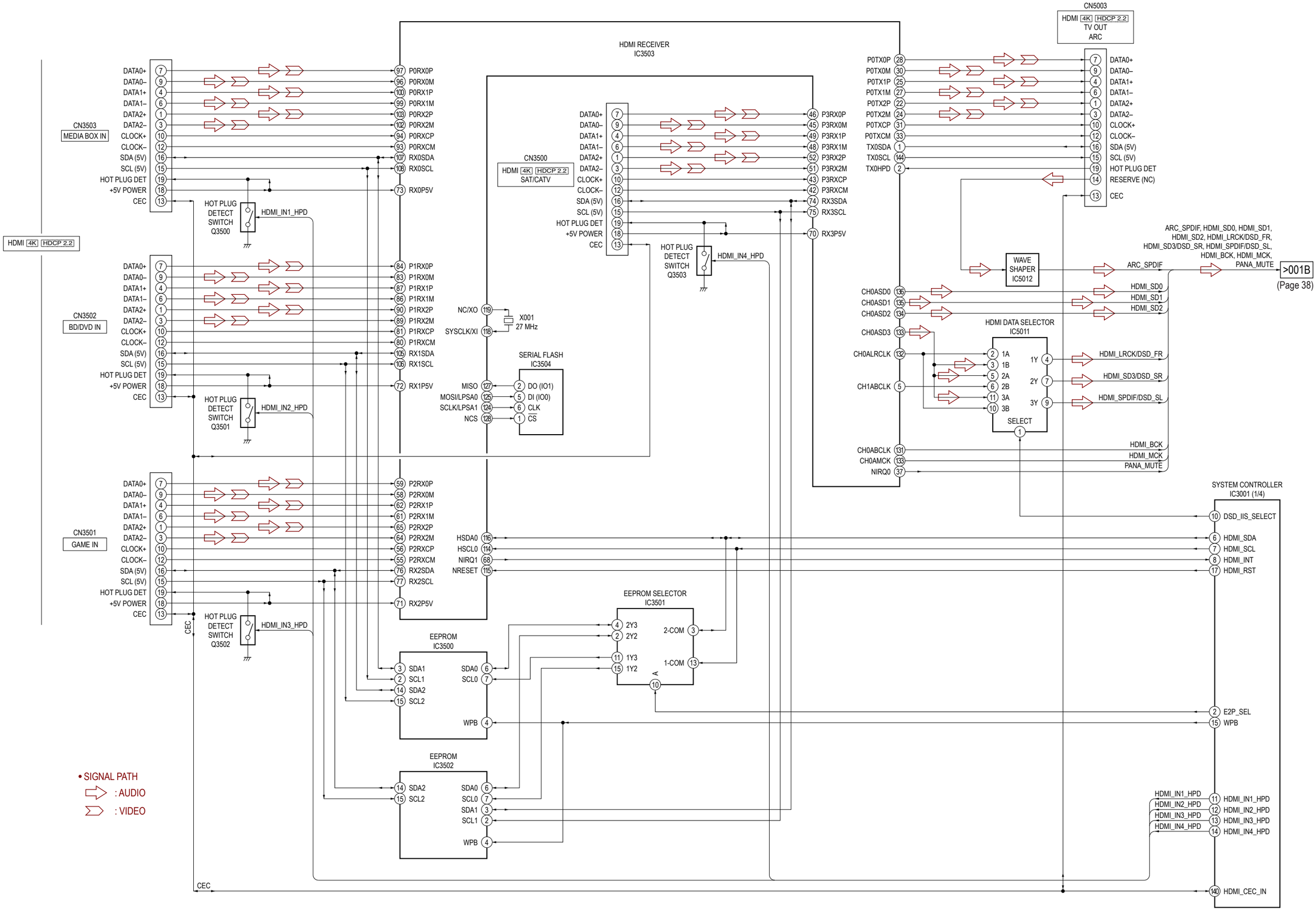
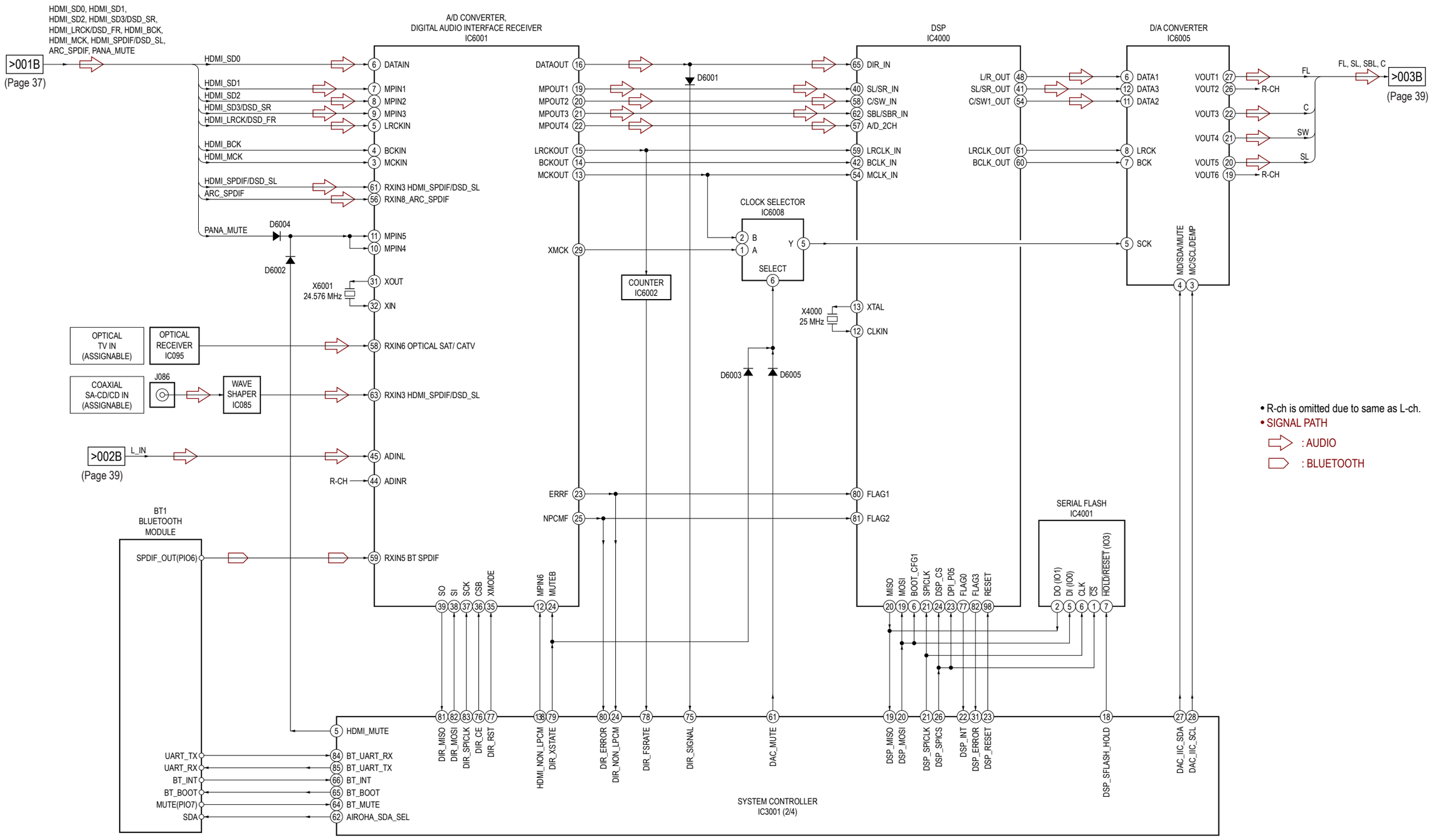
SECTION 6
DIAGRAMS

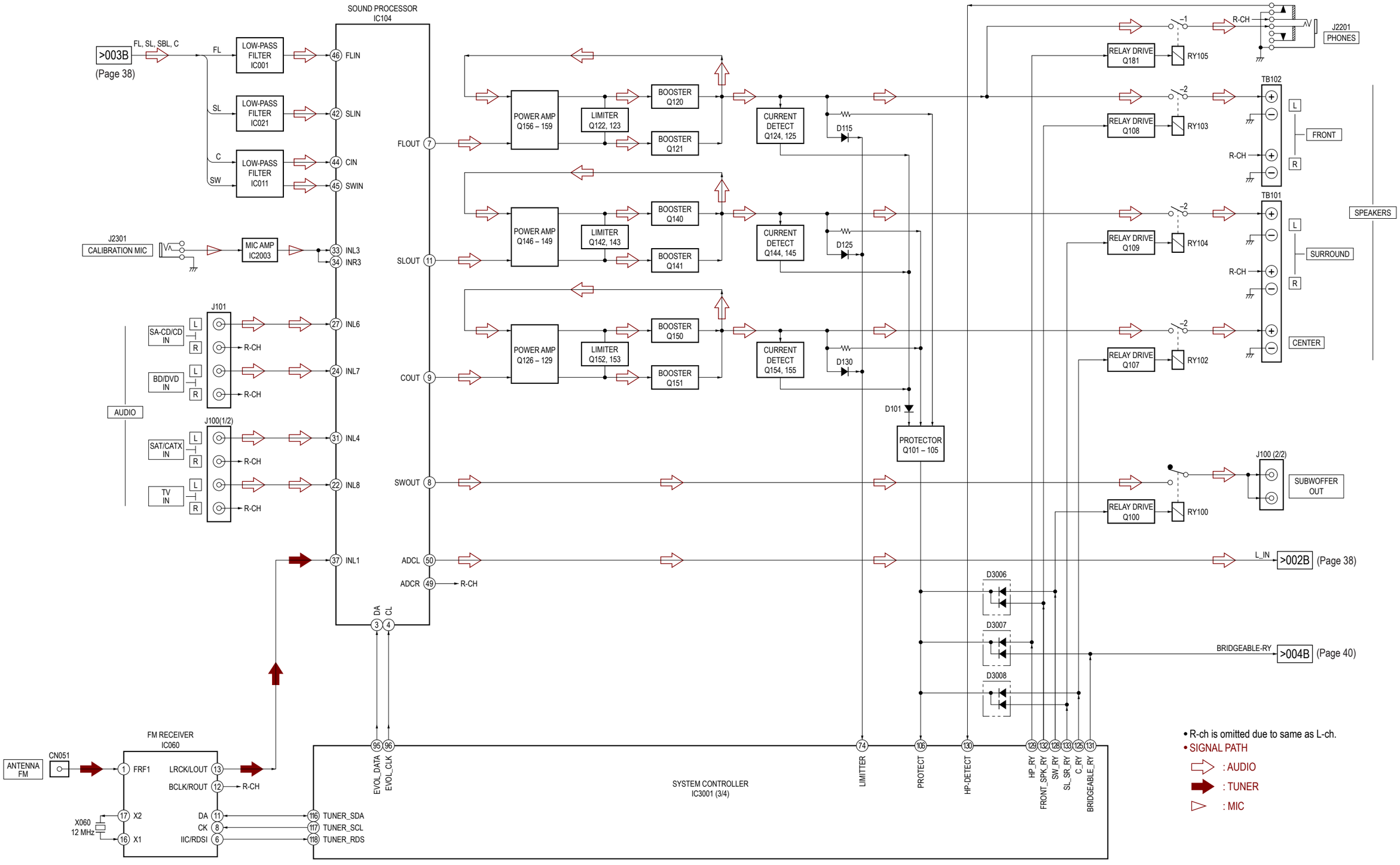
6-1. BLOCK DIAGRAM - HDMI Section -



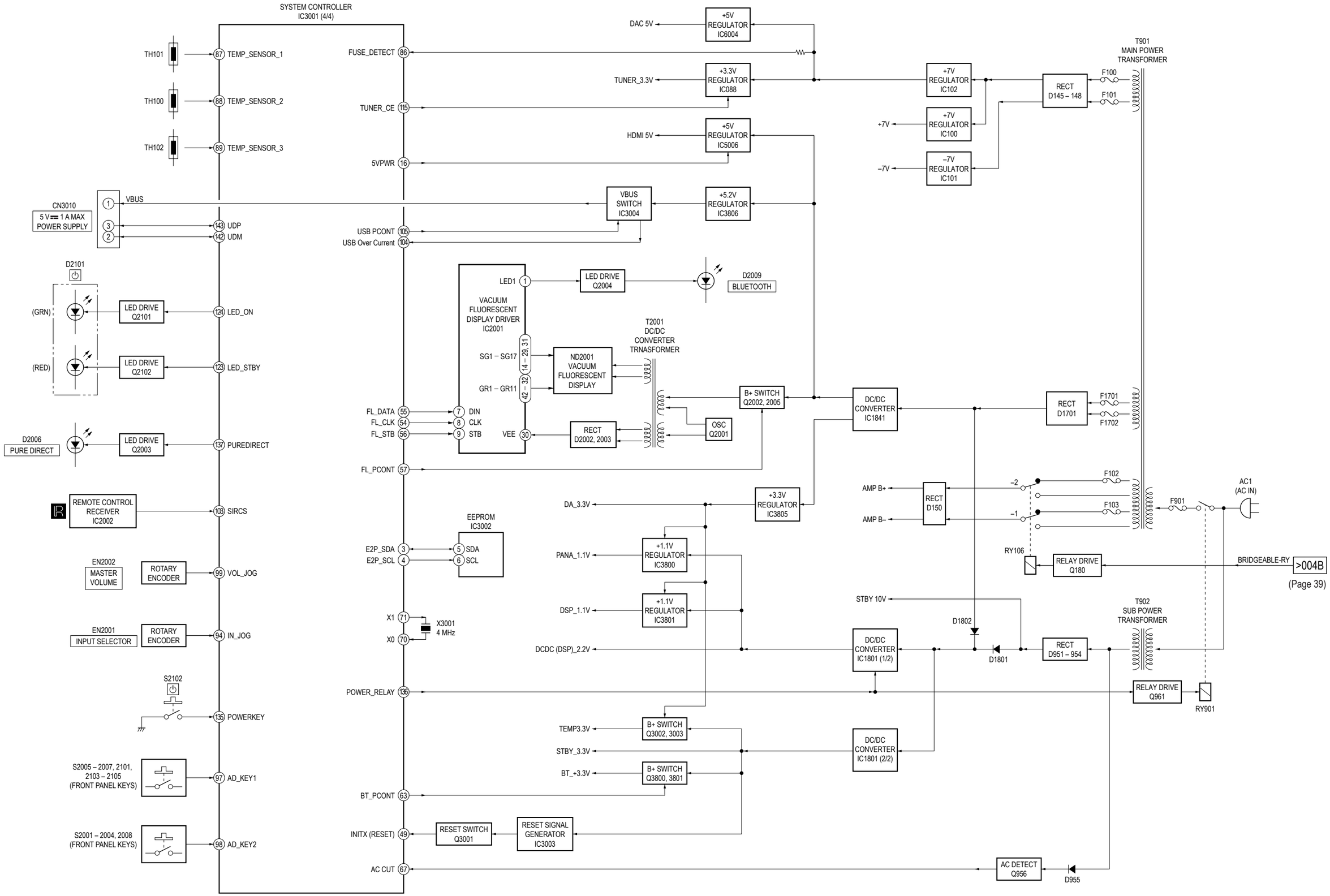
6-2. BLOCK DIAGRAM - DIGITAL AUDIO Section -



6-3. BLOCK DIAGRAM - AMP Section -



6-4. BLOCK DIAGRAM - PANEL/POWER SUPPLY Section -



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Printed Wiring Boards.

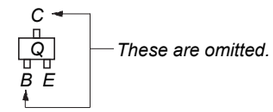
Note:

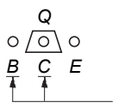
- ○——: Parts extracted from the component side.
- ——: Parts extracted from the conductor side.
- ▬: Pattern from the side which enables seeing.
  (The other layers' patterns are not indicated.)

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

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

- H59-DIGITAL board is multi-layer printed board. However, the patterns of intermediate layers have not been included in diagrams.
- Indication of transistor.





Note 1: When the H59-DIGITAL board is defective, replace the complete mounted board.
The mounted parts cannot be replaced with single for repairing.
Block diagram and printed wiring board that have been described in this service manual are for reference.

Note 2: Among mounted electrical parts on each board, only parts that are described in the electrical parts list can be replaced for repairing.
The parts that are not described in the electrical parts list cannot be replaced with single for repairing.

For Schematic Diagrams.

Note:

- All capacitors are in µF unless otherwise noted. (p: pF) 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.
- ⊣▭⊢: Nonflammable resistor.
- ▭: Panel designation.

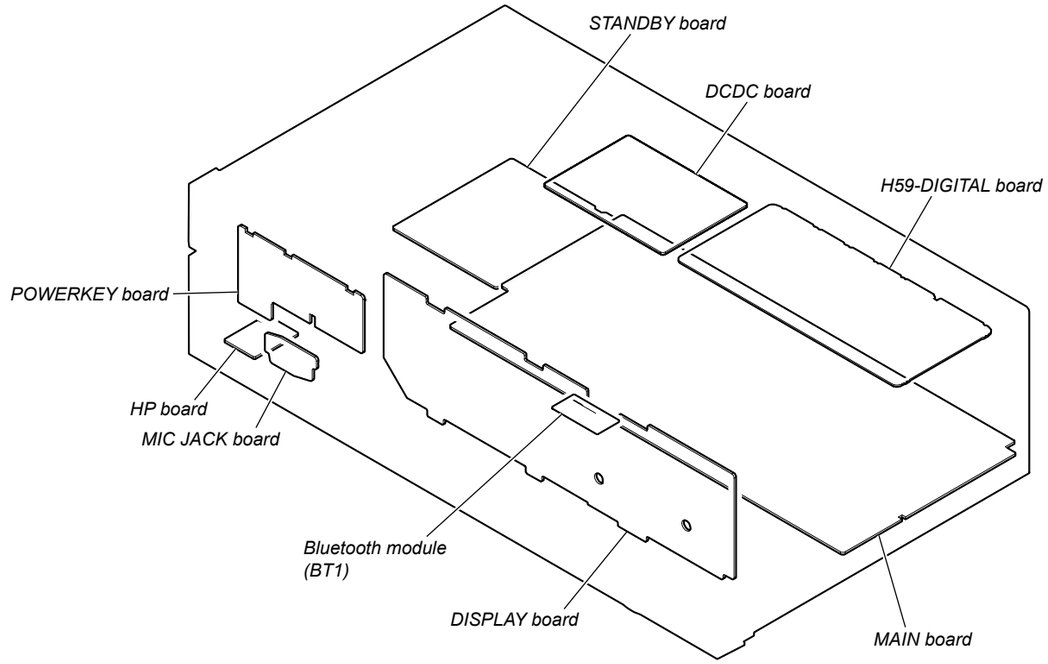
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬: B+ Line.
- ▬ ▬ ▬: B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: TUNER
- Voltages are taken with VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO
  ➡ : TUNER
  ▷ : MIC

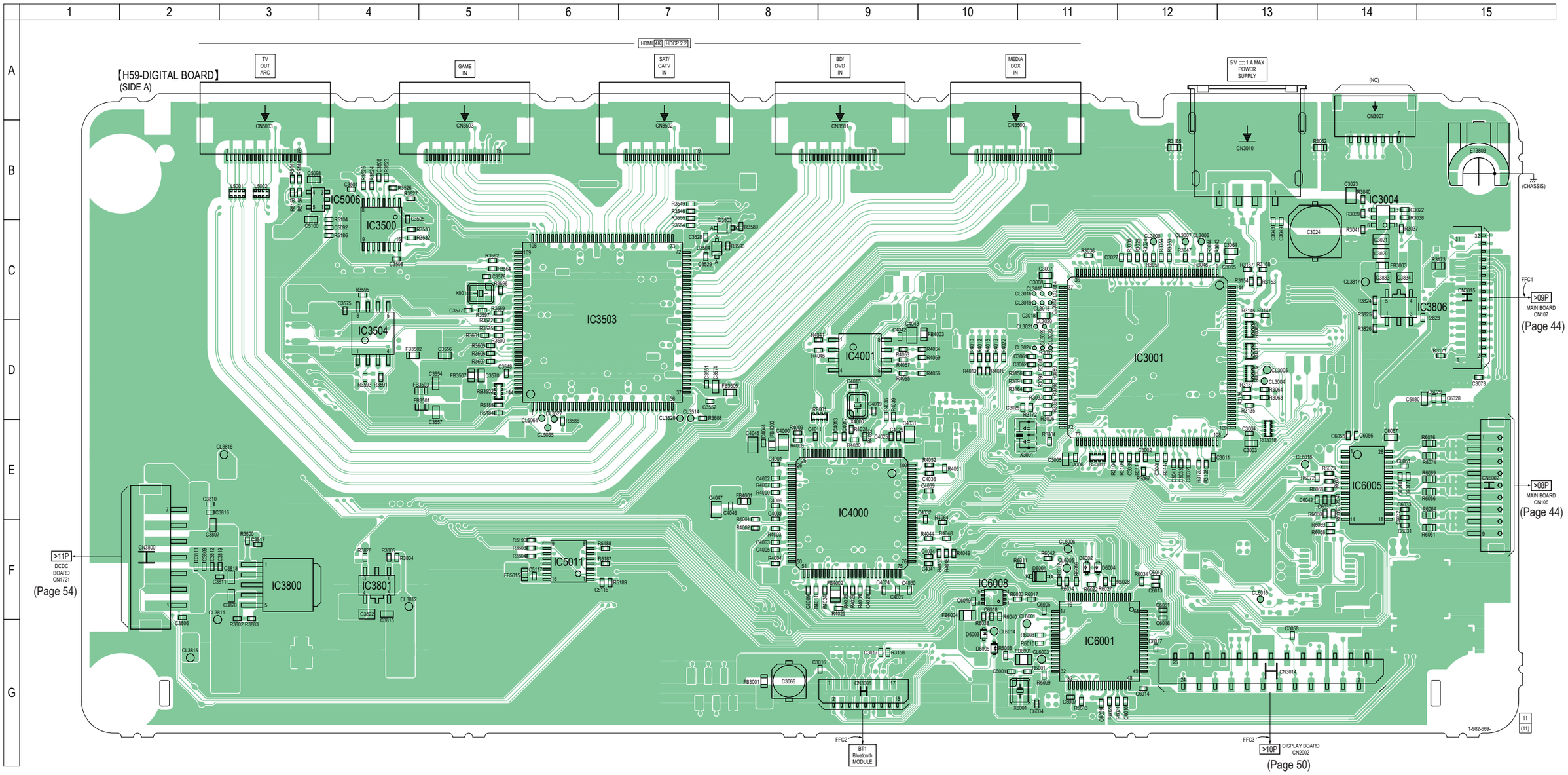
Note 1: When the H59-DIGITAL board is defective, replace the complete mounted board.
The mounted parts cannot be replaced with single for repairing.
Block diagram and printed wiring board that have been described in this service manual are for reference.

Note 2: Among mounted electrical parts on each board, only parts that are described in the electrical parts list can be replaced for repairing.
The parts that are not described in the electrical parts list cannot be replaced with single for repairing.

- **Circuit Boards Location**

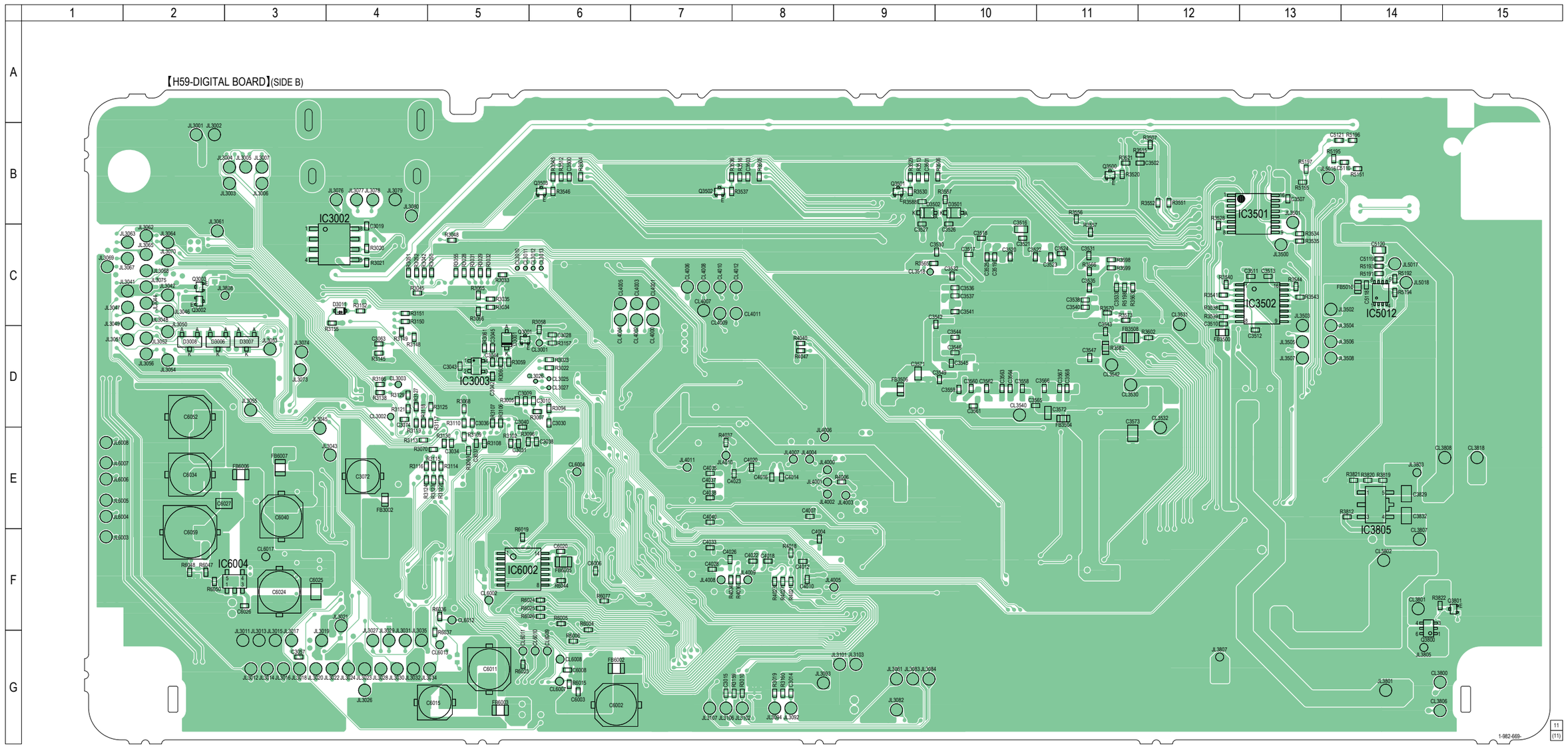


6-5. PRINTED WIRING BOARD - H59-DIGITAL Board (Side A) - • See page 41 for Circuit Boards Location. • : Uses unleaded solder.

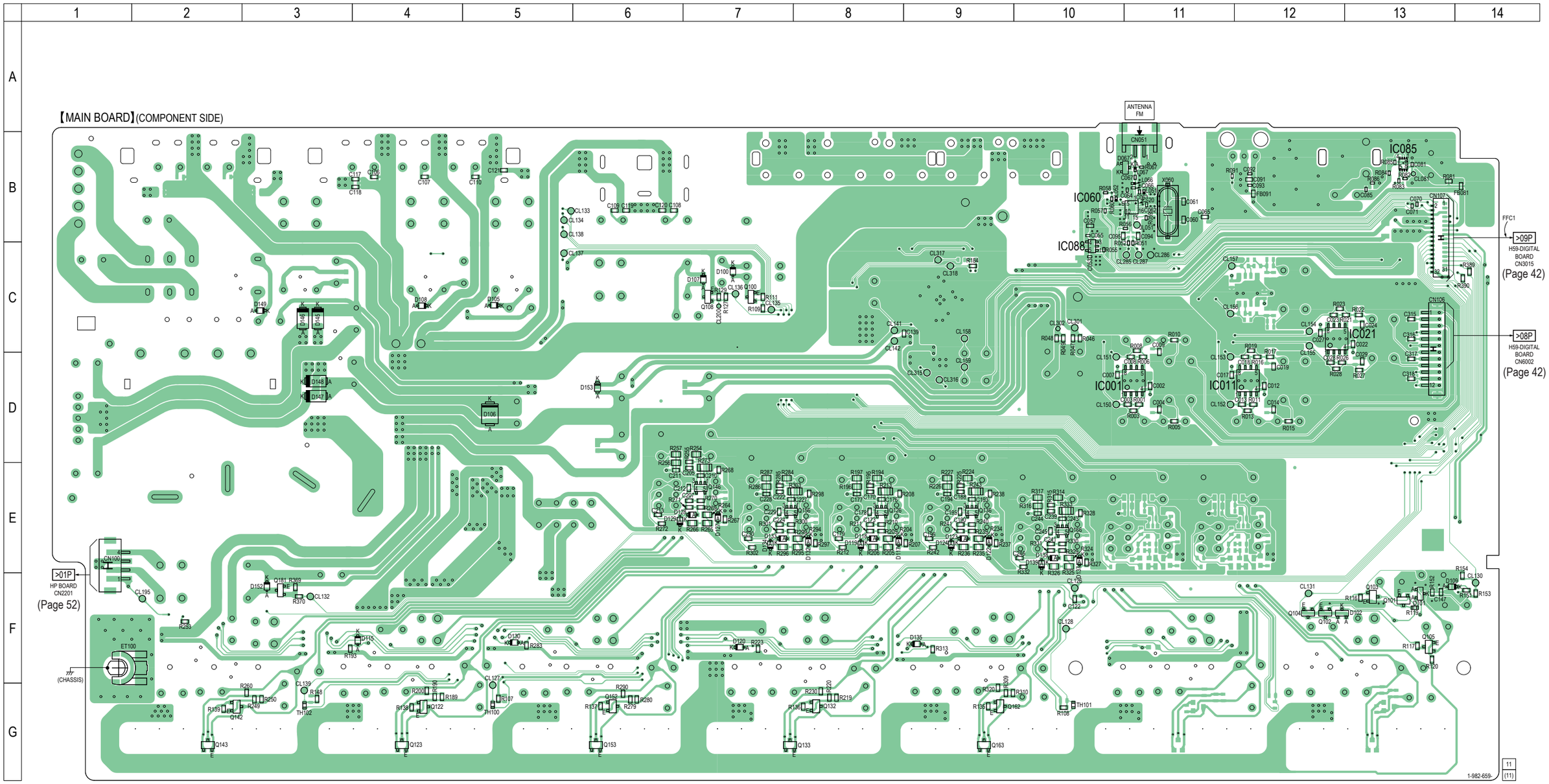


6-6. PRINTED WIRING BOARD - H59-DIGITAL Board (Side B) -

• See page 41 for Circuit Boards Location. • : Uses unleaded solder.

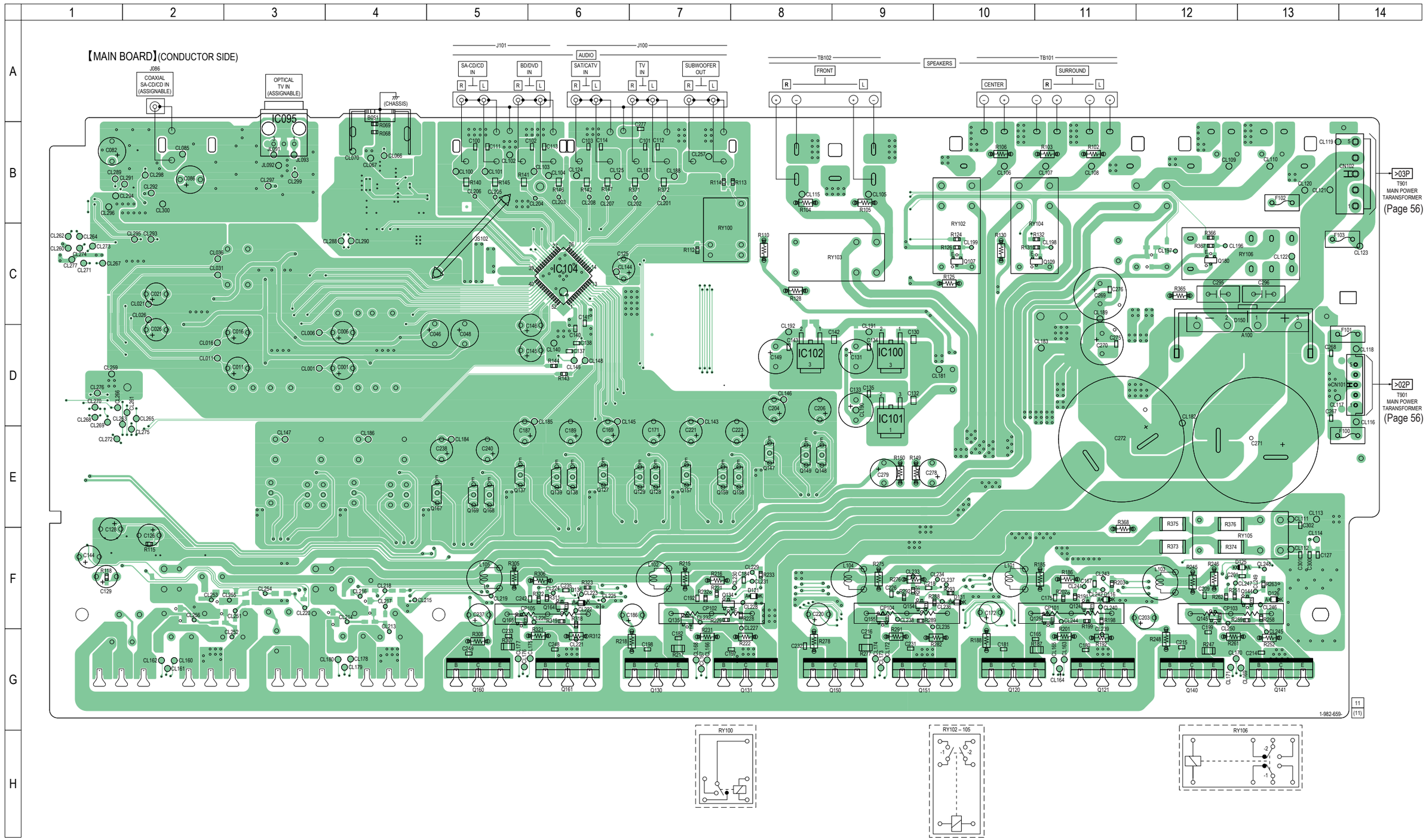


6-7. PRINTED WIRING BOARD - MAIN Board (Component Side) - • See page 41 for Circuit Boards Location. • : Uses unleaded solder.

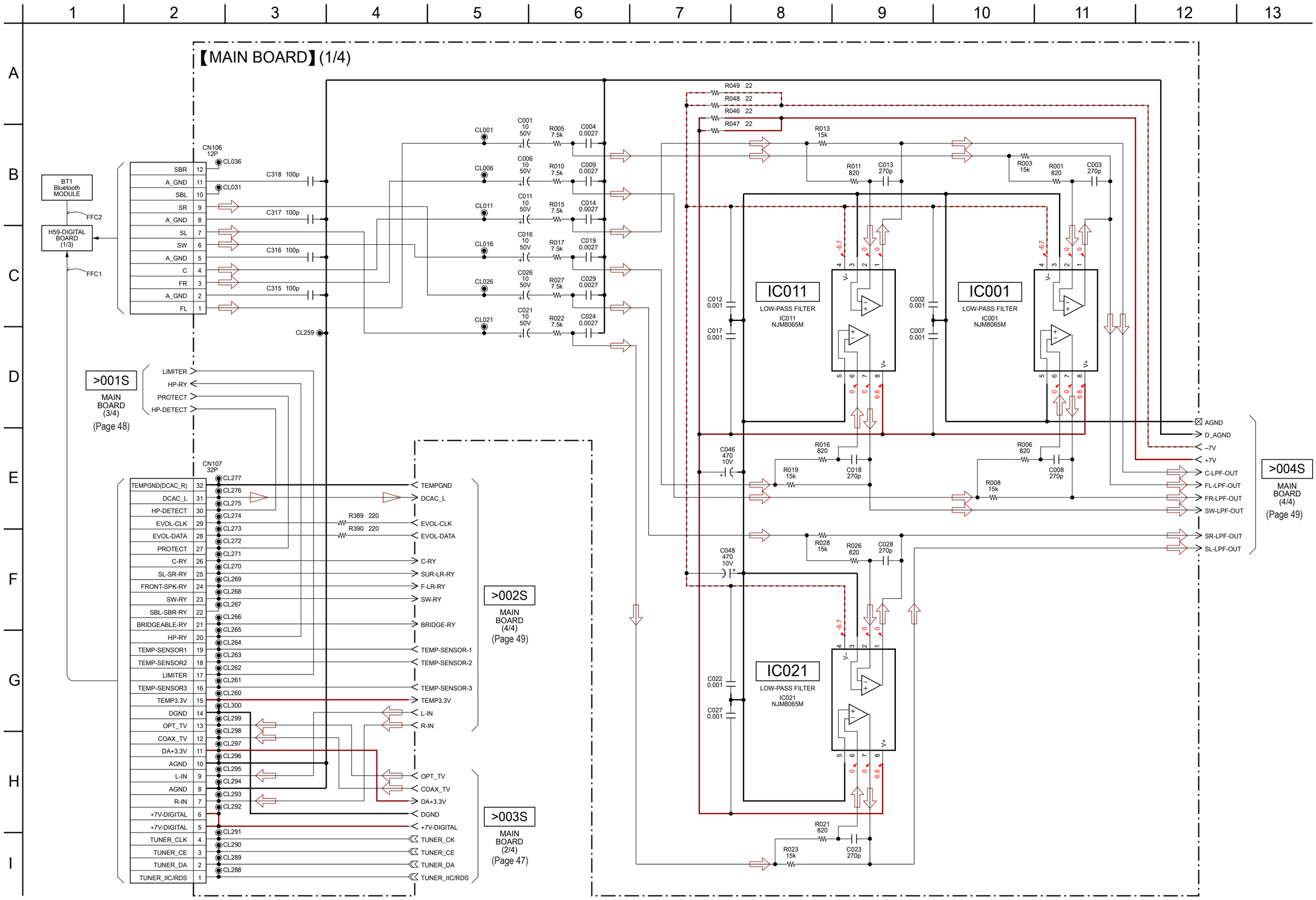


6-8. PRINTED WIRING BOARD - MAIN Board (Conductor Side) - • See page 41 for Circuit Boards Location. • : Uses unleaded solder.

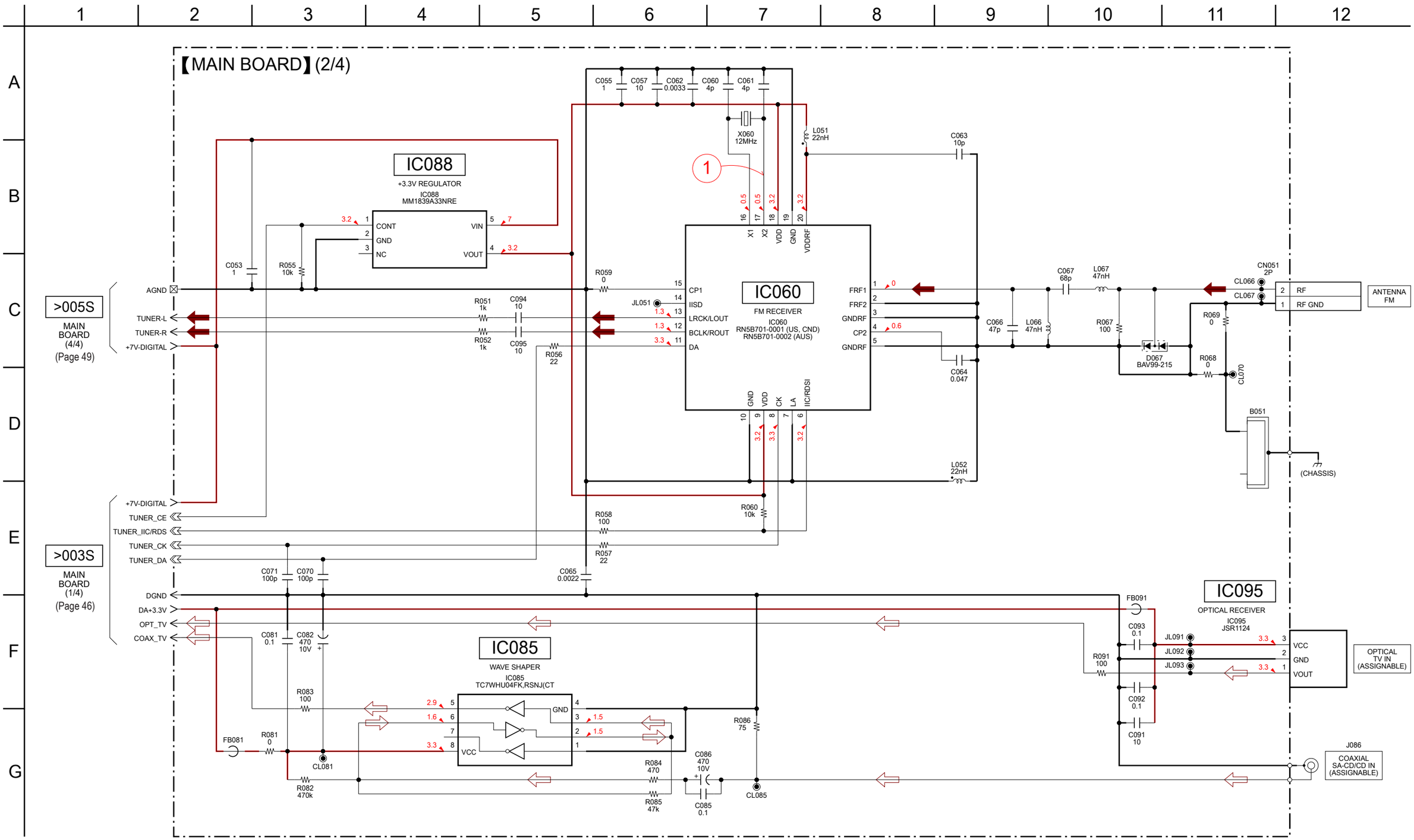
【MAIN BOARD】(CONDUCTOR SIDE)



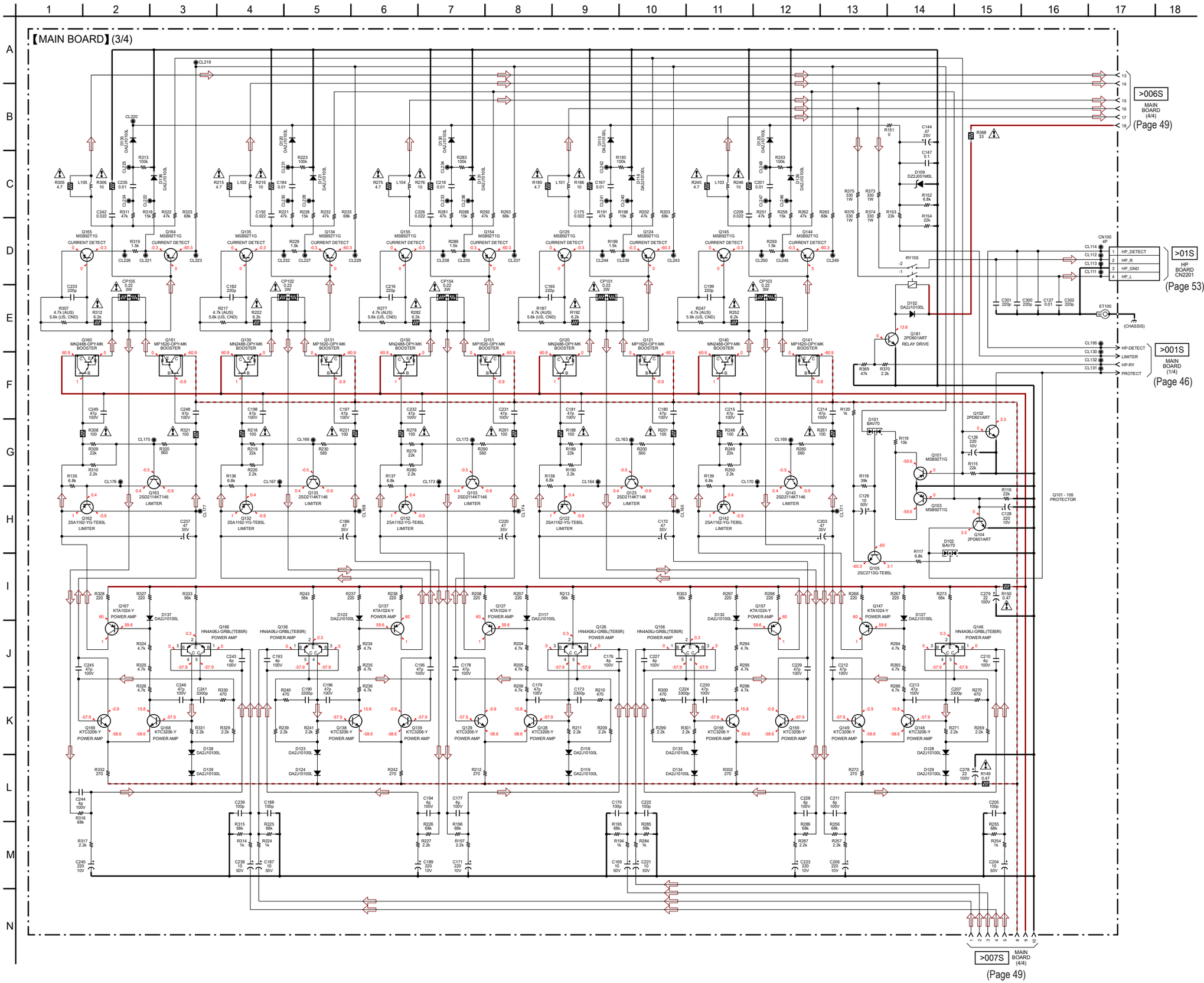
6-9. SCHEMATIC DIAGRAM - MAIN Board (1/4) -



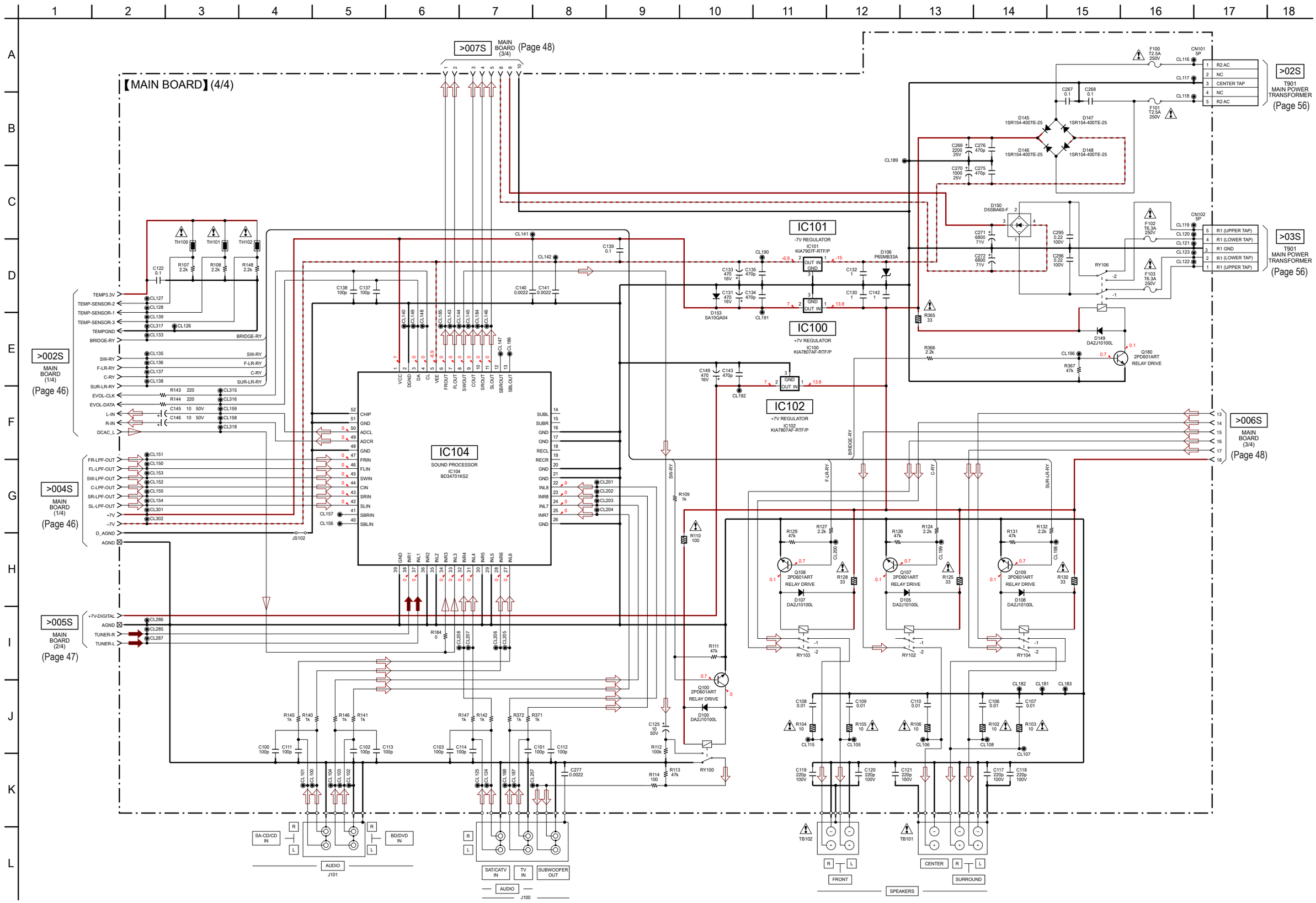
6-10. SCHEMATIC DIAGRAM - MAIN Board (2/4) - • See page 57 for Waveforms. • See page 58 for IC Block Diagrams.



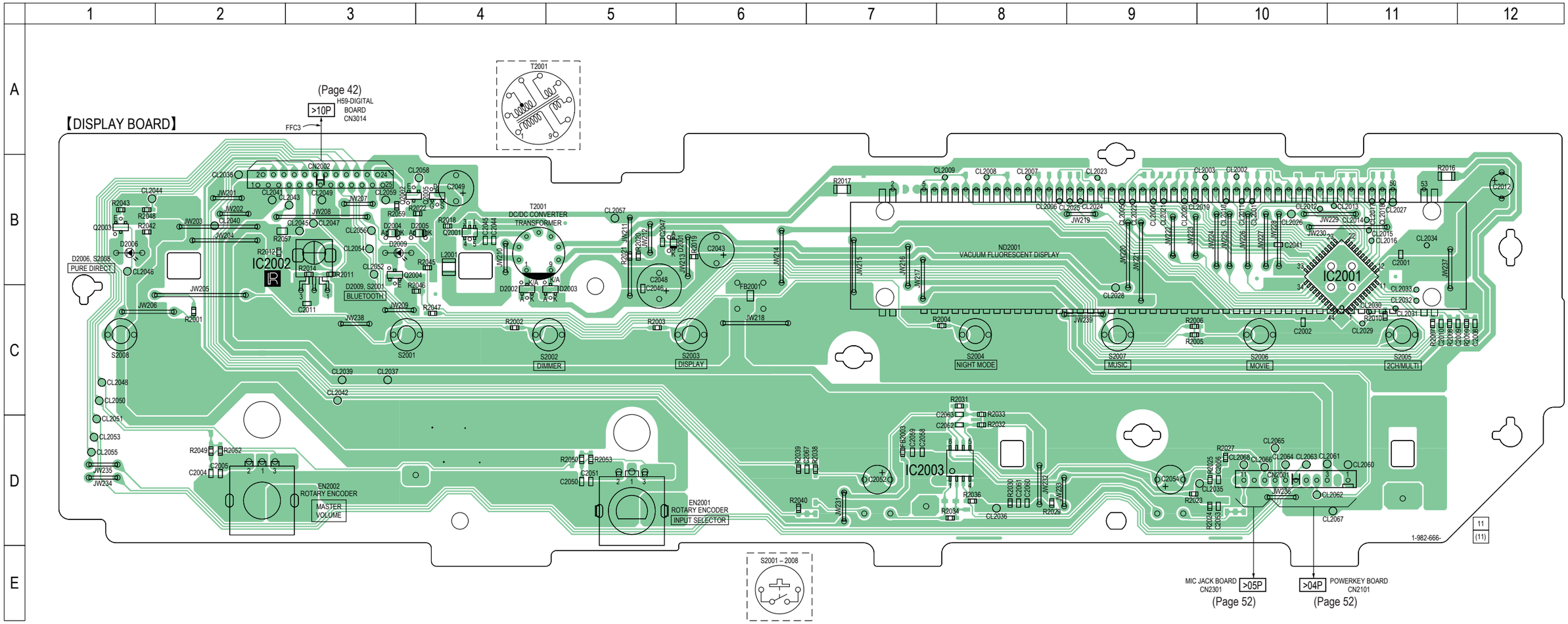
6-11. SCHEMATIC DIAGRAM - MAIN Board (3/4) -



6-12. SCHEMATIC DIAGRAM - MAIN Board (4/4) - • See page 58 for IC Block Diagrams.

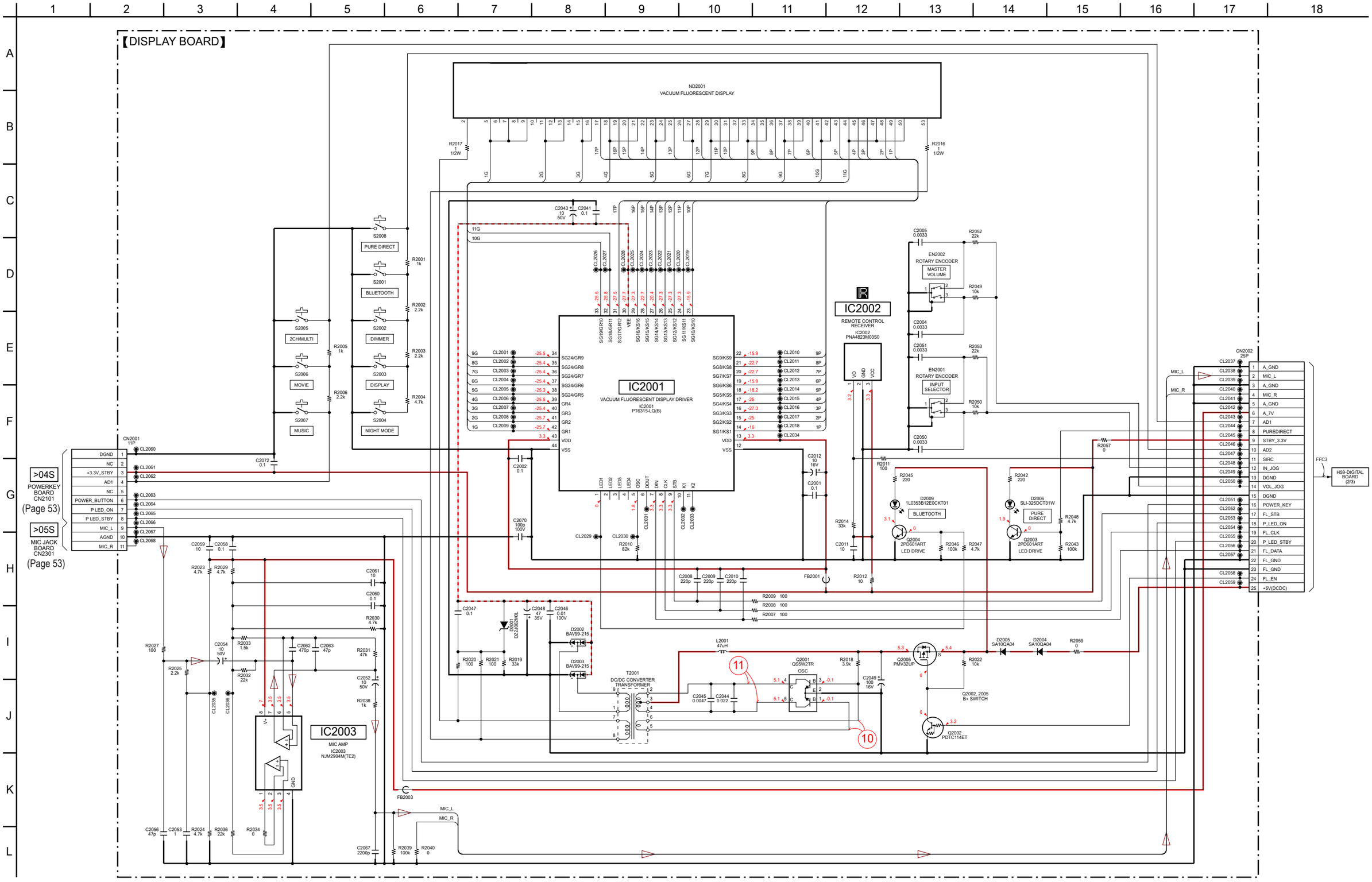


6-13. PRINTED WIRING BOARD - DISPLAY Board - • See page 41 for Circuit Boards Location. • : Uses unleaded solder.



Note: When replacing the rotary encoder (Ref. No. EN2001 or EN2002) on the DISPLAY board, remove the nut attached to the new rotary encoder. Nut is not used.

6-14. SCHEMATIC DIAGRAM - DISPLAY Board - • See page 57 for Waveforms. • See page 58 for IC Block Diagrams.

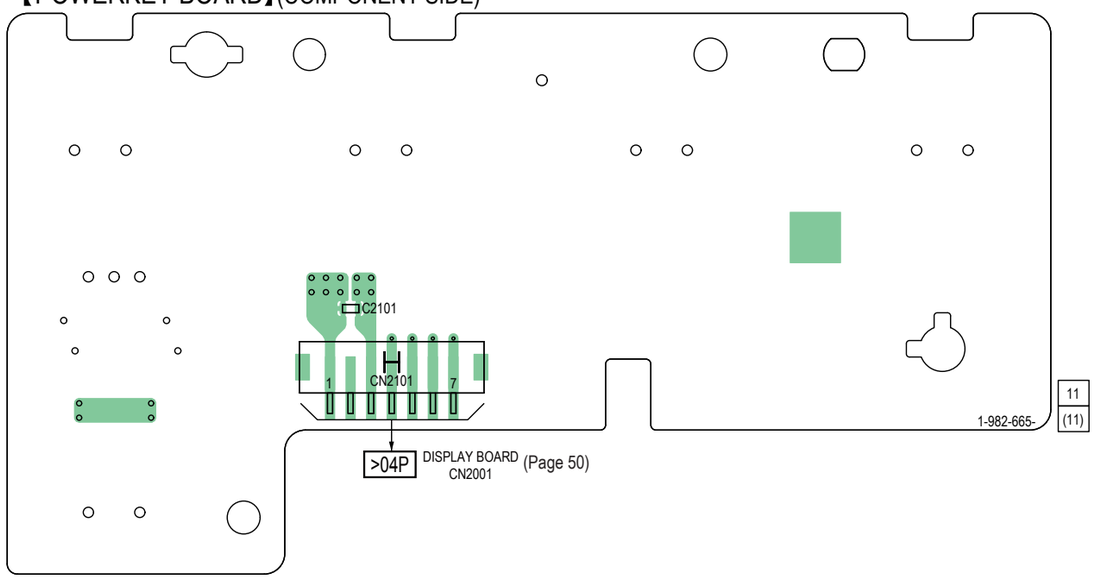


Note: When replacing the rotary encoder (Ref. No. EN2001 or EN2002) on the DISPLAY board, remove the nut attached to the new rotary encoder. Nut is not used.

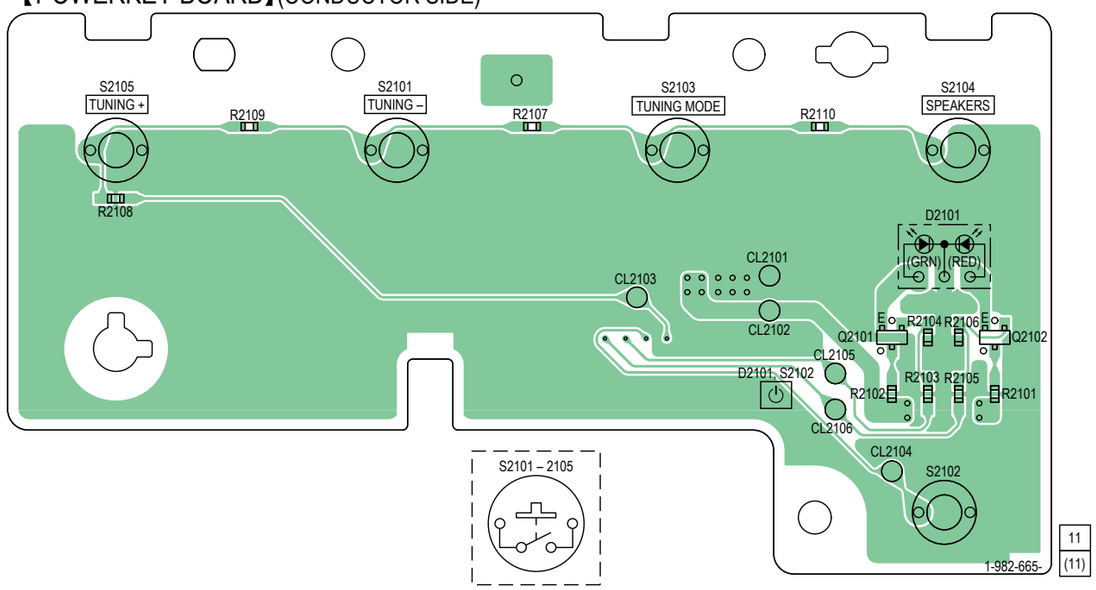
6-15. PRINTED WIRING BOARDS - PANEL Section -

• See page 41 for Circuit Boards Location. • : Uses unleaded solder.

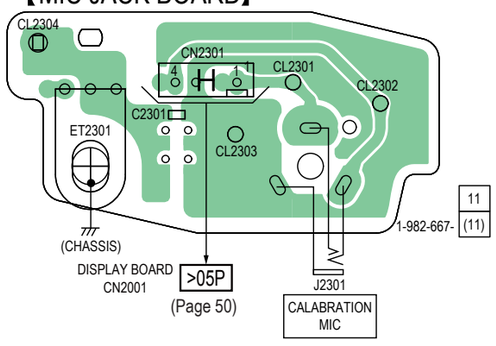
【POWERKEY BOARD】(COMPONENT SIDE)



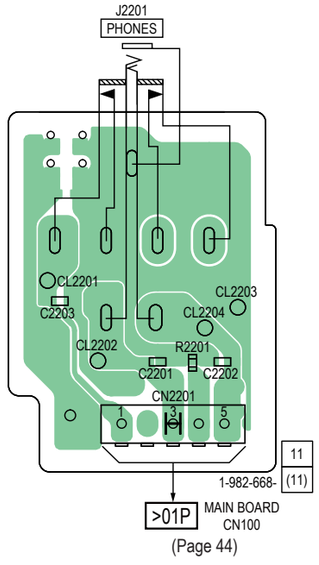
【POWERKEY BOARD】(CONDUCTOR SIDE)



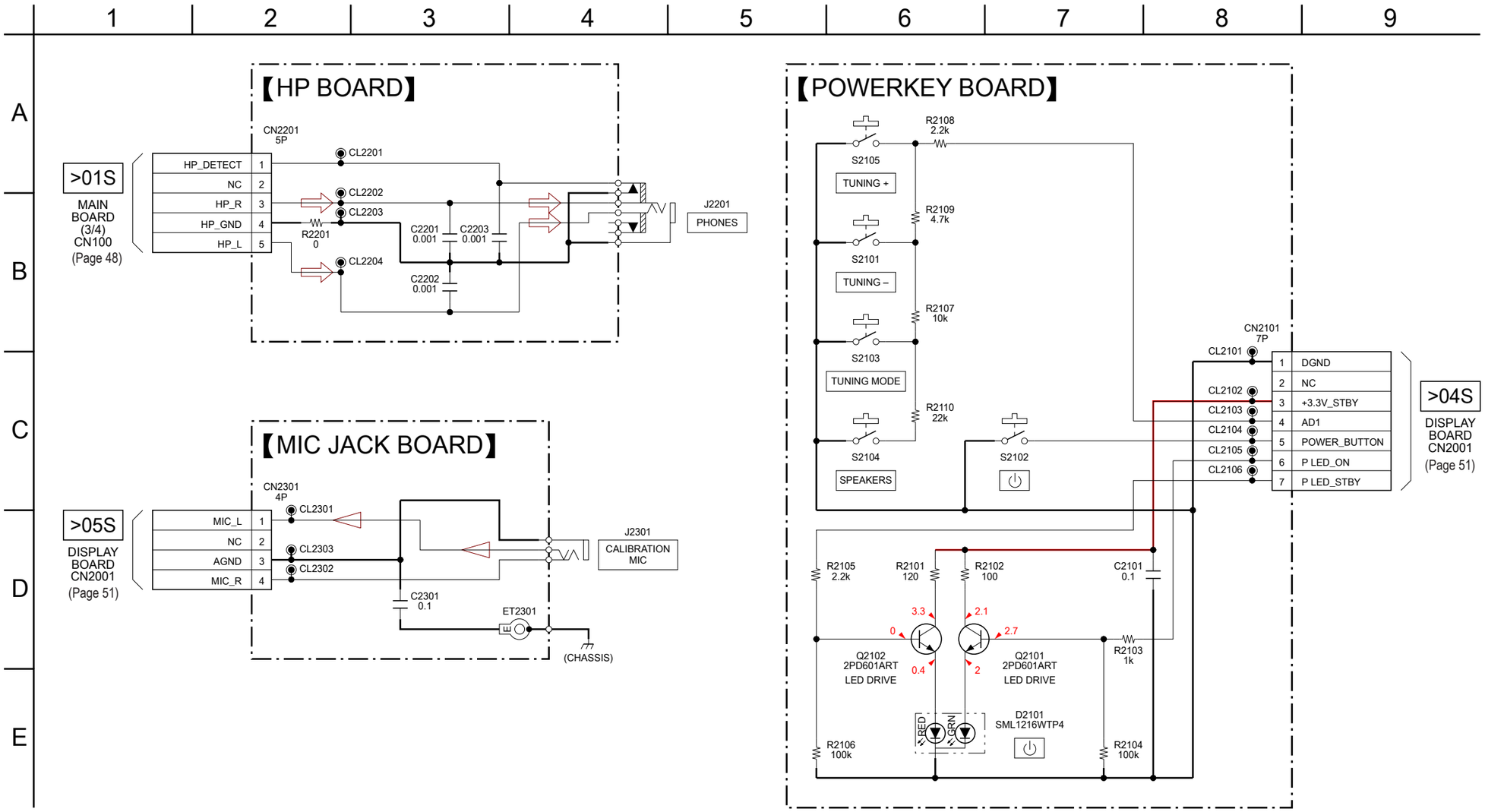
【MIC JACK BOARD】



【HP BOARD】



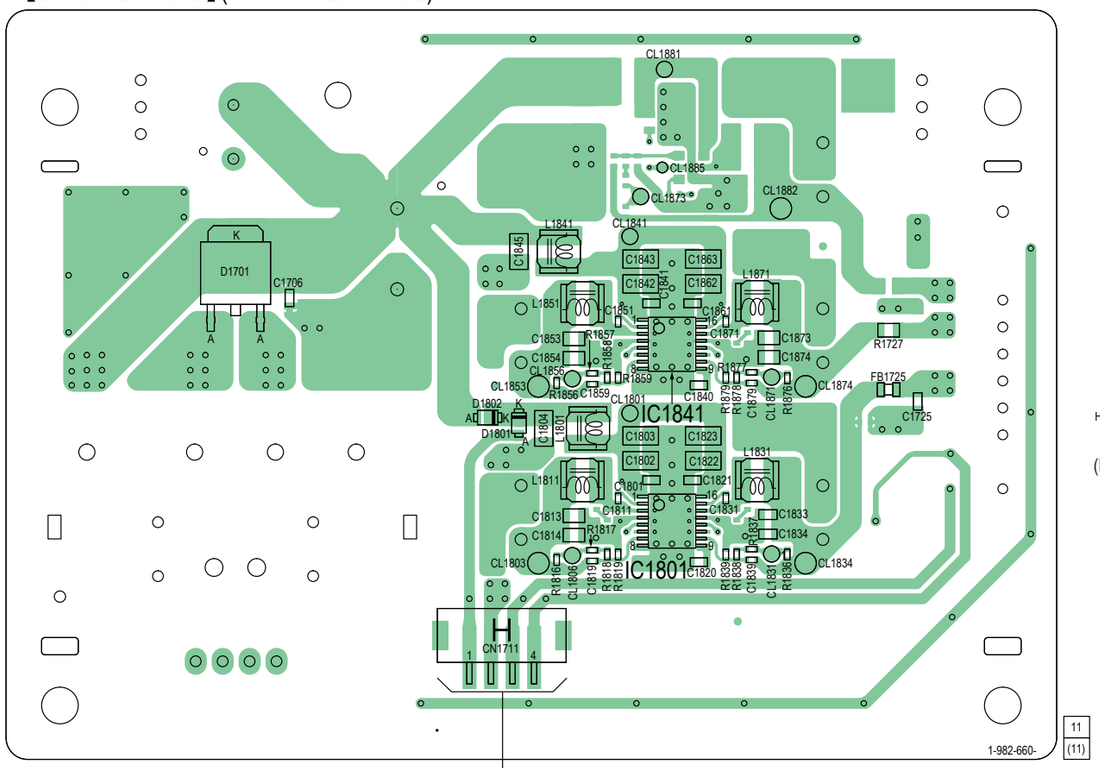
6-16. SCHEMATIC DIAGRAM - PANEL Section -



6-17. PRINTED WIRING BOARD - DCDC Board -

• See page 41 for Circuit Boards Location. • : Uses unleaded solder.

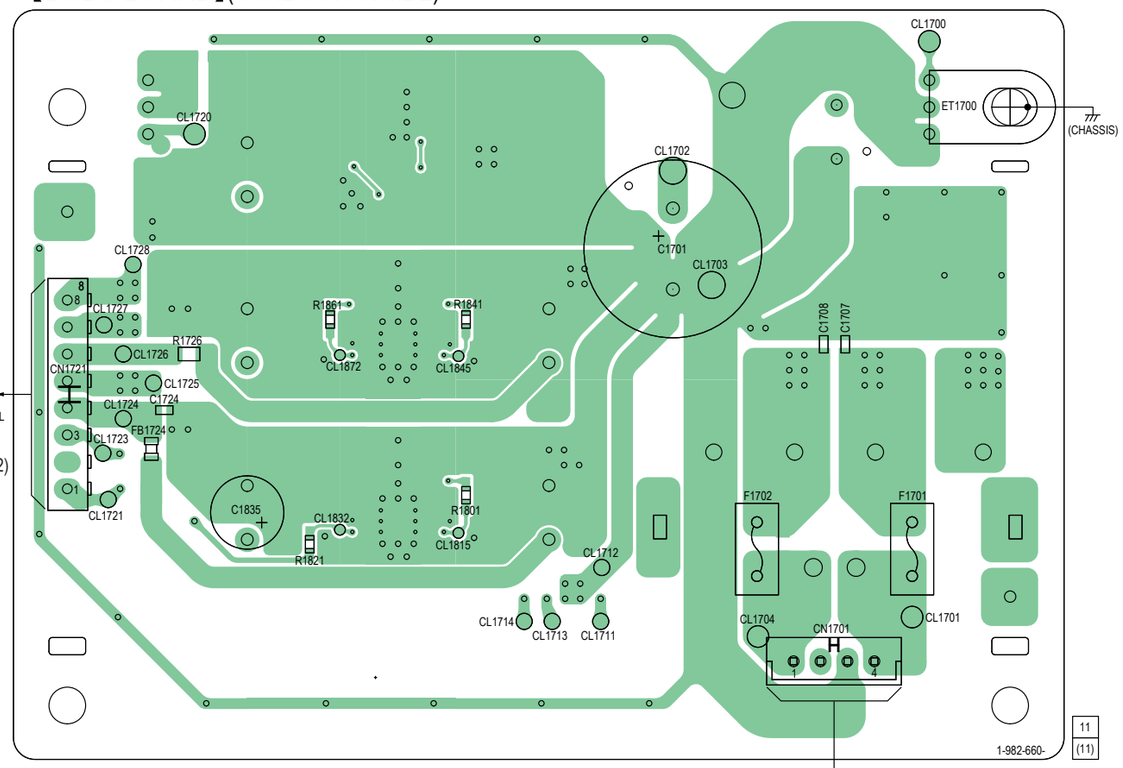
【DCDC BOARD】(COMPONENT SIDE)



>07P STANDBY BOARD CN961

(Page 56)

【DCDC BOARD】(CONDUCTOR SIDE)



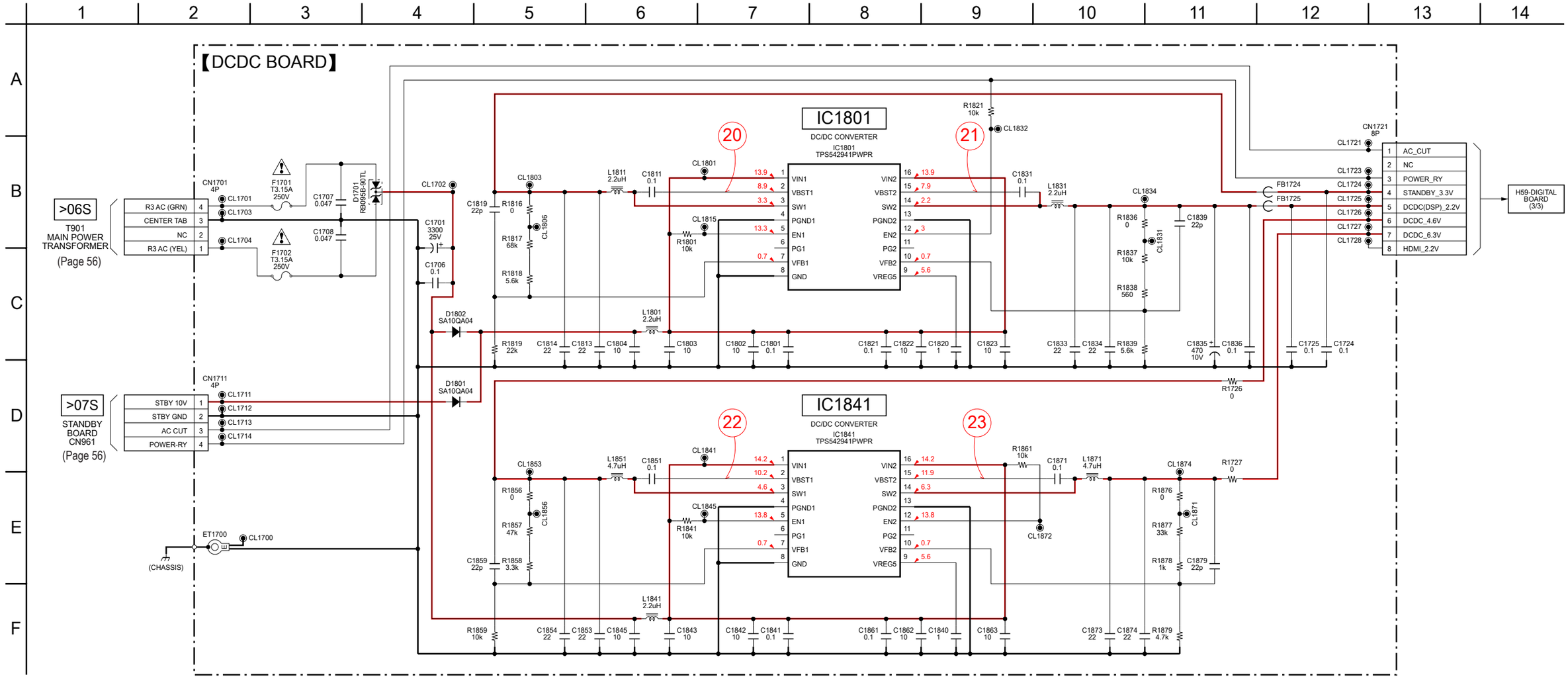
>11P H59-DIGITAL BOARD CN3800

(Page 42)

>06P T901 MAIN POWER TARANFORMER

(Page 56)

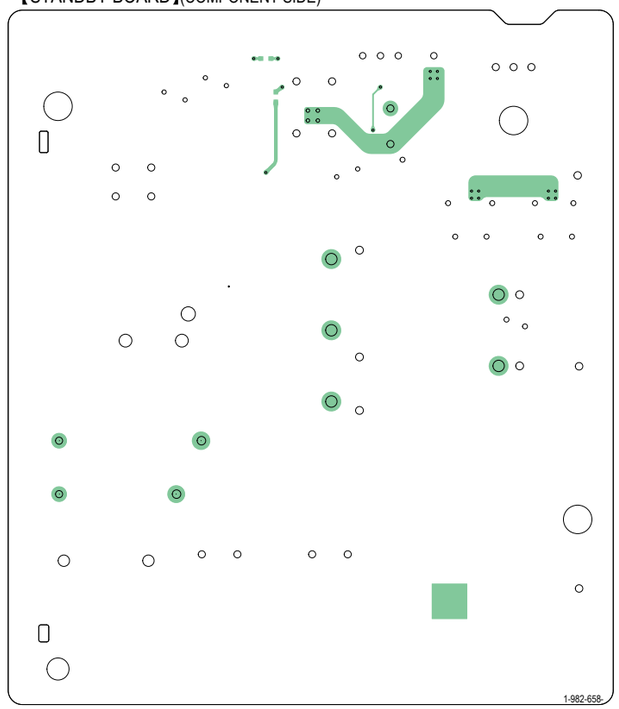
6-18. SCHEMATIC DIAGRAM - DCDC Board - • See page 57 for Waveforms. • See page 58 for IC Block Diagrams.



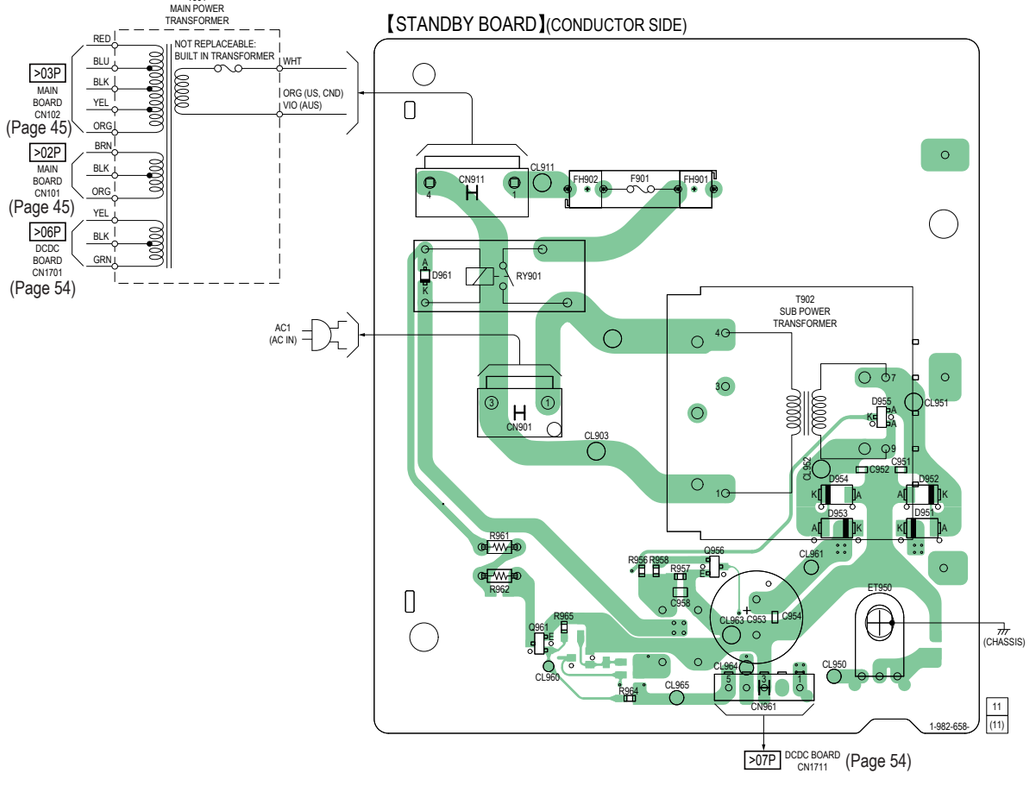
6-19. PRINTED WIRING BOARD - STANDBY Board -

• See page 41 for Circuit Boards Location. • : Uses unleaded solder.

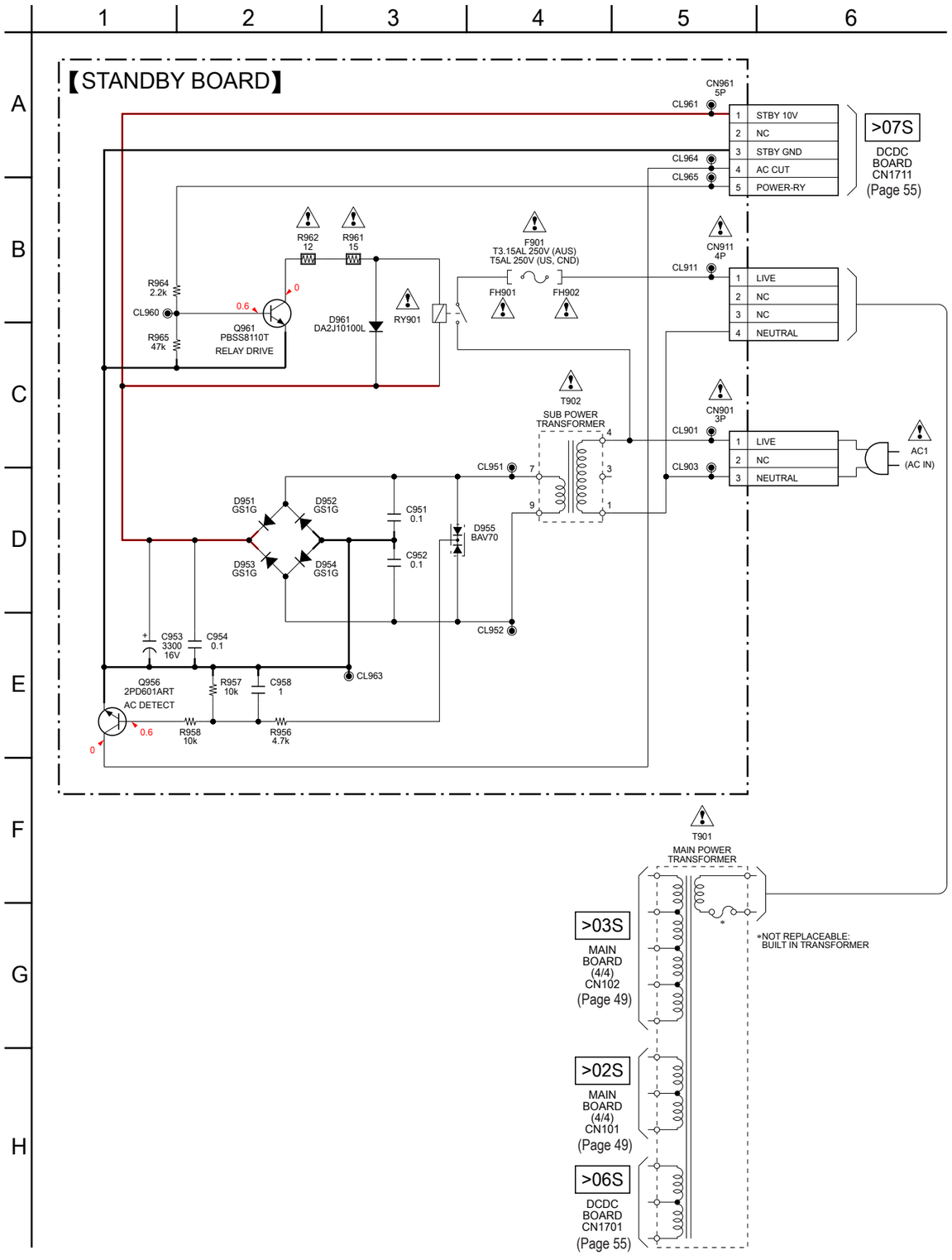
【STANDBY BOARD】(COMPONENT SIDE)



【STANDBY BOARD】(CONDUCTOR SIDE)



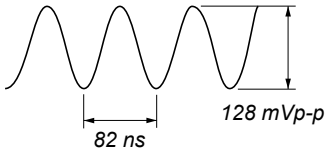
6-20. SCHEMATIC DIAGRAM - STANDBY Board -



• **Waveforms**

– MAIN Board –

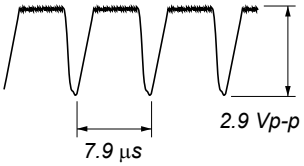
① **IC060 ⑰ (X2)**



50 mV/DIV, 100 ns/DIV

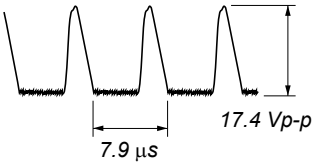
– DISPLAY Board –

⑩ **Q2001 ①, ③ (Base)**



1 V/DIV, 5 µs/DIV

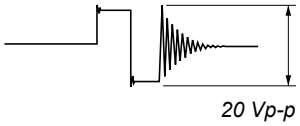
⑪ **Q2001 ④, ⑤ (Collector)**



5 V/DIV, 5 µs/DIV

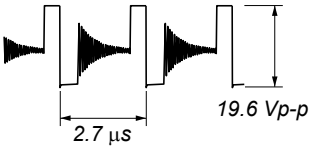
– DCDC Board –

⑳ **IC1801 ② (VBST1)**



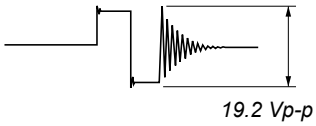
10 V/DIV, 500 ns/DIV

㉑ **IC1801 ⑮ (VBST2)**



10 V/DIV, 2 µs/DIV

㉒ **IC1841 ② (VBST1)**



10 V/DIV, 500 ns/DIV

㉓ **IC1841 ⑮ (VBST2)**

10 V/DIV, 2 µs/DIV