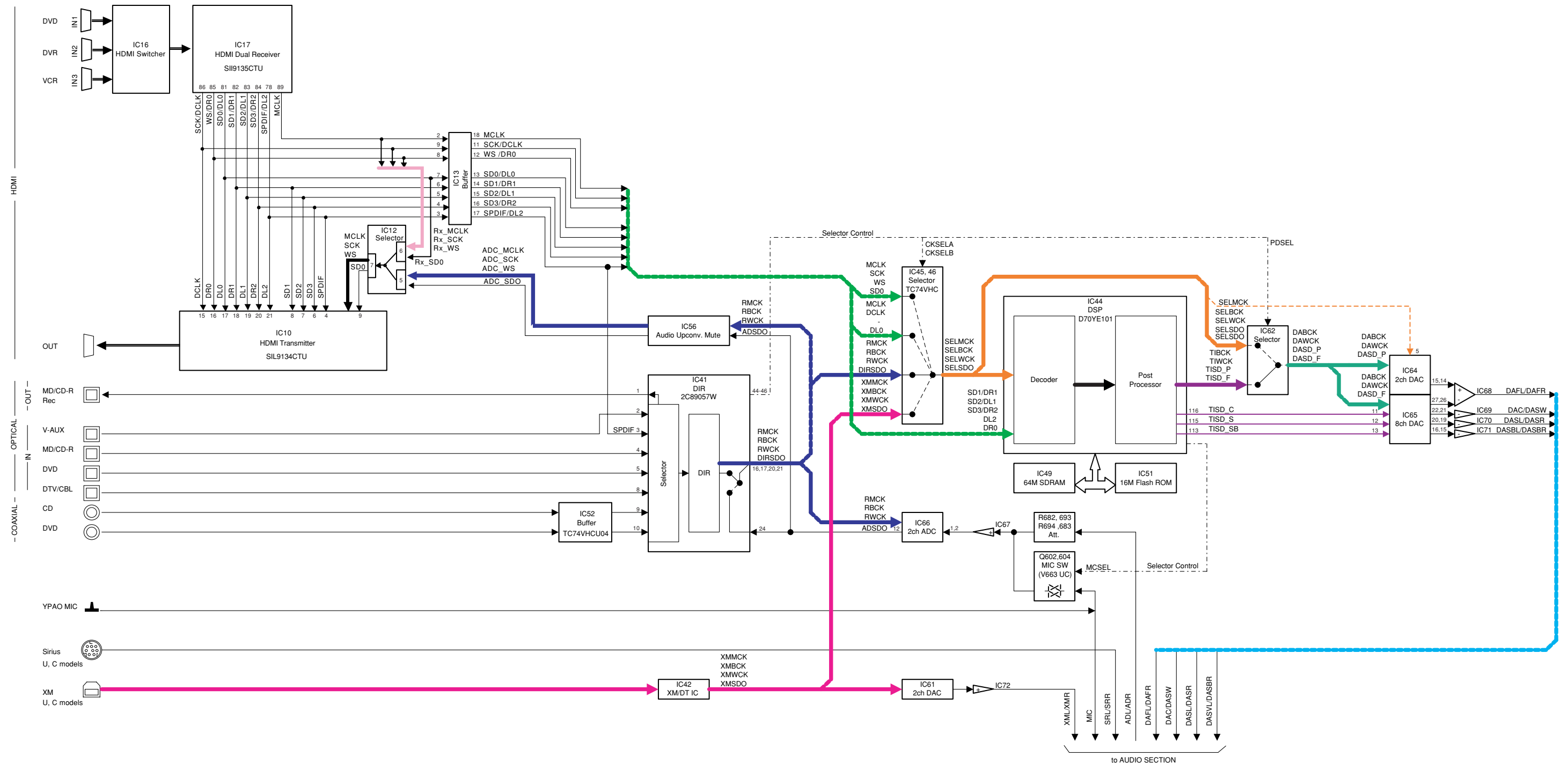


BLOCK DIAGRAMS

AUDIO (DIGITAL) SECTION BLOCK DIAGRAM

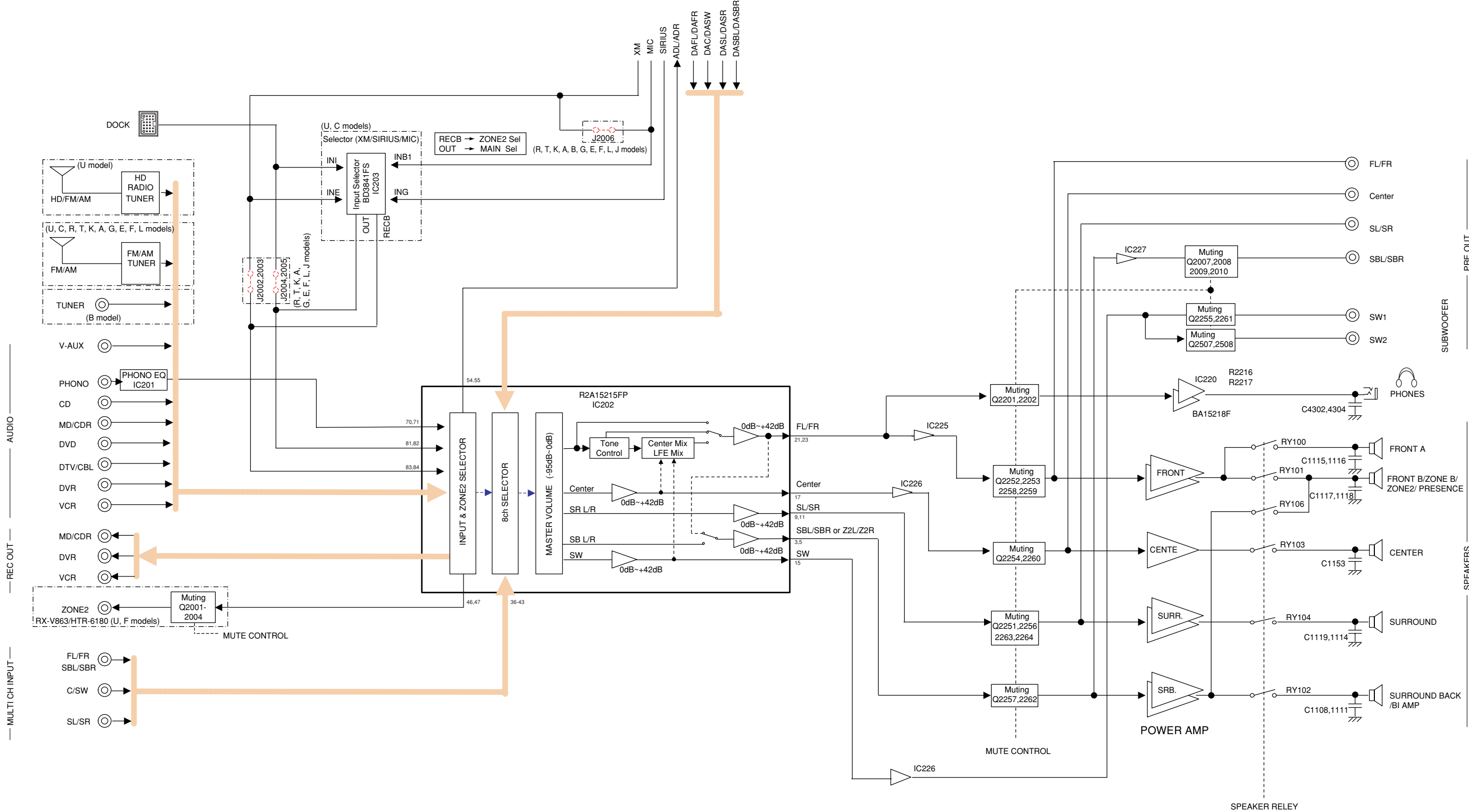
DIGITAL • See page 107-111 →
SCHEMATIC DIAGRAM



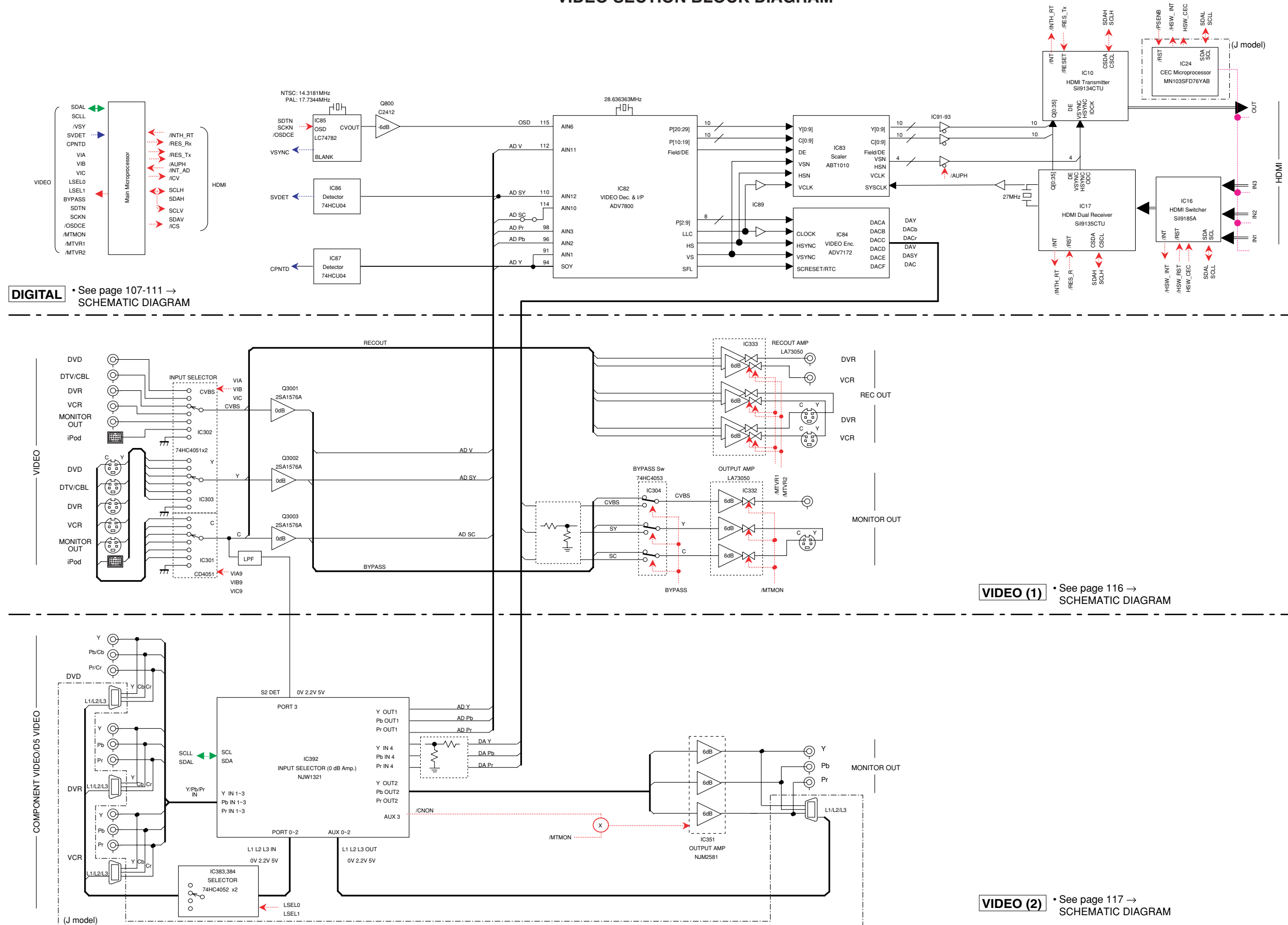
AUDIO (ANALOG) SECTION BLOCK DIAGRAM

FUNCTION • See page 112-113 → SCHEMATIC DIAGRAM

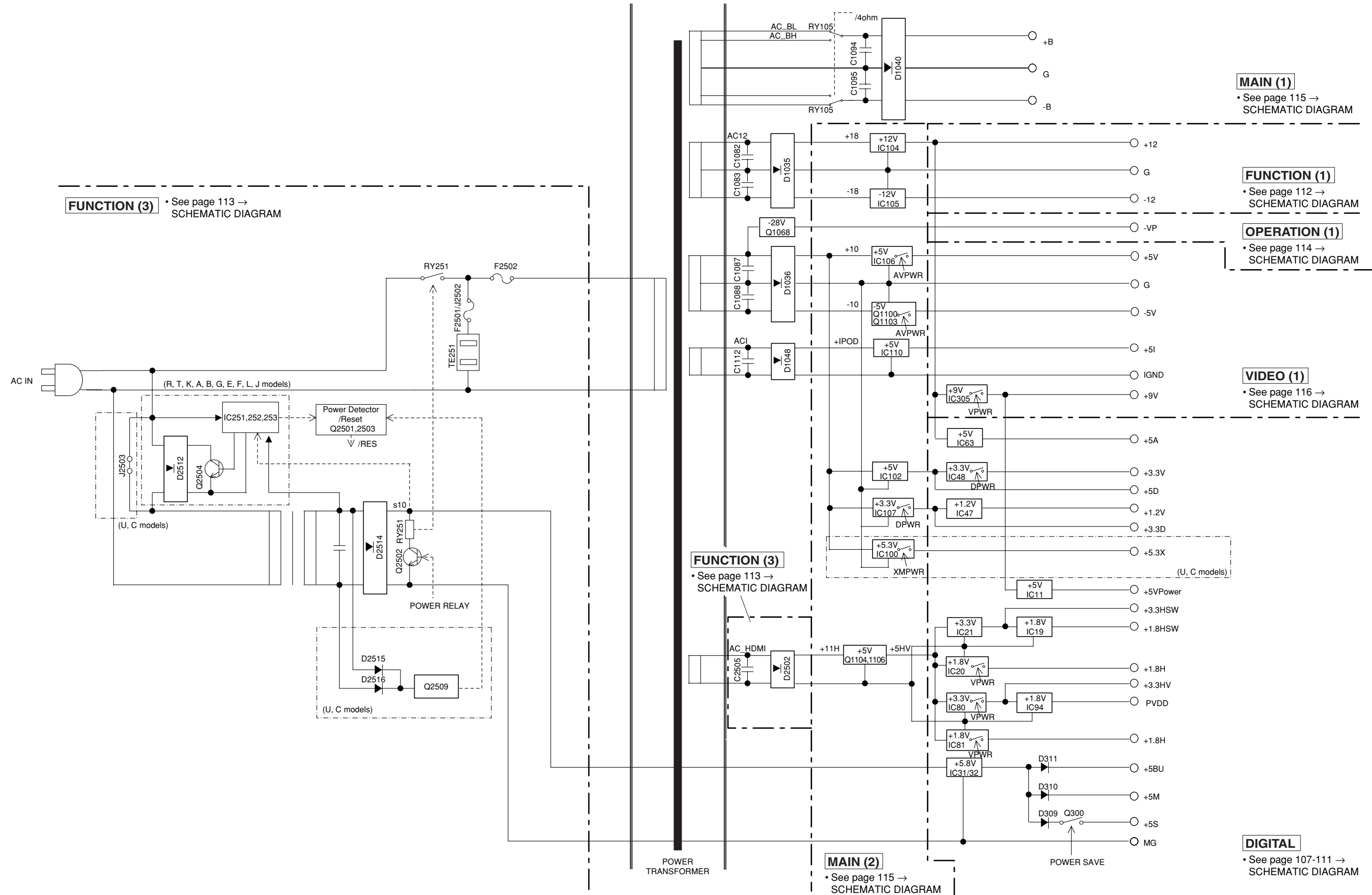
To AUDIO (DIGITAL) SECTION



VIDEO SECTION BLOCK DIAGRAM



POWER SUPPLY SECTION BLOCK DIAGRAM



CONTROL SECTION BLOCK DIAGRAM

1

2

3

4

5

6

7

FUNCTION (3)

• See page 113 → SCHEMATIC DIAGRAM

MAIN (1)

• See page 115 → SCHEMATIC DIAGRAM

MAIN (2)

• See page 115 → SCHEMATIC DIAGRAM

OPERATION (1)

• See page 114 → SCHEMATIC DIAGRAM

FUNCTION (1)

• See page 112 → SCHEMATIC DIAGRAM

VIDEO (1)

• See page 116 → SCHEMATIC DIAGRAM

FUNCTION (1)

• See page 112 → SCHEMATIC DIAGRAM

VIDEO (2)

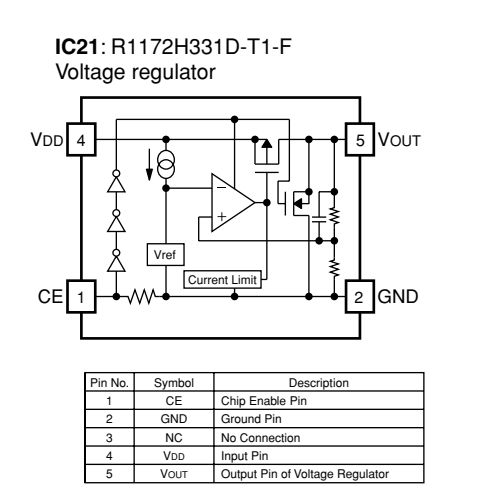
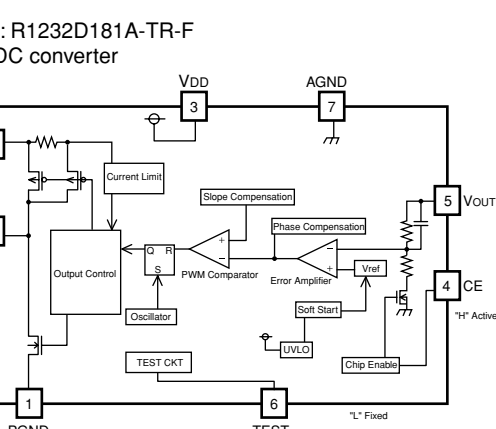
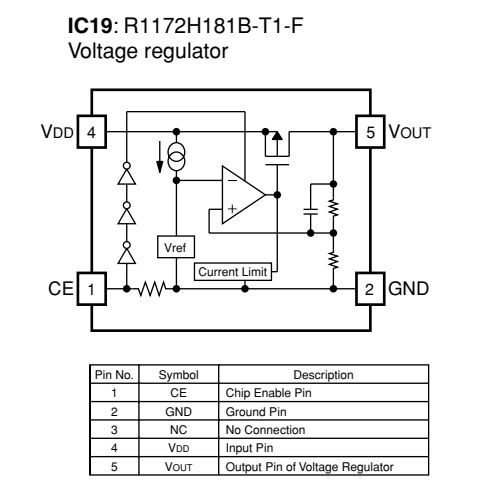
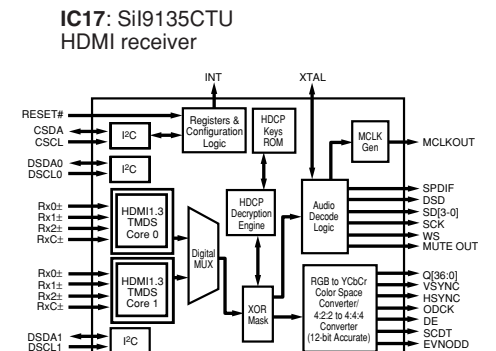
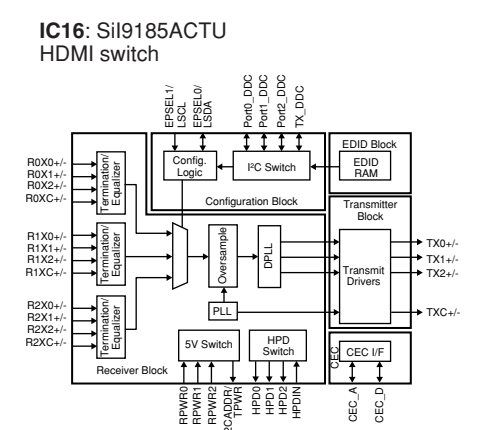
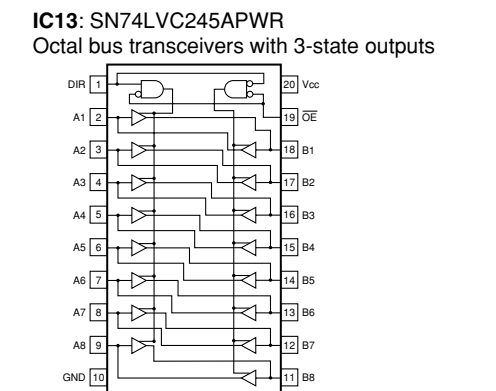
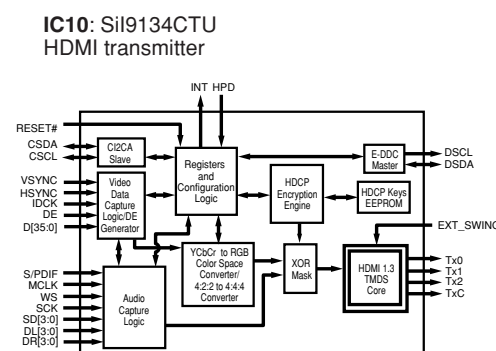
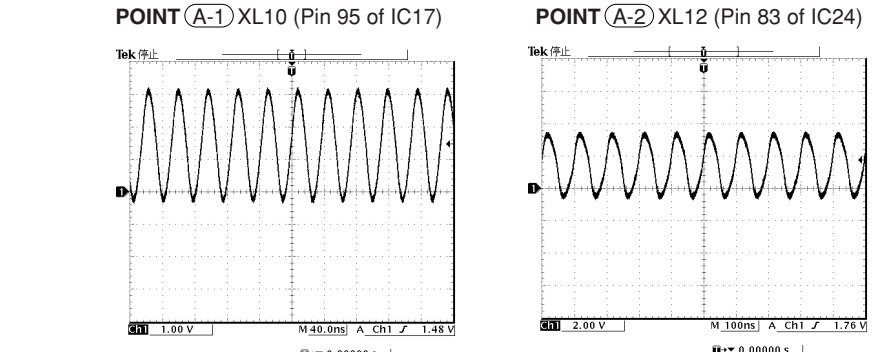
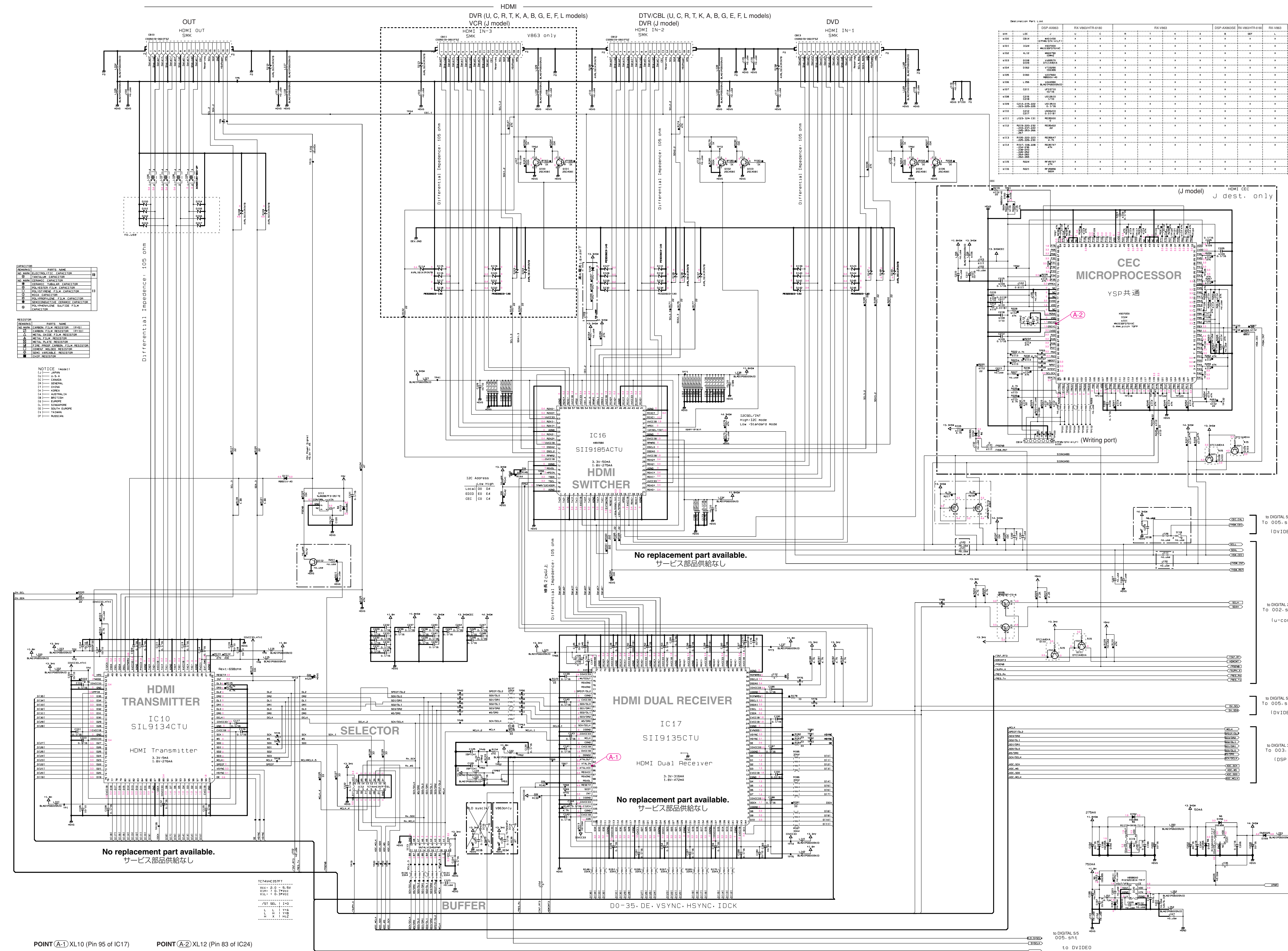
• See page 117 → SCHEMATIC DIAGRAM

DIGITAL

• See page 107-111 → SCHEMATIC DIAGRAM

SCHEMATIC DIAGRAMS
DIGITAL 1/5

RX-V863/HTR-6180/DSP-AX863SE/DSP-AX863



★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
★ Components having special characteristics are marked with a triangle (▲) and must be replaced with parts having specifications equal to those originally installed.
★ Schematic diagram is subject to change without notice.

● 電圧は、内部抵抗10MΩの電圧計で測定したものです。
● ▲印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
● 本回路図は標準回路図です。改良のため予告なく変更することがございます。

DIGITAL 3/5

Page 114 H2
to OPERATION (4), W442

to DIGITAL 2/5
to 002.sht(u-com)

s1-19:002.sht(u-com)
s20-80:004.sht(DSP)
s81-99:005.sht(DVIDEO)

Destination Part List

LOC	DSP-AX863	RX-V863HTR-6180	RX-V863	DSP-AX863SE	RX-V863HTR-6180	RX-V863
xxx	LOC	C	R	X	X	X
420	420	CAM-0800440248	CAM-0800440248	X	X	X
521	521	W50810	W50810	X	X	X
621	621	W50810	W50810	X	X	X
721	721	W50810	W50810	X	X	X
821	821	W50810	W50810	X	X	X
921	921	W50810	W50810	X	X	X
1021	1021	W50810	W50810	X	X	X
1121	1121	W50810	W50810	X	X	X
1221	1221	W50810	W50810	X	X	X
1321	1321	W50810	W50810	X	X	X
1421	1421	W50810	W50810	X	X	X
1521	1521	W50810	W50810	X	X	X
1621	1621	W50810	W50810	X	X	X
1721	1721	W50810	W50810	X	X	X
1821	1821	W50810	W50810	X	X	X
1921	1921	W50810	W50810	X	X	X
2021	2021	W50810	W50810	X	X	X
2121	2121	W50810	W50810	X	X	X
2221	2221	W50810	W50810	X	X	X
2321	2321	W50810	W50810	X	X	X
2421	2421	W50810	W50810	X	X	X
2521	2521	W50810	W50810	X	X	X
2621	2621	W50810	W50810	X	X	X
2721	2721	W50810	W50810	X	X	X
2821	2821	W50810	W50810	X	X	X
2921	2921	W50810	W50810	X	X	X
3021	3021	W50810	W50810	X	X	X
3121	3121	W50810	W50810	X	X	X
3221	3221	W50810	W50810	X	X	X
3321	3321	W50810	W50810	X	X	X
3421	3421	W50810	W50810	X	X	X
3521	3521	W50810	W50810	X	X	X
3621	3621	W50810	W50810	X	X	X
3721	3721	W50810	W50810	X	X	X
3821	3821	W50810	W50810	X	X	X
3921	3921	W50810	W50810	X	X	X
4021	4021	W50810	W50810	X	X	X
4121	4121	W50810	W50810	X	X	X
4221	4221	W50810	W50810	X	X	X
4321	4321	W50810	W50810	X	X	X
4421	4421	W50810	W50810	X	X	X
4521	4521	W50810	W50810	X	X	X
4621	4621	W50810	W50810	X	X	X
4721	4721	W50810	W50810	X	X	X
4821	4821	W50810	W50810	X	X	X
4921	4921	W50810	W50810	X	X	X
5021	5021	W50810	W50810	X	X	X
5121	5121	W50810	W50810	X	X	X
5221	5221	W50810	W50810	X	X	X
5321	5321	W50810	W50810	X	X	X
5421	5421	W50810	W50810	X	X	X
5521	5521	W50810	W50810	X	X	X
5621	5621	W50810	W50810	X	X	X
5721	5721	W50810	W50810	X	X	X
5821	5821	W50810	W50810	X	X	X
5921	5921	W50810	W50810	X	X	X
6021	6021	W50810	W50810	X	X	X
6121	6121	W50810	W50810	X	X	X
6221	6221	W50810	W50810	X	X	X
6321	6321	W50810	W50810	X	X	X
6421	6421	W50810	W50810	X	X	X
6521	6521	W50810	W50810	X	X	X
6621	6621	W50810	W50810	X	X	X
6721	6721	W50810	W50810	X	X	X
6821	6821	W50810	W50810	X	X	X
6921	6921	W50810	W50810	X	X	X
7021	7021	W50810	W50810	X	X	X
7121	7121	W50810	W50810	X	X	X
7221	7221	W50810	W50810	X	X	X
7321	7321	W50810	W50810	X	X	X
7421	7421	W50810	W50810	X	X	X
7521	7521	W50810	W50810	X	X	X
7621	7621	W50810	W50810	X	X	X
7721	7721	W50810	W50810	X	X	X
7821	7821	W50810	W50810	X	X	X
7921	7921	W50810	W50810	X	X	X
8021	8021	W50810	W50810	X	X	X
8121	8121	W50810	W50810	X	X	X
8221	8221	W50810	W50810	X	X	X
8321	8321	W50810	W50810	X	X	X
8421	8421	W50810	W50810	X	X	X
8521	8521	W50810	W50810	X	X	X
8621	8621	W50810	W50810	X	X	X
8721	8721	W50810	W50810	X	X	X
8821	8821	W50810	W50810	X	X	X
8921	8921	W50810	W50810	X	X	X
9021	9021	W50810	W50810	X	X	X
9121	9121	W50810	W50810	X	X	X
9221	9221	W50810	W50810	X	X	X
9321	9321	W50810	W50810	X	X	X
9421	9421	W50810	W50810	X	X	X
9521	9521	W50810	W50810	X	X	X
9621	9621	W50810	W50810	X	X	X
9721	9721	W50810	W50810	X	X	X
9821	9821	W50810	W50810	X	X	X
9921	9921	W50810	W50810	X	X	X

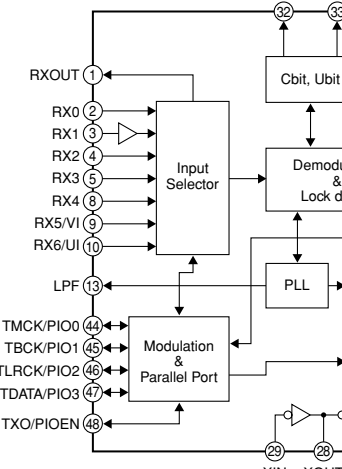
REMARKS	PARTS NAME
①	NO MARK ELECTROLYTIC CAPACITOR
②	TANTALUM CAPACITOR
③	CERAMIC TUBULAR CAPACITOR
④	POLYESTER FILM CAPACITOR (P=10)
⑤	POLYSTYRENE FILM CAPACITOR
⑥	MICA CAPACITOR
⑦	POLYPROPYLENE FILM CAPACITOR
⑧	SEMI-CONDUCTIVE CERAMIC CAPACITOR
⑨	POLYPHENYLENE SULFIDE FILM CAPACITOR

REMARKS	PARTS NAME
①	NO MARK CARBON FILM RESISTOR (P=5)
②	CARBON FILM RESISTOR (P=10)
③	METAL OXIDE FILM RESISTOR
④	METAL FILM RESISTOR
⑤	METAL PLATE RESISTOR
⑥	FIRE PROOF CARBON FILM RESISTOR
⑦	CEMENT MOLDED RESISTOR
⑧	SEMI-CONDUCTIVE CERAMIC RESISTOR
⑨	CHIP RESISTOR

NOTICE (note1)
(J) JAPAN
(U) U.S.A.
(C) CANADA
(R) GENERAL
(T) CHINA
(A) AUSTRALIA
(B) BRITISH
(O) EUROPE
(L) SINGAPORE
(E) SOUTH EUROPE
(V) TAIWAN
(F) RUSSIAN

IC41: LC89057W-VF40-AE

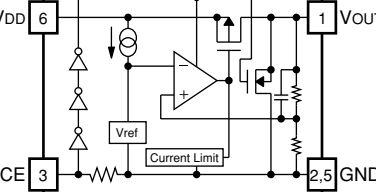
Digital audio interface transceiver



- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked with a star, and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.
- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- *印のある部品は、安全確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

IC47: R1172S121D-E2-F

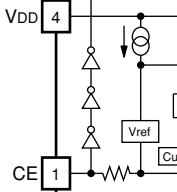
Voltage regulator



Pin No.	Symbol	Description
1	VOUT	Output Pin of Voltage Regulator
2	GND	Ground Pin
3	CE	Chip Enable Pin
4	NC	No Connection
5	VDD	Input Pin

IC48: R1172H31D-T1-F

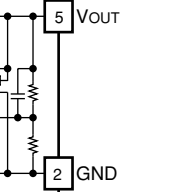
Voltage regulator



Pin No.	Symbol	Description
1	CE	Chip Enable Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

IC50: TC74VHC541FT

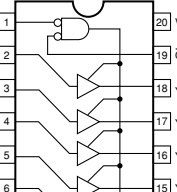
Octal bus buffer



Pin No.	Symbol	Description
1	VDD	Input Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

IC52: TC74VHC04FT

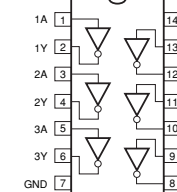
Hex inverters



Pin No.	Symbol	Description
1	VDD	Input Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

IC54: TC74VHC541FT

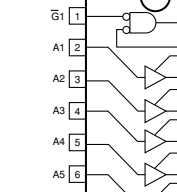
Octal bus buffer



Pin No.	Symbol	Description
1	VDD	Input Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

IC55: TC74VHC157FT

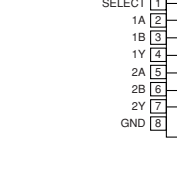
Quad 2-channel multiplexer



Pin No.	Symbol	Description
1	VDD	Input Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

IC56: TC74VHC08FT

Quad 2-input AND gate



Pin No.	Symbol	Description
1	VDD	Input Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

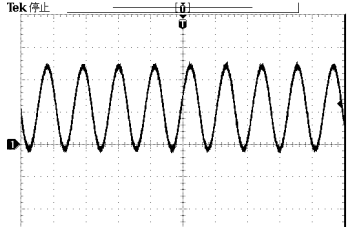
IC57: NJM4565M

Dual operational amplifier

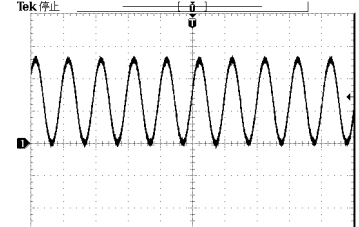


Pin No.	Symbol	Description
1	VDD	Input Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

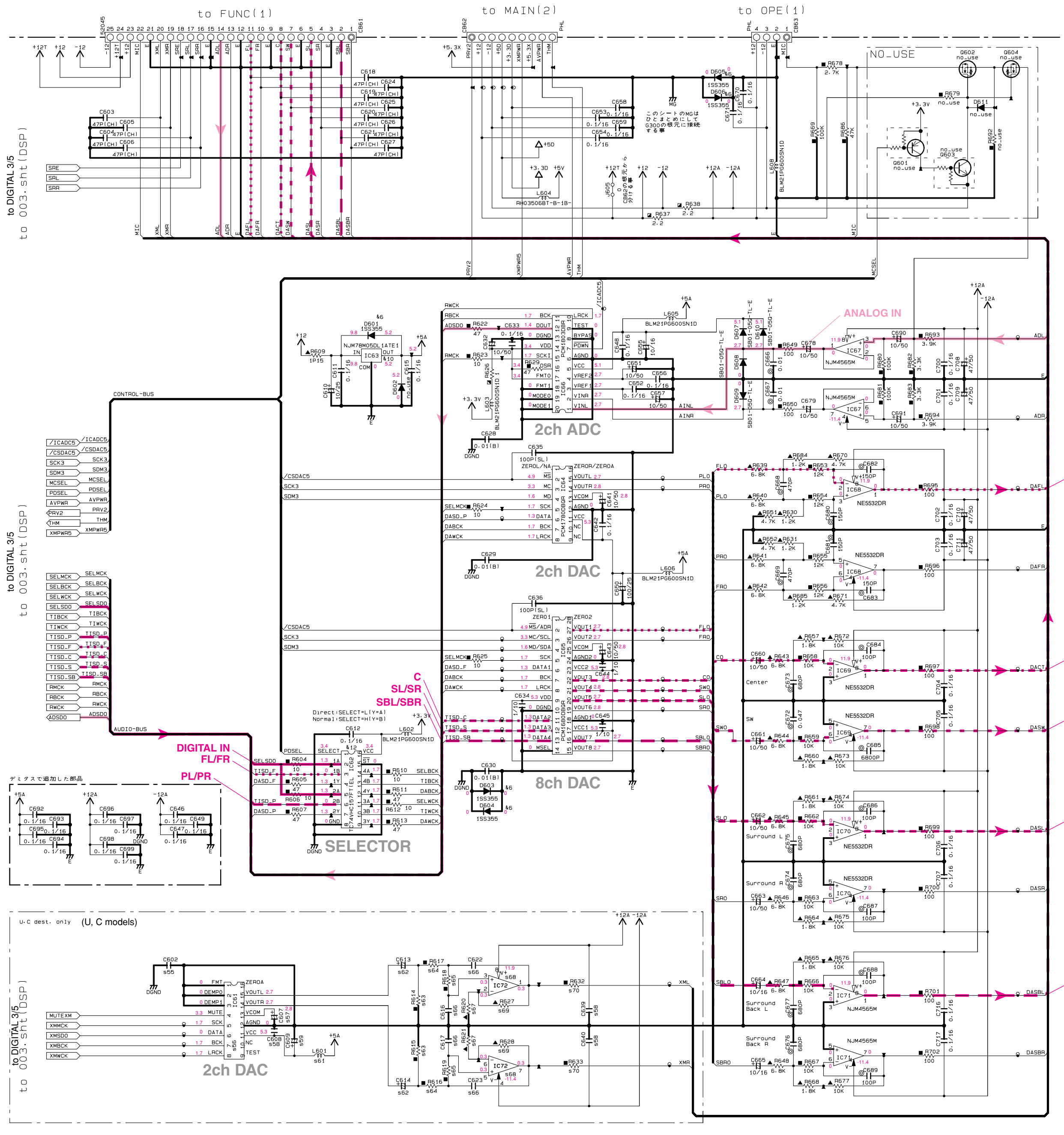
POINT (B-1) XL41 (Pin 28 of IC42)



POINT (B-2) XL42 (Pin 29 of IC41)



DIGITAL 4/5

Page 112 [A6]
to FUNCTION (1)_CB205Page 115 [K9]
to MAIN (2)_W107Page 114 [I9]
to OPERATION (1)_W401

Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
K1	U41	JS1166 GP1FAY51TKCP
K2	U42-44	JS1166 GP1FAY51TKCP
K3		
K4	IC49	W15L64164A-5TG K4564164A-UC5000
K5	Q402	2SC3326(A/B) 2SC3326(B) 2SC5936(A/B) 2SD2704K(1) 2SD1328(1)ST K1C2875-B
K6	D112, 150, 152-154, 156 160, 300, 307-310, 312-314 316, 409, 411-601 603-606, 800-806, 813 814, 816, 820, 821	155355 MAJ1110L KDS160-RTK/P
K7	Q401	DT114EXA KRC1025-RTK/P
K8	Q401-Q403	NVRL161A1RNTB SDV1608H100C050VP1
K9		
K10	IC63	NJM78M05DL1ATE1 K1A10W2F
K11		
K12		
K13		
K14		
K15	Q108-111, 301	DT114EXA KRC1045-RTK/P
K16		
K17	Q304	DT114EXA KRC1045-RTK/P
K18		

s1 ~19:002.sht(u-com)
 * s20~80:004.sht(DSP)
 s81~99:005.sht(DVIDEO)

Destination Part List

xxx	LOC	DSP-AX863	RX-V863HTR-6180	RX-V863	RX-V863	DSP-AX863SE	RX-V863HTR-6180	RX-V863	HTR-6180
K1	U41	X	U	C	R	T	K	A	B
K55	C602	X	U506410 0.51181	U506410 0.51181	X	X	X	X	X
K56	IC61	X	PC1781DBQR	PC1781DBQR	X	X	X	X	X
K57	C607	X	U623710 10/16	U623710 10/16	X	X	X	X	X
K58	C608	X	U613510 100/F-3	U613510 100/F-3	X	X	X	X	X
K59	C609	X	U621810 100/F-3	U621810 100/F-3	X	X	X	X	X
K61	L601	X	V244990 BLM1P05005N1D	V244990 BLM1P05005N1D	X	X	X	X	X
K62	C613	X	U63147 47/16	U63147 47/16	X	X	X	X	X
K63	R614	X	R035710 10K	R035710 10K	X	X	X	X	X
K64	R616	X	R036330 3.9K	R036330 3.9K	X	X	X	X	X
K65	R618	X	R036330 3.9K	R036330 3.9K	X	X	X	X	X
K66	C622	X	U616310 100P	U616310 100P	X	X	X	X	X
K67	R621	X	RF35633 3.9K	RF35633 3.9K	X	X	X	X	X
K68	IC72	X	NJM4565M	NJM4565M	X	X	X	X	X
K69	R628	X	RF35615 1.5K	RF35615 1.5K	X	X	X	X	X
K70	R632	X	R035610 1K	R035610 1K	X	X	X	X	X

CAPACITOR

NO MARK	PARTS NAME
⊗	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
⊗	CERAMIC TUBULAR CAPACITOR
⊗	POLYSTYRENE FILM CAPACITOR
⊗	POLYPROPYLENE FILM CAPACITOR
⊗	MICA CAPACITOR
⊗	SEMICONDUCTIVE CERAMIC CAPACITOR
⊗	POLYPHENYLENE SULFIDE FILM CAPACITOR

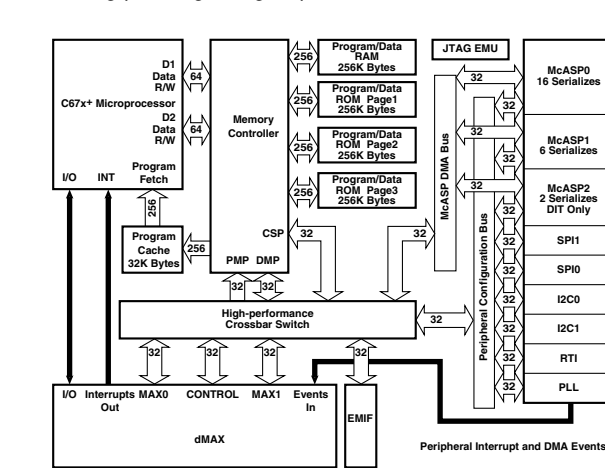
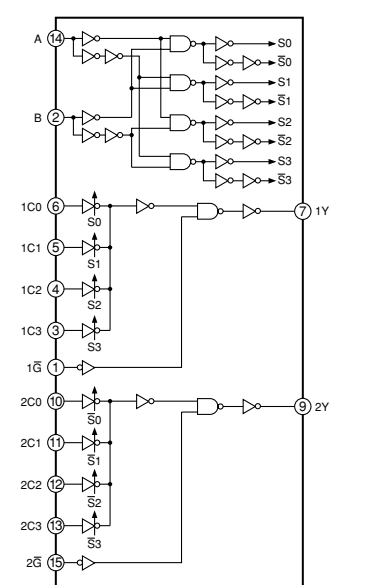
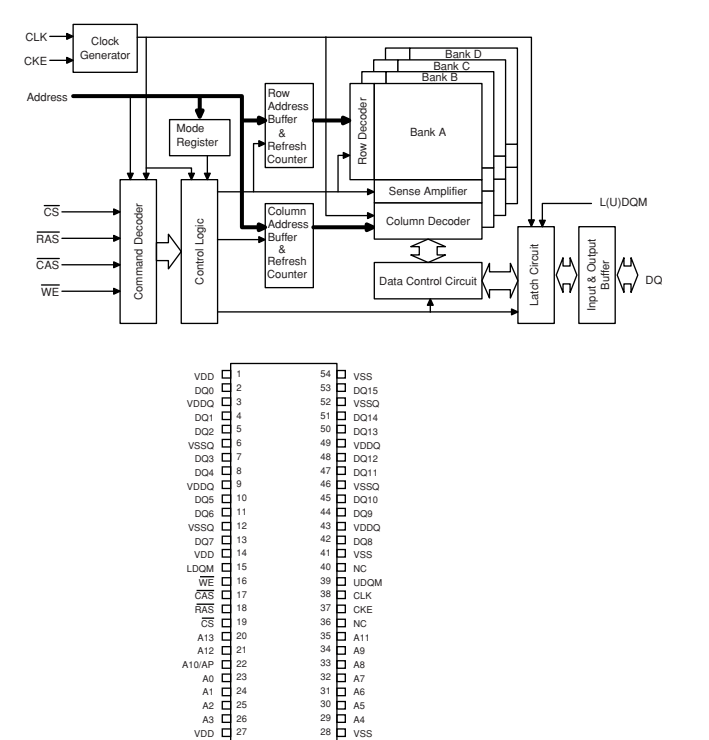
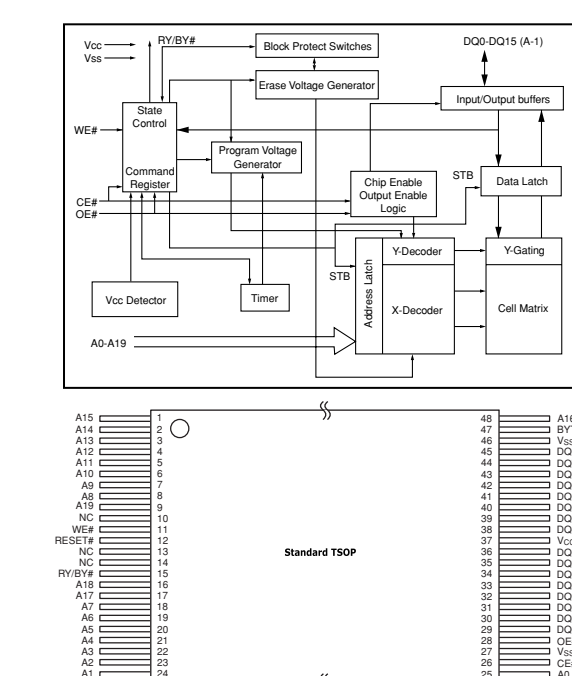
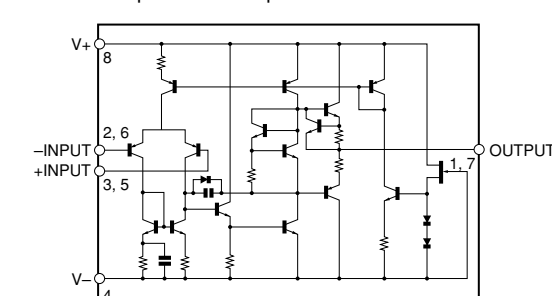
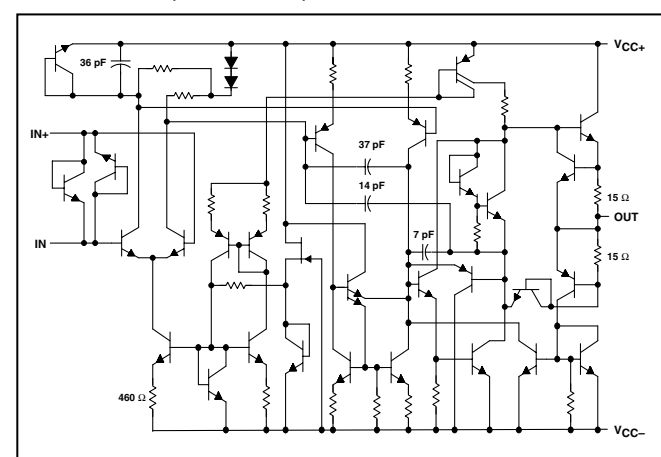
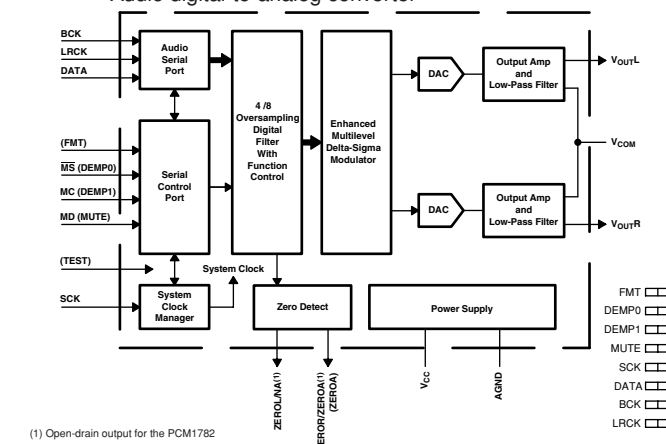
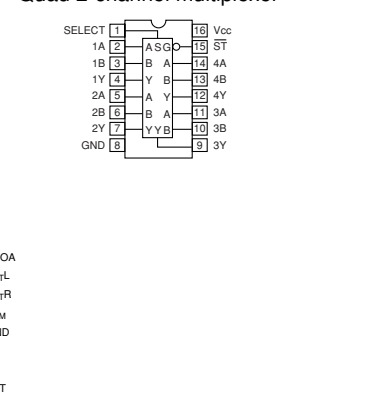
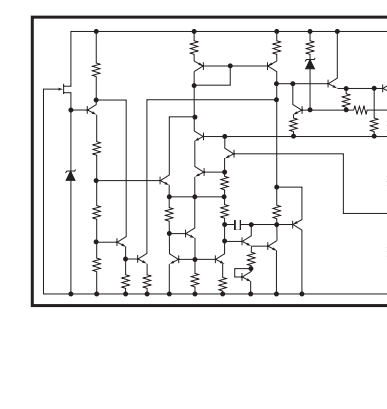
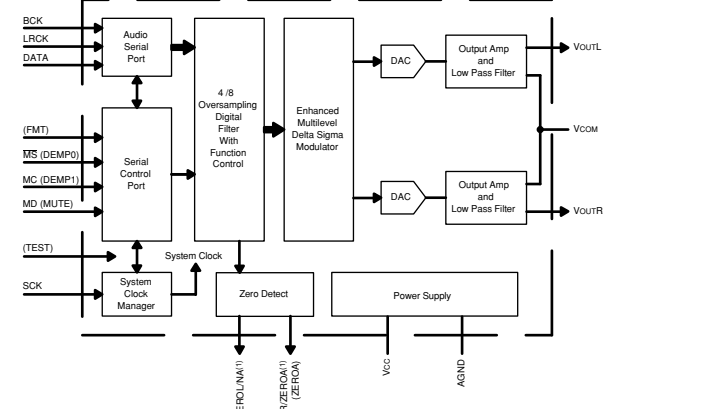
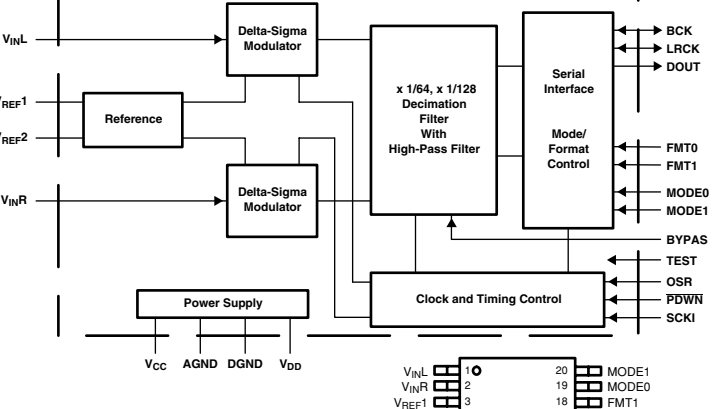
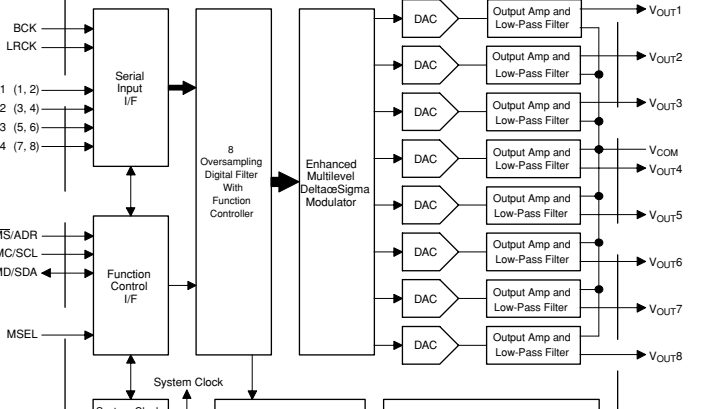
RESISTOR

REMARKS	PARTS NAME
⊗	CARBON FILM RESISTOR (P=5)
⊗	METAL OXIDE FILM RESISTOR (P=10)
⊗	METAL FILM RESISTOR
⊗	POLYSTYRENE FILM RESISTOR
⊗	FIRE PROOF CARBON FILM RESISTOR
⊗	CEMENT MOLDED RESISTOR
⊗	SEMI-VARIABLE RESISTOR
⊗	CHIP RESISTOR

NOTICE (mode1)

(J)..... JAPAN
 (U)..... U.S.A.
 (C)..... CANADA
 (R)..... GENERAL
 (T)..... CHINA
 (K)..... KOREA
 (A)..... AUSTRALIA
 (B)..... BRITISH
 (E)..... EUROPE
 (L)..... SINGAPORE
 (V)..... SOUTH EUROPE
 (F)..... RUSSIAN

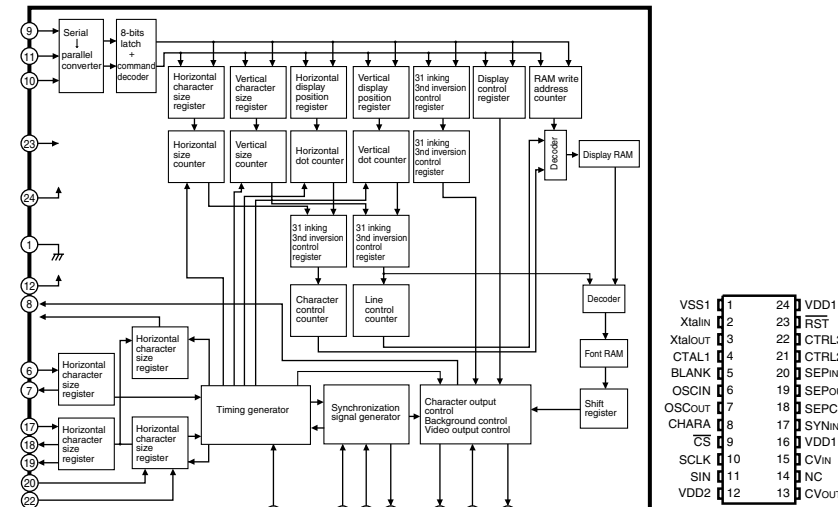
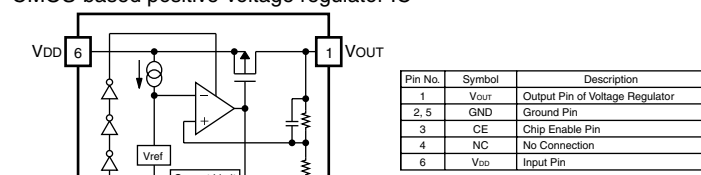
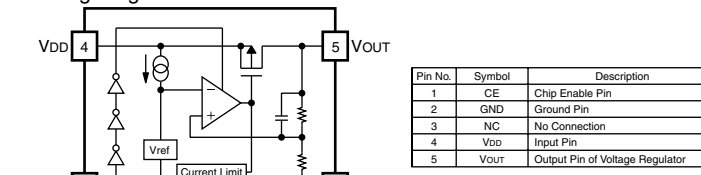
IC BLOCK DIAGRAMS DIGITAL 3/5

IC44: D70YE101BRFP266
Floating-point digital signal processorsIC45, 46: TC74VHC153FT
Dual 4-channel multiplexerIC49: M12L64164A-5TG
1M x 16-bit x 4 banks synchronous DRAMIC51: EN29L160AB-70TCTP
16 M-bit flash memory boot sector flash memory, CMOS 3.0 V-onlyIC67, 71, 72: NJM4565M
Dual operational amplifierIC68-70: NE5532DR
Dual low-noise operational amplifiersIC61: PCM1781DBQR
Audio digital-to-analog converterIC62: TC74VHC157FT
Quad 2-channel multiplexerIC63: NJM78M05DL1A
Voltage regulatorIC64: PCM1780DBQR
Audio digital-to-analog converterIC66: PCM1803DBR
Stereo A/D converterIC65: PCM1680DBQR
Audio digital-to-analog converter

★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
 ★ Components having special characteristics are marked with a star and must be replaced with parts having specifications equal to those originally installed.
 ★ Schematic diagram is subject to change without notice.

● 電圧は、内部抵抗10MΩの電圧計で測定したものです。
 ● ★印の部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
 ● 本回路図は標準回路図です。改良のため予告なく変更することがございます。

10UT: 1 2 3 4
 1IN+: 1 2 3 4
 VCC: 1 2 3 4
 VCC-: 1 2 3 4

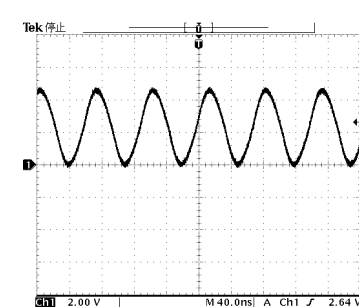
Page 116 [K6]
to VIDEO (1), CB305Page 117 [I9]
to VIDEO (2), CB356Page 115 [K8]
to MAIN (2), W109IC85: LC74782JM-8A16-TLMC
The on-screen display controller LSIIC80: R1172S331B-E2-F
CMOS-based positive-voltage regulator ICIC94: R1172H181B-T1-F
Voltage regulator

REMARKS	PARTS NAME	REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR	NO MARK	CARBON FILM RESISTOR (P=5)
NO MARK	TANTALUM CAPACITOR	NO MARK	CARBON FILM RESISTOR (P=10)
NO MARK	CERAMIC CAPACITOR	NO MARK	METAL FILM RESISTOR
NO MARK	CERAMIC TUBULAR CAPACITOR	NO MARK	METAL FILM RESISTOR
NO MARK	POLYESTER FILM CAPACITOR	NO MARK	POLYESTER FILM CAPACITOR
NO MARK	POLYETHYLENE FILM CAPACITOR	NO MARK	POLYETHYLENE FILM CAPACITOR
NO MARK	MICA CAPACITOR	NO MARK	SEMICONDUCTIVE CERAMIC CAPACITOR
NO MARK	POLYPROPYLENE FILM CAPACITOR	NO MARK	CEMENT MOLDED RESISTOR
NO MARK	POLYBUTYLENE SULFIDE FILM CAPACITOR	NO MARK	CHIP RESISTOR

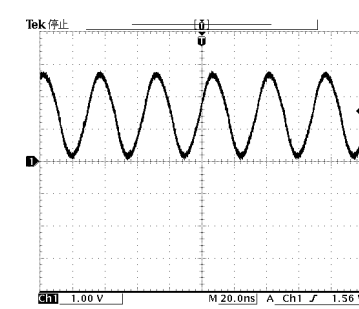
NOTICE (note1)

(J) JAPAN
(U) U.S.A.
(C) CANADA
(I) GENERAL
(T) CHINA
(A) AUSTRALIA
(B) BRITISH
(G) EUROPE
(L) SINGAPORE
(E) SOUTH EUROPE
(V) TAIWAN
(F) RUSSIA

POINT (B-3) XL80 (Pin 3 of IC85)



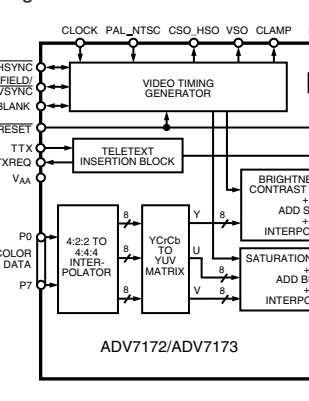
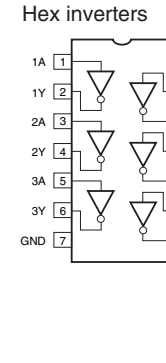
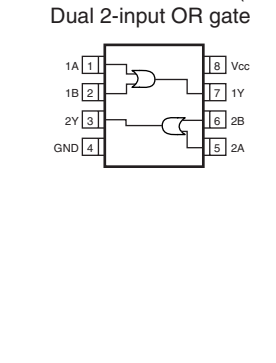
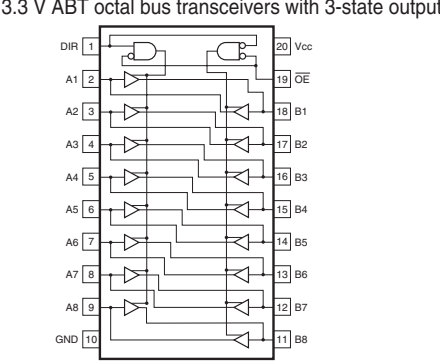
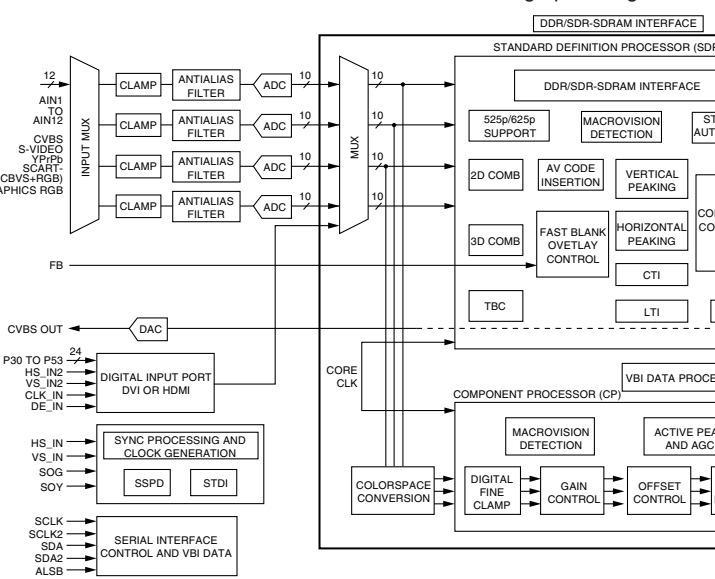
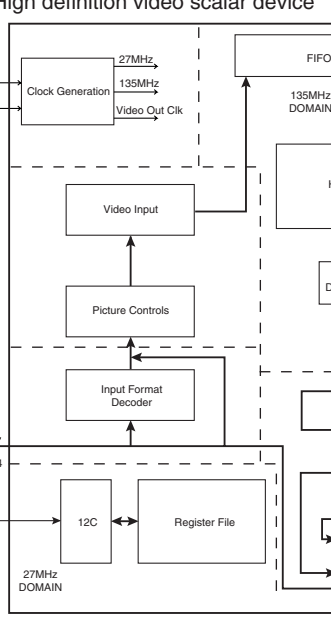
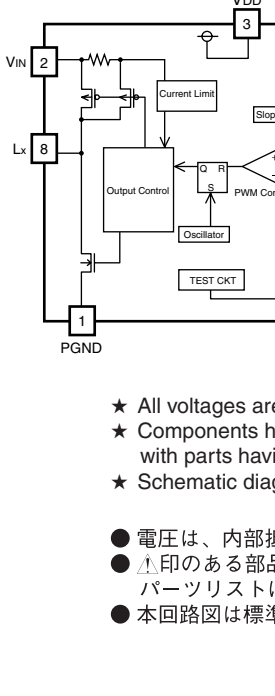
POINT (C-1) XL81 (Pin 81 of IC82)



BUS BUFFER

s1 ~19:002.sht(u-com)
s20~80:004.sht(DSP)
s81~99:005.sht(DVIDEO)

Destination Part List	DSP-AX863	RX-V863/HTR-6180	RX-V863	DSP-AX863SE	RX-V863/HTR-6180	RX-V863
SXX	LOC	U	C	R	K	A
181	XL80	IC85	IC85	IC85	IC85	IC85
182	CB84	IC80	IC80	IC80	IC80	IC80
183	CB85	IC94	IC94	IC94	IC94	IC94
184	CB86	IC82	IC82	IC82	IC82	IC82
185	CB87	IC88	IC88	IC88	IC88	IC88
186	CB88	IC89	IC89	IC89	IC89	IC89
187	CB89	IC90	IC90	IC90	IC90	IC90

IC84: ADV712KSTZ
Digital PAL/NTSC video encoderIC86, 87: TC74VHC04FT
Hex invertersIC89: TC7W32FK (TE85L, F)
Dual 2-input OR gateIC91-93: SN74LVTH245APW
3.3 V ABT octal bus transceivers with 3-state outputsIC82: ADV7800BSTZ-80
10-bit, SDTV/HDTV 3D comb filter, video decoder and graphics digitizerIC83: ABT1010PQ100A
High definition video scalar deviceIC81: R1232D181A-TR-F
DC-DC converter

- All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- Components having special characteristics are marked with a triangle (▲) and must be replaced with parts having specifications equal to those originally installed.
- Schematic diagram is subject to change without notice.

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- ▲印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パナソニックに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

FUNCTION 1/2

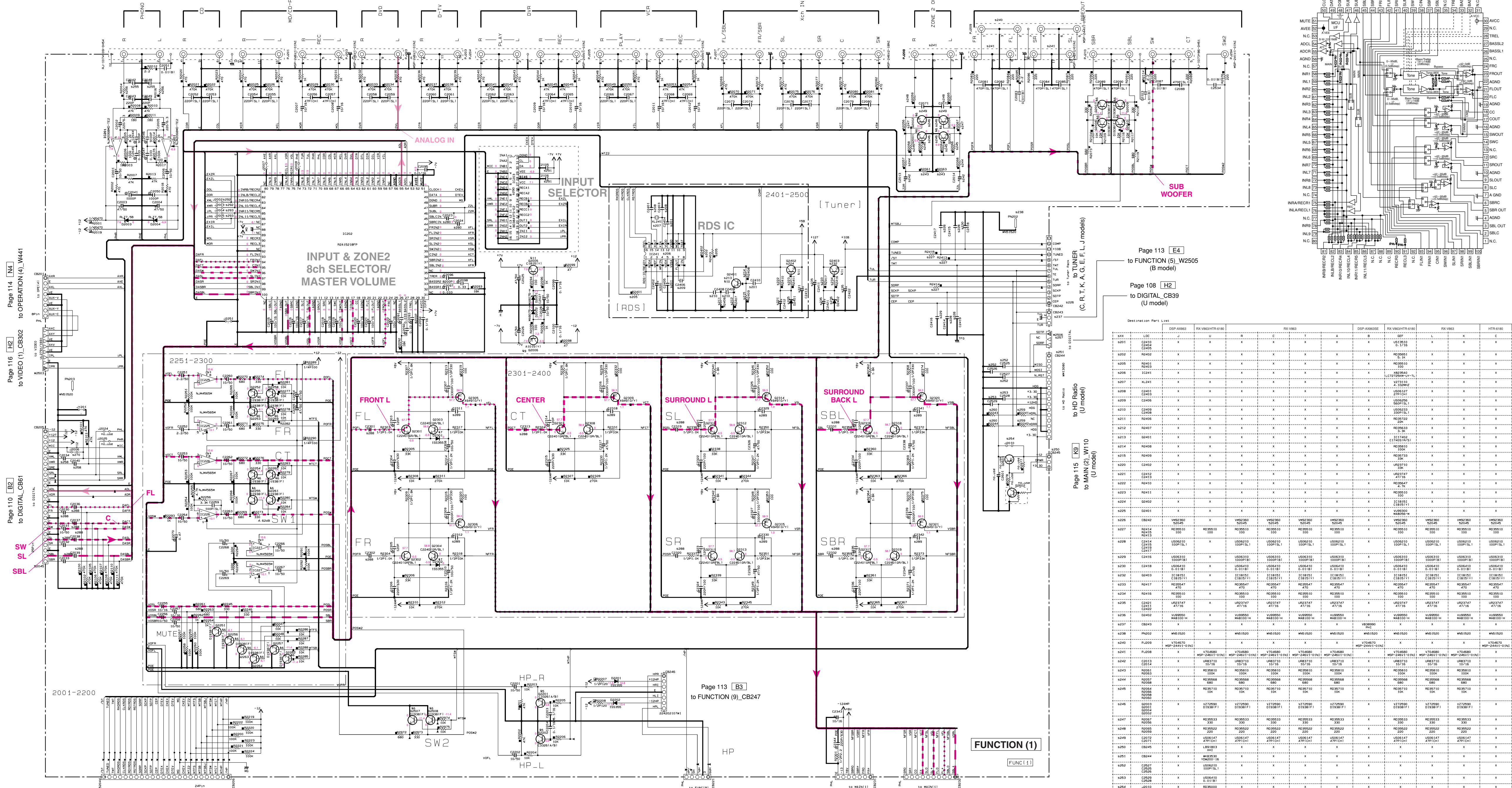
AUDIO

MULTI CH INPUT

PRE OUT

IC202: R2A15218FP

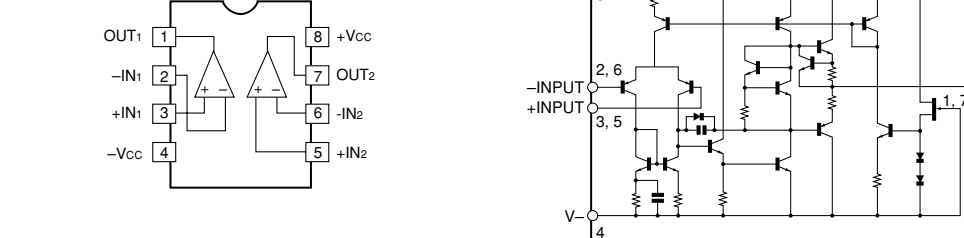
8-channel electronic volume with 11 input selector and tone control



Page 108 [12]
to DIGITAL_CB34

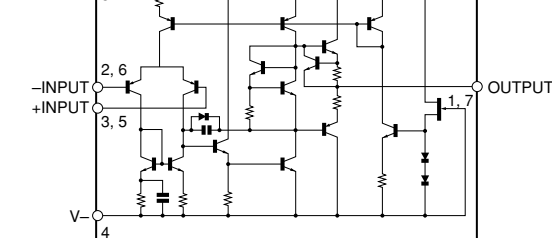
IC201: NJM2068MD-TE2

Dual operational amplifier



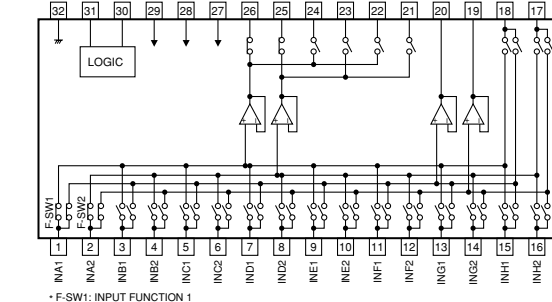
IC225-227: NJM4565M

Dual operational amplifier



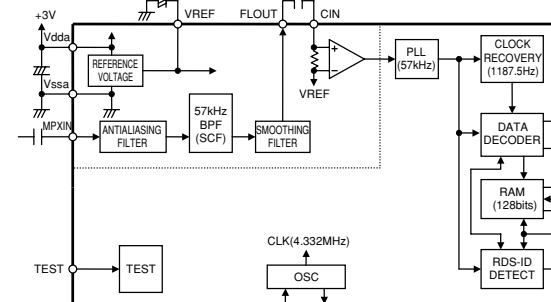
IC203: BD3841FS

Function switch



IC241: LC72725KM-UUY-TE-E

RDS signal demodulation IC



Page 114 [J9]
to OPERATION (1)_W402

Page 115 [B10]
to MAIN (1)_W106

Page 115 [B4]
to MAIN (1)_W105

Interchangeable Parts at Manufacture Stage

Parts Interference Parts Number

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

Parts Name

- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked with a triangle and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。



OPERATION

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊠	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
⊞	METAL FILM RESISTOR
⊞	METAL PLATE RESISTOR
⊞	FIRE PROOF CARBON FILM RESISTOR
⊞	CEMENT MOLDED RESISTOR
⊞	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
●	CERAMIC TUBULAR CAPACITOR
○	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
○	MICA CAPACITOR
○	POLYPROPYLENE FILM CAPACITOR
●	SEMICONDUCTIVE CERAMIC CAPACITOR

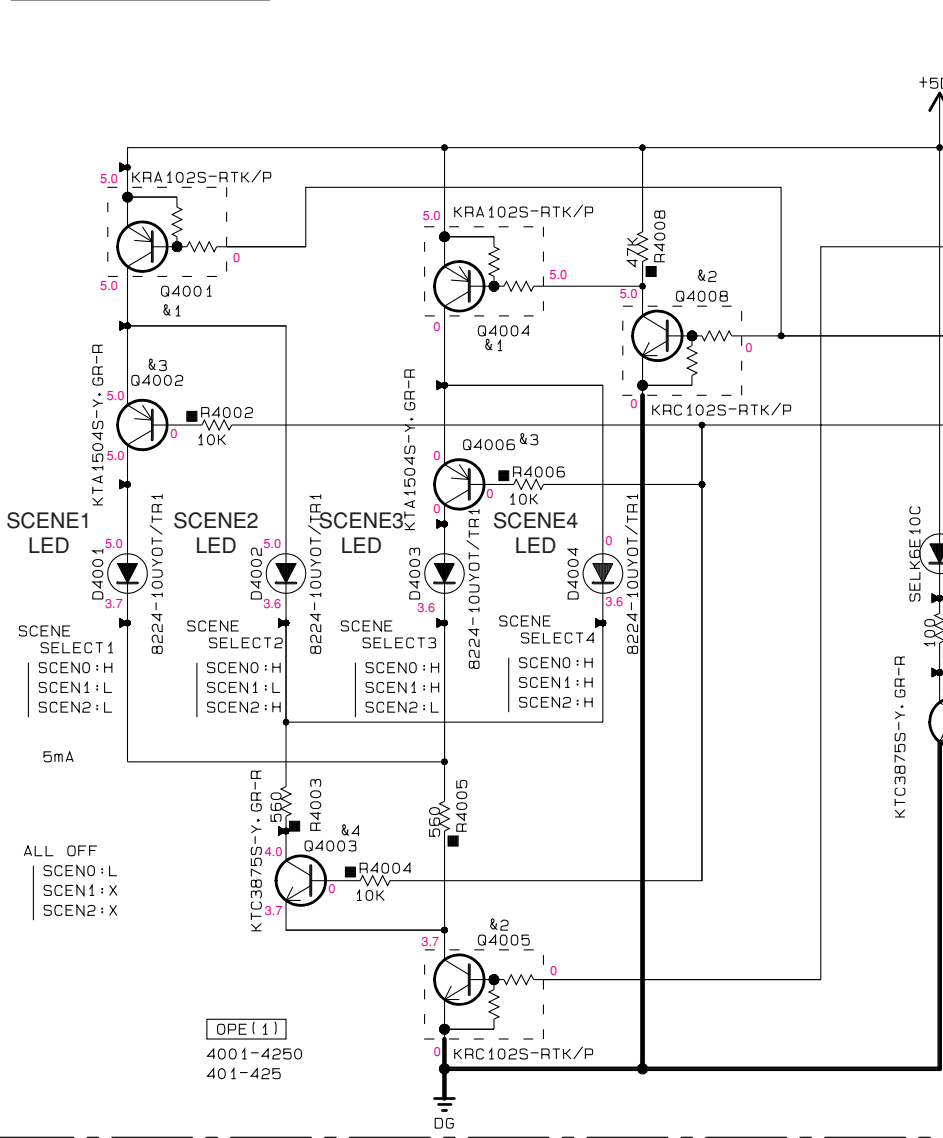
NOTICE (model)

(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN

sXX	LDC	J	UCRTKAGEFL	B	UF	C
s402	SW415 SW416 SW421 SW418 SW414 SW401 SW413 SW406	WD48310 SKRGAA010	WD48310 SKRGAA010	X	WD48310 SKRGAA010	WD48310 SKRGAA010
s403	R4039	RD35633 3.3K	RD35633 3.3K	X	RD35633 3.3K	RD35633 3.3K
s404	R4045	RD35647 4.7K	RD35647 4.7K	X	RD35647 4.7K	RD35647 4.7K
s405	R4056	RD35668 5.6K	RD35668 5.6K	X	RD35668 5.6K	RD35668 5.6K
s406	R4063	RD35710 10K	RD35710 10K	X	RD35710 10K	RD35710 10K
s407	R4067	RD35722 22K	RD35722 22K	X	RD35722 22K	RD35722 22K
s408	R4061	X	RD35710	X	RD35710	X
s409	D4015	X	V259680 S1H-9055T447	X	V259680 S1H-9055T447	X
s410	D4014	WC43500 KRC102S-RTK/P	WC43500 KRC102S-RTK/P	X	WC43500 KRC102S-RTK/P	WC43500 KRC102S-RTK/P
s411	D4008	X	VT33290 15S355	X	VT33290 15S355	X
s413	SW422	X	X	X	X	X
s416	C4003 C4004	X	US06310 1000P(B)	X	US06310 1000P(B)	X
s421	SW424	X	WD48310 SKRGAA010	X	WD48310 SKRGAA010	X
s441	J4401	X	RD35000	RD35000	RD35000	RD35000
s442	C4409	US13510 0.1/1/16	X	X	X	X

Mark	Reference Parts Number	Parts Name
k1	Q4001-4004	KRA102S-RTK/P DTA114EKA
k2	Q4005-4008-4012- Q4014-4018	KRC102S-RTK/P DTC114EKA
k3	Q4002-4006	KT1504S-Y-GR-RTK/P A1037AK(G/R/S)
k4	Q4003-4007-4009-4011- 4019-4022	KTC3B75S-Y-GR-RTK/P C2412K(G/R/S) 2000H(M/L/W/R)
k5	D4008-4012-4016-4017 4302-4303-4401-4404	15S355 MA2J110GL K03160(R/L/W/R)
k6	IC441	TC7SE132FU SN74AHC1632DCKR
k7	V401	17-BT-326NK HNA-17XMGST

OPERATION (1)



FL DRIVER

IC401
M66003-0131FP-R

17-BT-326NK

61 62 63 64 65 66 67 68 69

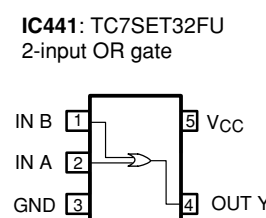
29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65

237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

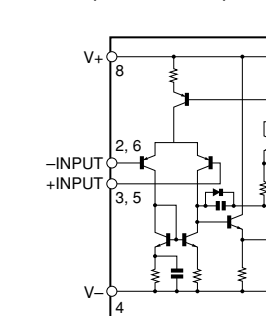
Page 108 [B2]
to DIGITAL_CB30

Page 110 [F2]
to DIGITAL_CB63

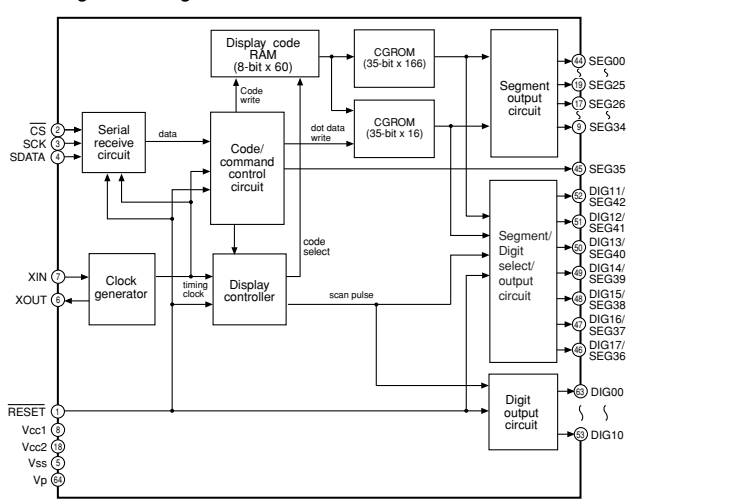
Page 112 [G8]
to FUNCTION (1)_CB221



IC402: NJM4556M
Dual operational amplifier



IC401: M66003-0131FP-R
18 digit 5 x 7 segment VFD controller/driver



- ★ 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- ★ 部品の交換は、安全確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- ★ 本回路図は標準回路図です。改良のため予告なく変更することがございます。

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- 部品の交換は、安全確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
	CARBON FILM RESISTOR (P=10)
	METAL OXIDE FILM RESISTOR
	METAL FILM RESISTOR
	METAL PLATE RESISTOR
	FIRE PROOF CARBON FILM RESISTOR
	CEMENT MOLDED RESISTOR
	SEMI VARIABLE RESISTOR
	CHIP RESISTOR

CAPACITOR		PARTS NAME
REMARKS		
NO MARK	ELECTROLYTIC CAPACITOR	
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	
⊙	CERAMIC TUBULAR CAPACITOR	
⊗	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
⊙	MICA CAPACITOR	
⊗	POLYPROPYLENE FILM CAPACITOR	
⊙	SEMICONDUCTIVE CERAMIC CAPACITOR	

(U)..... U.S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(Y)..... TAIWAN
(F)..... RUSSIAN

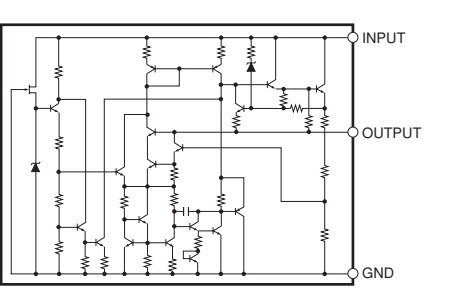
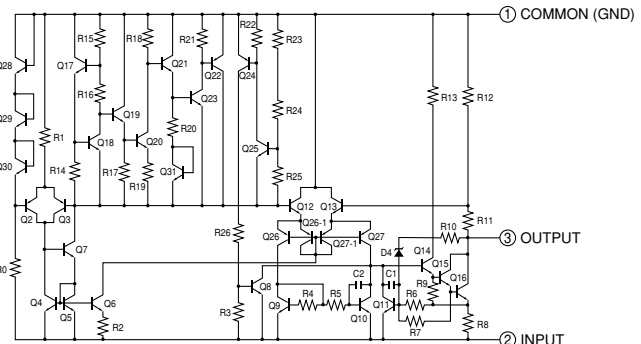
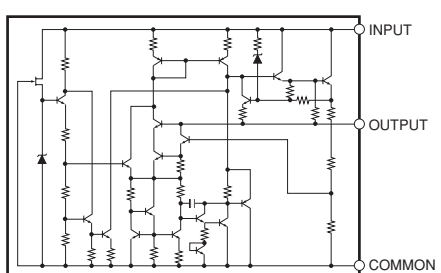
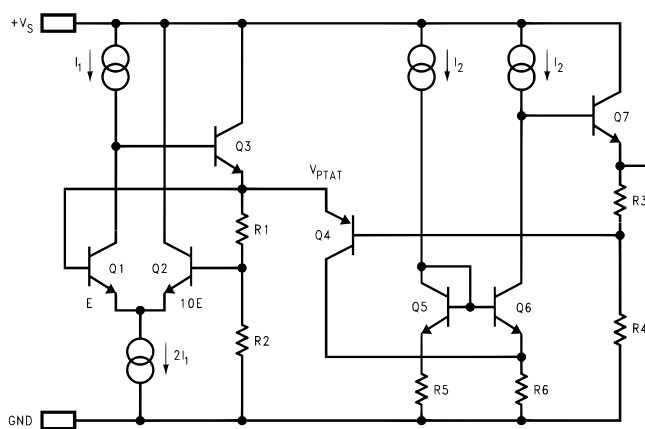
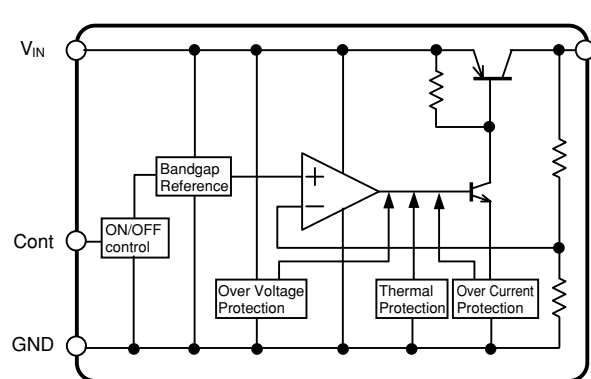
Mark	Reference Parts Number	Parts Name
41	01003-1016-1031-1033	H05104
	1034-1037-1039-1043	15S133
	1047-1049-1052-1053	15S176
	1055-1057-1059	

Description Part List									
		DISP-AN303	FX V0823HTH16100	FX V07180	FX V07180	FX V07180	FX V0823HTH16100	DISP-AN303E	HTH16100
ANX	LOC	MW7180	MW7180	MW7180	MW7180	MW7180	MW7180	MW7180	MW7180
x1	TE010	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823
		1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W
x2	TE001	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823
		1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W
x3	TE002	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823	FX V0823
		1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W	1.0500-10.00W
x15	W110	X	X	X	X	X	X	X	X
x13	DC100	X	HE14200	HE14200	X	X	X	X	HE14200
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x14	DIS082	X	FX V0823	FX V0823	X	FX V0823	X	FX V0823	FX V0823
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x15	C1100	X	UP08210	UP08210	X	UP08210	X	UP08210	UP08210
x16	C1191	X	FX V0827	FX V0827	X	FX V0827	X	FX V0827	FX V0827
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x17	DIS082	X	FX V0820	FX V0820	X	FX V0820	X	FX V0820	FX V0820
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x18	R1090	X	FX V0827	FX V0827	X	FX V0827	X	FX V0827	FX V0827
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x19	W1102	X	FX V0820	FX V0820	X	FX V0820	X	FX V0820	FX V0820
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x20	01070	X	FX V0820	FX V0820	X	FX V0820	X	FX V0820	FX V0820
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x21	00900	X	FX V0820	FX V0820	X	FX V0820	X	FX V0820	FX V0820
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x22	DIS01	X	FX V0820	FX V0820	X	FX V0820	X	FX V0820	FX V0820
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x23	C0173	X	UP08210	UP08210	X	UP08210	X	UP08210	UP08210
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x24	C1080	X	UP08210	UP08210	X	UP08210	X	UP08210	UP08210
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x25	R1036	X	FX V0827	FX V0827	X	FX V0827	X	FX V0827	FX V0827
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x26	R1033	X	FX V0827	FX V0827	X	FX V0827	X	FX V0827	FX V0827
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x27	R1037	X	FX V0820	FX V0820	X	FX V0820	X	FX V0820	FX V0820
			1.0500-10.00W	1.0500-10.00W					1.0500-10.00W
x28	W1157	MB10207	X	X	X	X	X	X	X

FRONT A

1

SURROUND BACK/

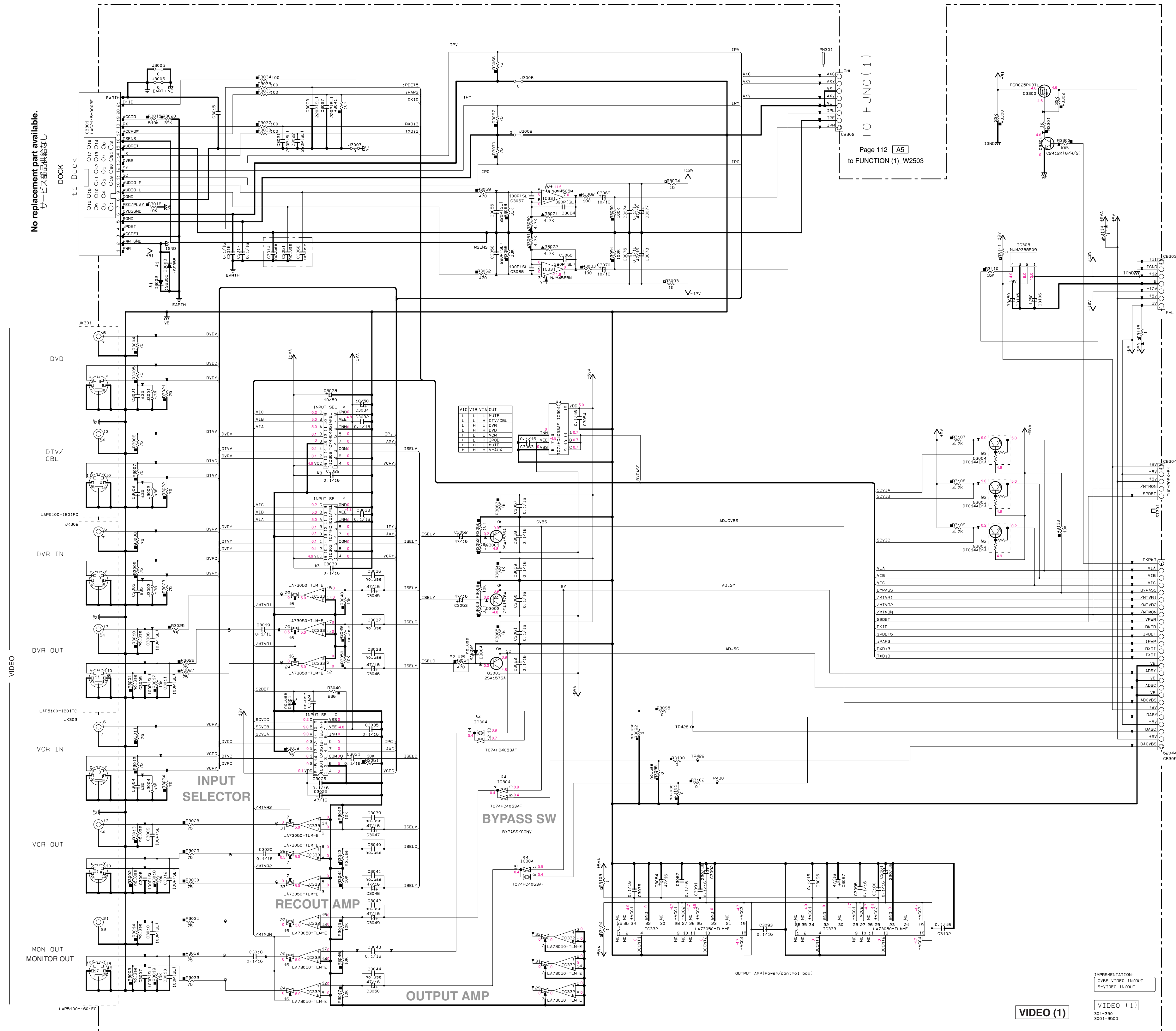
Page 108 E2Page 108 D2

- ★ All voltages are measured with a 10M Ω /V DC electronic voltmeter.
- ★ Components having special characteristics are marked  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

- 電圧は、内部抵抗10MΩの電圧計で測定したものです。
- ①印の部品は、安全性確保部品を示しています。部品の交換が必要な場合、パナリストに記載されている部品を使用してください。
- 本回路図は標準回路図です。改良のため予告なく変更することがございます。

VIDEO 1/2

No replacement part available.
サービス部品は絶不し



Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
A1	D3002-3003-3500-3504 3506	ISS395 M2J11100L K05160-RTK/P
A2	IC383	TC74HC4052AFTEL-F1 HM74HC4052S.JL-NL
A3	IC302-303	TC74HC4051AFEL HM74HC4051S.JL-NL
A4	IC304	TC74HC4053AFTEL-F1 HM74HC4053S.JL-NL
A5	D3004-3006	DTC144EK KRC1045-RTK/P
A6	D3501	KRC1025-RTK/P DTC114EK

NOTICE (model)

(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
□	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
△	METAL PLATE RESISTOR
□	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
□	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

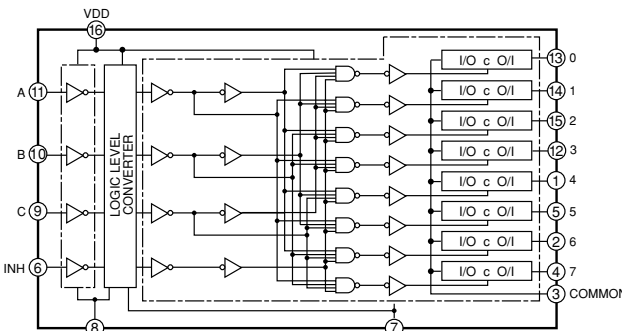
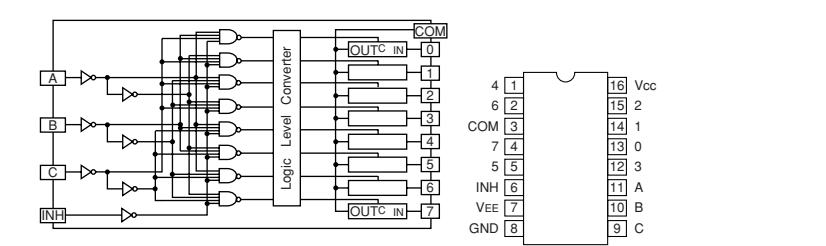
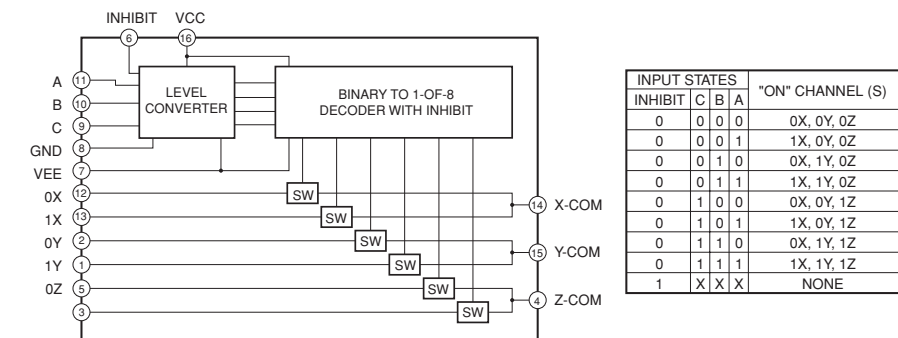
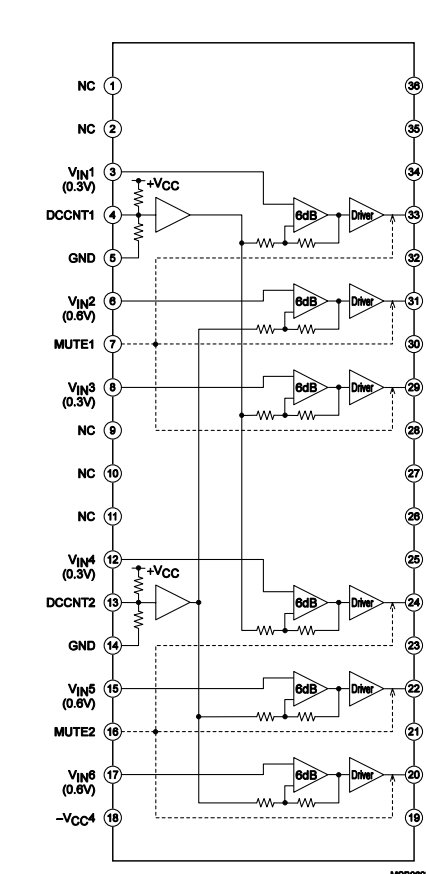
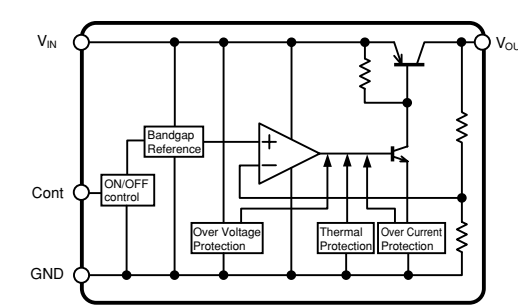
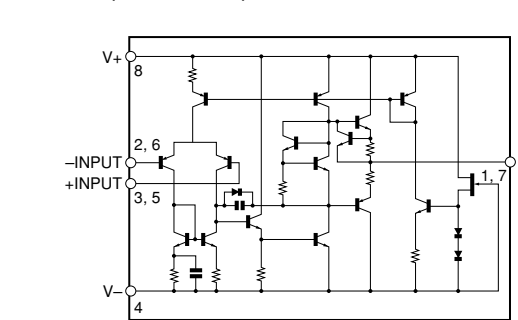
REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
□	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
●	CERAMIC TUBULAR CAPACITOR
○	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
①	MICA CAPACITOR
②	POLYPROPYLENE FILM CAPACITOR
●	SEMICONDUCTIVE CERAMIC CAPACITOR

Destination Part List			
SXX	LOC	J	UCRTKABEFL
S35	C3004 C3002 C3001 C3003	US13510 0.1/16	X
S36	R3040	RD35510 1K	X
S38	J3002 J3004 J3001 J3003	X	RD35500 0

Page 115 [K9]
to MAIN (2)_W114

Page 113 [B5]
to FUNCTION (6)_CB296

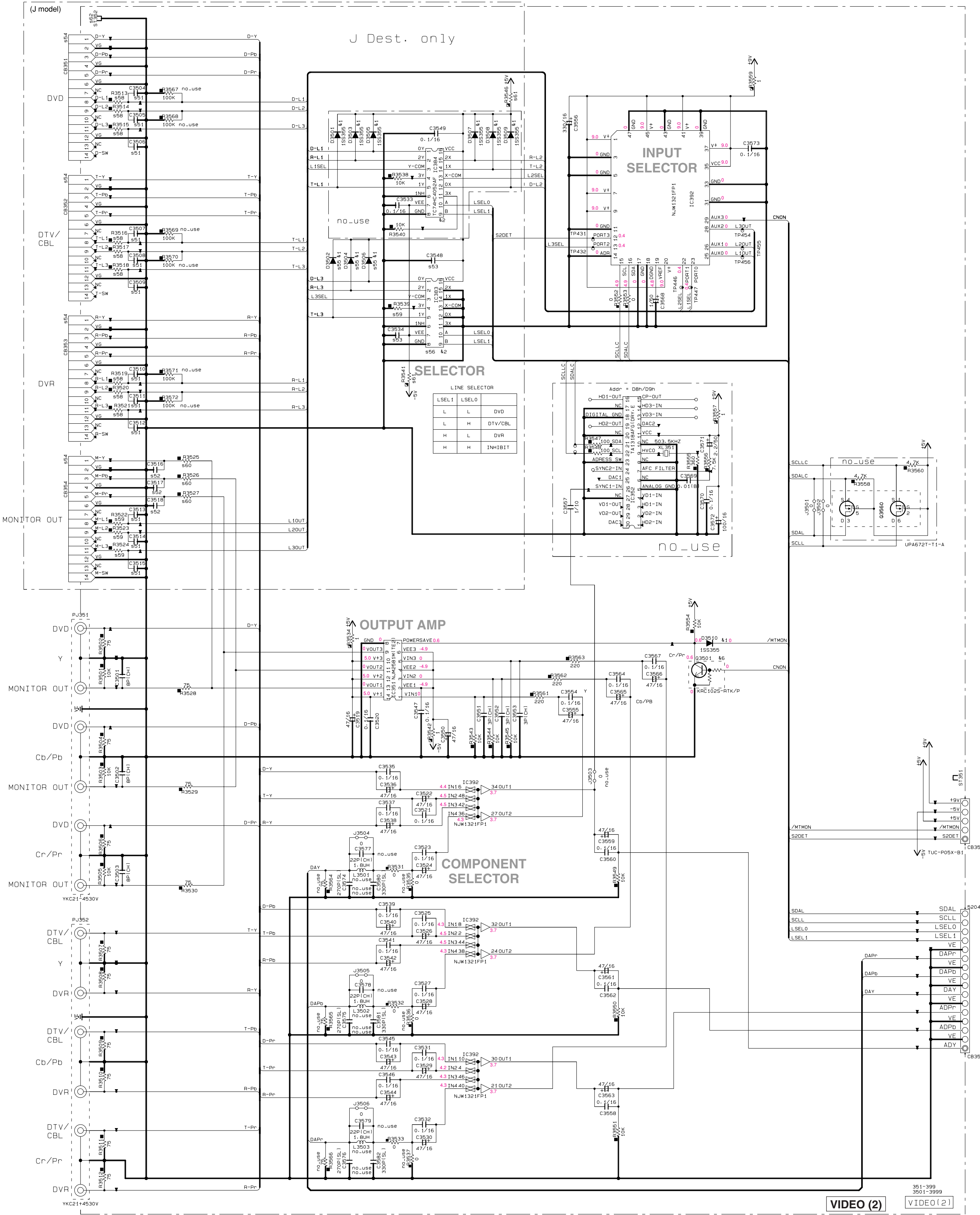
Page 111 [E2]
to DIGITAL_CB80

IC301: TC4051BF
Multiplexer/demultiplexerIC302, 303: TC74HC4051AFEL
8-channel analog multiplexer/demultiplexerIC304: TC74HC4053AF
Analog multiplexer/demultiplexerIC332, 333: LA73050-TLM-E
6-channel 75-ohm video driverIC305: NJM2388F09
Low dropout voltage regulator with ON/OFF controlIC331: NJM4565M
Dual operational amplifier

★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
★ Components having special characteristics are marked with a star and must be replaced with parts having specifications equal to those originally installed.
★ Schematic diagram is subject to change without notice.

● 電圧は、内部抵抗10MΩの電圧計で測定したものです。
● *印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
● 本回路図は標準回路図です。改良のため予告なく変更することがございます。

VIDEO 2/2



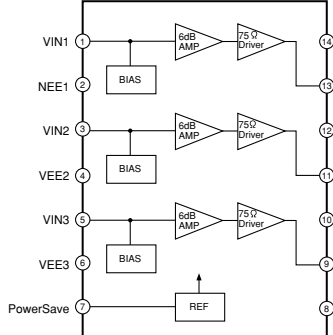
Part No.	Part Name	Part No.	Part Name
951	US06410 0.0161	952	US06900 BR1CH1
953	US13510 0.1/16	954	MD39840 V4745-3011
955	VT33290	956	XS790A0
958	RD35510 100	959	RD35710 10K
960	RD35475 75	961	HV75310
962	ST352		V404050

NOTICE (model)
 (J)..... JAPAN
 (U)..... U.S.A
 (C)..... CANADA
 (R)..... GENERAL
 (T)..... CHINA
 (K)..... KOREA
 (A)..... AUSTRALIA
 (B)..... BRITISH
 (G)..... EUROPE
 (L)..... SINGAPORE
 (V)..... TAIWAN
 (F)..... RUSSIAN

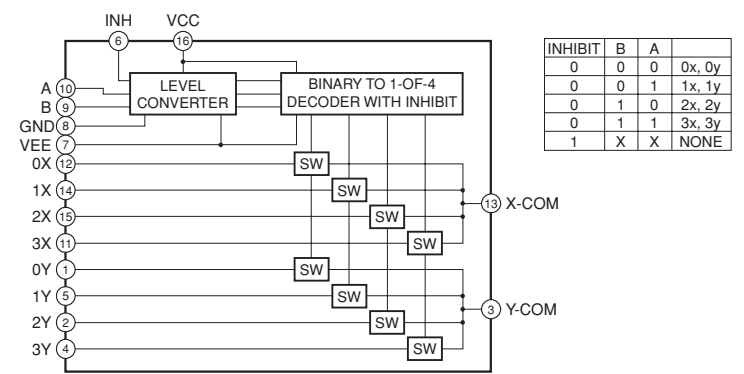
REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
●	CERAMIC TUBULAR CAPACITOR
○	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
①	MICA CAPACITOR
⊙	POLYPROPYLENE FILM CAPACITOR
⊙	SEMICONDUCTIVE CERAMIC CAPACITOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊠	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
⊠	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
⊠	FIRE PROOF CARBON FILM RESISTOR
⊠	CEMENT MOLDED RESISTOR
⊠	SEMI VARIABLE RESISTOR
⊠	CHIP RESISTOR

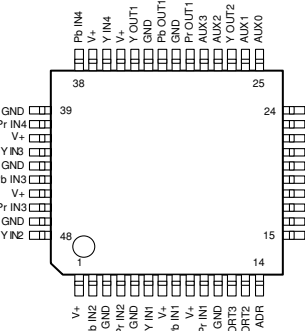
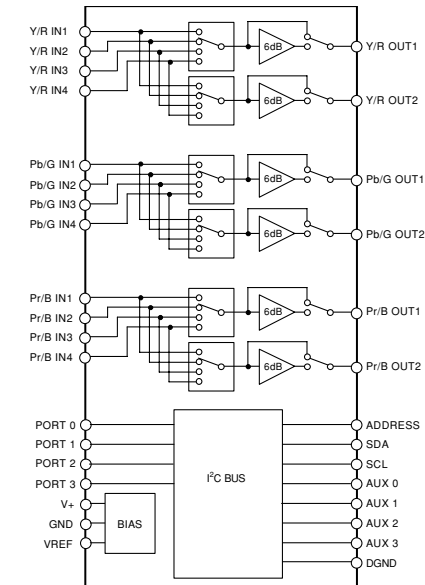
IC351: NJM2581M
Video amplifier



IC383: TC74HC4052AF
Analog multiplexer/demultiplexer



IC392: NJW1321FP1
Wide band video switch with I²C bus



TO FUNC(6)
 Page 113 [C5]
 to FUNCTION (6)_CB297

TO DIGITAL
 Page 111 [G2]
 to DIGITAL_CB81

* All voltages are measured with a 10MΩ/V DC electronic voltmeter.
 * Components having special characteristics are marked with a dot, and must be replaced with parts having specifications equal to those originally installed.
 * Schematic diagram is subject to change without notice.

● 電圧は、内部抵抗10MΩの電圧計で測定したものです。
 ● 点印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。
 ● 本回路図は標準回路図です。改良のため予告なく変更することがございます。