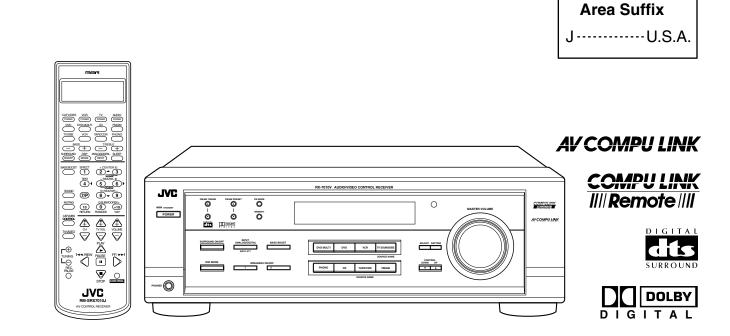
JVC SERVICE MANUAL

AUDIO/VIDEO CONTROL RECEIVER

RX-7010VBK



Contents

Safety precautions	-1-2
Importance administering point on the safety	- 1-3
Disassembly method	-1-4
Adjustment method	-1-9
Description of major ICs	1-10

Safety Precautions

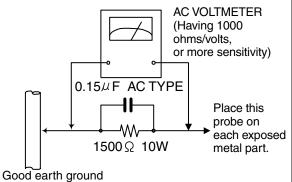
- 1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- 2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
- 3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (\triangle) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- 4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
- 5. Leakage currnet check (Electrical shock hazard testing) After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.
 - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)
 - Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a $1,500 \,\Omega$ 10W resistor paralleled by

a 0.15 /F AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to eachexposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement, voltage

measured Any must not exceed 0.75 V AC (r.m.s.).

This corresponds to 0.5 mA AC (r.m.s.).

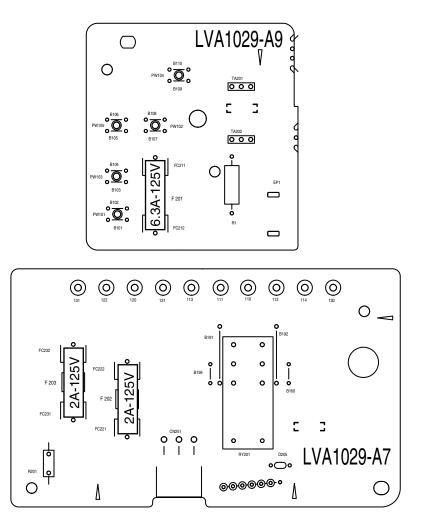


Warning

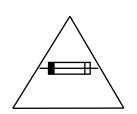
- 1. This equipment has been designed and manufactured to meet international safety standards.
- 2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained. 3. Repairs must be made in accordance with the relevant safety standards.
- 4. It is essential that safety critical components are replaced by approved parts.
- 5. If mains voltage selector is provided, check setting for local voltage.

A CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

Importance administering point on the safety



For USA and Canada / pour États - Unis d' Amérique et Canada



Caution: For continued protection against risk of fire, replace only with same type 6.3A/125V for F201, 2A/125V for F202 and F203. This symbol specifies type of fast operating fuse.

Précaution: Pour eviter risques de feux, remplacez le fusible de sureté de F201 comme le meme type que 6.3A/125V, et 2A/125V pour F202 et F203. Ce sont des fusibles sûretes qui functionnes rapide.

Disassembly method

Removing the top cover (See Fig.1)

- 1. Remove the four screws A attaching the top cover on both sides of the body.
- 2. Remove the three screws ${\sf B}\,$ on the back of the body.
- 3. Remove the top cover from behind in the direction of the arrow while pulling both sides outward.

Removing the front panel assembly (See Fig.2 and 3)

- Prior to performing the following procedure, remove the top cover.
- 1. Disconnect the card wire from connector CN402 on the audio board and CN201 on the power supply board in the front panel assembly.
- 2. Cut off the tie band fixing the harness.
- 3. Remove the three screws C attaching the front panel assembly.
- 4. Remove the four screws D attaching the front panel assembly on the bottom of the body. Detach the front panel assembly toward the front.

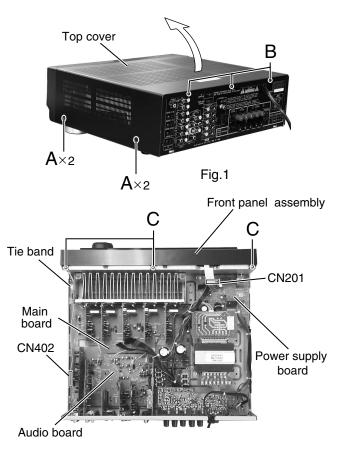


Fig.2

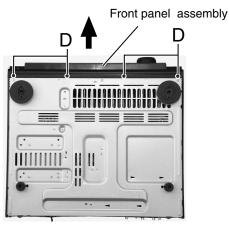


Fig.3

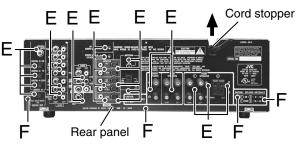


Fig.4

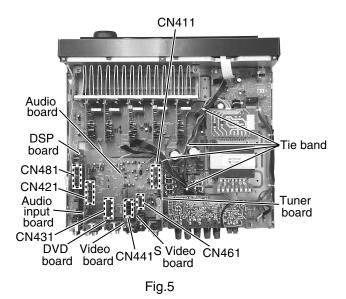
Removing the rear panel (See Fig.4)

- Prior to performing the following procedure, remove the top cover.
- 1. Remove the power cord stopper from the rear panel by moving it in the direction of the arrow.
- 2. Remove the twenty eight screws E attaching the each boards to the rear panel on the back of the body.
- 3.

Remove the four screws ${\sf F}\,$ attaching the rear panel on the back of the body.

Removing each board connected to the rear side of the audio board (See Fig.5 to 8)

- Prior to performing the following procedure, remove the top cover and the rear panel.
- 1. Cut off the tie band fixing the harness.
- 2. Disconnect the DSP board from connector CN481 on the audio board.
- 3. Disconnect the audio input board, DVD board Video board and the S video board from connector CN421, CN431,CN441 and CN461 on the audio board.
- 4. Disconnect the tuner board from connector CN411 on the audio board.



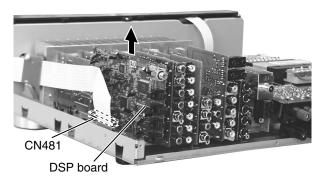


Fig.6

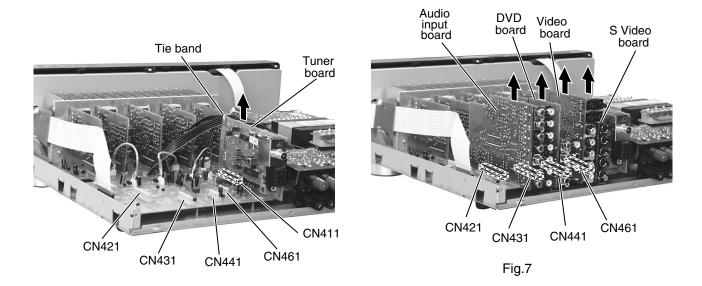


Fig.8

■ Removing the audio board (See Fig.9)

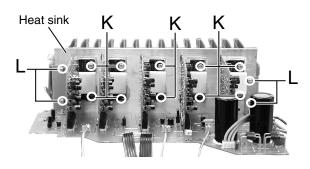
- Prior to performing the following procedure, remove the top cover and the rear panel.
- 1. Disconnect the card wire from connector CN402 on the audio board.
- 2. Disconnect the relay board from the audio board and the power supply board. (CN291,CN491)
- 3. Disconnect the harness from connector CN473, CN471, CN472, and CN385.
- 4. Remove the three screws G attaching the audio board assembly.
- 5. Remove the screw H attaching the audio board assembly.

■Removing the main board (See Fig.10)

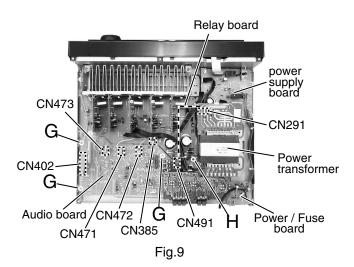
- Prior to performing the following procedure, remove the top cover, the rear panel and audio board.
- 1. Disconnect the harness from connector CN241 and CN203 on the power supply board respectively.
- 2. Remove the four screws I and the two screws J attaching the main board.
- 3. In case where the sub board is installed,detach it after removing the connectors CN208,CN209 and CN210 as well as the screw J'.

■Removing the Heat sink (See Fig.11 to 12)

- 1. Remove the ten screws K and four screws L attaching the heat sink.
- 2. Remove the two screws L' attaching the heat sink from the rear side of main board.







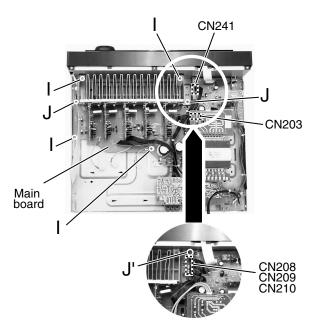
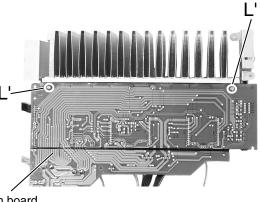


Fig.10



Main board rear side

Fig.12

Removing the power transformer

(See Fig.13)

- Prior to performing the following procedures, remove the top cover.
- 1. Unsolder the two harnesses connected to the power transformer.
- 2. Disconnect the harness from connector CN251 and unsolder the harnesses connected to FW201 on the power transformer board.
- 3. Remove the four screws M attaching the power transformer.

Removing the power / fuse board (See Fig.13)

- Prior to performing the following procedure, remove the top cover and the rear panel.
- 1. Remove the screw N attaching the power / fuse board.
- 2. Unsolder the power cord and other harnesses connected to the power / fuse board.

Removing the power supply board (See Fig.14 and 15)

- Prior to performing the following procedure, remove the top cover and the front panel.
- 1. Remove the one nut attaching the headphone jack of the power supply board on the front side of the body.
- 2. Disconnect the harness connected to connector CN241,CN201,CN203 and CN291 on the power transformer board (If necessary, cut off the band fixing the harness on the side of the base chassis).
- 3. Remove the three screws O attaching the power supply board and pull out the power supply board from the front bracket backward.
- 4. Unsolder the three harnesses connected to the power supply board.

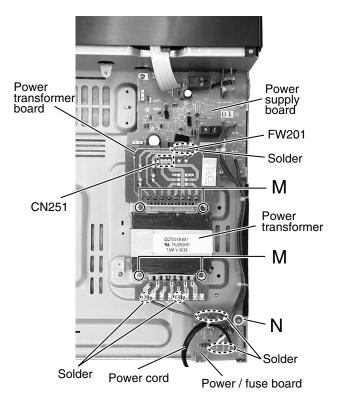


Fig.13

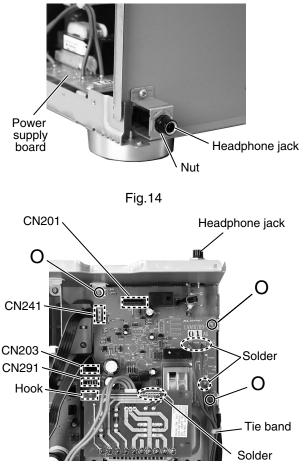


Fig.15

- Removing the system control board / power switch board (See Fig.16 to 18)
- · Prior to performing the following procedure, remove the top cover and the front panel assembly.
- 1. Pull out the volume knob on the front side of the front panel and remove the nut attaching the system control board.
- 2. Remove the two screws P attaching the power switch board.
- 3. Disconnect the harness from connector CN714 on the power switch board.
- 4. Remove the six screws Q attaching the system control board on the back of the front panel.
- 5. On the back of the front panel, release the eight joints by pushing the joint tabs inward. Remove the operation switch panel toward the front.
- 6. Release the two hook attaching the system control board.

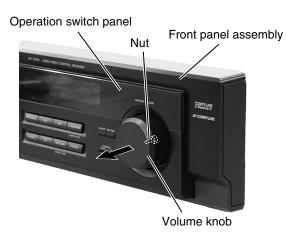


Fig.16

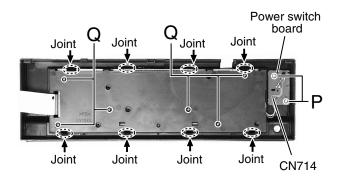
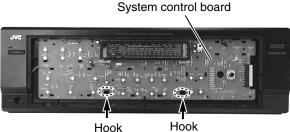


Fig.17



Hook

Fig.18

Adjustment method

Tuner section

 1.Tuner range

 FM
 87.5MHz~108.0MHz

 AM(MW)
 530kHz~1710kHz

Power amplifier section

Adjustment of idling current

Measurement location	TP301(Lch) , TP302(Rch)
Adjustment part	VR301(Lch) , VR302(Rch)

Attention

This adjustment does not obtain a correct adjustment value immediately after the amplifier is used (state that an internal temperature has risen).

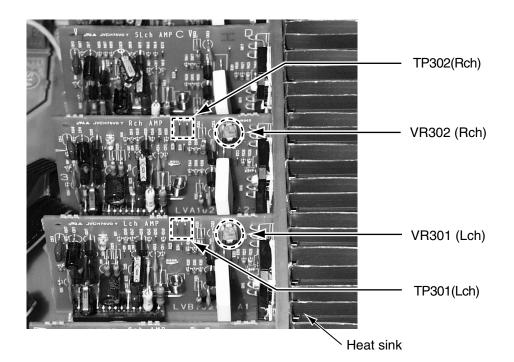
Please adjust immediately after using the amplifier after turning off the power supply of the amplifier and falling an internal temperature.

<Adjustment method>

- 1.Set the volume control to minimum during this adjustment.(No signal & No load)
- 2.Set the surround mode OFF.
- 2.Turn VR301 and VR302 fully counterclockwise to warm up before adjustment.

If the heat sink is already warm from previous use the correct adjustment can not be made.

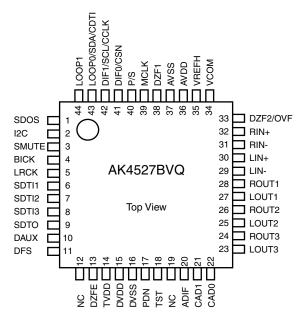
- 3.For L-ch,connect a DC voltmeter between TP301's B216 and B217 (Lch) And,connect it between TP302's B218 and B219(Rch).
- 4.30 minutes later after power on, adjust VR301 for L-ch, or VR302 for R-ch so that the DC voltmeter value has 1mV~10mV.
- * It is not abnormal though the idling current might not become 0mA even if it is finished to turn variable resistance (VR301,VR302) in the direction of counterclockwise.



Description of major ICs

AK4527B (IC601) : A/D,D/A Converter

1.Pin layout



2. Pin function (1/2)

2. Pin f	function (1/2)	AK4527(1/2)
No.	Pin name	I/O	Function
1	SDOS	Ι	SDTO Source Select Pin (Note 1)
			"L" : Internal ADC output, "H" : DAUX input
2	I2C	I	Control Mode Select Pin
			"L" : 3-wire Serial, "H" : I2C Bus
3	SMUTE	I	Soft Mute Pin (Note 1)
			When this pin goes to "H", soft mute cycle is initialized.
			When returning to "L", the output mute releases.
4	BICK		Audio Serial Data Clock Pin
5	LRCK	I/O	Input Channel Clock Pin
6	SDTI1	Ι	DAC1 Audio Serial Data Input Pin
7	SDTI2	I	DAC2 Audio Serial Data Input Pin
8	SDTI3	I	DAC3 Audio Serial Data Input Pin
9	SDTO	0	Audio Serial Data Output Pin
10	DAUX	Ι	Sub Audio Serial Data Input Pin
11	DFS	Ι	Double Speed Sampling Mode Pin (Note 1)
			"L" : Normal Speed, "H" : Double Speed
12	NC	-	No Connect
			No internal bonding.
13	DZEF	I	Zero Input Detect Enable Pin
			"L" : mode 7 (disable) at parallel mode,
			zero detect mode is selectable by DZFM2-0 bits at serial mode.
			"H" : mode 0 (DZF is AND of all six channels)
14	TVDD	-	Output Buffer Power supply Pin, 2.7V~5.5V
15	DVDD	-	Digital Power Supply Pin, 4.5V~5.5V
16	DVSS	-	De-emphasis Pin, 0V
17	PDN	I	Power-Down & Reset Pin
			When "L", the AK4527B is powered-down and the control registers are reset to default
			state. If the state of P/S or CAD0-1 changes, then the AK4527B must be reset by PDN.
18	TST	I	Test Pin
			This pin should be connected to DVSS.

Pin fu	unction (2/2)		AK4527(1/2)
No.	Pin name	I/O	Function
19	NC	-	No Connect
			No internal bonding.
20	ADIF	I	Analog Input Format Select Pin
			"H" : Full-differential input, "L" : Single-ended input
21	CAD1		Chip Address 1 Pin
22	CAD0	Ι	Chip Address 0 Pin
23	LOUT3	0	DAC3 Lch Analog Output Pin
24	ROUT3	0	DAC3 Rch Analog Output Pin
25	LOUT2	0	DAC2 Lch Analog Output Pin
26	ROUT2	0	DAC2 Rch Analog Output Pin
27	LOUT1	0	DAC1 Lch Analog Output Pin
28	ROUT1	0	DAC1 Rch Analog Output Pin
29	LIN-	I	Lch Analog Negative Input Pin
30	LIN+	I	Lch Analog Positive Input Pin
31	RIN-	I	Rch Analog Negative Input Pin
32	RIN+	1	Rch Analog Positive Input Pin
33	DZF2	0	Zero Input Detect 2 Pin (Note 2)
			When the input data of the group 1 follow total 8192LRCK cycles with "0" input data,
			this pin goes to "H".
	OVF	0	Analog Input Overflow Detect Pin (Note 3)
			This pin goes to "H" if the analog input of Lch or Rch is overflows.
34	VCOM	0	Common Voltage Output Pin,AVDD/2
			Large external capacitor around 2.2uF is used to reduce power-supply noise.
35	VREFH	I	Positive Voltage Reference Input Pin,AVDD
36	AVDD	-	Analog Power Supply Pin,4.5V~5.5V
37	AVSS	-	Analog Ground Pin,0V
38	DZF1	0	Zero Input Detect 1 Pin (Note 2)
			When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data,
			this pin goes to "H".
39	MCLK	Ι	Master Clock Input Pin
40	P/S	I	Parallel / Serial Select Pin
			"L" : Serial control mode, "H" : Parallel control mode
41	DIF0	I	Audio Data Interface Format 0 Pin in parallel mode
	CSN	I	Chip select pin in 3-wire serial control mode
			This pin should be connected to DVDD at I2C bus control mode
42	DIF1	Ι	Audio Data Interface Format 1 Pin in parallel mode
	SCL/CCLK	I	Control Data Clock Pin in serial control mode
			I2C = "L" : CCLK(3-wire Serial), I2C = "H" : SCL(I2CBus)
43	LOOP0	I	Loopback Mode 0 Pin in parallel control mode
	-		Enables digital loop-back from ADC to 3 DACs.
	SAD/CDTI	I/O	Control Data Input Pin in serial control mode
			I2C = "L" : CDTI(3-wire Serial), I2C = "H" : SDA(I2CBus)
44	LOOP1	I	Loopback Mode 1 Pin (Note 1)
			Enable all 3 DAC channels to be input from SDTII.
		L	· ·

Notes : 1. SDOS, SMUTE, DFS, and LOOP1 pins are ORed with register data if P/S = "L".

2. The group 1 and 2 can be selected by DZFM2-0 bit if P/S = "L" and DZFME = "L".

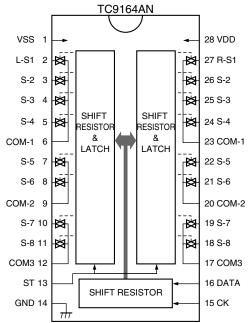
3. This pin becomes OVF pin if OVFE bit is set to "1" at serial control mode.

4. All input pins should not be left floating.

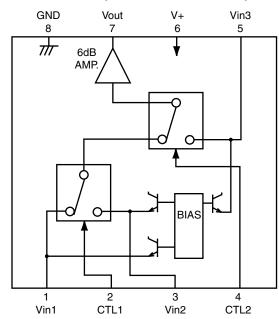
■ TC9164AN (IC402): Analog switch

1.Function

- Switch to On/Off of S1 to S8 by control of LSI.
- 2.Terminal Lay out & Block Diagram



■ NJM2246D(IC501,IC551,IC552):Video switch



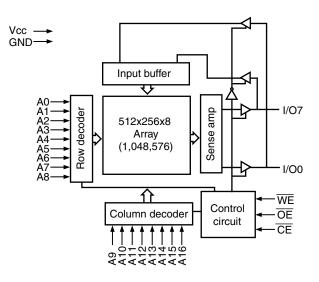
Control	input	- output	signal
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CTL 1	CTL 2	Output
L	L	VIN 1
Н	L	VIN 2
L/H	Н	VIN 3

AS7C31025-15 (IC641) : CMOS SRAM

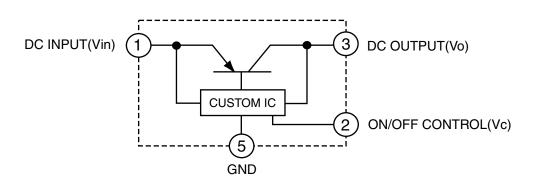
Block diagram

Pin layout

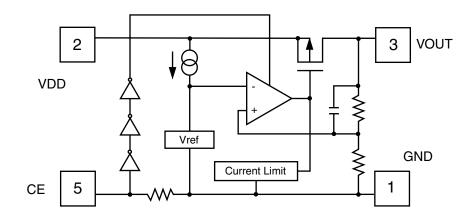


	32-p	oin TSC	DP I	l
A0 LL A1 A2 A3 CE I/O0 LL I/O1 LL Vcc GNDL I/O3 WE A4 A5 A6 A7	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	AS7C1025 AS7C31025	32 31 30 29 27 26 25 24 22 21 20 19 18 17	A16 A15 A14 A13 OE I/O7 I/O6 OND Vcc I/O5 I/O4 S12 A11 A10 A9 A8

PQ3DZ53 (IC681) : Regulator IC

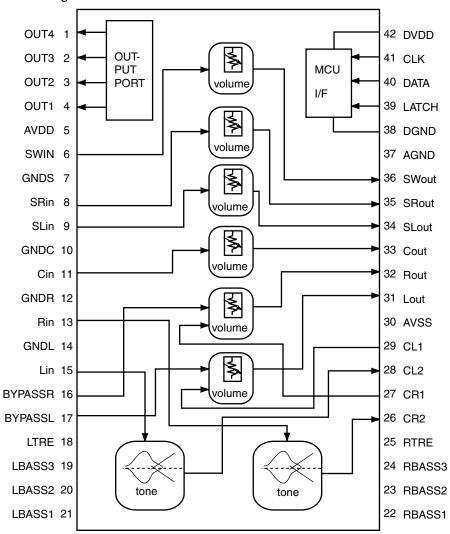


RN5RZ33BA (IC683) : Voltage Regurator



M62446FP(IC428) : 6CH Master volume

1.Block Diagram



2.Pin Function

Pin No.	Symbol	I/O	Descriptions
1	SURROUND	0	SURROUND control terminal
2	BASS BOOST	0	BASS BOOST control terminal
3	INPUT-ATT	0	Input attenuator control terminal
4	MUTING	0	MUTING control terminal
5	AVDD	-	Analog positive power supply terminal
6	SWIN	I	SUB Woofer volume signal input terminal
7	A.GND	-	Analog ground terminal
8	RR IN	I	R ch volume signal input terminal for rear speaker
9	RL IN	I	L ch volume signal input terminal for rear speaker
10	A.GND	-	Analog ground terminal
11	C IN	I	Center volume signal input terminal
12	A.GND	-	Analog ground terminal
13	R IN	I	R ch volume signal input terminal
14	A.GND	-	Analog ground terminal
15	L IN	I	L ch volume signal input terminal
16,17	BYPASSR,L	-	Non connect
18	LTRE	-	Frequency adjustment terminal tone/treble
19~21	LBASS3~1	-	Frequency adjustment terminal tone/bass
22	CR2	0	Tone output terminal
23,24	RBASS2,4	-	Frequency adjustment terminal tone/bass
25	RTRE	-	Frequency adjustment terminal tone/treble
26	RBASS1	-	Frequency adjustment terminal tone/bass
27	CR1		L/R volume input terminal
28	CL2	0	Tone output terminal
29	CL1	I	L/R volume input terminal
30	AVSS	-	Analog negative power supply terminal
31	L OUT	0	L ch output
32	R OUT	0	R ch output
33	C OUT	0	Center volume signal output terminal
34	RL OUT	0	L ch volume signal output terminal for rear speaker
35	RR OUT	0	R ch volume signal output terminal for rear speaker
36	SW OUT	0	SUB Woofer volume signal output terminal
37	A.GND	-	Analog ground terminal
38	D.GND	-	Digital ground terminal
39	VOL STB		Latch input terminal
40	VOL DATA		Volume data input terminal
41	VOL CLK		Clock input terminal for data transfer
42	DVDD	-	Digital power supply terminal

MN101C35DHK1 (IC701) : System controller

/ 10	0 ~	76	
1		75	
٢		2	
25		51	
2	6~	50	

Pin function (1/2)

Pin No.	Symbol	I/O	Function
1	TXD/SB00/P00	I	VOL.JOG IN_1
2	RXD/SBI0/P01	I	VOL.JOG IN_2
3	SBT0/P02	I/O	DATA (PLL)
4	SB01/P03	0	CLK (PLL)
5	SBI1/P04	0	DE (PLL)
6	SBT1/P05	I	VIDEO S/C DVD
7	BUZZER/P06	I	VIDEO S/C VCR
8	VDD	-	Power supply +5V
9,10	OSC1,2	I/O	OSC (8MHz)
11	VSS	-	GND
12	XI	I	GND
13	X0	0	OPEN
14	MMOD	I	GND
15	VREF-	-	GND
16	AN0/PA0	I	KEY INPUT 1 (7KEY)
17	AN1/PA1	I	KEY INPUT 2 (7KEY)
18	AN2/PA2	I	KEY INPUT 3 (7KEY)
19	AN3/PA3	I	KEY INPUT 4 (7KEY)
20	AN4/PA4	I	KEY INPUT 5 (7KEY)
21	AN5/PA5	I	INH IN
22	AN5/PA5	I	CHIP SELECT 1
23	AN5/PA5	I	CHIP SELECT 2
24	VREF+	-	Power supply +5V
25	P07	I	VIDEO S/C DBS
26	RST /P27	I	RESET INPUT
27	RNOUT/TM0I0/P10	0	RDS CLK OUT (RDS)
28	TM1I0/P11	I	DCS INPUT
29	TM2I0/P12	0	DCS OUTPUT
30	TM3I0/P13	I	AVLINK VCR IN
31	TM4I0/P14	0	AVLINK VCR OUT
32	P15	I/O	RDS DATA (RDS)
33	IRQ0/P20	I	PROTECTOR IN
34	SENS/IRQ1/P21	I	REMOCON INPUT
35	IRQ2/P22		TUNED IN (TUNER)
36	IRQ3/P23		STEREO IN (TUNER)
37	IRQ4/P24	Ι	RDS DAVN (RDS)
38	P25	I	SELF CHECK INPUT
39	SB02/P30	0	COMMAND (DSP)
40	SBI2/P31		STATUS (DSP)

Pin function (2/2)

Pin No.	Symbol	I/O	Function
41	SBT2/P32	0	CLK (DSP)
42	P50	0	READY (DSP)
43	P51	0	RESET (DSP)
44	P52	0	RELAY S
45	P53	0	RELAY C
46	P54	0	RELAY L/R 1
47	DGT17/P67	0	RELAY L/R 2
48	DGT16/P66	0	RELAY HEADPHONE
49~64	G16~G1	0	FL GRID SIGNAL CONTROL OUT
65 ~ 80	P87~P90	0	FL SEGMENT SIGNAL CONTROL OUT
81	SEG24/PC2	0	LED8 SIGNAL CONTROL OUT (FM/AM)
82	SEG25/PC1	0	LED7 SIGNAL CONTROL OUT (TV/DBS)
83	SEG26/PC0	0	LED6 SIGNAL CONTROL OUT (TAPE/CDR)
84	SEG27/PB7	0	LED5 SIGNAL CONTROL OUT (VCR)
85	SEG28/PB6	0	LED4 SIGNAL CONTROL OUT (CD)
86	SEG29/PB5	0	LED3 SIGNAL CONTROL OUT (DVD)
87	SEG30/PB4	0	LED2 SIGNAL CONTROL OUT (PHONO)
88	SEG31/PB3	0	LED1 SIGNAL CONTROL OUT (DVD MULTI)
89	SEG32/PB2	0	SOUSE MUTE
90	SEG33/PB1	0	SUBWOOFER MUTE
91	SEG34/PB0	0	TUNER MUTE
92	SEG35/PD7	0	POWER ON (STANDBY)
93	SEG36/PD6	0	SURROUND
94	SEG37/PD5	0	DATA (A.SW)
95	SEG38/PD4	0	CLK (A.SW)
96	SEG39/PD3	0	STB (A.SW)
97	SEG40/PD2	0	LATCH (A.SW)
98	SEG41/PD1	0	DATA (VOL)
99	SEG42/PD0	0	CLK (VOL)
100	VPP	0	VPP

■ TC9446F-014(IC631):Digital signal processor for dolby digital (AC-3) / MPEG2 audio decode

1 RST 1 Reset signal input terminal (L:reset H:Operation usually) 2 MMCD 1 Microcomputer interface chips select input terminal H:IC bus) 3 MICS 1 Microcomputer interface late Aubies input terminal 4 MICF 1 Microcomputer interface late Aubies input terminal 5 MICO IV Microcomputer interface acknowledge output terminal 6 MICK 1 Microcomputer interface acknowledge output terminal 7 MIACK 0 Microcomputer interface acknowledge output terminal 13 VSS - Digital ground terminal 0 14 LRCKA 1 Audio interface bit lock input terminal A 15 BCKA 1 Audio interface bit lock input terminal B 20 LRCKB 1 Audio interface bit lock input terminal B 21 BCKB 1 Audio interface bit lock input terminal A 22 SDT0 1 Audio interface bit lock coupt terminal A 23 SDT1 1 Audio interface bit lock coupt terminal A 24	Pin No.	Symbol	I/O	Function
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3 MICS 1 Mercocomputer interface alta //D terminal 4 MICP 1 Mercocomputer interface alta //D terminal 5 MIDIO I/O Mercocomputer interface alta //D terminal 7 MIACK 0 Mercocomputer interface alta //D terminal 8-11 Filo 1 Interrupt input terminal 0-3 12 I/RQ 1 Interrupt input terminal 13 VSS - Dipital ground terminal 14 LROCKA 1 Audoi interface IR clock input terminal A 15 BCKA 1 Audoi interface IR clock input terminal A 16-18 SDO0-2 O Audoi interface data cuput terminal A 20 LROCKB 1 Audoi interface data input terminal A 21 BCCKB 1 Audoi interface data input terminal B 22 SDT1 1 Audoi interface bit clock output terminal A 23 SDT1 1 Audoi interface bit clock output terminal A 24 VDD - Power supply for digital circuit		-		
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5 MDD I/O Microcomputer interface data i/O terminal 7 MIACK O Microcomputer interface acknowledge output terminal 8-11 FIG-3 I Flag input terminal acknowledge output terminal 12 IRQ I Interrupt input terminal 13 VSS - Digital ground terminal 14 LECKA I Audio interface LR clock input terminal A 15 BCKA I Audio interface DR clock input terminal A 20 LECKB I Audio interface DR clock input terminal B 21 BCKA I Audio interface DR clock input terminal B 22 SDT0 I Audio interface data input terminal C 23 SDT1 I Audio interface data input terminal A 24 VDD - Power suply for digital circuit 25 LRCKOA O Audio interface LR clock output terminal A 27.28 TESTO, T TESTO, T Test input terminal O' 28.33 TESTO, T Test input terminal O' (Lesst H-operation usuall				
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46 VSSA - Ground terminal for analog circuit 47 CKO O DIR Clock output terminal 48 LOCK O VCO Lock detection output terminal 49 VSS - Ground terminal for digital circuit 50 WR O External SRAM writing signal output terminal 51 OE O External SRAM output enable signal output terminal 52 CE O External SRAM chip enable signal output terminal 53 VDD - Power supply terminal for digital circuit 54-61 IO7-0 I/O External SRAM data I/O terminal 7-0 62 VSS - Ground terminal for digital circuit 63-70 AD0-7 O External SRAM address output terminal 0-7 71 VDD - Power supply terminal for digital circuit 72-80 AD8-16 O External SRAM address output terminal 8-16 81 VSS - Ground terminal for DLL 90 VDDDL - Power supply terminal for DLL 91 LPFO O LPF output terminal for DLL <t< td=""><td>45</td><td></td><td>I</td><td></td></t<>	45		I	
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97 VSSX Ground termonal for oscillation circuit 98,99 XO,XI I/O Oscillation I/O terminal	96		I	
98,99 XO,XI I/O Oscillation I/O terminal			-	
	98,99		I/O	
	100	VDDX	-	Power supply terminal for oscillation circuit

DLCKS terminal	DLONterminal	DLL clock setting	
L	L SCKI input (DLL circuit (
L	H Four times XI clock		
Н	L Three times XI clock		
H	Ĥ	Six times XI clock	

■ UPD784215AGC103(IC671):UNIT CPU 1.Pin layout

75	~	51		
76		0.	50	
ł			٢	
100	~	25	26	

2.Pin function

Pin No.	Symbol	I/O	Function
1~8		-	Non connect
9	VDD	-	Power supply terminal
10	X2	0	Connecting the crystal oscillator for system main clock
11	X1	Ī	Connecting the crystal oscillator for system main clock
12	VSS	-	Connect to GND
13	XT2	0	Connecting the crystal oscillator for system sub clock
14	XT1	1 i	Connecting the crystal oscillator for system sub clock
15	RESET	i i	System reset signal input
16	AUTODATA		Output of DSP to general-purpose port
17	LOCK	1	Output of DSP to general-purpose port
18	DIGITALO		Output of DSP to general-purpose port
19	FORMAT		Output of DSP to general-purpose port
20	CHANNEL		Output of DSP to general-purpose port
21	ERR		Output of DSP to general-purpose port
22	RSTDET		Reset signal input
23	AVDD	-	Power supply terminal
23	AVREF0	-	Connect to GND
25~32	AVREFU	-	Connect to GND
33	A)/00		Connect to GND
	AVSS	-	
34,35		-	Non connect
36	AV REF1	-	Power supply terminal
37,38	RX,TX	-	Not use
39	5050011	-	Non connect
40	DSPCOM		Communication port from IC701
41	DSPSTS	0	Status communication port to IC701
42	DSPCLK		Clock input from IC701
43	DSPRDY		Ready signal input from IC701
44		-	Non connect
45,46	MIDIO_IN/OUT	1/0	Interface I/O terminal with microcomputer
47	MICK	0	Interface I/O terminal with microcomputer of clock signal
48	MICS	0	Interface I/O terminal with microcomputer of chip select
49	MILP	0	Interface I/O termonal with microcomputer
50	MIACK	0	Interface I/O termonal with microcomputer
51,52		-	Non connect
53	DSPRST	0	Reset signal output of DSP
54~63		-	Non connect
64,65	CDTI/CDTO	I/O	Interface I/O terminal with microcomputer
66	CCLK	0	Interface I/O terminal with microcomputer of clock signal
67	CS	0	Interface I/O terminal with microcomputer of chip select
68	XTS	0	OSC Select
69,70		-	Non connect
71	PD	0	Reset signal output
72	GND	-	Connect to GND
73~80		-	Non connect
81	VDD	-	Power supply
82	3D-ON	-	Non connect
83	3D-ON	0	Switch at output destination of surround channel
84	ANA/T-TONE	0	Test tone control
85	REF-MIX	0	Control at output destination of LFE channel
			Non connect
86		-	
86 87	D.MUTE	-	Mute of the digital out terminal is controlled
	D.MUTE S.MUTE		
87		0	Mute of the digital out terminal is controlled
87 88		0	Mute of the digital out terminal is controlled Mute of the audio signal is controlled
87 88 89	S.MUTE ASW1~4	0 0 -	Mute of the digital out terminal is controlled Mute of the audio signal is controlled Non connect
87 88 89 90~93	S.MUTE	0 0 - 0	Mute of the digital out terminal is controlled Mute of the audio signal is controlled Non connect Selection of digital input selector



