

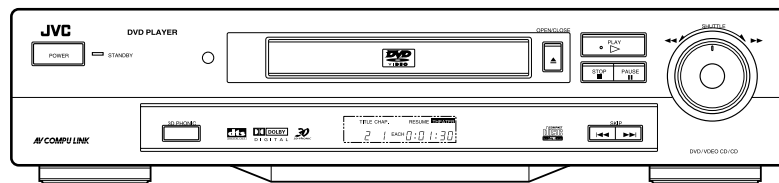
JVC

SCHEMATIC DIAGRAMS

DVD PLAYER

XV-521BK/523GD/522SL

CD-ROM No. SML200007



Video CD



Area Suffix XV-521BK

B U.K.
 EN Northern Europe
 EG ... Germany, France, Greece,
 Netherlands, Switzerland
 ES Spain, Italy
 EE Russian Federation

Area Suffix XV-523GD/522SL

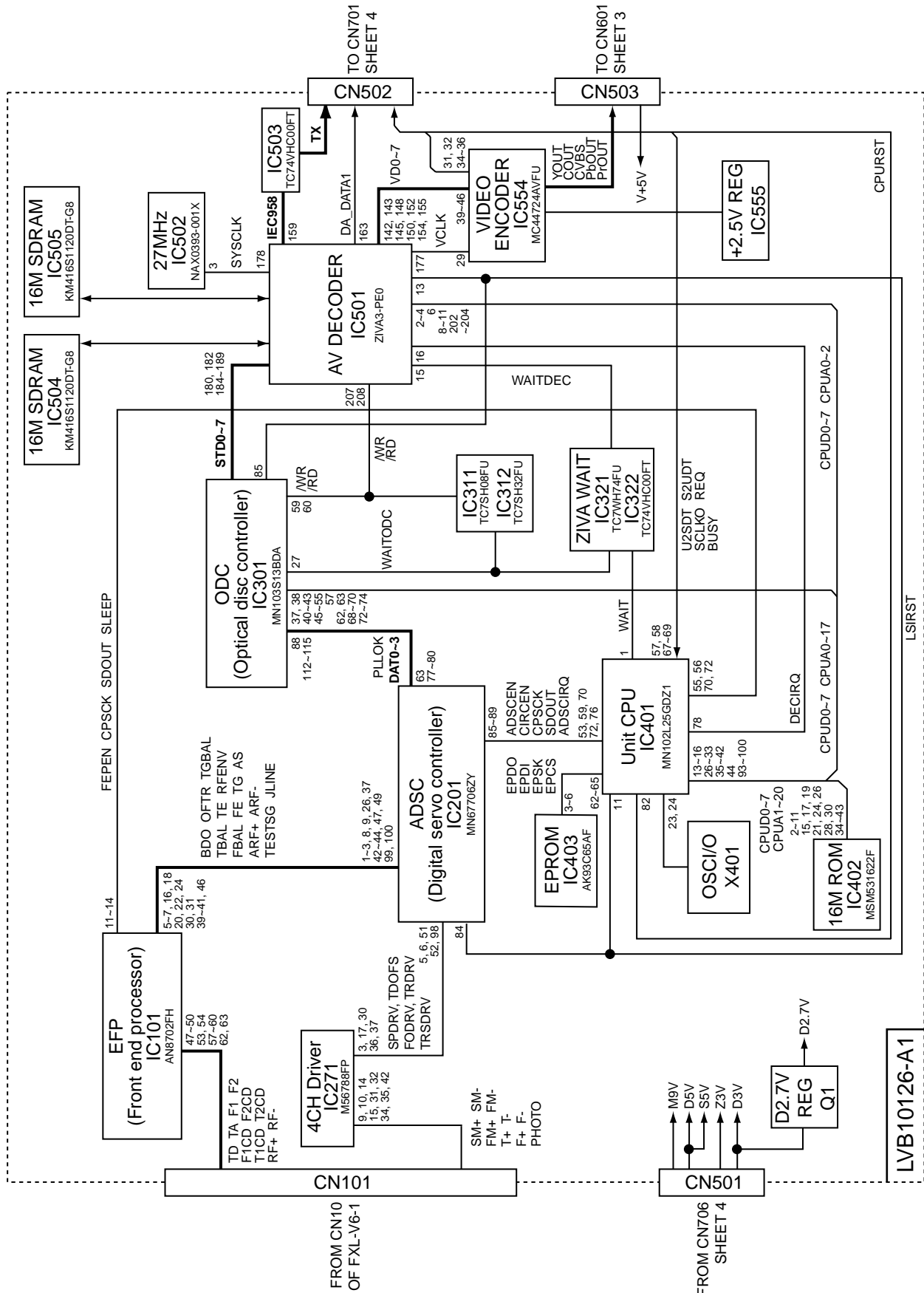
B U.K.
 EN Northern Europe
 EG ... Germany, France, Greece,
 Netherlands, Switzerland
 ES Spain, Italy

Contents

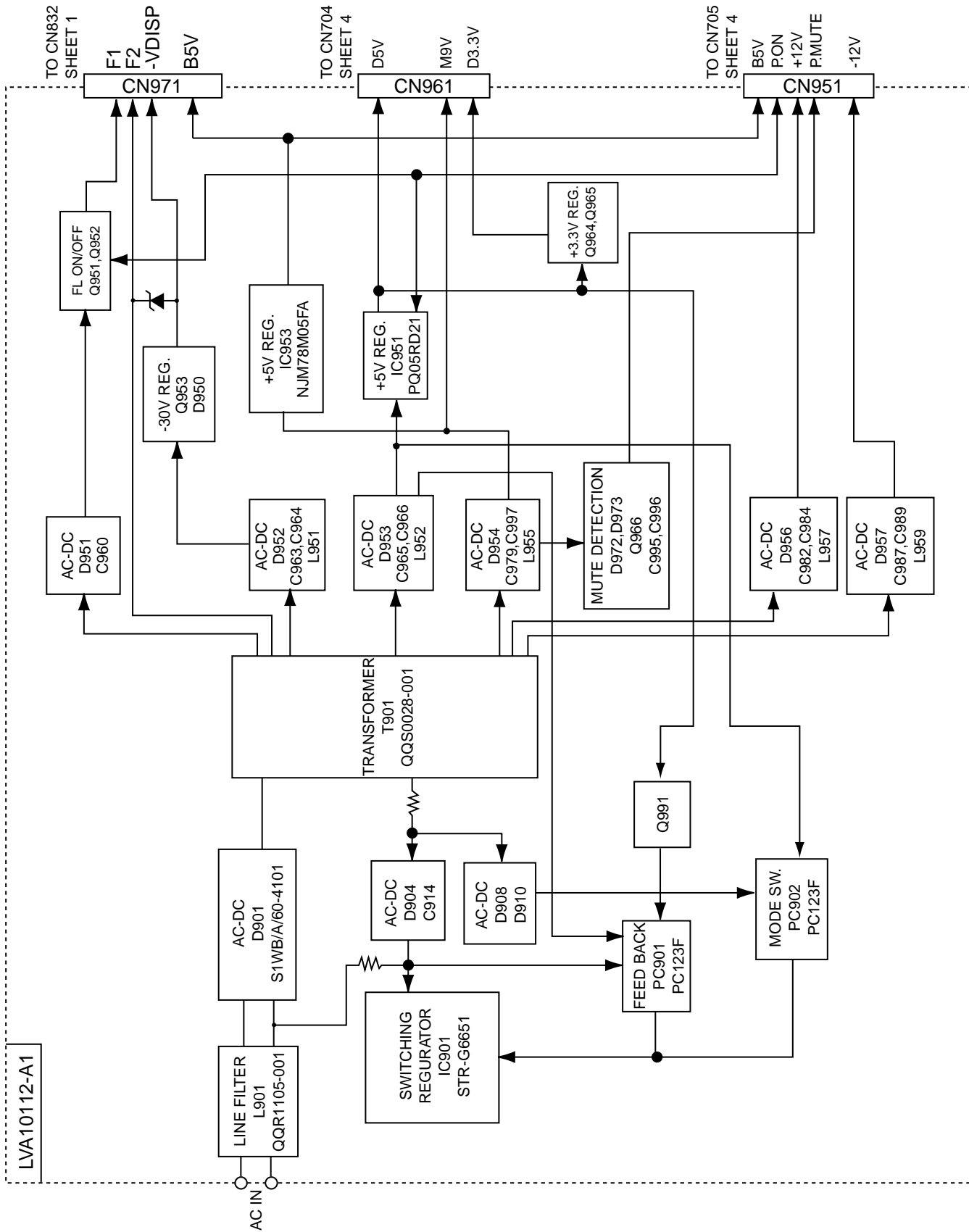
Block diagram 2-1
 Standard schematic diagrams 2-5
 Printed circuit boards 2-12

Block diagrams

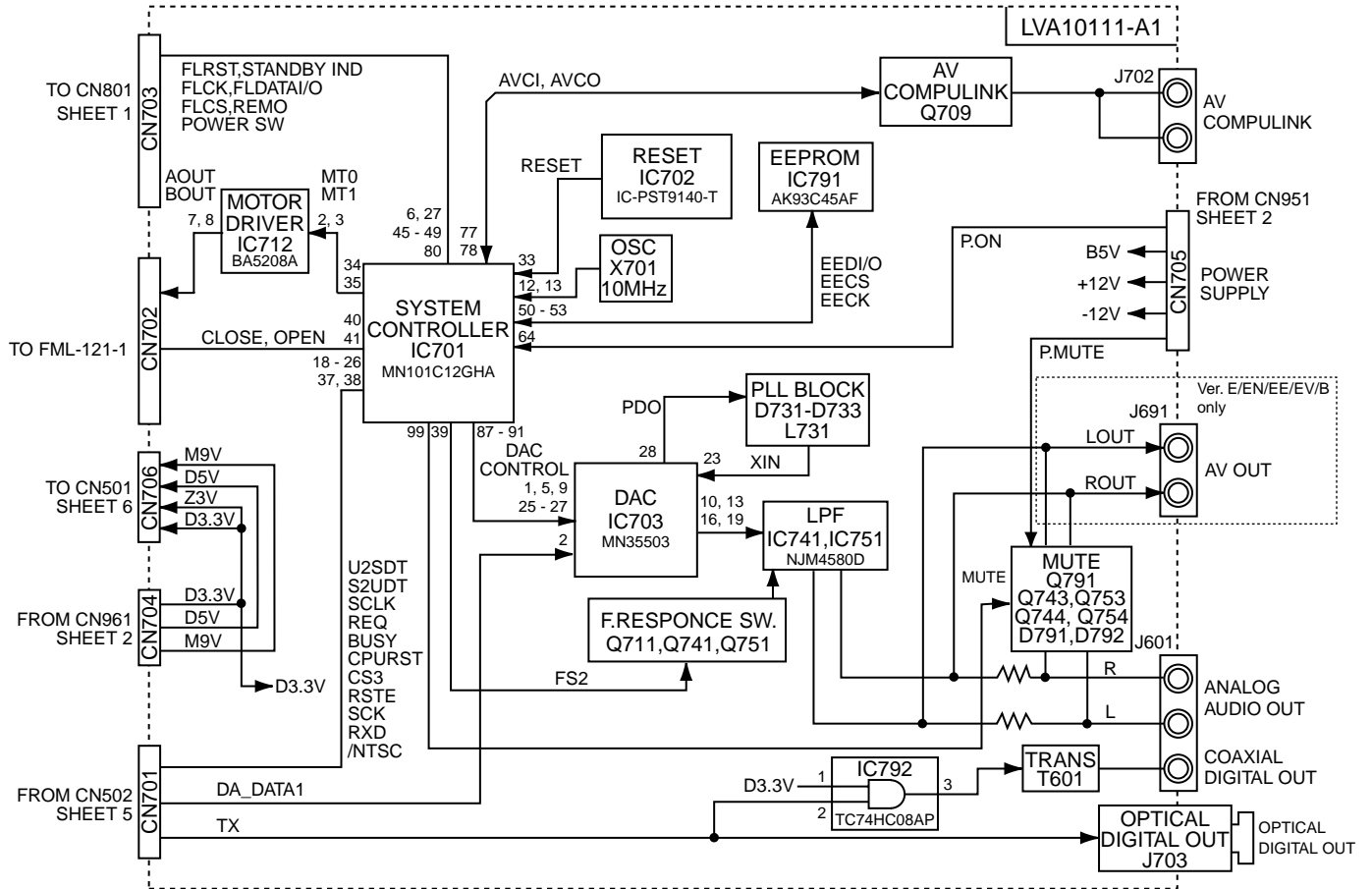
■ DVD Servo control and DSP section (SHEET 5,6)



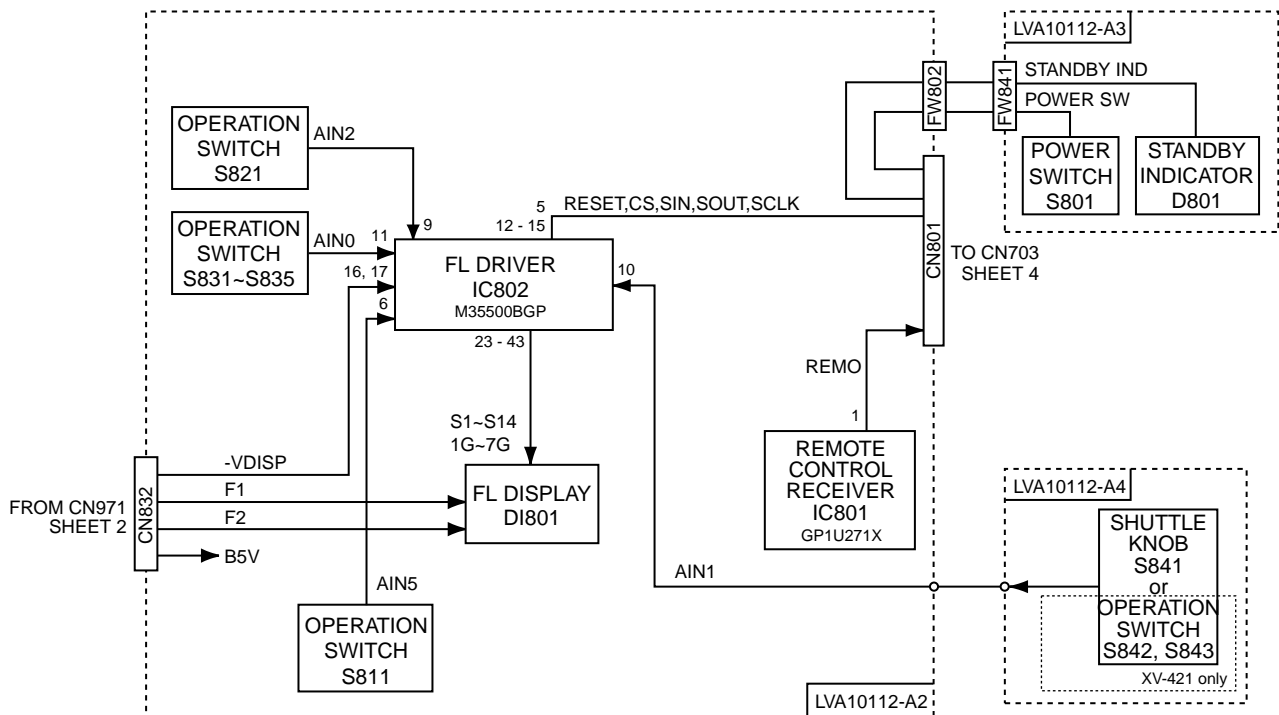
■ DC Regurator section (SHEET 2)



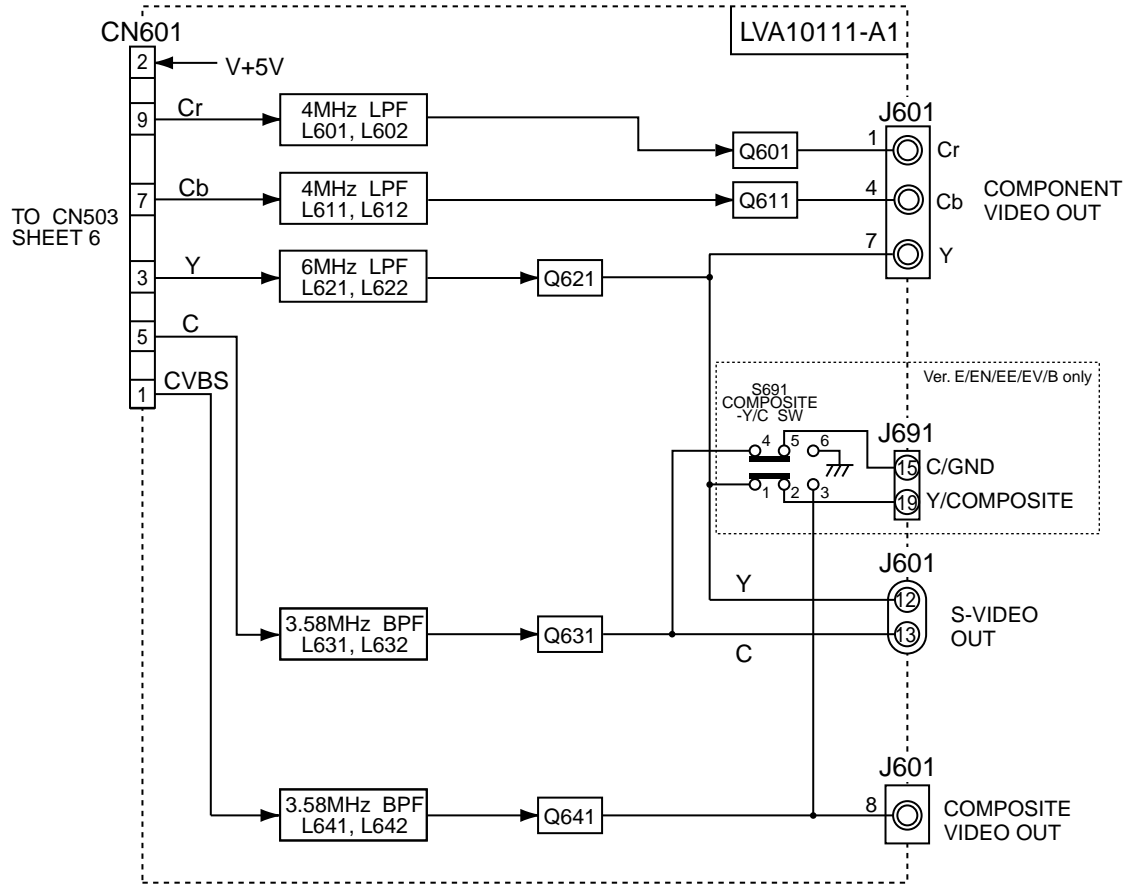
■ System control and Audio out section (SHEET 4)



■ FL Driver section (SHEET 1)

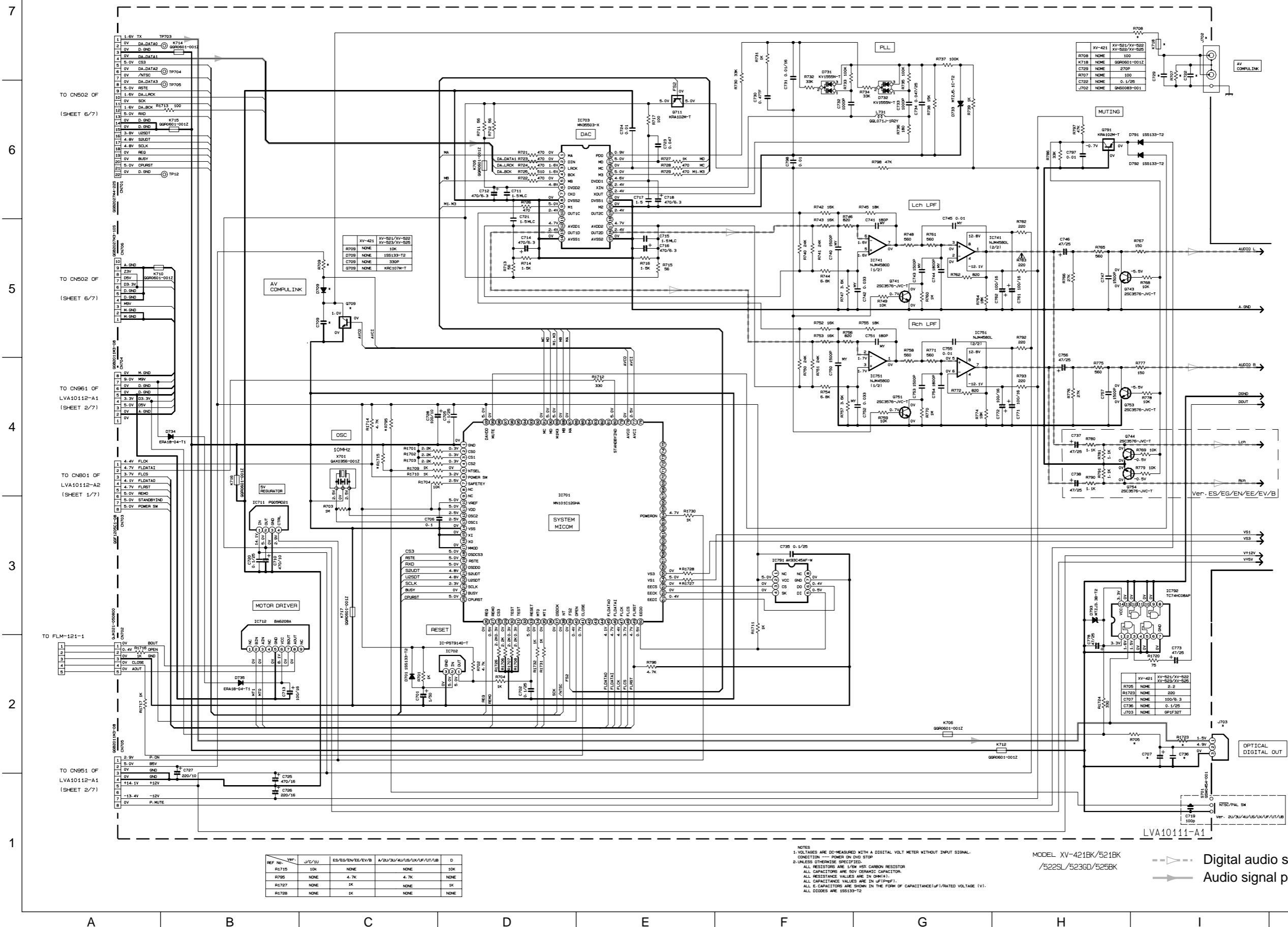


■ Video out section (SHEET 3)



Standard schematic diagrams

System control circuit



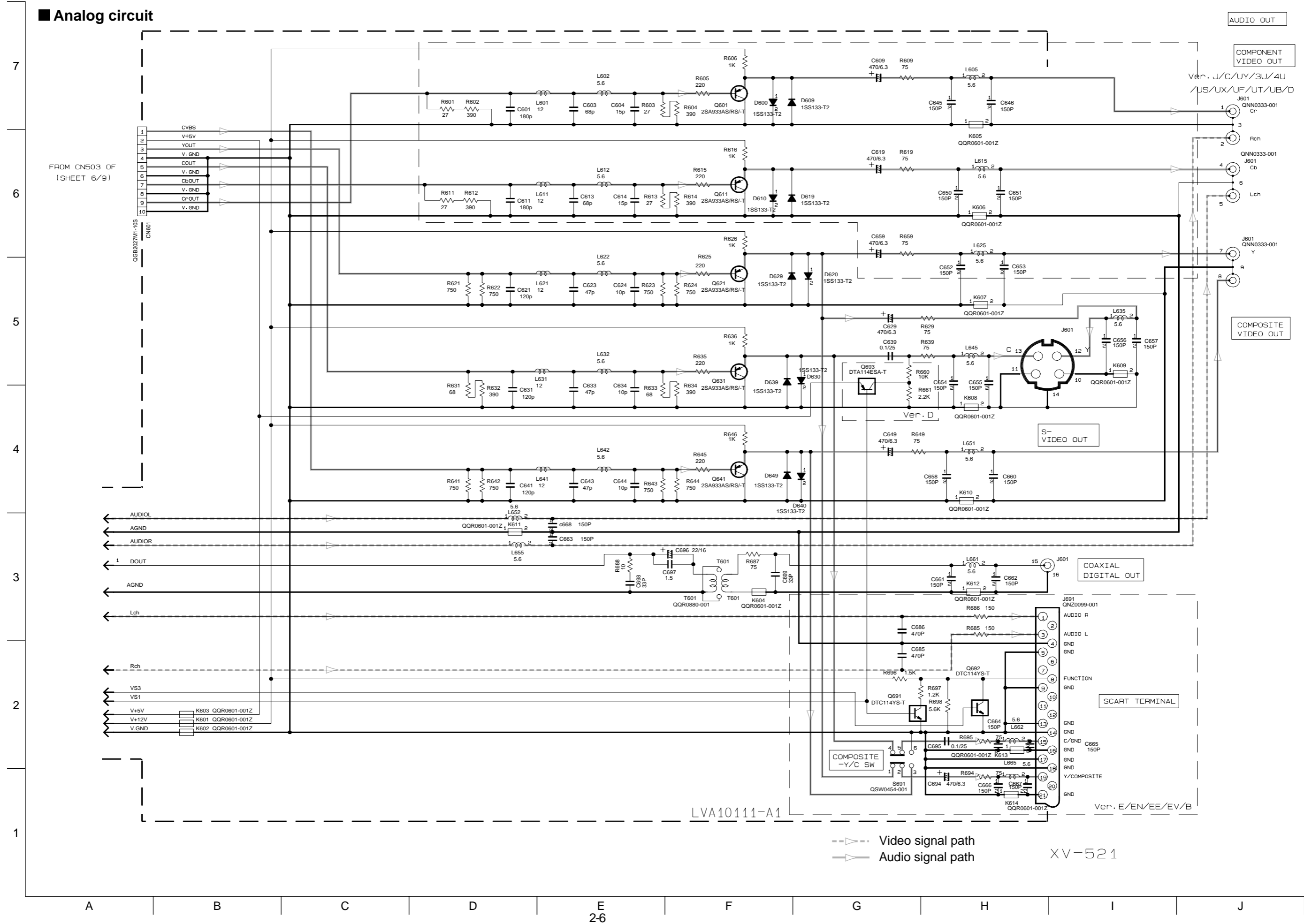
REF. NO.	VAL.	W/C/Ω/L	ES/EN/EE/EB/B	A/2U/3U/4U/5U/6U/7U/8	D
R175	10K		NONE	NONE	10K
R795	NONE	4.7K		NONE	NONE
R177	NONE	1K		NONE	1K
R178	NONE	1K		NONE	NONE

NOTES:
 1- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
 CONDITION --- POWER ON DVD STOP
 2- UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS ARE 1/8W 5% CARBON RESISTOR
 ALL CAPACITORS ARE 50V CERAMIC CAPACITOR
 ALL RESISTANCE VALUES ARE IN OHMS (Ω)
 ALL CAPACITANCE VALUES ARE IN PICO-FARAD (pF)
 ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
 ALL DIODES ARE 1SS133-T2

MODEL XV-421BK/521BK/522SL/523GD/525BK

--- Digital audio signal path
 — Audio signal path

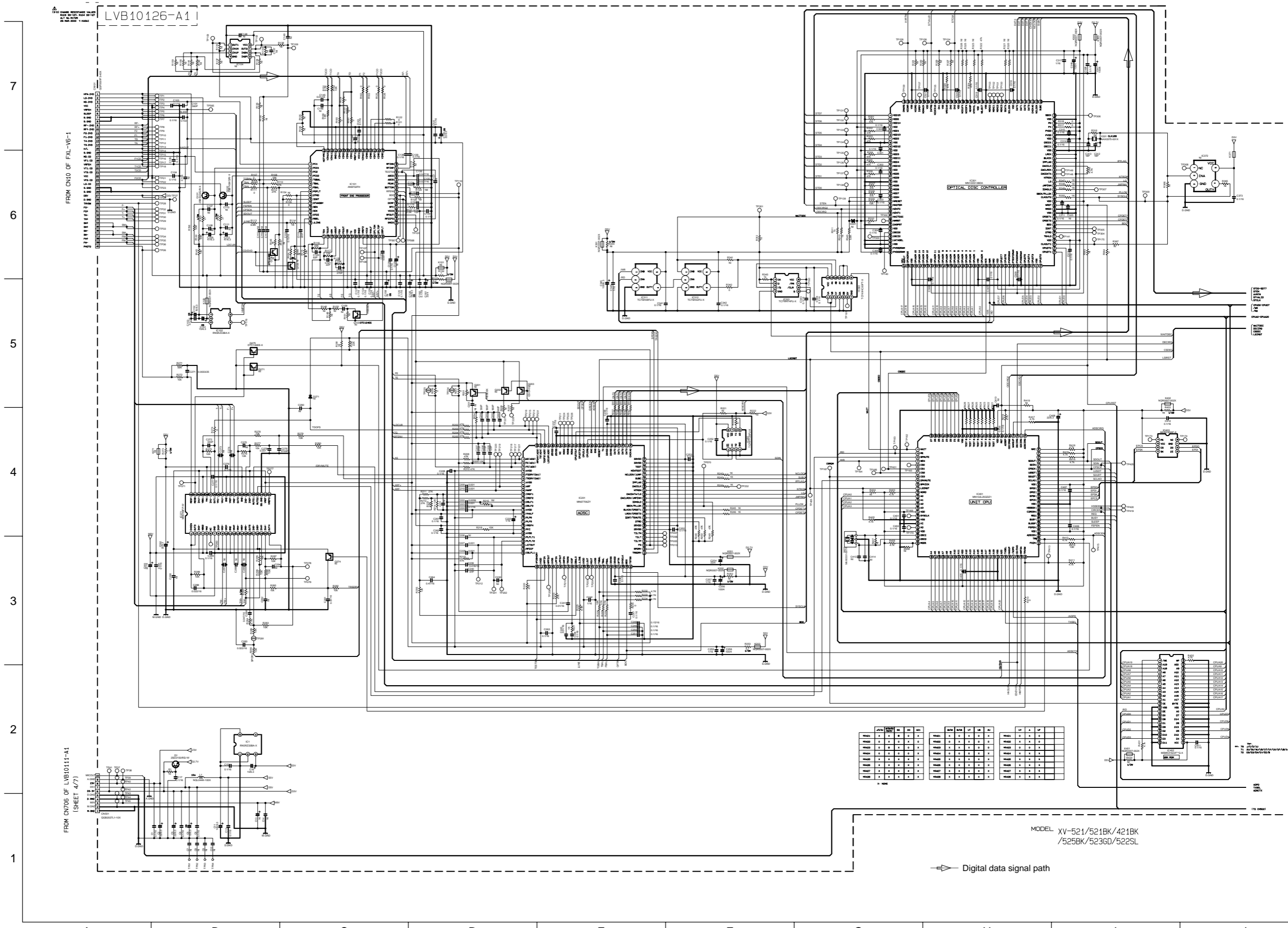
■ Analog circuit



--> Video signal path
 -> Audio signal path

XV-521

DVD servo circuit



FROM CN10 OF FXL-V5-1

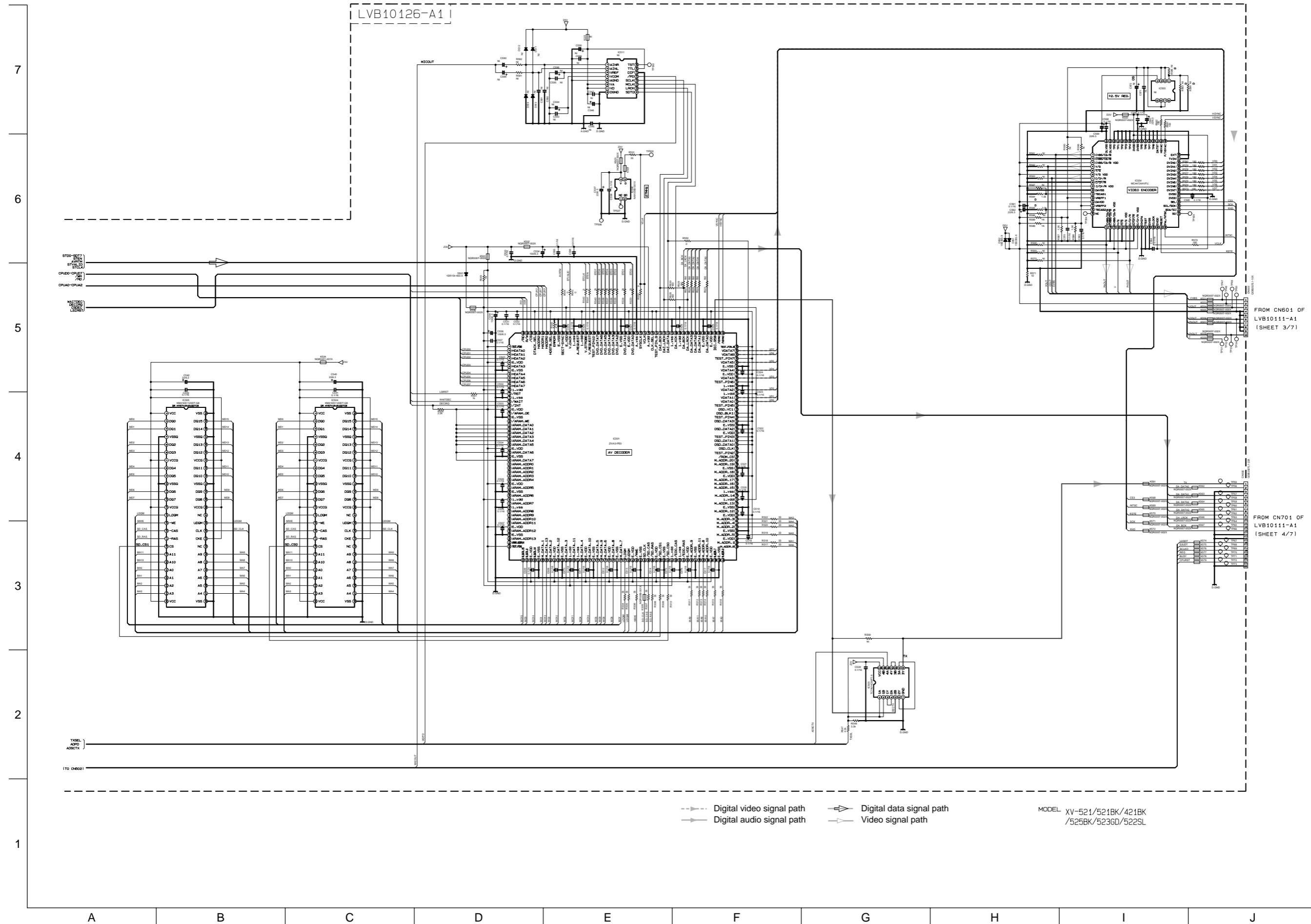
LVB10126-A1

FROM CN706 OF LVB10111-A1
(SHEET 4/7)

MODEL XV-521/521BK/421BK
/525BK/523GD/522SL

△ Digital data signal path

■ DSP circuit



FROM CN601 OF LVB10111-A1 (SHEET 3/7)

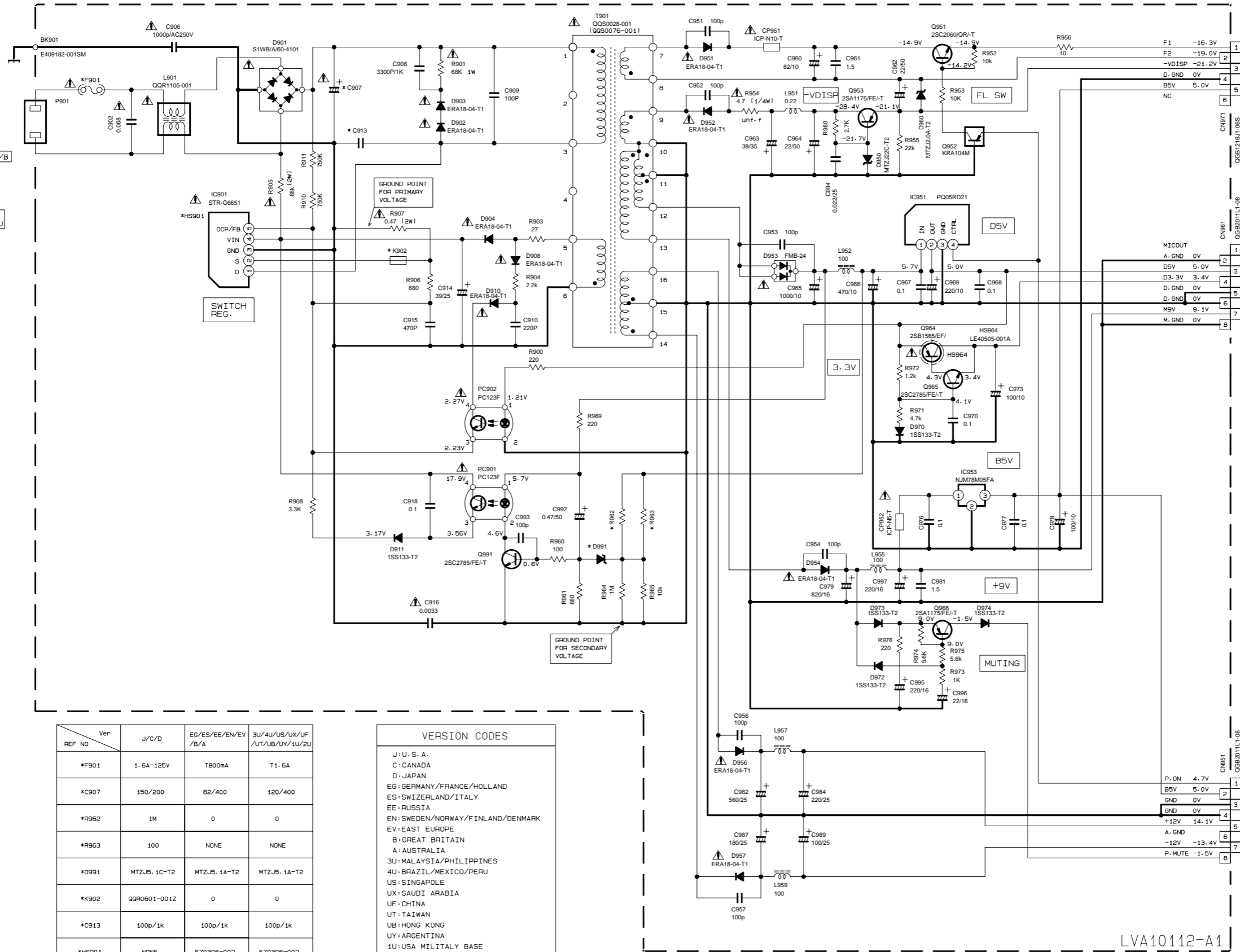
FROM CN701 OF LVB10111-A1 (SHEET 4/7)

--- Digital video signal path --- Digital data signal path
--- Digital audio signal path --- Video signal path

MODEL XV-521BK/421BK /525BK/523GD/522SL

Power supply circuit

- Ver. J/C
120V 60Hz
- Ver. D
100V 50/60Hz
- Ver. EG/ES/EE/EN/EV/B
230V 50Hz
- Ver. A
240V 50Hz
- Ver. 3U/4U/US/UX/UF
/UT/UB/UY/1U/2U
110-240V 50/60Hz



TO CNB32 OF
LVA10112-A2
(SHEET 1/7)

TO CN704 OF
LVA10111-A1
(SHEET 4/7)

TO CN705 OF
LVA10111-A1
(SHEET 4/7)

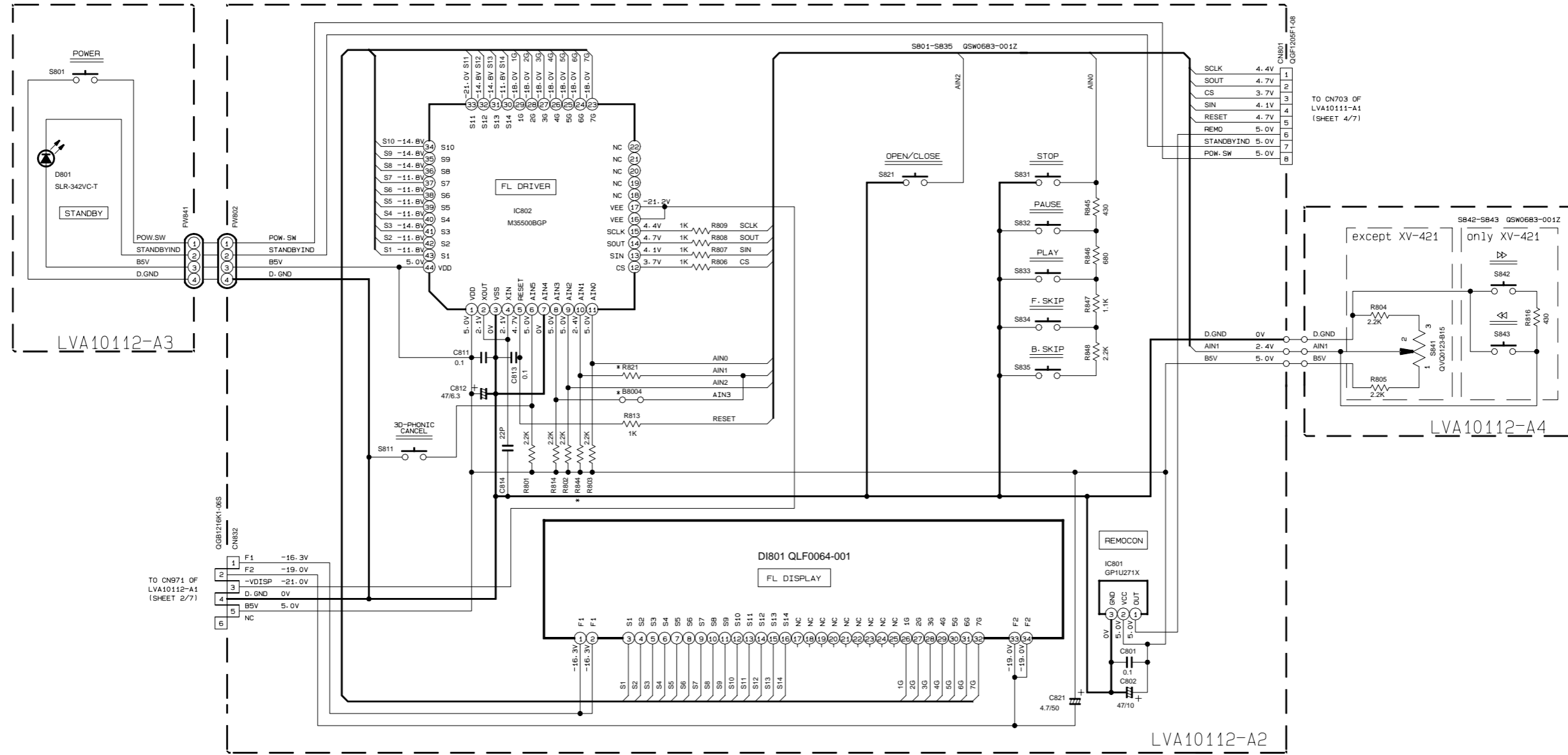
Ver	J/C/D	EG/ES/EE/EN/EV/UB/A	3U/4U/US/UX/UF/UT/UB/UY/1U/2U
*F901	1.6A-125V	T800mA	T1.6A
*C907	150/200	82/400	120/400
*R962	1M	0	0
*R963	100	NONE	NONE
*D991	MTZJ5. 1C-T2	MTZJ5. 1A-T2	MTZJ5. 1A-T2
*K902	QGR0601-001Z	0	0
*C913	100p/1k	100p/1k	100p/1k
*HS901	NONE	E70306-002	E70306-002

VERSION CODES
J: U. S. A.
C: CANADA
D: JAPAN
EG: GERMANY/FRANCE/HOLLAND
ES: SWITZERLAND/ITALY
EE: RUSSIA
EN: SWEDEN/NORWAY/FINLAND/DENMARK
EV: EAST EUROPE
B: GREAT BRITAIN
A: AUSTRALIA
3U: MALAYSIA/PHILIPPINES
4U: BRAZIL/MEXICO/PERU
US: SINGAPOLE
UX: SAUDI ARABIA
UF: CHINA
UT: TAIWAN
UB: HONG KONG
UY: ARGENTINA
1U: USA MILITARY BASE
2U: TURKEY/EGYPT/SOUTHAFRICA

LVA10112-A1

MODEL
XV-521/521BK/421BK
/525BK/523GD/522SL

Display circuit



TO CN971 OF LVA10112-A1 (SHEET 2/7)

TO CN703 OF LVA10111-A1 (SHEET 4/7)

REF NO	MODEL	XV-421	except XV-421
*BB004	QUY150-050Y	NONE	
*RB21	NONE	1k	
*RB44	2.2k	NONE	

- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION --- POWER ON NO DISC
 - UNLESS OTHERWISE SPECIFIED.
 - ALL RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
 - ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.
 - ALL RESISTANCE VALUES ARE IN OHM(Ω).
 - ALL CAPACITANCE VALUES ARE IN μF(P=pF).
 - ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).

XV-521/521BK/421BK /525BK/523GD/522SL

■ Voltage value section

7

IC101 table with 50 rows and 2 columns (NO, DC(V))

IC102 table with 5 rows and 2 columns (NO, DC(V))

IC201 table with 50 rows and 2 columns (NO, DC(V))

IC202 table with 8 rows and 2 columns (NO, DC(V))

IC271 table with 42 rows and 2 columns (NO, DC(V))

IC301 table with 50 rows and 2 columns (NO, DC(V))

IC311 table with 5 rows and 2 columns (NO, DC(V))

IC372 table with 5 rows and 2 columns (NO, DC(V))

IC401 table with 50 rows and 2 columns (NO, DC(V))

IC402 table with 8 rows and 2 columns (NO, DC(V))

IC403 table with 8 rows and 2 columns (NO, DC(V))

6

5

4

IC501 table with 104 rows and 2 columns (NO, DC(V))

IC502 table with 4 rows and 2 columns (NO, DC(V))

IC504 table with 8 rows and 2 columns (NO, DC(V))

IC505 table with 50 rows and 2 columns (NO, DC(V))

IC503 table with 14 rows and 2 columns (NO, DC(V))

IC554 table with 50 rows and 2 columns (NO, DC(V))

3

2

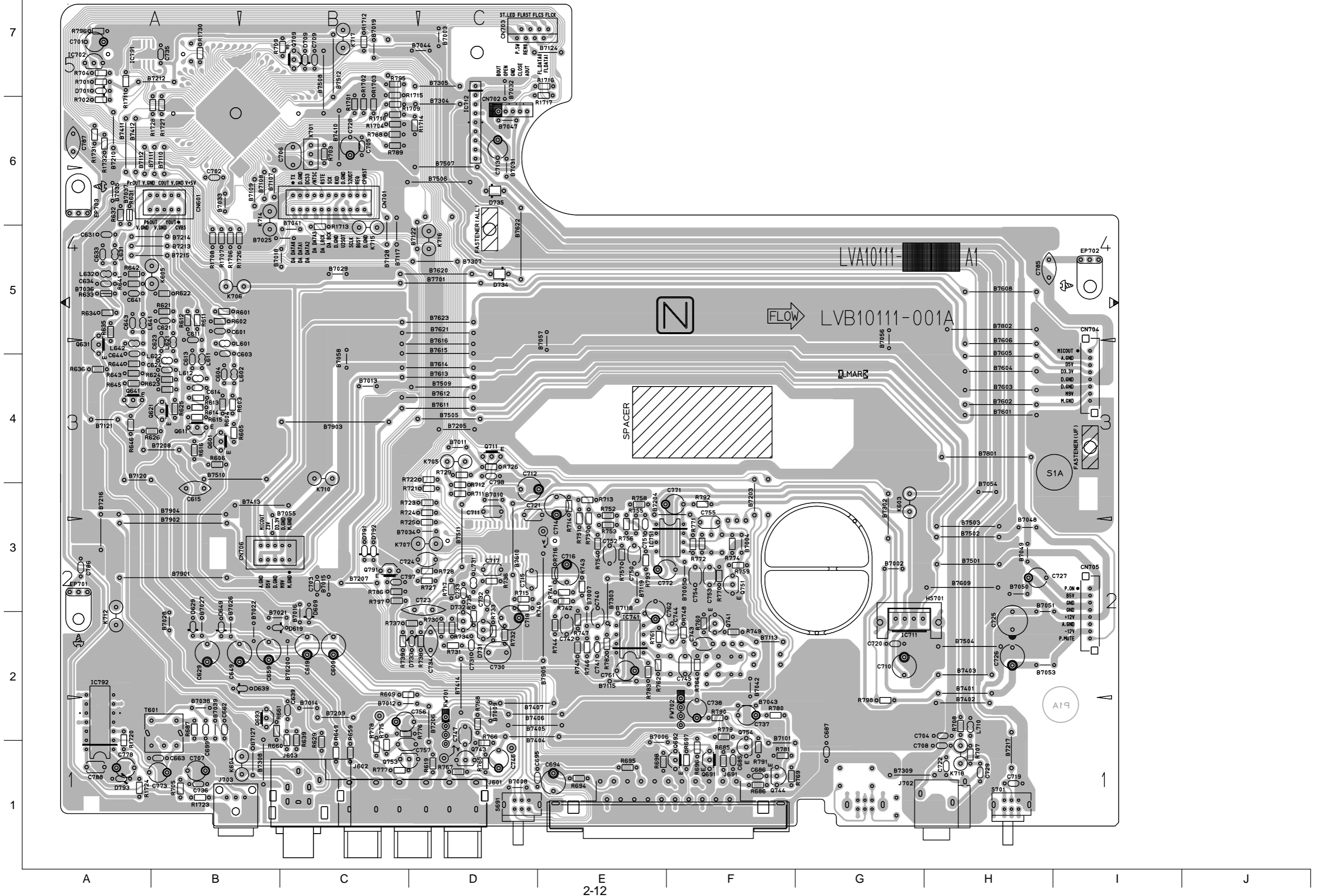
1

MODEL XV-521/521BK/421BK /525BK/523GD/522SL

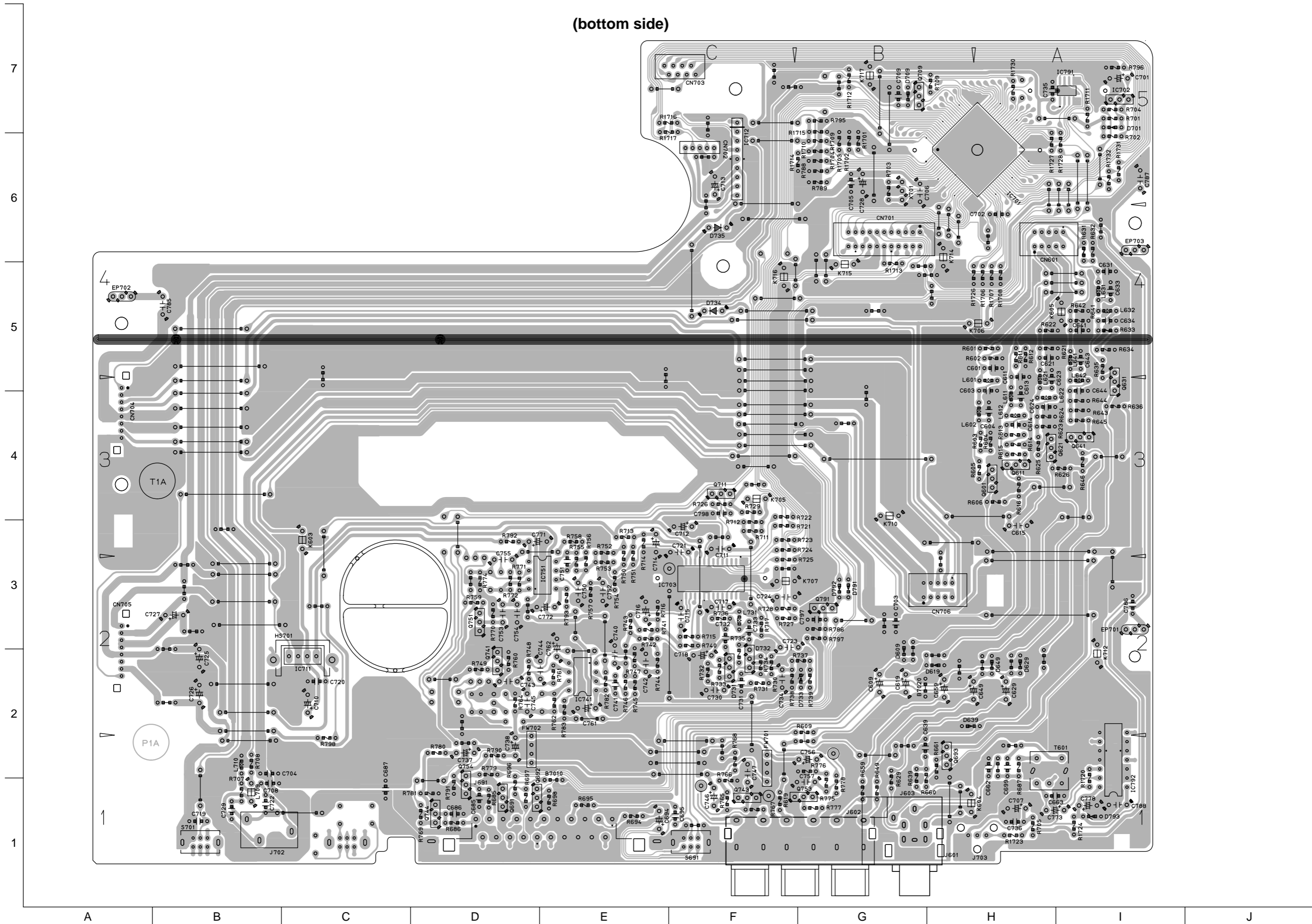
Printed circuit boards

■ MAIN board

(surface side)



(bottom side)



■ DVD Servo

7

(surface side)

(bottom side)

6

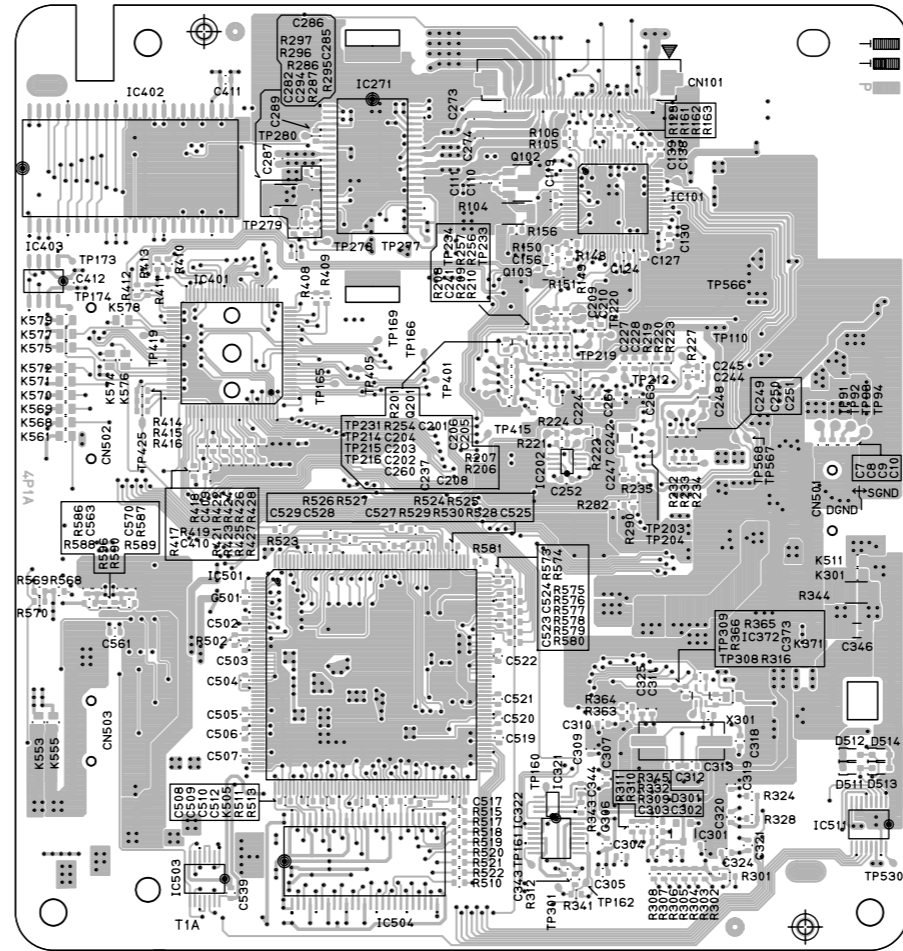
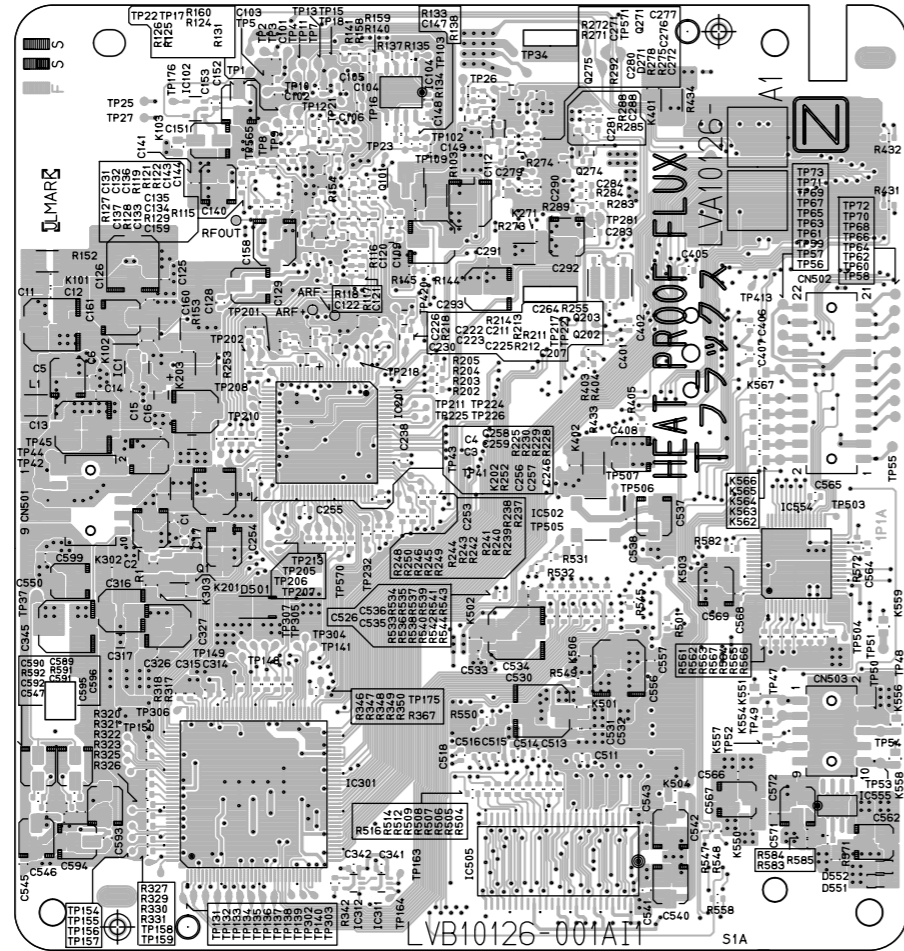
5

4

3

2

1



A B C D E F G H I J

JVC

VICTOR COMPANY OF JAPAN, LIMITED

OPTICAL DISC BUSINESS DIV. PERSONAL & MOBILE NETWORK BUSINESS UNIT

AV & MULTIMEDIA COMPANY 1644, Shimotsuruma, Yamato, Kanagawa 242-8514, Japan