

STR-DE495/DE595

SERVICE MANUAL

Ver 1.1 2003. 04

US Model
Canadian Model
STR-DE595

AEP Model
UK Model
E Model
Australian Model
Korean Model
STR-DE495/DE595



Photo: STR-DE595

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SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads, both channels driven, from 40 – 20,000 Hz; rated 90 watts per channel minimum RMS power, with no more than 0.09 % total harmonic distortion from 250 milliwatts to rated output (STR-DE595 area code US only).

Amplifier section

POWER OUTPUT

Models of area code US, CND
Rated Power Output at Stereo Mode
(8 ohms 40 Hz – 20 kHz, THD 0.09 %)
STR-DE595: 90 W + 90 W
STR-DE495: 70 W + 70 W

Reference Power Output
(8 ohms 40 Hz – 20 kHz, THD 0.09 %)
STR-DE595: FRONT ¹⁾: 90 W/ch
CENTER ¹⁾: 90 W
SURR ¹⁾: 90 W/ch

STR-DE495: FRONT ¹⁾: 70 W/ch
CENTER ¹⁾: 70 W
SURR ¹⁾: 70 W/ch

(8 ohms 1 kHz, THD 0.7 %)
STR-DE595: FRONT ¹⁾: 100 W/ch
CENTER ¹⁾: 100 W
SURR ¹⁾: 100 W/ch

STR-DE495: FRONT ¹⁾: 80 W/ch
CENTER ¹⁾: 80 W
SURR ¹⁾: 80 W/ch

Models of area code AEP, UK
Rated Power Output at Stereo Mode
(8 ohms 1 kHz, THD 0.7 %)
STR-DE595: 100 W + 100 W²⁾
STR-DE495: 80 W + 80 W²⁾

Reference Power Output ²⁾
(8 ohms 1 kHz, THD 0.7 %)
STR-DE595: FRONT ¹⁾: 100 W/ch
CENTER ¹⁾: 100 W
SURR ¹⁾: 100 W/ch
STR-DE495: FRONT ¹⁾: 80 W/ch
CENTER ¹⁾: 80 W
SURR ¹⁾: 80 W/ch

Models of area code SP
Rated Power Output at Stereo Mode
(8 ohms 1 kHz, THD 0.7 %)
STR-DE595: 90 W + 90 W²⁾
STR-DE495: 70 W + 70 W²⁾

Reference Power Output ²⁾
(8 ohms 1 kHz, THD 10 %)
STR-DE595: FRONT ¹⁾: 110 W/ch
CENTER ¹⁾: 110 W
SURR ¹⁾: 110 W/ch
STR-DE495: FRONT ¹⁾: 90 W/ch
CENTER ¹⁾: 90 W
SURR ¹⁾: 90 W/ch

Models of area code KR
Rated Power Output at Stereo Mode
(8 ohms 1 kHz, THD 0.7 %)
STR-DE595: 100 W + 100 W²⁾
90 W + 90 W³⁾
STR-DE495: 80 W + 80 W²⁾
70 W + 70 W³⁾

Reference Power Output ²⁾
(8 ohms 1 kHz, THD 10 %)
STR-DE595: FRONT ¹⁾: 120 W/ch
CENTER ¹⁾: 120 W
SURR ¹⁾: 120 W/ch
STR-DE495: FRONT ¹⁾: 100 W/ch
CENTER ¹⁾: 100 W
SURR ¹⁾: 100 W/ch

Models of other area code
Rated Power Output at Stereo Mode
(8 ohms 1 kHz, THD 0.7 %)
STR-DE595: 100 W + 100 W²⁾
80 W + 80 W²⁾
Reference Power Output ²⁾
(8 ohms 1 kHz, THD 10 %)
STR-DE595: FRONT ¹⁾: 120 W/ch
CENTER ¹⁾: 120 W
SURR ¹⁾: 120 W/ch
STR-DE495: FRONT ¹⁾: 100 W/ch
CENTER ¹⁾: 100 W
SURR ¹⁾: 100 W/ch

– Continued on next page –

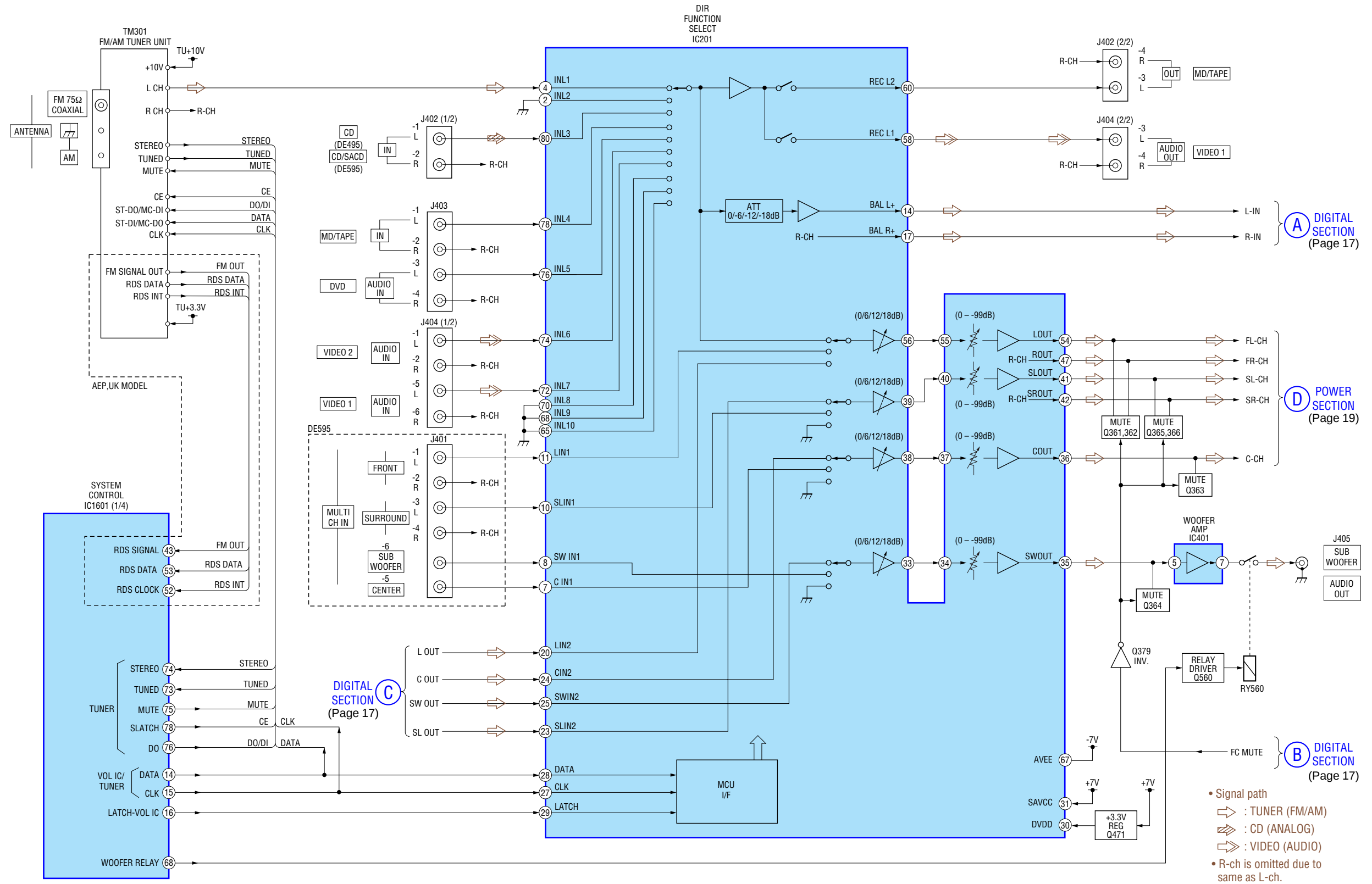
FM STEREO/FM-AM RECEIVER

9-877-028-02
2003D0400-1
© 2003. 04

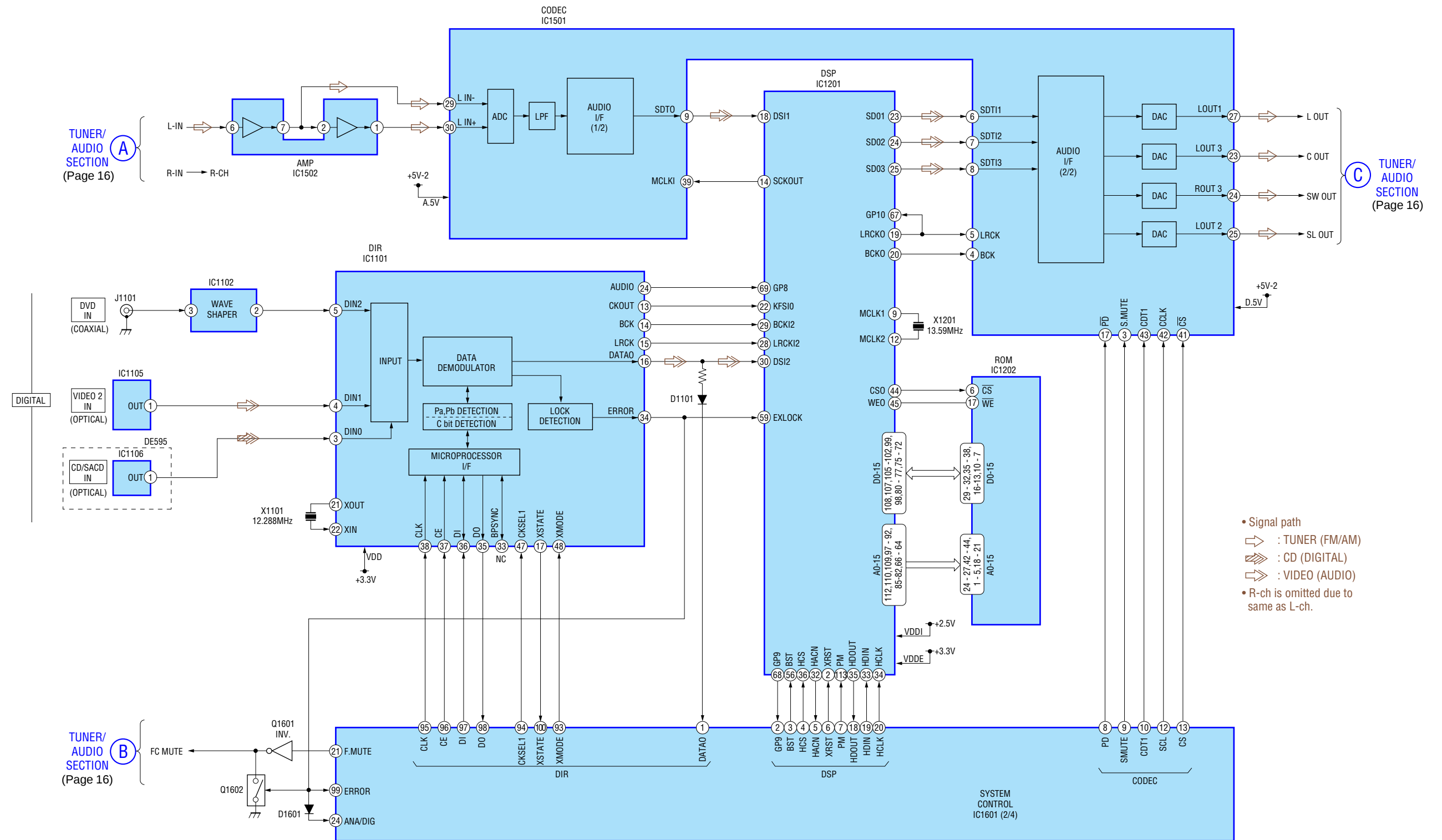
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Home Audio Company
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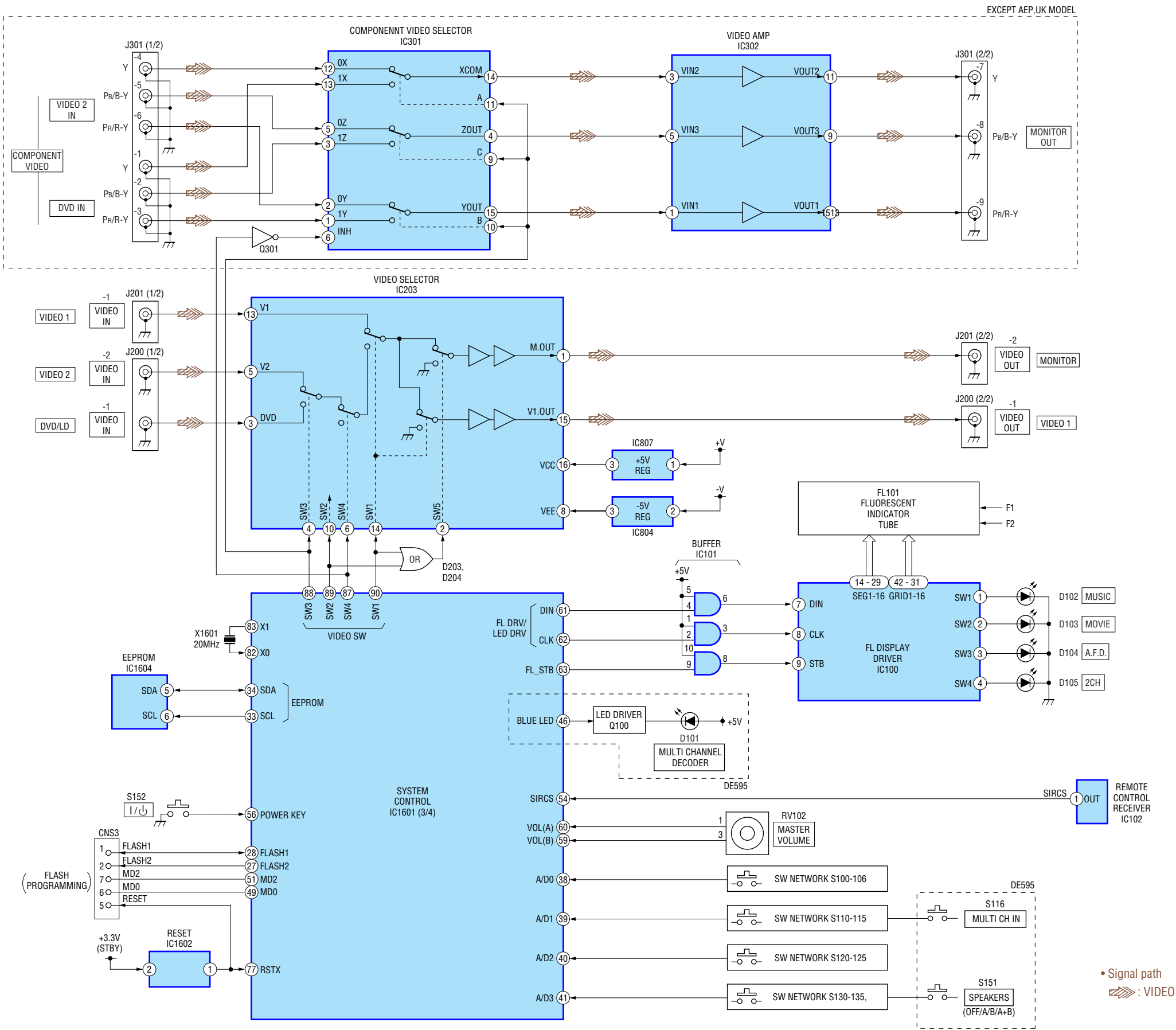
4-3. BLOCK DIAGRAM — TUNER/AUDIO SECTION —



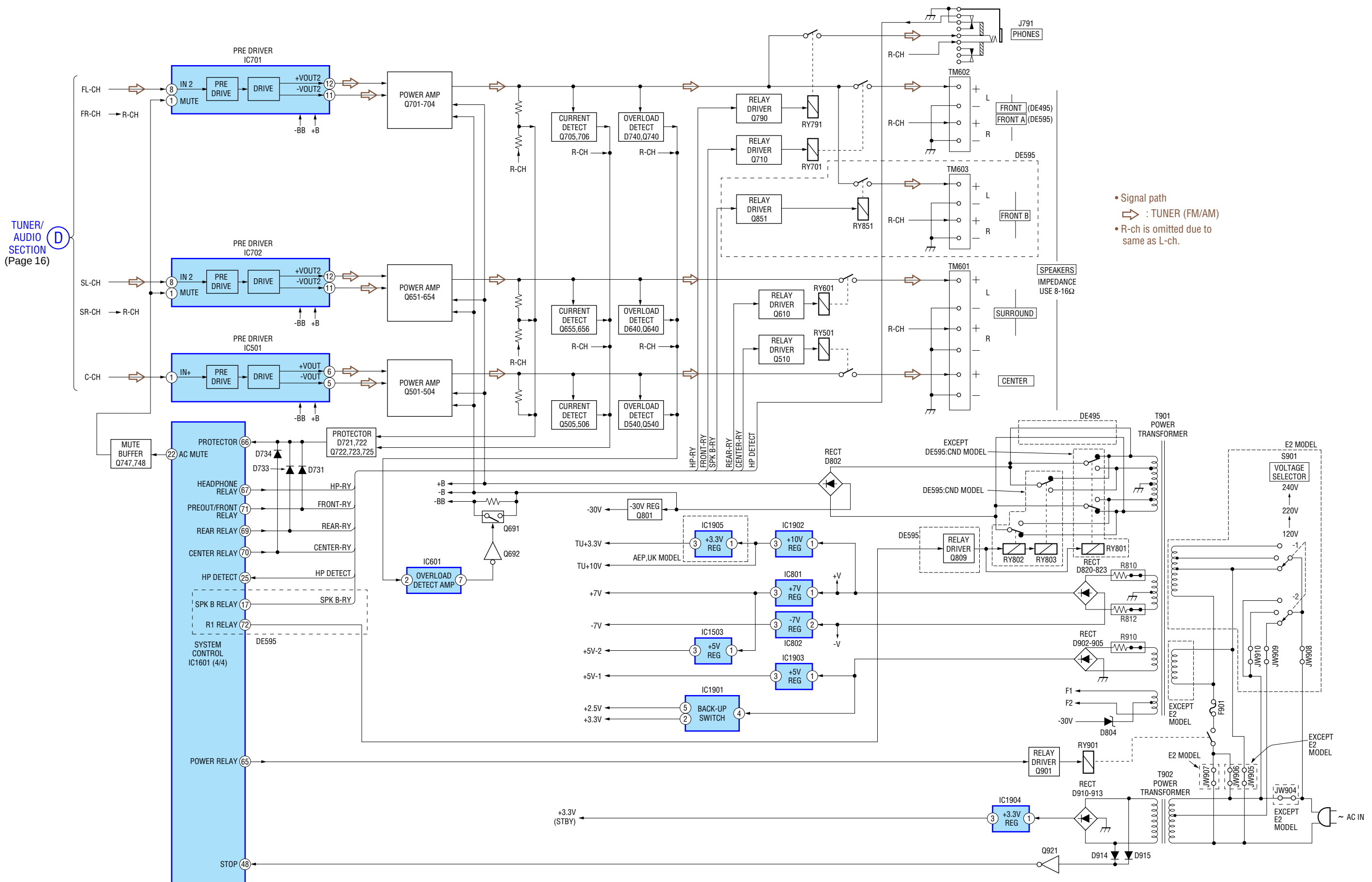
4-4. BLOCK DIAGRAM — DIGITAL SECTION —



4-5. BLOCK DIAGRAM — VIDEO/DISPLAY SECTION —



4-6. BLOCK DIAGRAM — POWER 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 schematic diagram:

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$
50 WV or less are not indicated except for electrolytics
and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{ W}$ or less unless otherwise
specified.
- $\triangle$: internal component.
-  : nonflammable resistor.
-  : fusible resistor.
-  : panel designation.

Note:
The components identi-
fied by mark $\triangle$ or dotted
line with mark $\triangle$ are criti-
cal for safety.
Replace only with part
number specified.

Note:
Les composants identifiés par
une marque $\triangle$ sont critiques
pour la sécurité.
Ne les remplacer que par une
pièce portant le numéro
spécifié.

-  : B+ Line.
-  : B- Line.
- Voltage and waveforms are dc with respect to ground
under no-signal (detuned) conditions.
no mark : FM
- Voltages are taken with a VOM (Input impedance 10 M Ω).
Voltage variations may be noted due to normal produc-
tion tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal produc-
tion tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 : TUNER (FM/AM)
 : VIDEO (AUDIO)
 : VIDEO
 : CD (ANALOG)
 : CD (DIGITAL)
- Abbreviation
CND : Canadian model.
AUS : Australian model.
MX : Mexican model.
SP : Singapore model.
E2 : AC 120 V area in E model.
AR : Argentine model.
KR : Korean model.
TW : Taiwan model.

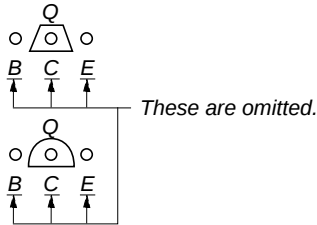
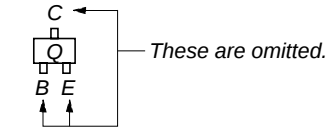
for printed wiring boards:

-  : parts extracted from the component side.
- $\triangle$: internal component.
-  : Pattern from the side which enables seeing.

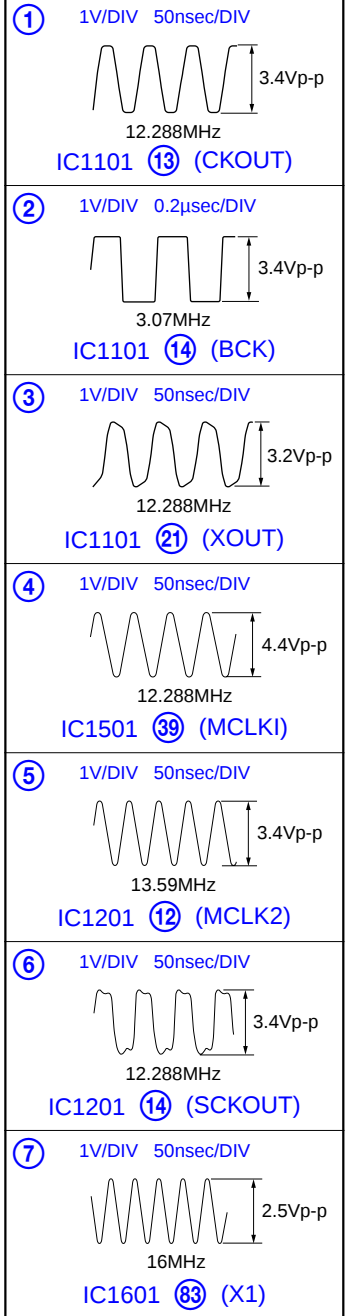
Caution:

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.

- Abbreviation
CND : Canadian model.
AUS : Australian model.
MX : Mexican model.
SP : Singapore model.
E2 : AC 120 V area in E model.
AR : Argentine model.
KR : Korean model.
TW : Taiwan model.

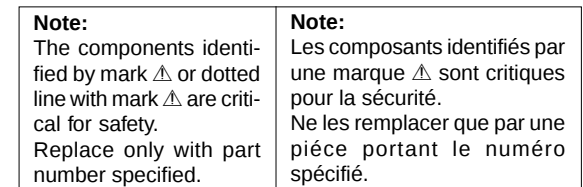


• Waveforms (DIGITAL Board)

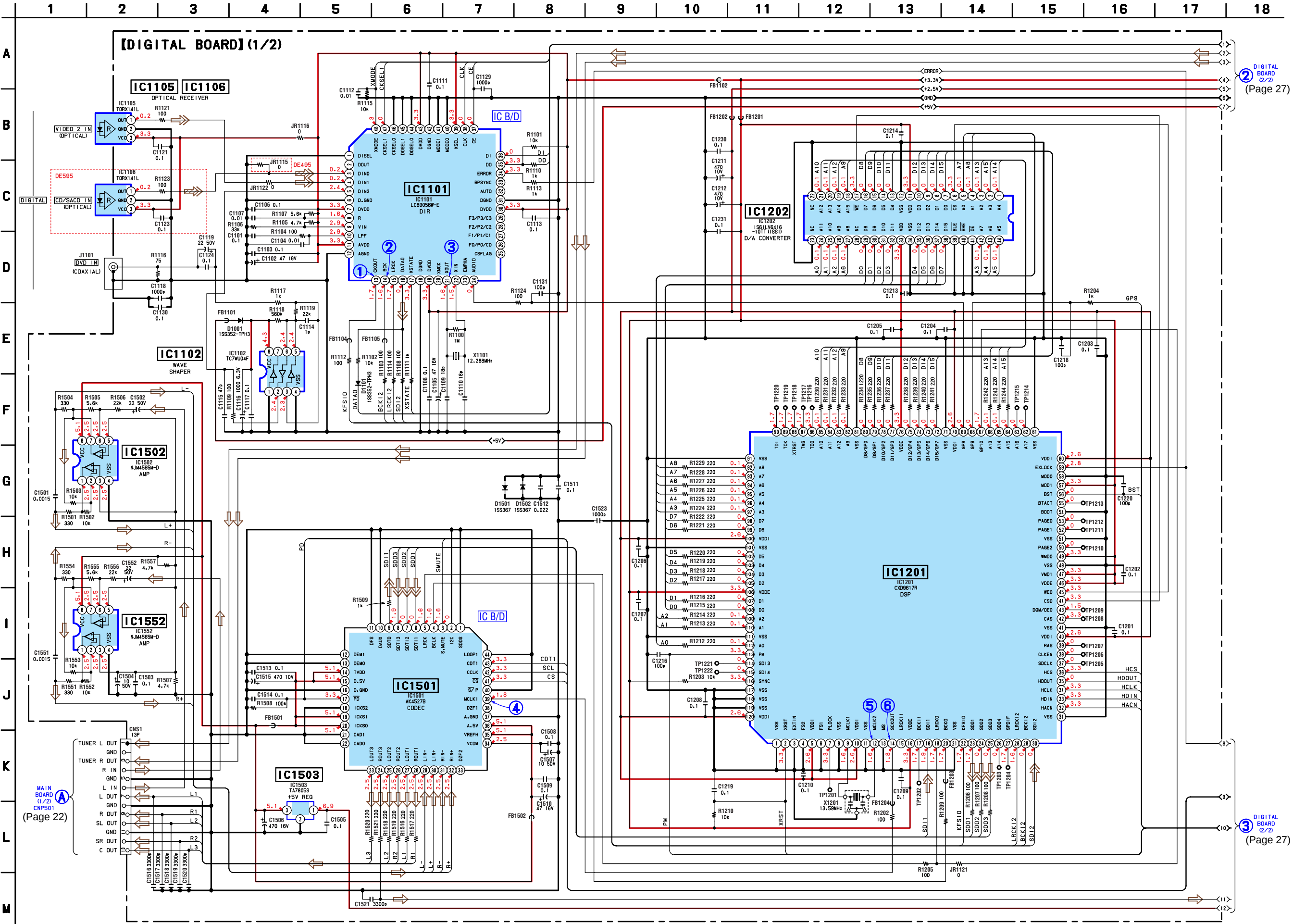


4-8. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) — • Refer to page 20 for Common Note on Schematic Diagram and page 34 for IC Block Diagrams.

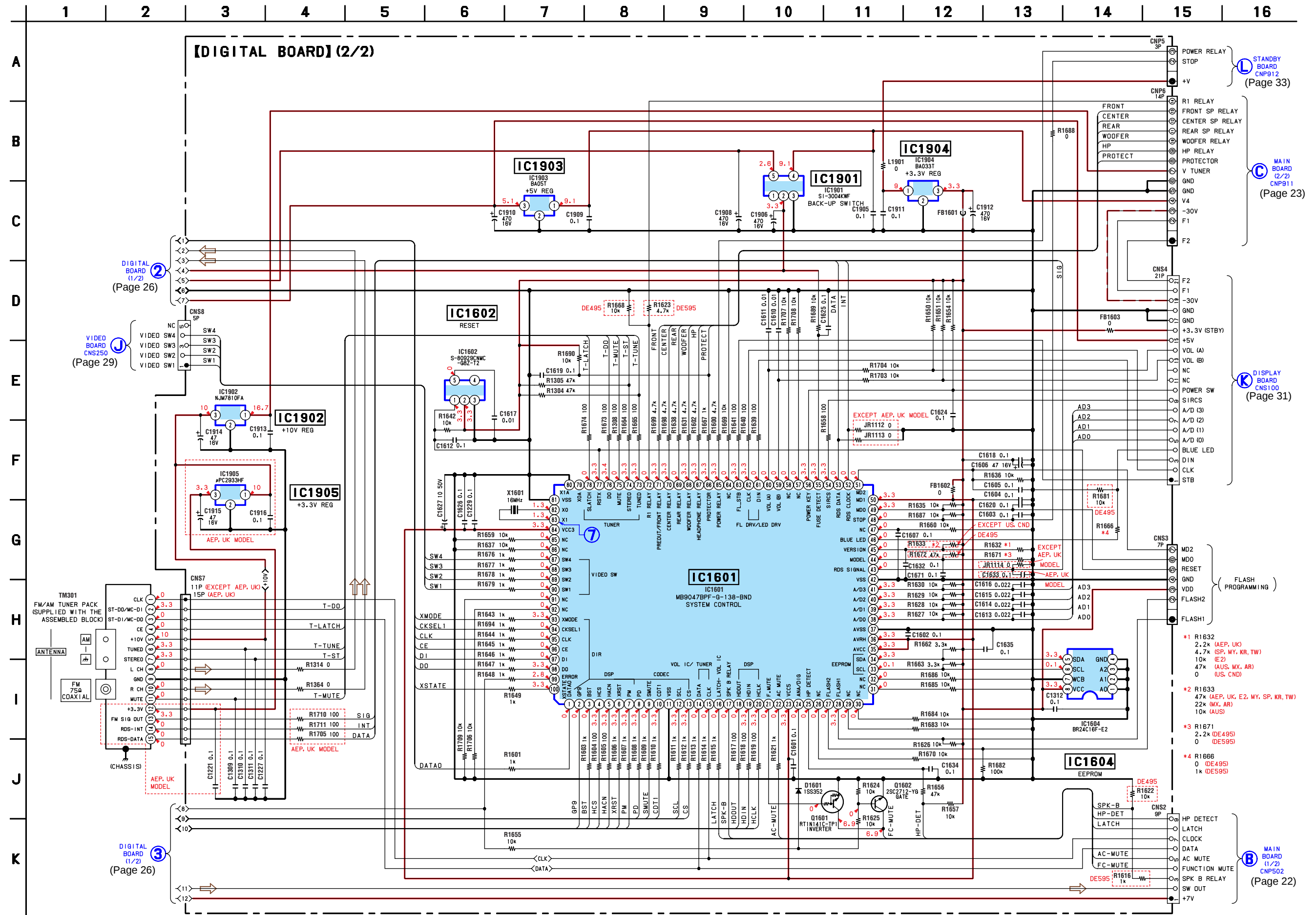




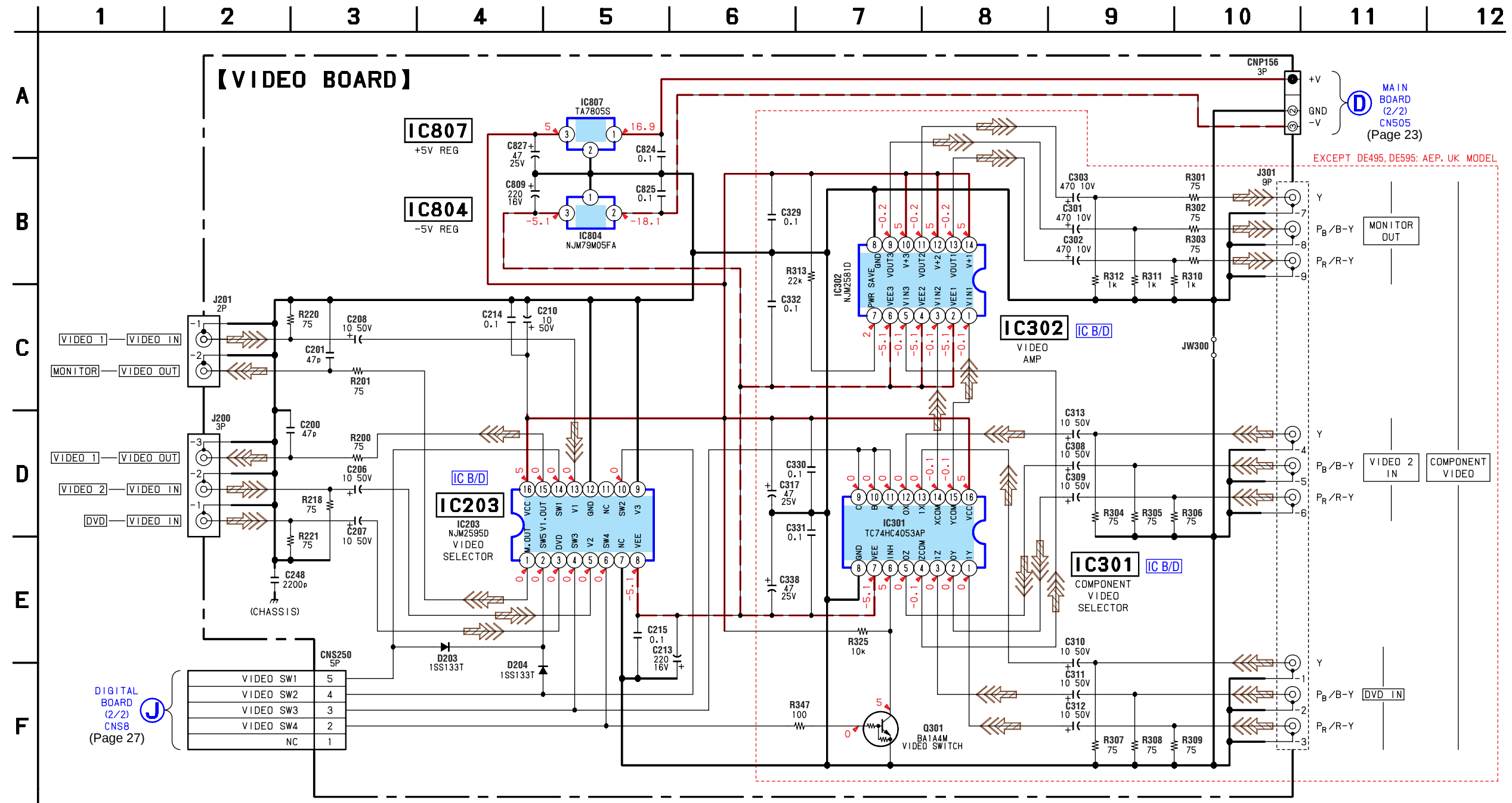
4-12. SCHEMATIC DIAGRAM — DIGITAL SECTION (1/2) — • Refer to page 20 for Common Note on Schematic Diagram and Waveforms and page 34 for IC Block Diagrams.



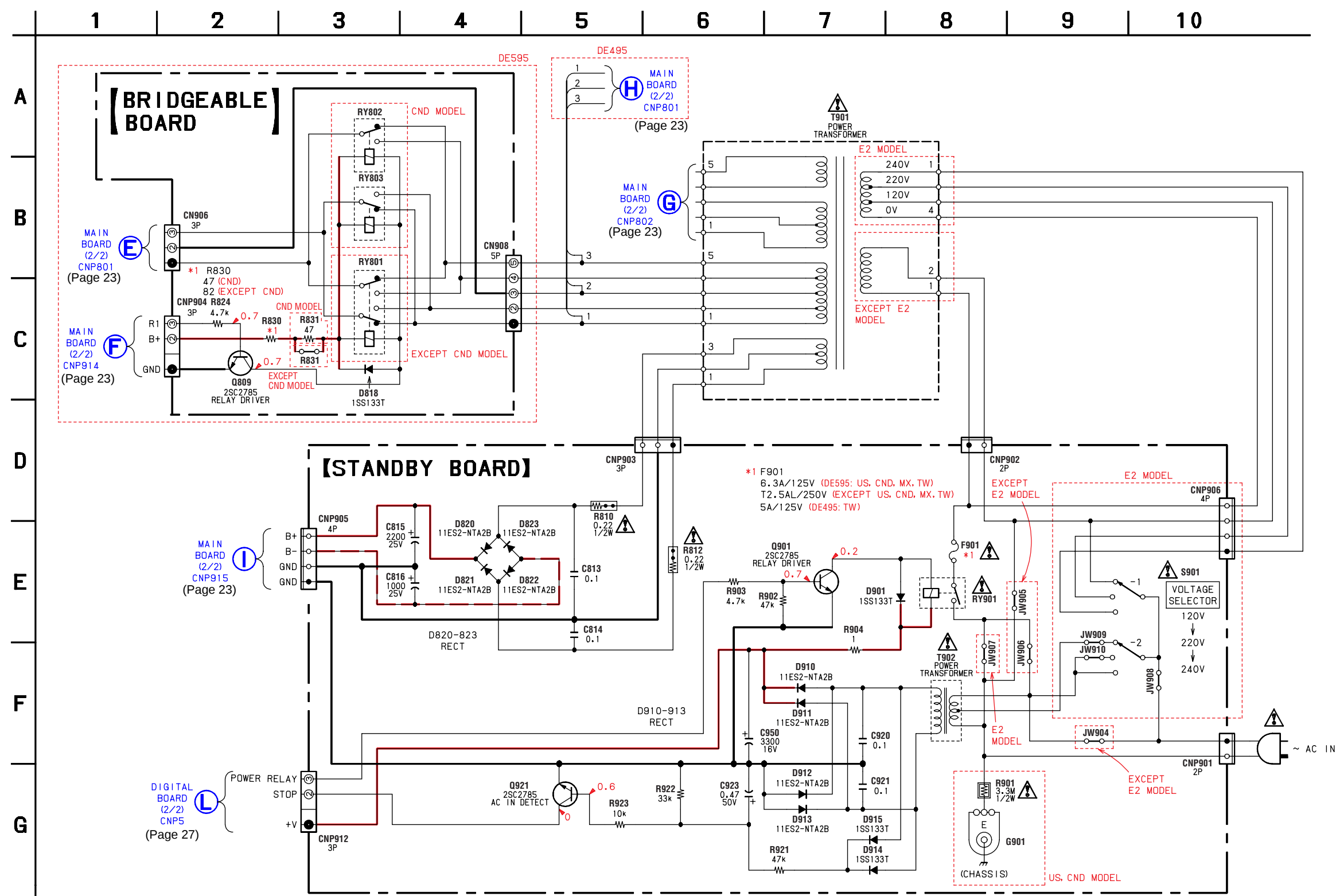
4-13. SCHEMATIC DIAGRAM — DIGITAL SECTION (2/2) — • Refer to page 20 for Common Note on Schematic Diagram and Waveforms.



4-15. SCHEMATIC DIAGRAM — VIDEO SECTION — • Refer to page 20 for Common Note on Schematic Diagram and page 34 for IC Block Diagrams.



4-19. SCHEMATIC DIAGRAM — POWER SECTION — • Refer to page 20 for Common Note on Schematic Diagram.

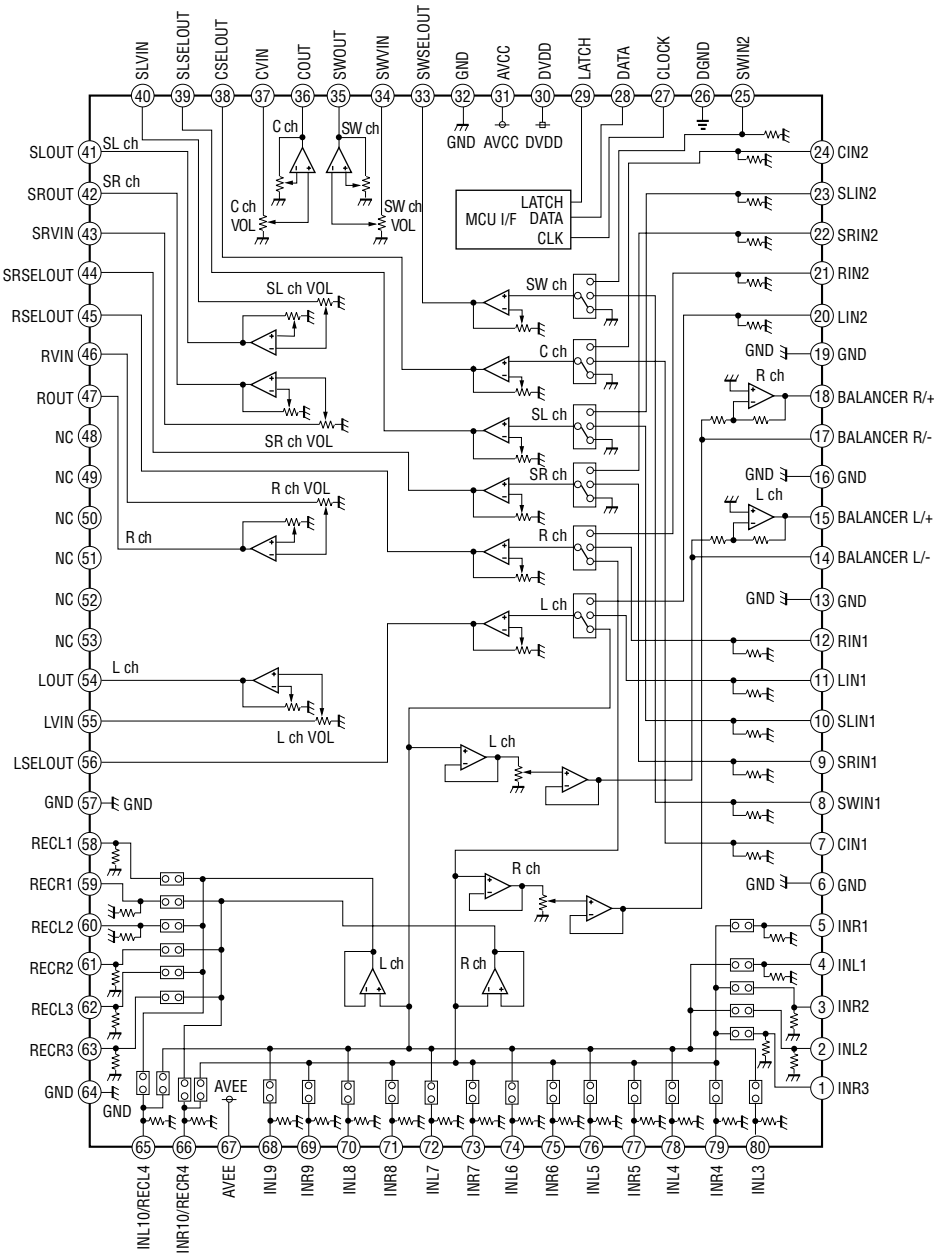


Note:
The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

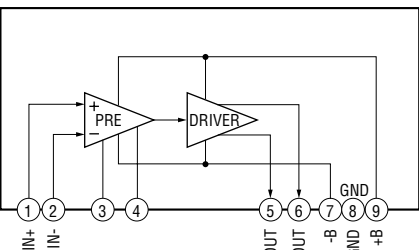
Note:
Les composants identifiés par une marque  sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

4-20. IC BLOCK DIAGRAMS

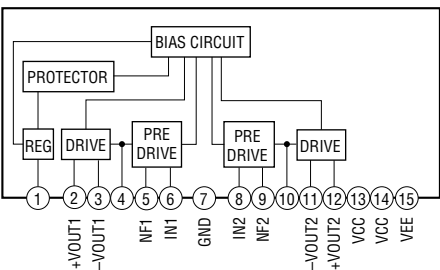
IC201 M61527FP (MAIN BOARD (1/2))



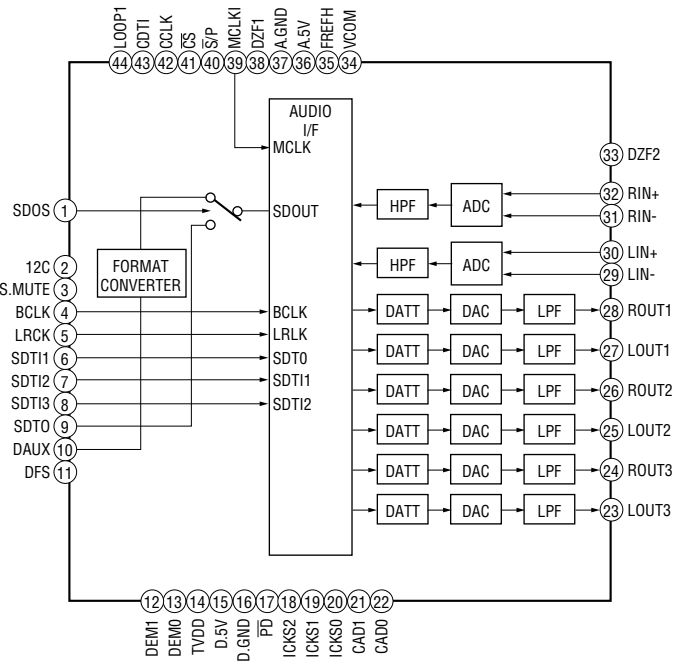
IC501 STK350-230 (MAIN BOARD (2/2))



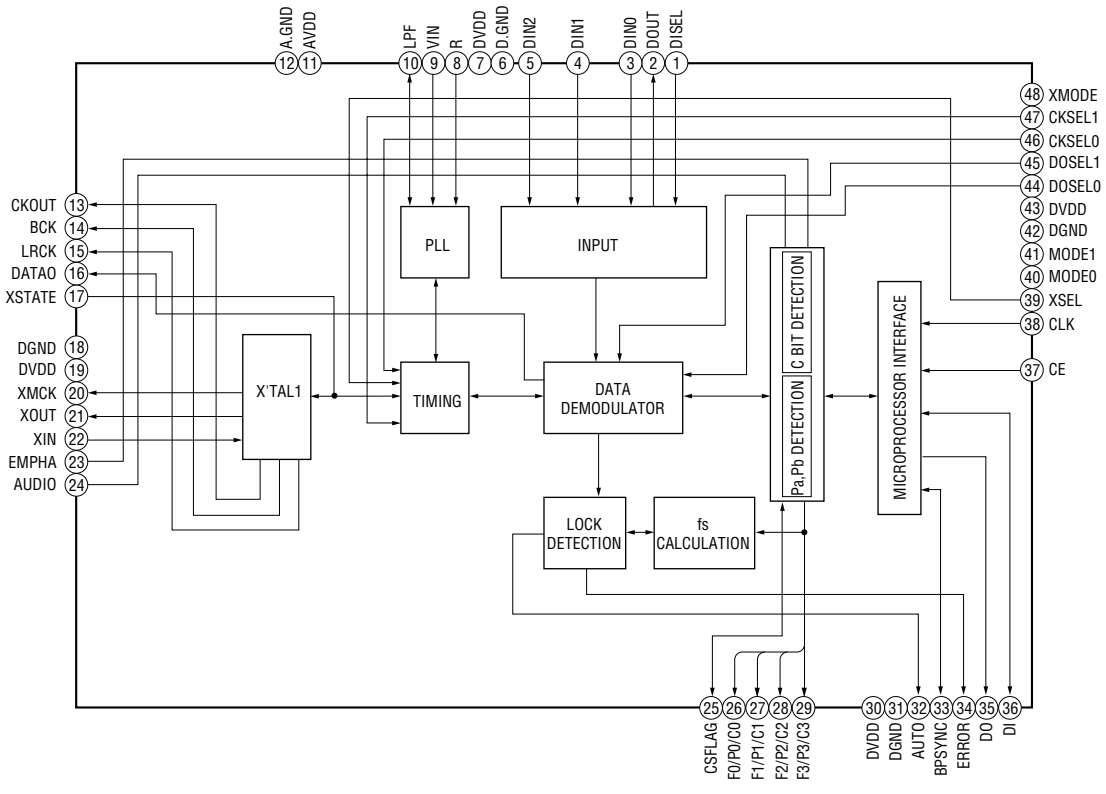
IC701 μ PC2581V-S (MAIN BOARD (2/2))
IC702 μ PC2581V-S (MAIN BOARD (2/2))



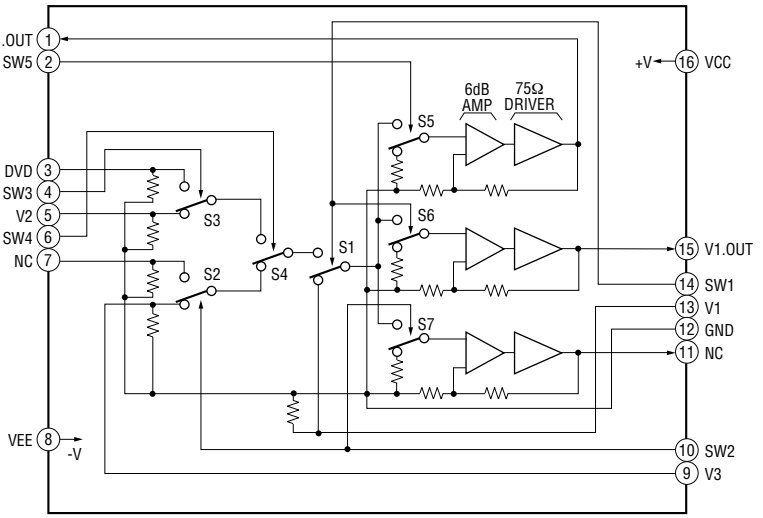
IC1501 AK4527B (DIGITAL BOARD (1/2))

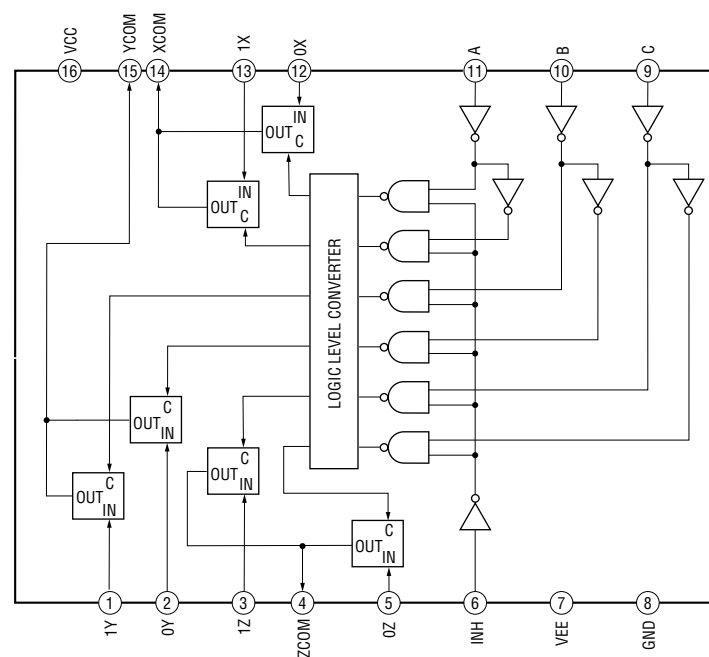


IC1101 LC89056W-E (DIGITAL BOARD (1/2))



IC203 NJM2595D (VIDEO BOARD)



IC301 TC74HC4053AP**IC302 NJM2581D**