

# XR-5W497RB

## SERVICE MANUAL

*AEP Model*



Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

“DOLBY” and the double-D symbol  $\square\square$  are trademarks of Dolby Laboratories Licensing Corporation.

### **Notes on Chip Component Replacement**

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

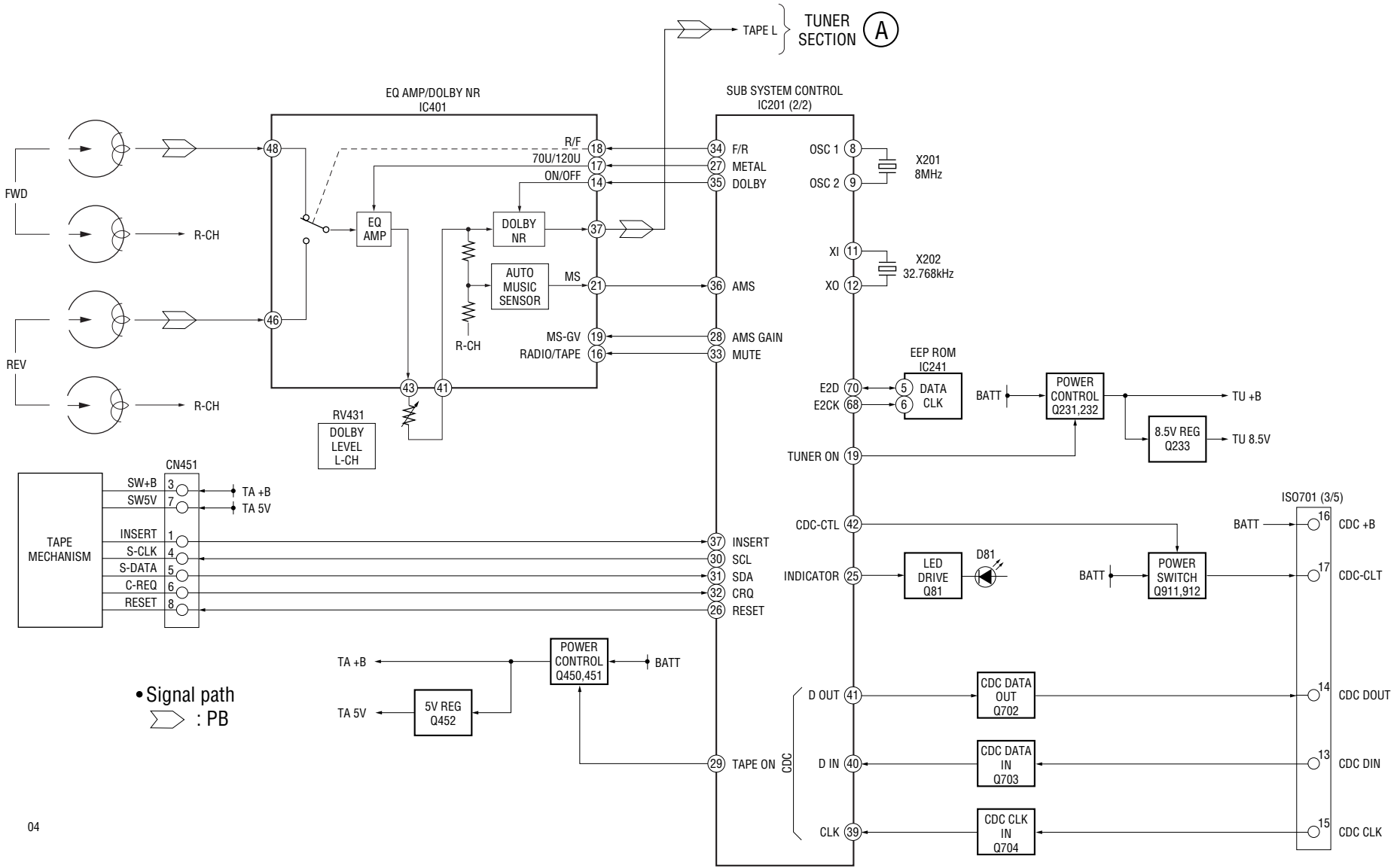
## FM/AM CASSETTE CAR STEREO



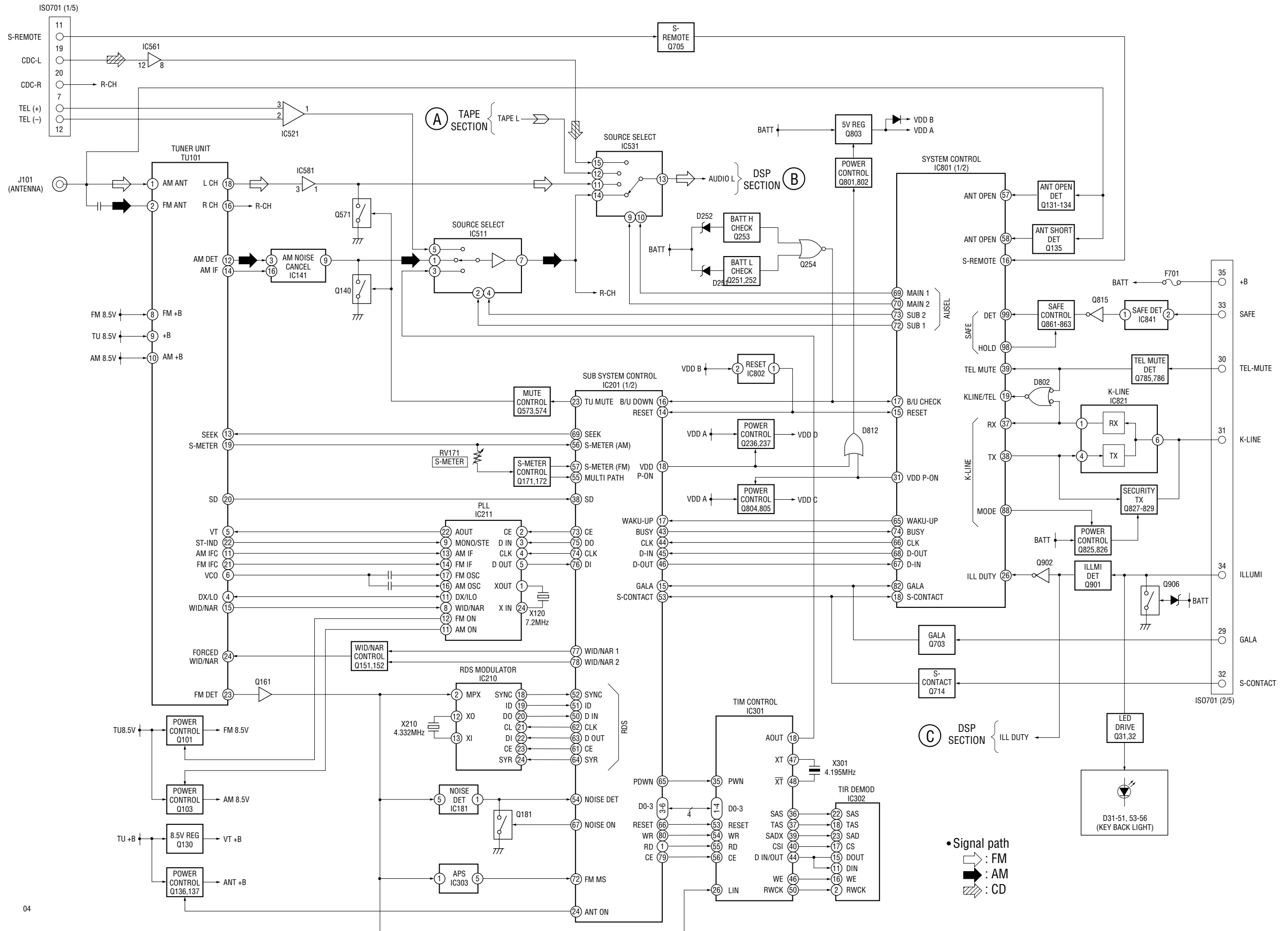
# SONY®



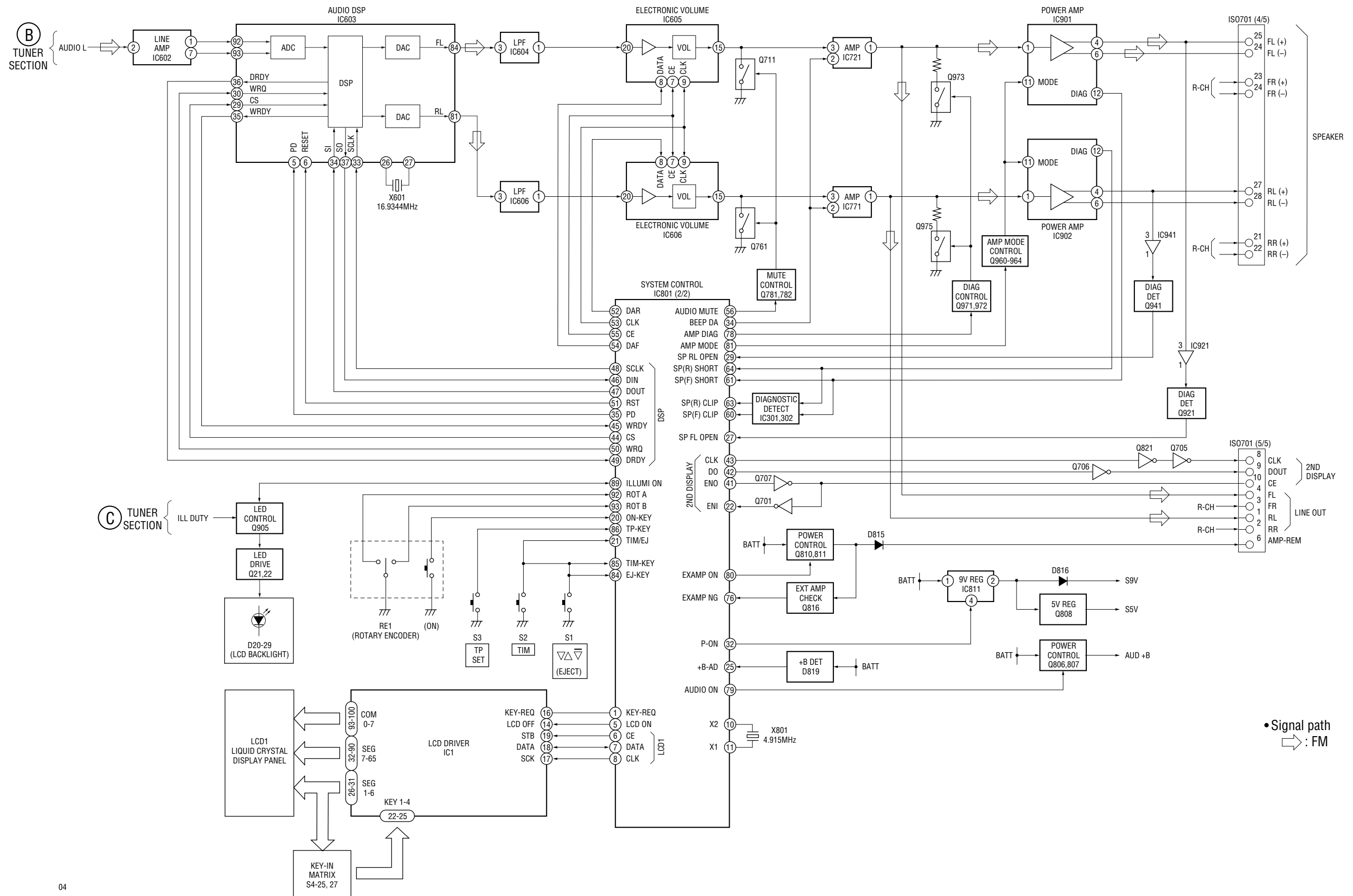
3-2. BLOCK DIAGRAM — TAPE SECTION —



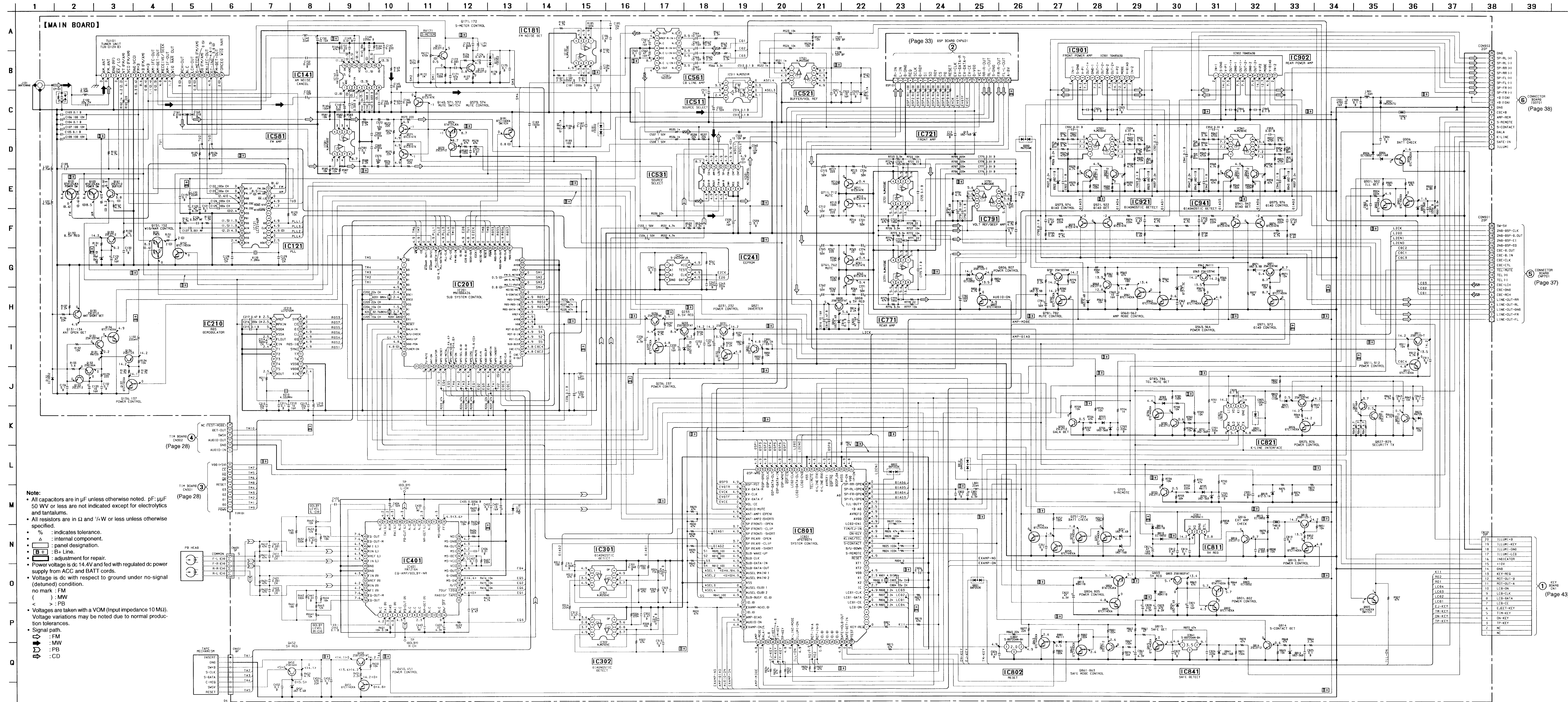
2-3. BLOCK DIAGRAM — TUNER SECTION —



2-4. BLOCK DIAGRAM — DSP SECTION —



2-6. SCHEMATIC DIAGRAM — MAIN SECTION — Refer to page 46 for IC Block Diagrams.



- Note:**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
  - All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
  - % : indicates tolerance.
  - $\square$  : internal component.
  - $\square$  : panel designation.
  - B+** : B+ Line.
  - $\square$  : adjustment for repair.
  - Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
  - Voltage is dc with respect to ground under no-signal (detuned) condition.
  - no mark : FM
  - ( ) : MW
  - < : PB
  - Voltages are taken with a VOM (input impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
  - Signal path.
  - $\square$  : FM
  - $\square$  : MW
  - $\square$  : PB
  - $\square$  : CD

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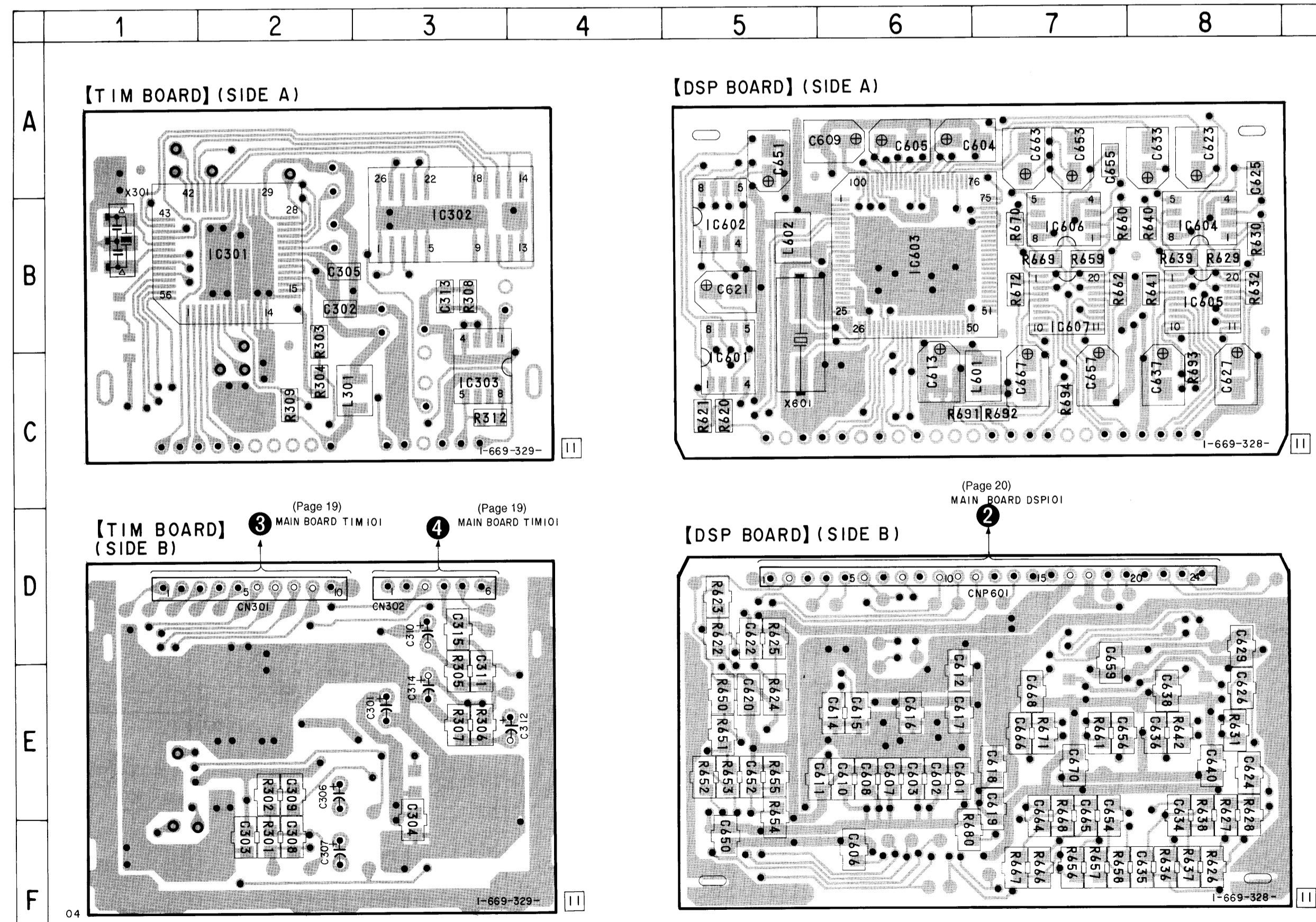
2-7. PRINTED WIRING BOARDS — TIM/DSP SECTION —

• Semiconductor Location

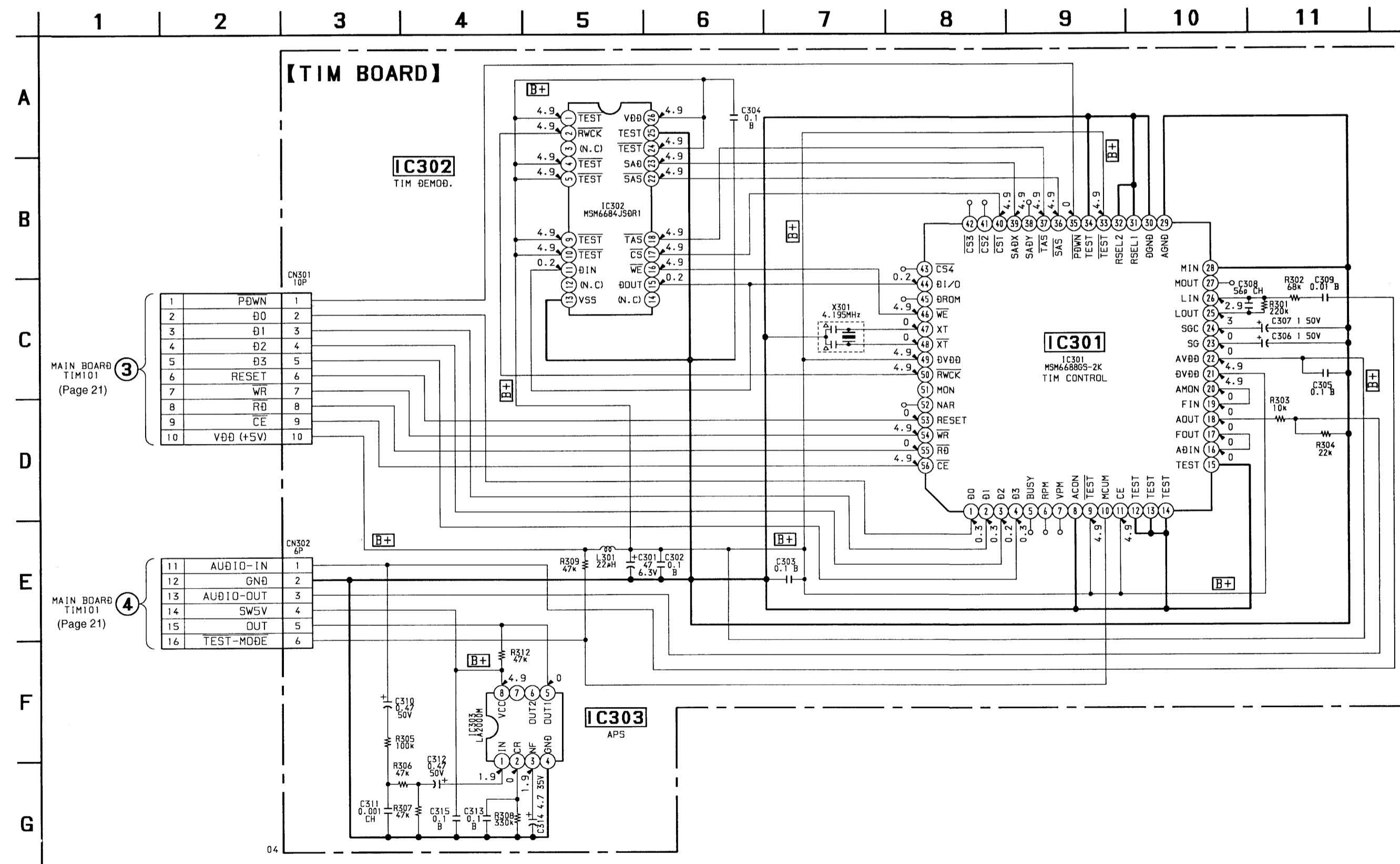
Ref. No.	Location
IC301	B-2
IC302	B-3
IC303	C-3
IC601	C-5
IC602	B-5
IC603	B-6
IC604	B-6
IC605	B-8
IC606	B-7
IC607	B-7

Note:  
 • — : parts extracted from the component side.  
 • — : Through hole.  
 • — : internal component.  
 • — : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:  
 Pattern face side: Parts on the pattern face side seen from the (Side B) pattern face are indicated.  
 Parts face side: Parts on the parts face side seen from the (Side A) parts face are indicated.

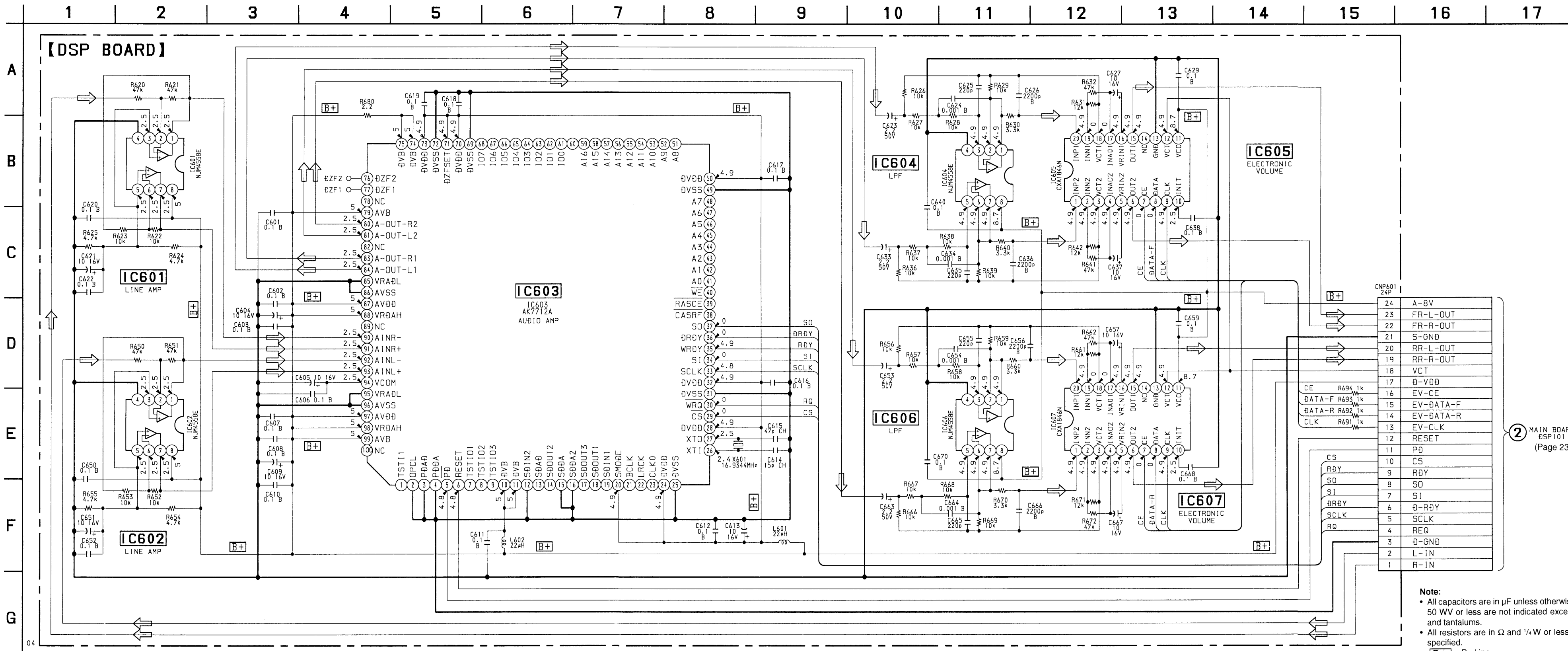


2-8. SCHEMATIC DIAGRAM — TIM SECTION — • Refer to page 48 for IC Block Diagrams.



Note:  
 • All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ ,  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.  
 • All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.  
 • — : internal component.  
 • — : +B+ Line.  
 • Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.  
 • Voltage is dc with respect to ground under no-signal (detuned) condition.  
 • no mark - FM  
 • Voltages are taken with a VOM (Input impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.

2-9. SCHEMATIC DIAGRAM — DSP SECTION — • Refer to page 49 for IC Block Diagrams.

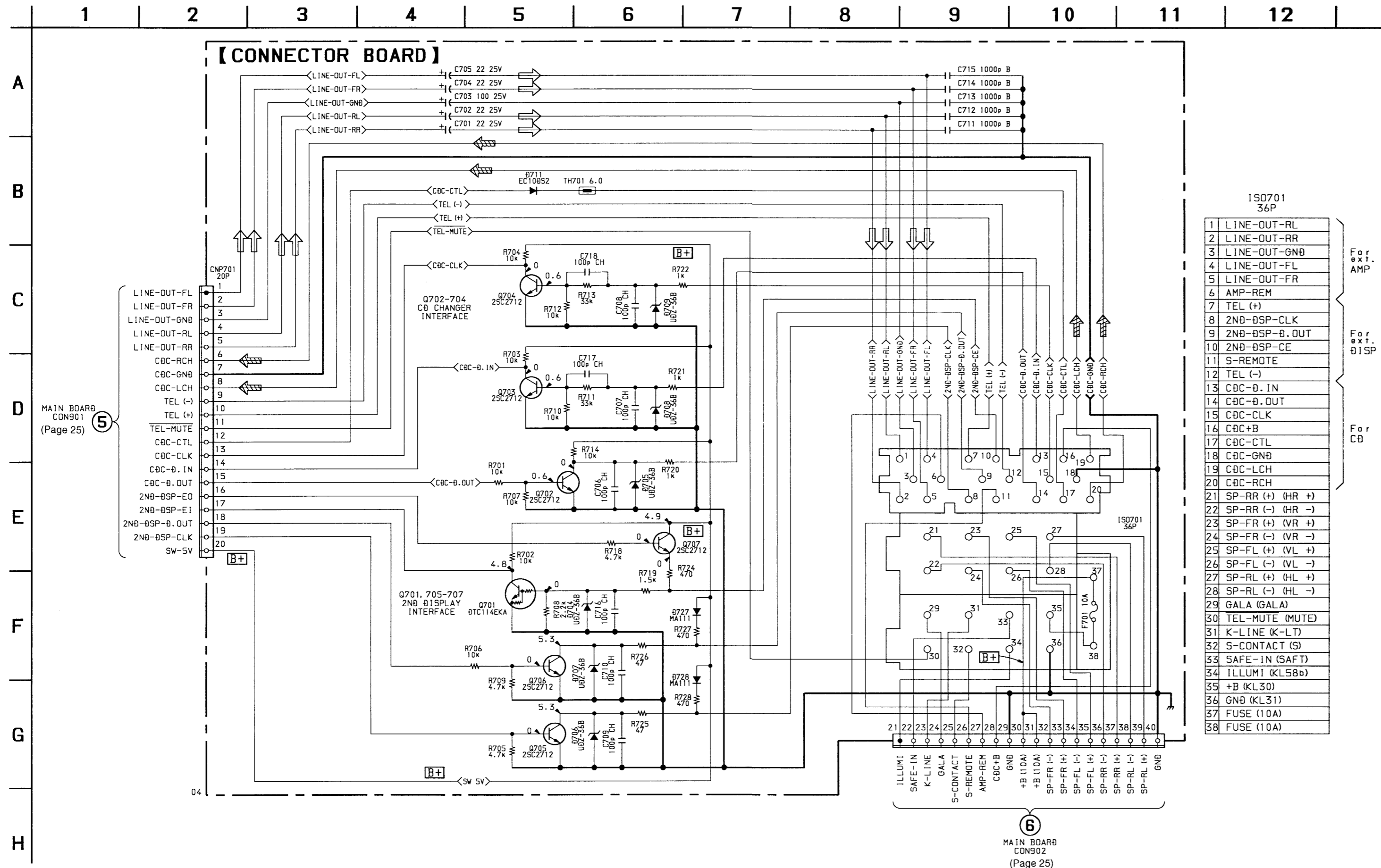


**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{pF}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- [B+] : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltage is dc with respect to ground under no-signal (detuned) condition.
- no mark : FM
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- □ : FM

② MAIN BOARD 85P101 (Page 23)

2-11. SCHEMATIC DIAGRAM — CONNECTOR SECTION —

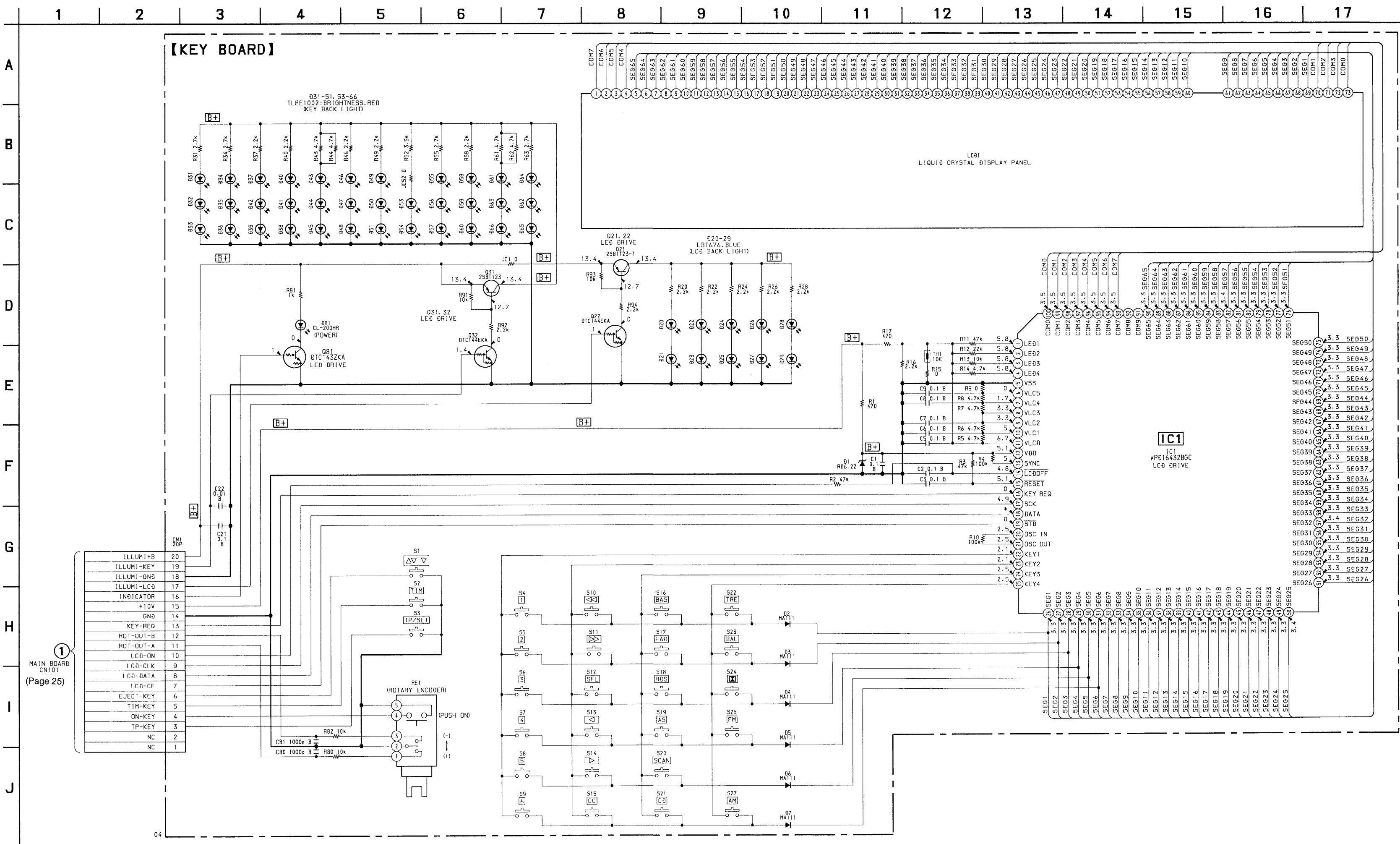


**Note:**

- All capacitors are in µF unless otherwise noted. pF: pµF
- 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- [B+] : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltage is dc with respect to ground under no-signal (detuned) condition.
- no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- FM
- CD



2-13. SCHEMATIC DIAGRAM — PANEL SECTION —



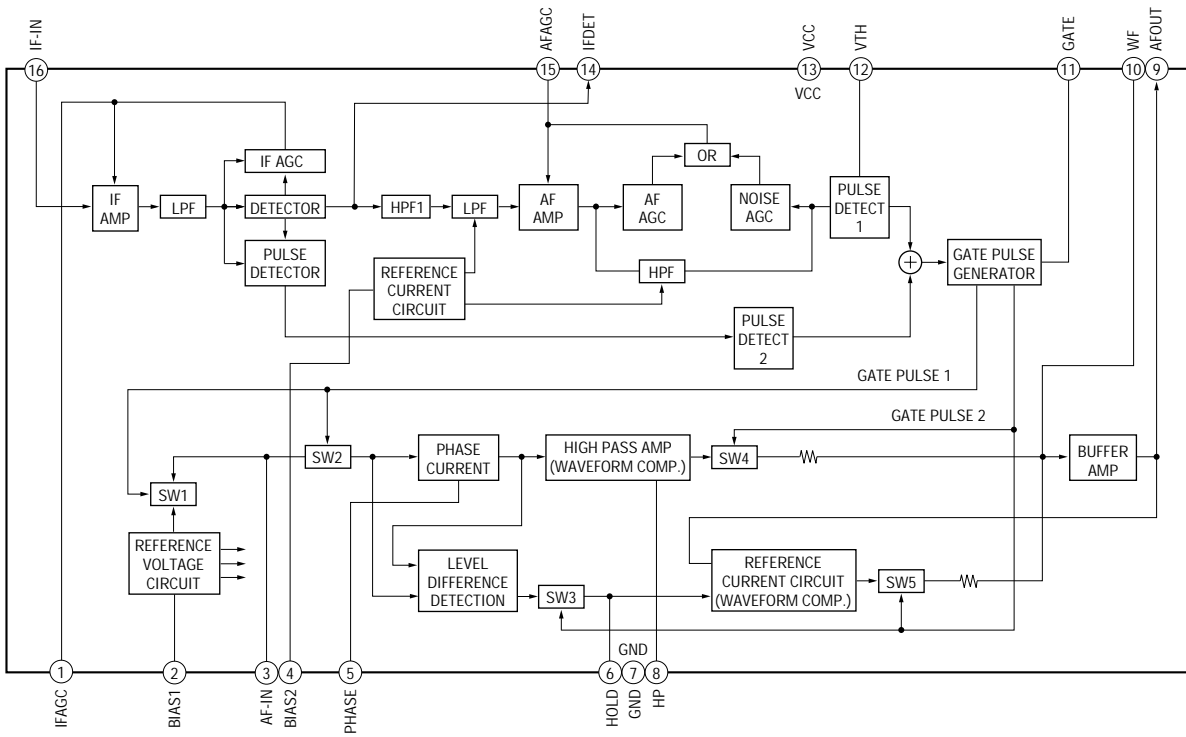
1 MAIN BOARD CNI 01 (Page 25)

**Note:**

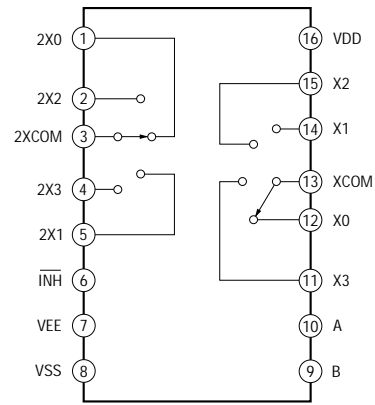
- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{pF}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
- [Panel Designation]: panel designation.
- [B+]: B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltage is dc with respect to ground under no-signal (detuned) condition.
- no mark : FM
- Voltagess are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.

• IC Block Diagrams

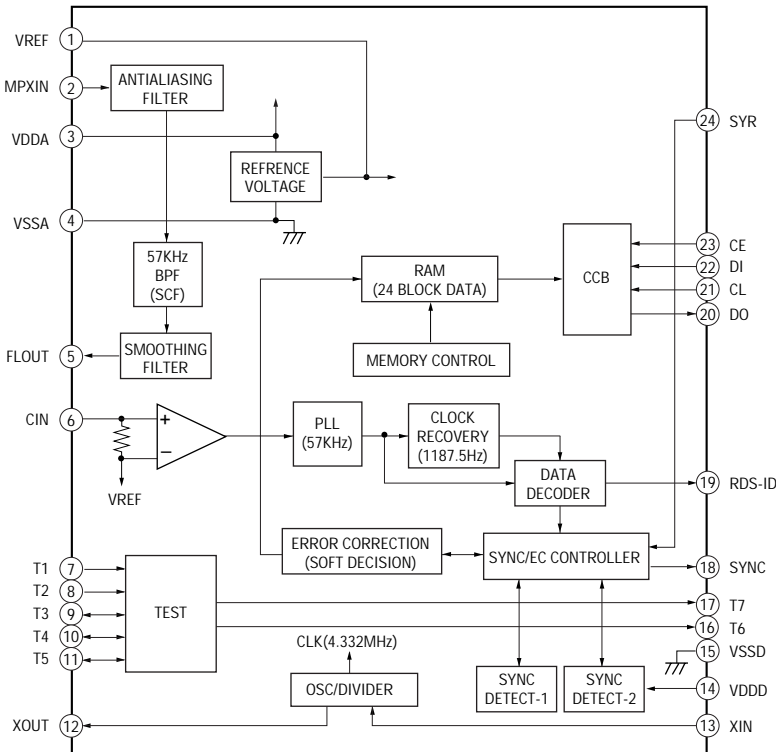
IC141 HA12181FP



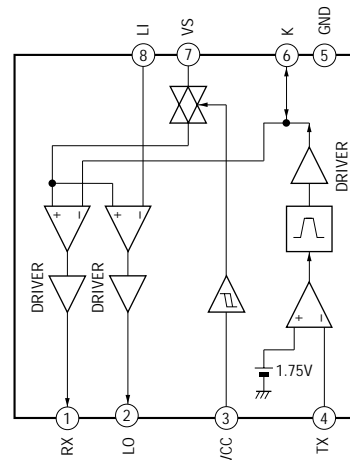
IC531 MC14052B



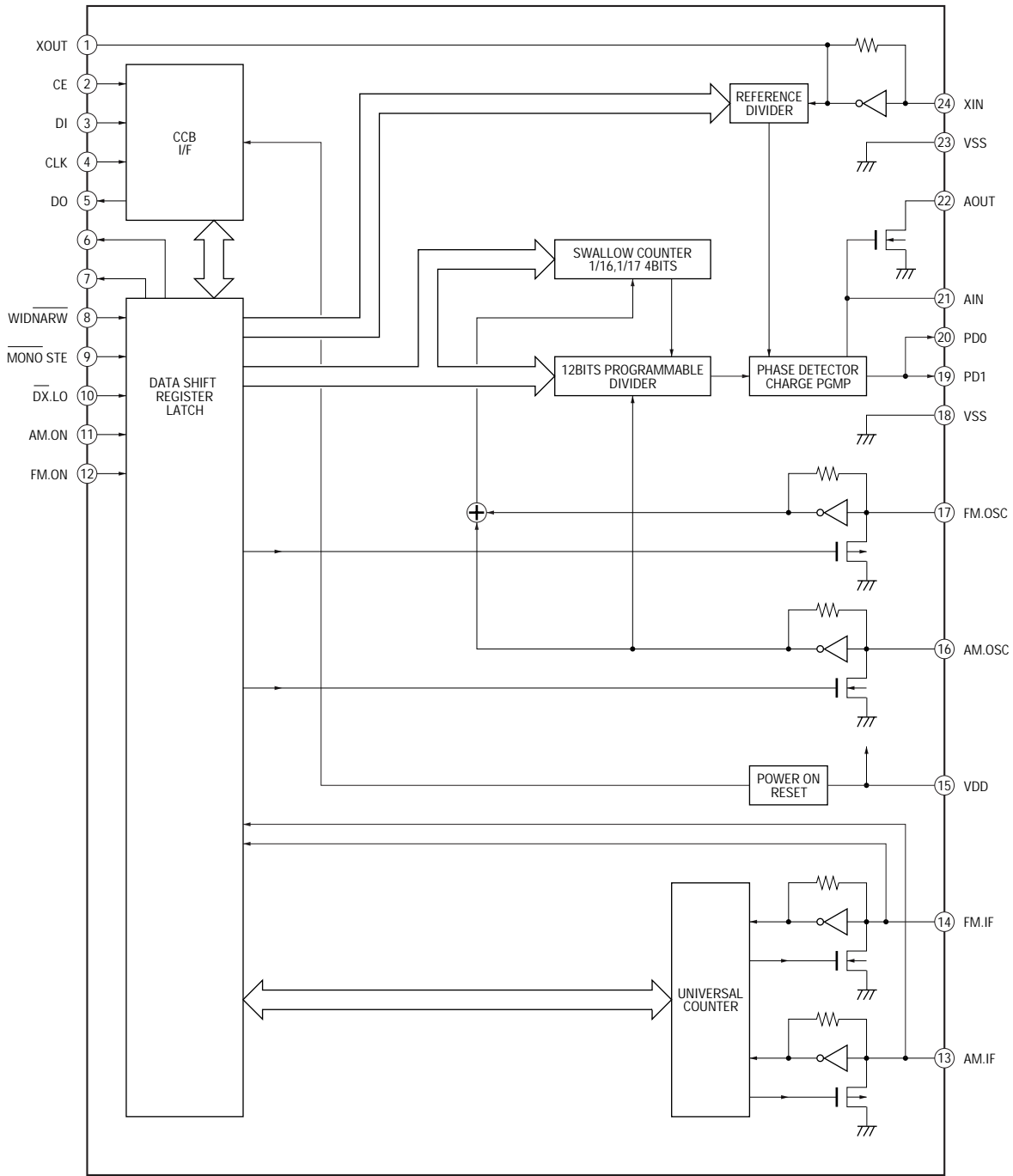
IC210 LC72720M



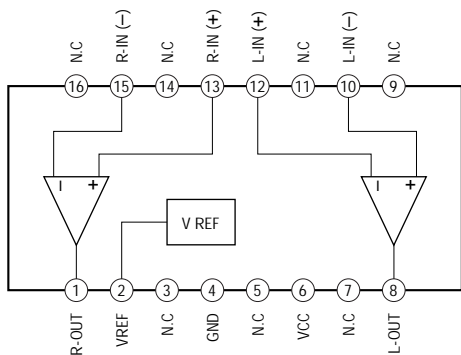
IC821 L9637D



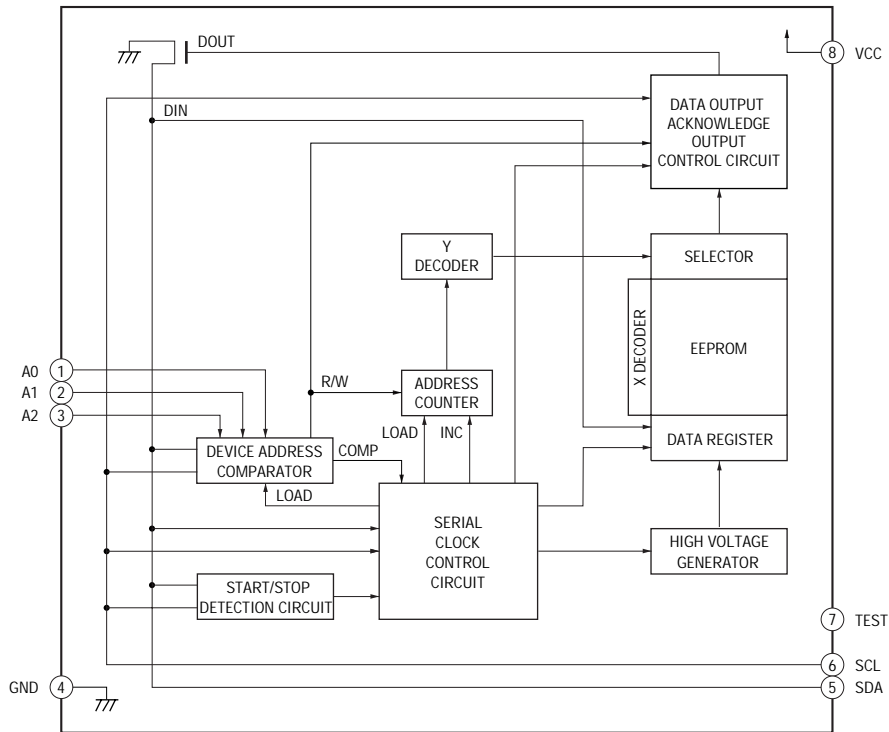
### IC121 LC72146M



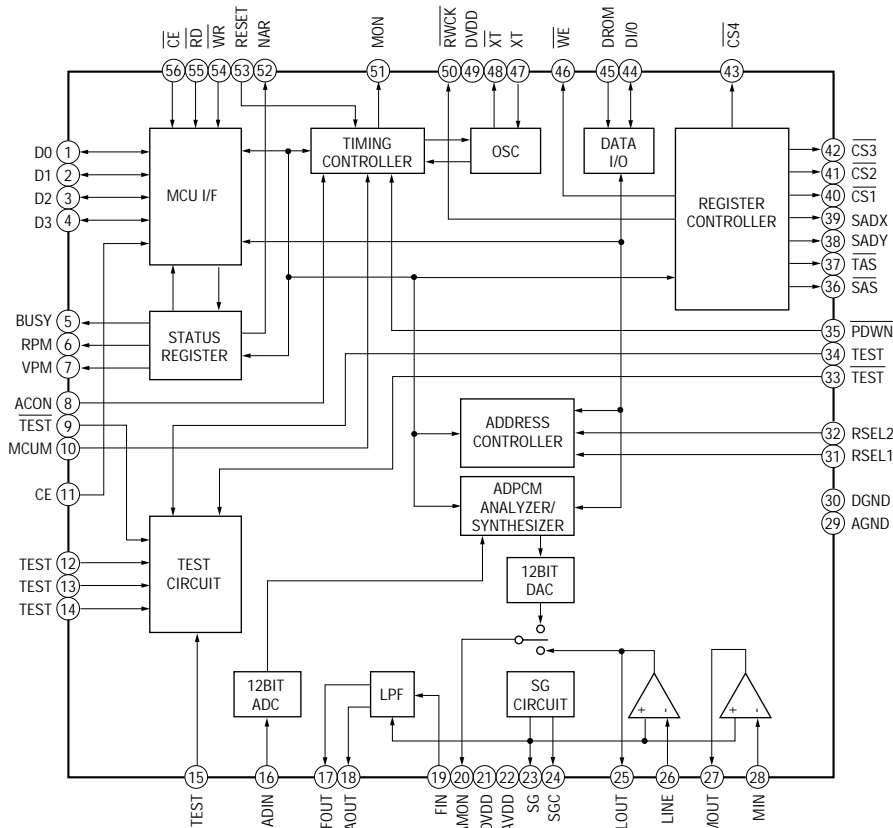
### IC561 TA2050F



**IC241 S-24C04AFJA**



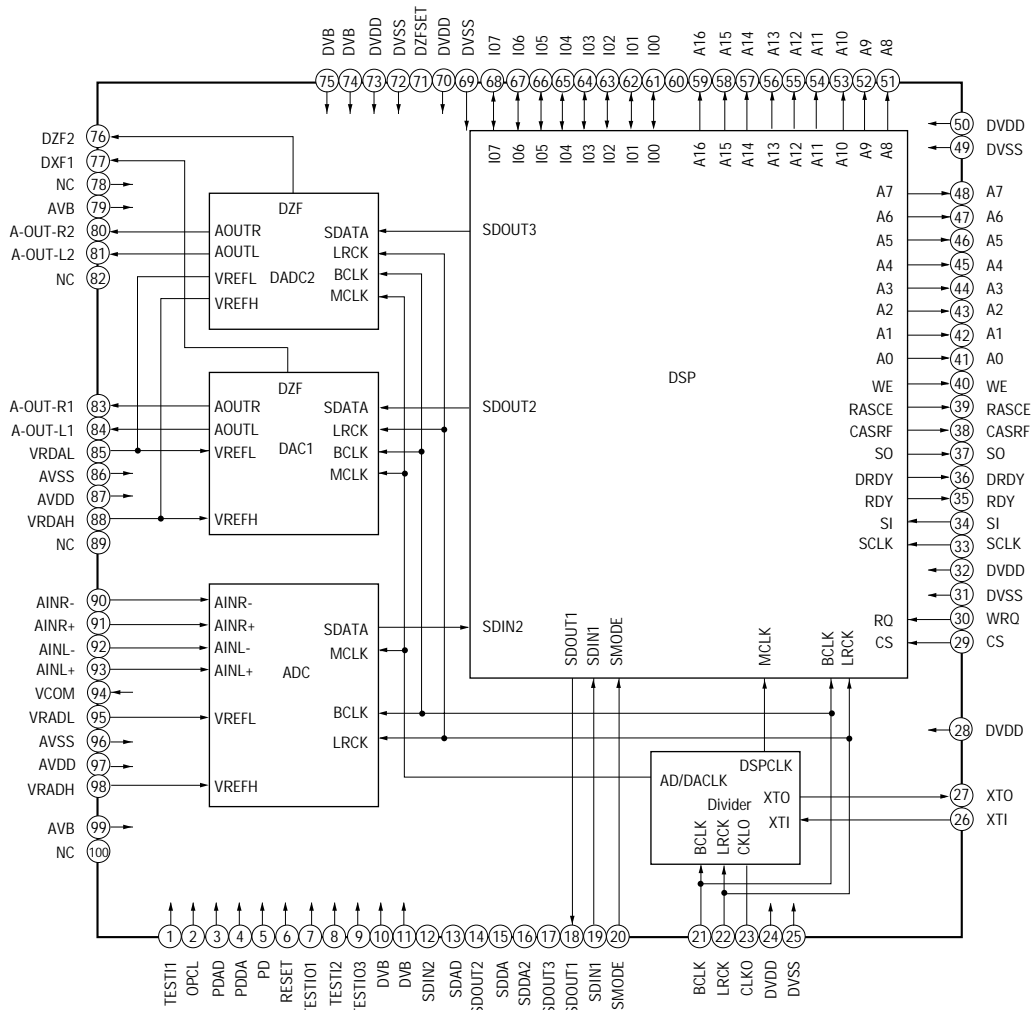
**IC301 MSM6688GS-2K**







### IC603 AK7712A



### IC901, 902 TDA8563AQ

