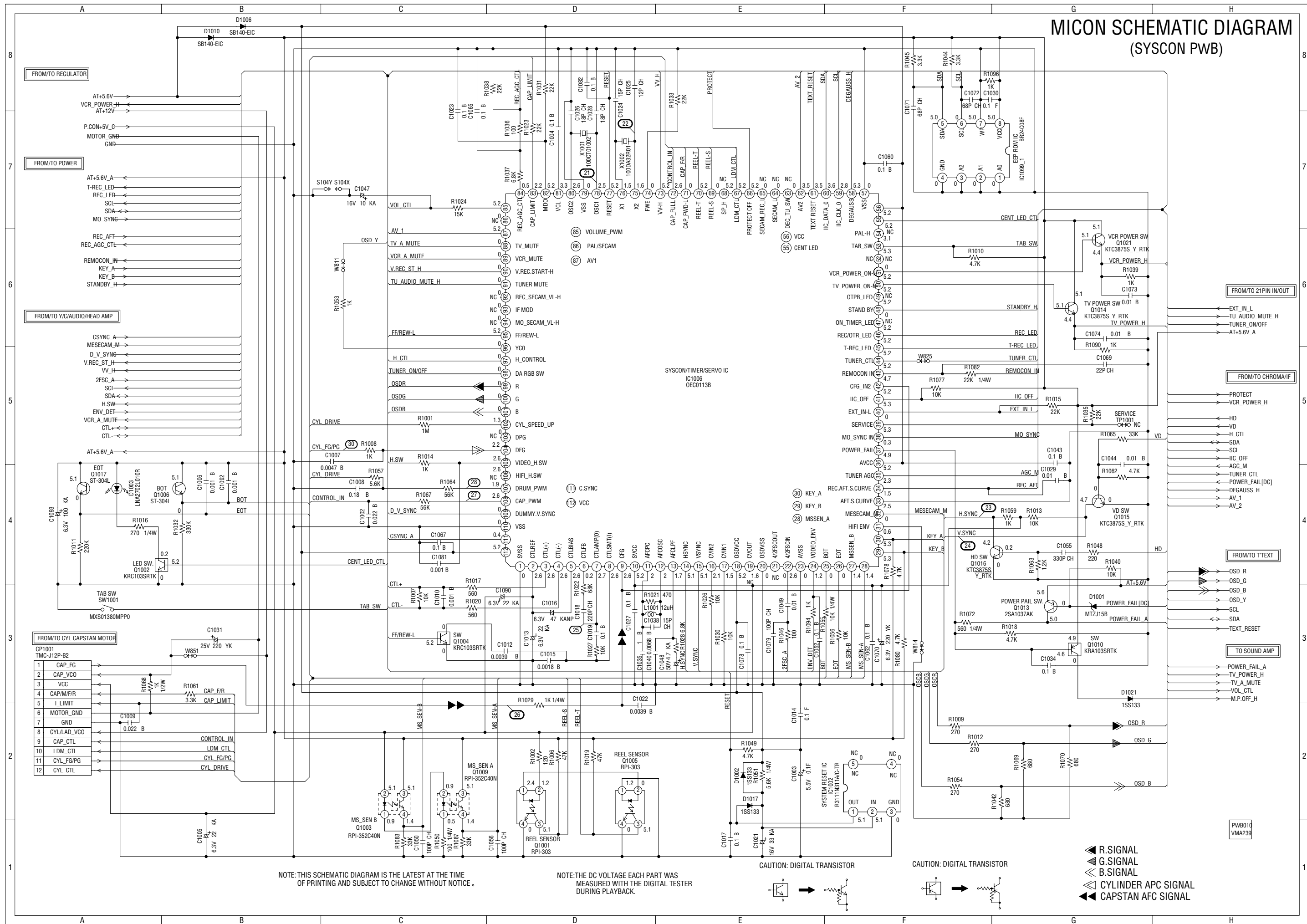
T' TEXT BLOCK DIAGRAM



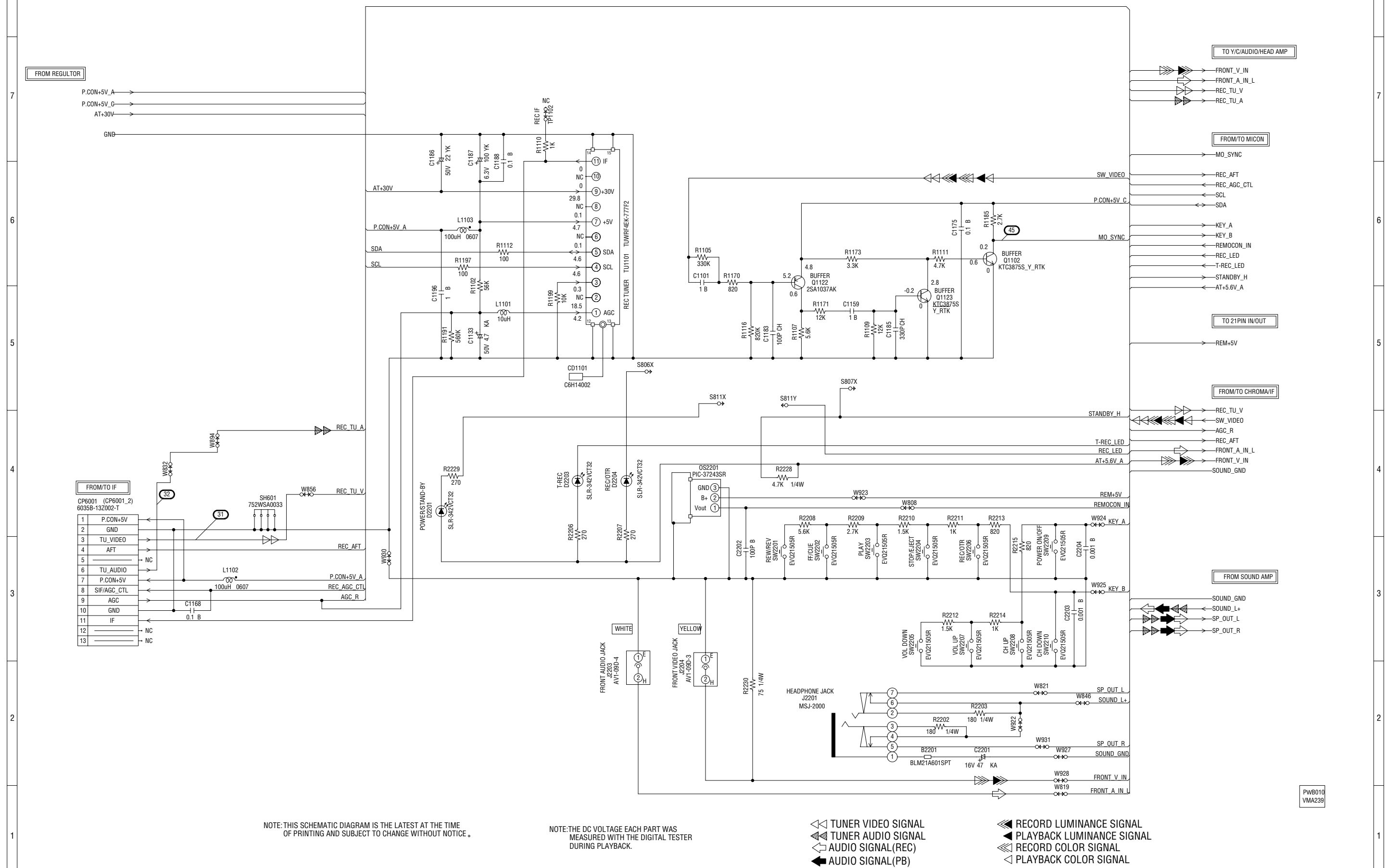
Y/C/AUDIO/HEAD AMP SCHEMATIC DIAGRAM (SYSCON PWB)



MICON SCHEMATIC DIAGRAM (SYSCON PWB)



POWER SCHEMATIC DIAGRAM (SYSCON PWB)



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.

- ◀◀ TUNER VIDEO SIGNAL
- ◀◀ TUNER AUDIO SIGNAL
- ◀ AUDIO SIGNAL(REC)
- ◀ AUDIO SIGNAL(PB)

- ◀◀ RECORD LUMINANCE SIGNAL
- ▶▶ PLAYBACK LUMINANCE SIGNAL
- ◀◀ RECORD COLOR SIGNAL
- ▶▶ PLAYBACK COLOR SIGNAL

21PIN IN/OUT SCHEMATIC DIAGRAM (SYSCON PWB)

FROM/TO MICON

AT+5.6V_A
TUNER_ON/OFF
EXT_IN_L
TU_AUDIO_MUTE_H

REM+5V

C4237
0.001 CH

FRONT_A_IN_L

FROM REGULATOR

P.CON+9V
GND

FROM POWER

REM+5V

FROM/TO Y/C/AUDIO/HEAD AMP

FRONT_A_IN_L
REAR_V_IN
REAR_A_IN_L

FROM/TO CHROMA/IF

JACK_VIDEO
REAR_V_IN
TU_AUDIO
REAR_A_IN_L
21_R
21_G
21_B
21_Y

PWB010
VMA239

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

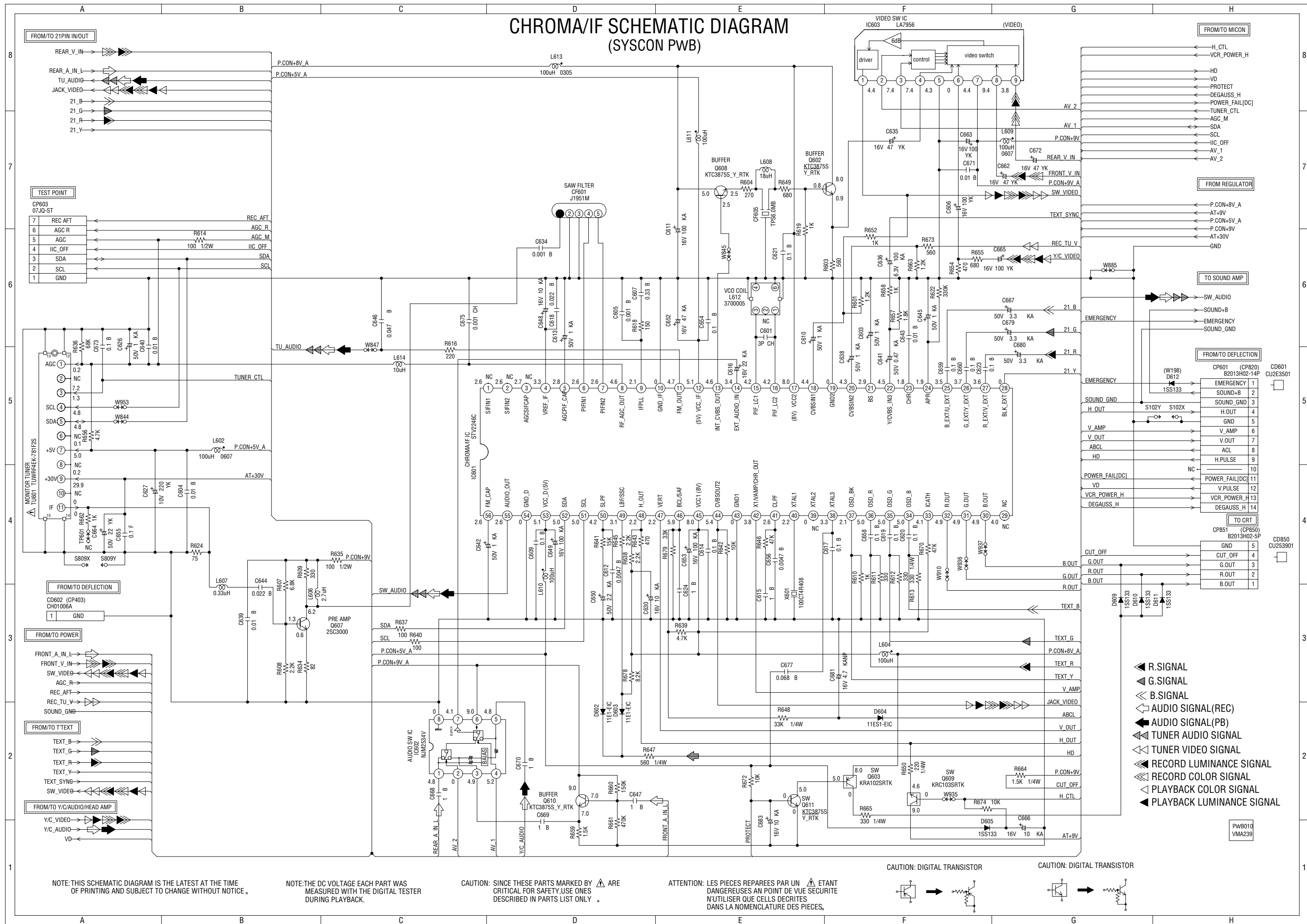
NOTE: THE DC VOLTAGE EACH PART WAS
MEASURED WITH THE DIGITAL TESTER
DURING PLAYBACK.

AUDIO SIGNAL(REC)
AUDIO SIGNAL(PB)
TUNER VIDEO SIGNAL
TUNER AUDIO SIGNAL

RECORD LUMINANCE SIGNAL
RECORD COLOR SIGNAL
PLAYBACK LUMINANCE SIGNAL
PLAYBACK COLOR SIGNAL

R.SIGNAL
G.SIGNAL
B.SIGNAL

CHROMA/IF SCHEMATIC DIAGRAM (SYSCON PWB)



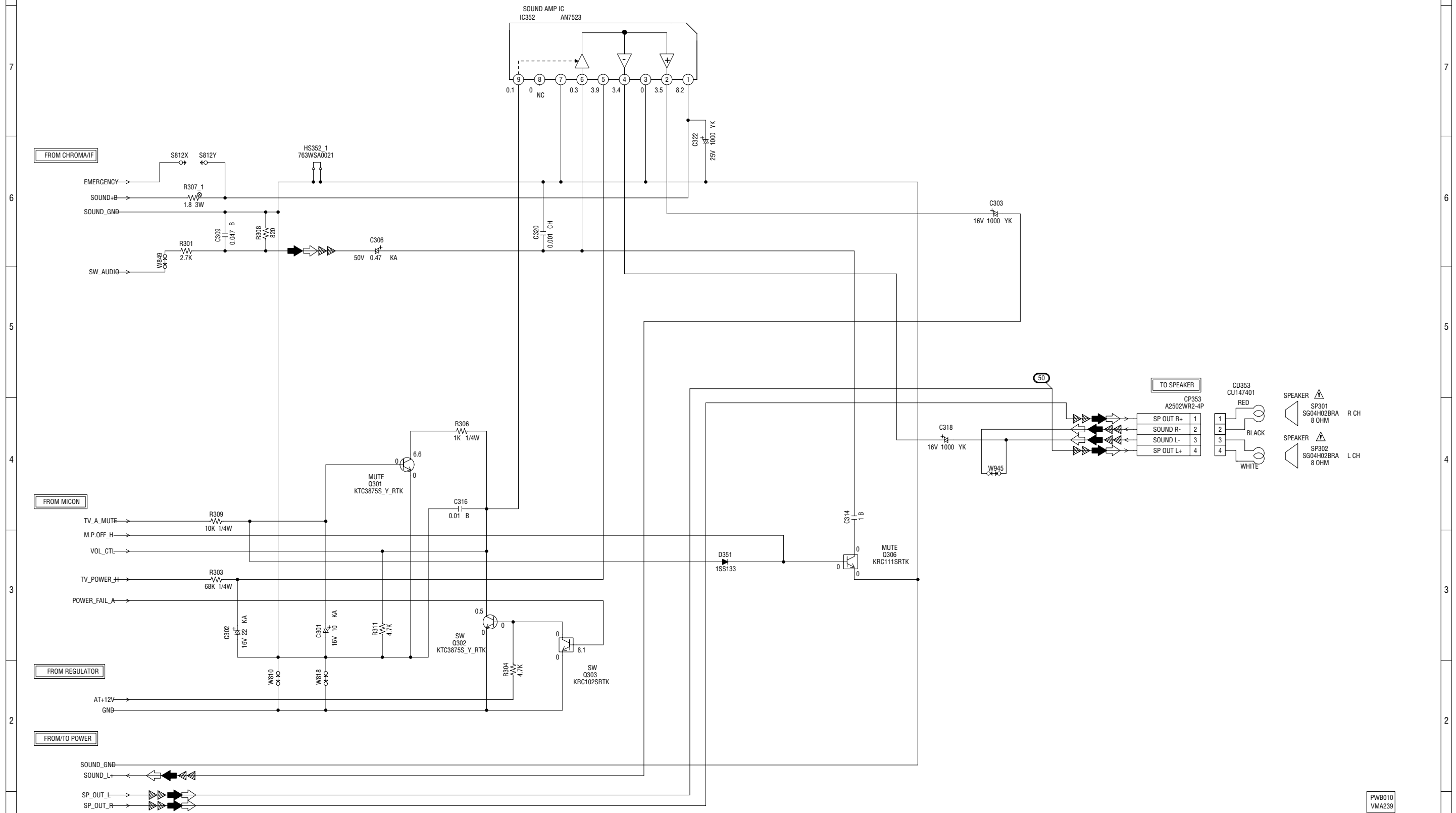
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

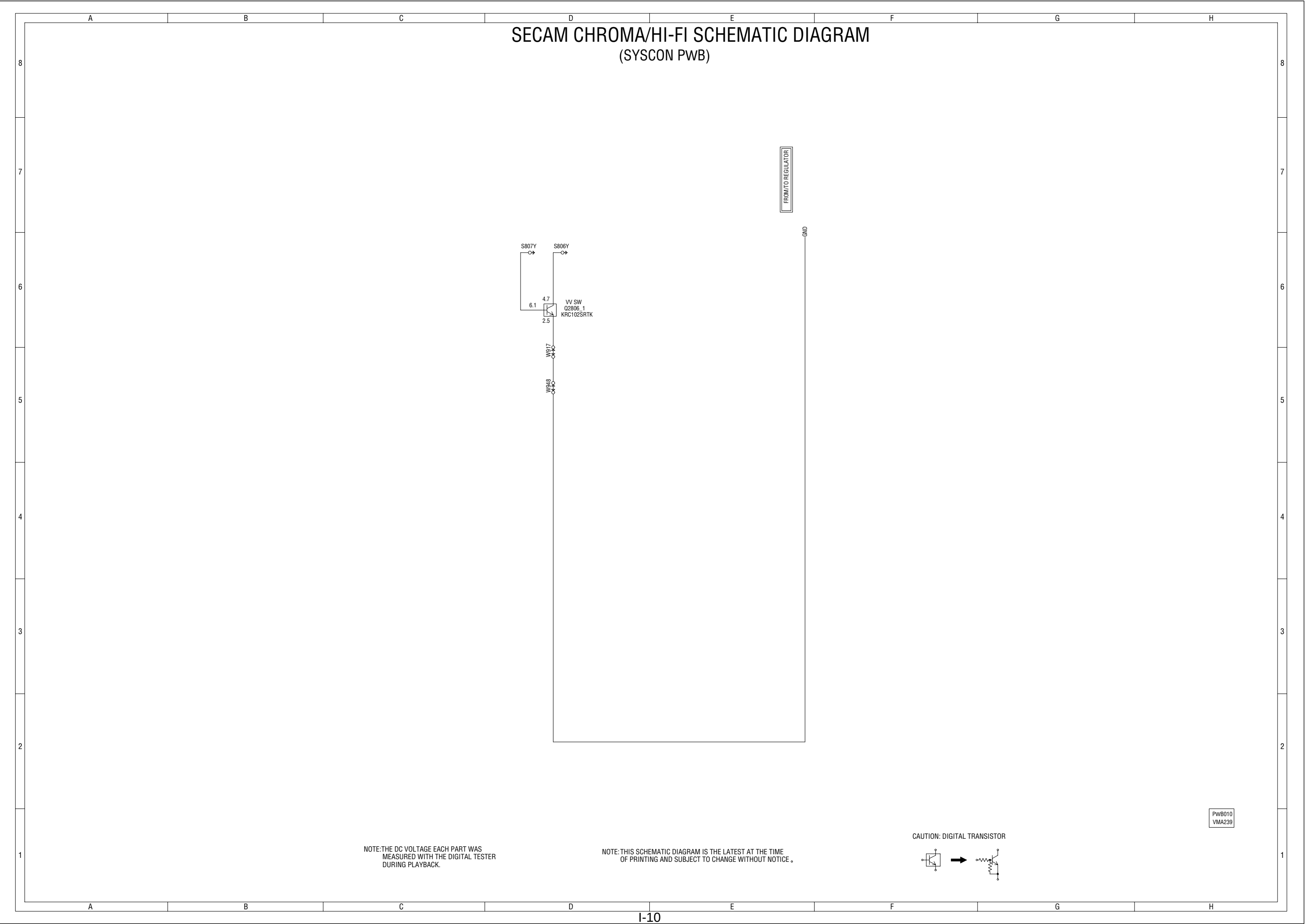
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

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

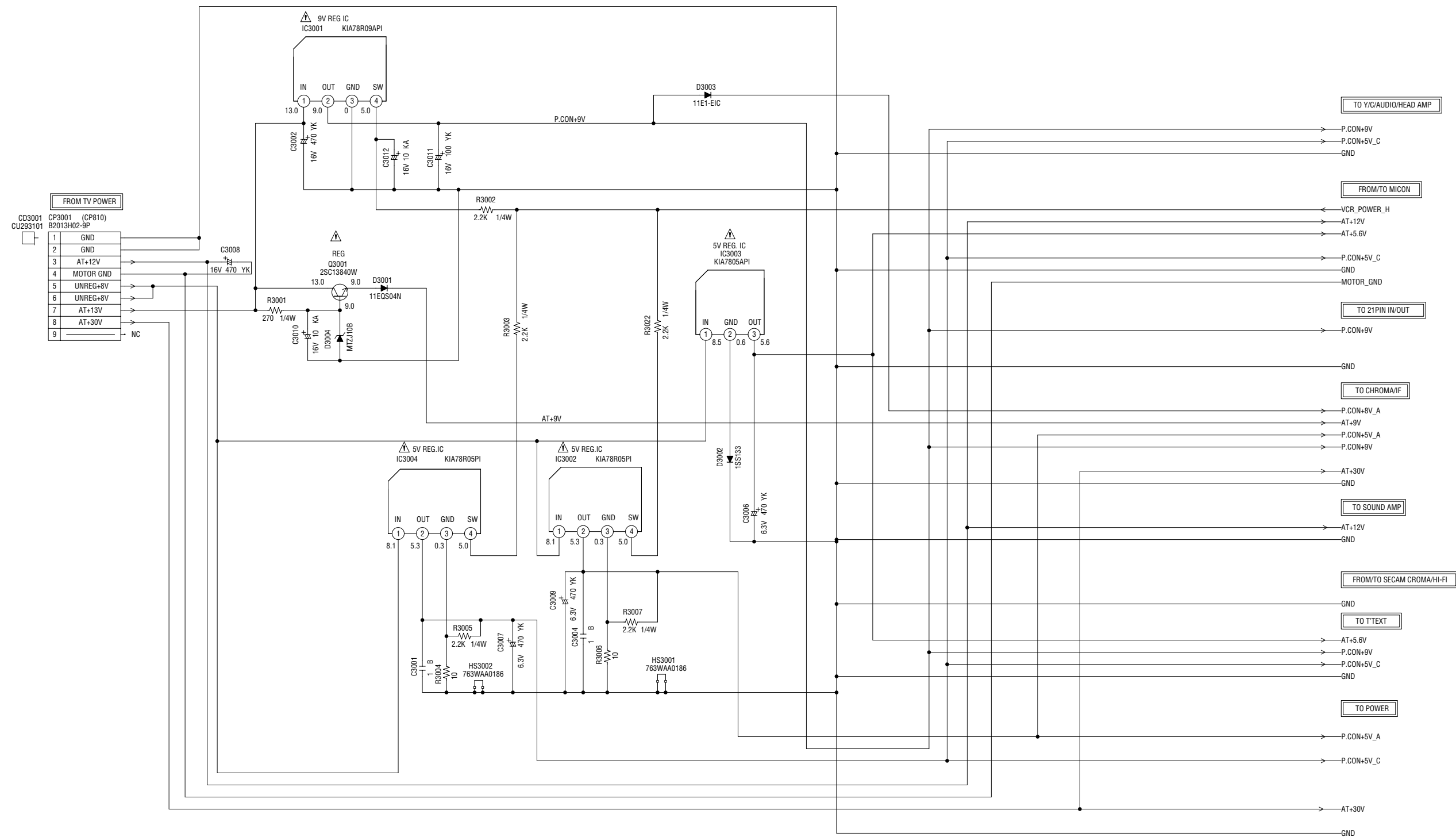
ATTENTION: LES PIECES REPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLES DECRITES DANS LA NOMENCLATURE DES PIECES.

SOUND AMP SCHEMATIC DIAGRAM
(SYSCON PWB)





REGULATOR SCHEMATIC DIAGRAM
(SYSCON PWB)



PWB010
VMA239

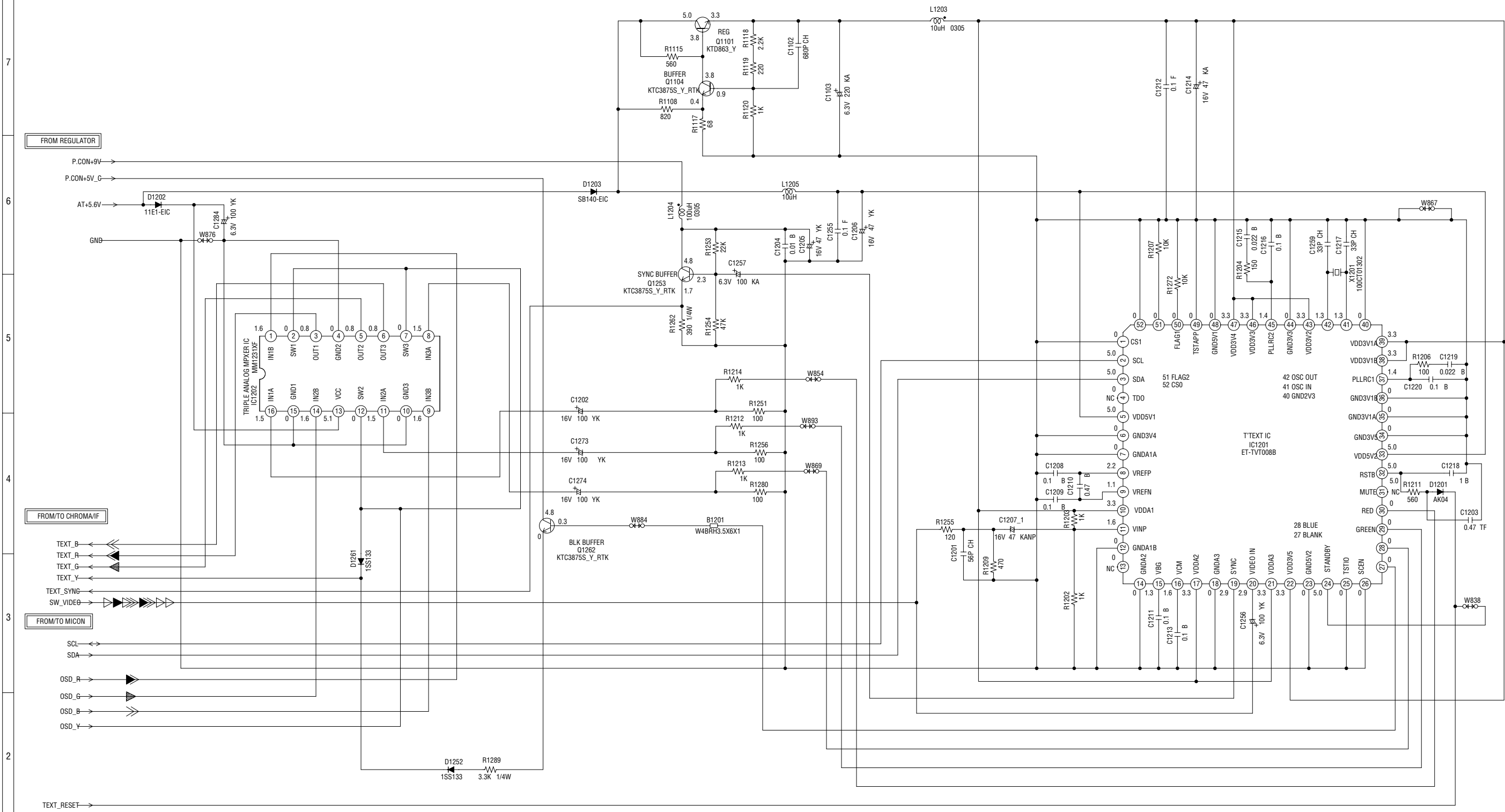
NOTE:THE DC VOLTAGE EACH PART WAS
MEASURED WITH THE DIGITAL TESTER
DURING PLAYBACK.

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

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 CELLS DECRITES
DANS LA NOMENCLATURE DES PIECES,

T'TEXT SCHEMATIC DIAGRAM
(SYSCON PWB)



TV POWER SCHEMATIC DIAGRAM (MAIN PWB)

The diagram illustrates the power supply system for a television set, centered around a main printed wiring board (PWB). Key components include:

- Power Input & Switching:** An AC input transformer (AC230-240V_50Hz) feeds through switches S101/S102 into a bridge rectifier (D501, D502, D503, D504) followed by a filter capacitor C501.
- Voltage Regulation:** The circuit includes several voltage regulators: IC501 (7805), IC502 (7812), and IC503 (LM317) which provides adjustable outputs for +B, SOUND+B, DEGAUSS_H, and VCR_POWER_H.
- Protection & Monitoring:** Thermal fuses F501 and F502 are used for overcurrent protection. Various resistors (R501-R516) and capacitors (C501-C518) provide timing and filtering throughout the circuit.
- Relay Drive:** A relay driver stage uses transistor Q504 and diode D516 to control the degaussing coil (L503).
- Connectors & Terminals:** Multiple connectors (e.g., CP501, CP502, CP503) and terminals (e.g., W801-W810) facilitate connections to other parts of the TV chassis.

Legend:

- NOTE:** THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.
- 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:** THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.
- 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 N'UTILISER QUE CELLES DECRITES DANS LA NOMENCLATURE DES PIECES.

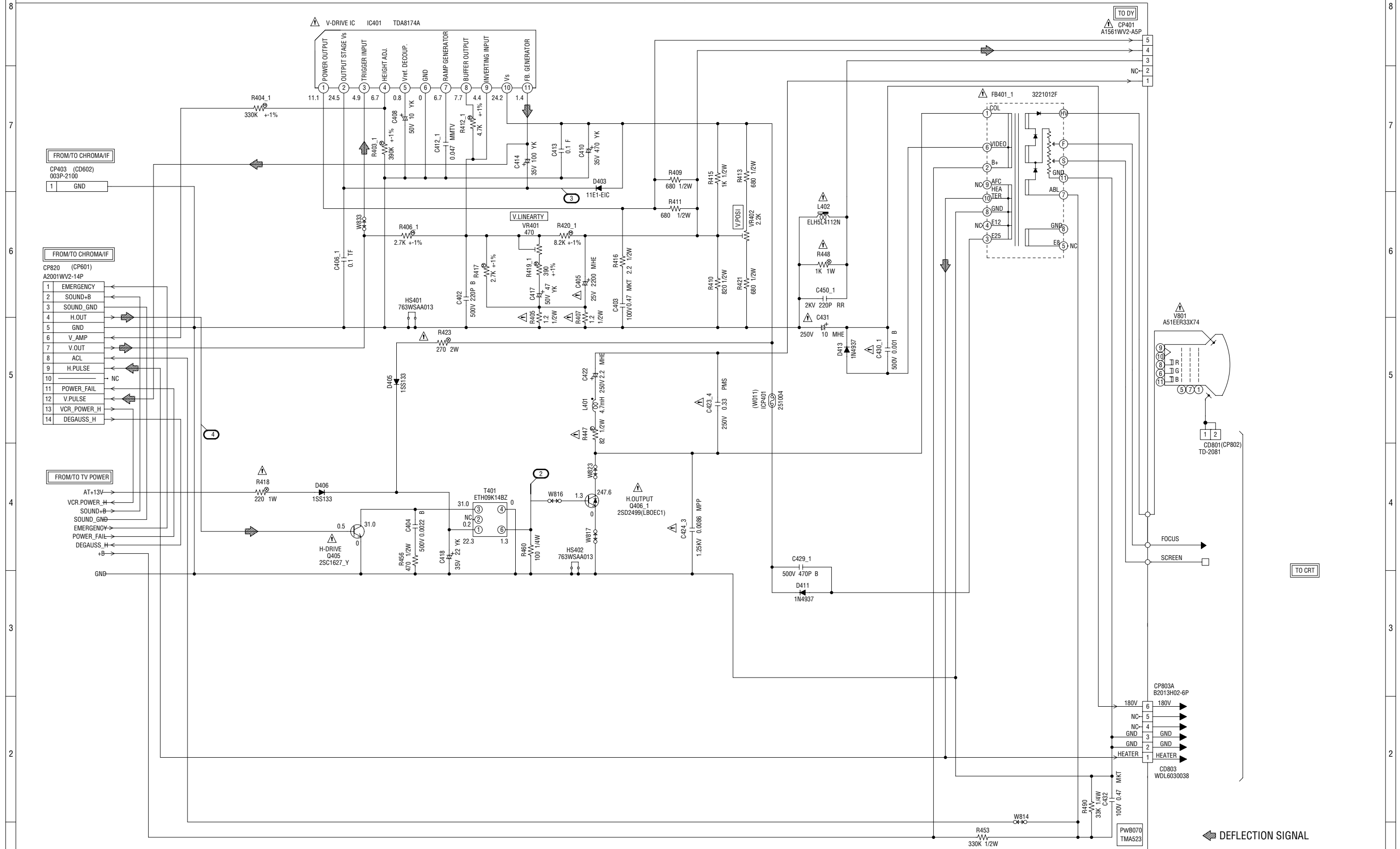
TO REGULATOR

GND	1
GND	2
+AT+12V	3
MOTOR_GND	4
UNREG+8V	5
UNREG+8V	6
+AT+13V	7
+AT+30V	8
NC	9

PWB070 TMA523

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

DEFLECTION SCHEMATIC DIAGRAM (MAIN PWB)



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.

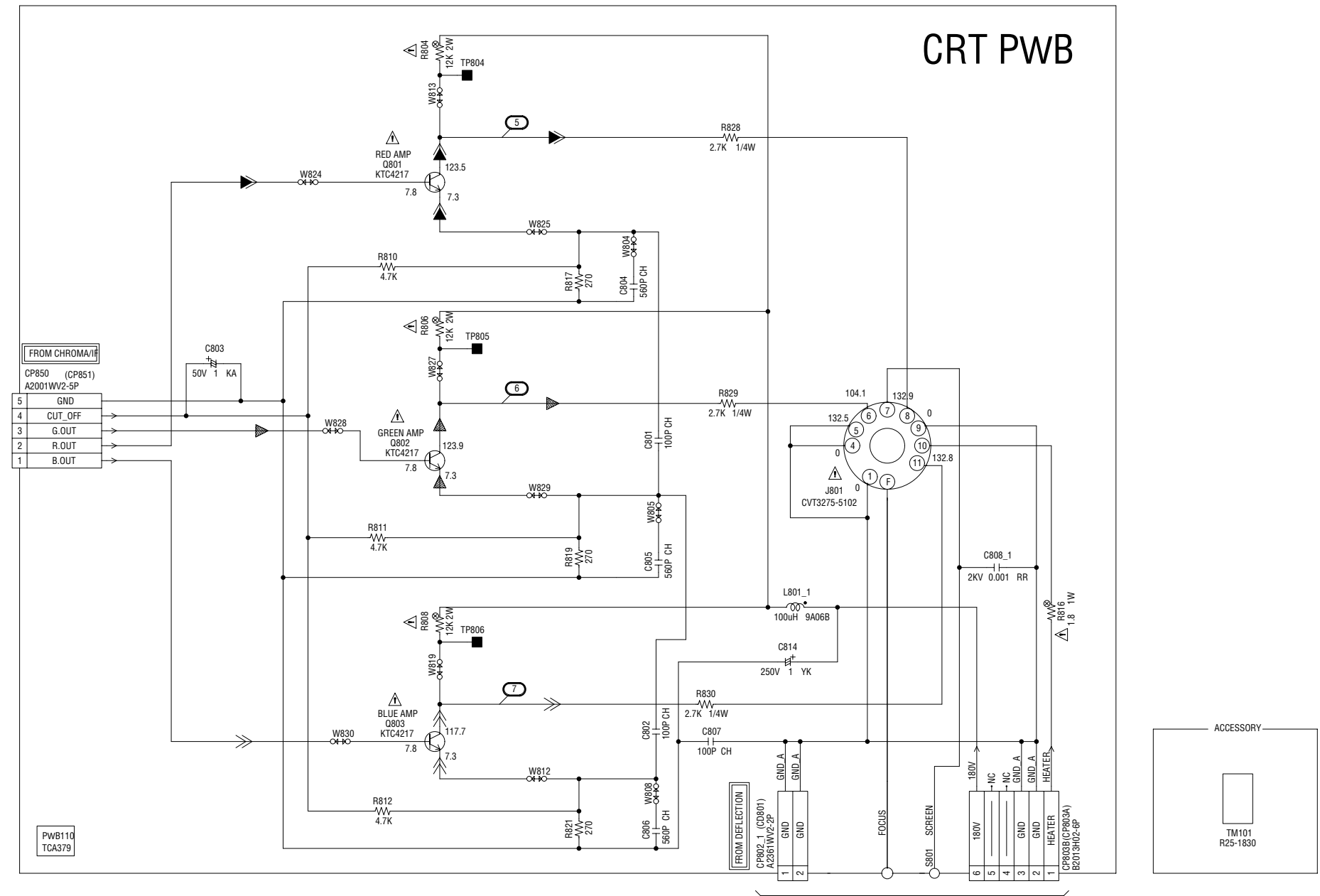
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

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 AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

CRT SCHEMATIC DIAGRAM
(CRT PWB)



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.

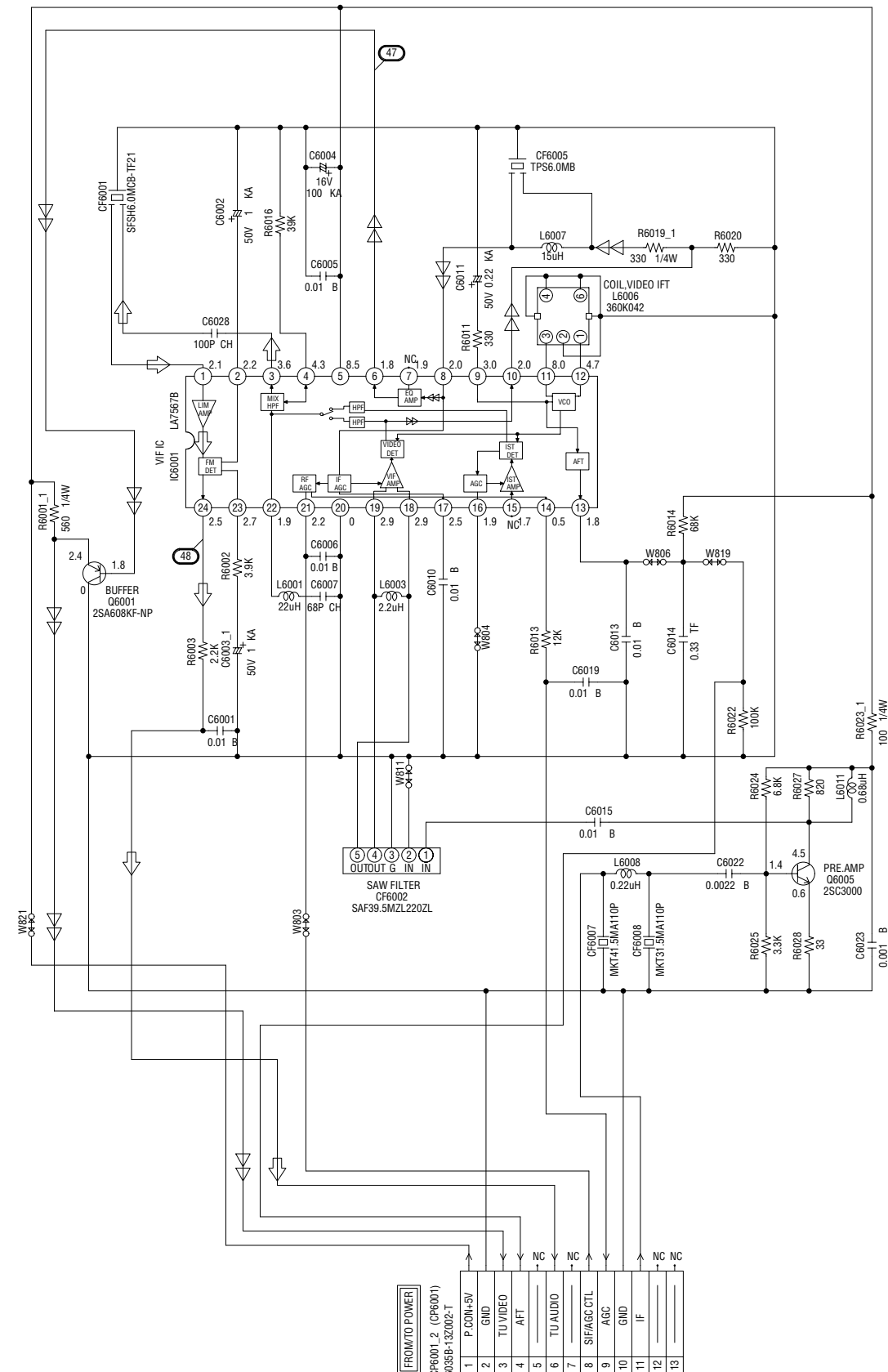
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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 CELLS DECRITES DANS LA NOMENCLATURE DES PIECES.

◀ R.SIGNAL
◀ G.SIGNAL
◀ B.SIGNAL

IF SCHEMATIC DIAGRAM
(IF PWB)



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

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

◁ TUNER VIDEO SIGNAL
◁ AUDIO SIGNAL(REC)

PWB350
VE6778

1-20

