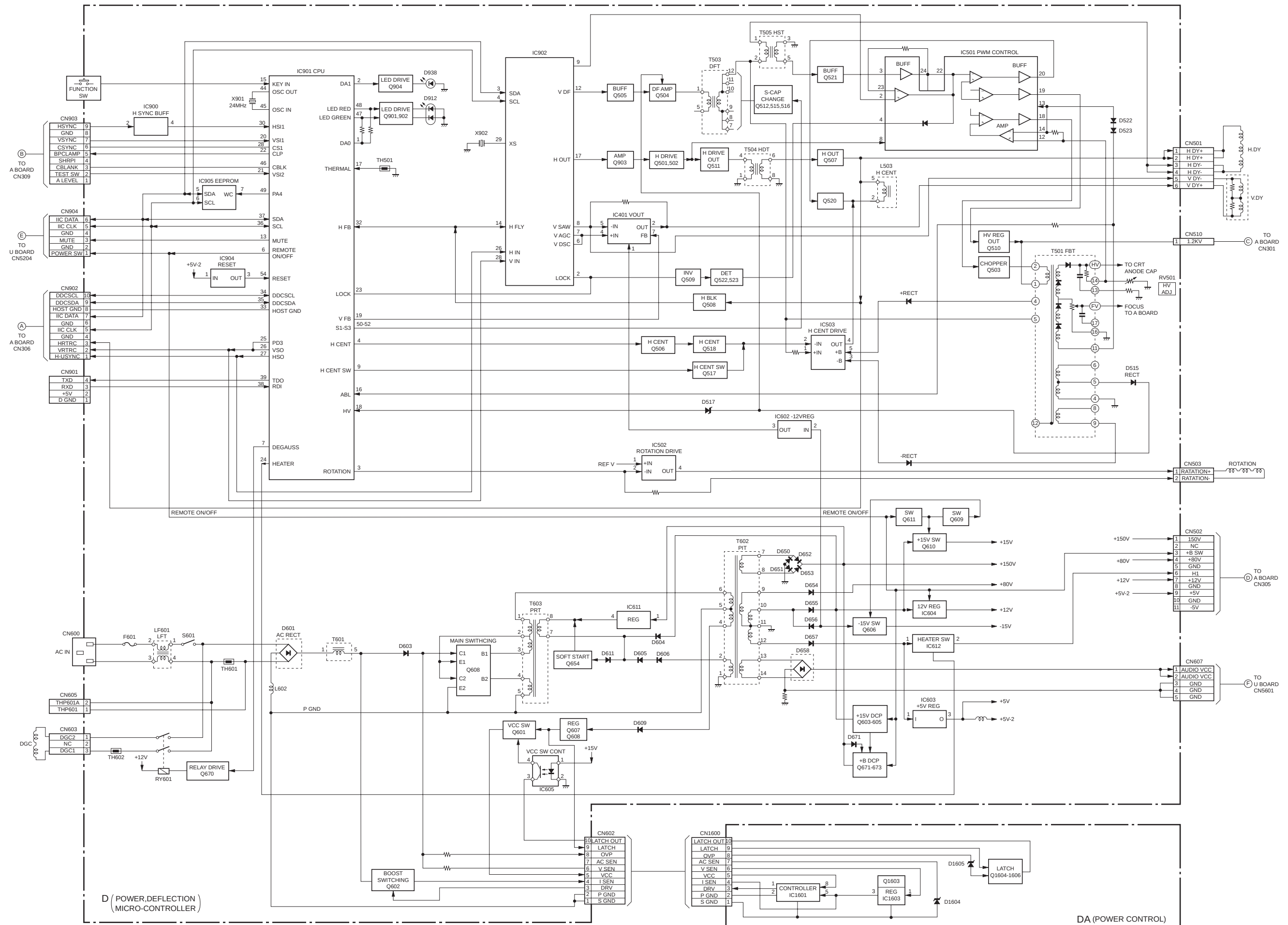
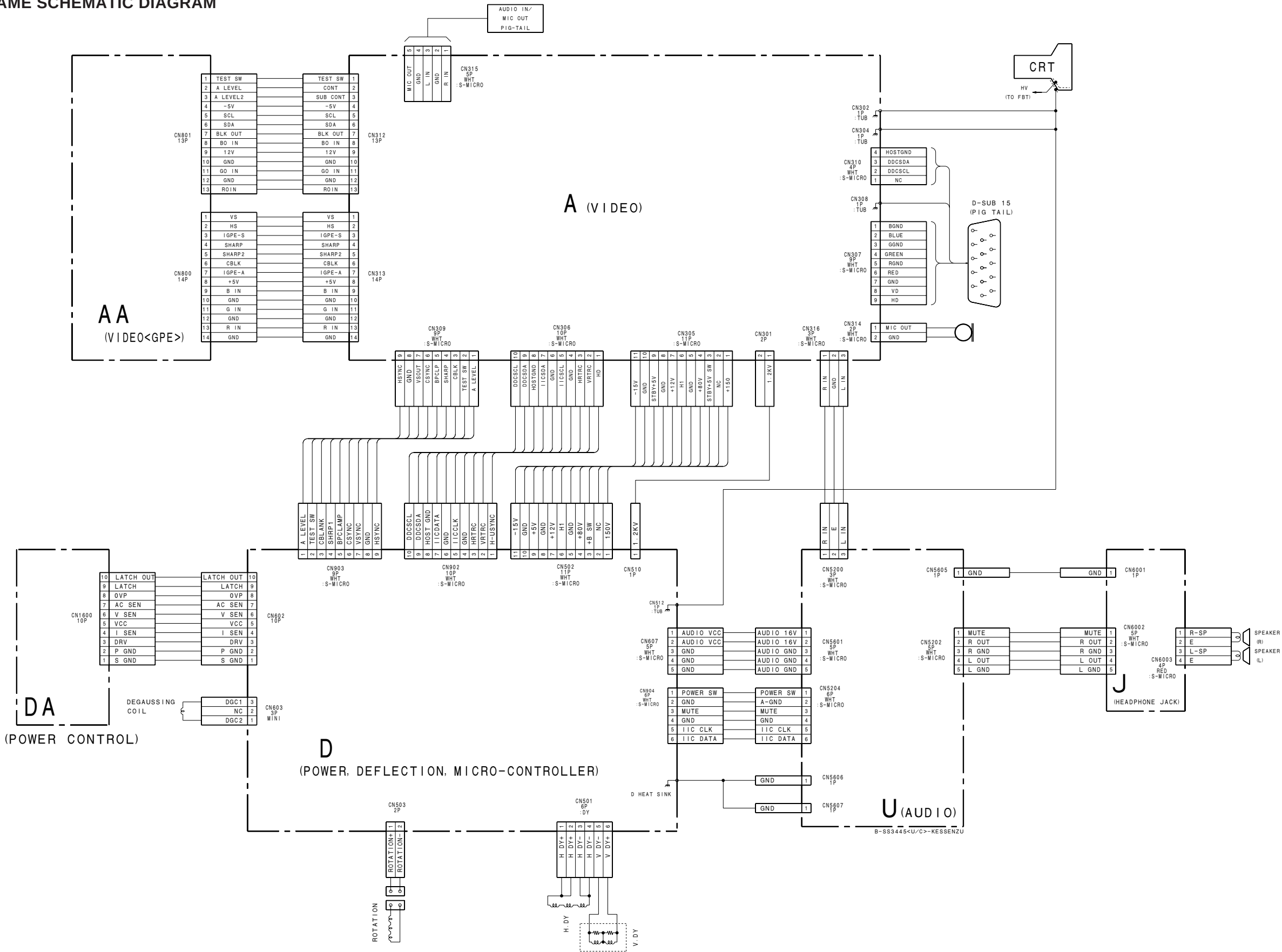


5-1. BLOCK DIAGRAMS

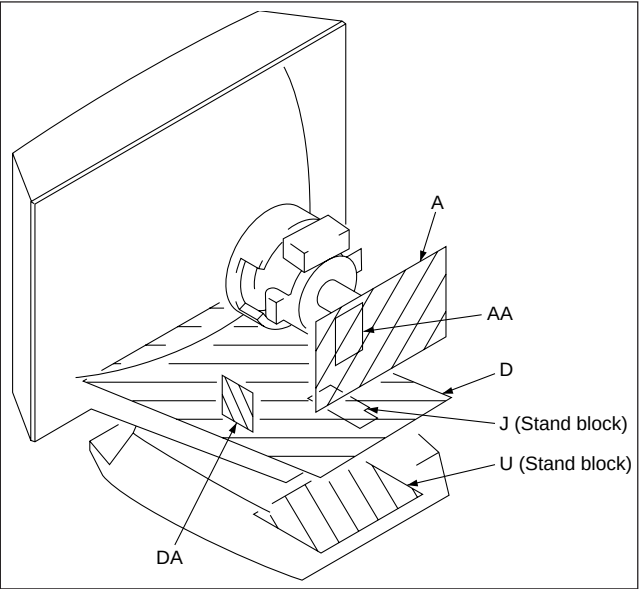




5-2. FRAME SCHEMATIC DIAGRAM



5-3. CIRCUIT BOARDS LOCATION



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. (pF: μmF)
- Capacitors without voltage indication are all 50 V.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4 W (CHIP : 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- Δ : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- $\perp$: earth-ground.
- : earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 M digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- * : Can not be measured.
- Circled numbers are waveform references.
- : B + bus.
- : B - bus.
- The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by , make the necessary adjustments indicated. (See page 3-1)
- When replacing the part in below table, be sure to perform the related adjustment.

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

	Part replaced ()	
HV ADJ	RV501	
	Part replaced ()	
HV Regulator Circuit Check	D Board	IC501, C553, C554 C555, C558, C561 R540, R564, R567 RV501, T501 (FBT)
HV Hold-down Circuit Check	D Board	IC603, IC901, D515 D517, C540, C542 C544, R543, R547 R549, R552, T501 (FBT)
Beam Current Protector Circuit Check	D Board	IC603, IC604, IC901 C535, C541, R515 R545, R546, R548 R550, R934, T501 (FBT)

Terminal name of semiconductors in silk screen printed circuit (※)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode Anode Cathode	
⑬	Transistor (FET)		Drain Gate	
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		Source Drain Gate	
⑯	Transistor		Emitter Collector Base	
—	Discrete semiconductor			

(Chip semiconductors that are not actually used are included.)

The schematic diagram illustrates the video section of a color television set, organized into a grid with columns numbered 1 to 17 and rows lettered A to J. The diagram shows the flow of video signals from input connectors to the picture tube.

Input and Initial Processing (Columns 1-4): The video signal enters via a D-SUB 15 (PIG TAIL) connector (CN307) and an S-MICRO connector (CN312). It passes through a series of resistors (R101-R108) and capacitors (C101-C104) to the video input of the video processor IC006 (CX48075S). The processor also receives control signals like STBY+5V and GND.

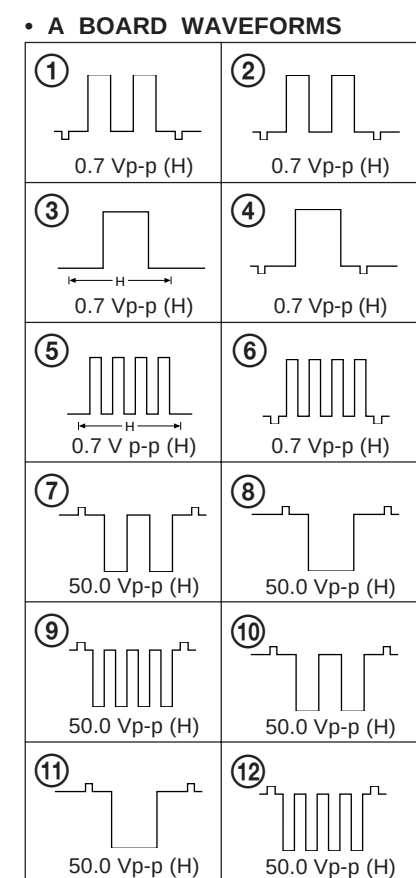
Video Processing and OSD (Columns 5-10): The video processor IC006 handles the signal, with its output (G1 IN, G2 IN, G3 IN) going to the OSD mixer IC001 (LM2406T). The OSD mixer also receives control signals and provides OSD output (OSD OUT) to the video processor. The video processor also has a video output (V OUT) and a video level control (V LEVEL) input.

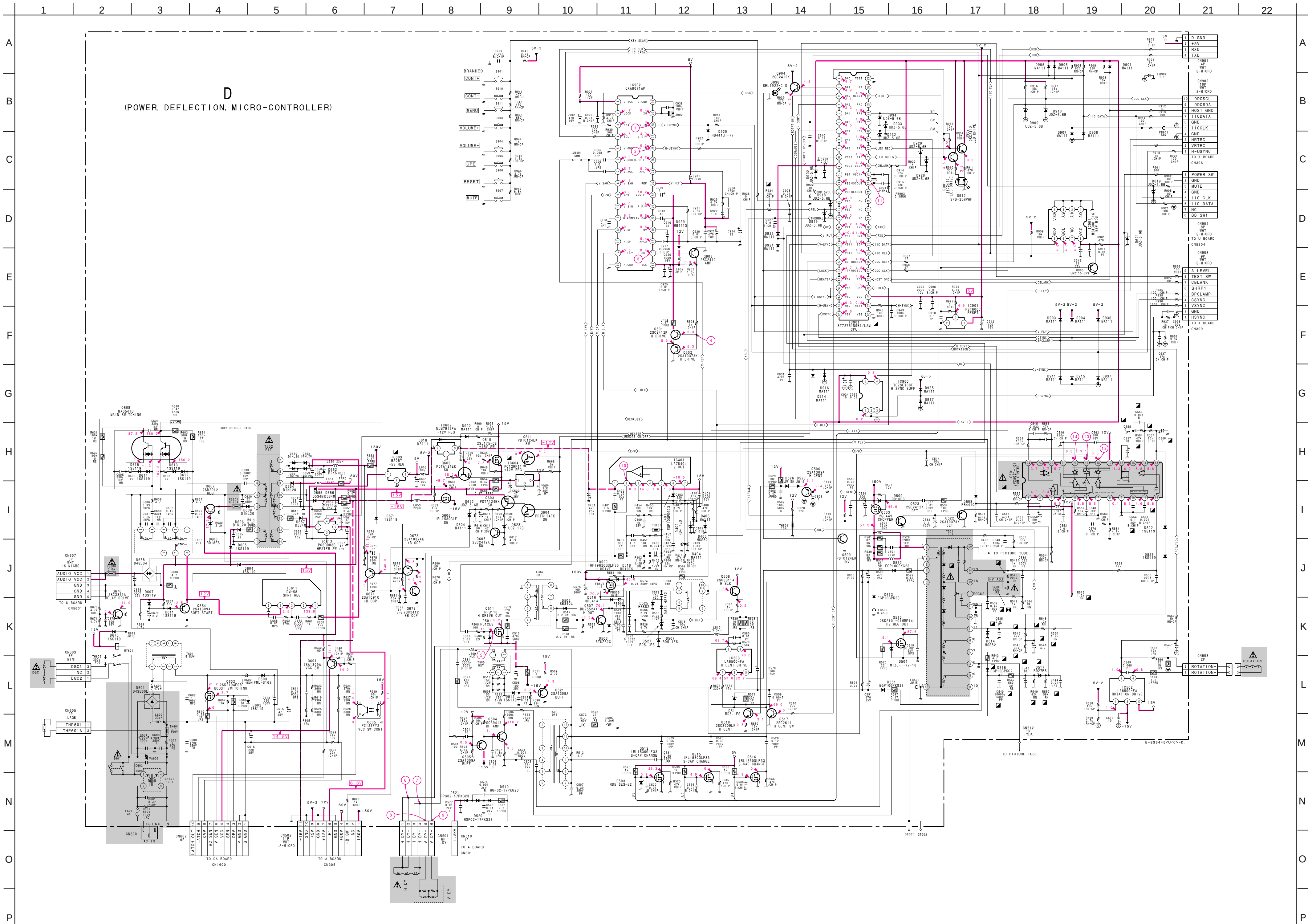
Video Output and Picture Tube (Columns 11-17): The video signal is then sent to the video output stage, which includes a video output driver IC009 (SN74HC02ANS) and a video output filter IC008 (ME2392P). The output signal is then sent to the picture tube (J001) via a video output connector (CN301). The picture tube also receives control signals like STBY+5V and GND.

Power and Control (Columns 11-17): The diagram shows various power supply rails (12V, 80V, 140V, 15V) and control signals (STBY+5V, GND) distributed throughout the circuit. It also includes a section for the picture tube (J001) and its associated components (R101-R108, C101-C104).

Connectors and Components: The diagram includes numerous connectors (CN307, CN312, CN313, CN309, CN306, CN310, CN316, CN314, CN315, CN301, CN512, CN5200) and a wide variety of components (resistors, capacitors, diodes, transistors, ICs) labeled with their respective values and part numbers.

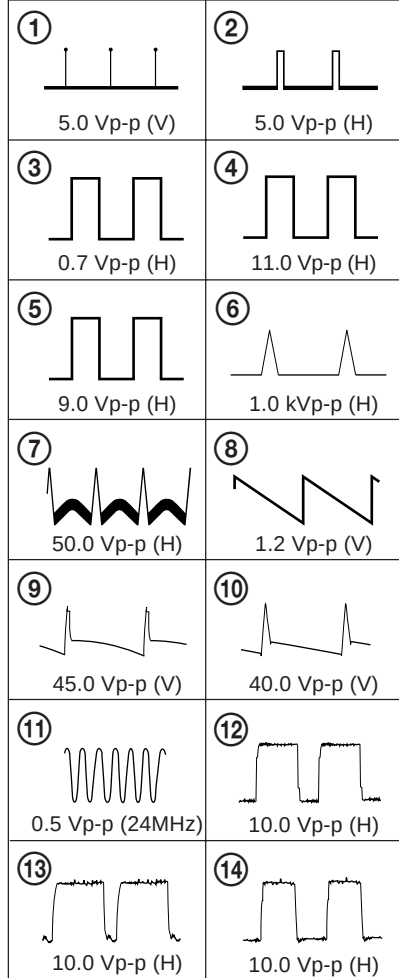
← **A** board





D
(POWER, DEFLECTION, MICRO-CONTROLLER)

• D BOARD WAVEFORMS



• D BOARD
IC502, IC503
LA6500-FA

