HISTORY

Model Name : KV-HR29M61/HR29N90/ HR34M61/HR34N90

SERVICE MANUAL

Part No. : 9-965-396-01

When clicking an item, it's detail is displayed.

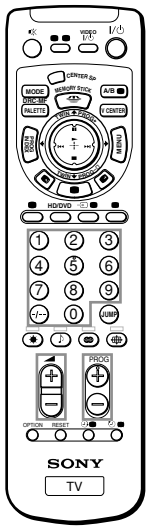
Date	SUPP./CORR.	Description of SUP/COR	Change of main text
2004.01		NEW	–

Self Diagnosis Supported model

SERVICE MANUAL AX-1CHASSIS

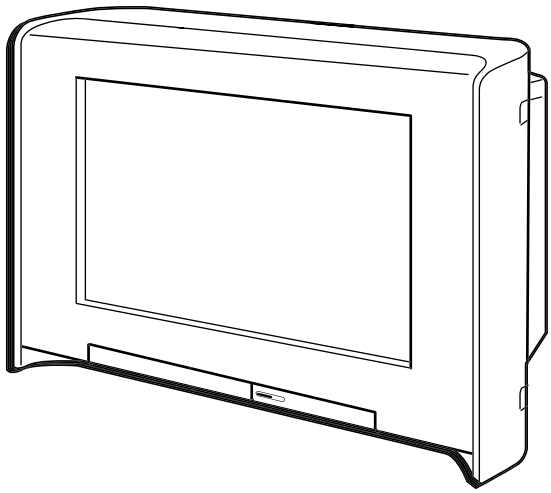
MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-HR29M61	RM-1007	GE	SCC-M15C-A
KV-HR29N90	RM-1011	Taiwan	SCC-M19D-A
KV-HR34M61	RM-1007	GE	SCC-M15B-A
KV-HR34N90	RM-1011	Taiwan	SCC-M19C-A

MODEL	COMMANDER	DEST.	CHASSIS NO.



RM-1007

RM-1011



KV-HR29M61/HR29N90/HR34M61/HR34N90

TRINITRON® COLOR TV

SONY®

Specifications

Power requirements	220–240 V AC, 50/60 Hz (GE model), 110 V AC, 60 Hz (Taiwan model)	
Power consumption (W)	Indicated on the rear of the TV.	
Television system	B/G, I, D/K, M (GE model), M (Taiwan model)	
Color system	PAL, PAL 60, NTSC4.43, NTSC3.58, SECAM (GE model)	
Available language for Teletext (GE model)	English, Farsi, French	
Stereo/Bilingual system	NICAM Stereo/Bilingual D/K, I, B/G; A2 Stereo/Bilingual (German) B/G	
Channel coverage		
B/G (GE model)	VHF : E2 to E12 / UHF : E21 to E69 / CATV : S01 to S03, S1 to S41	
I (GE model)	UHF : B21 to B68 / CATV : S01 to S03, S1 to S41	
D/K (GE model)	VHF : C1 to C12, R1 to R12 / UHF : C13 to C57, R21 to R60 / CATV : S01 to S03, S1 to S41, Z1 to Z39	
M	VHF : A2 to A13 / UHF : A14 to A79/CATV : A-8 to A-2, A to W+4, W+6 to W+84 (GE model) VHF : 2 - 13 / UHF : 14 - 69/CATV : 1- 125 (Taiwan model)	
(Antenna)	75-ohm external terminal	
Audio output (Speaker)	7.5W + 7.5W	
3D Woofer	15W	
Number of terminal		
(Video)	Input: 4 Output: 1	Phono jacks; 1 Vp-p, 75 ohms
(Audio)	Input: 6 Output: 1	Phono jacks; 500 mVrms
(S Video)	Input: 2	Y: 1 Vp-p, 75 ohms, unbalanced, sync negative C: 0.286 Vp-p, 75 ohms
(Component Video)	Input: 2	Phono jacks Y: 1 Vp-p, 75 ohms, sync negative P_B/C_B: 0.7 Vp-p, 75 ohms P_R/C_R: 0.7 Vp-p, 75 ohms Audio: 500 mVrms
(G/B/R/HD/ VD Video)	Input: 1	Phono jacks G: 0.7 Vp-p, 75 ohms, B: 0.7 Vp-p, 75 ohms, R: 0.7 Vp-p, 75 ohms HD: 0.7 Vp-p, 75 ohms, VD: 0.7 Vp-p, 75 ohms
(Center Speaker)	Input:1	120 W max., 8 ohms
(Headphones)	Output: 1	Stereo minijack
Picture tube	34in.	29in.
Tube size (cm) (measured diagonally)	86	72
Screen size (cm) (measured diagonally)	80	68
Dimensions (w/h/d, mm)	898 x 706 x 575	775 x 617 x 506
Mass (kg)	85	58

Design and specifications are subject to change without notice.

(CAUTION)
SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!
AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESECOMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFEOPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

TABLE OF CONTENTS

SECTION 1

SELF DIAGNOSIS FUNCTION

1. Summary of Self-Diagnosis Function

- This device includes a self-diagnosis function.
- In case of abnormalities, the ⏻ or STANDBY/WAKE UP indicator automatically blinks. It is possible to predict the abnormality location by the number of blinks. The Instruction Manual describes blinking of the ⏻ or STANDBY/WAKE UP indicator.
- If the symptom is not reproduced sometimes in case of a malfunction, there is recording of whether a malfunction was generated or not. Operate the remote command to confirm the matter on the screen and to predict the location of the abnormality.

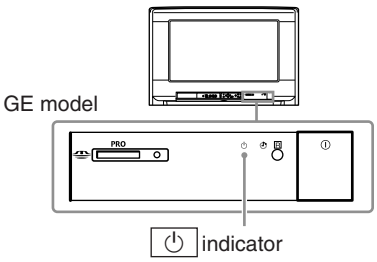
2. Diagnosis Items and Prediction of Malfunction Location

- When a malfunction occurs the ⏻ or STANDBY/WAKE UP indicator only blinks for one of the following diagnosis items. In case of two or more malfunctions, the item which first occurred blinks. If the malfunctions occurred simultaneously, the item with the lower blink count blinks first.
- The screen display displays the results regarding all the diagnosis items listed below. The display " 0 " means that no malfunctions occurred.

Diagnosis Item	Number of times ⏻ or STANDBY/WAKE UP indicator blinks	Probable Cause Location	Detected Symptoms
+B overcurrent (OCP)	2 times	T8001 (FBT) Rare short-circuit etc. (D board) Q5001 (H-OUT), Q5006 (D board)	Has entered standby mode. (Relay is off when the power turns on.)
+B overvoltage (OVP)	3 times	+B load open (D board) R6570 Open PH8003, control system malfunction L2603 Open	Has entered standby mode.
Vertical deflection stopped (V-STOP)	4 times	IC5101 (V. OUT) (D board) IC401 (CXA2170Q) (MG board)	Has entered standby mode.
IK error (AKB ERROR)	5 times	VIDEO OUT IC malfunction IC9001, 9002, 9003 (C board) IC401 (CXA2170Q) (MG board)	Has not entered standby mode.
Low-B error	6 times	Sub power supply system load shorted etc. (A board)	Has entered standby mode.
Horizontal deflection stopped (H-STOP)	7 times	IC401 (CXA2170Q) (MG board) Q5404 (S-COR-OUT), Q5001 (H-OUT), Q5006	Has entered standby mode.
Audio Protector	8 times	IC2000, 2001 malfunction (A board)	Has entered standby mode.
Zero Cross DET error	9 times	RY6000 Power relay melting down (A board)	Has not entered standby mode.
High-Voltage stopped (HV-PROT)	10 times	T8001 (FBT) rare short-circuit (D board) IC8002, Q8013, 8014, R8051 (D board)	Has entered standby mode.

3. Blinking count display of ⏻ or STANDBY/WAKE UP indicator

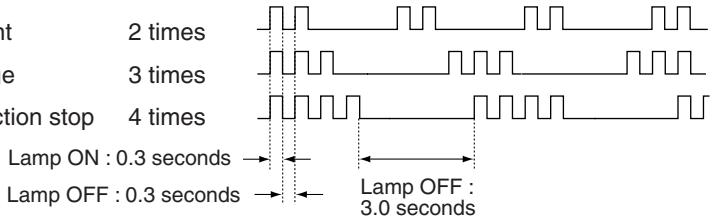
< FRONT PANEL >



* One blink is not used for self-diagnosis.

•EXAMPLE

<Diagnosis Items>	<Number of Blinks>
• +B overcurrent	2 times
• +B overvoltage	3 times
• Vertical deflection stop	4 times



Release of ⏻ or STANDBY/WAKE UP indicator blinking.

- The STAND BY indicator blinking display is released by turning OFF the power switch on the TV main unit or removing the plug from the power.
  But in the RLY ERR (10 times blinking), do not release by tuning power off.
  For details, refer to the item 1-6.

4. Self-diagnosis screen displays

- In cases of malfunctions where it is not possible to determine the symptom such as when the power goes off occasionally or when the screen disappears occasionally, there is a screen display on whether the malfunction occurred or not in the past (and whether the detection circuit operated or not) in order to allow confirmation.

<Screen Display Method>

- Quickly press the remote command button in the following order from the standby state.

<GE model>

[i+ ?] → [5] → [◿ −] → [I/⏻]

⇧

Be aware that this differs from the method of entering the service mode ([◿ +]).

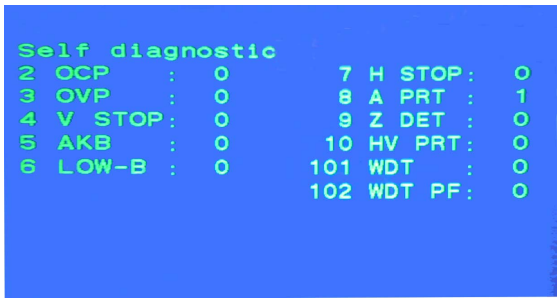
<Taiwan model>

[顯 示] → [5] → [音 量 −] → [電 源]

⇧

Be aware that this differs from the method of entering the service mode ([音 量 +]).

Self-diagnosis screen display



- "G" : OK, "NG" : DETECTS ONCE OR MORE
- THE 10 DIGITS OF NUMERALS ARE FOR CHECKING, NO RELATION TO DIAGNOSIS.
- 101 : NO LED BLINKING FOR WDT.
  "0" : NUMBER OF DETECTION.

5. After the self-diagnosis operation

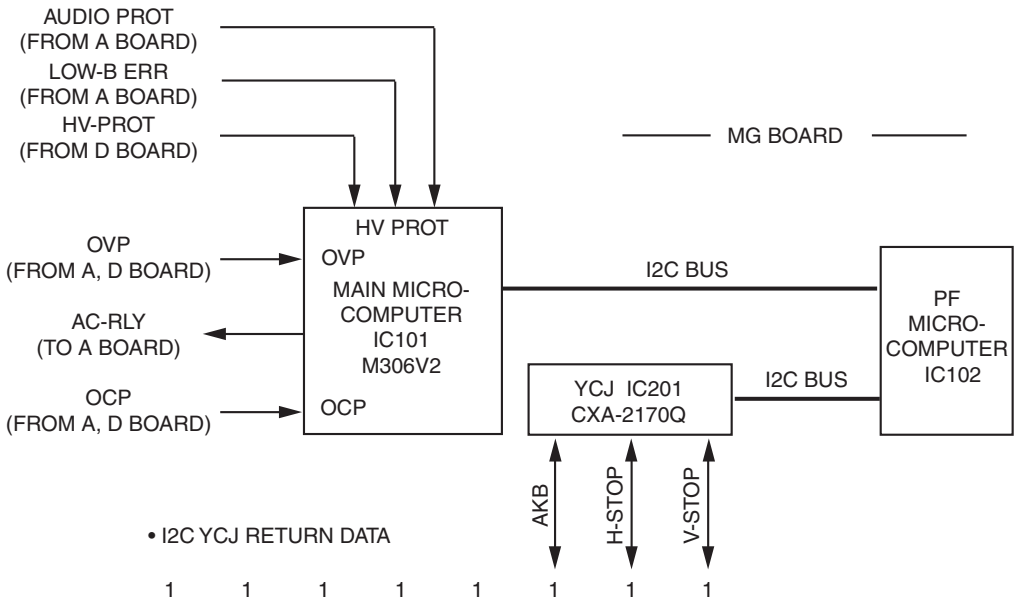
- The results display is not automatically cleared. In case of repairs and after repairs, check the self-diagnosis screen and be sure to return the results display to " 0 ".
- If the results display is not returned to " 0 " it will not be possible to judge a new malfunction after completing repairs.

<Method of Clearing Results Display>

1. Power off (Set to the standby mode)
2. [i+] [?] → [5] → [◿ +] → [I/⏻] (Service Mode) <GE model>
   [顯示] → [5] → [音量 +] → [電源] (Service Mode) <Taiwan model>
3. Channel [8] → [0] (Test reset = Factory preset condition)

<Method of Ending Self Diagnosis Screen>

- When ending the self-diagnosis screen completely, turn the power switch OFF on the remote commander or the main unit.

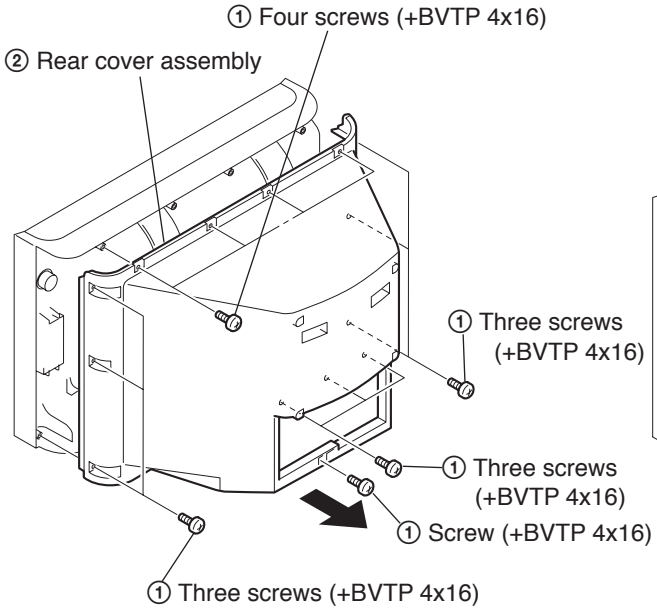


LED BLINKING TIMES	SYMPTOM
2	+B OCP
3	+B OVP
4	V-STOP
5	AKB
6	LOW-B ERROR
7	H-STOP
8	AUDIO PROT
9	Z DET
10	HV PRT

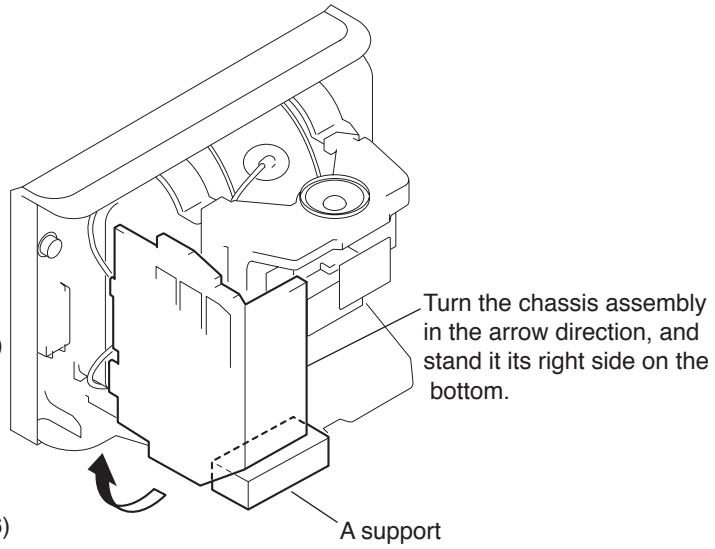
+B OCP	If the IC701 Pin 44 (+B OCP DET) is high 2 seconds, turn AC-RELAY low (P-OFF) and make STANDBY LED blinks twice.
+B OVP	If the IC701 Pin 45 (+B OVP DET) is high 2 seconds, turn AC-RELAY low (P-OFF) and make STANDBY LED blinks three times.
V-STOP	If the return data Bit0 (VNG) from CXA2150Q is “1” while 2 seconds, turn AC-RELAY low (P-OFF) and make STANDBY LED blinks four times.
AKB	If the return data Bit2 (IKREF) from CXA2150Q is “0” and there is no change for 20 seconds, make STANDBY LED blinks five times. At this time, AC-RELAY continues to high.
LOW-B ERROR	If the IC701 Pin 69 (AC-RELAY) is high and the Pin 43 (LOW-B ERROR DET) is low while 5 seconds, turn AC-RELAY low (P-OFF) and make STANDBY LED blinks six times.
H-STOP	If the return data Bit1 (HNG) from CXA2170 is “1” while 2 seconds, turn AC-RELAY low (P-OFF) and make STANDBY LED blinks seven times.
W. D. T.	Observes the watch dock timer (BUS COMMUNICATION ERROR DET) bus communication. If errors are detected, counts up and reform the bus communication and displays the number of time. (No LED blinking).
AUDIO PROT	In case of Pin 85 of IC101 (AUDIO PROT DET) turns high 60msec twice at a time, makes AC-RELAY turns low (Power off) and STANDBY-LED blinks 8 times.
HV-PROT	In case of Pin 33 of IC101 (HV-PROT DET) turns high 10 seconds continuously in normal operation or in BS fixed Stand-by, makes AC-RELAY turns low (Power off) and STANDBY-LED blinks 10 times.
Z DET	There are two causes for Zero Cross Error. Normally the pulse doubled AC power supply frequeny is fed to Pin 8 of IC101. But in case of the abnormal pulse is fed, it makes AC-RELAY turns low (Power off) and STANDBY-LED blinks 9 times. In this case, “1” is not displayed in ’9. Z DET’ column in the self-diagnosis mode.

SECTION 2
DISASSEMBLY

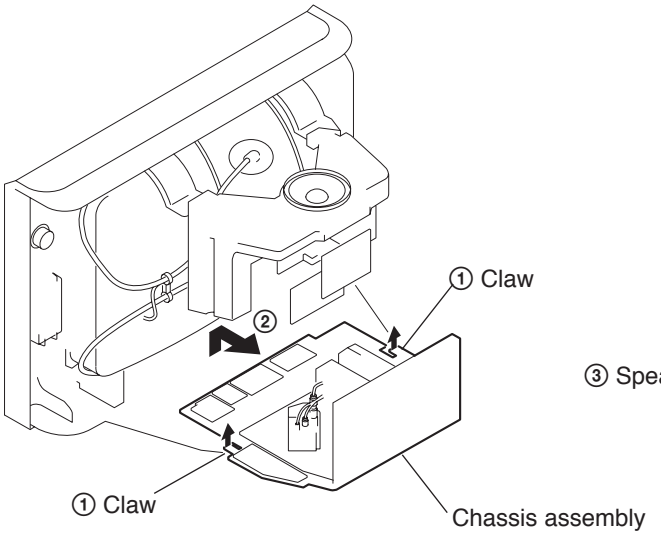
2-1. REAR COVER ASSEMBLY



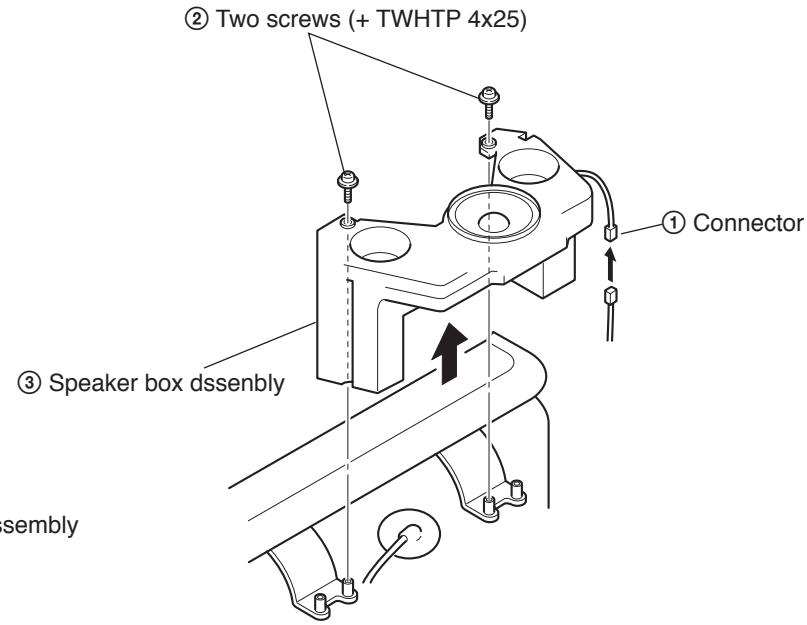
2-3. SERVICE POSITION



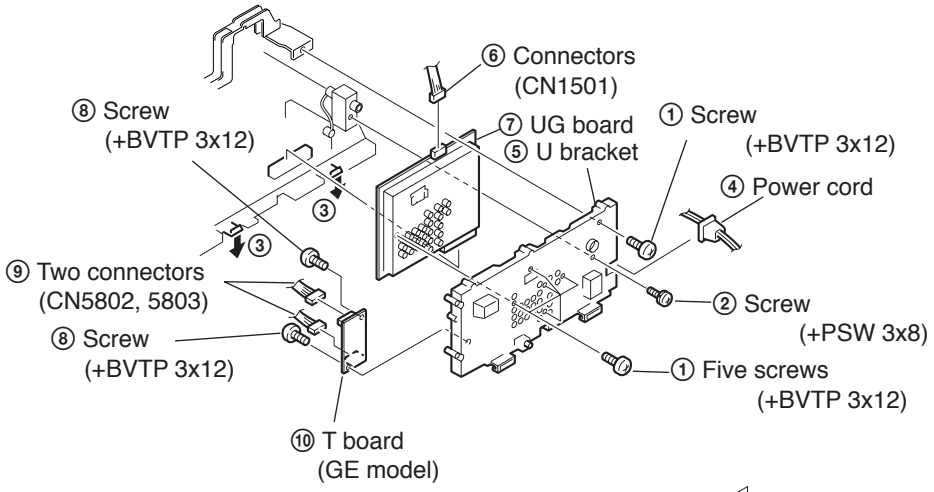
2-2. CHASSIS ASSEMBLY



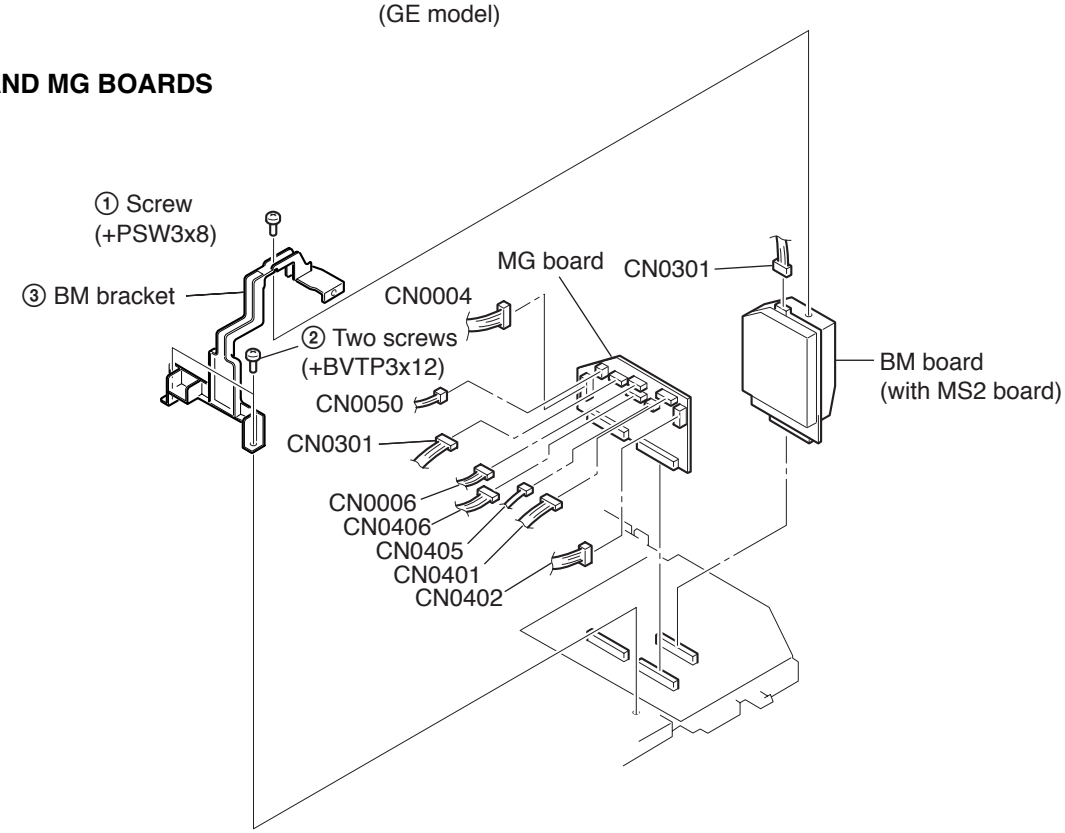
2-4. SPEAKER BOX ASSEMBLY



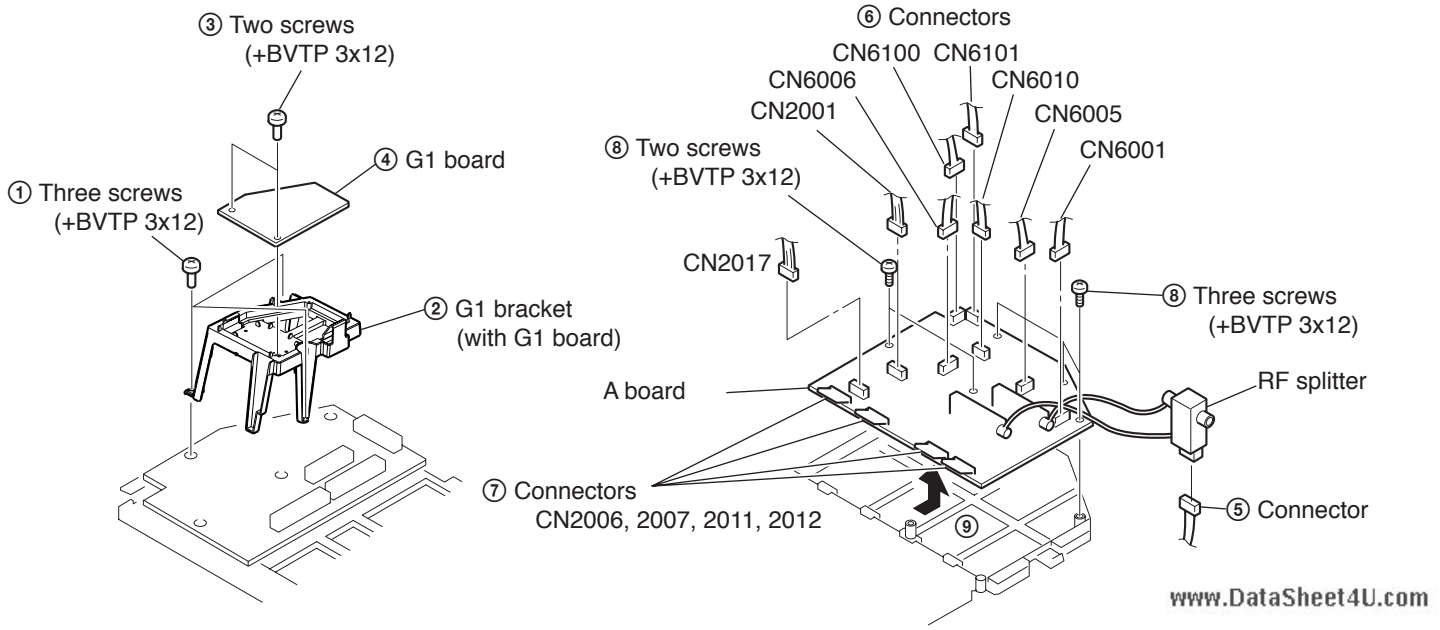
2-5. T (GE model) AND UG BOARDS



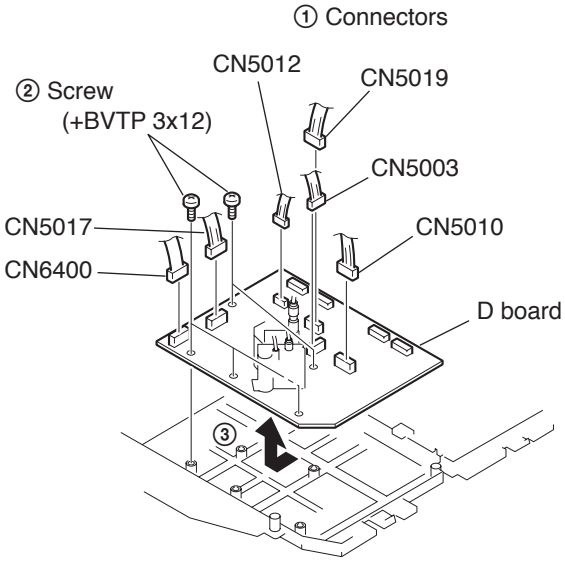
2-6. BM AND MG BOARDS



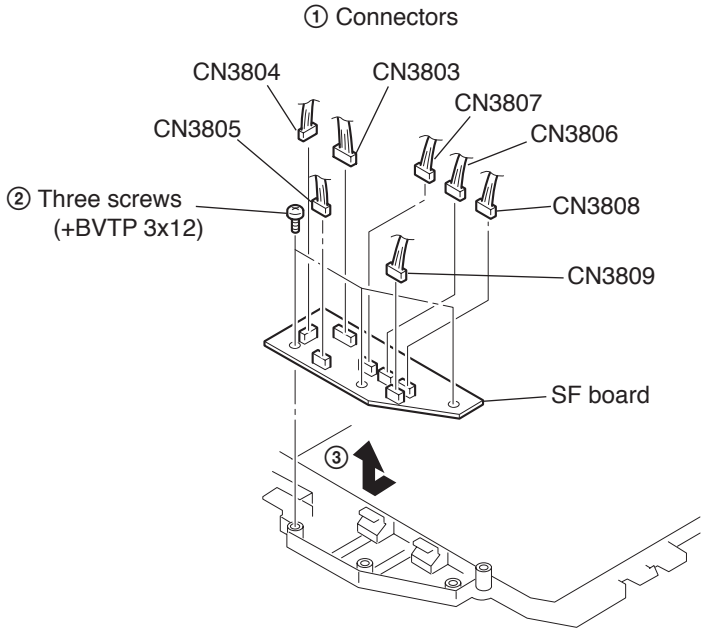
2-7. G1 (GE model) AND A BOARDS



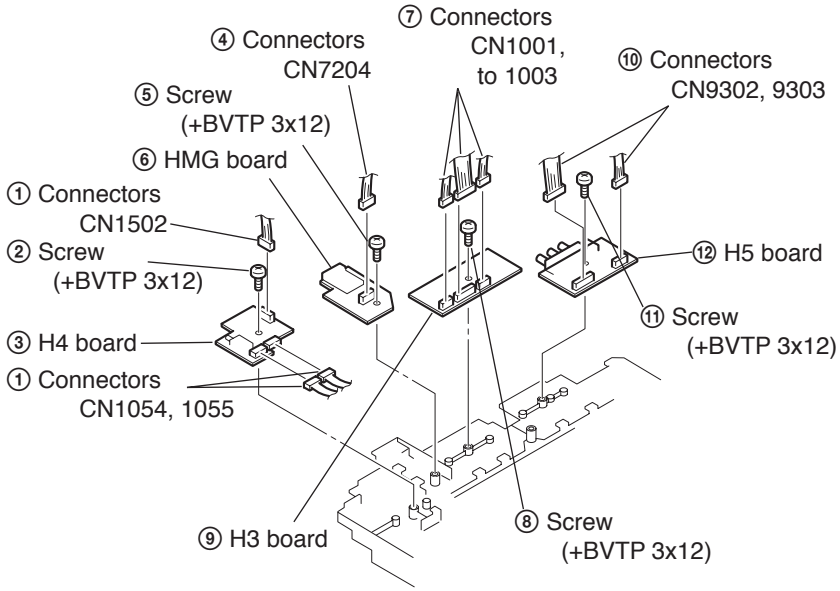
2-8. D BOARD



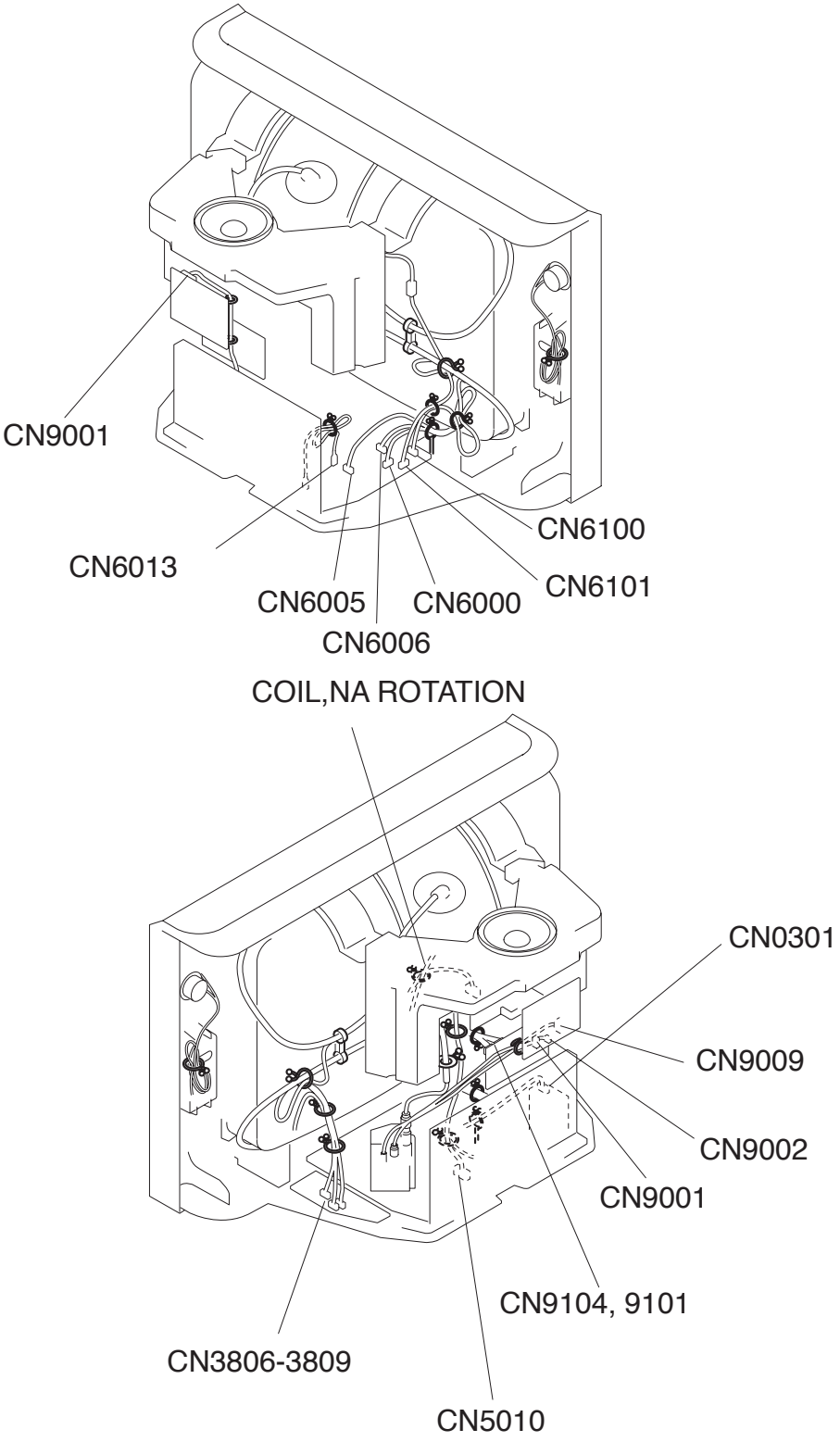
2-9. SF BOARD



2-10. H3, H4, H5 AND HMG BOARDS



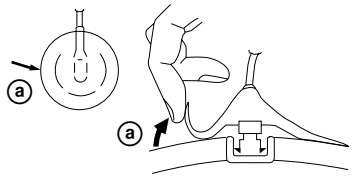
2-11. HARNESS ARRANGEMENT



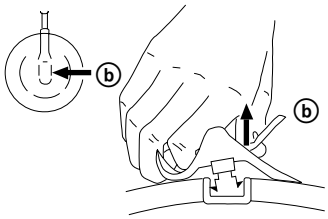
2-12. REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

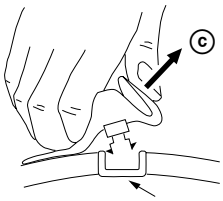
• REMOVING PROCEDURES



① **Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.**



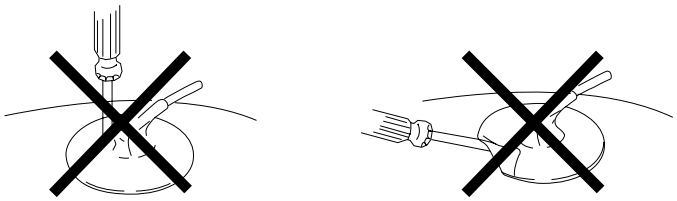
② **Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.**



③ **When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.**

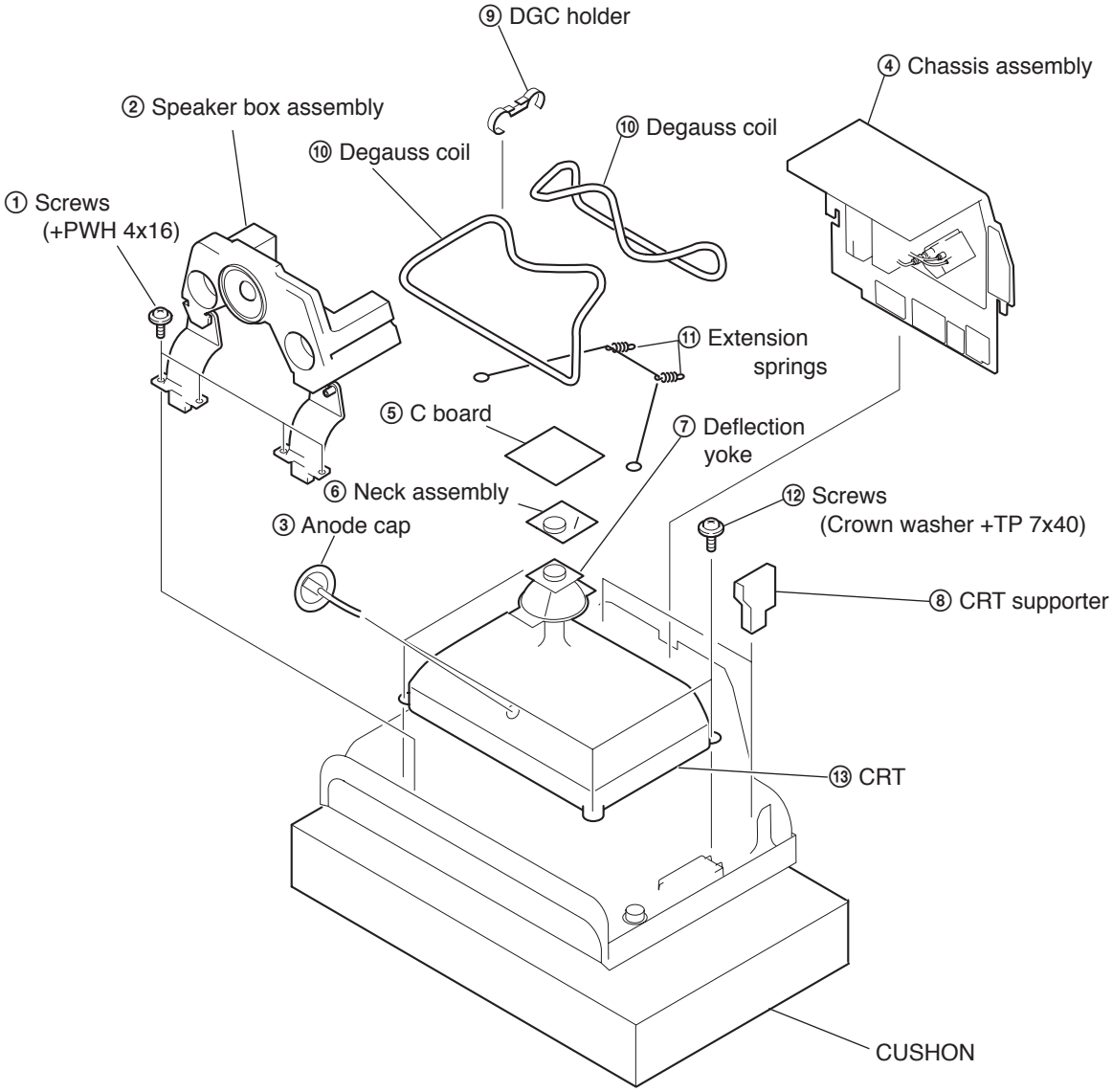
• HOW TO HANDLE AN ANODE-CAP

① **Do not damage the surface of anode-caps with sharp shaped objects.**
② **Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.**
③ **Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.**



2-13. CRT

NOTE: After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.



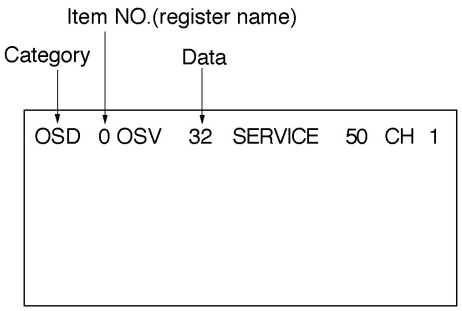
SECTION 3
SERVICE MODE

3-1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

1. Standby mode. (Power off)
2. [i+ ?] → [5] → [◿ (+)] → [I/⏻] <GE model>
   [顯 示] → [5] → [音 量 (+)] → [電 源] <Taiwan model>
   on the Remote Commander.
   (Press each button within a second.)

3-2. SERVICE MODE ADJUSTMENT



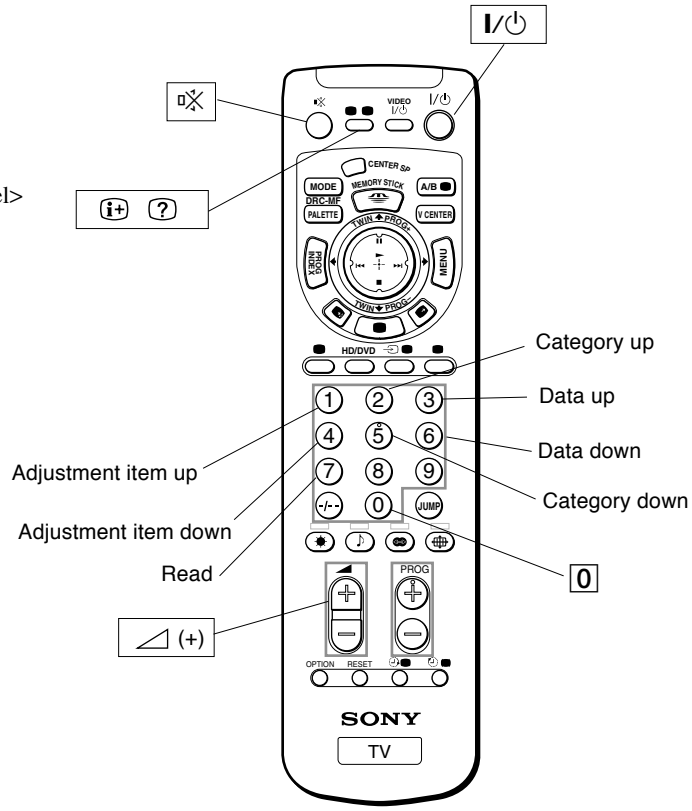
3. The SCREEN displays the item being adjusted.
4. Press [1] or [4] on the Remote Commander to select the category.
5. Press [3] or [6] on the Remote Commander to change the data.
6. Press [2] or [5] on the Remote Commander to select the adjustment item.
7. If you want to recover the latest values press [7] then [0] to read the memory.
8. Press [MUTING] or [靜 音] then [0] to write into memory.
9. Turn power off.

Note: Press [8] then [0] on the Remote Commander to initialize or turn set off and on to exit.

3-3. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, turn power off with the remote commander.
2. Turn power on and set to Service Mode.
3. Call the adjusted items again and confirm they were adjusted.

3-4. ADJUSTING BUTTONS AND INDICATOR



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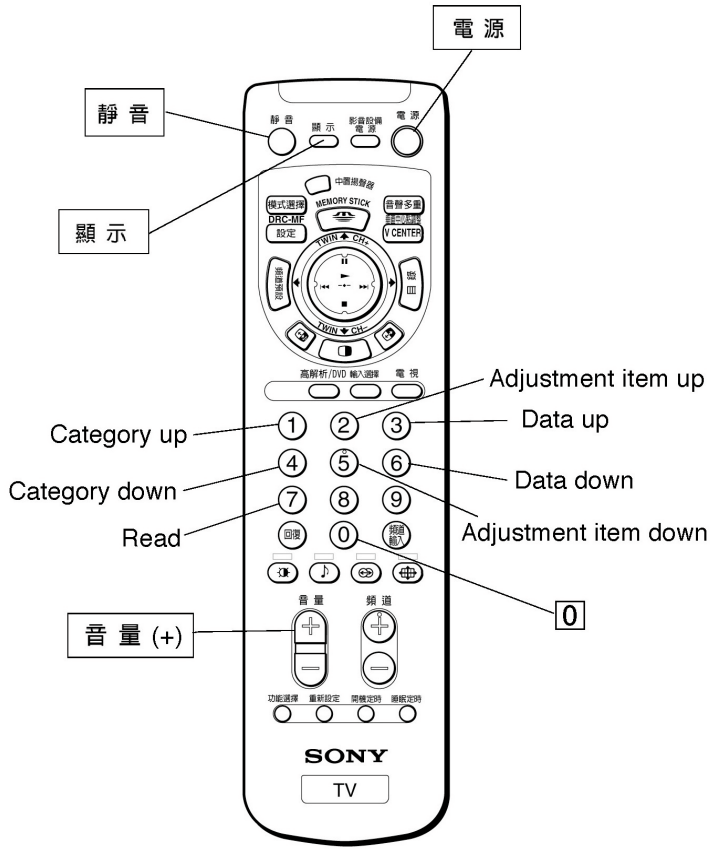

RM-1011

3-5.SERVICE MODE LIST

OSD

Functionality No.	Functionality Name	Range	Standards	Function	Remarks
00	OSV		32	OSD V Position	
01	OSH		13	OSD H Position	
02	FW1		07	OSD ODD/EVEN Field Window Setup #1	
03	FW2		20	OSD ODD/EVEN Field Window Setup #2	
04	VOF		*1	OSD V Position (Offset)	Wide/50/60/100/120/HD/Twin/Favorite/Index

Standards *1

Functionality No.	Functionality Name	FULL50	FULL60	FULL100	FULL120	WDZM50	WDZM60	WDZM100
04	VOF	32	32	32	32	32	32	32

Functionality No.	Functionality Name	WDZM120	ZOOM50	ZOOM60	ZOOM100	ZOOM120	INDEX50	INDEX60
04	VOF	32	32	32	32	32	32	32

Functionality No.	Functionality Name	FAVORITE50	FAVORITE60	TWIN50	TWIN60	HD50	HD60	MS
04	VOF	32	32	32	32	32	32	32

Functionality No.	Functionality Name	VCOMP	VCOMP60	VCOMP100	VCOMP120
04	VOF	32	32	32	32

MSP

Functionality No.	Functionality Name	Range	Standards	Function	Remarks
00	WST		21	W/G Stereo Threshold	
01	WBT		236	W/G Bilingual Threshold	
02	WLL		05	W/G Monaural Threshold	
03	WAC		01	W/G Agreement Count	
04	WDL		48	W/G Search Delay	
05	NDL		32	NICAM Search Delay	
06	SDL		16	Stereo status Read Delay	
07	AGC		01	AGC Switch Auto/Constant	
08	REL		40	AGC Gain at Constant Mode	
09	CRM		00	Carrier muting on/off	
10	ACO		01	Audio Clock out on/off	
11	FP		27	FM Prescale for non-M system	
12	FPM		50	FM Prescale for M system	
13	FH		54	FM Prescale for HDEV	
14	FHM		101	FM Prescale for HDEV and M	
15	WGP		28	W/G Prescale	
16	NIP		127	NICAM Prescale	
17	ERR		80	Auto FM switch Threshold	
18	VOL		48	Loud Speaker gain 0700h to 07FFh	

TEXT

Functionality		Range	Standards	Function	Remarks
No.	Name				
00	TXH		35	Teletext Horizontal Display Position	
01	TXV		63	Teletext Vertical Display Position	
02	THD		56	Teletext H-sync Active Edge Shift	
03	TVD		00	Teletext V-sync Active Edge Shift	
04	HPL		00	Teletext H-sync Polarity Configuration	
05	VPL		00	Teletext V-sync Polarity Configuration	
06	FPL		01	Teletext Field Polarity Configuration	
07	FMD		03	Teletext Fastext/TOP Force Mode	
08	TBR		15	Teletext RGB Brightness	
09	NOP		02	Teletext National Option Table Configuration	
10	TCH		02	Teletext Twisted Character Set Configuration	

PIC

Functionality		Range	Standards	Function	Remarks
No.	Name				
00	PIC		* 1	User Picture	Picture Mode
01	COL		* 1	User Color	Picture Mode
02	BRI		* 1	User Bright	Picture Mode
03	HUE		*1	User Hue	Picture Mode
04	SHP		* 1	User Sharp	Picture Mode
05	PIOF		*2	Picture Offset (Picture * (20-data)/20 * Eco(75%)	MS/NORMAL/MULTI/OTHER

Standards *1

Functionality		Picture Mode			
No.	Name	Dynamic	Standard	Hi-Fine	Personal
00	PIC	100	80	60	50
01	COL	60	60	50	50
02	BRI	43	50	50	50
03	HUE	50	50	50	50
04	SHP	50	50	50	50

Standards *2

Functionality		Picture Offset				
No.	Name	MS	Normal(4:4)	HD	Twin/Index/Pap	Other
05	PIOF	3	1	3	5	0

SOU

Functionality		Range	Standards	Function	Remarks
No.	Name				
00	BAS		*1	User Bass	Sound Mode
01	TRE		*1	User Treble	Sound Mode

Standards *1

Functionality		Sound Mode			
No.	Name	Dynamic	Drama	Soft	Personal
00	BAS	50	50	50	50
01	TRE	50	50	50	50

DRC

Functionality		Range	Standards	Function	Remarks
No.	Name				
00	CLAR		*1	User DRC Palette Initial number Clarity	
01	REAL		*1	User DRC Palette Initial Number Reality	

Standards *1

Functionality		DRC Palette (TV Custom1)		DRC Palette (TV Custom2)		DRC Palette (TV Custom3)		DRC Palette (Video Custom1)		DRC Palette (Video Custom2)	
No.	Name	Dynamic	Std/HiFine/Per	Dynamic	Std/HiFine/Per	Dynamic	Std/HiFine/Per	Dynamic	Std/HiFine/Per	Dynamic	Std/HiFine/Per
00	CLAR	01	01	50	50	80	80	01	01	50	50
01	REAL	25	25	55	55	90	90	25	25	55	55

Functionality		DRC Palette (Video Custom3)		DRC Palette (Comp Custom1)		DRC Palette (Comp Custom2)		DRC Palette (Comp Custom3)	
No.	Name	Dynamic	Std/HiFine/Per	Dynamic	Std/HiFine/Per	Dynamic	Std/HiFine/Per	Dynamic	Std/HiFine/Per
00	CLAR	80	80	01	01	50	50	80	80
01	REAL	90	90	25	25	55	55	90	90

LUMA

Functionality		Range	Standards
No.	Name		
0	BROF	0-7	*1
1	GAMM	0-7	*1
2	GAMS	0-15	*2
3	RGAM	0-15	*2
4	GGAM	0-15	*2
5	BGAM	0-15	*2
6	BLK	0-7	*1
7	APED	0-3	*3
8	DCTR	0-15	*3
9	ABLM	0-3	*3

Standards *1

RF / CV / YC / COMP

No.	Name	Dynamic													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	BROF	0	0	0	0	0	0	4	4	1	1	1	1	3	3
1	GAMM	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6	BLK	6	6	6	6	6	6	7	7	7	7	7	7	7	7

No.	Name	Standard													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	BROF	5	5	5	3	3	3	4	4	4	4	1	1	1	1
1	GAMM	3	3	3	3	3	3	4	4	4	4	4	4	4	4
6	BLK	4	4	4	4	4	4	4	4	4	4	5	5	5	5

No.	Name	Hi-fine													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	BROF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	GAMM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	BLK	0	0	0	0	0	0	0	0	0	0	0	0	0	0

No.	Name	Personal													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	BROF	5	5	5	3	3	3	4	4	4	4	1	1	1	1
1	GAMM	3	3	3	3	3	3	4	4	4	4	4	4	4	4
6	BLK	4	4	4	4	4	4	4	4	4	4	5	5	5	5

RGB / MS / Twin

No.	Name	Dynamic													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	BROF	4	4	1	1	1	1	3	3	1	1	1	1	1	0
1	GAMM	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6	BLK	7	7	7	7	7	7	7	7	5	5	5	5	5	5

No.	Name	Standard													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	BROF	4	4	4	4	1	1	1	1	1	1	1	1	1	1
1	GAMM	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6	BLK	4	4	4	4	5	5	5	5	5	5	5	5	5	5

No.	Name	Hi-Fine													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	BROF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	GAMM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	BLK	0	0	0	0	0	0	0	0	0	0	0	0	0	0

No.	Name	Personal													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	BROF	4	4	4	4	1	1	1	1	1	1	1	1	1	1
1	GAMM	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6	BLK	4	4	4	4	5	5	5	5	5	5	5	5	5	5

Standards *2

No.	Name	GAMMA0	GAMMA1	GAMMA2	GAMMA3	GAMMA4	GAMMA5	GAMMA6	GAMMA7
2	GAMS	13	13	13	13	13	13	13	13
3	RGAM	0	4	5	6	7	8	9	10
4	GGAM	0	4	5	6	7	8	9	10
5	BGAM	0	4	5	6	7	8	9	10

Standards *3

No.	Name	BLK0	BLK1	BLK2	BLK3	BLK4	BLK5	BLK6	BLK7
7	APED	0	1	3	3	2	1	3	2
8	DCTR	0	5	8	15	10	5	10	10
9	ABLM	0	0	0	1	0	0	1	1

COLR

Functionality		Range	Standards
No.	Name		
0	CLOF	0-7	*1
1	HUOF	0-7	*1
2	RDRV	0-63	41
3	GDRV	0-63	30
4	BDRV	0-63	35
5	RCUT	0-63	41
6	GCUT	0-63	31
7	BCUT	0-63	24
8	SBRT	0-63	25
9	DCOL	0-3	1
10	WBSW	0-1	*2
11	SBOF	0-7	*2
12	RDOF	0-63	*2
13	GDOF	0-63	*2
14	BDOF	0-63	*2
15	RCOF	0-63	*2
16	GCOF	0-63	*2
17	BCOF	0-63	*2
18	AXIS	0-3	*1
19	R-YR	0-15	*3
20	R-YB	0-15	*3
21	G-YR	0-15	*3
22	G-YB	0-15	*3

Standards *1

RF / CV / YC / COMP

No.	Name	Dynamic													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	CLOF	6	6	6	5	5	5	6	6	6	6	5	5	5	5
1	HUOF	3	3	1	3	3	1	3	2	3	3	3	3	3	3
18	AXIS	3	3	1	3	3	1	3	1	3	1	3	1	3	1

No.	Name	Standard													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	CLOF	1	1	3	1	1	3	1	3	4	4	4	4	4	4
1	HUOF	3	3	1	3	3	1	3	2	3	3	3	3	3	3
18	AXIS	3	3	1	3	3	1	3	1	3	1	3	1	3	1

No.	Name	Hi-Fine													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	CLOF	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1	HUOF	3	3	3	3	3	3	3	3	3	3	3	3	3	3
18	AXIS	3	3	1	3	3	1	3	1	3	1	3	1	3	1

No.	Name	Personal													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	CLOF	1	1	3	1	1	3	1	3	4	4	4	4	4	4
1	HUOF	3	3	1	3	3	1	3	2	3	3	3	3	3	3
18	AXIS	3	3	1	3	3	1	3	1	3	1	3	1	3	1

RGB / MS / Twin

No.	Name	Dynamic													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	CLOF	6	6	6	6	5	5	5	5	7	7	7	7	7	6
1	HUOF	3	3	3	3	3	3	3	3	3	3	3	3	3	3
18	AXIS	3	1	3	1	3	1	3	1	1	1	1	1	1	1

No.	Name	Standard													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	CLOF	1	1	4	4	4	4	4	4	4	4	4	4	4	4
1	HUOF	3	3	3	3	3	3	3	3	3	3	3	3	3	3
18	AXIS	3	1	3	1	3	1	3	1	1	1	1	1	1	1

No.	Name	Hi-Fine													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	CLOF	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1	HUOF	3	3	3	3	3	3	3	3	3	3	3	3	3	3
18	AXIS	3	1	3	1	3	1	3	1	1	1	1	1	1	1

No.	Name	Personal													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	CLOF	1	1	4	4	4	4	4	4	4	4	4	4	4	4
1	HUOF	3	3	3	3	3	3	3	3	3	3	3	3	3	3
18	AXIS	3	1	3	1	3	1	3	1	1	1	1	1	1	1

Standards *2
(HR29M61/HR29N90)

No.	Name	COOL	WARM	MIDCOOL
10	WBSW	0	1	0
11	SBOF	3	3	3
12	RDOF	31	29	31
13	GDOF	32	32	31
14	BDOF	35	42	31
15	RCOF	31	22	31
16	GCOF	33	36	31
17	BCOF	39	63	31

Standards *2
(HR34M61/HR34N90)

No.	Name	COOL	WARM	MIDCOOL
10	WBSW	0	1	0
11	SBOF	3	3	3
12	RDOF	31	29	31
13	GDOF	31	32	31
14	BDOF	35	44	31
15	RCOF	31	11	31
16	GCOF	35	28	31
17	BCOF	40	63	31

Standards *3

No.	Name	AXIS0	AXIS1	AXIS2	AXIS3
19	R-YR	8	14	9	9
20	R-YB	9	15	15	9
21	G-YR	9	8	9	9
22	G-YB	6	4	7	7

CLTY

Functionality		Range	Standards
No.	Name		
0	SYSM	0-3	*1
1	UVML	0-3	*1
2	VMCR	0-3	*1
3	VMLM	0-3	*1
4	VMF0	0-3	*1
5	VMDL	0-15	*1
6	SHOF	0-3	*1
7	SHF0	0-1	*1
8	PROV	0-3	*1
9	F1LV	0-3	*1
10	LTLV	0-3	*1
11	LTMD	0-1	*1
12	CTLV	0-3	*1
13	MIDE	0-63	*1
14	VMLV	0-15	*2

Standards *1

No.	Name	Dynamic													
		RF			CV/YC			Comp							
		480_60I	480_60I	576_50I	480_60I	480_60I	576_50I	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
		NTSC	PAL	PAL	NTSC	PAL	PAL								
0	SYSM	1	1	1	1	1	1	2	2	2	2	3	3	3	3
1	UVML	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	VMCR	0	0	0	2	2	2	0	0	0	0	0	0	0	0
3	VMLM	3	3	3	3	3	3	0	0	0	0	0	0	0	0
4	VMF0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
5	VMDL	8	8	8	3	3	3	3	3	5	5	5	5	10	10
6	SHOF	3	3	3	3	3	3	0	0	0	0	1	1	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	F1LV	0	0	0	0	0	0	0	0	2	2	3	3	0	0
10	LTLV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
11	LTMD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	CTLV	3	3	3	3	3	3	0	0	0	0	0	0	0	0
13	MIDE	3	3	3	7	7	7	11	11	27	27	19	19	19	19

No.	Name	Dynamic													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	SYSM	2	2	2	2	3	3	3	3	3	3	3	3	3	2
1	UVML	3	3	3	3	3	3	3	3	2	2	2	2	2	3
2	VMCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	VMLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	VMF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	VMDL	3	3	5	5	5	5	10	10	10	10	10	10	10	5
6	SHOF	0	0	0	0	1	1	0	0	0	0	0	0	0	1
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	F1LV	0	0	2	2	3	3	0	0	0	0	0	0	0	0
10	LTLV	3	3	3	3	3	3	3	3	0	0	0	0	0	3
11	LTMD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	CTLV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	MIDE	11	11	27	27	19	19	19	19	23	23	23	23	23	27

No.	Name	Standard													
		RF			CV/YC			Comp							
		480_60I	480_60I	576_50I	480_60I	480_60I	576_50I	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
		NTSC	PAL	PAL	NTSC	PAL	PAL								
0	SYSM	1	1	1	1	1	1	2	2	2	2	3	3	3	3
1	UVML	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	VMCR	0	0	0	2	2	2	0	0	0	0	0	0	0	0
3	VMLM	3	3	3	3	3	3	0	0	0	0	0	0	0	0
4	VMF0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
5	VMDL	8	8	8	3	3	3	3	3	5	5	5	5	10	10
6	SHOF	1	1	1	1	1	1	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	F1LV	0	0	0	0	0	0	0	0	1	1	0	0	0	0
10	LTLV	0	0	0	0	0	0	0	0	0	0	0	0	1	1
11	LTMD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	CTLV	1	1	1	1	1	1	0	0	0	0	0	0	0	0
13	MIDE	2	2	2	6	6	6	10	10	26	26	18	18	18	18

No.	Name	Standard													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	SYSM	2	2	2	2	3	3	3	3	3	3	3	3	3	2
1	UVML	3	3	3	3	3	3	3	3	2	2	2	2	2	3
2	VMCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	VMLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	VMF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	VMDL	3	3	5	5	5	5	10	10	10	10	10	10	10	5
6	SHOF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	F1LV	0	0	1	1	0	0	0	0	0	0	0	0	0	0
10	LTLV	0	0	0	0	0	0	1	1	0	0	0	0	0	0
11	LTMD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	CTLV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	MIDE	10	10	26	26	18	18	18	18	22	22	22	22	22	26

No.	Name	Hi-Fine													
		RF			CV/YC			Comp							
		480_60I	480_60I	576_50I	480_60I	480_60I	576_50I	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
		NTSC	PAL	PAL	NTSC	PAL	PAL								
0	SYSM	1	1	1	1	1	1	2	2	2	2	3	3	3	3
1	UVML	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	VMCR	0	0	0	2	2	2	0	0	0	0	0	0	0	0
3	VMLM	3	3	3	3	3	3	0	0	0	0	0	0	0	0
4	VMF0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
5	VMDL	8	8	8	3	3	3	3	3	5	5	5	5	10	10
6	SHOF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	F1LV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	LTLV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	LTMD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	CTLV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	MIDE	0	0	0	4	4	4	8	8	24	24	16	16	16	16

No.	Name	Hi-Fine													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	SYSM	2	2	2	2	3	3	3	3	3	3	3	3	3	2
1	UVML	3	3	3	3	3	3	3	3	2	2	2	2	2	3
2	VMCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	VMLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	VMF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	VMDL	3	3	5	5	5	5	10	10	10	10	10	10	10	5
6	SHOF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	F1LV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	LTLV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	LTMD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	CTLV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	MIDE	8	8	24	24	16	16	16	16	20	20	20	20	20	24

No.	Name	Personal													
		RF			CV/YC			Comp							
		480_60I	480_60I	576_50I	480_60I	480_60I	576_50I	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
		NTSC	PAL	PAL	NTSC	PAL	PAL								
0	SYSM	1	1	1	1	1	1	2	2	2	2	3	3	3	3
1	UVML	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	VMCR	0	0	0	2	2	2	0	0	0	0	0	0	0	0
3	VMLM	3	3	3	3	3	3	0	0	0	0	0	0	0	0
4	VMF0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
5	VMDL	8	8	8	3	3	3	3	3	5	5	5	5	10	10
6	SHOF	1	1	1	1	1	1	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	F1LV	0	0	0	0	0	0	0	0	1	1	0	0	0	0
10	LTLV	0	0	0	0	0	0	0	0	0	0	0	0	1	1
11	LTMD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	CTLV	1	1	1	1	1	1	0	0	0	0	0	0	0	0
13	MIDE	2	2	2	6	6	6	10	10	26	26	18	18	18	18

No.	Name	Personal													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie	All Format
0	SYSM	2	2	2	2	3	3	3	3	3	3	3	3	3	2
1	UVML	3	3	3	3	3	3	3	3	2	2	2	2	2	3
2	VMCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	VMLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	VMF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	VMDL	3	3	5	5	5	5	10	10	10	10	10	10	10	5
6	SHOF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	F1LV	0	0	1	1	0	0	0	0	0	0	0	0	0	0
10	LTLV	0	0	0	0	0	0	1	1	0	0	0	0	0	0
11	LTMD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	CTLV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	MIDE	10	10	26	26	18	18	18	18	22	22	22	22	22	26

Standards *2

No.	Name	Dynamic			Standard			Hi-Fine			Personal		
		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
14	VMLV	15	10	15	6	5	10	4	5	5	4	5	10

MIDE

Functionality		Range	Standards
No.	Name		
0	POP	0-63	*1
1	MHLY	0-3	*1
2	MHLC	0-3	*1
3	MVLY	0-3	*1
4	MVLC	0-3	*1
5	MHYR	0-3	*1
6	MHYL	0-3	*1
7	MHYE	0-7	*1
8	MHYO	0-1	*1
9	MHCR	0-3	*1
10	MHCL	0-3	*1
11	MHCE	0-7	*1
12	MHCO	0-1	*1
13	MVYR	0-3	*1
14	MVYL	0-3	*1
15	MVYE	0-7	*1
16	MVCR	0-3	*1
17	MVCL	0-3	*1
18	MVCE	0-7	*1

Standards *1

No.	Name	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	MHLY	3	3	3	3	1	1	1	1	1	1	1	1	0	1	2	1
2	MHLC	3	3	3	3	3	3	3	3	3	3	3	3	0	3	3	3
3	MVLY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	MVLC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	MHYR	0	0	0	1	0	0	0	1	0	0	0	1	1	0	1	1
6	MHYL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	MHYE	2	2	2	7	0	0	2	7	0	0	2	7	4	6	6	6
8	MHYO	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	MHCR	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
10	MHCL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	MHCE	0	2	3	5	0	0	0	5	0	0	0	0	7	7	7	7
12	MHCO	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
13	MVYR	0	0	0	2	1	1	1	2	1	1	1	1	1	1	1	1
14	MVYL	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
15	MVYE	0	0	2	5	0	2	3	5	0	2	3	4	0	0	3	4
16	MVCR	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
17	MVCL	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
18	MVCE	0	0	0	3	0	0	0	3	0	0	0	0	0	0	2	3

No.	Name	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1	MHLY	2	2	2	2	0	0	0	0	1	1	1	1	1	1	1	1
2	MHLC	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3
3	MVLY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	MVLC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	MHYR	0	0	1	1	0	0	0	0	1	1	1	1	1	1	1	1
6	MHYL	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1
7	MHYE	2	2	2	4	0	0	0	0	0	2	4	7	0	0	2	5
8	MHYO	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1
9	MHCR	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1
10	MHCL	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1
11	MHCE	0	2	2	4	0	0	0	0	0	0	2	5	0	0	2	5
12	MHCO	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	MVYR	2	2	0	2	1	1	1	1	1	1	1	2	1	1	1	1
14	MVYL	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
15	MVYE	0	1	2	4	0	0	1	2	0	2	2	4	0	0	0	0
16	MVCR	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1
17	MVCL	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0
18	MVCE	0	0	2	3	0	0	1	2	0	1	2	3	0	0	1	3

No.	Name	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
1	MHLY	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0
2	MHLC	3	3	3	3	0	0	0	0	3	3	0	0	0	0	0	0
3	MVLY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	MVLC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	MHYR	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0
6	MHYL	1	1	2	2	1	1	1	1	1	1	1	1	0	0	0	0
7	MHYE	4	7	2	7	2	4	7	7	2	5	7	7	0	0	0	0
8	MHYO	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0
9	MHCR	0	0	0	0	0	0	1	1	2	2	0	1	0	0	0	0
10	MHCL	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0
11	MHCE	0	0	0	0	0	0	4	4	0	0	4	4	0	0	0	0
12	MHCO	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0
13	MVYR	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0
14	MVYL	0	1	1	1	0	0	1	1	1	1	1	1	0	0	0	0
15	MVYE	0	3	7	5	0	0	4	4	0	3	4	4	0	0	0	0
16	MVCR	0	0	0	0	0	0	1	1	2	2	1	1	0	0	0	0
17	MVCL	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0
18	MVCE	0	0	0	0	0	0	4	4	0	0	4	4	0	0	0	0

No.	Name	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
1	MHLY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	MHLC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MVLY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	MVLC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	MHYR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	MHYL	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
7	MHYE	0	2	4	7	7	0	0	0	0	0	0	0	0	0	0	0
8	MHYO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	MHCR	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
10	MHCL	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
11	MHCE	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0
12	MHCO	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
13	MVYR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	MVYL	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
15	MVYE	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0
16	MVCR	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
17	MVCL	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
18	MVCE	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0

CCPM

Functionality		Range	Standards
No.	Name		
0	REFC	0-3	1
1	YLEV	0-255	*1
2	CLEV	0-255	*1
3	SHUE	0-15	*1
4	SHUO	0-7	3
5	YCDL	0-15	*2
6	FUP2	0-3	*3
7	SHF0	0-1	*3
8	PROV	0-7	*3
9	SHPC	0-3	*3
10	SSHP	0-15	*3
11	CBPF	0-3	*4
12	CBPA	0-3	*4
13	CEQ	0-3	*4
14	SFIL	0-1	*5
15	SSTC	0-1	*5
16	AFCG	0-3	*10
17	AFLG	0-3	*6
18	AFCM	0-1	*6
19	AFLC	0-1	*6
20	AFHC	0-1	*6
21	CDM1	0-3	*6
22	CDM2	0-1	*6
23	CDM3	0-1	*6
24	CLPP	0-63	28
25	BGPS	0-15	*7
26	APED	0-3	*8
27	DCTR	0-3	*8
28	YTRP	0-1	*9
29	CTRP	0-1	*9
30	STUP	0-15	*10
31	VINT	0-15	*10
32	CLAD	0-1	*10
33	SSAD	0-1	*10
34	CLPG	0-3	*10
35	HSSL	0-3	*10
36	VSSL	0-3	*10
37	STTC	0-3	*10
38	VAFC	0-1	*10
39	SLPF	0-1	*11
40	1774	0-15	0
41	NCOM	0-1	*12
42	SDLP	0-1	*13
43	ROM2	0-1	*13
44	VECR	0-1	*14
45	VECL	0-1	*14
46	VECN	0-3	*14
47	VEGA	0-7	*14
48	BPT1	0-255	*15
49	BPT2	0-255	*15
50	KLEV	0-3	*16
51	APCG	0-3	*16
52	BLKM	0-3	1
53	HSPO	0-15	7
54	VBIS	0-31	5
55	ID1W	0-1	1
56	30H	0-255	0
57	3410	0-3	0
58	4CNT	0-1	1
59	SDOF	0-1	0
60	APAT	0-3	2
61	APHL	0-3	2
62	APAR	0-3	1
63	APHY	0-3	0
64	DTTC	0-3	2
65	DTLT	0-3	2
66	E656	0-1	0
67	DCLP	0-1	0
68	MVSW	0-3	*10
69	MVCT	0-15	7

*Available for MS mode only.

Standards *1

[ ] : HR29N90/HR34N90

No.	Name	RF		CV		YC		Comp		MS
		60Hz	50Hz	60Hz	50Hz	50Hz	60Hz	50Hz	60Hz	
1	YLEV	169	171	184	188	187	187	185	185	115
2	CLEV	105	102	102	103	105	105	194	194	113
3	SHUE	0 [10]	7	6	7	6	7	7	7	7

Standards *2

No.	Name	RF			CV		YC		Comp	MS
		NTSC	PAL_DKI	PAL_OTHER	NTSC	PAL	NTSC	PAL		
5	YCDL	8	5	7	8	8	7	7	8	9

Standards *3

( ) : HR34M61, [ ] : HR29N90/HR34N90

No.	Name	Dynamic													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
6	FUP2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	0 [1]	0	0	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3 [7]	3	3	3 [5]	3	3 [7]	7	7	7	7	7	7	7	7
9	SHPC	3	3 [2]	3 [2]	2	2	2	2	2	2	2	2	2	2	2
10	SSHP	6 (8) [5]	6 (8) [10]	6 (8) [10]	9	9	9	10	10	10	10	10	10	10	10

No.	Name	Dynamic												
		RGB								MS				Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie(Hi-Fine)	All Format
6	FUP2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	7	7	7	7	7	7	7	7	3	3	3	3	3	3
9	SHPC	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	SSHP	10	10	10	10	10	10	10	10	10	10	10	10	10	10

No.	Name	Standard													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
6	FUP2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	0 [1]	0	0	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3 [7]	3	3	3 [5]	3	3 [7]	3 [7]	3 [7]	3 [7]	3	3 [7]	3	3 [7]	3
9	SHPC	2 [3]	2	2	2	2	2	2	2	2	2	2	2	0	0
10	SSHP	8 [5]	8	8	7	7	7	8	8	8	8	8	8	7	7

No.	Name	Standard													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie(Hi-Fine)	All Format
6	FUP2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3 [7]	3	3	3	3	3	3	3	3 [7]	3 [7]	3 [7]	3 [7]	3 [7]	3
9	SHPC	2	2	2	2	2	2	0	0	2	2	2	2	2	2
10	SSHP	8	8	8	8	8	8	7	7	8	8	8	8	8	8

No.	Name	Hi-Fine													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
6	FUP2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	0 [1]	0	0	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3 [7]	3	3	3 [5]	3	3 [7]	3 [7]	3 [7]	3 [7]	3	3 [7]	3	3 [7]	3
9	SHPC	2 [3]	2	2	2	2	2	2	2	2	2	2	2	0	0
10	SSHP	7 [5]	7	7	7	7	7	7	7	7	7	7	7	7	7

No.	Name	Hi-Fine													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie(Hi-Fine)	All Format
6	FUP2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3 [7]	3	3	3	3	3	3	3	3 [7]	3 [7]	3 [7]	3 [7]	3 [7]	3
9	SHPC	2	2	2	2	2	2	0	0	2	2	2	2	2	2
10	SSHP	8	8	8	8	8	8	7	7	8	8	8	8	8	8

No.	Name	Personal													
		RF			CV/YC			Comp							
		480_60I NTSC	480_60I PAL	576_50I PAL	480_60I NTSC	480_60I PAL	576_50I PAL	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
6	FUP2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	0 [1]	0	0	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3 [7]	3	3	3 [5]	3	3 [7]	3 [7]	3 [7]	3 [7]	3	3 [7]	3	3 [7]	3
9	SHPC	2 [3]	2	2	2	2	2	2	2	2	2	2	2	0	0
10	SSHP	8 [5]	8	8	7	7	7	8	8	8	8	8	8	7	7

No.	Name	Personal													
		RGB								MS					Twin
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Index	Full	Popup	Player	Movie(Hi-Fine)	All Format
6	FUP2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SHF0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	PROV	3 [7]	3	3	3	3	3	3	3	3 [7]	3 [7]	3 [7]	3 [7]	3 [7]	3
9	SHPC	2	2	2	2	2	2	0	0	2	2	2	2	2	2
10	SSHP	8	8	8	8	8	8	7	7	8	8	8	8	8	8

Standards *4 [ ] : HR29N90/HR34N90

No.	Name	RF NTSC (GR: OFF)	PAL_DKI	PAL_OTHER	CV NTSC	PAL	YC NTSC	PAL
11	CBPF	2	2	2	0	0	0	0
12	CBPA	1 [0]	1	1	0	0	0	0
13	CEQ	1	1	1	0	0	0	0

Standards *5

No.	Name	RF	CV	YC	Comp	Digital
14	SFIL	1	1	1	1	1
15	SSTC	0	0	0	0	0

Standards *6

No.	Name	RF	CV/YC	Other
17	AFLG	0	0	0
18	AFCM	0	0	0
19	AFLC	0	0	0
20	AFHC	0	0	0
21	CDM1	2	2	2
22	CDM2	0	0	0
23	CDM3	0	0	0

Standards *7

No.	Name	RF	VIDEO1	VIDEO2	VIDEO3	VIDEO4/Other
25	BGPS	10	9	9	9	9

Standards *8

No.	Name	Single	Black0	Black1	Black2	Black3	Black4	Black5	Black6	Black7
26	APED	0	0	0	0	0	0	0	0	0
27	DCTR	0	0	0	0	0	0	0	0	0

Standards *9

No.	Name	SD	Other
28	YTRP	1	0
29	CTRP	1	0

Standards *10 [ ] : HR29N90/HR34N90

No.	Name	RF	CV/YC	Other							
				480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
16	AFCG	1	0	1	1	1	1	1	1	1	1
30	STUP	0 [8]	0 [8]	0	0	0	0	0	0	0	0
31	VINT	7	7	7	7	7	7	7	7	3	3
32	CLAD	0	0	0	0	0	0	0	0	0	0
33	SSAD	0	0	0	0	0	0	1	1	1	1
34	CLPG	2	2	2	2	2	2	2	2	2	2
35	HSSL	3	3	3	3	3	3	3	3	3	3
36	VSSL	2	2	2	2	2	2	3	3	3	3
37	STTC	2	2	2	2	2	2	2	2	2	2
38	VAFC	1	1	1	1	1	1	1	1	1	1
68	MVSW	2	2	2	2	2	2	2	2	2	2

Standards *11

No.	Name	RF	CV	YC/Other
39	SLPF	0	0	0

Standards *12

No.	Name	60Hz			50Hz		
		RF	BS/CV/YC	Other	RF	CV/YC	Other
41	NCOM	0	0	0	0	0	0

Standards *13

No.	Name	SD	Other
42	SDLP	1	0
43	ROM2	0	0

Standards *14

No.	Name	Dynamic				Standard			
		60Hz		50Hz		60Hz		50Hz	
		RF	Other	RF	Other	RF	Other	RF	Other
44	VECR	0	0	0	0	0	0	0	0
45	VECL	0	0	0	0	0	0	0	0
46	VECN	2	2	2	2	2	2	2	2
47	VEGA	0	0	0	0	0	0	0	0

No.	Name	Hi-Fine				Personal			
		60Hz		50Hz		60Hz		50Hz	
		RF	Other	RF	Other	RF	Other	RF	Other
44	VECR	0	0	0	0	0	0	0	0
45	VECL	0	0	0	0	0	0	0	0
46	VECN	2	2	2	2	2	2	2	2
47	VEGA	0	0	0	0	0	0	0	0

Standards *15

No.	Name	RF	Other	
48	BPT1	40	40	Only At Auto Color System Mode
49	BPT2	30	30	Only At Auto Color System Mode

Standards *16

No.	Name	RF	CV	YC/Other
50	KLEV	2	2	2
51	APCG	0	0	0

COMB

Functionality		Range	Standards
No.	Name		
0	NSS	0-31	*1
1	TESS	0-7	0
2	NSC	0-31	*1
3	NSV	0-1	*1
4	SCTP	0-3	*1
5	CYBP	0-3	*1
6	Y2BP	0-3	*1
7	C2LE	0-3	*1
8	DTCN	0-3	*1
9	VEDL	0-7	*1
10	HP	0-7	*1
11	PNR	0-1	*1
12	NCDT	0-1	*1
13	MC1	0-15	*1
14	MC2	0-15	*1
15	CR1	0-3	*1
16	CR2	0-15	*1
17	CR3	0-3	*1
18	CR4	0-3	*1
19	CCR	0-3	*1
20	CHED	0-3	*1
21	CVED	0-3	*1
22	CR5	0-7	*1
23	YFLT	0-7	*1
24	C3LE	0-3	*1
25	YMFH	0-15	*1
26	YMFV	0-7	*1
27	F2SW	0-1	*1
28	MO1	0-15	*1
29	MO2	0-7	*1
30	MNNR	0-1	*1
31	DTH	0-7	*1
32	DTV	0-7	*1
33	DT2D	0-3	*1
34	DTHP	0-7	*1
35	DTCR	0-7	*1
36	D2FC	0-3	*1
37	D2F	0-15	*1
38	D2F2	0-3	*1
39	D2FL	0-3	*1
40	DC	0-3	*1
41	CVFL	0-7	*1
42	H2DD	0-3	*1
43	HC2F	0-1	*1
44	THRU	0-1	0
45	MCH	0-31	*1
46	MCV	0-3	*1
47	PEDS	0-1	*1
48	MMK	0-7	*1
49	MKAM	0-1	*1
50	GHLT	0-1	*1
51	TESL	0-7	0
52	MNSW	0-1	*1
53	MDYB	0-3	*1
54	LCBP	0-7	*1
55	BPSE	0-1	*1
56	CR2H	0-1	*1
57	IMPR	0-3	*1
58	IMPS	0-1	*1
59	IMPL	0-1	*1
60	PLPL	0-3	*1
61	MDYE	0-3	*1
62	PLCL	0-1	*1
63	BPL2	0-7	*1
64	HPL	0-7	*1
65	CVFP	0-1	*1
66	STDH	0-3	*1
67	SHH	0-3	*1
68	BPOF	0-1	*1
69	C1L	0-1	*1
70	BPL3	0-7	*1
71	D2F3	0-7	*1
72	LPSW	0-1	*1
73	LCR	0-1	*1
74	F2CR	0-1	*1
75	YIR	0-1	*1
76	MOMO	0-1	*1
77	CYV	0-1	*1
78	PAL3	0-1	*1

Standards *1 ( ) : HR29M61

No.	Name	NTSC		PAL	
		Standard	NonStandard	Standard	NonStandard
0	NSS	8	8	8	8
2	NSC	15	15	15	15
3	NSV	1	1	1	1
4	SCTP	0	2	0	0
5	CYBP	0	1	0 (1)	1
6	Y2BP	0	1	0	1
7	C2LE	1	0	1	0
8	DTCN	1	0	1	0
9	VEDL	3	3	3	3
10	HP	2	2	2	2
11	PNR	0	0	0	0
12	NCDT	0	0	0	0
13	MC1	4	4	15	15
14	MC2	3	3	15	15
15	CR1	1	1	1	1
16	CR2	1	1	1	1
17	CR3	0	0	0	0
18	CR4	1	1	1	1
19	CCR	2	2	2	2
20	CHED	2	2	2	2
21	CVED	3	3	2	2
22	CR5	4	3	0	0
23	YFLT	4	4	4	4
24	C3LE	1	1	1	1
25	YMFH	3	3	3	3
26	YMFV	1	1	1	1
27	F2SW	0	0	0	0
28	MO1	15	15	6	6
29	MO2	3	3	3	3
30	MNNR	1	1	1	1
31	DTH	2	2	2	2
32	DTV	2	2	2	2
33	DT2D	2	2	2	2
34	DTHP	3	3	2	2
35	DTCR	4	4	4	4
36	D2FC	3	3	3	3
37	D2F	9	9	8	8
38	D2F2	1	1	1	1
39	D2FL	0	0	0	0
40	DC	0	0	0	0
41	CVFL	3	0	3	0
42	H2DD	0	0	1	1
43	HC2F	1	1	1	1
45	MCH	15	15	22	22
46	MCV	1	1	0	0
47	PEDS	0	0	0	0
48	MMK	7	7	7	7
49	MKAM	0	0	0	0
50	GHLT	0	0	0	0
52	MNSW	0	0	0	0
53	MDYB	0	0	0	0
54	LCBP	2	2	2	2
55	BPSE	1	1	1	1
56	CR2H	0	0	0	0
57	IMPR	3	3	3	3
58	IMPS	1	1	1	1
59	IMPL	0	0	0	0
60	PLPL	1	1	1	1
61	MDYE	3	3	3	3
62	PLCL	1	1	1	1
63	BPL2	1	1	1	1
64	HPL	1	1	1	1
65	CVFP	0	0	0	0
66	STDH	2	2	1	1
67	SHH	1	1	1	1
68	BPOF	1	1	0	0
69	C1L	1	1	1	1
70	BPL3	7	7	7	7
71	D2F3	2	2	2	2
72	LPSW	1	1	1	1
73	LCR	1	1	1	1
74	F2CR	1	1	1	1
75	YIR	1	1	1	1
76	MOMO	0	0	0	0
77	CYV	0	0	0	0
78	PAL3	1	1	1	1

YCTM(CXA2163)

Functionality		Range	Standards
No.	Name		
0	YLEV	0-63	21
1	CLEV	0-63	13
2	SCON	0-15	*1
3	SCOL	0-15	*1
4	YDLY	0-15	*1
5	SHAP	0-15	*1
6	SHF0	0-3	2
7	PREO	0-3	3
8	BPF0	0-3	1
9	BPFQ	0-3	2
10	FLSW	0-1	1
11	CBOF	0-15	9
12	CROF	0-15	9
13	SR-Y	0-15	7
14	SB-Y	0-15	7

Standards *1

No.	Name	RF	Other
2	SCON	7	7
3	SCOL	7	7
4	YDLY	5	5
5	SHAP	6	6

YCTS(CXA2163)

Functionality		Range	Standards
No.	Name		
0	YLEV	0-63	43
1	CLEV	0-63	29
2	SCON	0-15	*1
3	SCOL	0-15	*1
4	SHUE	0-63	*1
5	YDLY	0-15	*2
6	SHAP	0-15	*1
7	SHF0	0-3	2
8	PREO	0-3	3
9	BPF0	0-3	1
10	BPFQ	0-3	2
11	FLSW	0-1	1
12	CBOF	0-15	9
13	CROF	0-15	7
14	SR-Y	0-15	7
15	SB-Y	0-15	7
16	PNGW	0-1	1
17	PNIS	0-1	0
18	NCOM	0-1	1
19	ATPD	0-3	*3
20	DCTR	0-3	*3

Standards *1

No.	Name	60Hz		50Hz	
		RF	Other	RF	Other
2	SCON	8	7	8	7
3	SCOL	5	7	6	6
4	SHUE	36	32	31	31
6	SHAP	7	7	7	7

Standards *2

No.	Name	RF			CV		YC	
		NTSC	PAL_DKI	AL_OTHE	NTSC	PAL	NTSC	PAL
5	YDLY	3	6	3	3	3	5	5

Standards *3

No.	Name	Single	Black0	Black1	Black2	Black3	Black4	Black5	Black6	Black7
19	ATPD	0	0	0	0	0	0	0	0	0
20	DCTR	0	0	0	0	0	0	0	0	0

YCTC(CXA2163)

Functionality		Range	Standards
No.	Name		
0	SDTS	0-1	1
1	BELS	0-3	2
2	BLF0	0-1	0
3	SVID	0-1	0
4	SGPP	0-3	0
5	SIDS	0-1	1
6	CDMD	0-3	0
7	AFCG	0-3	0
8	MVM	0-1	0

MCP

Functionality		Range	Standards
No.	Name		
0	TCOF	0-1	0
1	PON	0-1	1
2	RON	0-1	1
3	GON	0-1	1
4	BON	0-1	1
5	AKBO	0-1	0
6	RGBL	0-3	2
7	YLMT	0-3	0
8	BLKB	0-3	1
9	YOF	0-15	*1
10	CBOF	0-63	*1
11	CROF	0-63	*1
12	SPIC	0-15	*1
13	SCOL	0-63	*1
14	SHUE	0-63	*1
15	ABLT	0-15	*2

Standards *1
HR29M61/HR29N90

No.	Name	DRC		Analog			RGB				MS	Twin
		RF/CV/YC	Comp-480i	480p/576p	720p	1080i	DRC	480p	720p	1080i		
9	YOF	7	7	7	7	7	7	7	7	7	7	7
10	CBOF	31	31	30	31	31	31	35	31	30	31	31
11	CROF	31	31	30	31	31	31	33	35	35	31	31
12	SPIC	8	5	5	10	10	9	9	12	12	8	8
13	SCOL	31	31	31	31	31	31	31	31	31	33	31
14	SHUE	31	31	31	31	31	31	31	31	31	31	31

Standards *2
HR29M61/HR29N90

No.	Name	Other	Small Pic (Normal)
15	ABLT	0	7

Standards *1
HR34M61/HR34N90

No.	Name	DRC		Analog			RGB				MS	Twin
		RF/CV/YC	Comp-480i	480p/576p	720p	1080i	DRC	480p	720p	1080i		
9	YOF	7	7	7	7	7	7	7	7	7	7	7
10	CBOF	29	29	28	29	28	28	40	28	27	28	28
11	CROF	29	29	28	29	28	28	32	34	38	31	28
12	SPIC	8	5	5	10	10	9	9	12	12	8	8
13	SCOL	31	31	31	31	31	31	31	31	31	33	31
14	SHUE	31	31	31	31	31	31	31	31	31	31	31

Standards *2
HR34M61/HR34N90

No.	Name	Other	Small Pic (Normal)
15	ABLT	0	6

DEF1

Functionality		Range	Standards
No.	Name		
0	VPOS	0-63	24
1	VSIZ	0-63	31
2	VLIN	0-15	8
3	VSCO	0-15	*1
4	VCEN	0-63	31
5	VPIN	0-31	*2
6	NSCO	0-63	31
7	HTPZ	0-31	15
8	ZOOM	0-1	*3
9	APSW	0-1	*4
10	ASPT	0-63	*5
11	SCRL	0-63	*5
12	UVLN	0-15	*6
13	LVLN	0-15	*6
14	VPSO	0-15	*7

Standards *1

No.	WideZoom	Other
3 VSCO	11	8

Standards *2

No.	Vcomp	Other
5 VPIN	15	15

Standards *3

No.	Zoom WideZoom	Other
8 ZOOM	1	0

Standards *4

No.	HD		SD
	50Hz	60Hz	
9 APSW	1	0	1

Standards *5
HR29M61/HR29N90

No.	Full						VComp/Normal					
	50Hz		60Hz		100Hz	120Hz	50Hz		60Hz		100Hz	120Hz
	SD	HD	SD	HD	SD	SD	SD	HD	SD	HD	SD	SD
10 ASPT	47	47	47	47	45	45	46	60	46	47	44	43
11 SCRL	31	31	31	31	36	35	35	35	32	32	36	34

No.	WideZoom				Zoom			
	50Hz	60Hz	100Hz	120Hz	50Hz	60Hz	100Hz	120Hz
	SD	SD	SD	SD	SD	SD	SD	SD
10 ASPT	22	22	22	22	43	43	43	43
11 SCRL	31	31	31	31	31	31	31	31

Standards *5
HR34M61/HR34N90 [ ] : HR34N90

No.	Full						VComp/Normal					
	50Hz		60Hz		100Hz	120Hz	50Hz		60Hz		100Hz	120Hz
	SD	HD	SD	HD	SD	SD	SD	HD	SD	HD	SD	SD
10 ASPT	47	47	47	47	45	45	45	58 [68]	45	45	42	42
11 SCRL	31	31	31	31	36	35	34	35	31	31	36	34

No.	WideZoom				Zoom			
	50Hz	60Hz	100Hz	120Hz	50Hz	60Hz	100Hz	120Hz
	SD	SD	SD	SD	SD	SD	SD	SD
10 ASPT	22	22	22	22	43	43	43	43
11 SCRL	31	31	31	31	31	31	31	31

Standards *6

No.	WideZoom	Other
12 UVLN	4	0
13 LVLN	4	0

Standards *7

No.	50Hz	60Hz	100Hz	120Hz
14 VPSO	7	6	10	12

DEF2

HR29M61/HR29N90

Functionality		Range	Standards
No.	Name		
0	HCNT	0-63	31
1	HPOS	0-63	*1
2	HSIZ	0-63	*2
3	SLIN	0-15	*2
4	MPIN	0-15	*2
5	PIN	0-63	*2
6	UCP	0-63	*2
7	LCP	0-63	*2
8	PPHA	0-63	*3
9	VANG	0-63	31
10	LANG	0-63	31
11	VBOW	0-63	31
12	LBOW	0-63	31
13	UXCG	0-3	2
14	LXCG	0-3	2
15	UXCP	0-3	3
16	LXCP	0-3	2
17	XCPP	0-1	0
18	PPHO	0-15	*4
19	PINO	-4/+3	*5
20	UCPO	-4/+3	*5
21	LCPO	-4/+3	*5
22	VAOC	0-7	4
23	HIHS	0-31	*6
24	HISL	0-7	*6
25	HIMP	0-15	*6
26	HIPN	0-15	*6

HR34M61/HR34N90

Functionality		Range	Standards
No.	Name		
0	HCNT	0-63	31
1	HPOS	0-63	*1
2	HSIZ	0-63	*2
3	SLIN	0-15	*2
4	MPIN	0-15	*2
5	PIN	0-63	*2
6	UCP	0-63	*2
7	LCP	0-63	*2
8	PPHA	0-63	*3
9	VANG	0-63	31
10	LANG	0-63	31
11	VBOW	0-63	31
12	LBOW	0-63	31
13	UXCG	0-3	0
14	LXCG	0-3	0
15	UXCP	0-3	0
16	LXCP	0-3	0
17	XCPP	0-1	0
18	PPHO	0-15	*4
19	PINO	-4/+3	*5
20	UCPO	-4/+3	*5
21	LCPO	-4/+3	*5
22	VAOC	0-7	4
23	HIHS	0-31	*6
24	HISL	0-7	*6
25	HIMP	0-15	*6
26	HIPN	0-15	*6

Standards *1

No.	HD	SD
1 HPOS	24	26

Standards *2

HR29M61/HR29N90

No.	WideZoom	Other
2 HSIZ	49	31
3 SLIN	13	5
4 MPIN	15	10
5 PIN	40	31
6 UCP	31	35
7 LCP	31	35

HR34M61/HR34N90

No.	WideZoom	Other
2 HSIZ	49	31
3 SLIN	13	9
4 MPIN	15	6
5 PIN	40	31
6 UCP	31	35
7 LCP	31	35

Standards *3

No.	Zoom WideZoom	Other
8 PPHA	20	20

Standards *4

HR29M61/HR29N90

No.	50Hz	60Hz	100Hz	120Hz
18 PPHO	8	5	8	11

HR34M61

No.	50Hz	60Hz	100Hz	120Hz
18 PPHO	8	5	10	11

HR34N90

No.	50Hz	60Hz	100Hz	120Hz
18 PPHO	8	4	10	11

Standards *5

HR29M61/HR29N90

No.	60Hz		100Hz		120 Hz	
	WideZoom	Other	WideZoom	Other	WideZoom	Other
19 PINO	0	0	0	0	0	0
20 UCPO	0	0	0	-1	0	-1
21 LCPO	0	0	0	0	0	0

HR34M61/HR34N90

No.	60Hz		100Hz		120 Hz	
	WideZoom	Other	WideZoom	Other	WideZoom	Other
19 PINO	0	0	0	1	0	0
20 UCPO	0	0	0	0	0	-1
21 LCPO	0	0	0	0	0	0

Standards *6

HR29M61/HR29N90

No.	WideZoom/ VComp	Other
23 HIHS	3	3
24 HISL	3	3
25 HIMP	5	5
26 HIPN	3	3

HR34M61/HR34N90

No.	WideZoom/ VComp	Other
23 HIHS	1	1
24 HISL	2	2
25 HIMP	4	4
26 HIPN	0	0

DEF3

Functionality		Range	Standards
No.	Name		
0	HBLK	0-1	1
1	LBLK	0-63	*1
2	RBLK	0-63	*1
3	VBLK	0-1	*2
4	TBLK	0-15	*3
5	BBLK	0-15	*3
6	AFCM	0-3	3
7	JUMP	0-1	*4
8	VDJP	0-1	*5
9	AKBT	0-31	*3

Standards *1

No.	HD	SD
1 LBLK	54	54
2 RBLK	30	28

Standards *2

No.	Zoom WideZoom	Other
3 VBLK	0	1

Standards *3

HR29M61/HR29N90

No.	Full						4:3VComp/Normal					
	50Hz		60Hz		100Hz	120Hz	50Hz		60Hz		100Hz	120Hz
	SD	HD	SD	HD	SD	SD	SD	HD	SD	HD	SD	SD
4 TBLK	7	4	1	9	15	12	15	10	9	9	15	15
5 BBLK	13	6	8	14	9	4	15	14	15	14	15	11
9 AKBT	18	16	18	16	20	18	31	16	18	16	30	23

No.	WideZoom				Zoom			
	50Hz	60Hz	100Hz	120Hz	50Hz	60Hz	100Hz	120Hz
	SD	SD	SD	SD	SD	SD	SD	SD
4 TBLK	12	12	12	12	7	7	7	7
5 BBLK	15	15	15	15	7	7	7	7
9 AKBT	15	15	15	15	15	15	15	15

HR34M61/HR34N90

No.	Full						4:3VComp/Normal					
	50Hz		60Hz		100Hz	120Hz	50Hz		60Hz		100Hz	120Hz
	SD	HD	SD	HD	SD	SD	SD	HD	SD	HD	SD	SD
4 TBLK	7	4	2	9	15	15	15	10	9	9	15	15
5 BBLK	13	6	9	14	9	5	15	14	15	14	15	11
9 AKBT	18	16	18	16	20	18	31	16	18	16	30	23

No.	WideZoom				Zoom			
	50Hz	60Hz	100Hz	120Hz	50Hz	60Hz	100Hz	120Hz
	SD	SD	SD	SD	SD	SD	SD	SD
4 TBLK	12	12	12	12	7	7	7	7
5 BBLK	15	15	15	15	7	7	7	7
9 AKBT	15	15	15	15	15	15	15	15

Standards *4

No.	Vcomp/Norm	Other
7 JUMP	1	0

Standards *5

No.	Zoom	HD	Other
	WideZoom		
8 VDJP	1	1	0

DEF4

Functionality		Range	Standards
No.	Name		
0	QPDC	0-63	*1
1	QPDV	0-63	*1
2	QPDP	0-15	*1
3	QPAM	0-63	*1
4	QPAV	0-63	*1
5	QPAP	0-15	*1
6	COPY	0-3	0

Standards *1

HR29M61/HR29N90

No.	Vcomp/Norm	Other
0 QPDC	30	30
1 QPDV	50	50
2 QPDP	7	7
3 QPAM	38	38
4 QPAV	50	50
5 QPAP	6	6

HR34M61

No.	Vcomp/Norm	Other
0 QPDC	35	35
1 QPDV	48	48
2 QPDP	6	6
3 QPAM	36	36
4 QPAV	40	40
5 QPAP	6	6

HR34N90

No.	Vcomp/Norm	Other
0 QPDC	40	40
1 QPDV	48	48
2 QPDP	6	6
3 QPAM	31	31
4 QPAV	40	40
5 QPAP	6	6

DEF5

Functionality		Range	Standards
No.	Name		
0	VON	0-1	1
1	EWDC	0-1	0
2	AGCS	0-1	0
3	ACMP	0-7	0

MID1

Functionality		Range	Standards
No.	Name		
0	DYCD	0-15	*1
1	DYSD	0-7	*2
2	MDVP	0-15	*3

Standards *1

No.	Single	Other
0 DYCD	2	2

Standards *2 [ ] : HR29N90/HR34N90

No.	Single(Norm)	Twin/Freeze	MS	Index
1 DYSD	1	1 [2]	1	0

Standards *3

No.	Vcomp				Other			
	50Hz	60Hz	100Hz	120Hz	50Hz	60Hz	100Hz	120Hz
2 MDVP	12	0	15	15	0	0	15	15

MID2

Functionality		Range	Standards
No.	Name		
0	BCOL	0-15	*1
1	MSYS	0-1	1

Standards *1

No.	Single(Normal)	TWIN	Freeze	Index	Favorite/PAP	MS
0 BCOL	0	4	1	4	4	6

MID3

Functionality		Range	Standards
No.	Name		
0	MHPH	-8/+7	*1
1	SHPH	-8/+7	*2

Standards *1

No.	RF		CV		YC		Comp								
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Other
0 MHPH	5	-1	5	-1	5	-1	3	3	2	2	2	0	0	1	0

No.	RGB									MS
	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Other	
0 MHPH	7	7	-8	-8	0	0	0	0	0	0

Standards *2

No.	RF		CV		YC	
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
1 SHPH	4	6	4	6	4	6

VSW

Functionality		Range	Standards
No.	Name		
0	VTC	0-3	1
1	HSEP	0-1	1

CRNR

Functionality		Range	Standards
No.	Name		
0	YNR	0-15	*1
1	CNR	0-15	*1

Standards *1

No.	Name	RF	CV	YC	Comp	MS
0	YNR	0	0	0	0	0
1	CNR	0	0	0	0	0

RNR

Functionality		Range	Standards
No.	Name		
0	NYLP	0-1	*1
1	NYG	0-3	*1
2	NYPH	0-31	*1
3	NYLM	0-15	*1
4	NCLP	0-1	*1
5	NCG	0-3	*1
6	NCPH	0-31	*1
7	NCLM	0-15	*1

Standards *1

No.	Name	RNR=OFF											
		RF		CV/YC		Component							
		50Hz	60Hz	50Hz	60Hz	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	NYLP	0	0	0	0	0	0	0	0	0	0	0	0
1	NYG	0	0	0	0	0	0	0	0	0	0	0	0
2	NYPH	0	0	0	0	0	0	0	0	0	0	0	0
3	NYLM	0	0	0	0	0	0	0	0	0	0	0	0
4	NCLP	0	0	0	0	0	0	0	0	0	0	0	0
5	NCG	0	0	0	0	0	0	0	0	0	0	0	0
6	NCPH	0	0	0	0	0	0	0	0	0	0	0	0
7	NCLM	0	0	0	0	0	0	0	0	0	0	0	0

No.	Name	RNR=HIGH											
		RF		CV/YC		Component							
		50Hz	60Hz	50Hz	60Hz	480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I
0	NYLP	0	0	0	0	0	0	0	0	0	0	0	0
1	NYG	1	3	1	3	3	1	3	1	1	1	1	1
2	NYPH	13	5	13	5	5	13	5	13	13	13	13	13
3	NYLM	10	2	10	2	2	10	2	10	10	10	10	10
4	NCLP	0	1	0	1	1	0	1	0	0	0	0	0
5	NCG	1	1	1	1	1	1	1	1	1	1	1	1
6	NCPH	13	3	13	3	3	13	3	13	13	13	13	13
7	NCLM	10	2	10	2	2	10	2	10	10	10	10	10

No.	Name	RNR=OFF									
		RGB									MS
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Other	
0	NYLP	0	0	0	0	0	0	0	0	0	0
1	NYG	0	0	0	0	0	0	0	0	0	0
2	NYPH	0	0	0	0	0	0	0	0	0	0
3	NYLM	0	0	0	0	0	0	0	0	0	0
4	NCLP	0	0	0	0	0	0	0	0	0	0
5	NCG	0	0	0	0	0	0	0	0	0	0
6	NCPH	0	0	0	0	0	0	0	0	0	0
7	NCLM	0	0	0	0	0	0	0	0	0	0

No.	Name	RNR=HIGH									
		RGB									MS
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Other	
0	NYLP	0	0	0	0	0	0	0	0	0	0
1	NYG	3	1	3	1	1	1	1	1	0	0
2	NYPH	5	13	5	13	13	13	13	13	0	0
3	NYLM	2	10	2	10	10	10	10	10	0	0
4	NCLP	1	0	1	0	0	0	0	0	0	0
5	NCG	1	1	1	1	1	1	1	1	0	0
6	NCPH	3	13	3	13	13	13	13	13	0	0
7	NCLM	2	10	2	10	10	10	10	10	0	0

BNR

Functionality		Range	Standards
No.	Name		
0	EDL	0-7	*1
1	LFL	0-7	*1
2	DCT	0-7	*1
3	BLEV	0-7	*1
4	DNE	0-1	*1

Standards *1

No.	Name	BNR:OFF									
		RF/CV/YC/Comp/RGB									MS
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Other	
0	EDL	0	0	0	0	0	0	0	0	0	0
1	LFL	0	0	0	0	0	0	0	0	0	0
2	DCT	0	0	0	0	0	0	0	0	0	0
3	BLEV	0	0	0	0	0	0	0	0	0	0
4	DNE	0	0	0	0	0	0	0	0	0	0

NoiseReducer BnrFormatInputPack 2Byte

No.	Name	BNR:HIGH									
		RF/CV/YC/Comp/RGB									MS
		480_60I	576_50I	480_60P	576_50P	720_60P	720_50P	1080_60I	1080_50I	Other	
0	EDL	2	2	2	2	2	2	2	2	2	2
1	LFL	2	2	2	2	2	2	2	2	2	2
2	DCT	2	2	2	2	2	2	2	2	2	2
3	BLEV	7	7	7	7	7	7	7	7	7	7
4	DNE	1	1	1	1	1	1	1	1	1	1

SNNR

Functionality		Range	Standards
No.	Name		
0	MODE	0-3	0
1	SNNR	0-7	0
2	HYST	0-15	7
3	WSLT	0-255	*1
4	SSSN	0-15	*2
5	F2SN	0-3	*2
6	SCSN	0-3	*2
7	VGSN	0-7	*2
8	YNSN	0-15	*2
9	CNSN	0-15	*2
10	PYSN	0-31	*2
11	LYSN	0-15	*2
12	PCSN	0-31	*2
13	LCSN	0-15	*2
14	7SHP	0-63	*2
15	7YF1	0-3	*2
16	7LTI	0-3	*2
17	7CTI	0-3	*2
18	7VML	0-15	*2
19	7VMC	0-3	*2
20	MIDD	0-63	*2
21	CCLV	0-15	*2
22	CCBP	0-1	*2
23	PCR4	0-1	*2
24	PYMH	0-7	*2
25	PYMV	0-7	*2
26	PMO1	0-7	*2
27	PMO2	0-7	*2
28	PDF2	0-7	*2
29	PF2D	0-1	*2
30	SACG	0-3	*2
31	SALG	0-3	*2

Standards *1

No.	Name	A	B	C	D	E	F	G
3	WSLT	5	20	45	63	85	110	127

Standards *2

No.	Name	0	1	2	3	4	5	6	7
4	SSSN	0	1	2	2	2	2	2	3
5	F2SN	0	0	0	0	0	0	0	0
6	SCSN	0	0	1	1	1	1	1	1
7	VGSN	0	1	1	1	1	1	1	1
8	YNSN	0	2	3	4	5	6	7	8
9	CNSN	0	2	3	4	5	6	7	8
10	PYSN	0	0	0	0	0	0	0	0
11	LYSN	0	0	0	0	0	0	0	0
12	PCSN	0	0	0	0	0	0	0	0
13	LCSN	0	0	0	0	0	0	0	0
14	7SHP	0	0	1	1	3	3	3	4
15	7YF1	0	0	1	1	2	2	2	3
16	7LTI	0	0	1	1	2	2	3	3
17	7CTI	0	0	1	1	2	2	3	3
18	7VML	0	3	5	7	9	11	13	15
19	7VMC	0	0	1	1	2	2	2	3
20	MIDD	0	0	1	1	2	2	2	3
21	CCLV	0	3	5	7	9	11	13	15
22	CCBP	0	0	0	0	0	0	0	0
23	PCR4	0	0	0	0	0	0	0	0
24	PYMH	0	0	0	0	0	0	0	0
25	PYMV	0	0	0	0	0	0	0	0
26	PMO1	0	0	0	0	0	0	0	0
27	PMO2	0	0	0	0	0	0	0	0
28	PDF2	0	0	0	0	0	0	0	0
29	PF2D	0	0	0	0	0	0	0	0
30	SACG	0	0	0	0	1	2	2	2
31	SALG	0	0	0	0	1	1	1	1

AWID

Functionality		Range	Standards
No.	Name		
0	AWOF	0-1	1
1	FRWD	0-3	2
2	FRTI	0-3	2
3	LPFL	0-1	0
4	UPAR	0-1	0
5	UPTH	0-1	0
6	X149	0-1	0
7	DMST	0-1	0
8	UPRL	0-1	0
9	OFSL	0-1	0
10	SLOF	0-1	0
11	FR43	0-3	2
12	REFP	0-15	5
13	REFM	0-15	1

DDEV

Functionality		Range	Standards	Remarks
No.	Name			
0	ASPT	0-1	1	
1	OVSR	0-31	18	
2	DTYP	0-7	0	
3	DFID	0-15	0	
4	ALTD	0-7	*1	Highland Value
5	HICM	0-1	*1	Highland SW
6	ALMX	0-7	4	

Standards *1

Item		Except Highland & Iran	Highland & Iran
4	ALTD	0	4
5	HICM	0	1

SFC

HR29M61

Functionality		Range	Standards
No.	Name		
0	COPC	0-1	0
1	COPL	0-1	0
2	TESW	0-1	1
3	ENSW	0-1	1
4	NSSW	0-1	1
5	EWSW	0-1	1
6	LTEU	-128/+127	-40
7	LTEC	-128/+127	-34
8	LTED	-128/+127	-37
9	RTEU	-128/+127	31
10	RTEC	-128/+127	20
11	RTED	-128/+127	32
12	NSTE	-128/+127	-41
13	LENU	-128/+127	-43
14	LENC	-128/+127	-53
15	LEND	-128/+127	-47
16	RENU	-128/+127	43
17	RENC	-128/+127	42
18	REND	-128/+127	37
19	NSEN	-128/+127	-25
20	LNSU	-128/+127	-4
21	LNSC	-128/+127	0
22	LNSD	-128/+127	4
23	RNSU	-128/+127	-4
24	RNSC	-128/+127	0
25	RNSD	-128/+127	4
26	NSNS	-128/+127	69
27	LEWU	-128/+127	-18
28	LEWC	-128/+127	0
29	LEWD	-128/+127	18
30	REWU	-128/+127	18
31	REWC	-128/+127	0
32	REWD	-128/+127	-18
33	APEN	0-255	64
34	TECT	0-255	64
35	ENCT	0-255	66
36	NSCT	0-255	64
37	EWCT	0-255	64
38	HPOS	0-10	5
39	VPOS	0-255	15
40	VOSI	0-255	*1
41	RVOS	0-255	*1
42	VSEI	0-255	*1
43	RVSE	0-255	*1
44	VINT	0-255	*1
45	RVIN	0-255	*1
46	ODP	0-255	9
47	ODVM	0-255	69
48	ODHH	0-255	7
49	HPHL	0-255	30
50	HOS	0-255	40
51	HSEI	0-255	93
52	HINT	0-255	93
53	HLIN	0-255	56
54	LDCV	0-255	13
55	VCOM	0-255	20
56	TESL	0-255	63
57	PWMA	0-255	255
58	HCMX	0-255	32
59	VCMX	0-255	32
60	LCMX	0-255	64
61	LAMX	0-255	64
62	NSMX	0-255	64
63	UPMX	0-15	3
64	HSLV	0-31	31

HR29N90

Functionality		Range	Standards
No.	Name		
0	COPC	0-1	0
1	COPL	0-1	0
2	TESW	0-1	1
3	ENSW	0-1	1
4	NSSW	0-1	1
5	EWSW	0-1	1
6	LTEU	-128/+127	-23
7	LTEC	-128/+127	-13
8	LTED	-128/+127	-31
9	RTEU	-128/+127	31
10	RTEC	-128/+127	16
11	RTED	-128/+127	23
12	NSTE	-128/+127	-18
13	LENU	-128/+127	-43
14	LENC	-128/+127	-65
15	LEND	-128/+127	-50
16	RENU	-128/+127	50
17	RENC	-128/+127	62
18	REND	-128/+127	38
19	NSEN	-128/+127	-21
20	LNSU	-128/+127	-11
21	LNSC	-128/+127	0
22	LNSD	-128/+127	11
23	RNSU	-128/+127	-11
24	RNSC	-128/+127	0
25	RNSD	-128/+127	11
26	NSNS	-128/+127	118
27	LEWU	-128/+127	-26
28	LEWC	-128/+127	0
29	LEWD	-128/+127	26
30	REWU	-128/+127	26
31	REWC	-128/+127	0
32	REWD	-128/+127	-26
33	APEN	0-255	64
34	TECT	0-255	64
35	ENCT	0-255	66
36	NSCT	0-255	64
37	EWCT	0-255	64
38	HPOS	0-10	5
39	VPOS	0-255	15
40	VOSI	0-255	*1
41	RVOS	0-255	*1
42	VSEI	0-255	*1
43	RVSE	0-255	*1
44	VINT	0-255	*1
45	RVIN	0-255	*1
46	ODP	0-255	8
47	ODVM	0-255	109
48	ODHH	0-255	166
49	HPHL	0-255	246
50	HOS	0-255	40
51	HSEI	0-255	93
52	HINT	0-255	93
53	HLIN	0-255	56
54	LDCV	0-255	13
55	VCOM	0-255	20
56	TESL	0-255	33
57	PWMA	0-250	0
58	HCMX	0-255	32
59	VCMX	0-255	32
60	LCMX	0-255	64
61	LAMX	0-255	64
62	NSMX	0-255	64
63	UPMX	0-15	3
64	HSLV	0-31	27

HR34M61

Functionality		Range	Standards
No.	Name		
0	COPC	0-1	0
1	COPL	0-1	0
2	TESW	0-1	1
3	ENSW	0-1	1
4	NSSW	0-1	1
5	EWSW	0-1	1
6	LTEU	-128/+127	-40
7	LTEC	-128/+127	-34
8	LTED	-128/+127	-37
9	RTEU	-128/+127	31
10	RTEC	-128/+127	20
11	RTED	-128/+127	32
12	NSTE	-128/+127	-41
13	LENU	-128/+127	-43
14	LENC	-128/+127	-53
15	LEND	-128/+127	-47
16	RENU	-128/+127	43
17	RENC	-128/+127	42
18	REND	-128/+127	37
19	NSEN	-128/+127	-25
20	LNSU	-128/+127	-4
21	LNSC	-128/+127	0
22	LNSD	-128/+127	4
23	RNSU	-128/+127	-4
24	RNSC	-128/+127	0
25	RNSD	-128/+127	4
26	NSNS	-128/+127	69
27	LEWU	-128/+127	-18
28	LEWC	-128/+127	0
29	LEWD	-128/+127	18
30	REWU	-128/+127	18
31	REWC	-128/+127	0
32	REWD	-128/+127	-18
33	APEN	0-255	64
34	TECT	0-255	64
35	ENCT	0-255	66
36	NSCT	0-255	64
37	EWCT	0-255	64
38	HPOS	0-10	5
39	VPOS	0-255	15
40	VOSI	0-255	*1
41	RVOS	0-255	*1
42	VSEI	0-255	*1
43	RVSE	0-255	*1
44	VINT	0-255	*1
45	RVIN	0-255	*1
46	ODP	0-255	8
47	ODVM	0-255	109
48	ODHH	0-255	166
49	HPHL	0-255	246
50	HOS	0-255	40
51	HSEI	0-255	93
52	HINT	0-255	93
53	HLIN	0-255	56
54	LDCV	0-255	13
55	VCOM	0-255	20
56	TESL	0-255	63
57	PWMA	0-255	255
58	HCMX	0-255	32
59	VCMX	0-255	32
60	LCMX	0-255	64
61	LAMX	0-255	64
62	NSMX	0-255	64
63	UPMX	0-15	3
64	HSLV	0-31	27

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Functionality		Range	Standards
No.	Name		
0	COPC	0-1	0
1	COPL	0-1	0
2	TESW	0-1	1
3	ENSW	0-1	1
4	NSSW	0-1	1
5	EWSW	0-1	1
6	LTEU	-128/+127	-20
7	LTEC	-128/+127	-14
8	LTED	-128/+127	-28
9	RTEU	-128/+127	16
10	RTEC	-128/+127	11
11	RTED	-128/+127	23
12	NSTE	-128/+127	-49
13	LENU	-128/+127	-54
14	LENC	-128/+127	-73
15	LEND	-128/+127	-60
16	RENU	-128/+127	64
17	RENC	-128/+127	67
18	REND	-128/+127	55
19	NSEN	-128/+127	-32
20	LNSU	-128/+127	-4
21	LNSC	-128/+127	0
22	LNSD	-128/+127	4
23	RNSU	-128/+127	-4
24	RNSC	-128/+127	0
25	RNSD	-128/+127	4
26	NSNS	-128/+127	115
27	LEWU	-128/+127	-28
28	LEWC	-128/+127	0
29	LEWD	-128/+127	28
30	REWU	-128/+127	28
31	REWC	-128/+127	0
32	REWD	-128/+127	-28
33	APEN	0-255	64
34	TECT	0-255	64
35	ENCT	0-255	66
36	NSCT	0-255	64
37	EWCT	0-255	64
38	HPOS	0-10	5
39	VPOS	0-255	15
40	VOSI	0-255	*1
41	RVOS	0-255	*1
42	VSEI	0-255	*1
43	RVSE	0-255	*1
44	VINT	0-255	*1
45	RVIN	0-255	*1
46	ODP	0-255	8
47	ODVM	0-255	109
48	ODHH	0-255	166
49	HPHL	0-255	246
50	HOS	0-255	40
51	HSEI	0-255	93
52	HINT	0-255	93
53	HLIN	0-255	56
54	LDCV	0-255	13
55	VCOM	0-255	20
56	TESL	0-255	63
57	PWMA	0-255	0
58	HCMX	0-255	32
59	VCMX	0-255	32
60	LCMX	0-255	64
61	LAMX	0-255	64
62	NSMX	0-255	64
63	UPMX	0-15	3
64	HSLV	0-31	27

Standards *1

No.	FULL						NORMAL/VCOMP					
	480P/960I 60Hz	1080I/540P 60Hz	480I 120Hz	576I 100Hz	576P/1152I 50Hz	1080I/540P 50Hz	480P/960I 60Hz	1080I/540P 60Hz	480I 120Hz	576Iz 100Hz	576P/1152I 50Hz	1080I/540P 50Hz
40 VOSI	21	0	10	13	30	62	21	0	14	18	42	62
41 RVOS	0	0	0	0	0	0	0	0	0	0	0	0
42 VSEI	50	51	32	37	60	56	50	52	28	33	60	56
43 RVSE	0	0	0	0	0	0	0	0	0	0	0	0
44 VINT	50	55	25	30	60	56	50	55	25	30	60	56
45 RVIN	0	0	0	0	0	0	0	0	0	0	0	0

No.	WIDEZOOM				ZOOM			
	480P/960I 60Hz	480I 120Hz	576I 100Hz	576P/1152I 50Hz	480P/960I 60Hz	480I 120Hz	576I 100Hz	576P/1152I 50Hz
40 VOSI	30	11	16	37	67	30	42	84
41 RVOS	96	43	52	96	64	26	32	96
42 VSEI	54	34	39	63	45	32	34	53
43 RVSE	0	0	0	0	0	0	0	0
44 VINT	47	24	29	57	40	20	24	48
45 RVIN	32	22	22	32	22	13	16	32

AP

Functionality		Range	Standards
No.	Name		
0	SUBV	0-15	*1
1	BASS	0-15	*2
2	TREB	0-15	*2
3	BBE	0-1	*2
4	BBEL	0-31	*2
5	BBEH	0-31	*2
6	AGC	0-1	*3
7	AGCL	0-3	*3
8	SUR	0-15	*4

Standards *1

No.	TruSurround	Simulated	OFF
0 SUBV	2	3	3

Standards *2 HR29M61/HR34M61

No.	Personal (BBE:off)						Personal (BBE:Low)						Personal (BBE:High)					
	Tu			Others			Tu			Others			BS			Others		
	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF
1 BASS	7	6	6	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7
2 TREB	7	6	6	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7
3 BBE	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
4 BBEL	0	0	0	0	0	0	8	6	6	8	6	6	14	12	12	14	12	12
5 BBEH	0	0	0	0	0	0	8	6	6	8	6	6	14	12	12	14	12	12

HR29N90/HR34N90

No.	Personal (BBE:off)						Personal (BBE:Low)						Personal (BBE:High)					
	Tu			Others			Tu			Others			BS			Others		
	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF
1 BASS	7	6	6	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7
2 TREB	7	6	6	7	6	6	7	7	7	7	7	7	7	6	6	7	7	7
3 BBE	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
4 BBEL	0	0	0	0	0	0	9	7	7	8	6	6	14	12	12	14	12	12
5 BBEH	0	0	0	0	0	0	8	6	6	8	6	6	13	11	11	14	12	12

HR29M61

No.	Dynamic						Drama						Soft					
	BS			Others			Tu			Others			Tu			Others		
	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF
1 BASS	11	10	10	11	10	10	10	9	9	10	9	9	10	8	8	10	8	8
2 TREB	8	7	7	8	7	7	9	8	8	9	8	8	9	7	7	9	7	7
3 BBE	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
4 BBEL	15	13	13	15	13	13	10	8	8	10	8	8	0	0	0	0	0	0
5 BBEH	9	7	7	13	11	11	9	7	7	11	9	9	0	0	0	0	0	0

HR29N90

No.	Dynamic						Drama						Soft					
	BS			Others			Tu			Others			Tu			Others		
	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF
1 BASS	11	10	10	11	10	10	10	9	9	10	9	9	10	8	8	10	8	8
2 TREB	8	7	7	8	7	7	8	7	7	9	8	8	9	7	7	9	7	7
3 BBE	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
4 BBEL	15	13	13	15	13	13	10	8	8	10	8	8	0	0	0	0	0	0
5 BBEH	10	8	8	13	11	11	9	7	7	11	9	9	0	0	0	0	0	0

HR34M61

No.	Dynamic						Drama						Soft					
	BS			Others			Tu			Others			Tu			Others		
	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF
1 BASS	11	10	10	11	10	10	10	9	9	10	9	9	10	8	8	10	8	8
2 TREB	8	7	7	8	7	7	9	8	8	9	8	8	9	7	7	9	7	7
3 BBE	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
4 BBEL	5	13	13	15	13	13	10	8	8	10	8	8	0	0	0	0	0	0
5 BBEH	9	7	7	11	9	9	9	7	7	9	7	7	0	0	0	0	0	0

HR34N90

No.	Dynamic						Drama						Soft					
	BS			Others			Tu			Others			Tu			Others		
	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF	TruSurround	Simulated	OFF
1 BASS	11	10	10	11	10	10	10	9	9	10	9	9	10	8	8	10	8	8
2 TREB	8	7	7	8	7	7	8	7	7	9	8	8	9	7	7	9	7	7
3 BBE	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
4 BBEL	16	14	14	15	13	13	8	6	6	10	8	8	0	0	0	0	0	0
5 BBEH	9	7	7	11	9	9	8	6	6	9	7	7	0	0	0	0	0	0

Standards *3

No.	Intellient Volume	
	Auto	OFF
6 AGC	1	0
7 AGCL	0	0

Standards *4

No.	Effect		
	TruSurround	Simulated	OFF
8 SUR	12	15	0

MSMO

Functionality		Range	Standards
No.	Name		
0	MSPF	0-1	0
1	MIXU	0-1	0
2	STD1	0-1	0
3	LVDS	0-3	2
4	BGLV	0-255	0
5	DPAC	0-1	0

OSDP

Functionality		Range	Standards
No.	Name		
0	LEVL	0-15	0
1	FFLV	0-15	0

ASEL

Functionality		Range	Standards
No.	Name		
0	TU1	0-15	10
1	TU2	0-15	9
2	TU3	0-15	0
3	VID1	0-15	7
4	VID2	0-15	5
5	VID3	0-15	4
6	VID4	0-15	3
7	YUV1	0-15	2
8	YUV2	0-15	1
9	YUV3	0-15	0
10	MS	0-15	8
11	ATSC	0-15	0
12	CSPK	0-15	6

VSEL

Functionality		Range	Standards
No.	Name		
0	TU1	0-15	1
1	TU2	0-15	2
2	TU3	0-15	0
3	VID1	0-15	5
4	VID2	0-15	6
5	VID3	0-15	7
6	VID4	0-15	4
7	YUV1	0-31	16
8	YUV2	0-31	18
9	YUV3	0-31	0
10	ATSC	0-31	0
11	SECM	0-31	17

DRCV

Functionality		Range	Standards
No.	Name		
0	MFVR	0-1	0
1	ISEL	0-1	1
2	ORES	0-255	*1
3	ONCT	0-255	*1
4	FMAT	0-1	0
5	FMTH	0-3	*2
6	FSEL	0-1	1
7	CDLY	0-3	2
8	LMIT	0-1	0
9	LMLV	0-3	*3
10	LMSL	0-1	1
11	VDLY	0-3	1
12	VDPR	0-3	3
13	WPLL	0-3	2
14	CRCT	0-1	0

Standards *1

[ ] : HR29N90/HR34N90

No.	Name	Dynamic				Standard			
		RF	BS/CV/YC	Component	RGB	RF	BS/CV/YC	Component	RGB
2	ORES	128 [102]	128	128	128	128	128	128	128
3	ONCT	128 [153]	128	128	128	128	128	128	128

No.	Name	Hi-Fine				Personal			
		RF	BS/CV/YC	Component	RGB	RF	BS/CV/YC	Component	RGB
2	ORES	128	128	128	128	128	128	128	128
3	ONCT	128	128	128	128	128	128	128	128

Standards *2

No.	Name	Other	RF
5	FMTH	1	1

Standards *3

No.	Name	Dynamic	Standard	Hi-Fine	Personal
9	LMLV	2	2	2	2

PFID [ ] : HR29N90/HR34N90

Functionality		Range	Standards
No.	Name		
0	COLS	0-7	2 [5]
1	DEFS	0-7	0
2	DRC	0-1	0
3	AMAX	0-1	1
4	FRME	0-1	0
5	SMAX	0-1	1
6	FVLO	0-1	1
7	2057	0-1	0
8	NSMT	0-1	0 [1]
9	YDET	0-1	0

PFOP

Functionality		Range	Standards
No.	Name		
0	CMD	0-15	0

GUID

Functionality		Range	Standards	Function	Remarks
No.	Name				
01	CUID		0	Guide Select country ID (0:English,1:Tiwan,2:Korea,3:English)	

POWR

Functionality		Range	Standards	Function	Remarks
No.	Name				
00	DLY1		4	Power On Delay1	
01	DLY2		0	Power On Delay2	
02	DLY3		4	Power On Delay3	
03	ZDET		31	Zero Detect Delay	
04	ZTMO		30	Zero Detect Timeout (*10ms min 300ms)	

OPM

Functionality		Range	Standards	Function	Remarks
No.	Name				
00	APC		1	APC Switch	
01	TSY		2	TV System Selection under searching with Auto TV System	
02	AFM		1	Auto FM switch	
03	DBL		0	Disable Blueback function	
04	SSO		1	Speed CH Search Selection	
05	SCH		1	CH Selection for Shipping Condition	NTSC Only
06	SCA		1	Cable/Air Selection for Shipping Condition	NTSC Only
07	DMG		0	Disable Menu-operation Guide	
08	VSN		0	Enable Noise Reduction in Video Mode	
09	LBB		1	Lower Blue Back Intensity	
10	23P		1	2/3 Pull Down Mode 0: Force OFF, 1: Auto	
11	DF		36	DF_PHA	
12	DQP		26	DQP_PHA	
13	VLIM		*1	Wide V-Center Limit	50/60/ZM/WZ
14	TUT1		5	Tune Wait Time Mode1 (Max) 30[ms] + 10[ms] * service_data	
15	TUT2		5	Tune Wait Time Mode2 (Max) 30[ms] + 10[ms] * service_data	
16	TUT3		5	Tune Wait Time Mode3 (Max) 30[ms] + 10[ms] * service_data	
17	TUTW		5	Tune Wait Time 6 point sense	
18	3NR		1	3D-NR INIT (User Reset or Test Reset)	
19	SIG		*2	No-Signal Detect number of lock detect count.	TV/Video(HD/DVD)
20	NSIG		*2	No-Signal Detect number of unlock detect counter.	TV/Video(HD/DVD)

***1**

Functionality		V-Center Limit			
No.	Name	WIDEZOOM 50Hz	WIDEZOOM 60Hz	ZOOM 50Hz	ZOOM 60Hz
13	VLIM	15	15	15	15

***2**

Functionality		Signa-Detect	
No.	Name	RF	Video
19	SIG	0	5
20	NSIG	0	20

OPB

Functionality		Range	Standards	Function	Remarks
No.	Name				
00	OP0		60	Optional Bits 0	
01	OP1		107	Optional Bits 1	
02	OP2		3	Optional Bits 2	
03	OP3		104	Optional Bits 3	
04	OP4		52	Optional Bits 4	

SRV

Functionality		Range	Standards	Function	Remarks
No.	Name				
00	COM			Service Command	

SECTION 4
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:
PICTURE control ..... normal
BRIGHTNESS control..... normal

Perform the adjustments in the following order :
1. Beam Landing
2. Convergence
3. Focus
4. White Balance

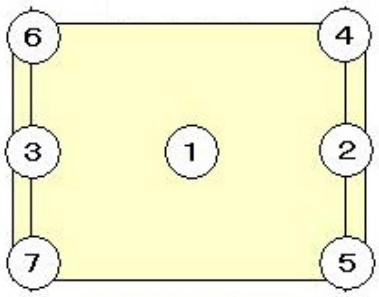
Note : Test Equipment Required.
1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

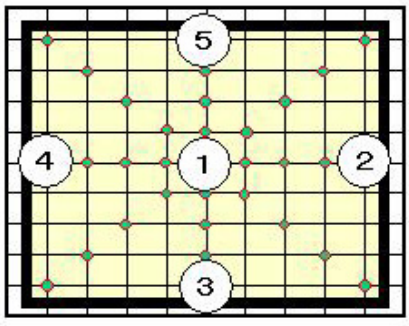
4-1. INITIALIZING SFC DATA

1. Set to the service mode.
2. Set to the coarse CONV and LAND adjustment mode.
3. Move the marker in the order as shown in the figure and set its data to "0".

Landing: ① → ② → ③ → ④ → ⑤ → ⑥ → ⑦



Convergence: ① → ② → ③ → ④ → ⑤



- Move the marker with the buttons ↑ ,↓ , ← and → on the remote commander."
  Press "ENTER" to decide the position.
  Change the data with the buttons ↑ ,↓ , ← and → on the remote commander.

4-2. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast
   Brightness } normal
2. Position neck assy as shown in Fig4-1.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
   (See Figures 4-2 through 4-4.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 4-3.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.

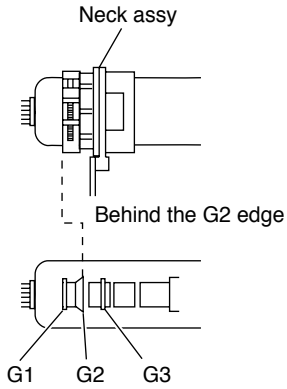


Fig. 4-1

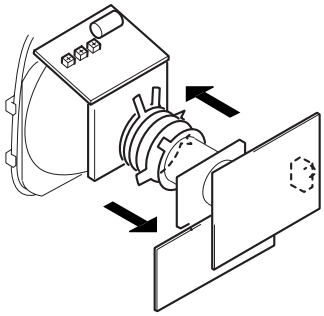


Fig. 4-2

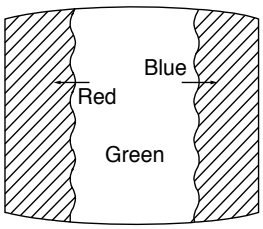


Fig. 4-3

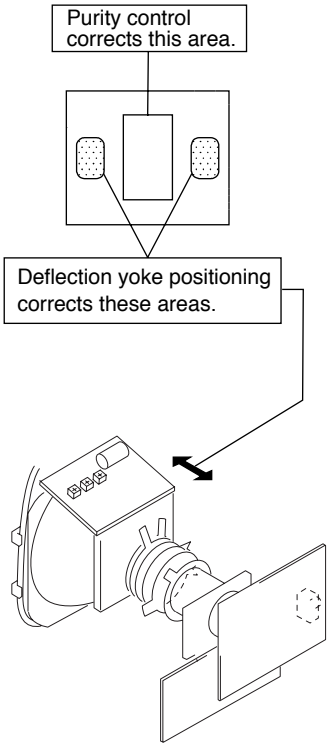


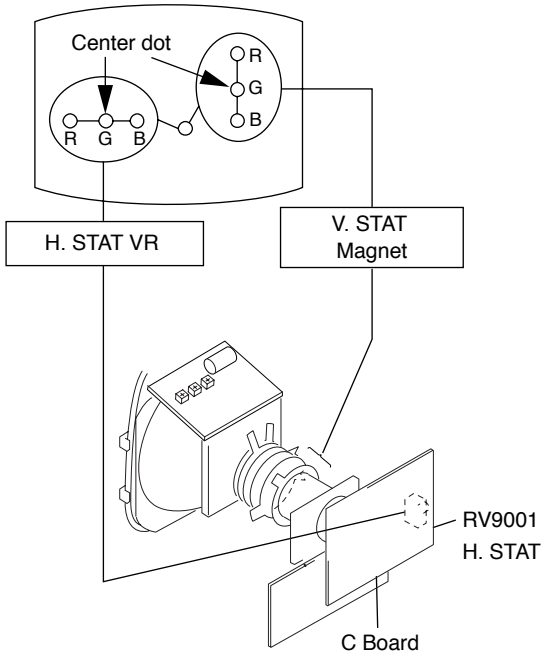
Fig. 4-4

4-3. CONVERGENCE ADJUSTMENT

Preparation :

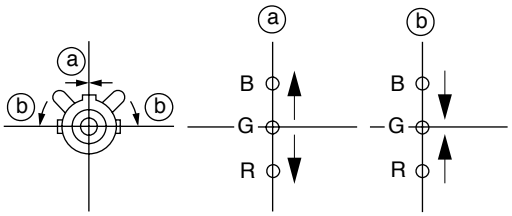
- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Set the Picture Mode to “STANDARD”.
- Cross hatch / Dot pattern.

4-3-1. Horizontal and Vertical Static Convergence

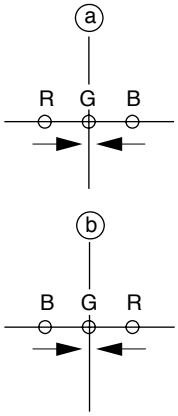


1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)

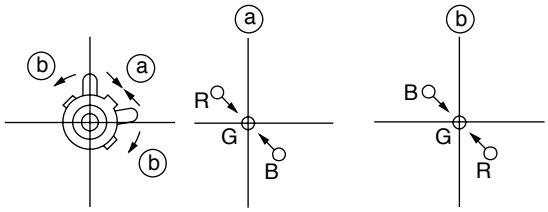
① V. STAT

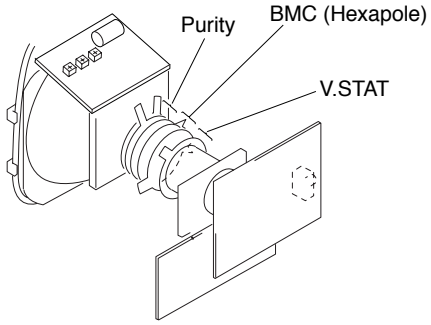


② H. STAT VR



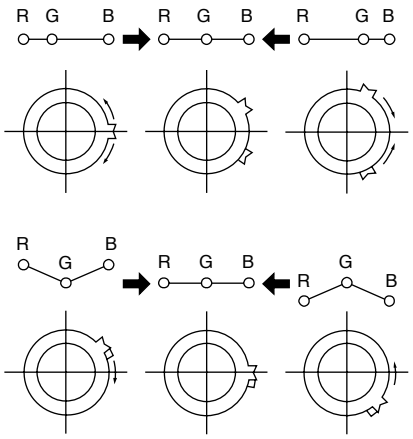
③ BMC





④ BMC (Hexapole) Magnet.

If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.



Note

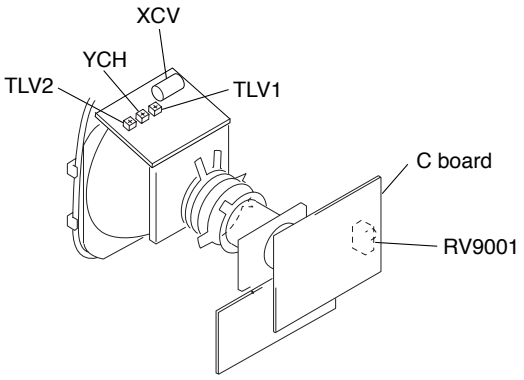
1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

4-3-2. Dynamic Convergence Adjustment

Preparation:

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence
- Set the PICTURE and BRIGHTNESS to normal.

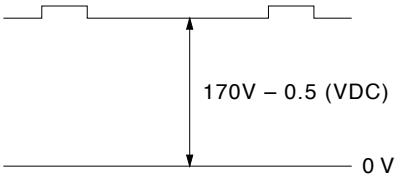
2. Adjust XCV core.
   To able to become balance of XCV on the X axis well.
3. Adjust V-TILT.
   Correct the vertical mis-convergence of red and blue of vertically sides on the Y axis.
4. Adjust YCH.
   Adjust horizontal mis-convergence of red and blue of vertically sides on the Y axis. Mentioned above steps 2 to 4 are adjusting respectively perform minuteness tracking.



4-4. G2 (SCREEN) ADJUSTMENT

1. G2 (SCREEN) ADJUSTMENT

1) Set to zoom mode and the PICTURE and BRIGHTNESS to normal and to the service mode.
2) In put monoscope signal.
3) Set the service data. CXA2150P-210: ABLK10
4) Connect R, G and B of the C board cathode to the oscilloscope.
5) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
6) Whilst watching the picture, adjust the screen VR located on the flyback transformer to the point just before the flyback return lines disappear (to the point before cut-off)

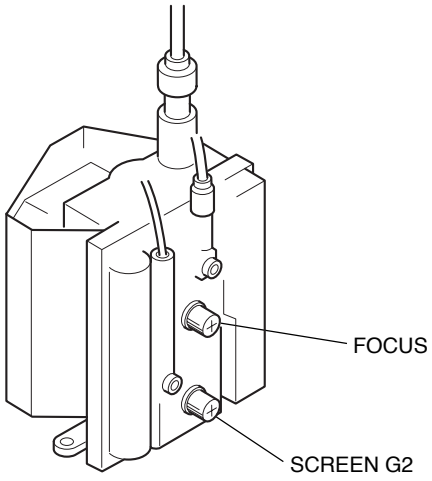


4-5. FOCUS ADJUSTMENT 1

Note

Focus adjustment should be completed before W/B adjustment.

(1) Receive digital monoscope pattern.
(2) Set DRC-MF to “Progressive” and PICTURE to “Standard”.
(3) Adjust FOCUS VR so that the center of the screen becomes justfocus.



FLYBACK TRANSFORMER (T8001)

4-6. NECK ASSY TWIST ADJUSTMENT

(1) Receive dot/hatch pattern.
(2) Turn FOCUS VR fully counter-clockwise.
(3) Confirm the dot shape at the screen center. (Fig. 4-5)
(4) Resume FOCUS VR.

Note

In case of turning NECK ASSY, loosen the screw 3 turns. Do not move the position.

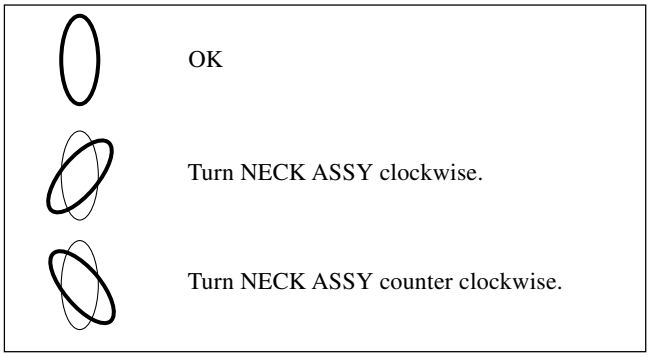
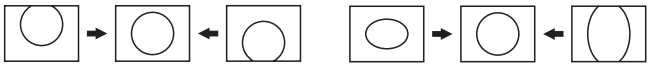


Fig. 4-5

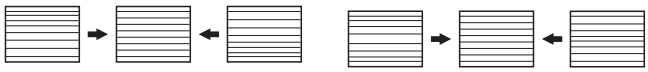
4-7. PICTURE DISTORTION ADJUSTMENT

Note: In this adjustment use the monoscope signal.
Adjust in the service mode "DEF1" and "DEF2".

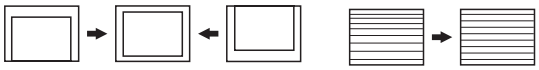
0 (VPOS)-DEF1 1 (VSIZ)-DEF1



2 (VLIN)-DEF1 3 (VSCO)-DEF1

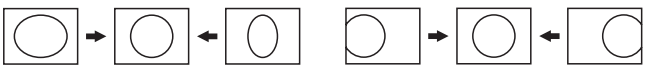


11 (SCRL)-DEF1 12 (UVLN)-DEF1

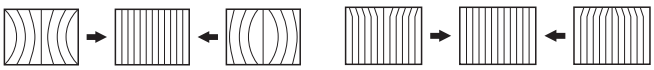


13 (LVLN)-DEF1

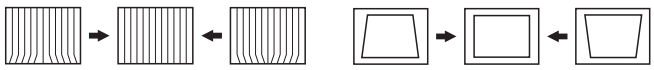
2 (HSIZ)-DEF2 1 (HPOS)-DEF2



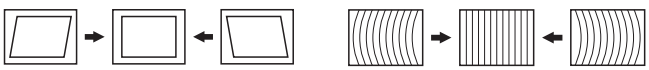
5 (PIN)-DEF2 6 (UCP)-DEF2



7 (LCP)-DEF2 8 (PPHA)-DEF2



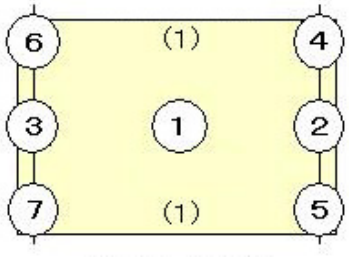
9 (VANG)-DEF2 11 (VBOW)-DEF2



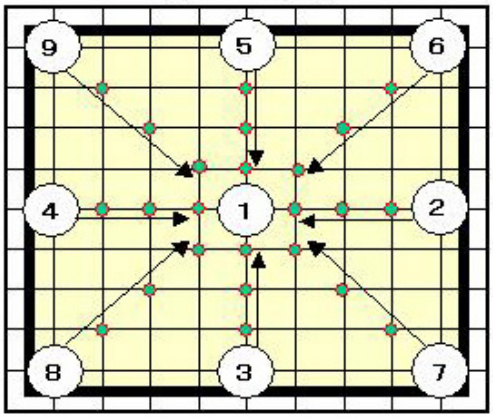
4-8. SFC COARSE ADJUSTMENT

Summary:
Move the marker to the position as shown in the figure and adjust the convergence or the landing at its position.
Also to move the marker is available with the buttons 1 and 4 on the remote commander.

Landing: ① → ② → ③ → ④ → ⑤ → ⑥ → ⑦
Select R, G or B signal by pressing "6" on the remote commander.
In case of selecting VIDEO without input, a single color is displayed.
In case of adjusting 1 position, observe the (1) positions.



Convergence: ① → ② → ③ → ④ → ⑤ → ⑥ → ⑦ → ⑧
Adjust the position from outer to inner as shown in the figure.

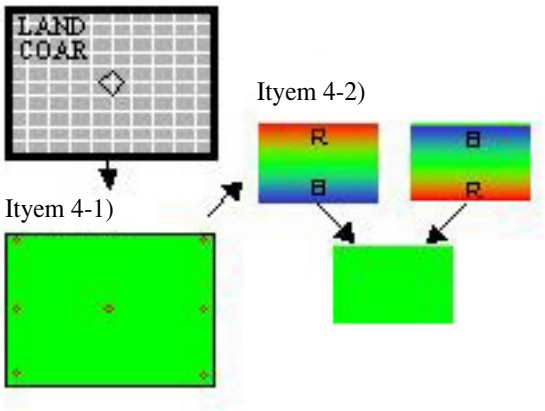


4-8-1. Landing Adjustment

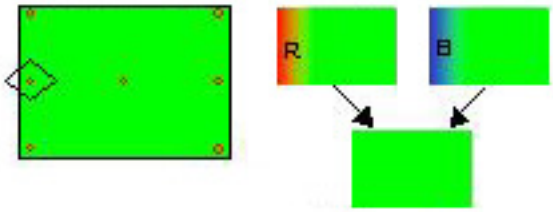
In case of no lack of uniformity, it is no need to adjust.

1. Set to the service mode.
2. Select the category “LAND”. The cross hatch and the marker appear on the screen
3. Set to the coarse adjustment by pressing “9” on the remote commander.
4. Adjust upper and lower sides on the screen. (Edges of Y axis)
   1) Move the marker to the center on the screen and set to green single color.
      Move the marker by pressing ↑,↓, ← and → buttons on the remote commander.
      The crosshatch appears on the screen, but the marker moves to the position only as shown in the figure. Set the marker to the center on the screen and press “ENTER”. Then it becomes the adjusting mode. To return to move the marker, press “ENTER” again.
      To change the single color red, green or blue, press “6”.
   Note: In case of receiving TV signal, a single color is mixed to the TV signal. It is easy to adjust in VIDEO 1 to 3 without input because only a single color is displayed.
   2) Landing adjustment
      Adjust with the remote commander ← and → to reduce the lack of uniformity on upper and lower side on the screen.
      After adjustment, press “ENTER”. Then it becomes to moving marker mode and the crosshatch appears on the screen.”
5. Adjust right and left sides on the screen. (Edges of X axis)
   Set the marker to right or left and adjust landing in the same manner as the item 4.
6. Adjust on the corners.
   Set the marker to the corners and adjust landing in the same manner as the item 4.
   It can be adjusted from any corner.
7. Write the adjusted data to the memory by pressing “MUTE” and “0” on the remote commander.

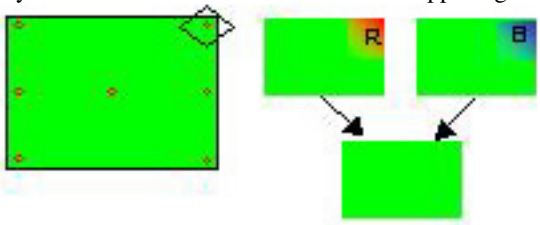
Ityems 2, 3

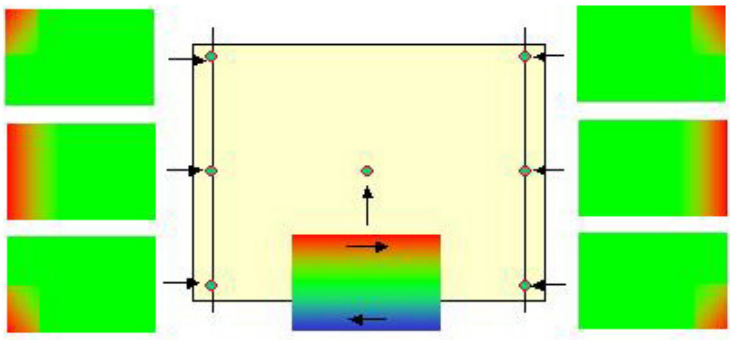


Ityem 5 In case of the marker is on the left side.



Ityem 6 In case of the marker is on the upper right side.

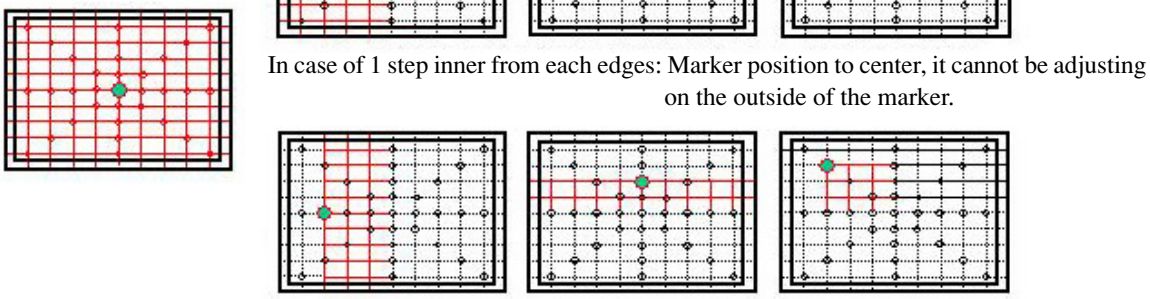




4-8-2. Convergence Adjustment

The adjusting ranges according to its position selected.

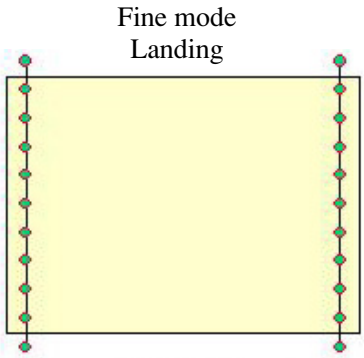
It is adjustable from the selected point to the center.

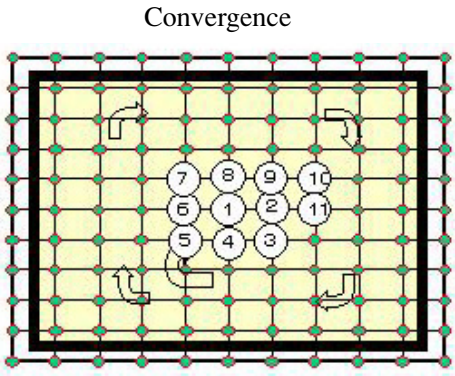


4-9. SFC FINE ADJUSTMENT

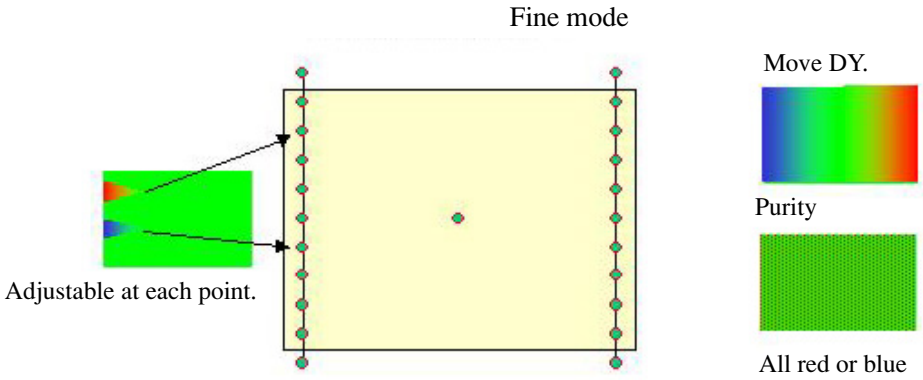
Landing: Left 11 points, right 11 points
Select R, G or B signal by pressing “6” on the remote commander.
In case of selecting VIDEO without input, a single color is displayed.

Convergence: Move the marker from the center to outer spirally.
Only the center data is within +-15.



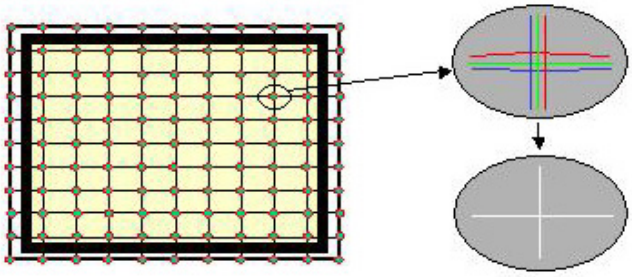


4-9-1. Landing



4-9-2. Convergence

Fine mode
Adjustable at each point.



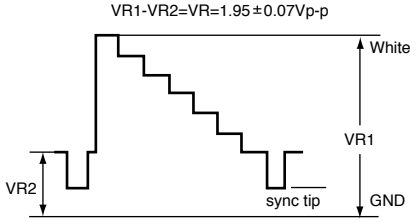
4-10.P & P SUB CONTRAST ADJUSTMENT (VIDEO) (NTSC/PAL)

1. Receive the signal.
   TV terminal (sub) : Color-bar (white-75%, No setup)
   VIDEO terminal (main) : Color-bar (white-75%, No setup)
2. VIDEO MODE : AV Pro
   PICTURE : maximum
   COLOR : minimum
   RGB Signal : off
3. Set to P & P mode, and set to service mode.
4. Set the service data.

Category	Reg. No & Name		Standards
MCP	2	RON	1
	3	GON	0
	4	BON	0
	7	YLMT	1
PIC	0	PIC	100
	1	COL	0
	5	PIOF	0

5. Connect an oscilloscope between the check point and ground.
   Check points : CN9001 pin ① (R-DRV)
   (C Board)
6. Adjust the item as shown below.

	Category	Reg. No & Name
LEFT	CCPM	1 YLEV
RIGHT	YCTS	0 YLEV



7. Write the data into memory.
   MUTE → 12

4-11. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (VIDEO) (NTSC/PAL)

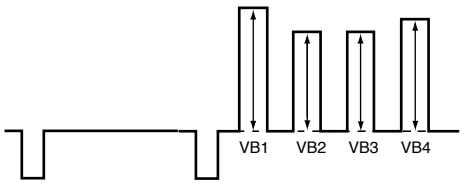
1. Receive the signal.
   TV terminal (sub) : Color-bar (white-75%, No setup)
   VIDEO terminal (main) : Color-bar (white-75%, No setup)
2. VIDEO MODE : AV Pro
   PICTURE : maximum
   COLOR : center
   RGB Signal : on
3. Set to P & P mode, set to service mode.
4. Set the service data.

Category	Reg. No & Name		Standards
MCP	2	RON	1
	3	GON	1
	4	BON	1
	7	YLMT	1
PIC	0	PIC	60
	1	COL	50

5. Connect an oscilloscope between pin ⑤ (B-DRV) of CN9001 (C board) connecter and ground.
6. Adjust the item as shown below to have VB1 ≦ VB4 and VB2 ≦ VB3 in the waveform levels.

	Category	Reg. No & Name	
LEFT	CCPM	2	CLEV
		3	SHUE
RIGHT	YCTS	1	CLEV
		4	SHUE

7. Write the data into memory.
   MUTE → 12



4-12. WHITE BALANCE ADJUSTMENT

(1). VIDEO MODE : AV PRO
PICTURE : Maximum
COLOR : Minimum
Color Temp.: High
DRC-MF : Progressive

(2). Receive the all white signal and set to full mode screen and to the service mode.

(3). Minimize the cut-offs and make drives normal in the following items.

Category	Reg. No & Name	
COLR	3	GDRV
	4	BDRV
	6	GCUT
	7	BCUT

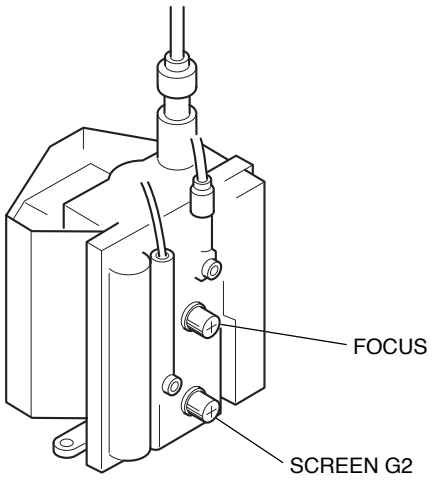
(4). Adjust with the cut-offs and the drives mutually the white balance becomes best in the mode the picture is maximum or minimum.

4-13. FOCUS ADJUSTMENT 2

Note

Focus adjustment should be completed before W/B adjustment.

(1) Receive digital monoscope pattern.
(2) Set DRC-MF to “Progressive” and PICTURE to “Standard”.
(3) Adjust FOCUS VR so that the center of the screen becomes justfocus.
(4) Change the receiving signal to white pattern and blue back.
(5) Confirm MAGENTA RING should not be over the limit sample. In case MAGENTA RING is over the limit sample, adjust FOCUS VR to take tracking of MAGENTA RING and FOCUS.



FLYBACK TRANSFORMER (T8001)

SECTION 5

SAFETY RELATED ADJUSTMENTS

[D BOARD]

5-1. +B MAX VOLTAGE CONFIRMATION

1. Supply 242 ± $^{2}_{0}$ VAC (GE model) or 121 ± $^{2}_{0}$ VAC (Taiwan model) to variable autotransformer.
2. Receive dot signal pattern and set the PICTURE and BRIGHTNESS settings to their minimum.
3. Confirm the voltage between the both sides of C6512 on D board is 137.0 V dc.

5-2. HV REGULATION CIRCUIT ADJUSTMENT

When replacing the following components marked with ◪ on the schematic diagram always check HV regulation, and if necessary re-adjust.

⧓: RV8002
◪: IC8004, IC8005,
R8014, R8015, R8017
PH8003
T8001 (FBT)
D board

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
2. Power on the set.
3. Receive the dot signal.
4. Set PIC MIN/BRT MIN.
5. Confirm that the static voltmeter reading is 31.5 ± 0.3kVDC.
6. If not, adjust with RV8002 to the specified value.

5-3. HV PROTECTOR CIRCUIT CHECK

When replacing the following components marked with ◪ on the schematic diagram always check hold-down voltage.

⧓: RV8002
◪: D8014
IC8001
R8016, R8019, R8046, R8052, R8072,
R8078, R8079, R8165
T8001 (FBT)
D board

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
2. Power on the set.
3. Receive the dot signal.
4. Set PIC MIN/BRT MIN.
5. The set turns off (the protector circuit activates) at the 36.6kVDC or less reading on the static voltmeter.
6. After that, adjust the item 5-2 (Return to 31.5kVDC).

5-4. IK PROTECTOR CIRCUIT CHECK (D BOARD)

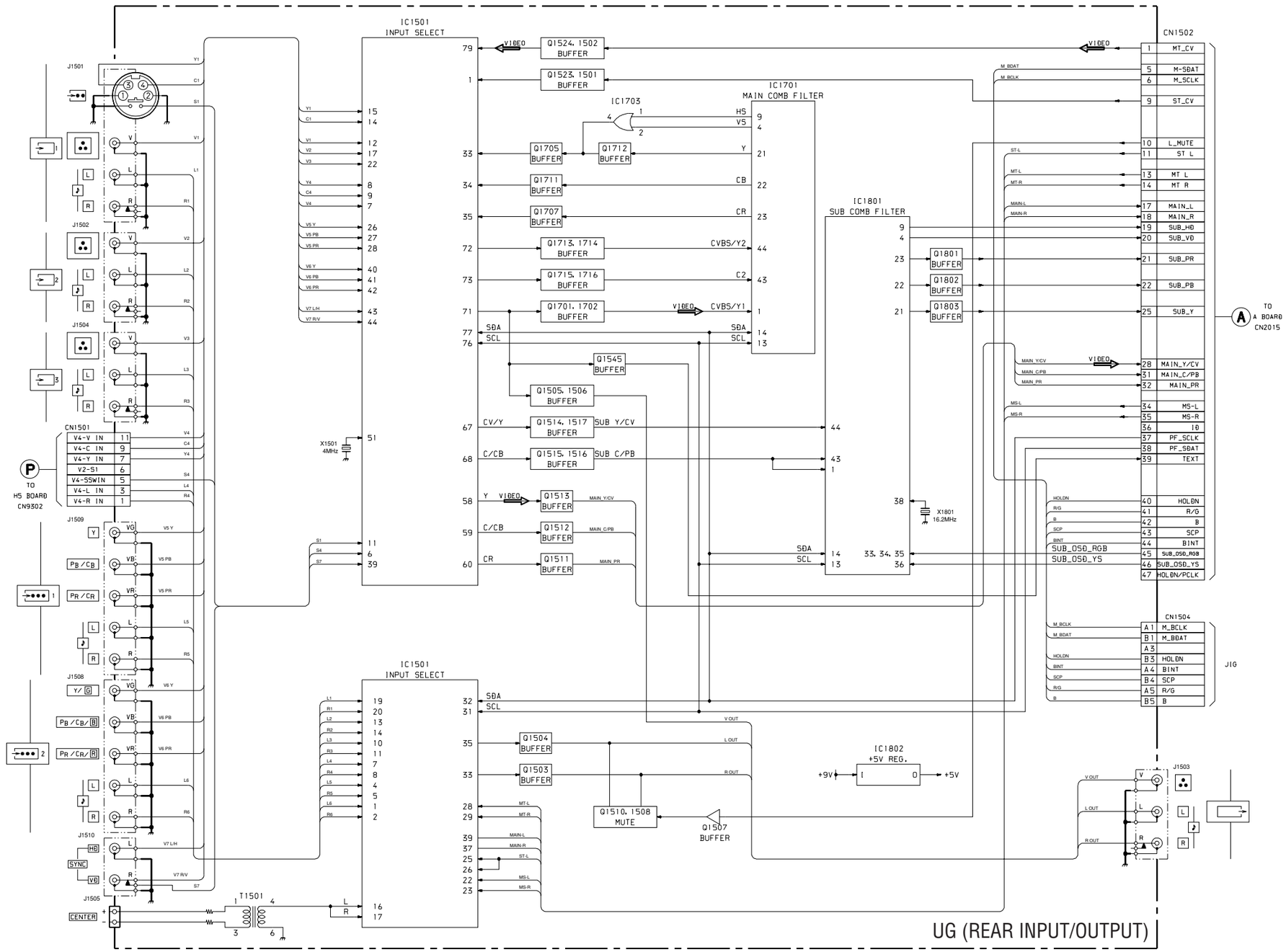
When replacing the following components marked with / on the schematic diagram, always check IK protector circuit.

◪: D8004
IC8001
Q8007
R8027, R8030, R8035,R8037
R8038, R8039, R8040, R8041, R8043,
D board

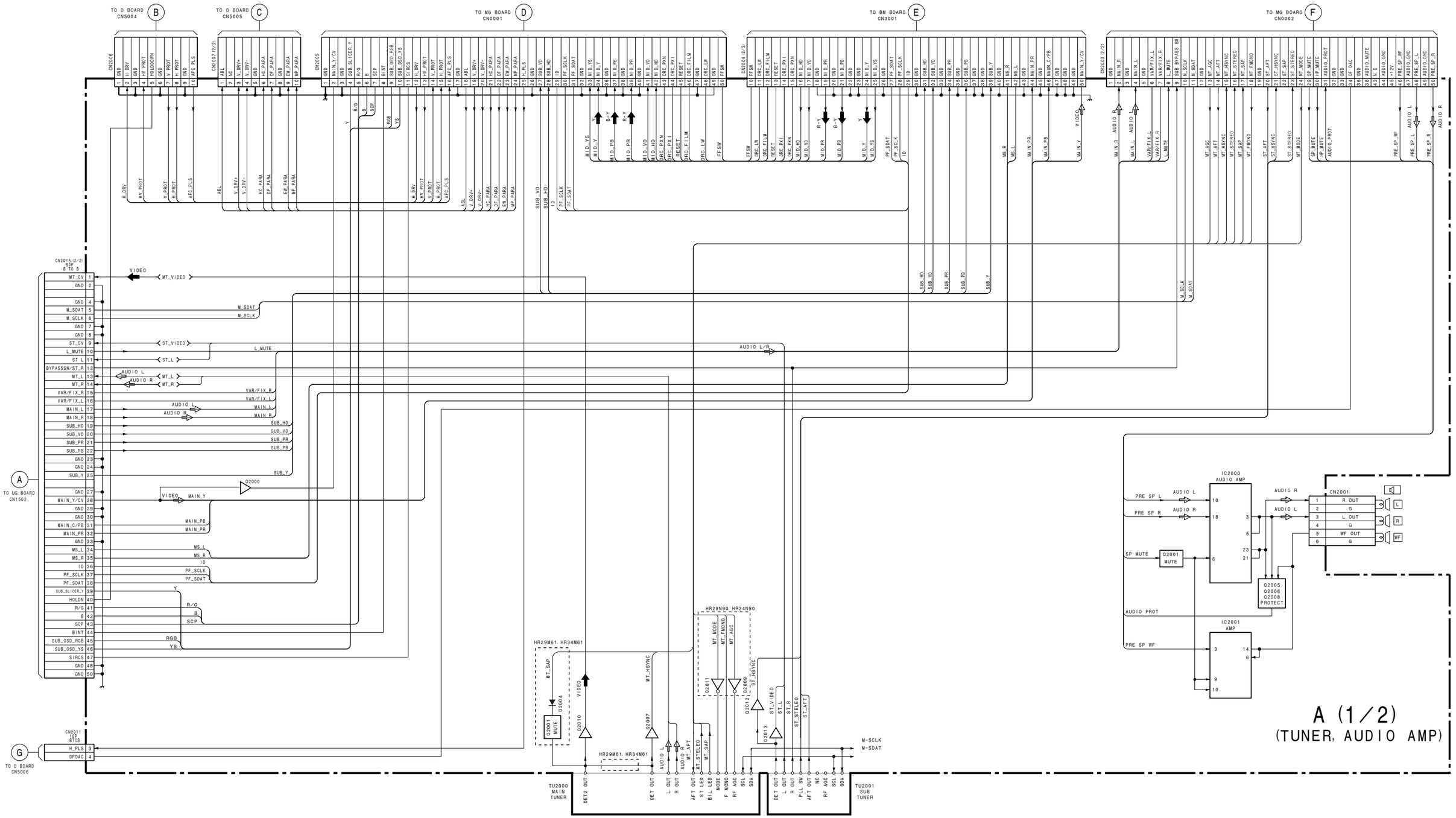
1. Unsolder T8001 (FBT) Pin 1 and connect a DC current meter between Pin 1 and the pattern.
2. Remove R0494 (MG MOUNT).
3. Feed the all white signal, increase the picture and brightness slowly and check the hold-down works when the reading on the DC current meter is 2670uA.
4. Turn power off.
5. Remove the DC current meter and set R0494 solder the unsolder portions.

SECTION 6
DIAGRAMS

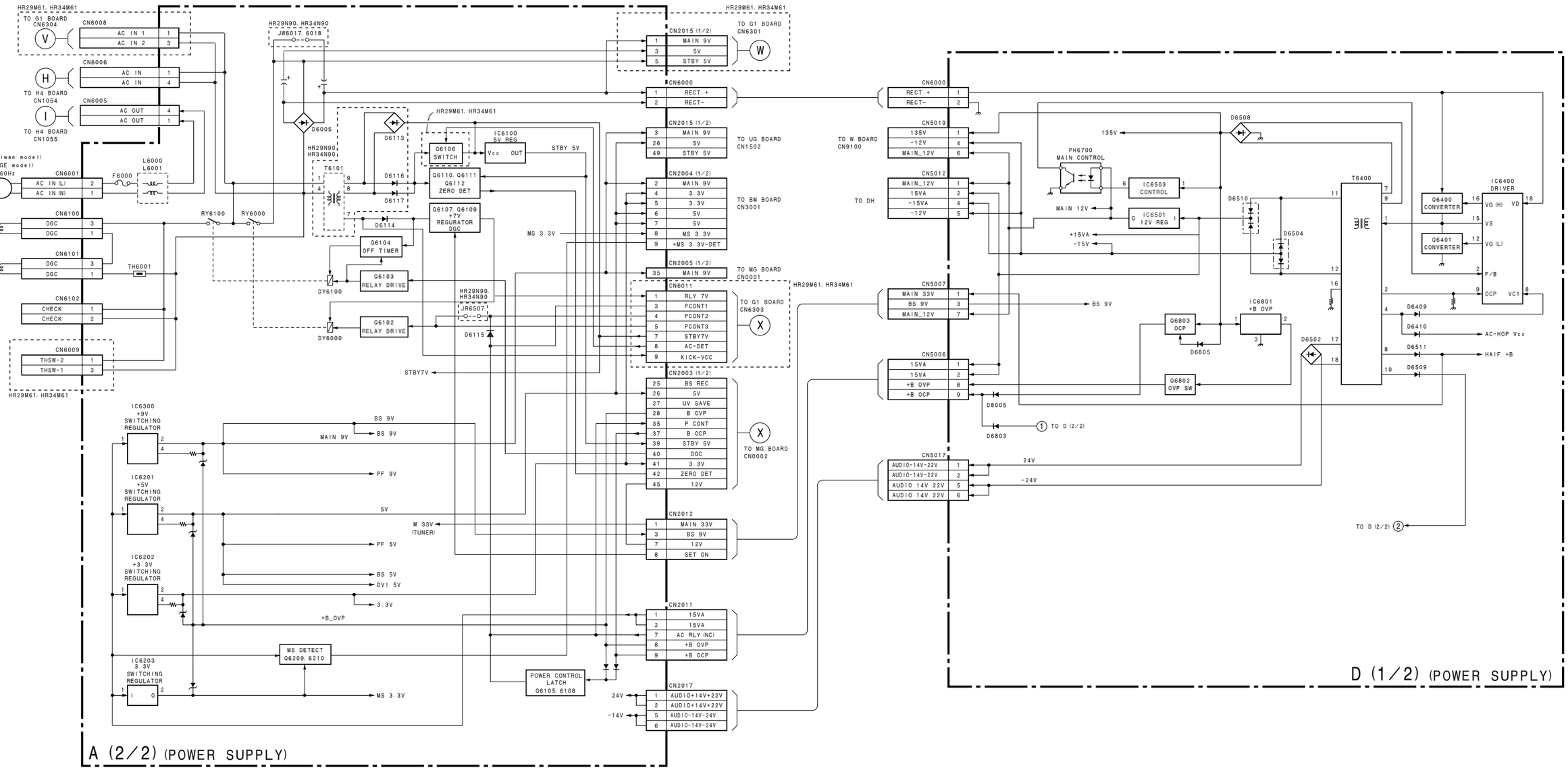
6-1. BLOCK DIAGRAM (1)



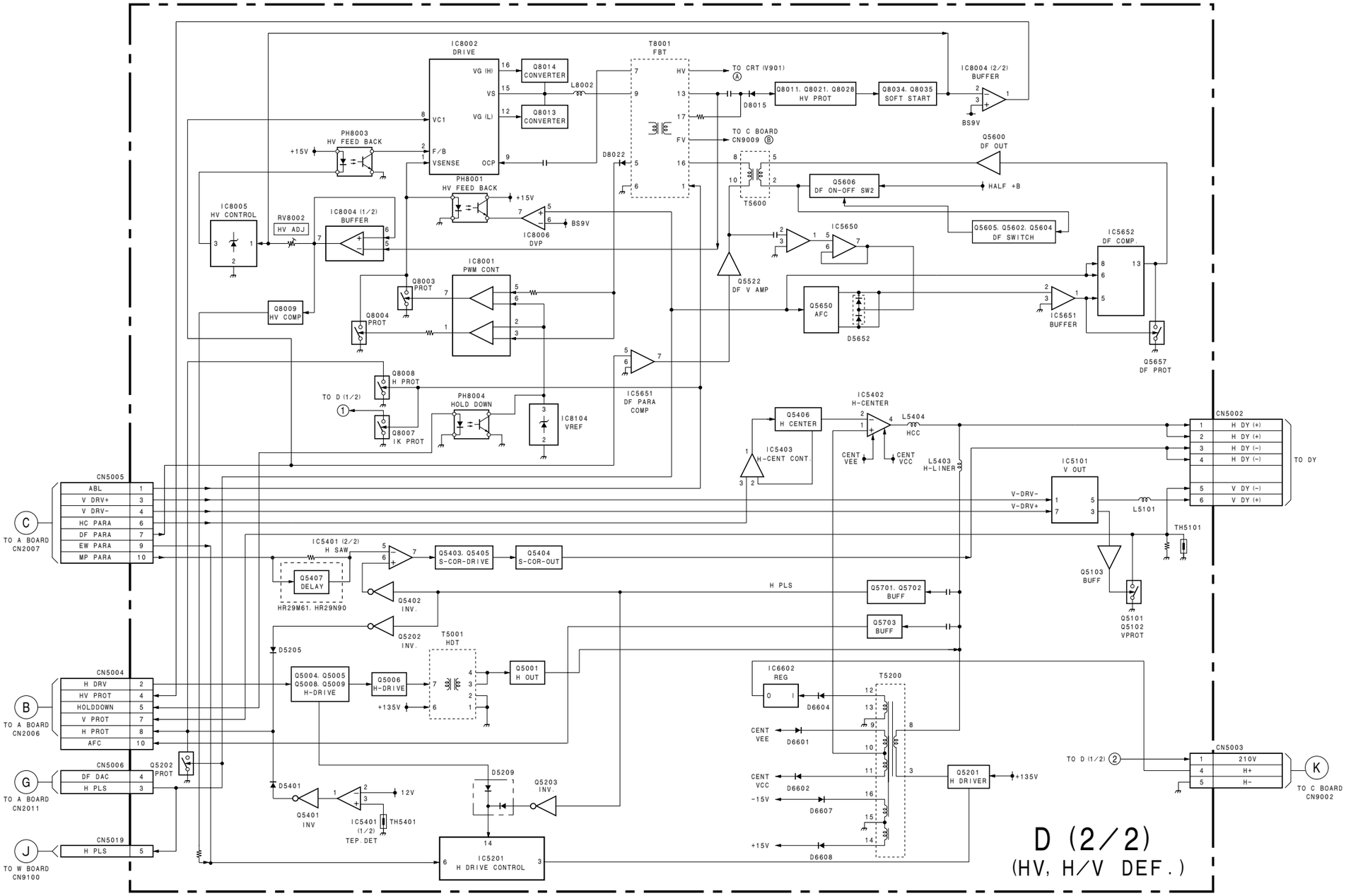
BLOCK DIAGRAM (2)



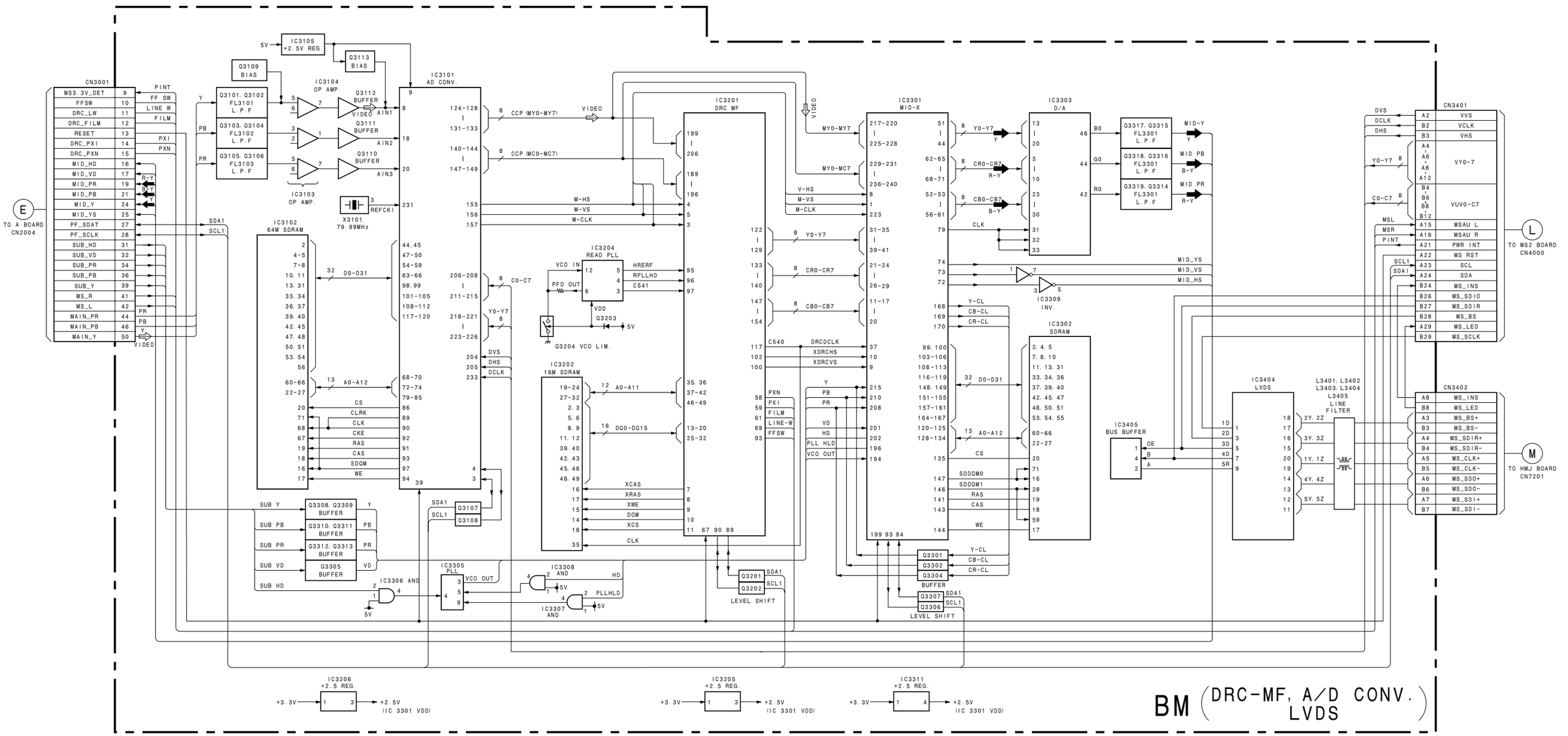
BLOCK DIAGRAM (3)



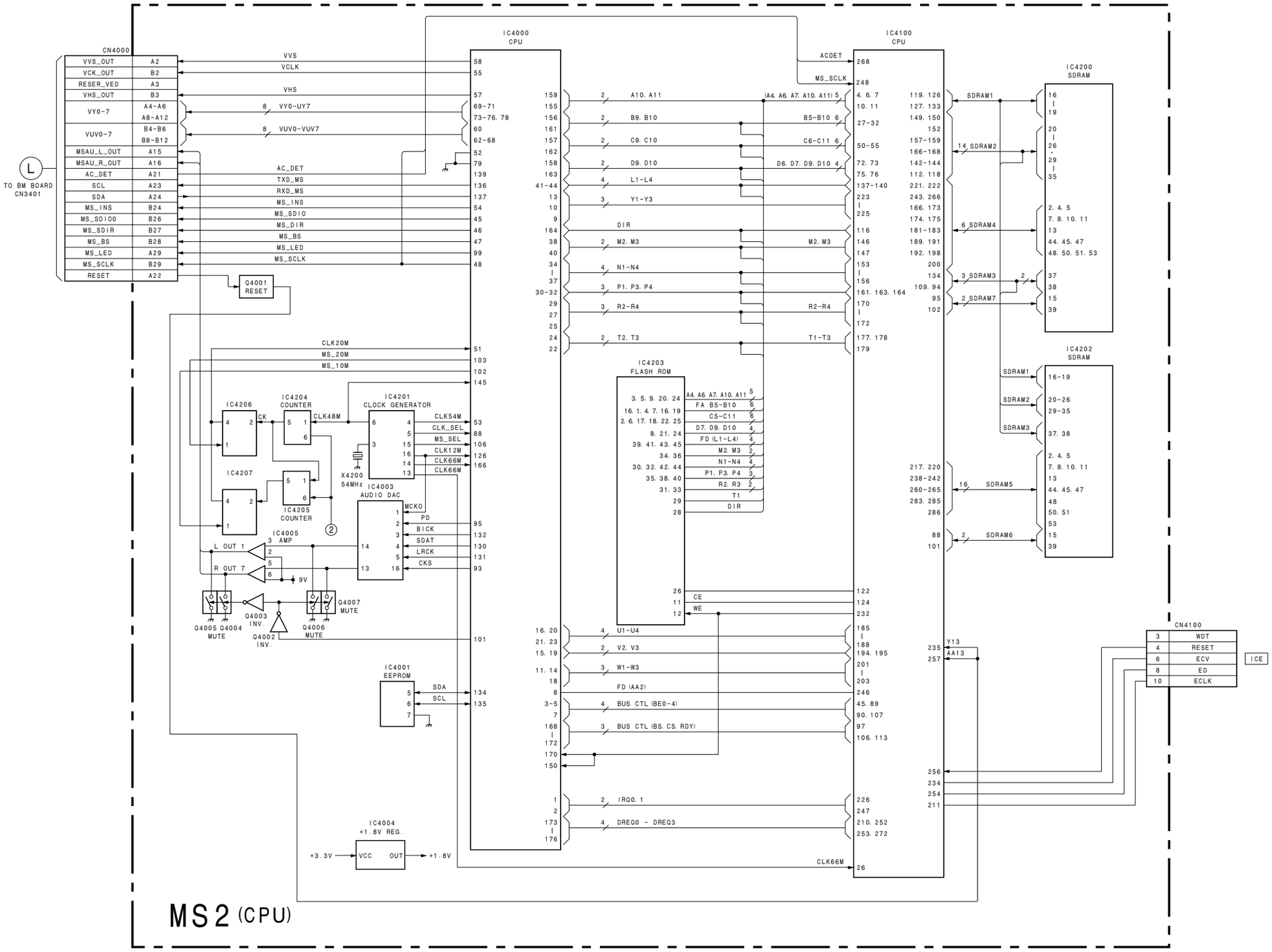
BLOCK DIAGRAM (4)



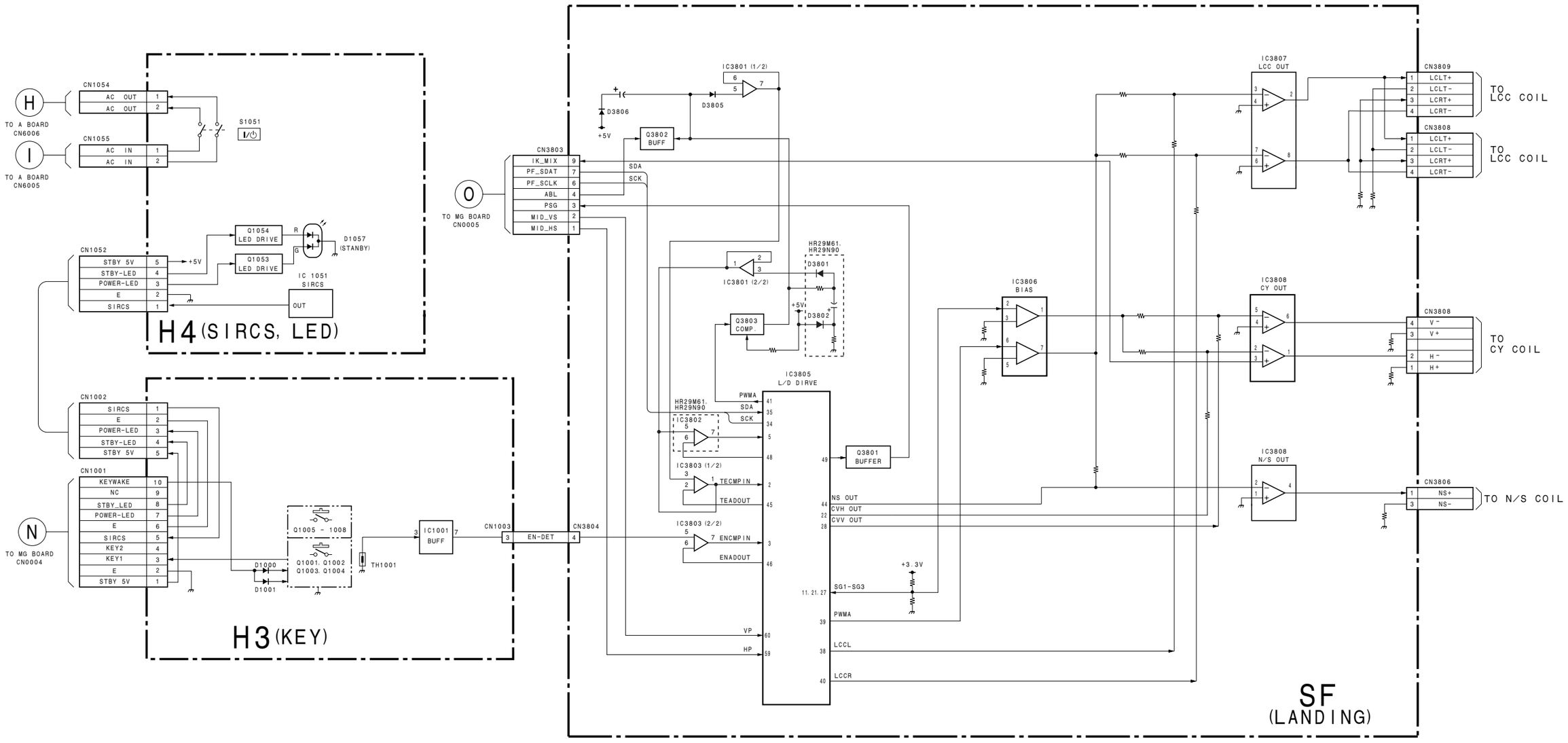
BLOCK DIAGRAM (5)



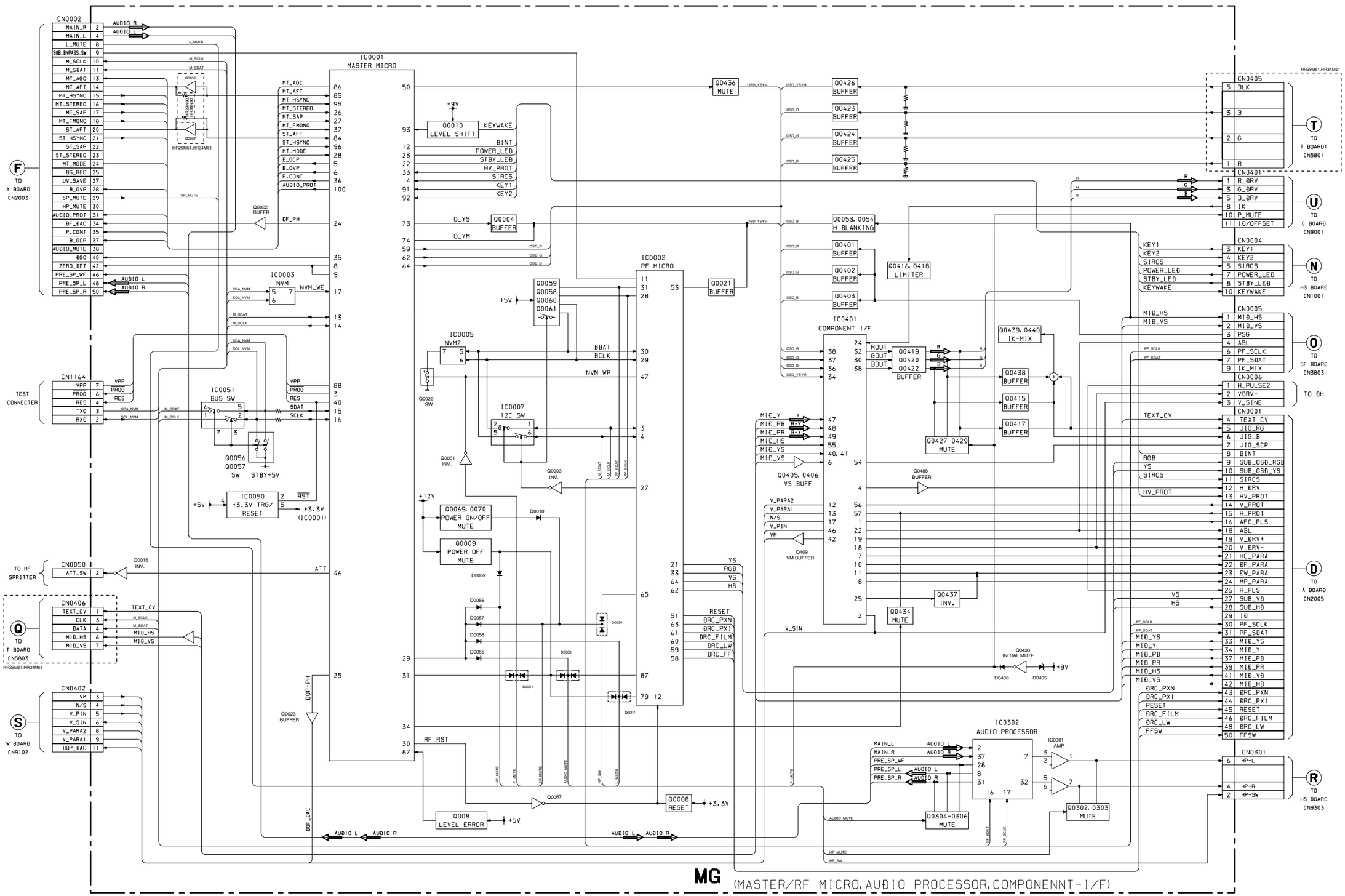
BLOCK DIAGRAM (6)



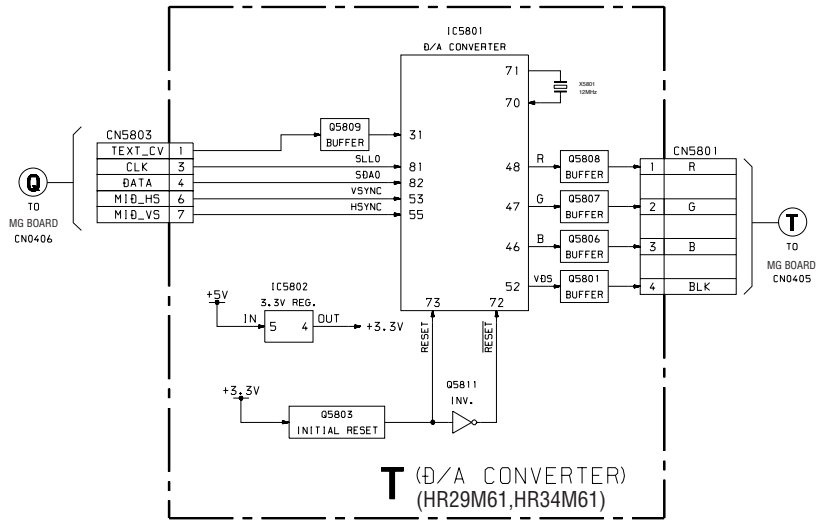
BLOCK DIAGRAM (7)

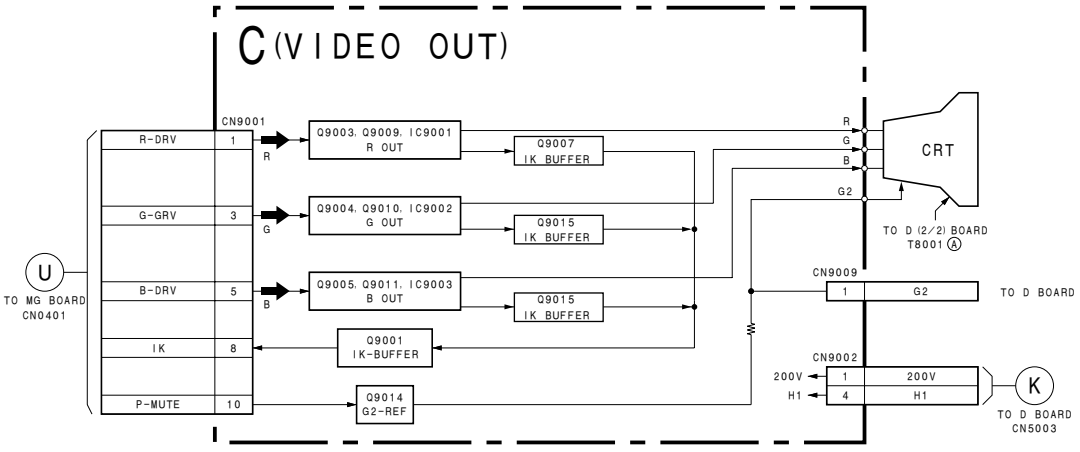


BLOCK DIAGRAM (8)

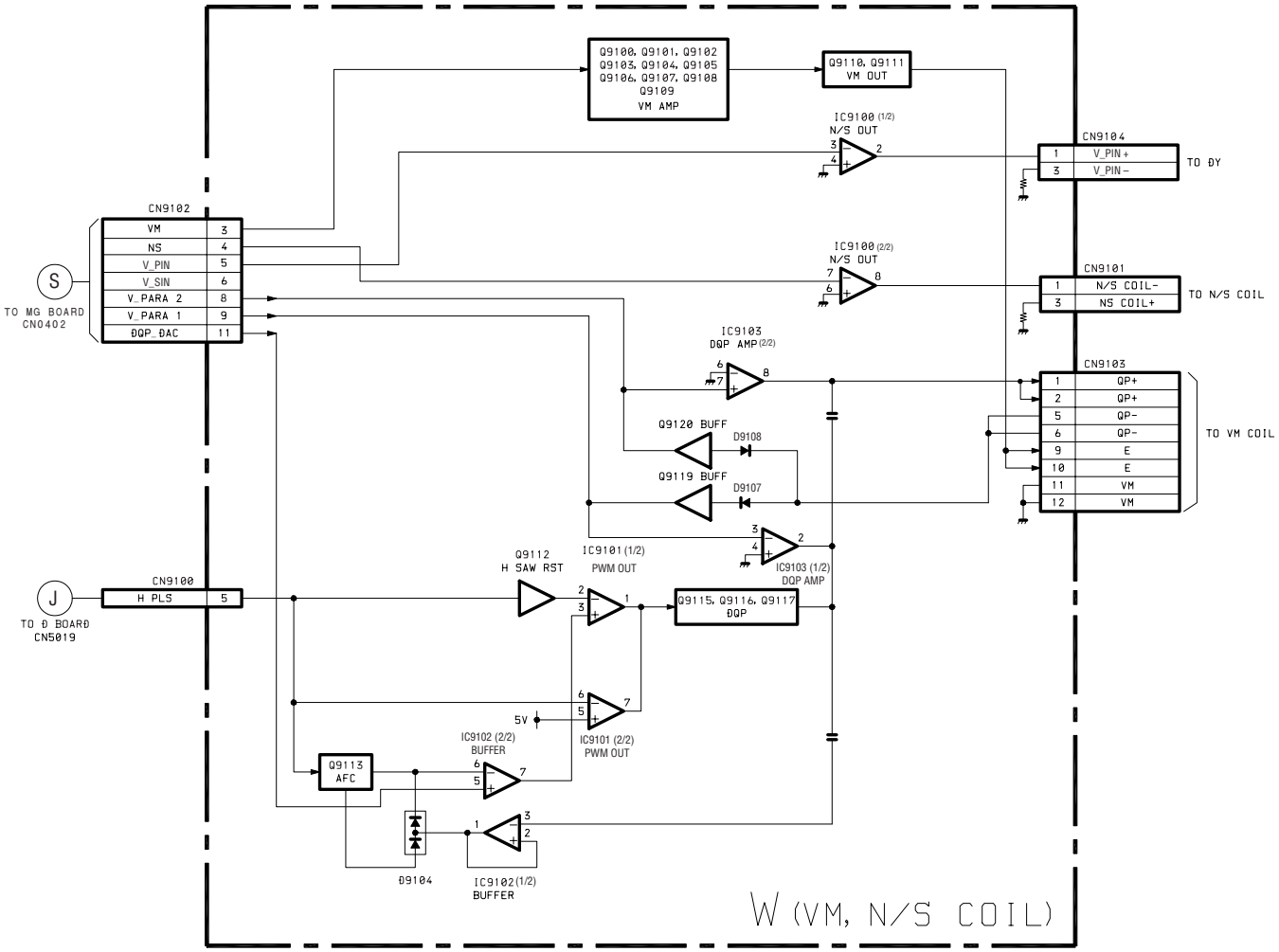


BLOCK DIAGRAM (9)

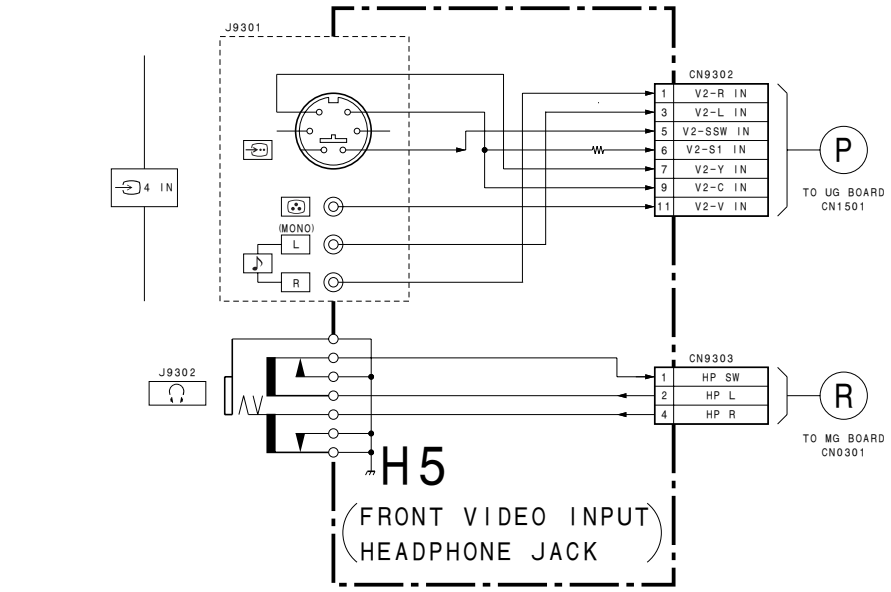


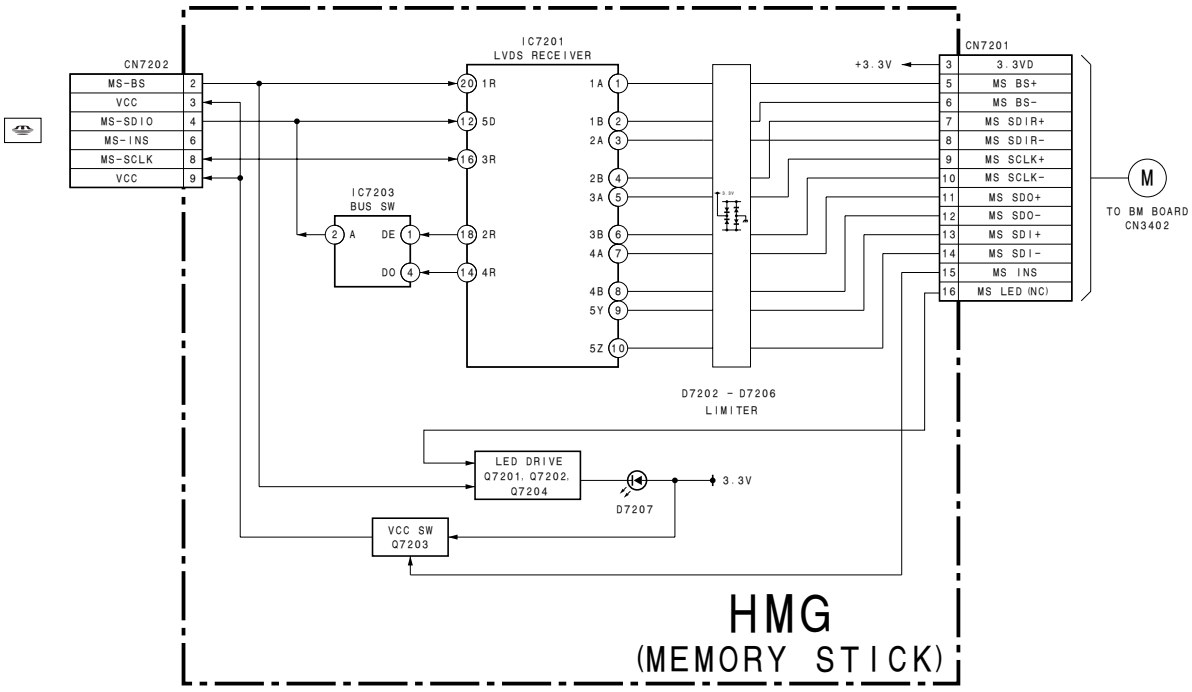


BLOCK DIAGRAM (10)

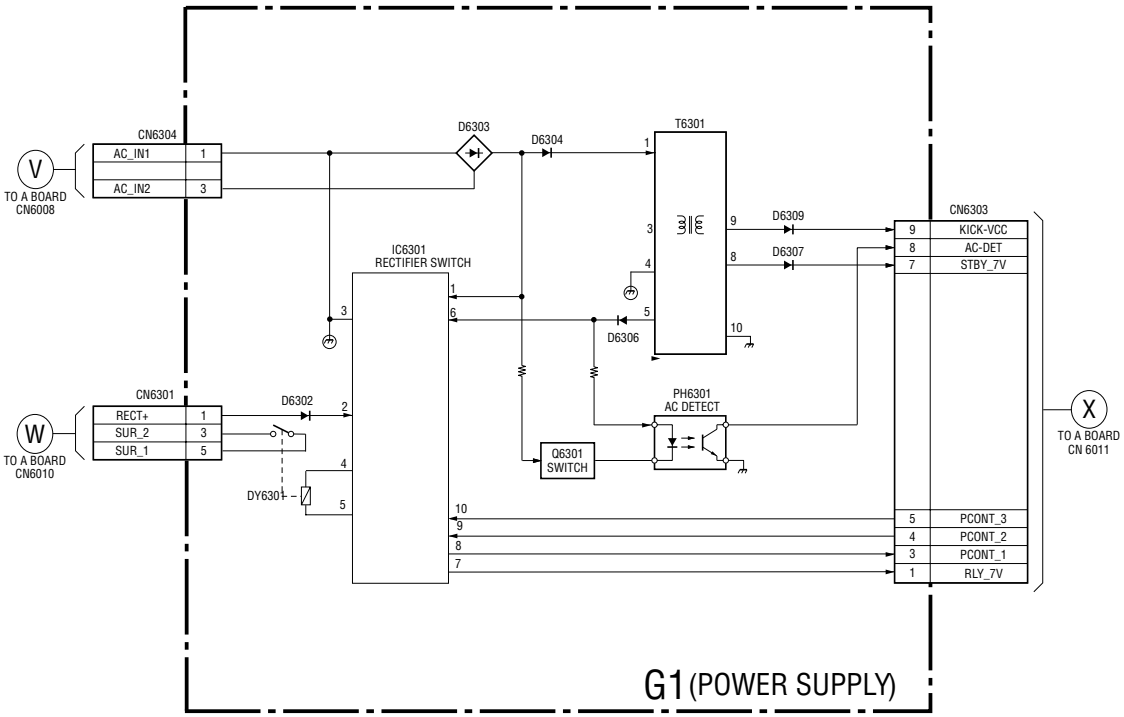


BLOCK DIAGRAM (11)

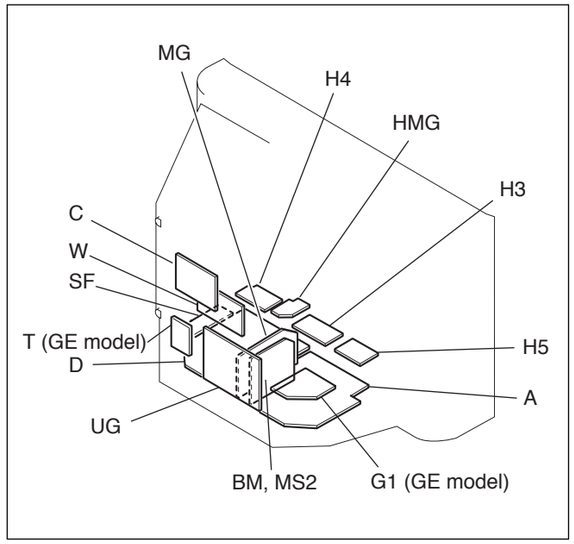




BLOCK DIAGRAM (12)



6-2. CIRCUIT BOARDS LOCATION



Note: The symbol ▬▬ display is on the component slde.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The symbol ▬▬ indicate fast operating fuse. Replace only with fuse of same rating as maked.

6-3. SCHEMATIC DIAGRAMS

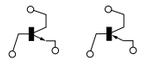
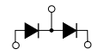
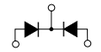
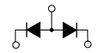
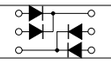
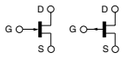
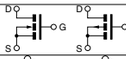
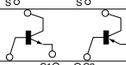
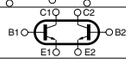
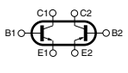
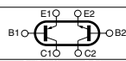
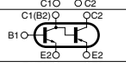
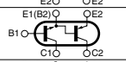
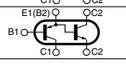
Note:
- Capacitors without voltage indication are all 50V.
- All resistors are in ohms.
  kΩ=1000Ω, MΩ=1000kΩ
- Indication of resistance, which dose not have one for rating electrical power, is as follows.
  Pitch : 5mm
  Rating electrical power : 1/4 W
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-chassis.
- The components identified by ⧓ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪ , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⧓ and repeat the adjustment until the specified value is achieved.
  (Refer to RV8002 adjustment on Page 56.)
- Readings are taken with a PAL color-bar signal input.
- Readings are taken with a 10MΩ digital multimeter.

- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
  ＊ : Measurement impossibillity.
- Circled numbers are waveform references.
- ▬▬ : B+ bus.
- ▬ ▬ ▬ : B– bus.
- ⇨ : signal path.(RF)

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

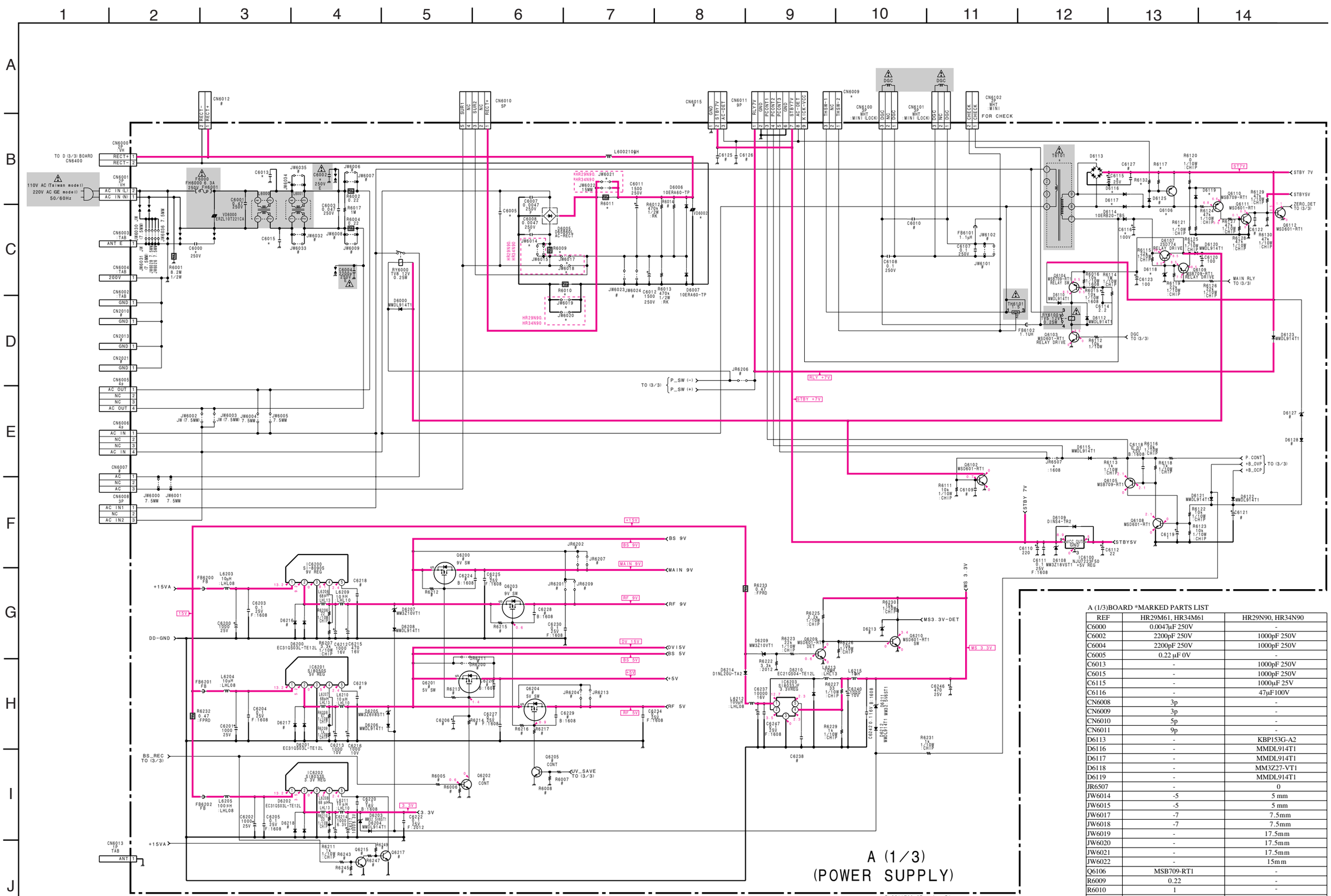
Terminal name of semiconductors in silk screen printed circuit (＊)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor	T	Collector / Base T Emitter	
②	Transistor	▬	Collector / Base ▬ Emitter	
③	Diode	⊓	Cathode ▬ Anode	
④	Diode	T	Cathode / Anode T (NC)	
⑤	Diode	▬	Cathode / Anode ▬ (NC)	
⑥	Diode	T	Common / Anode T Cathode	
⑦	Diode	▬	Common / Anode ▬ Cathode	
⑧	Diode	T	Common / Anode T Anode	
⑨	Diode	▬	Common / Anode ▬ Anode	
⑩	Diode	T	Common / Cathode T Cathode	
⑪	Diode	▬	Common / Cathode ▬ Cathode	
⑫	Diode	▮	Anode / Anode / Cathode ▮ Cathode / Anode / Anode	
⑬	Transistor (FET)	▮	Drain ▮ Source / Gate	
⑭	Transistor (FET)	⊢	Drain ▮ Source / Gate	
⑮	Transistor (FET)	▮	□ Source / □ Drain / □ Gate	
⑯	Transistor	▮	□ Emitter / □ Collector / □ Base	
⑰	Transistor	⊣⊢	C2 B1 E1 / E2 B2 C1	
⑱	Transistor	⊣⊢	C1 B2 E2 / E1 B1 C2	
⑲	Transistor	▬	C1 B2 E2 / E1 B1 C2	
⑳	Transistor	▬	C1 B2 E2 / E1 B1 C2	
㉑	Transistor	▬	E2 B1 E1 / C2 C1(B2)	
㉒	Transistor	▬	(B2) / B1 E1 E2 / C1 C2	
㉓	Transistor	▬	(B2) / E2 E1 B1 / C2 C1	
–	Discrete semiconductot			

(Chip semiconductors that are not actually used are included.)

Ver.1.5

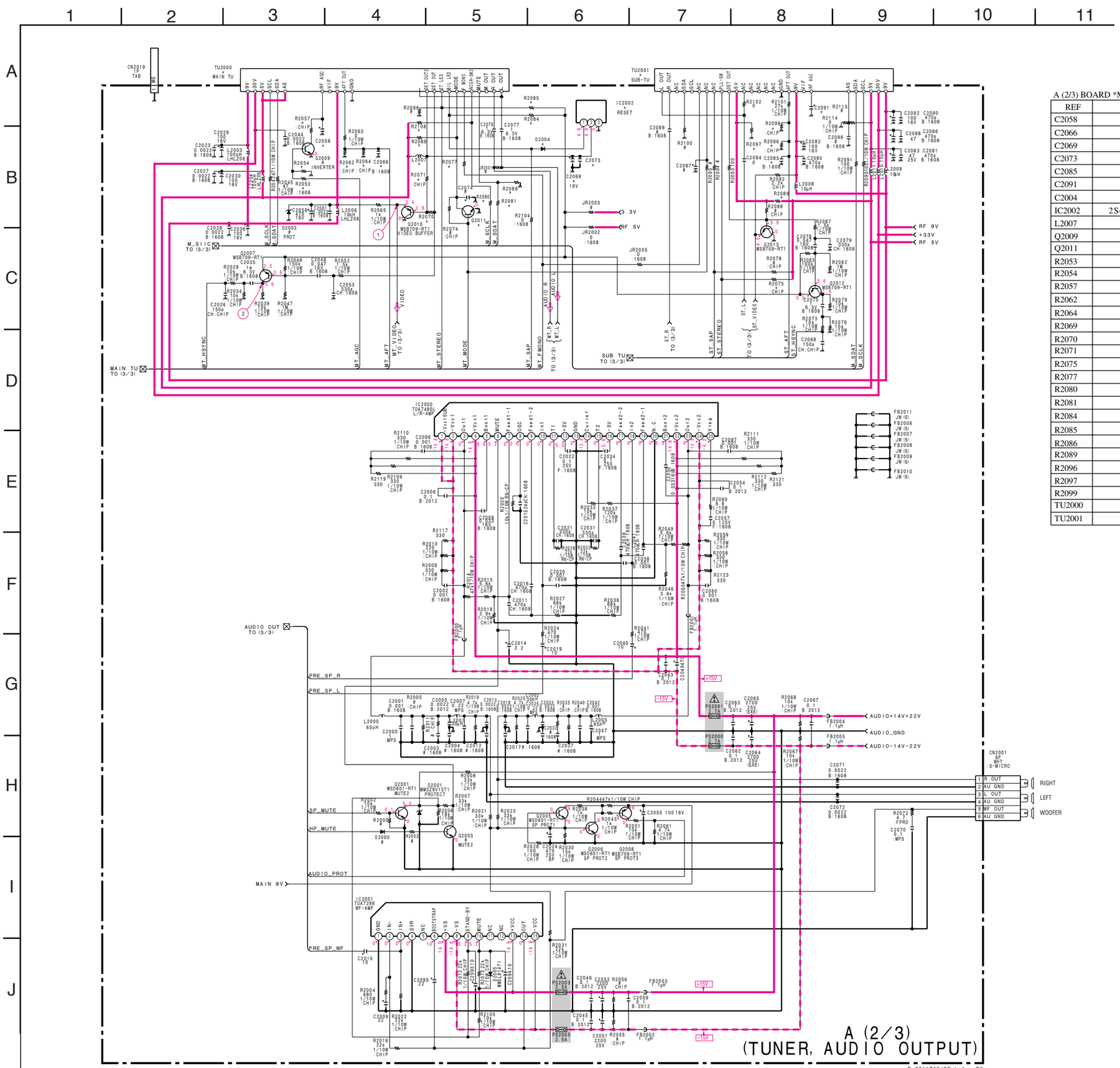
(1) Schematic Diagram of A (1/3) Board



A (1/3)BOARD *MARKED PARTS LIST

REF	HR29M61, HR34M61	HR29N90, HR34N90
C6000	0.0047μF 250V	-
C6002	2200pF 250V	1000pF 250V
C6004	2200pF 250V	1000pF 250V
C6005	0.22 μF 0V	-
C6013	-	1000pF 250V
C6015	-	1000pF 250V
C6115	-	1000μF 25V
C6116	-	47μF100V
CN6008	3p	-
CN6009	3p	-
CN6010	5p	-
CN6011	9p	-
D6113	-	KBP153G-A2
D6116	-	MMDL914T1
D6117	-	MMDL914T1
D6118	-	MM3Z27-VT1
D6119	-	MMDL914T1
JR6507	-	0
JW6014	-5	5 mm
JW6015	-5	5 mm
JW6017	-7	7.5mm
JW6018	-7	7.5mm
JW6019	-	17.5mm
JW6020	-	17.5mm
JW6021	-	17.5mm
JW6022	-	15mm
Q6106	MSB709-RT1	-
R6009	0.22	-
R6010	1	-
R6011	1	-
R6117	10K	-
R6121	-	-
R6132	0	-
T6101	-	TRANSFORMER
VD6002	ENE4710-20A	-

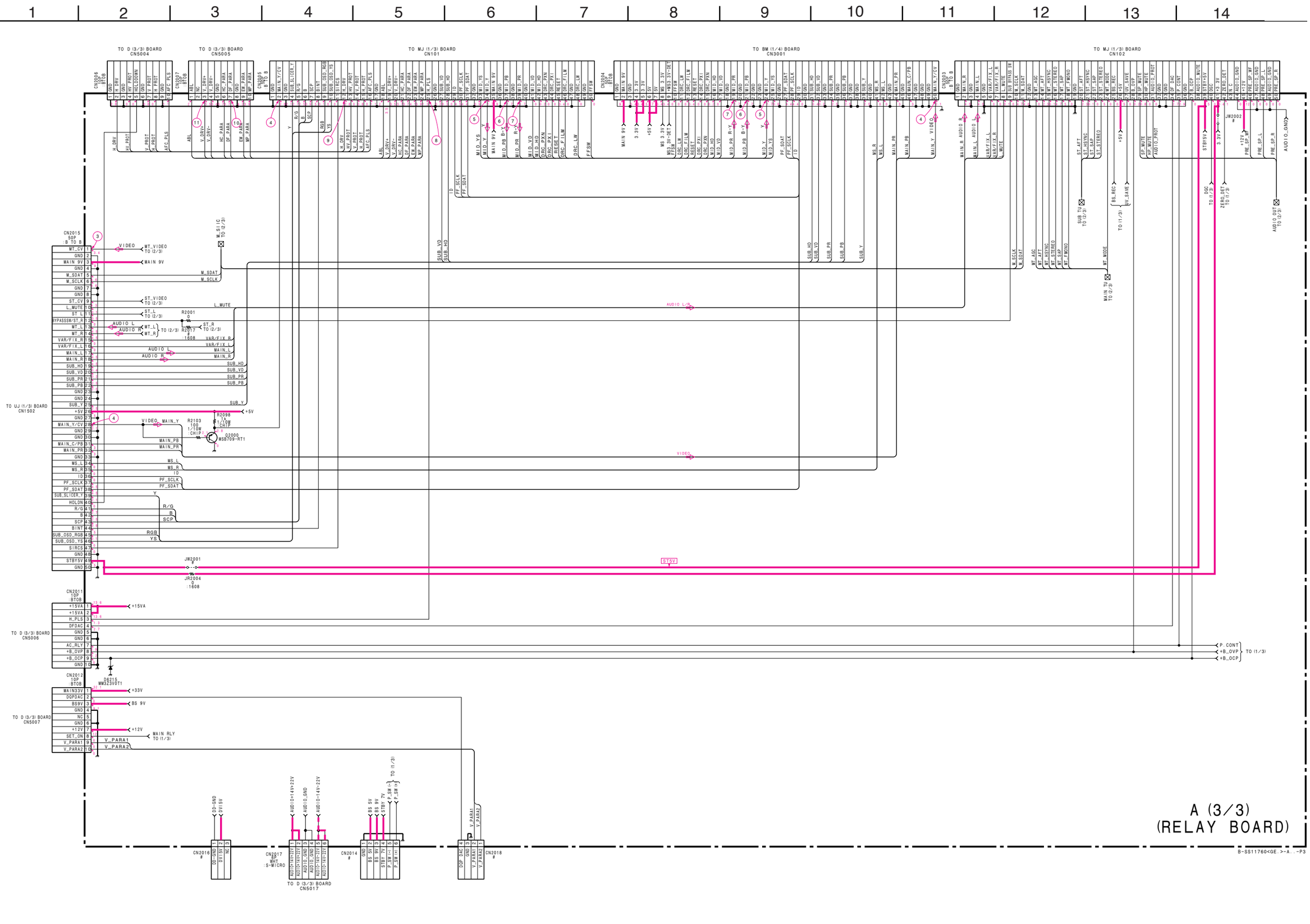
(2) Schematic Diagram of A (2/3) Board



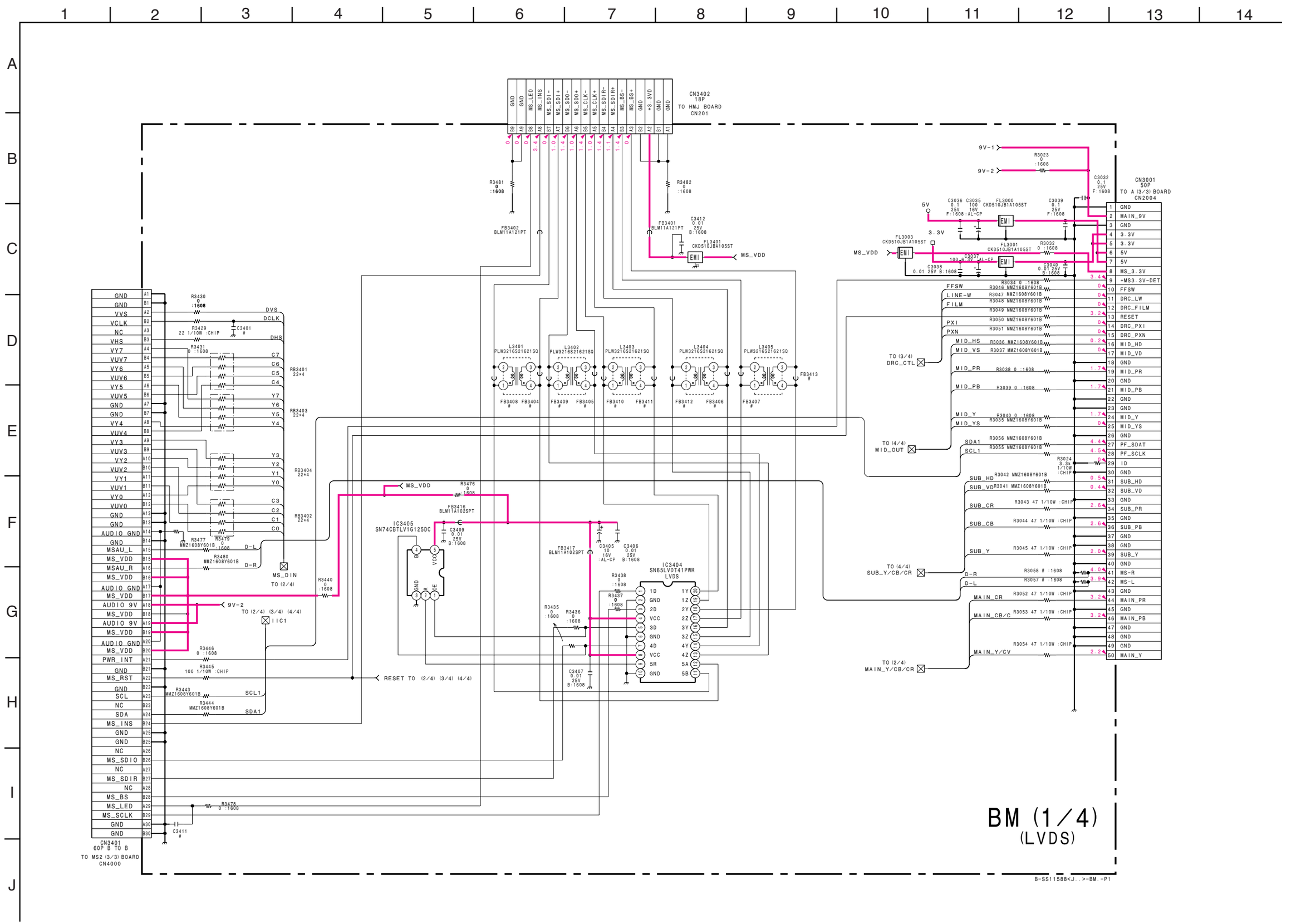
A (2/3) BOARD *MARKED PARTS LIST

REF	HR29M61:GE	HR29N90:WB
C2058	-	10µF 50V
C2066	-	0.01µF 25V
C2069	100 F 16V	-
C2073	0.1 F 25V	-
C2085	-	0.01µF 25V
C2091	-	10µF50V
C2004	MMDL914T1	-
IC2002	2S-80843CLUA-B64T2G	-
L2007	10 µH	-
Q2009	-	MSD 601-RT1
Q2011	-	MSD 601-RT1
R2053	-	10K
R2054	-	10K
R2057	-	47K
R2062	-	22K
R2064	-	150K
R2069	-	10K
R2070	0	-
R2071	-	0
R2075	100	-
R2077	-	0
R2080	100	-
R2081	100	-
R2084	-	22K
R2085	-	22K
R2086	-	0
R2089	0	-
R2096	-	150K
R2097	-	0
R2099	-	22K
TU2000	BTF-WG442	BTF-WA421
TU2001	BTF-LG434	BTF-FA421

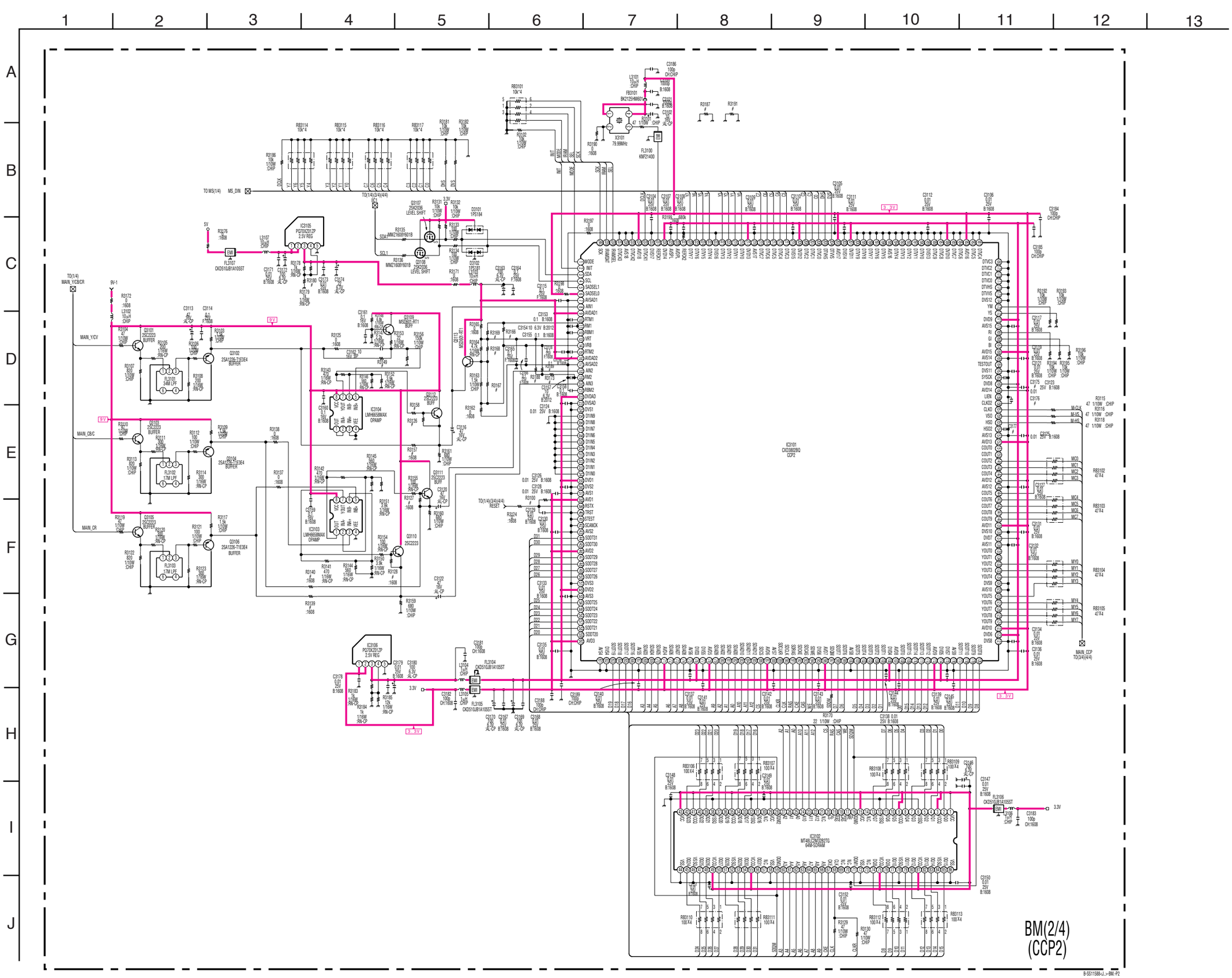
(3) Schematic Diagram of A (3/3) Board



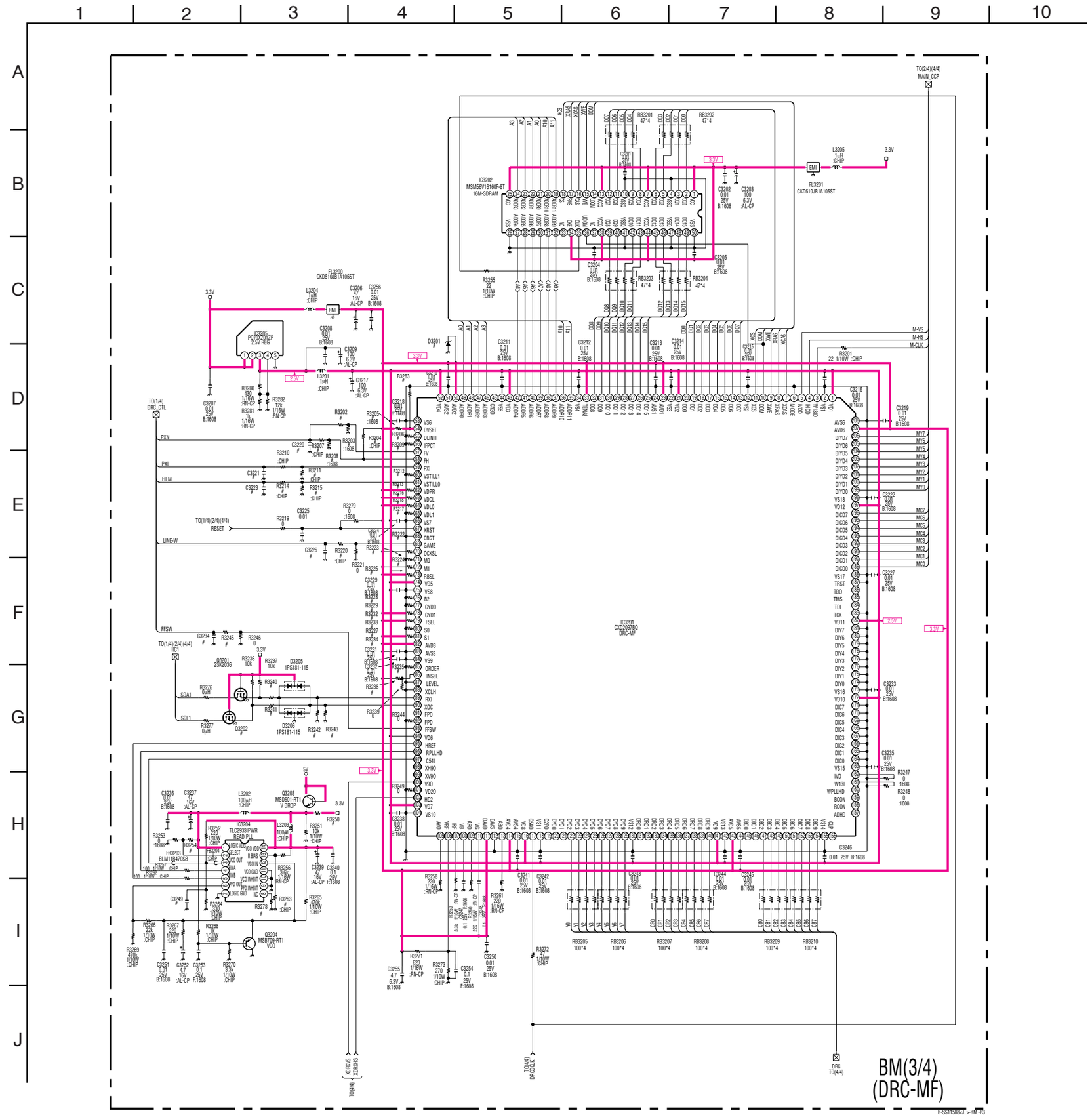
(4) Schematic Diagram of BM (1/4) Board



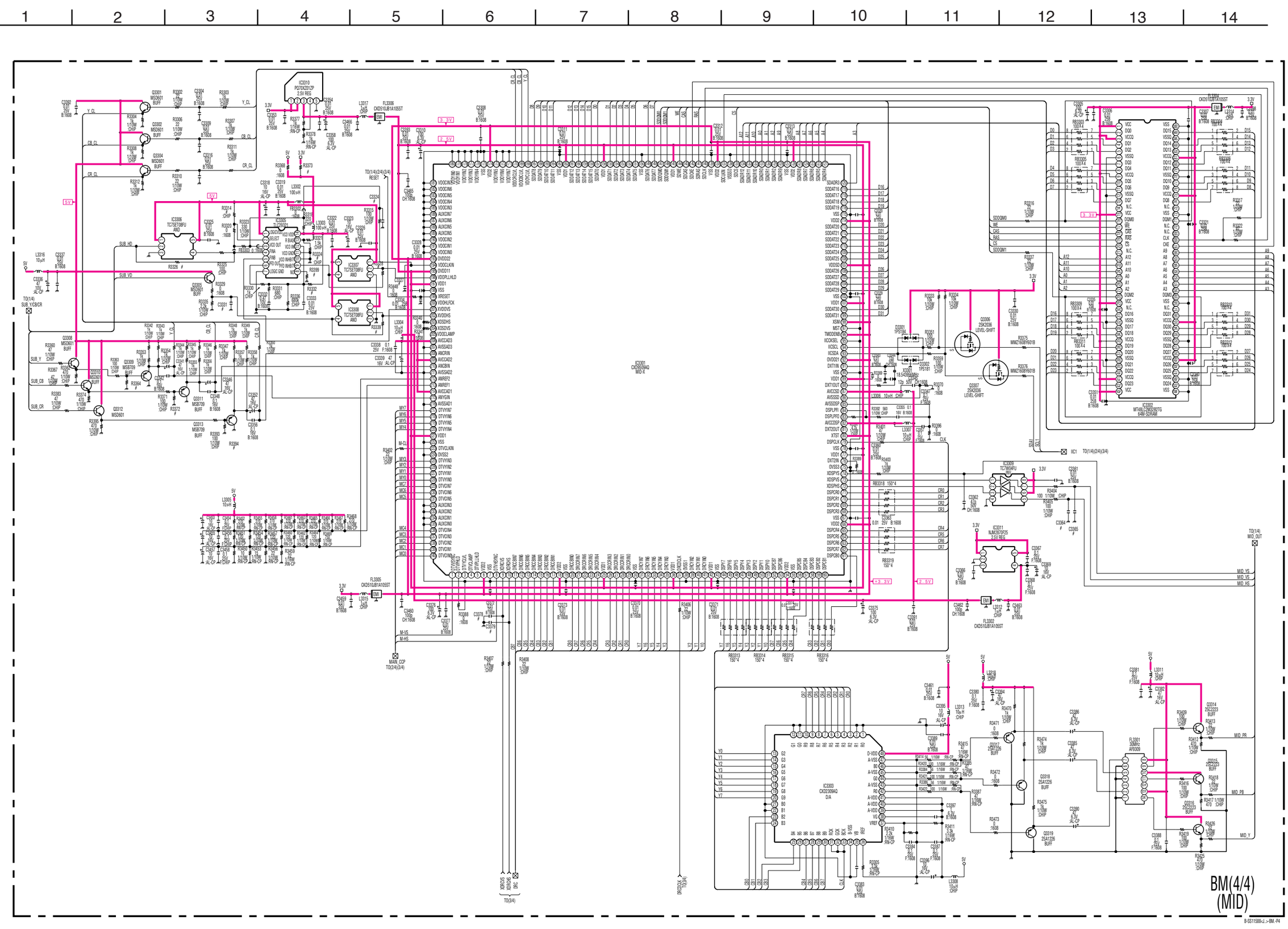
(5) Schematic Diagram of BM (2/4) Board



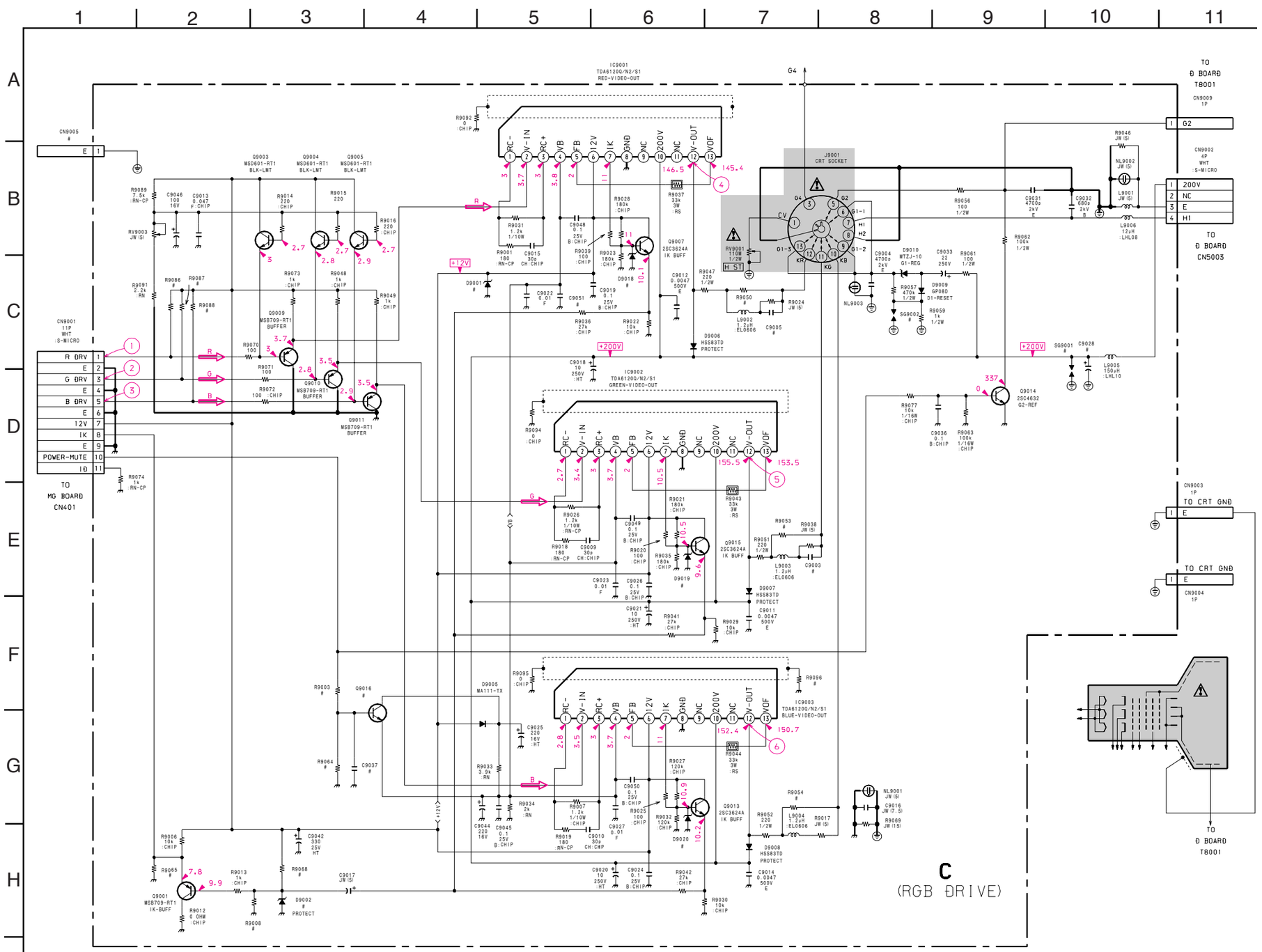
(6) Schematic Diagram of BM (3/4) Board



(7) Schematic Diagram of BM (4/4) Board



(8) Schematic Diagram of C Board



(9) Schematic Diagram of D (1/3) Board

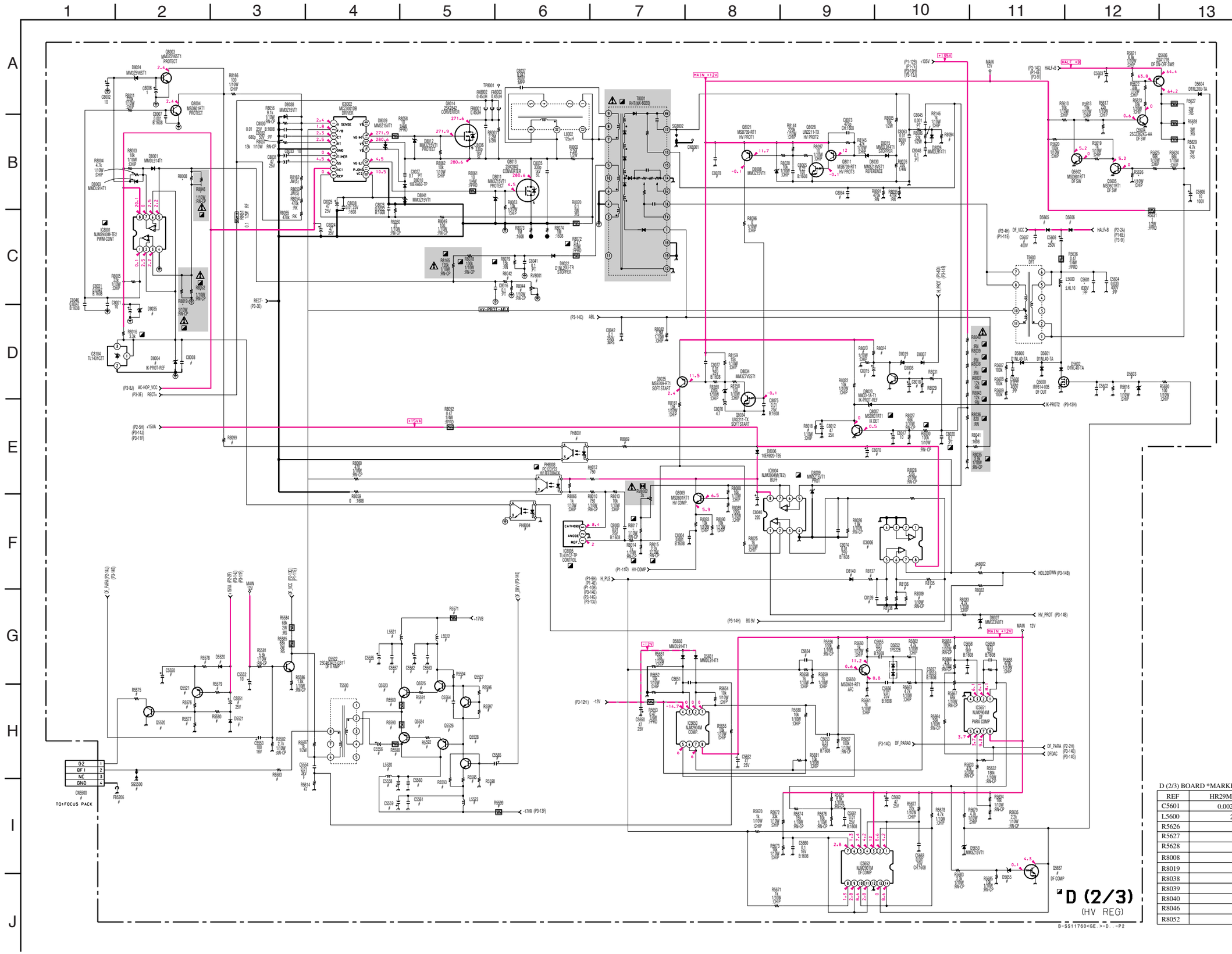
D (1/3) BOARD *MARKED PARTS LIST

REF	HR29M61, HR29N90	HR34M61, HR34N90
C5003	4700p 1.5KV	9100p 1.5KV
C5004	5100p 1.5KV	9100p 1.5KV
C5008	-	470p 2KV
C5204	100uF 160V	220uF 160V
C5409	0.27uF 250V	0.56uF 250V
C5418	0.33uF 250V	0.47uF 400V
C5424	1uF 6.3V	-
Q5407	MSB709-RT1	-
R5001	1.5K	390
R5002	1.5K	390
R5004	-	390
R5010	-	0.47
R5011	-	390
R5112	4.7K	3.3K
R5113	4.7K	3.3K
R5239	100K	-
R5439	33K	-
R5440	390K	-
R5441	68K	-

D (1/3)
(H OUT/V OUT)

B-SS11760<GE.>-D...-P1

(10) Schematic Diagram of D (2/3) Board



D (2/3) BOARD *MARKED PARTS LIST

REF	HR29M61, HR29N90	HR34M61, HR34N90
C5601	0.0022uF 630V	0.001uF 630V
L5600	220uH	330uH
R5626	68K	68K
R5627	3.9K	4.7K
R5628	3.9K	4.7K
R8008	18K	-
R8019	15K	27K
R8038	15K	12K
R8039	15K	12K
R8040	3K	4.7K
R8046	2.2K	1.5K
R8052	82K	22K

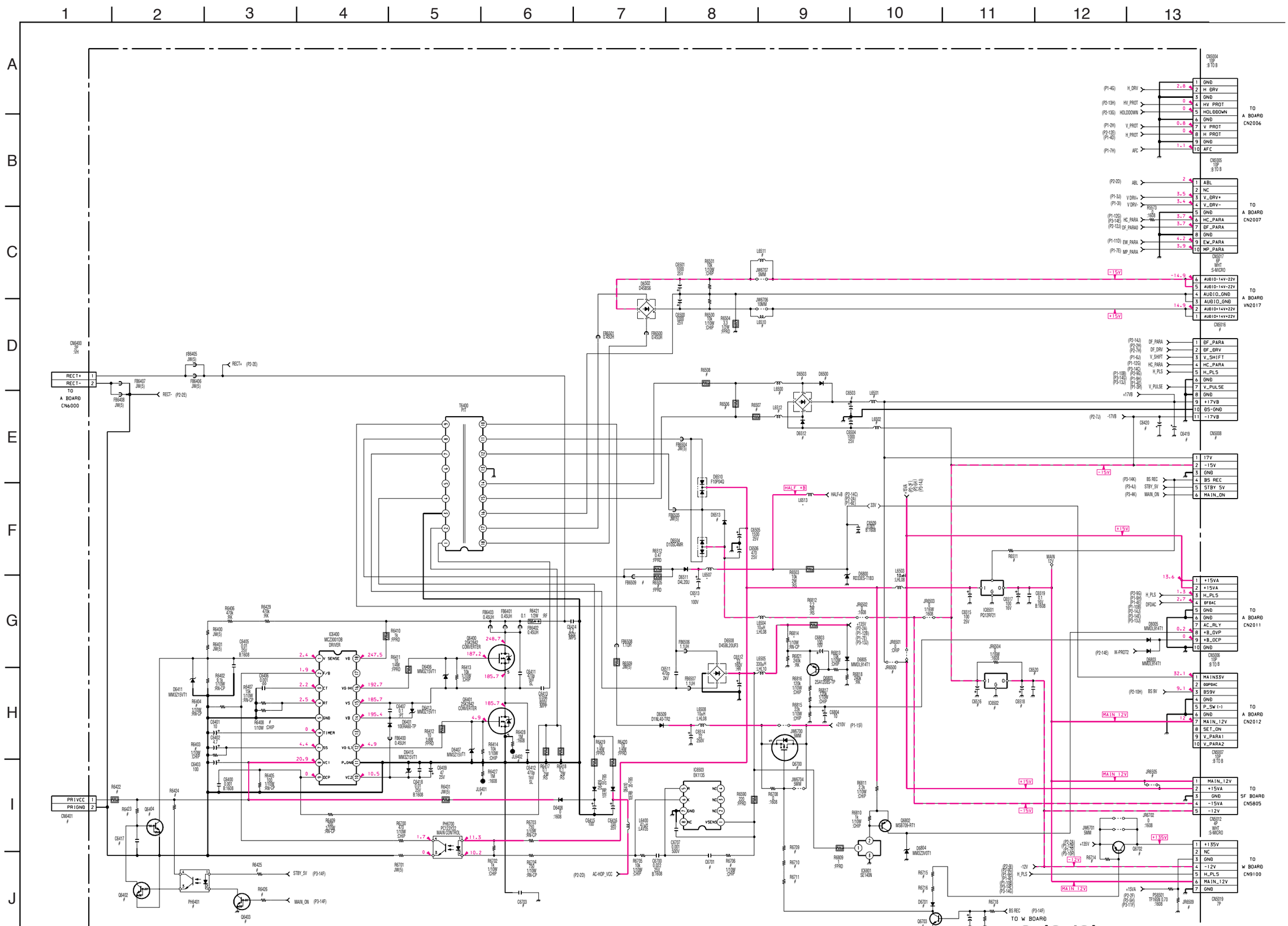
KV-HR29M61/HR29N90/HR34M61/HR34N90

RM-1007 RM-1011 RM-1007 RM-1011

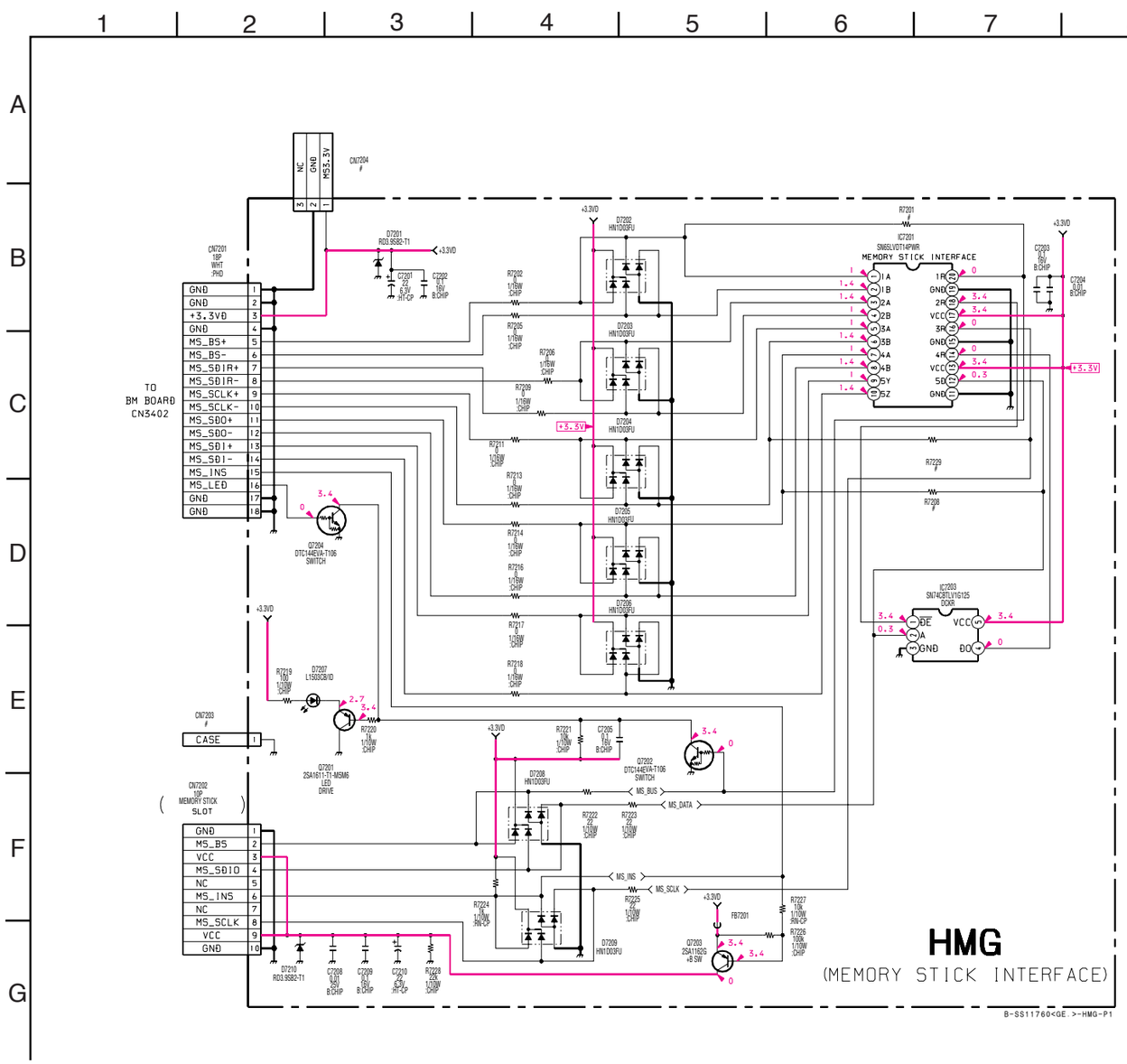
(11) Schematic Diagram of D (3/3) Board

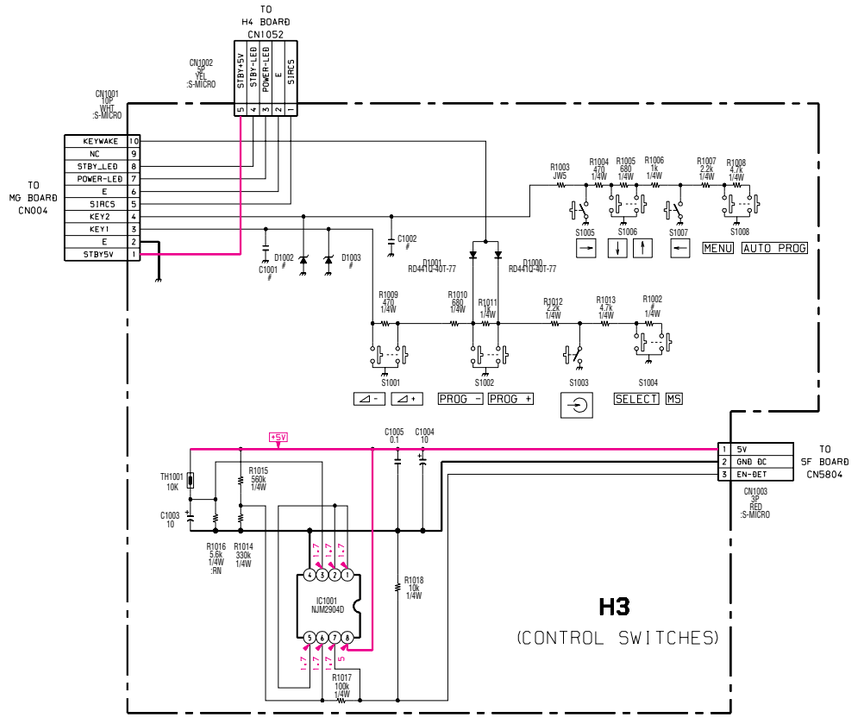
D (3/3) BOARD *MARKED PARTS LIST

REF	HR29M61, HR29N90	HR34M61, HR34N90
C6513	100uF 100V	82uF 100V
L6507	100uH	JW
L6513	COIL,CHOPPER	COIL,CHOPPER
R6814	1.5K	2.2K

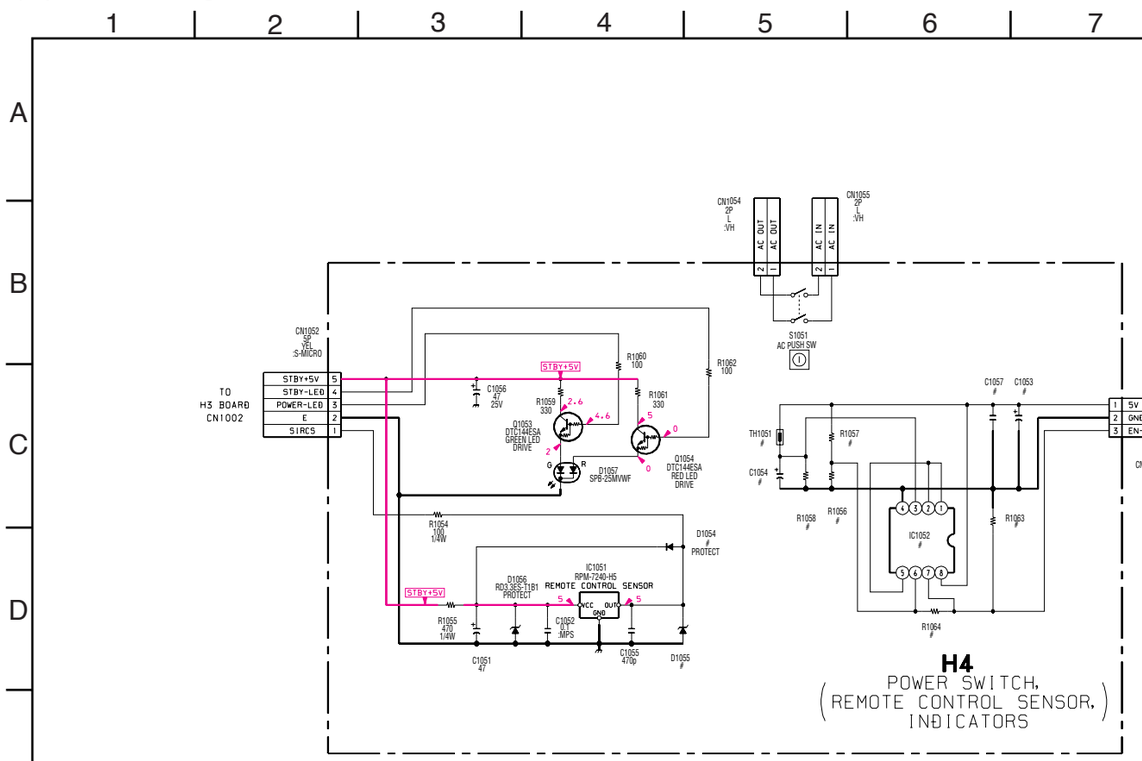


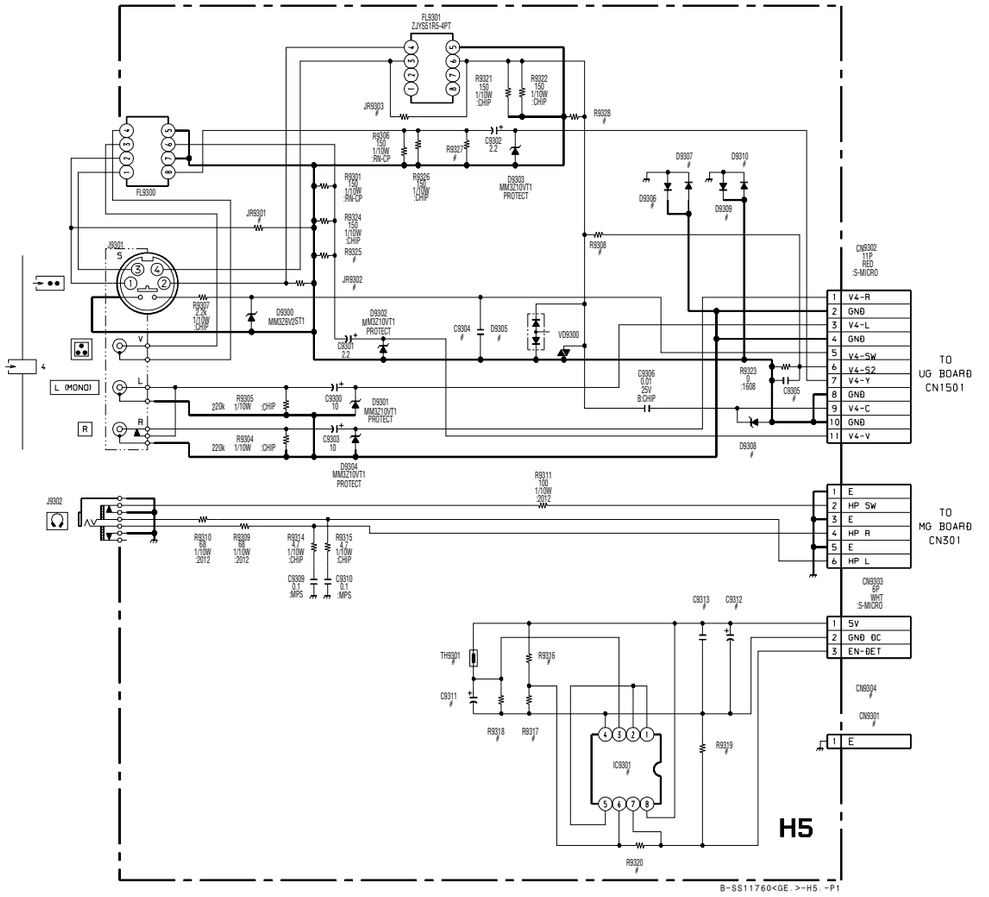
(12) Schematic Diagram of HMG, H3 Board





(13) Schematic Diagram of H4, H5 Board





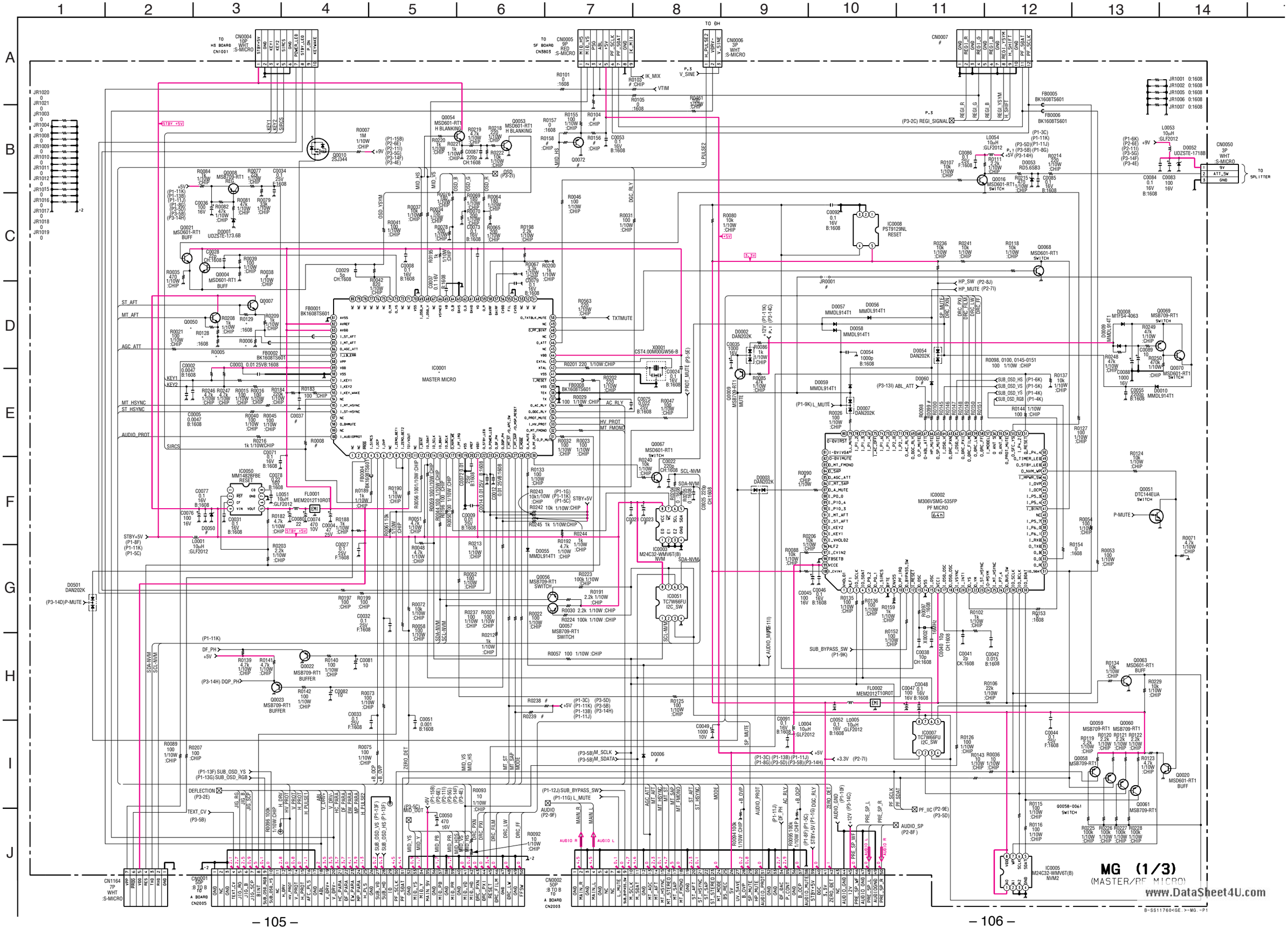
KV-HR29M61/HR29N90/HR34M61/HR34N90

RM-1007 RM-1011 RM-1007 RM-1011

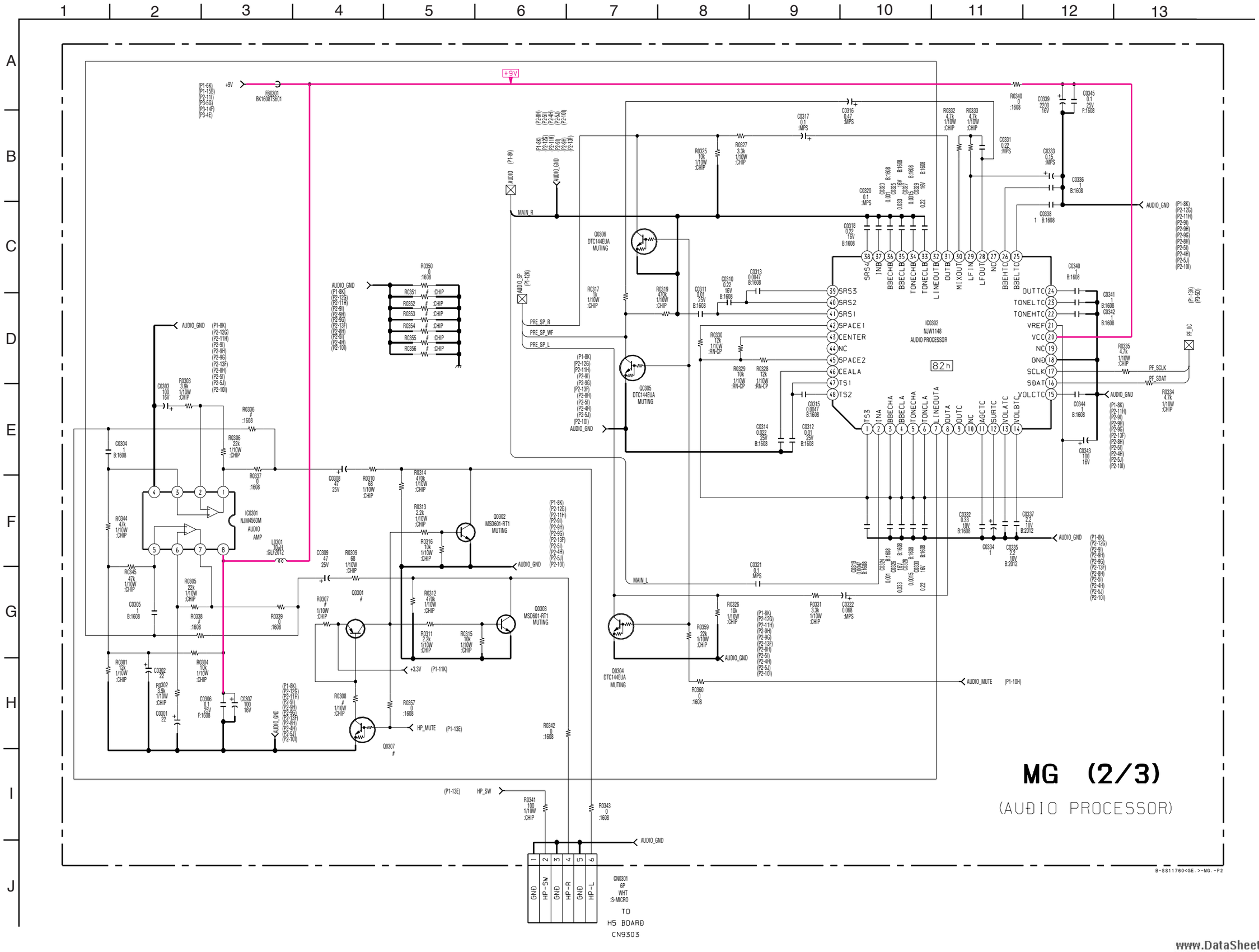
MG (1/3) BOARD *MARKED PARTS LIST

REF	HR29M61, HR34M61	HR29N90, HR34N90
IC0001	CXP96148-013Q	CXP961048-014Q
Q0007	2SC4081106R	-
Q0050	2SC4081106R	-
R0005	15K	-
R0006	15K	-
R0128	-	0
R0129	-	0

(14) Schematic Diagram of MG (1/3) Board



(15) Schematic Diagram of MG (2/3) Board



(16) Schematic Diagram of MG (3/3) Board

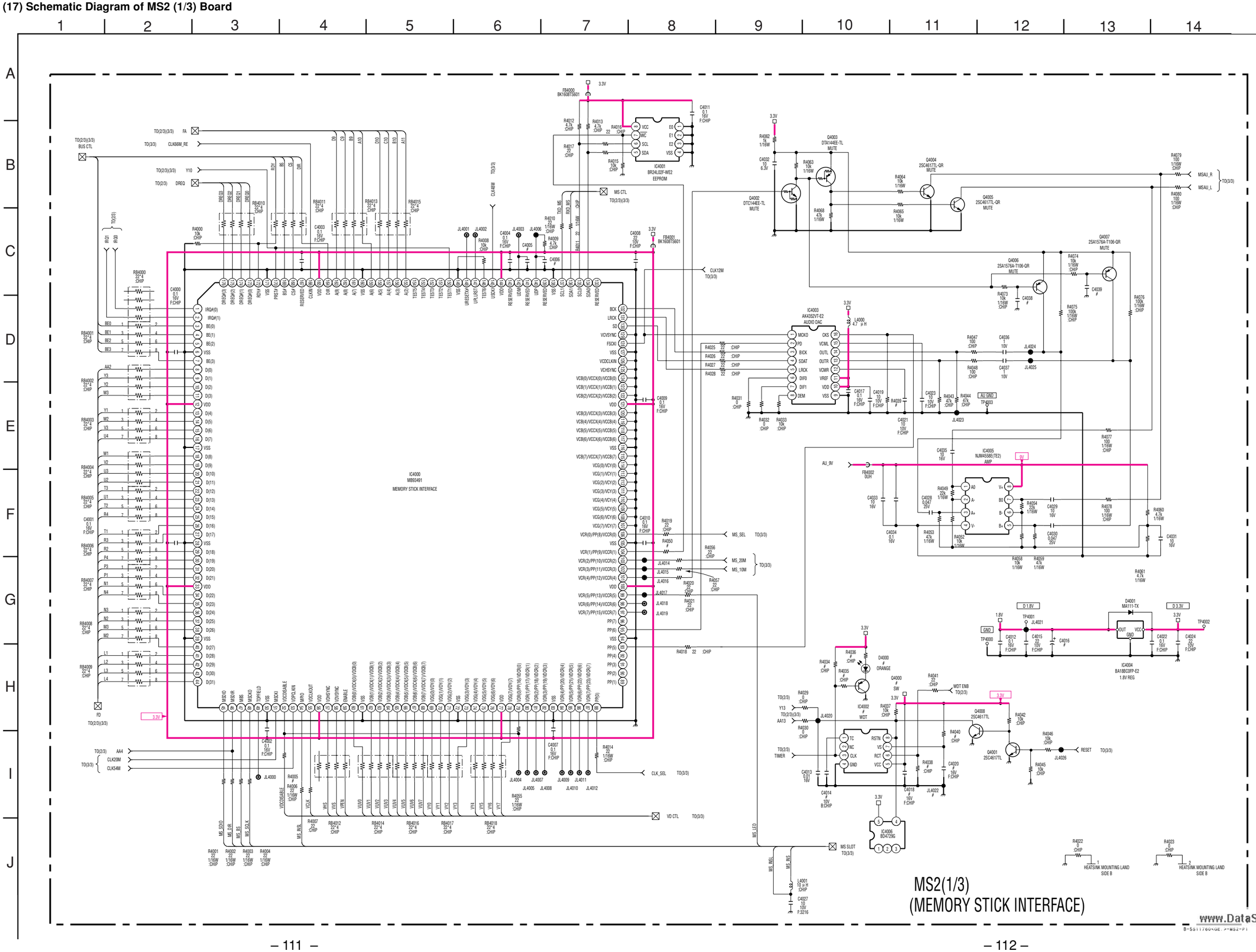
MG (3/3) BOARD *MARKED PARTS LIST

REF	HR29M61:GE	HR29N90:WB
CN0405	5P	-
CN0406	8P	-

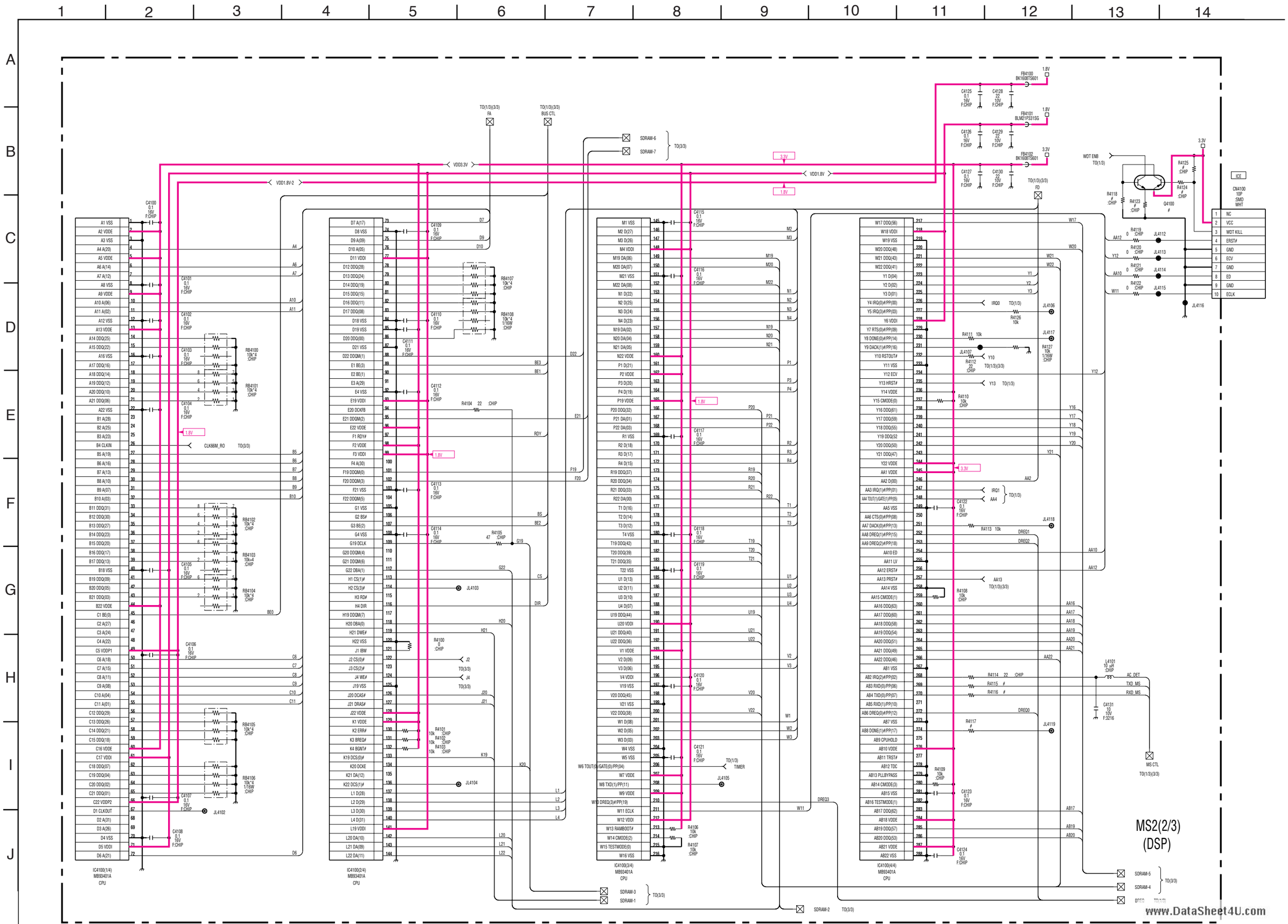
MG (3/3)

(COMPONENNT-I/F)

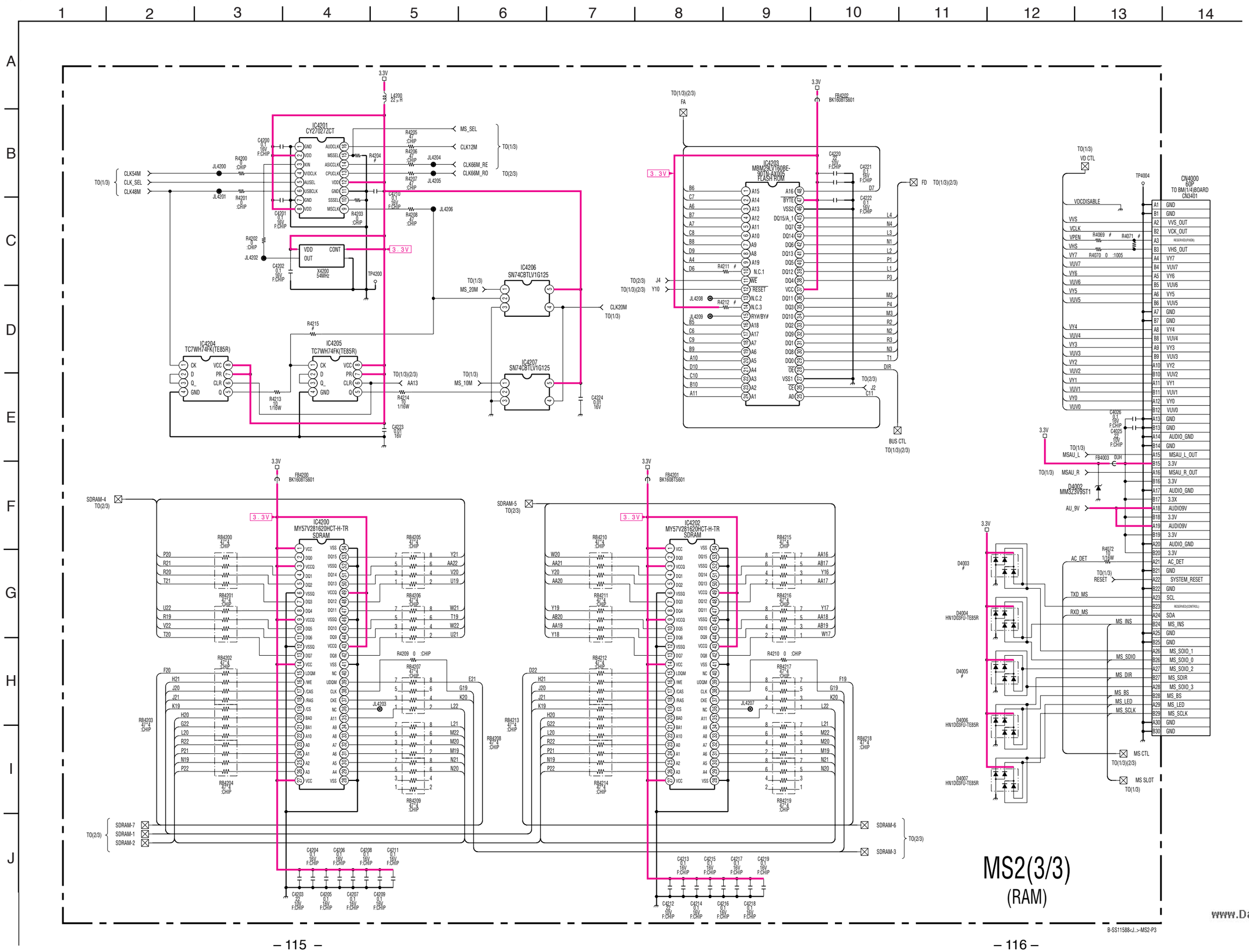
(17) Schematic Diagram of MS2 (1/3) Board



(18) Schematic Diagram of MS2 (2/3) Board



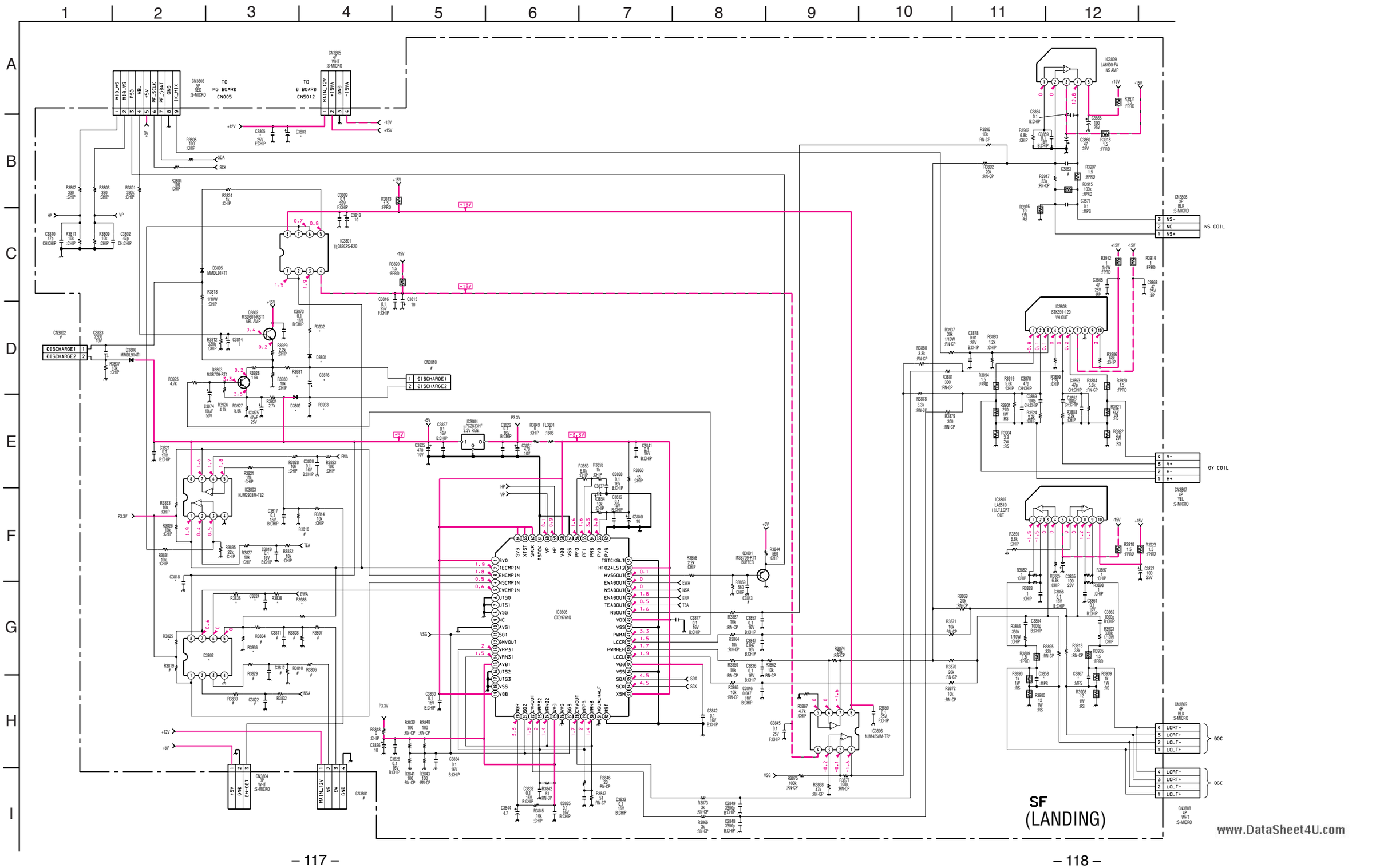
(19) Schematic Diagram of MS2 (3/3) Board



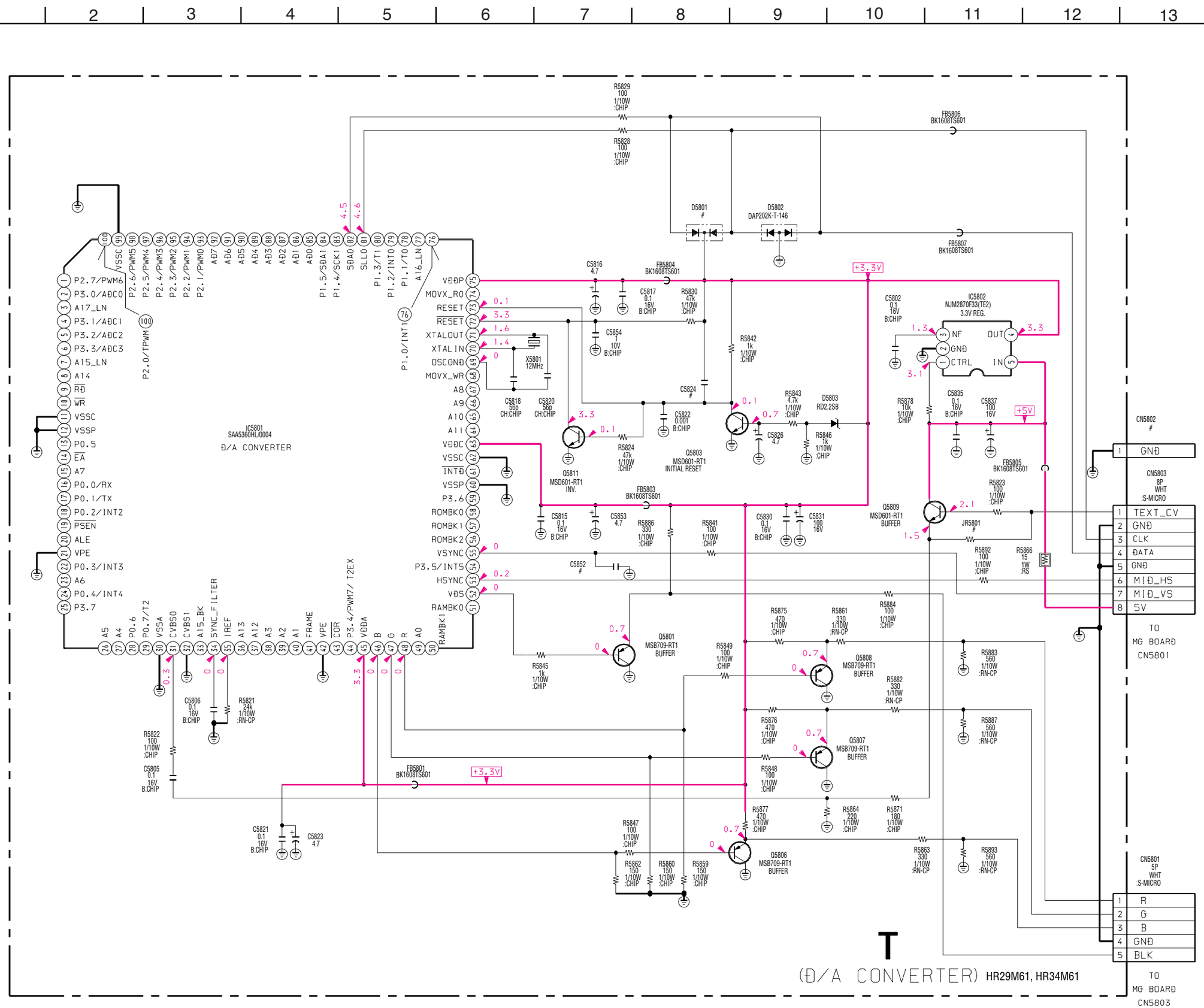
SF BOARD *MARKED PARTS LIST

REF	HR29M61	HR29N90	HR34M61	HR34N90
C3803	-	-	-	10uF 52V
C3805	-	-	-	0.1uF 27V
C3818	0.1uF 16V	0.1uF 16V	-	-
C3824	0.1uF 16V	0.1uF 16V	-	-
C3858	VARISTOR,ERZV09D180	0.1uF 50V	VARISTOR,ERZV09D180	0.1uF 50V
C3867	VARISTOR,ERZV09D180	0.1uF 50V	VARISTOR,ERZV09D180	0.1uF 50V
C3876	220uF 16V	220uF 16V	-	-
D3801	MMDL914T7	MMDL914T1	-	-
D3802	MMDL914T7	MMDL914T1	-	-
IC3802	NJM2903M-TE2	NJM2903M-TE2	-	-
R3818	1M	1M	330K	330K
R3825	10K	10K	-	-
R3836	10K	10K	-	-
R3838	10K	10K	-	-
R3931	330K	330K	-	-
R3932	1K	1K	-	-
R3933	10K	10K	-	-
R3935	10K	10K	-	-
R3936	22K	22K	-	-

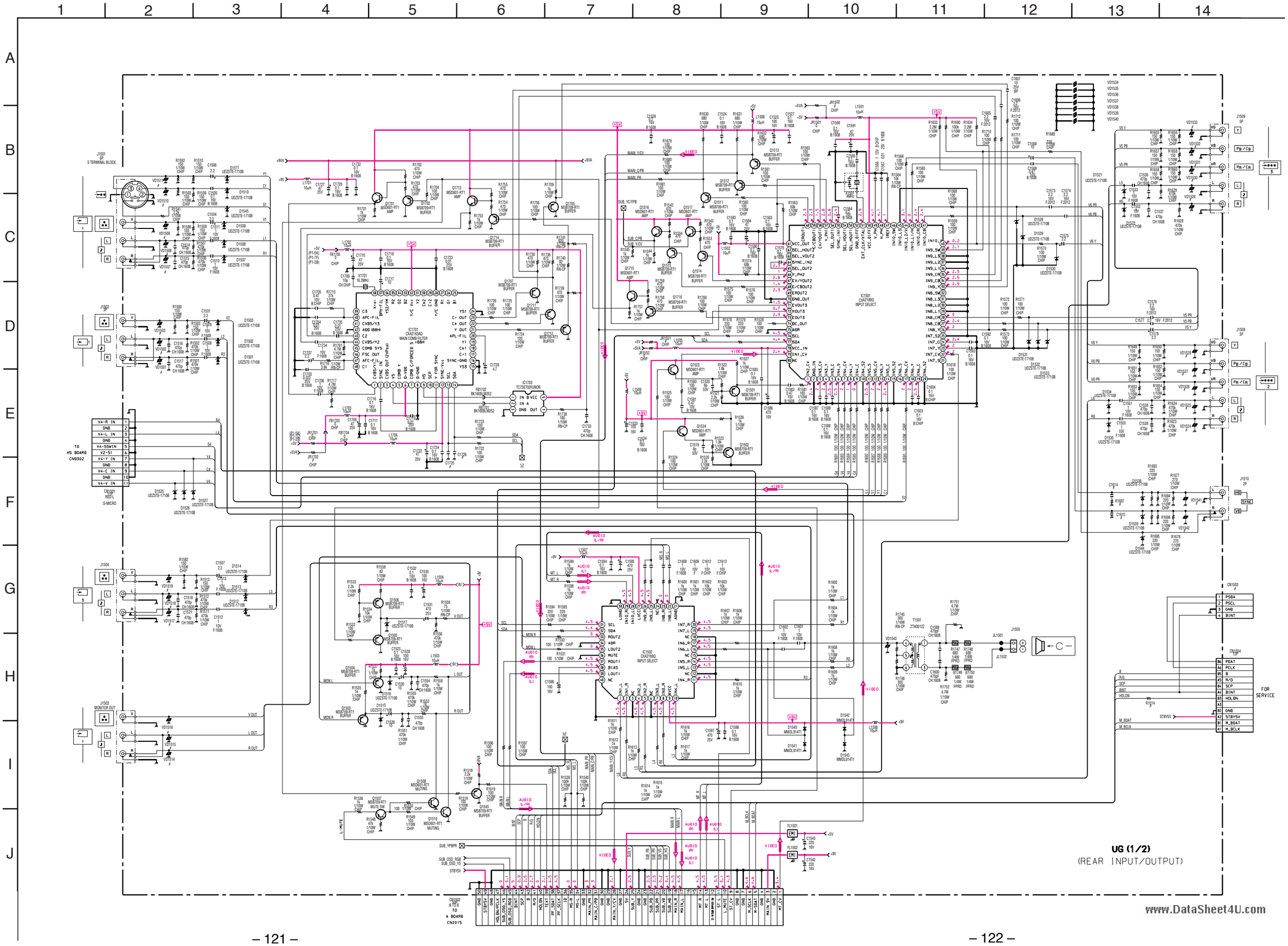
(20) Schematic Diagram of SF Board



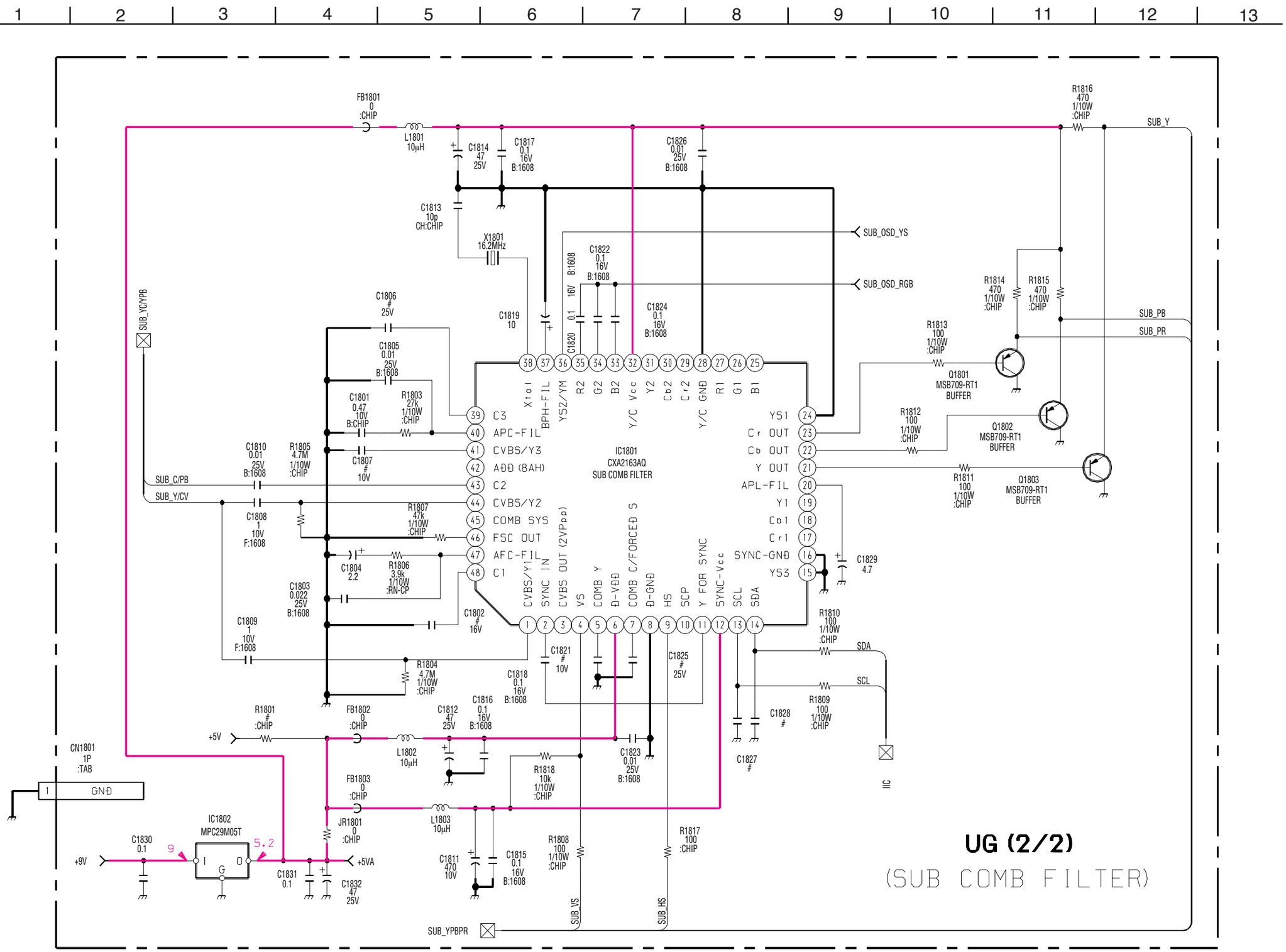
(21) Schematic Diagram of T Board



(22) Schematic Diagram of UG (1/2) Board



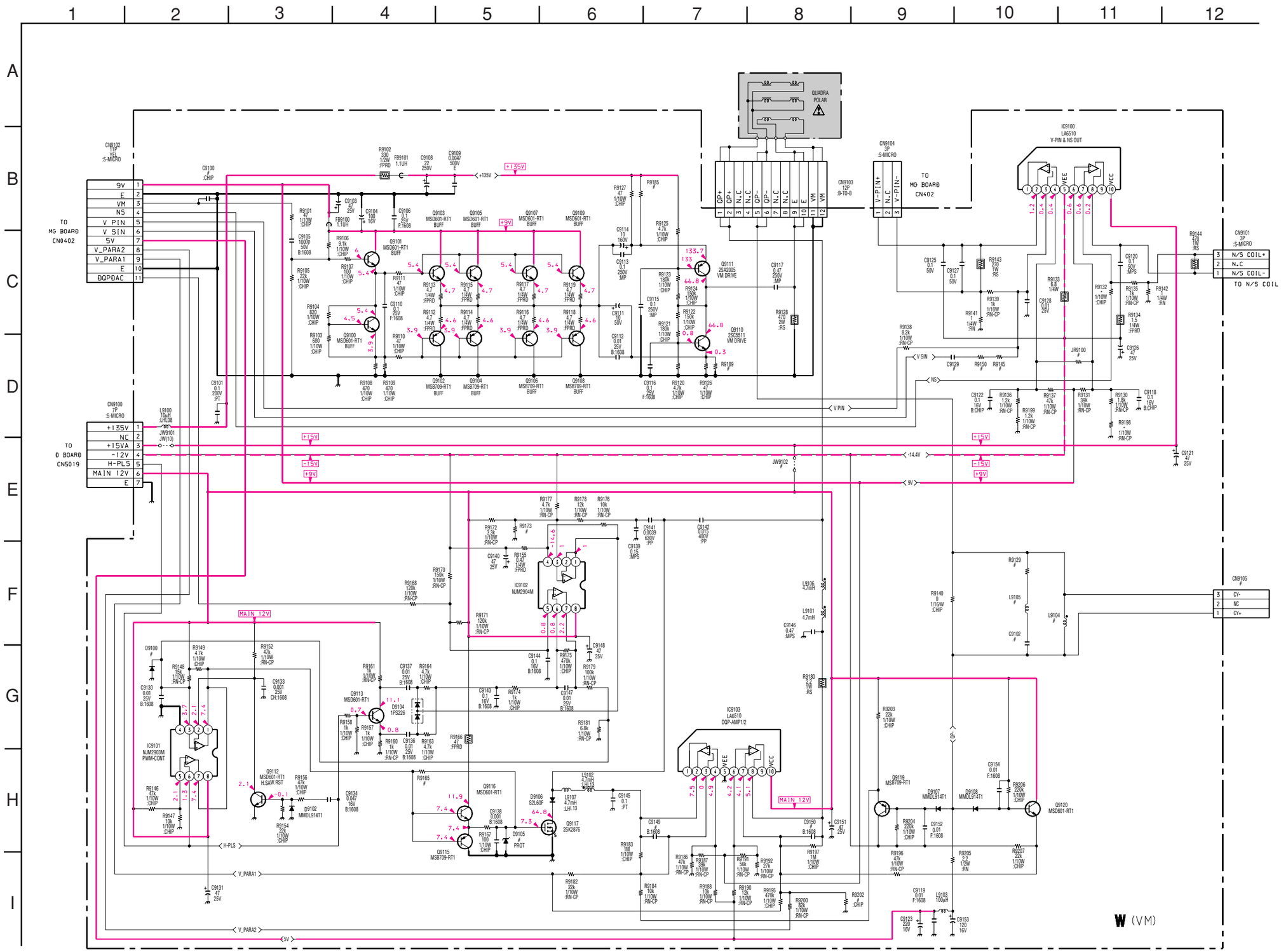
(23) Schematic Diagram of UG (2/2) Board



W BOARD *MARKED PARTS LIST

REF	HR29M61	HR29N90	HR34M61	HR34N90
R9132	5.6k	6.8k	5.6k	5.6k
R9198	560	560	1k	1k

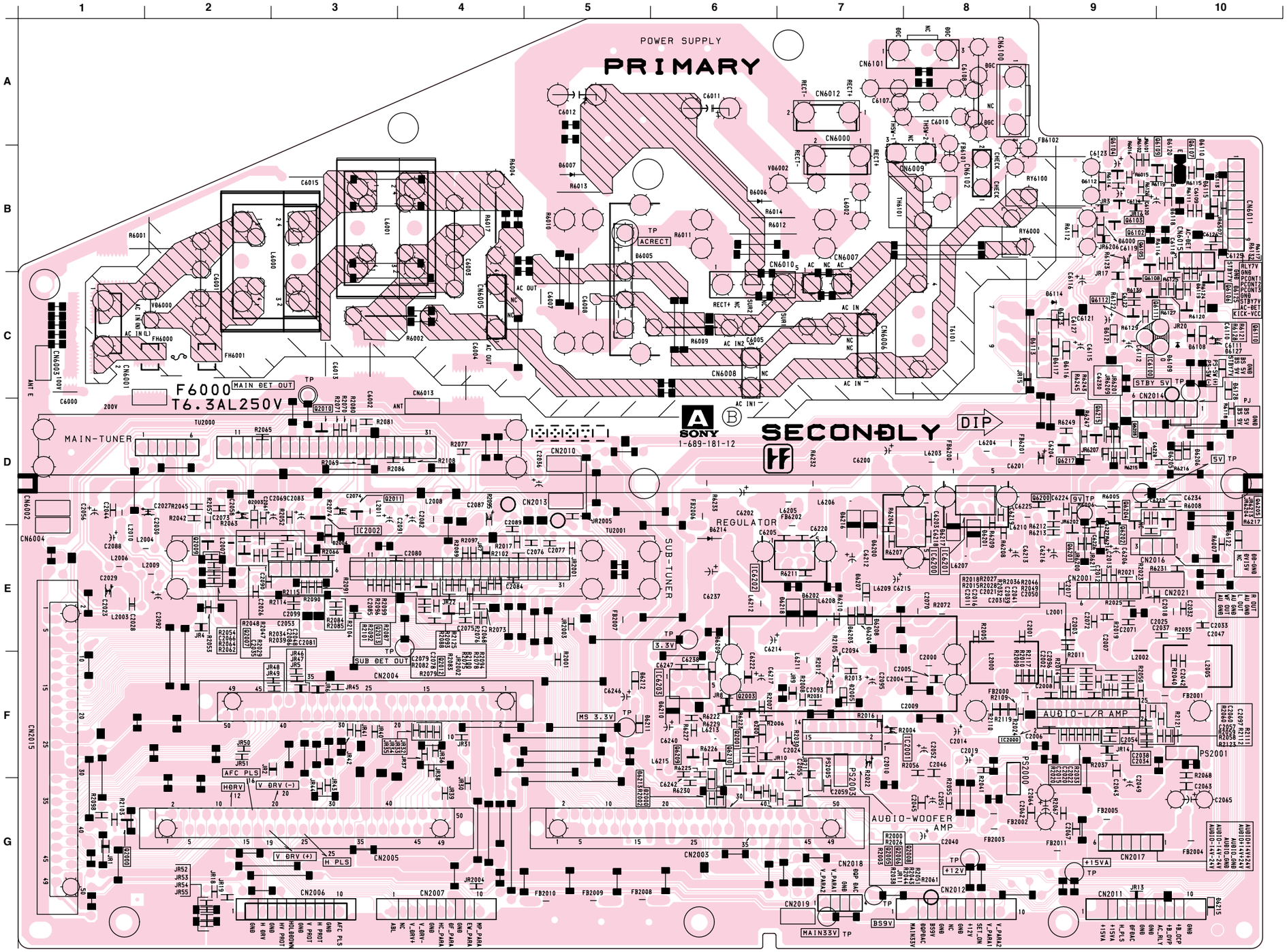
(24) Schematic Diagram of W Board



6-4. PRINTED WIRING BOARDS

A [POWER SUPPLY, TUNER, AUDIO OUTPUT, RELAY BOARD]

— A BOARD —



• A BOARD SEMICONDUCTOR LOCATION

IC		
IC2000	F-9	
IC2001	F-7	
IC2002	D-3	
IC6100	C-9	
IC6200	D-8	
IC6201	D-8	
IC6202	E-7	
IC6203	F-6	

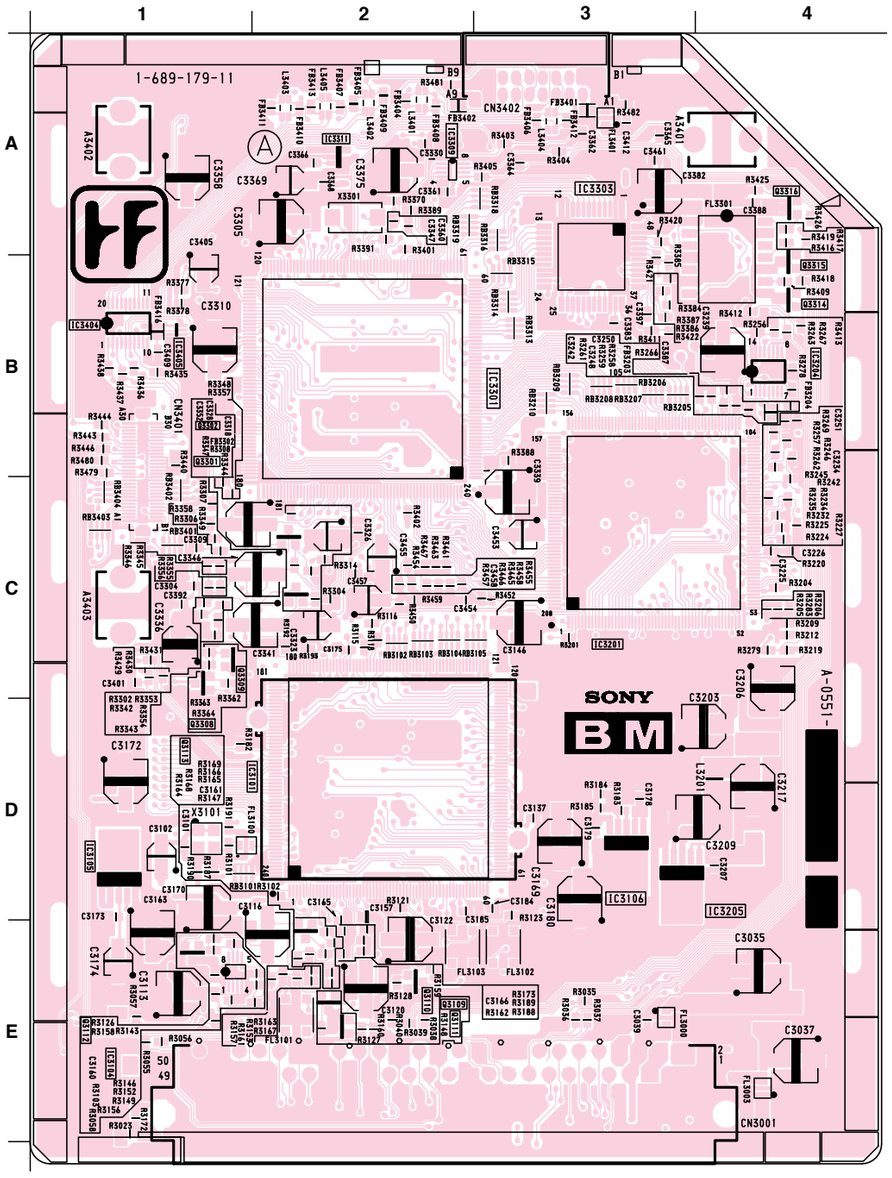
TRANSISTOR		
		*
Q2000	G-1	①
Q2001	F-6	①
Q2005	F-6	①
Q2006	F-6	①
Q2007	E-2	①
Q2008	F-6	①
Q2010	D-3	①
Q2012	E-4	①
Q2013	E-4	①
Q6102	B-9	①
Q6103	B-9	①
Q6104	B-9	①
Q6105	B-9	①
Q6107	B-10	①
Q6108	B-9	①
Q6109	B-10	①
Q6110	C-10	①
Q6111	C-9	①
Q6112	C-9	①
Q6209	F-6	①
Q6210	F-6	①

DIODE		
		*
D2001	F-6	③
D2004	E-3	③
D2005	F-7	③
D6000	B-9	③
D6005	B-5	③
D6108	C-10	③
D6109	C-10	③
D6110	B-10	③
D6112	B-9	③
D6113	C-9	③
D6114	C-9	③
D6115	B-10	③
D6116	C-9	③
D6117	C-9	③
D6118	B-10	③
D6119	C-10	③
D6120	B-10	③
D6121	C-9	③
D6122	E-10	③
D6123	C-9	③
D6200	D-7	③
D6201	E-8	③
D6202	E-7	③
D6203	E-7	③
D6204	E-7	③
D6205	D-10	③
D6206	D-10	③
D6207	E-7	③
D6208	E-7	③
D6209	F-6	③
D6210	F-6	③
D6211	F-5	③
D6212	F-5	③
D6214	E-6	③
D6215	G-10	③

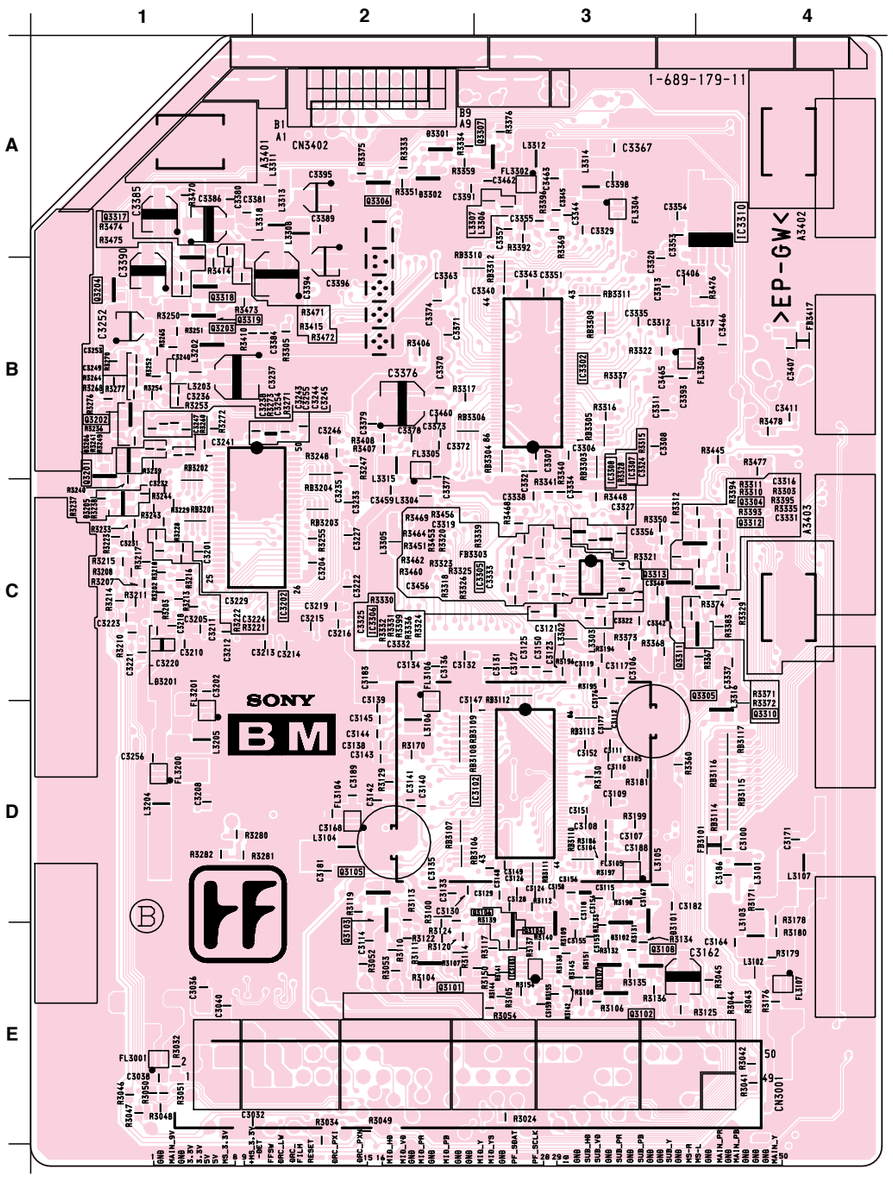
*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page XX)

BM [LVDS, DRC-MF, A/D CONVERTER, MID]

— BM BOARD (A Side) —



— BM BOARD (B Side) —



• BM BOARD SEMICONDUCTOR LOCATION

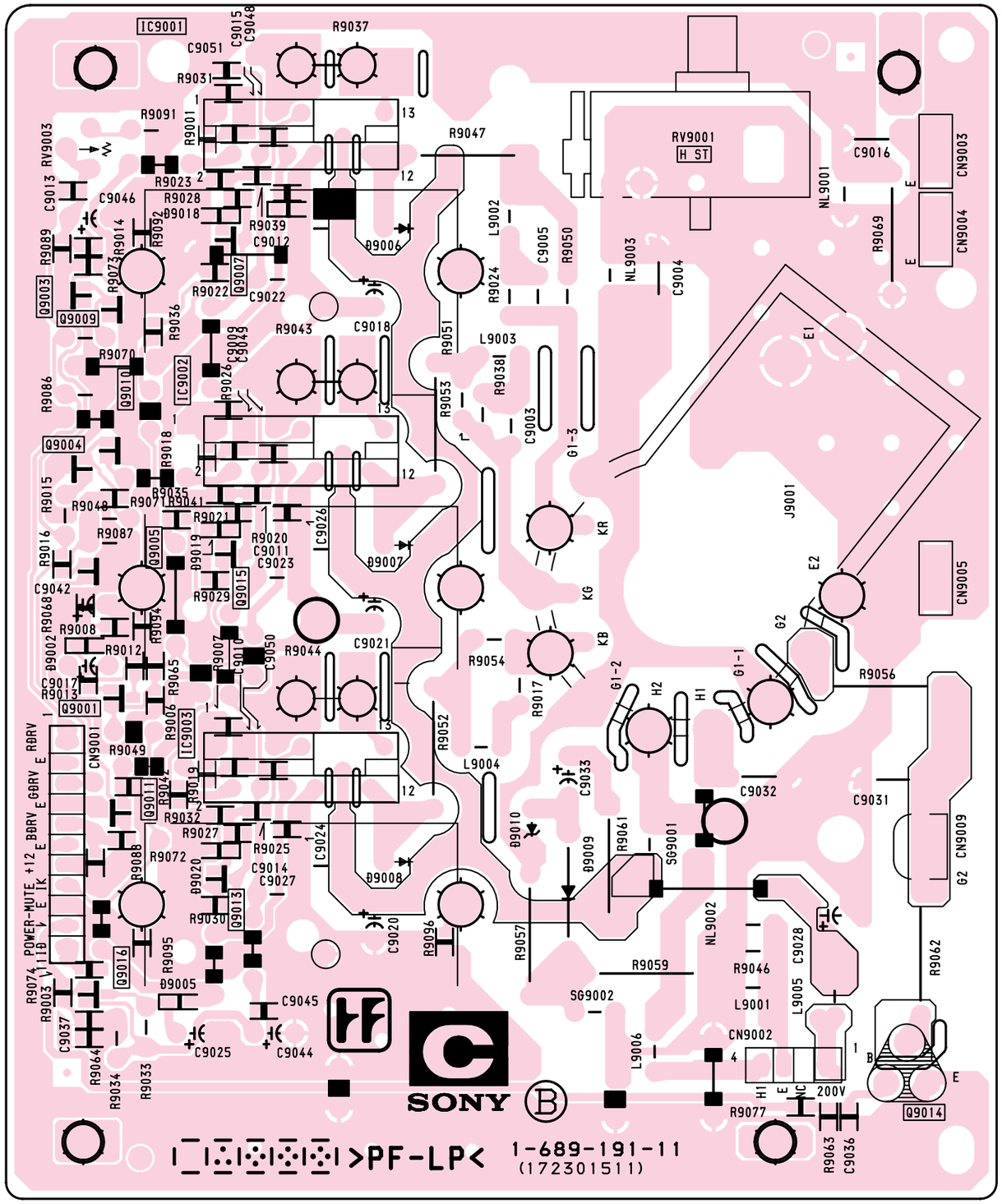
IC			
	COMPONENT SIDE	CONDUCTOR SIDE	*
IC3101	D-2		
IC3102		D-3	
IC3103		E-3	
IC3104	E-1		
IC3105	D-1		
IC3106	D-3		
IC3201	C-3		
IC3202		C-2	
IC3204	B-4		
IC3205	D-3		
IC3301	B-2		
IC3302		B-3	
IC3303	A-3		
IC3305		C-3	
IC3306		C-3	
IC3307		C-3	
IC3308		C-3	
IC3309	A-2		
IC3310		A-4	
IC3311	A-2		
IC3404	B-1		
IC3405	B-1		

TRANSISTOR			
	COMPONENT SIDE	CONDUCTOR SIDE	*
Q3101		E-2	②
Q3102		E-3	②
Q3103		D-2	②
Q3104		E-3	②
Q3105		D-2	②
Q3106		D-3	②
Q3107		E-3	②
Q3108		E-3	②
Q3109	E-2		②
Q3110	E-2		②
Q3111	E-2		②
Q3112	E-1		②
Q3113	E-2		②
Q3201		B-1	②
Q3202		B-1	②
Q3203		B-1	②
Q3204		B-1	②
Q3301	C-2		②
Q3302	C-2		②
Q3304		C-4	②
Q3305		D-4	②
Q3306		A-2	②
Q3307		A-3	②
Q3308	C-1		②
Q3309	C-1		②
Q3310		C-4	②
Q3311		C-3	②
Q3312		C-4	②
Q3313		C-3	②
Q3314	B-4		②
Q3315	B-4		②
Q3316	A-4		②
Q3317		A-1	②
Q3318		B-1	②
Q3319		B-1	②

DIODE			
	COMPONENT SIDE	CONDUCTOR SIDE	*
D3101		D-3	⑤
D3102		D-3	⑤
D3205		C-1	⑤
D3206		B-1	⑤
D3301		A-2	⑤
D3302		A-2	⑤

C [RGB DRIVE]

— C BOARD —



• D BOARD SEMICONDUCTOR LOCATION

DIODE

*

IC3101	D-2	
IC5101	F-5	
IC5201	E-9	
IC5401	D-8	
IC5402	G-6	
IC5403	G-10	
IC5650	F-1	
IC5651	G-1	
IC5652	G-2	
IC6400	C-2	
IC6501	G-3	
IC6503	C-4	
IC6602	E-4	
IC6801	C-5	
IC8001	B-4	
IC8002	B-3	
IC8004	C-7	
IC8005	C-5	
IC8104	C-4	

TRANSISTOR

*

Q5001	E-10	
Q5004	C-10	①
Q5005	C-10	①
Q5006	D-10	
Q5008	D-10	①
Q5009	C-10	①
Q5101	G-4	①
Q5102	G-4	①
Q5103	G-4	①
Q5201	E-8	
Q5202	G-10	①
Q5203	E-9	①
Q5401	D-8	①
Q5402	D-8	①
Q5403	C-7	①
Q5404	E-6	
Q5405	C-7	①
Q5406	G-10	
Q5522	B-8	
Q5600	C-8	
Q5602	C-10	①
Q5604	B-10	
Q5605	C-10	①
Q5606	C-9	
Q5650	F-1	①
Q5657	G-2	①
Q5701	G-9	①
Q5702	G-9	①
Q5703	G-9	①
Q6400	B-2	
Q6401	C-2	
Q6802	G-3	①
Q6803	E-5	
Q8003	B-4	①
Q8004	B-4	①
Q8007	C-6	①
Q8009	C-7	①
Q8011	C-8	①
Q8013	B-3	
Q8014	A-3	
Q8021	C-8	①
Q8028	C-8	①
Q8034	C-8	①
Q8035	C-7	①

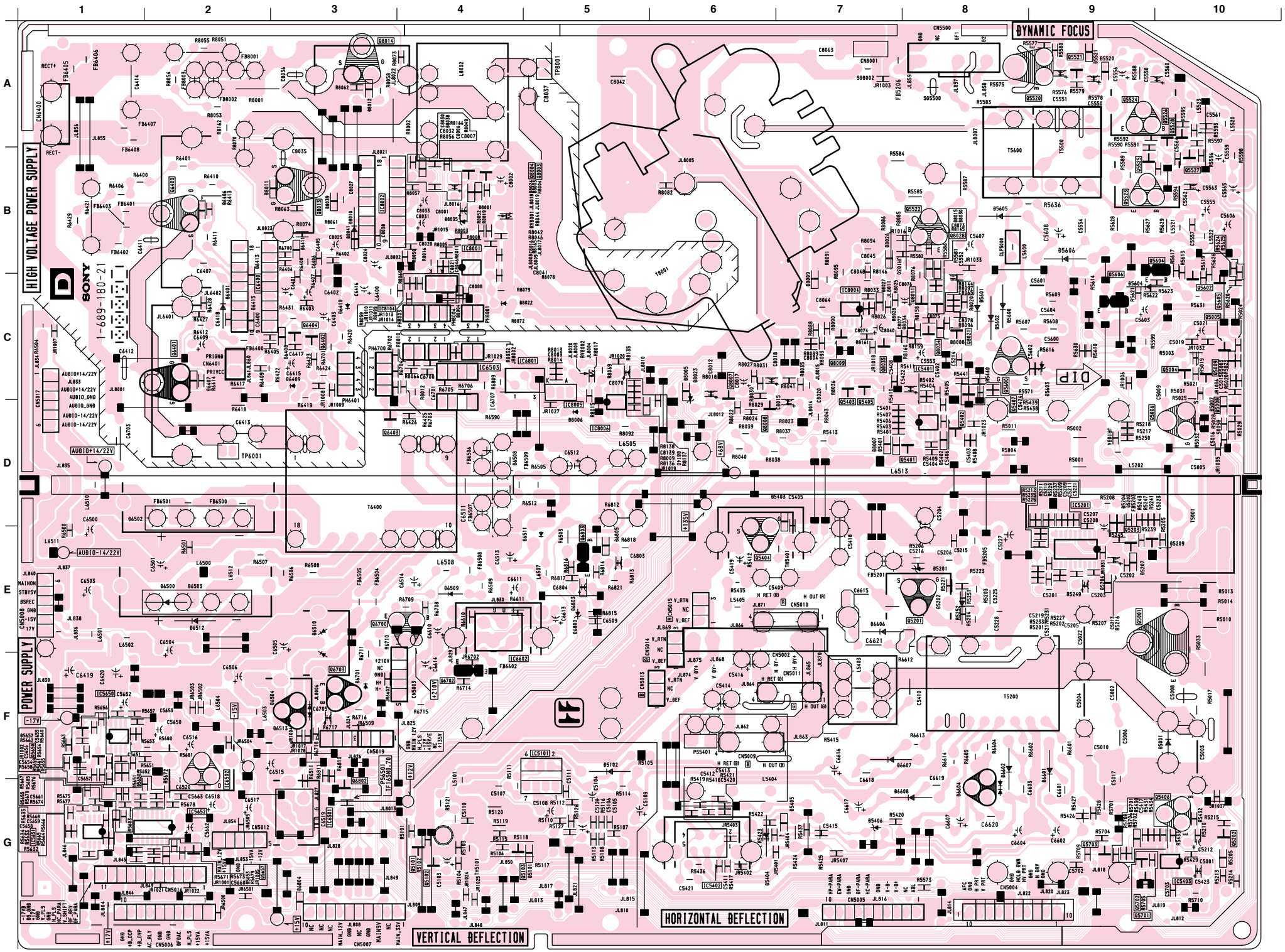
DIODE

*

D5001	F-10	
D5003	C-10	③
D5005	D-10	③
D5101	G-5	③
D5102	F-5	
D5201	E-8	
D5202	E-8	
D5203	E-9	③
D5204	E-9	③
D5205	G-10	③
D5206	E-9	③
D5207	E-9	③
D5209	E-9	③
D5401	D-7	③
D5402	D-8	③
D5405	G-7	③
D5406	G-7	
D5600	C-8	
D5601	C-8	
D5602	C-8	
D5603	C-9	
D5604	C-9	
D5605	B-8	
D5606	B-9	
D5650	F-1	③
D5651	F-1	③
D5652	F-1	③
D5653	G-2	③
D5655	G-1	③
D5701	G-9	③
D6401	C-2	③
D6406	B-2	③
D6407	C-2	③
D6408	C-3	③
D6409	C-3	
D6410	C-3	
D6411	B-3	③
D6413	C-2	③
D6415	C-2	③
D6502	D-2	
D6504	F-3	
D6508	D-4	
D6509	E-4	
D6510	E-3	
D6511	E-5	
D6601	F-9	
D6602	F-8	
D6604	G-8	
D6607	F-7	
D6608	G-8	
D6800	E-5	
D6803	E-5	③
D6804	G-3	③
D6805	E-5	③
D8001	B-4	③
D8003	B-4	③
D8005	C-6	③
D8006	D-5	
D8008	C-8	③
D8009	C-7	③
D8010	B-3	
D8011	B-3	③
D8012	A-3	③
D8015	B-8	③
D8022	C-4	
D8023	C-6	
D8024	B-4	③
D8026	B-7	③
D8027	C-7	③
D8030	B-8	③
D8034	C-8	③
D8038	B-4	③
D8039	B-3	③
D8041	B-3	

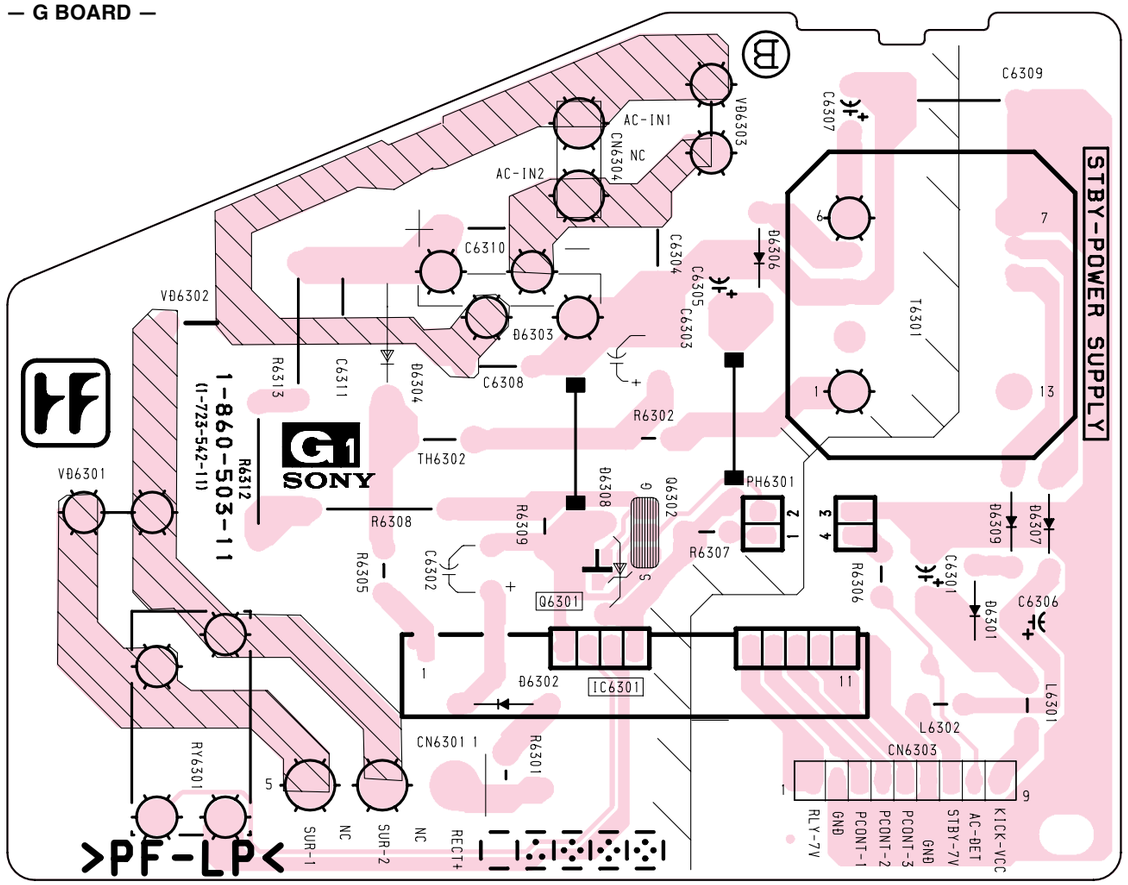
D [H OUT/V OUT, HV REG, POWER SUPPLY]

— D BOARD —



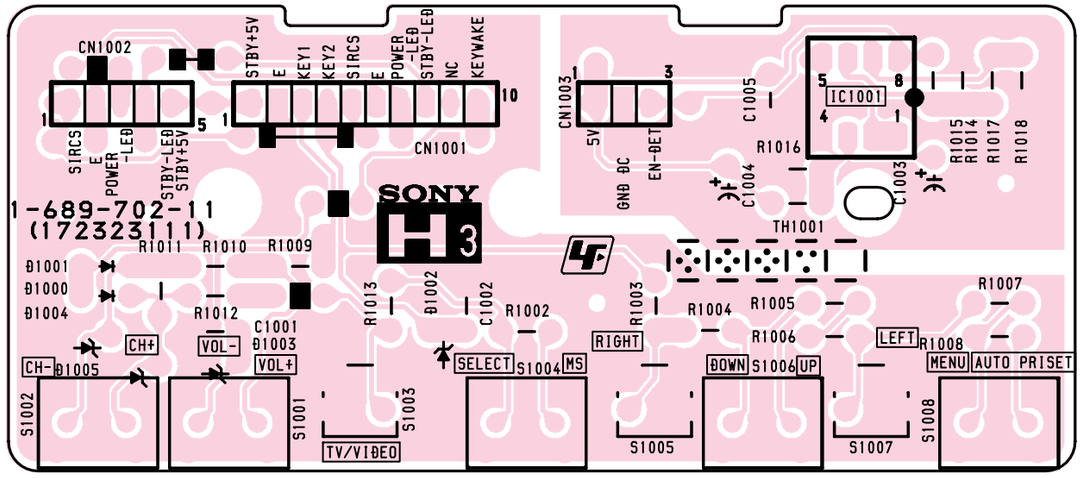
G1 [POWER SUPPLY]

— G BOARD —



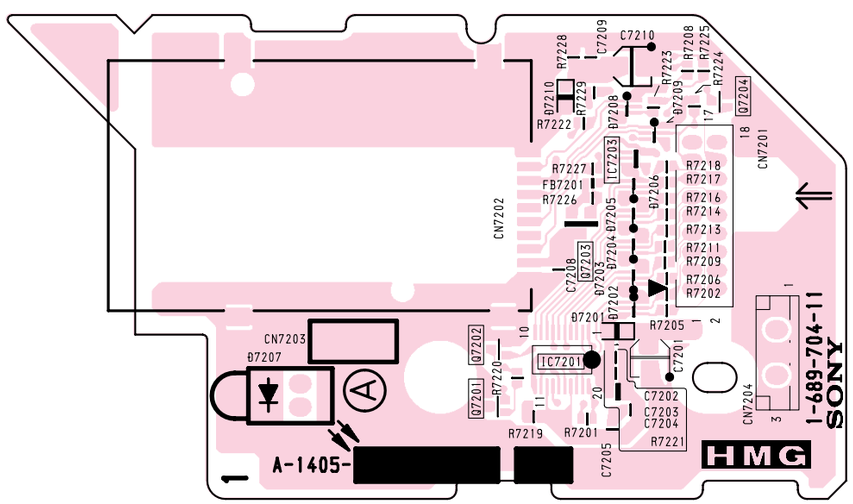
H3 [CONTROL SWITCHES]

— H3 BOARD —

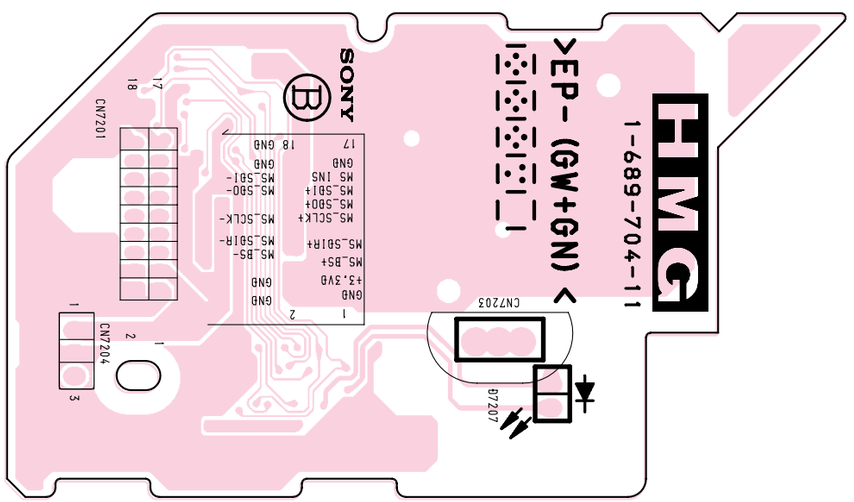


HMG [MEMORY STICK INTERFACE]

— HMG BOARD (A Side) —

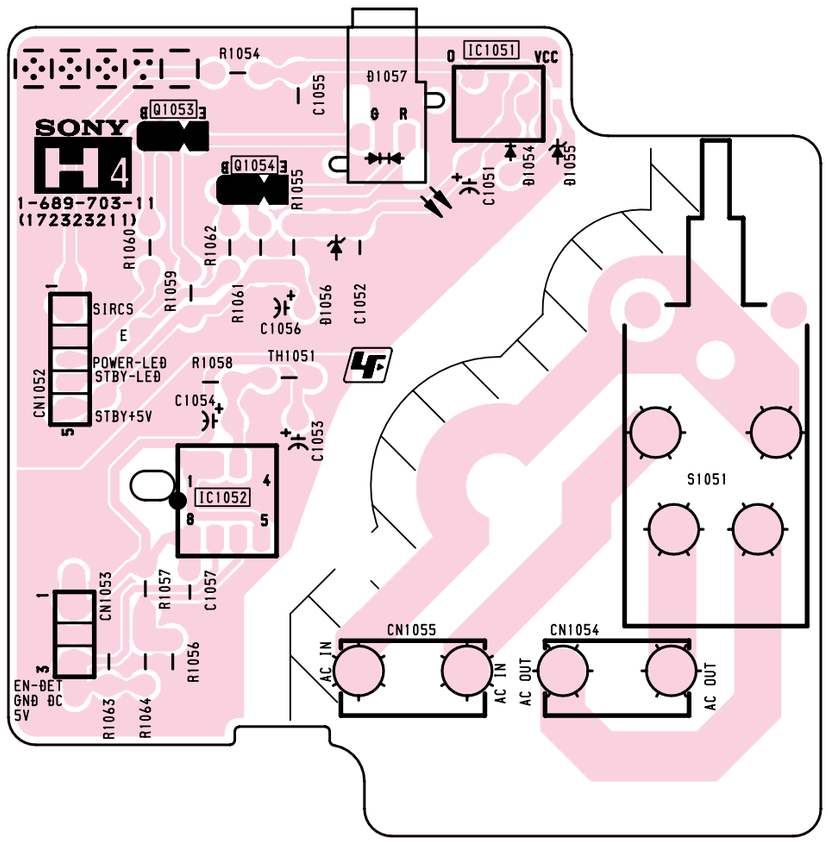


— HMG BOARD (B Side) —



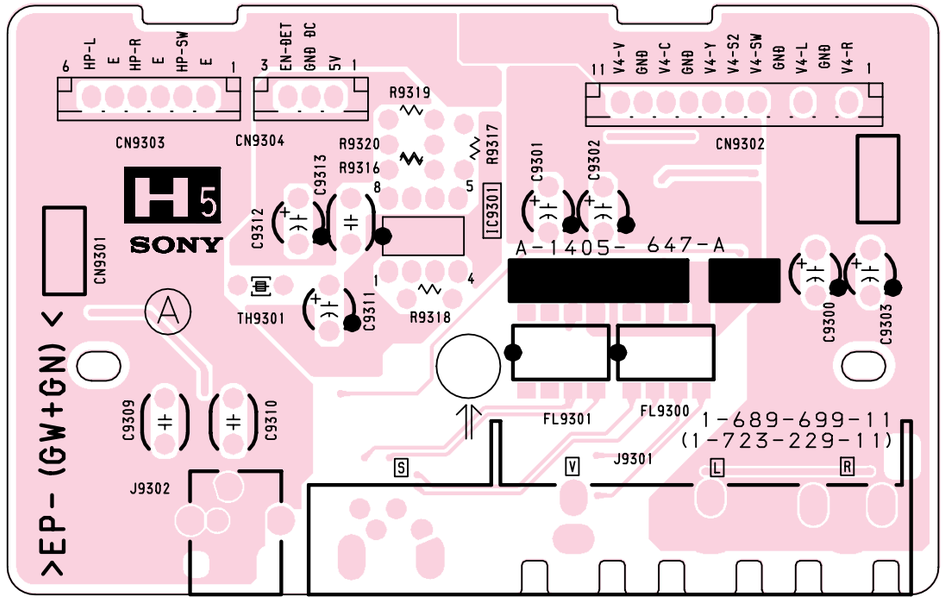
H4 [POWER SWITCH, REMOTE CONTROL SENSOR, INDICATORS]

— H4 BOARD —

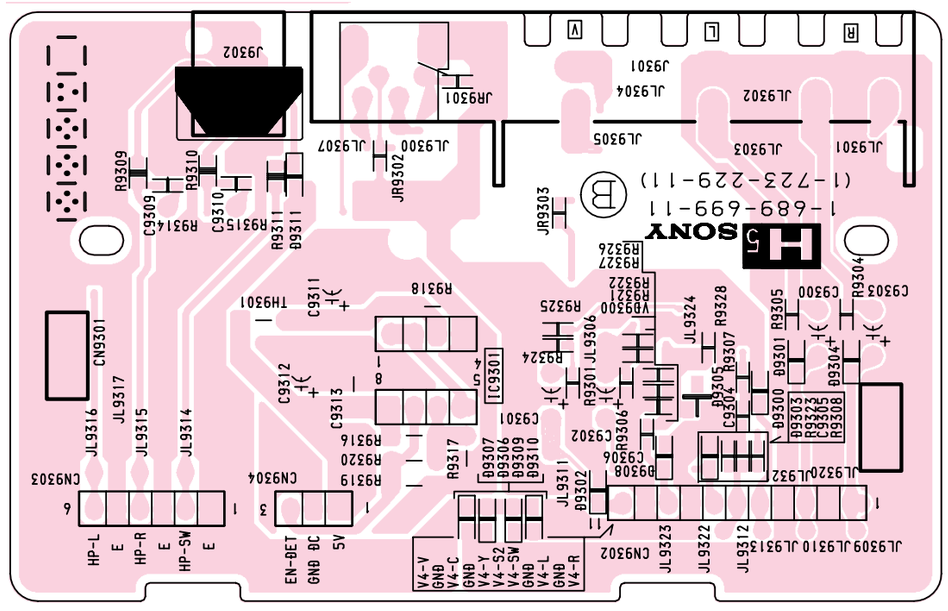


H5 [VIDEO 4 IN, PHONES]

— H5 BOARD (A Side) —

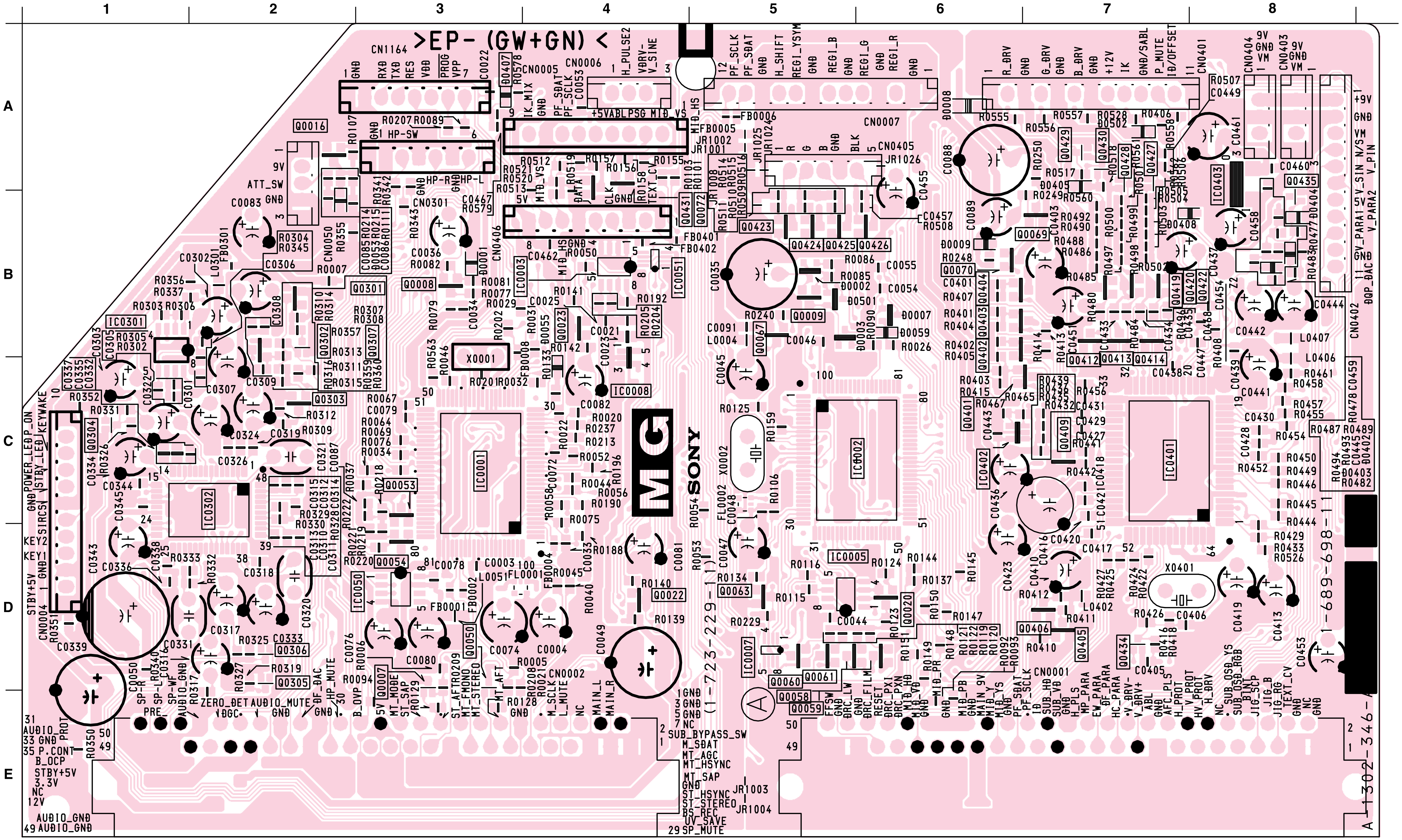


— H5 BOARD (B Side) —



MG [MASTER/RF MICRO, AUDIO PROCESSOR, COMPONENNT-I/F]

— MG BOARD (A Side) —

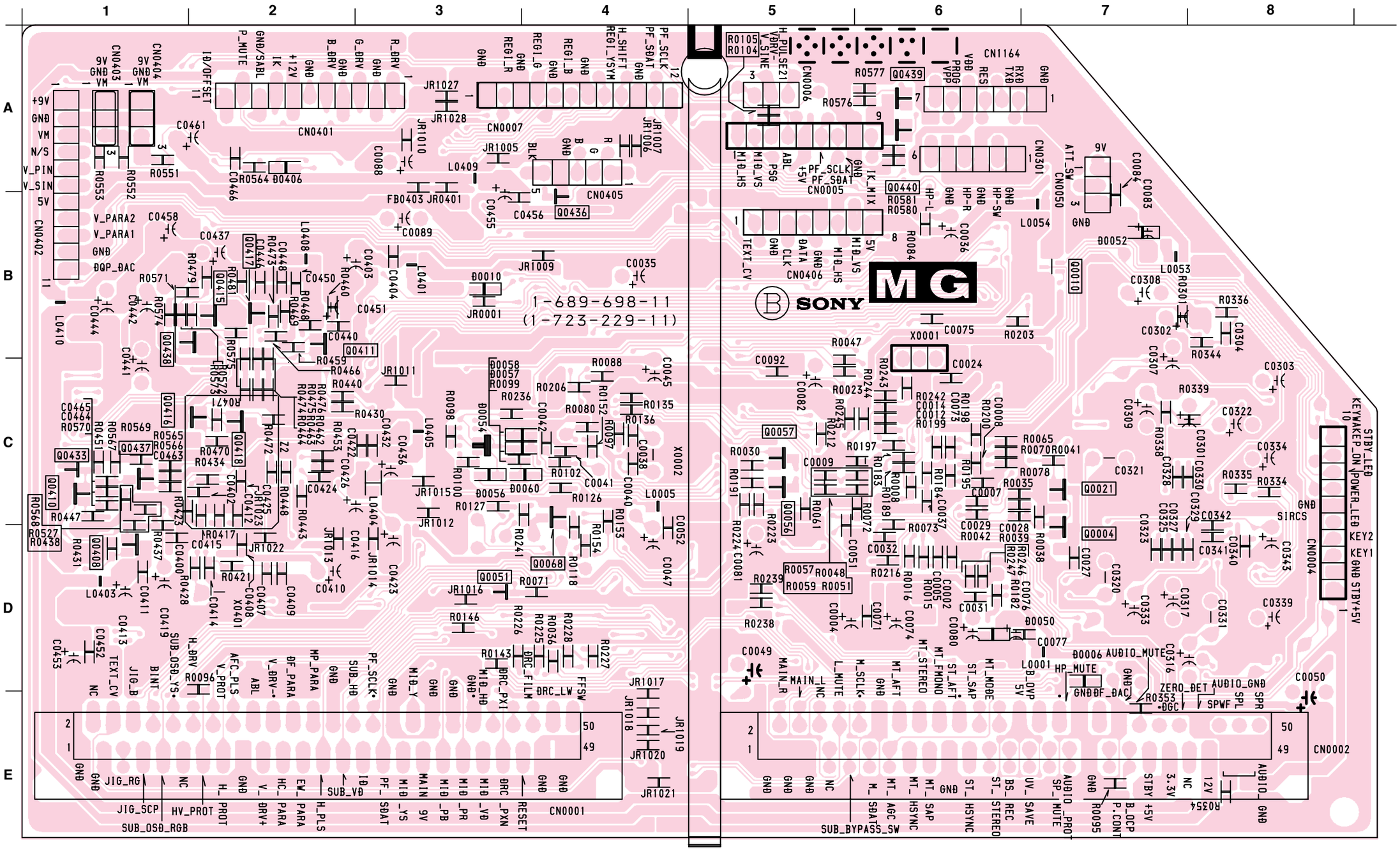


• **MG BOARD SEMICONDUCTOR LOCATION**

IC	COMPONENT SIDE	CONDUCTOR SIDE	*
IC0001	C-3		
IC0002	C-5		
IC0003	B-4		
IC0005	D-5		
IC0007	D-5		
IC0008	C-4		
IC0050	D-3		
IC0051	B-4		
IC0301	B-1		
IC0302	C-2		
IC0401	C-7		
IC0403	A-8		

TRANSISTOR	COMPONENT SIDE	CONDUCTOR SIDE	*
Q0004		C-7	①
Q0007	D-3		②
Q0008	B-3		②
Q0009	B-5		②
Q0010		B-7	②
Q0016	A-2		②
Q0020	D-6		②
Q0021		C-7	①
Q0022	D-4		②
Q0023	B-4		②
Q0050	D-3		②
Q0051		D-3	①
Q0053	C-3		②
Q0054	D-3		②
Q0056		C-5	①
Q0057		C-5	①
Q0058	D-5		②
Q0059	D-6		②
Q0060	D-5		②
Q0061	D-5		②
Q0063	D-5		②
Q0067	B-5		②
Q0068		C-4	①
Q0069	B-7		②
Q0070	B-6		②
Q0302	B-2		②
Q0303	C-2		②
Q0304	C-1		②
Q0305	D-2		②
Q0306	D-2		②
Q0401	C-6		②
Q0402	B-6		②
Q0403	B-6		②
Q0405	D-7		②
Q0406	D-7		②
Q0408		D-1	①
Q0409	D-7		②
Q0415		B-2	①
Q0416		C-2	①
Q0417		B-2	①
Q0418		C-2	①
Q0419	B-7		②
Q0420	B-7		②
Q0422	B-7		②
Q0423	B-5		②
Q0424	B-5		②
Q0425	B-5		②
Q0426	B-6		②
Q0427	A-7		②
Q0428	A-7		②
Q0429	A-7		②
Q0430	A-7		②
Q0431	A-4		②

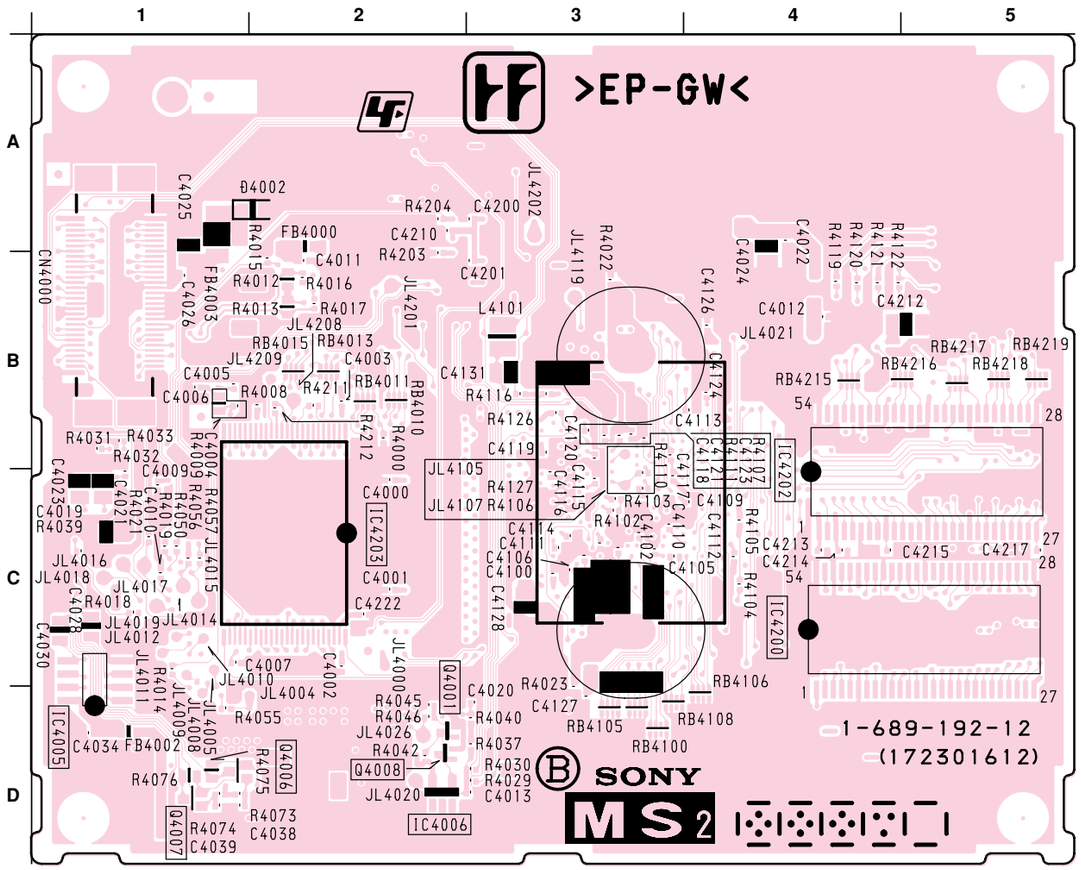
— MG BOARD (B Side) —



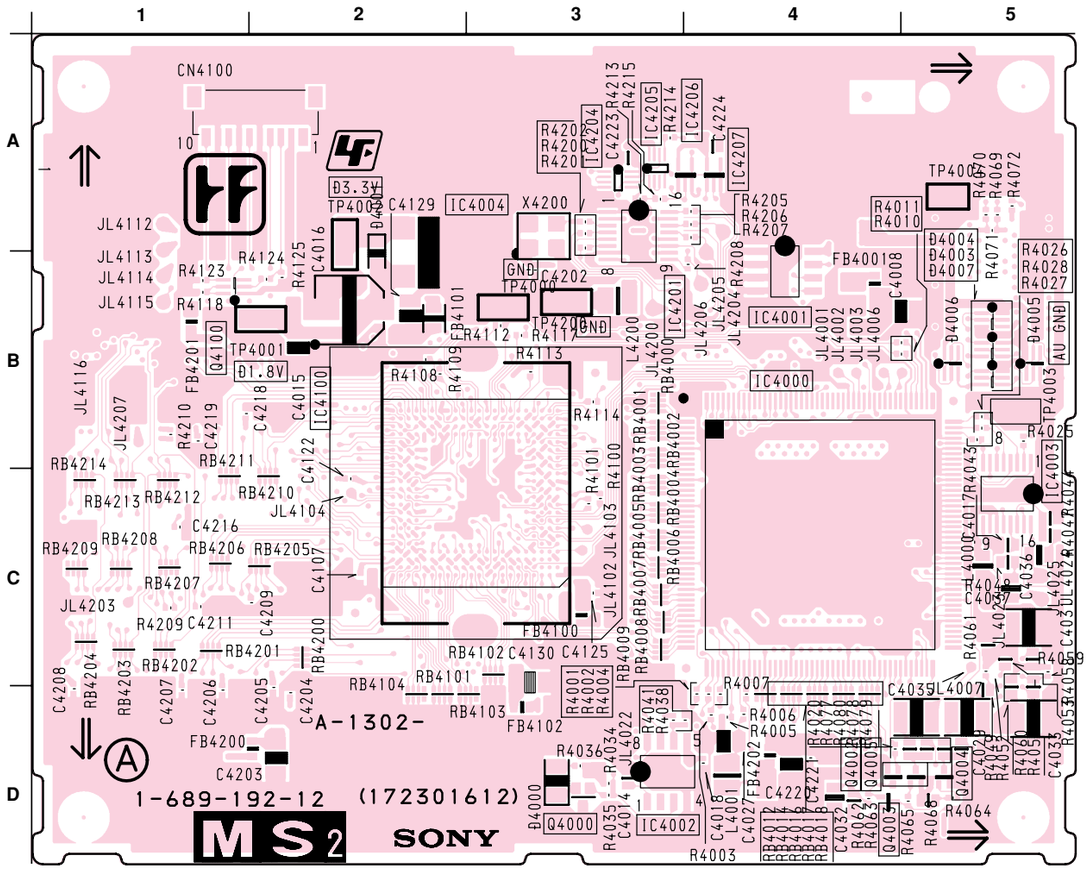
Q0434	D-7		②	**DIODE**				D0008	A-6		③	D0056		C-3	③	D0406		A-2	③
Q0435	B-8		②		COMPONENT SIDE	CONDUCTOR SIDE	*	D0009	B-6		③	D0057		C-3	③	D0407	A-3		③
Q0436		B-4	①	D0001	B-3		③	D0010		B-3	③	D0058		C-3	③	D0501		B-5	⑤
Q0437		C-1	①	D0002	B-5		⑤	D0052		B-7	③	D0059	B-6		③	D0502	A-7		③
Q0438		B-1	①	D0003	B-5		⑤	D0053	B-2		③	D0403	B-8		③				
Q0439		A-6	①	D0007	B-6		⑤	D0054		C-3	④	D0404	B-8		③				
Q0440		A-6	①					D0055	C-4		③	D0405	A-7		③				

MS2 [MEMORY STICK INTERFACE, UPU, RAM]

— MS2 BOARD (A Side) —



— MS2 BOARD (B Side) —



• MS2 BOARD SEMICONDUCTOR LOCATION

IC

	COMPONENT SIDE	CONDUCTOR SIDE *
IC4000	C-4	
IC4001	B-4	
IC4002	D-3	
IC4003	C-5	
IC4004	A-2	
IC4005		C-1
IC4200		C-5
IC4201	B-3	
IC4202		C-5
IC4203		C-2
IC4204	A-3	
IC4205	A-3	
IC4206	A-3	
IC4207	A-4	

TRANSISTOR

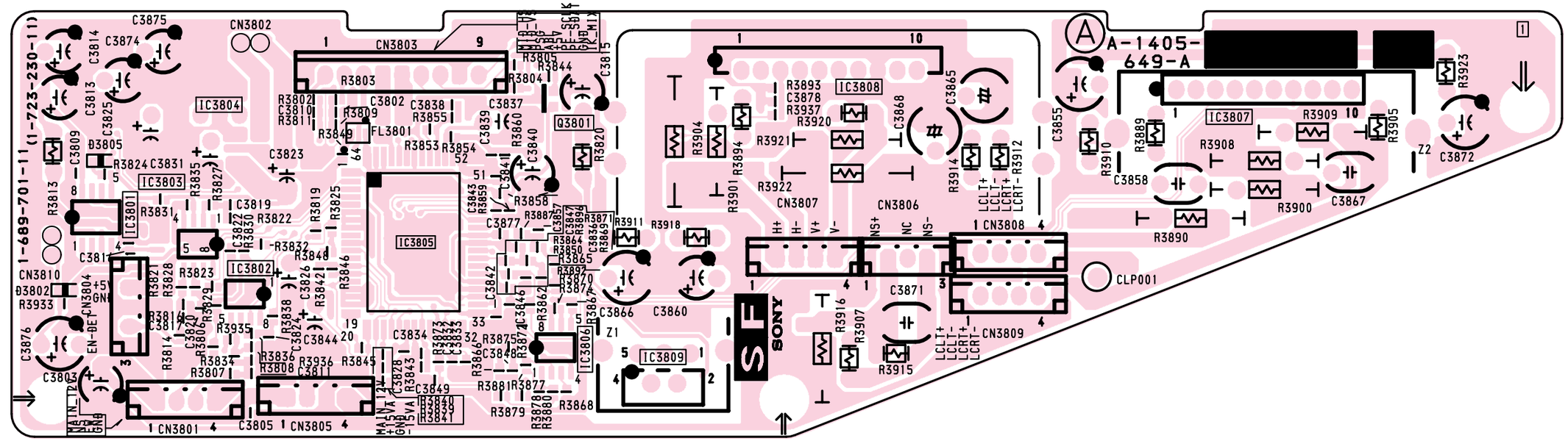
	COMPONENT SIDE	CONDUCTOR SIDE *	
Q4001		D-2	②
Q4002	D-4		②
Q4003	D-4		②
Q4004	D-5		②
Q4005	D-5		②
Q4006		D-1	②
Q4007		D-1	②

DIODE

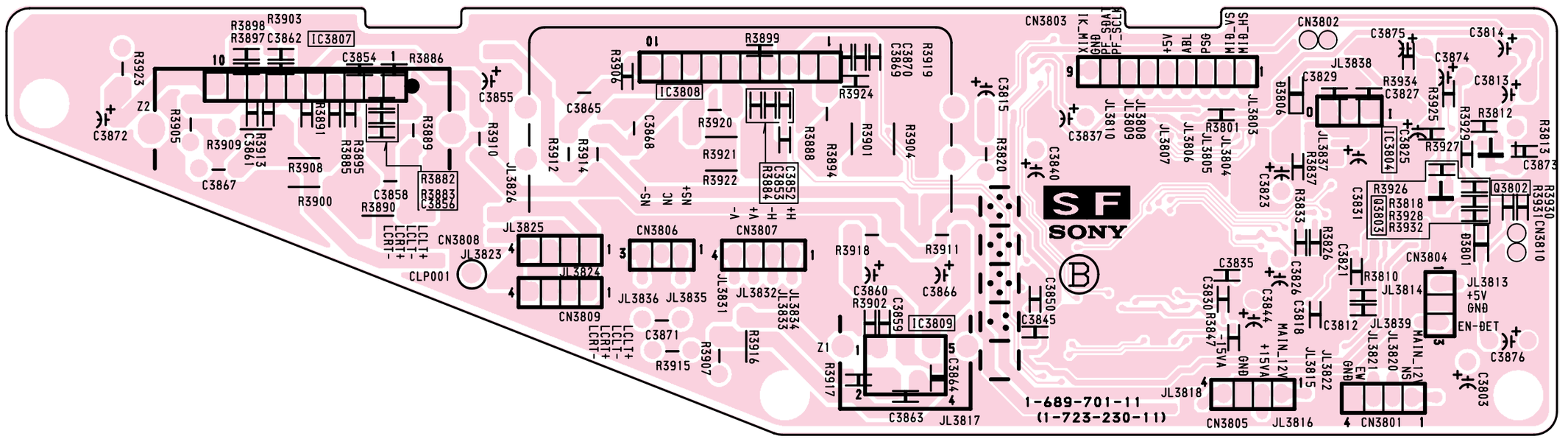
	COMPONENT SIDE	CONDUCTOR SIDE *	
D4001	A-2		③
D4002		A-2	③
D4004	B-5		⑤
D4006	B-5		⑤
D4007	B-5		⑤

SF [LANDING]

— SF BOARD (A Side) —

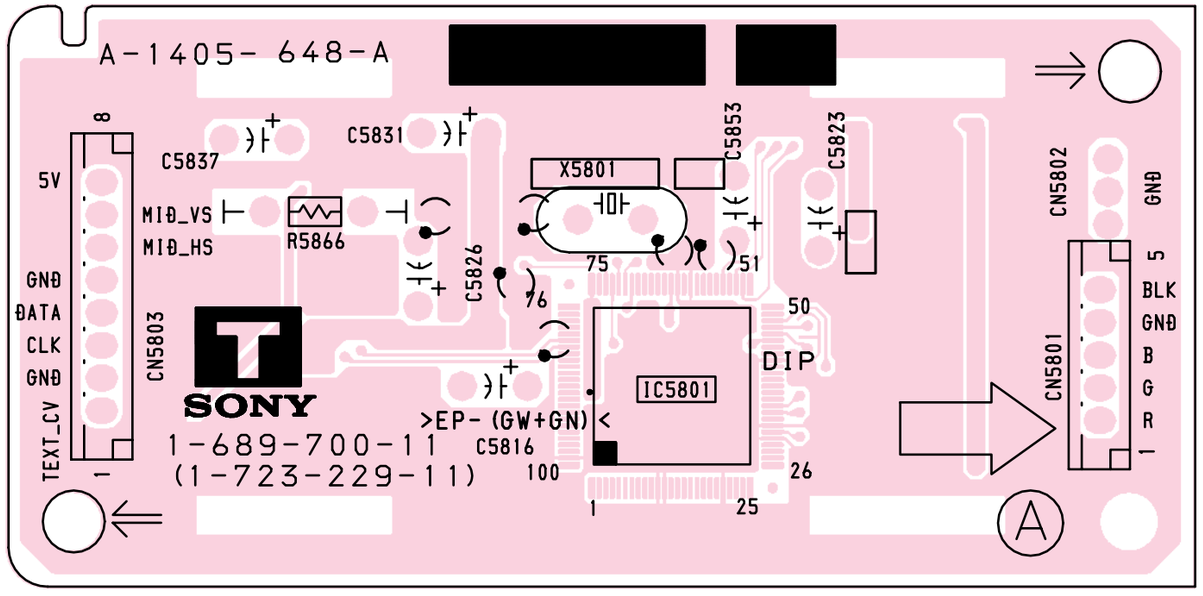


— SF BOARD (B Side) —

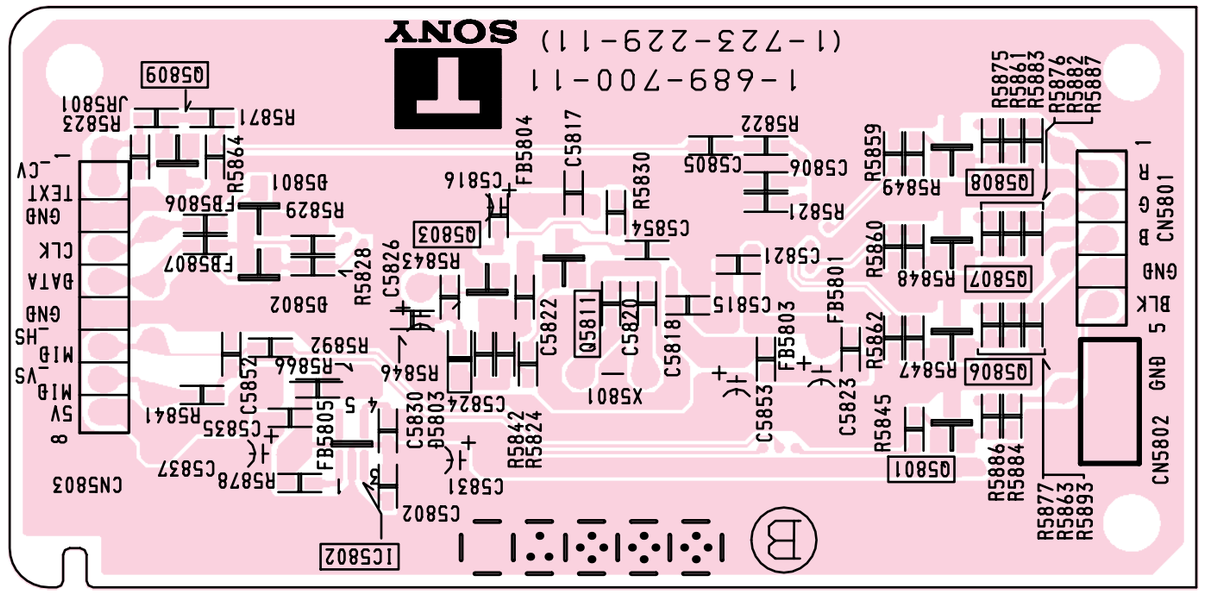


T [TELE TEXT]

— T BOARD (A Side) —



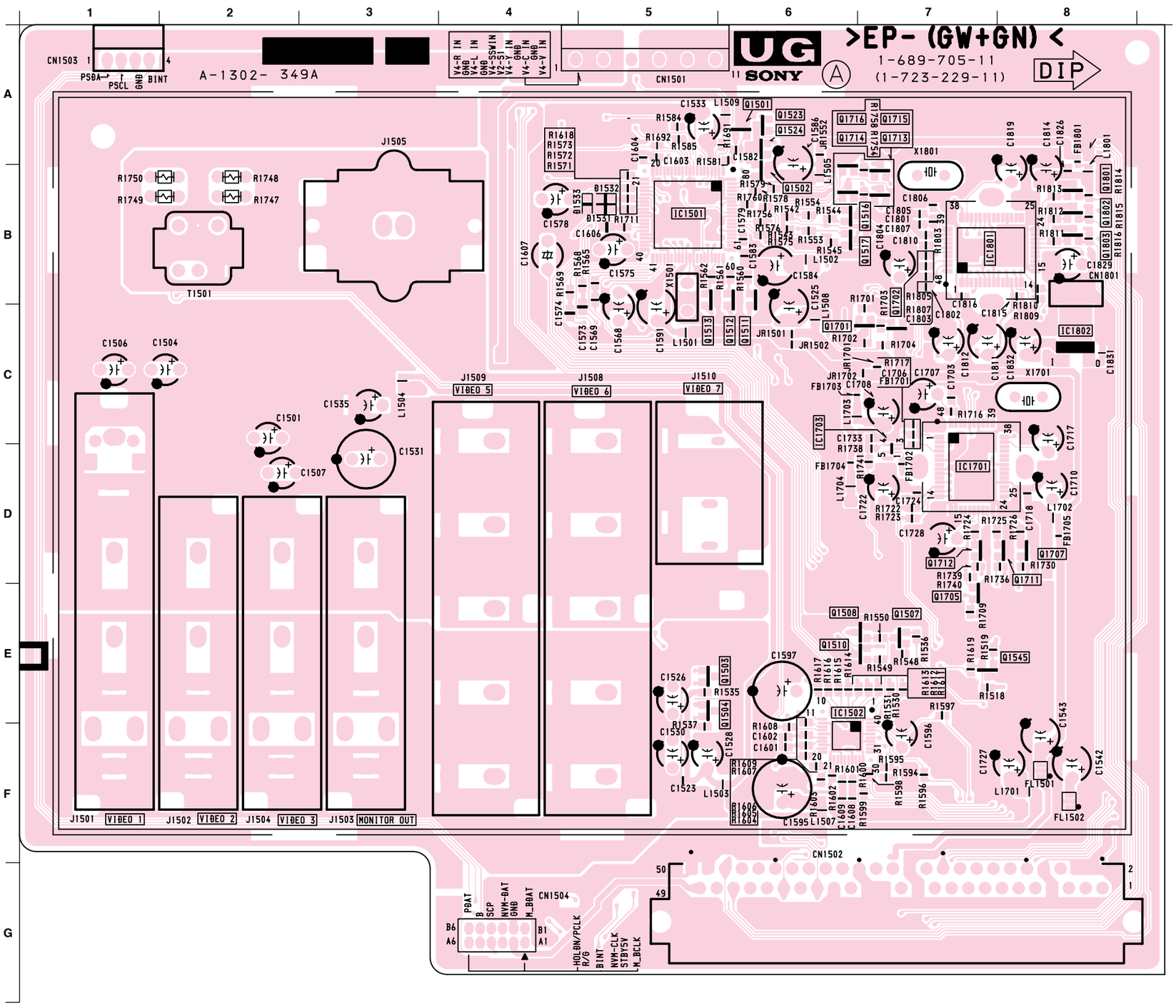
— T BOARD (B Side) —



UG

[REAR INPUT/OUTPUT, SUB COMB FILTER]

— UG BOARD (A Side) —



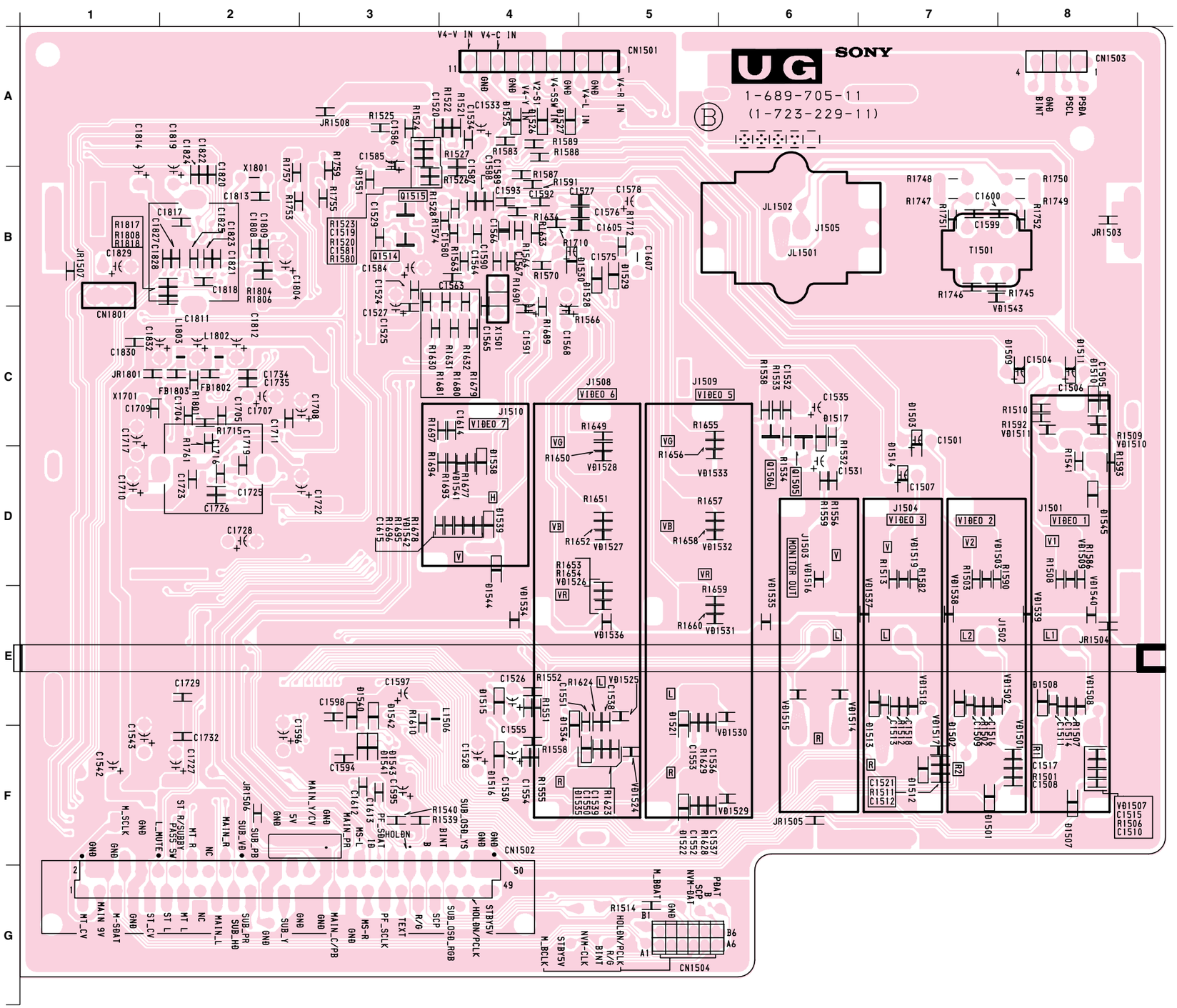
• UG BOARD SEMICONDUCTOR LOCATION

IC			
	COMPONENT SIDE	CONDUCTOR SIDE	*
IC1501	B-5		
IC1502	F-6		
IC1701	D-7		
IC1703	D-7		
IC1801	B-7		
IC1802	C-8		

TRANSISTOR			
	COMPONENT SIDE	CONDUCTOR SIDE	*
Q1501	A-6		②
Q1502	B-6		②
Q1503	E-5		②
Q1504	E-5		②
Q1505		C-6	①
Q1506		C-6	①
Q1507	E-7		②
Q1508	E-7		②
Q1510	E-7		②
Q1511	C-6		②
Q1512	C-6		②
Q1513	C-5		②
Q1514		B-3	①
Q1515		B-3	①
Q1516	B-6		②
Q1517	B-6		②
Q1523	A-6		②
Q1524	A-6		②
Q1545	E-7		②
Q1701	C-7		②
Q1702	C-7		②
Q1705	E-7		②
Q1707	D-8		②
Q1711	D-8		②
Q1712	D-7		②
Q1713	B-7		②
Q1714	B-6		②
Q1715	B-7		②
Q1716	B-6		②
Q1801	B-8		②
Q1802	B-8		②
Q1803	B-8		②

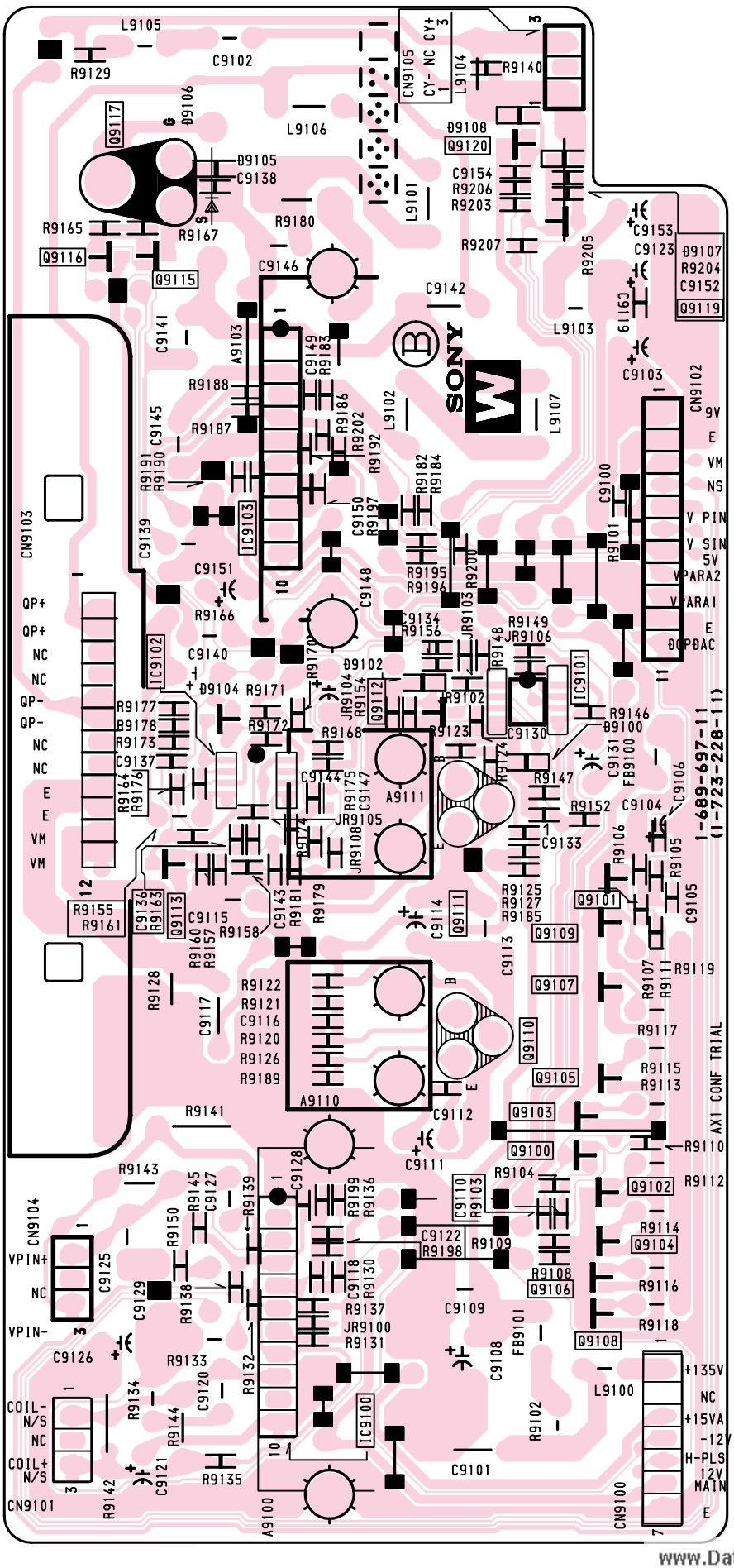
DIODE			
	COMPONENT SIDE	CONDUCTOR SIDE	*
D1501		F-7	③
D1502		E-7	③
D1503		C-7	③
D1507		F-8	③
D1508		E-8	③
D1509		C-8	③
D1510		C-8	③
D1511		C-8	③
D1512		F-7	③
D1513		E-7	③
D1514		D-7	③
D1515		E-4	③
D1516		F-4	③
D1517		C-6	③
D1521		E-5	③
D1522		F-5	③
D1525		A-4	③
D1526		A-4	③
D1527		A-4	③
D1528		B-5	③
D1529		B-5	③
D1530		B-4	③
D1531	B-5		③
D1532	B-5		③
D1533	B-5		③
D1534		E-4	③
D1535		F-4	③
D1538		D-4	③
D1539		D-4	③
D1540		E-3	③
D1541		F-3	③
D1542		E-3	③
D1543		F-3	③
D1544		D-4	③
D1545		D-8	③

— UG BOARD (B Side) —



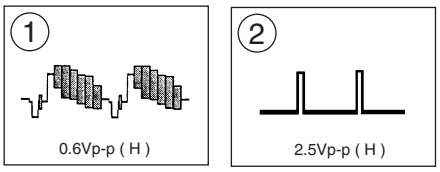
W [VM]

— W BOARD —

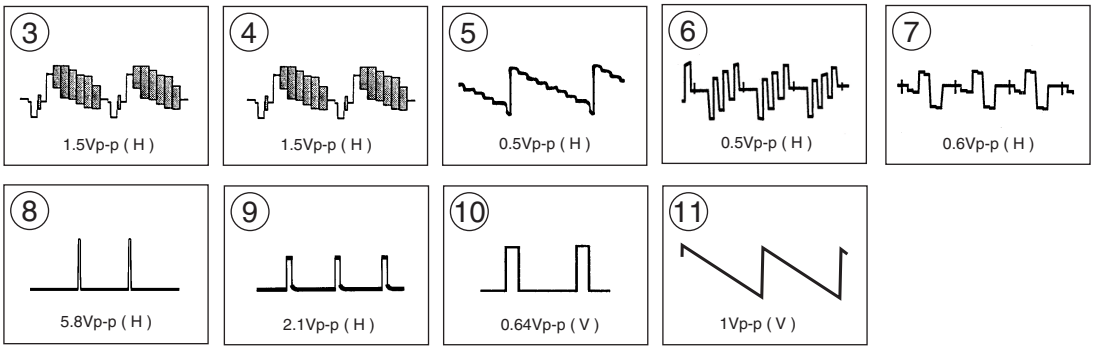


6-5. WAVEFORMS

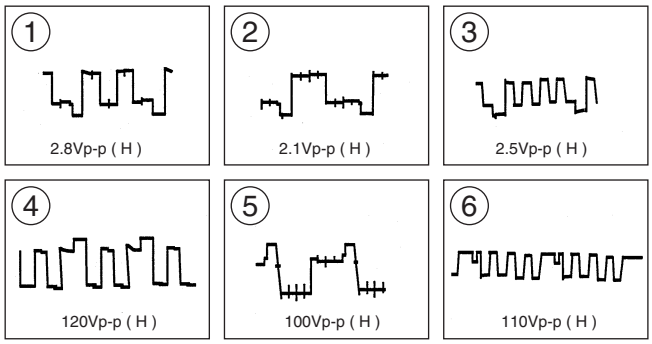
•A (2/3) BOARD WAVEFORMS



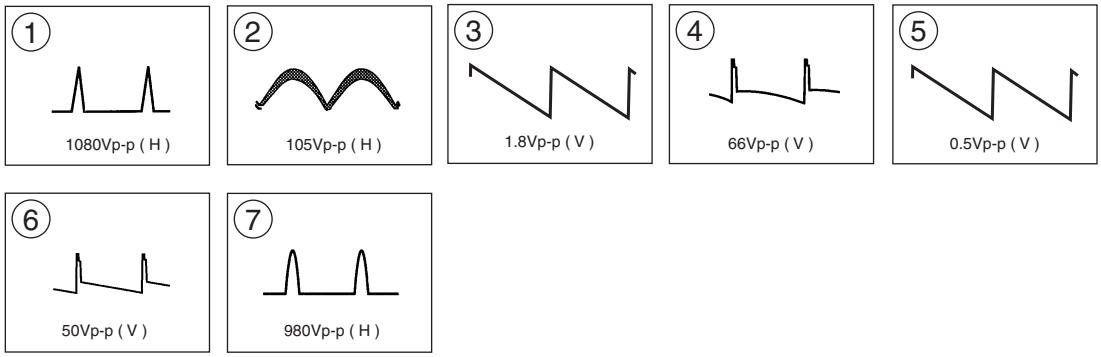
•A (3/3) BOARD WAVEFORMS



• C BOARD WAVEFORMS

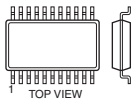


•D (1/3) BOARD WAVEFORMS



6-6. SEMICONDUCTORS

AK4352VT-E2



16pin

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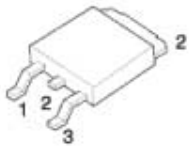

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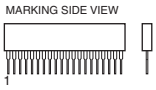

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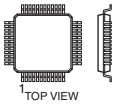
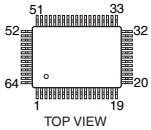


208pin

CXD2170Q



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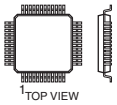

44pin

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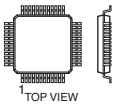

80pin

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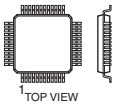

48pin

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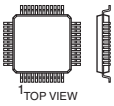
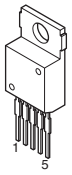


240pin

LA6500-FA



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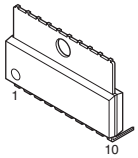
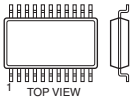


MM1096AFF
MN24C02-WMN6T(A)
NJM2903M
NJM2903M-TE2
NJM2904M
NJM2904M-TE2
NJM4558E(TE2)
NJM4558M-TE2
NJM4560M-TE2
TC7W04FU-TE12R
TC7W66FU(TE12R)
TC7WH74FK



8pin

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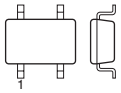
NJM2870F33(TE2)



5pin

NJM2901M

14pin

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8pin

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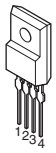

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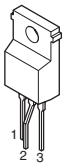
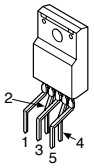
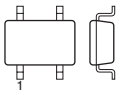


SI-8033S C348
SI-8050S-LF1101

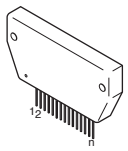


SN74CBTLV1G125DCKR
TC7SET02FU(TE85R)
TC7SET08FU(TE85L)

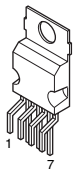


5pin

STK391-120



STV9379A



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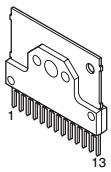
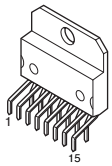
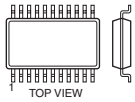


TDA7296



TLC2932IPWR
TLC2933IPWR-12



14pin

2SA1162-G
2SA1163-G
2SA1226
2SA1576A-T106-R
2SA1611-M5M6
2SB709A-QRS-TX
2SC2223-F13
2SC2713-G
2SC3624A-T1L15L
2SC4081T106R
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MSB709-RT1
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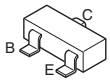
UN2211-TX



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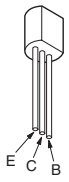

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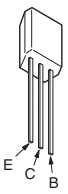
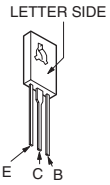


2SC2688-(5)LK



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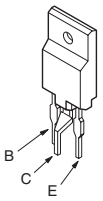
2SC4634LS-CB11



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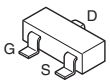

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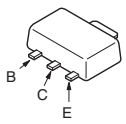

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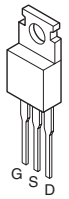

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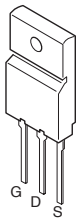
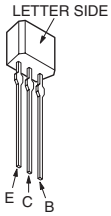
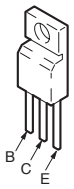
2SK3262-01MR-F119



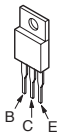
DTC144ESA



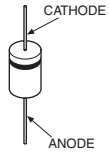
HN1B01FU-TE85R



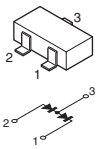
IRF614-005



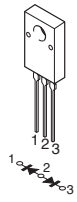
10ERA60-TP
10ERB20-TB5
GP08D
GP08DPKG23
HSS83TD
RD2.0SB-T1
RD3.9SB2
S2L60F



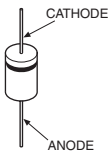
1PS181-115
1PS184-115
1PS226-115



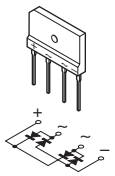
D10SC4MR



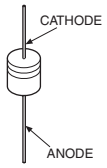
D1NL20U
D1NL20U-TR



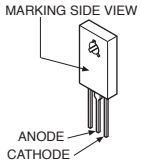
D1NL40-TA2
D4SBL20MF3
D4SBS6



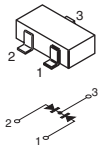
D1NS4
D2L20U
MTZJ-T-77-15B
RB441Q-40T77
RD10ESB2
RD15ES-B1
RD3.0ES-B2
RD3.3ES-B2
RD5.1ES-B1
RD5.1ESB2



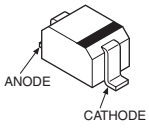
D5LC20U-4012



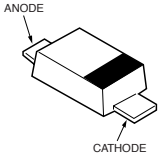
DAN202K
DAN202K-T-146



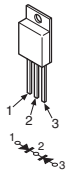
DTZ10B
MA111-TX
MMDL914T1
PDZ15B-115
PDZ4.7B-115
RD5.6SB3-T1
UDZS-TE17-18B
UDZS-TE17-3.6B
UDZS-TE17-6.2B
UDZ-TE-17-18B
UDZ-TE-17-6.8B
UDZ-TE-17-7.5B



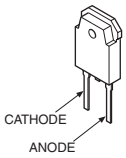
EC31QS03L-TE12L
KDS160-RTK



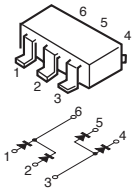
F10P04Q



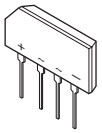
FMQ-G5FMS



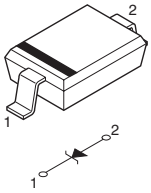
HN1D03FU



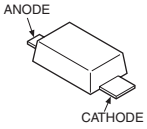
KBP153G-A2



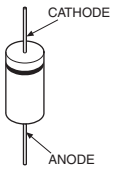
MM3Z15VT1
MM3Z27VT1
MM3Z3V0T1
MM3Z3V9ST1
MM3Z4V7ST1
MM3Z9V1ST1



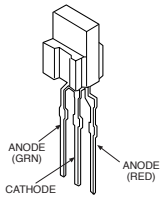
M1FS4-4063



RD33EB3T



SPB-25MVWF



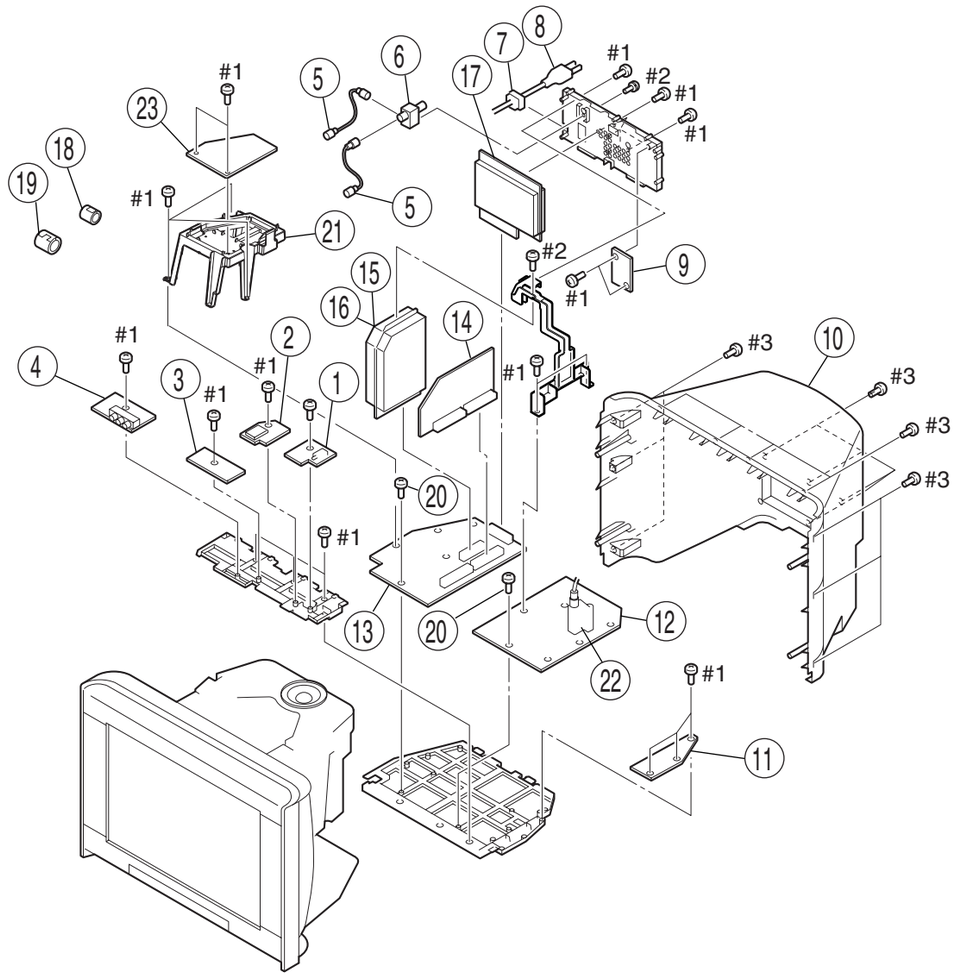
SECTION 7
EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

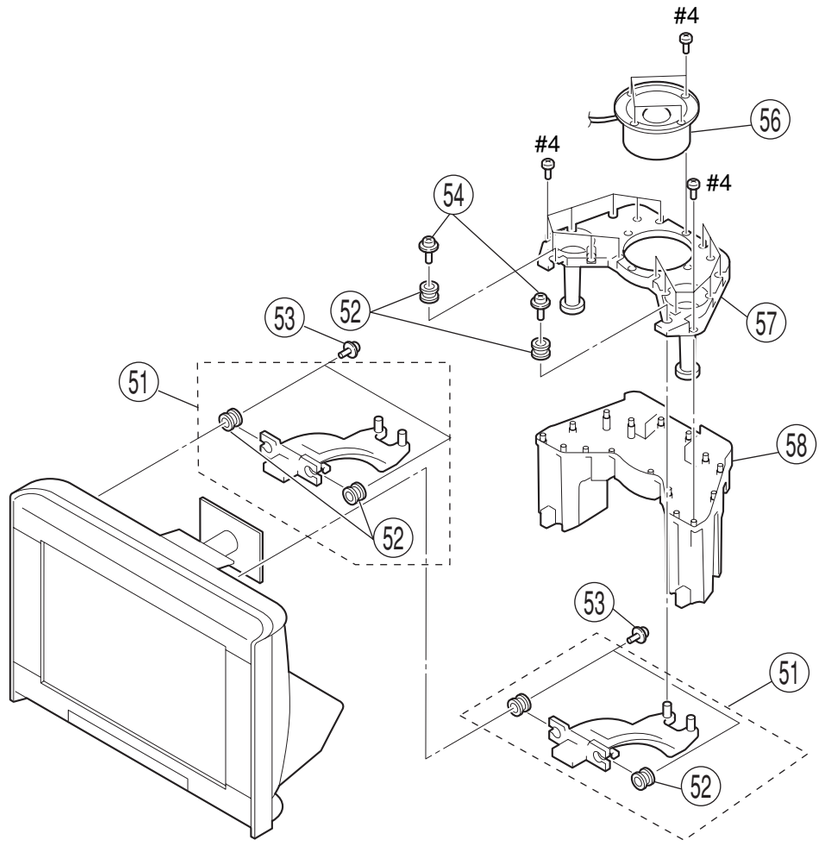
The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. CHASSIS SECTION



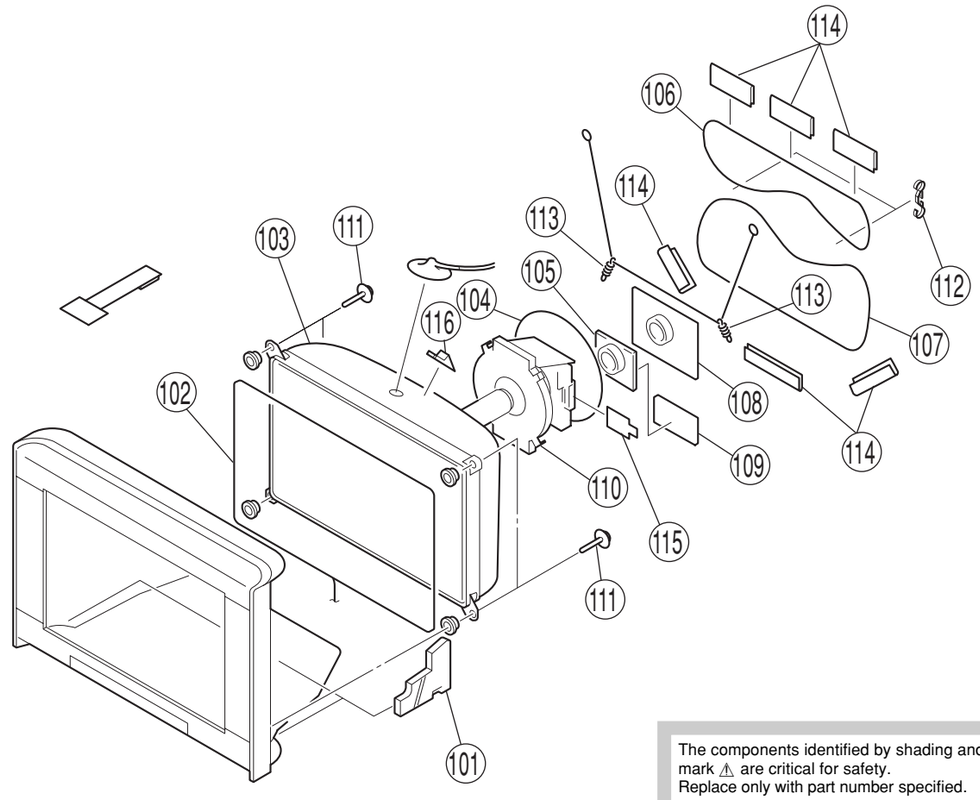
REF. NO.		PART NO.	DESCRIPTION	REMARK
1	*	A-1405-651-A	H4 BOARD, COMPLETE	(HR29N90, HR34N90)
1	*	A-1410-417-A	H4 BOARD, COMPLETE	(HR29M61, HR34M61)
2	*	A-1405-652-A	HMG BOARD, COMPLETE	(HR29N90, HR34N90)
2	*	A-1410-418-A	HMG BOARD, COMPLETE	(HR29M61, HR34M61)
3	*	A-1405-650-A	H3 BOARD, COMPLETE	(HR29N90, HR34N90)
3	*	A-1410-416-A	H3 BOARD, COMPLETE	(HR29M61, HR34M61)
4	*	A-1405-647-B	H5 BOARD, COMPLETE	(HR29N90, HR34N90)
4	*	A-1410-415-A	H5 BOARD, COMPLETE	(HR29M61, HR34M61)
5	*	1-555-110-00	P-P CABLE	
6		1-251-658-41	SPLITTER RF	(HR29M61, HR34M61)
6		1-417-333-11	RF SPLITTER	(HR29N90, HR34N90)
7		4-022-115-00	HOLDER, AC CORD	
8	⚠	1-791-439-11	CORD, POWER (WITH CONNECTOR)	(HR29M61, HR34M61)
8	⚠	1-828-022-11	POWER-SUPPLY CORD	(HR29N90, HR34N90)
9	*	A-1410-454-A	T BOARD, COMPLETE	(HR29M61, HR34M61)
10	*	X-4041-963-2	ASSY, REAR COVER	(HR34M61, HR34N90)
10	*	X-4042-429-1	COVER, REAR ASSY	(HR29M61, HR29N90)
11	*	A-1410-399-A	SF BOARD, COMPLETE	(HR34N90)
11	*	A-1410-428-A	SF BOARD, COMPLETE	(HR29N90)
11		A-1410-906-A	SF BOARD, COMPLETE	(HR34M61)
11		A-1410-907-A	SF BOARD, COMPLETE	(HR29M61)
12	*	A-1302-616-A	D BOARD, COMPLETE	(HR34N90)
12	*	A-1302-624-A	D BOARD, COMPLETE	(HR34M61)
12	*	A-1302-628-A	D BOARD, COMPLETE	(HR29N90)
12	*	A-1302-692-A	D BOARD, COMPLETE	(HR29M61)
13	*	A-1302-575-A	A BOARD, COMPLETE	(HR29N90, HR34N90)
13	*	A-1302-621-A	A BOARD, COMPLETE	(HR29M61, HR34M61)
14	*	A-1302-615-A	MG BOARD, COMPLETE	(HR34N90)
14	*	A-1302-623-A	MG BOARD, COMPLETE	(HR34M61)
14	*	A-1302-627-A	MG BOARD, COMPLETE	(HR29N90)
14	*	A-1302-691-A	MG BOARD, COMPLETE	(HR29M61)
15	*	A-1302-757-B	MS2 BOARD, COMPLETE	(HR29N90, HR34N90)
15	*	A-1302-842-A	MS2 BOARD, COMPLETE	(HR29M61, HR34M61)
16	*	A-1302-619-A	BM BOARD, COMPLETE	(HR29M61, HR34M61)
16	*	A-1302-746-A	BM BOARD, COMPLETE	(HR29N90, HR34N90)
17	*	A-1302-556-A	UG BOARD, COMPLETE	(HR29N90, HR34N90)
17	*	A-1302-622-A	UG BOARD, COMPLETE	(HR29M61, HR34M61)
18		1-543-993-11	CORE, FERRITE	
19		1-500-497-11	FILTER, CLAMP (FERRITE CORE)	
20		4-046-797-01	SCREW (3X12), (+)BVTAP	
21	*	4-094-855-01	BRACKET, G1	(HR29M61, HR34M61)
22	⚠	1-453-387-61	FBT ASSY NX-6020//M3J4	(HR34M61, HR34N90)
22	⚠	1-453-445-21	FBT ASSY NX-6020//M3B4	(HR29M61, HR29N90)
23	*	A-1410-408-A	G1 BOARD, COMPLETE	(HR29M61, HR34M61)
#1		7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
#2		7-682-948-01	SCREW +PSW 3X8	
#3		7-685-663-71	SCREW +BVTP 4X16 TYPE2 IT-3	(HR29N90, HR34N90)

7-2. SUPER WOOFER BLOCK



REF. NO.		PART NO.	DESCRIPTION	REMARK
51	*	X-4041-962-1	JOINT ASSY, SP (HR34M61, HR34N90)	
51	*	X-4042-426-1	SP JOINT (29) ASSY (HR29M61, HR29N90)	
52		4-374-745-11	CUSHION (A) (HR29N90, HR34N90)	
53		4-058-870-01	SCREW, (4X16) W (+) P TAPPING	
54		4-064-929-02	SCREW, TP+TWH 4X25	
56		1-825-576-11	LOUDSPEAKER (16cm)	
57	*	4-087-460-01	3D BOX, TOP	
58	*	4-087-461-01	3D BOX, BOTTOM	
#4		7-685-663-79	SCREW +BVTP 4X16 TYPE2 IT-3	

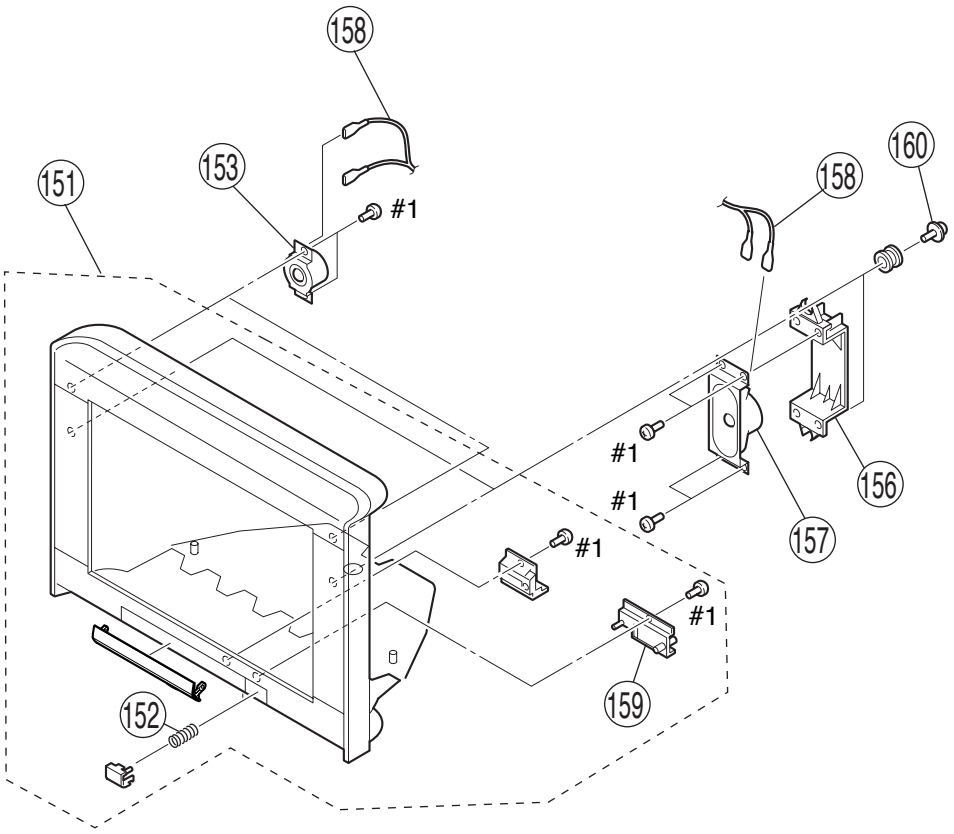
7-3. CRT SECTION



The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.		PART NO.	DESCRIPTION	REMARK
101		4-095-755-01	SUPPORTER, CRT (HR34M61, HR34N90)	
101		X-4042-729-1	SUPPORTER, CRT (29) ASSY (HR29M61, HR29N90)	
102	⚠	1-456-570-11	COIL, LANDING CORRECTION (HR34M61, HR34N90)	
102	⚠	1-456-618-11	COIL, LANDING CORRECTION (HR29M61, HR29N90)	
103	⚠	8-735-122-05	CRT 34RFN (EQUATORIAL)(HR34M61)	
103	⚠	8-735-126-05	CRT 34RFN (NORTH) (HR34N90)	
103	⚠	8-735-139-05	CRT 29RFEN (FOR NORTH) (HR29M61, HR29N90)	
104	⚠	1-451-498-21	COIL, NA ROTATION	
105	⚠	8-453-022-21	NA2920-M2 (HR29N90, HR29M61)	
105	⚠	8-453-023-21	NA328-M2 (HR34M61, HR34N90)	
106	⚠	1-456-571-11	DEGAUSSING COIL (WITH LCC)(HR34M61)	
106	⚠	1-456-590-11	DEGAUSSING COIL (WITH LCC)(HR29N90)	
106	⚠	1-456-591-11	DEGAUSSING COIL (WITH LCC)(HR34N90)	
106	⚠	1-456-633-11	DEGAUSSING COIL (WITH LCC)(HR29M61)	
107	⚠	1-456-571-21	DEGAUSSING COIL (WITH LCC)(HR34M61)	
107	⚠	1-456-590-21	DEGAUSSING COIL (WITH LCC)(HR29N90)	
107	⚠	1-456-591-21	DEGAUSSING COIL (WITH LCC)(HR34N90)	
107	⚠	1-456-633-21	DEGAUSSING COIL (WITH LCC)(HR29M61)	
108	*	A-1405-958-A	C BOARD, COMPLETE(HR29N90, HR34N90)	
108	*	A-1410-419-A	C BOARD, COMPLETE (HR29M61, HR34M61)	
109	*	A-1410-400-A	W BOARD, COMPLETE (HR34N90)	
109	*	A-1410-421-A	W BOARD, COMPLETE (HR34M61)	
109	*	A-1410-429-A	W BOARD, COMPLETE (HR29N90)	
109	*	A-1410-557-A	W BOARD, COMPLETE (HR29M61)	
110	⚠	1-451-568-11	DEFLECTION YOKE (Y29SEC2-T) (HR29M61, HR29N90)	
110	⚠	8-451-539-11	DY Y34RFC2-M (HR34M61, HR34N90)	
111		4-080-811-01	SCREWTAPPIN7+CROWN WASHER(L40)	
112		4-061-369-01	HOLDER, DEGAUSE COIL	
113		4-369-318-61	SPRING, TENSION	
114		4-098-960-01	DGC CUSHION (L) (HR29N90, HR34N90)	
115		2-163-920-01	PLATE, TLH CORRECTION (HR34M61)	
115		4-077-228-02	PIECE, TLH CONVERGENCE (HR34M61, HR34N90)	
116	*	3-703-961-02	SPACER, DY (HR34N90)	
116		4-046-600-11	SPACER, DY (HR34M61)	
116		4-091-037-02	SPACER, DY	

7-4. BEZEL SECTION



REF. NO.		PART NO.	DESCRIPTION	REMARK
151		X-4042-406-2	ASSY, CABINET	(HR34N90)
151		X-4042-428-1	ASSY, CABINET	(HR29N90)
151		X-4042-708-2	ASSY, CABINET	(HR34M61)
151		X-4042-710-1	CABINET ASSY	(HR29M61)
152		4-042-593-01	SPRING, COMPRESSION	
153		1-825-575-11	LOUDSPEAKER (5cm)	
156	*	4-086-708-01	BRACKET, SPEAKER	

REF. NO.	PART NO.	DESCRIPTION	REMARK
157	1-825-574-11	LOUDSPEAKER (5.5X13cm)	
158	1-900-275-97	LEAD ASSY (B), SPEAKER	
159	4-093-613-02	PANEL, MS	
160	4-302-404-03	SCREW (WASHER HEAD) (+P 4X16)	
#1	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	

A

SECTION 8
ELECTRICAL PARTS LIST

The components identified by shading and mark ⚠ are critial for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- The components identified by in ⊠ this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- CAPACITORS
  PF : μμ□F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

RESISTORS
- All resistors are in ohms
- F : nonflammable

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1302-575-A	A BOARD, COMPLETE(HR29N90, HR34N90)			
		**********			
*	A-1302-621-A	A BOARD, COMPLETE(HR29M61,HR34M61)			
		**********			
	1-533-223-11	FUSE HOLDER			
	4-382-854-01	SCREW (M3X8), P, SW (+)			
*	7-322-065-48	RUBBER, SILICONE RTV (KE-3490)			
	7-682-948-01	SCREW +PSW 3X8			
		< CAPACITOR >			
C2001	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C2002	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C2005	1-164-161-11	CERAMIC CHIP	0.0022μF	10%	50V
C2006	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2007	1-137-190-91	FILM	0.22μF	5%	50V
C2008	1-164-677-11	CERAMIC CHIP	0.033μF	10%	16V
C2009	1-126-965-91	ELECT	22μF	20%	50V
C2010	1-126-964-11	ELECT	10μF	20%	50V
C2011	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C2013	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2014	1-109-953-11	ELECT	2.2μF	20%	50V
C2015	1-162-975-11	CERAMIC CHIP	24pF	5%	50V
C2016	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C2018	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2019	1-126-964-11	ELECT	10μF	20%	50V
C2020	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C2021	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C2022	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2023	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2024	1-107-704-51	ELECT	470μF	20%	25V
C2025	1-137-190-91	FILM	0.22μF	5%	50V
C2026	1-164-217-11	CERAMIC CHIP	150pF	5%	50V
C2027	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2028	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2029	1-126-933-11	ELECT	100μF	20%	16V
C2030	1-126-933-11	ELECT	100μF	20%	16V
C2031	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C2033	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2034	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2035	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2036	1-126-933-11	ELECT	100μF	20%	16V
C2038	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C2039	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C2040	1-126-964-11	ELECT	10μF	20%	50V
C2041	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C2042	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C2043	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2044	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2045	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2046	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2047	1-136-177-00	FILM	1μF	5%	50V
C2048	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C2049	1-126-055-11	ELECT	470μF	20%	50V
C2050	1-164-677-11	CERAMIC CHIP	0.033μF	10%	16V
C2051	1-126-943-11	ELECT	2200μF	20%	25V
C2052	1-126-943-11	ELECT	2200μF	20%	25V
C2053	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C2054	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2055	1-126-933-11	ELECT	100μF	20%	16V
C2056	1-126-935-11	ELECT	470μF	20%	16V
C2057	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2058	1-126-964-11	ELECT	10μF	20%	50V (HR29N90, HR34N90)
C2059	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2060	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C2061	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2062	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2063	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2064	1-165-738-31	ELECT	2700μF	20%	25V
C2065	1-165-738-31	ELECT	2700μF	20%	25V
C2066	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V (HR29N90, HR34N90)
C2067	1-115-339-11	CERAMIC CHIP	0.1μF	10%	50V
C2068	1-164-217-11	CERAMIC CHIP	150pF	5%	50V
C2069	1-126-933-11	ELECT	100μF	20%	16V
C2070	1-136-497-81	FILM	0.1μF	5%	50V
C2071	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2072	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2073	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2075	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2076	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2077	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2078	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C2079	1-162-959-11	CERAMIC CHIP	330pF	5%	50V
C2080	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C2081	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C2082	1-126-933-11	ELECT	100μF	20%	16V
C2083	1-126-947-11	ELECT	47μF	20%	35V
C2084	1-216-864-11	SHORT CHIP	0		
C2085	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V (HR29N90, HR34N90)
C2086	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C2088	1-126-967-11	ELECT	47μF	20%	50V (HR29N90, HR34N90)
C2090	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C2091	1-126-964-11	ELECT	10μF	20%	50V (HR29N90, HR34N90)

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C2092	1-126-933-11	ELECT	100µF	20%	16V
C2093	1-126-964-11	ELECT	10µF	20%	50V
C2094	1-126-964-11	ELECT	10µF	20%	50V
C2095	1-126-965-91	ELECT	22µF	20%	50V
C2096	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C2097	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C6000	1-117-703-11	CERAMIC	0.0047µF	99%	250V (HR29M61, HR34M61)
C6001 ⚠	1-165-530-31	MYLAR	0.47µF	10	0V
C6002 ⚠	1-113-889-11	CERAMIC	1000pF	20%	250V (HR29N90, HR34N90)
C6002 ⚠	1-119-894-51	CERAMIC	2200pF	20%	250V (HR29M61, HR34M61)
C6003	1-165-530-31	MYLAR	0.47µF	10	0V
C6004 ⚠	1-113-889-11	CERAMIC	1000pF	20%	250V (HR29N90, HR34N90)
C6004 ⚠	1-119-894-51	CERAMIC	2200pF	20%	250V (HR29M61, HR34M61)
C6005	1-165-529-31	MYLAR	0.22µF	10	0V
C6007	1-161-964-91	CERAMIC	0.0047µF		250V
C6008	1-161-964-91	CERAMIC	0.0047µF		250V
C6011	1-137-750-11	ELECT	1500µF	20%	250V
C6012	1-137-750-11	ELECT	1500µF	20%	250V
C6013	1-113-889-11	CERAMIC	1000pF	20%	250V (HR29N90, HR34N90)
C6015	1-113-889-11	CERAMIC	1000pF	20%	250V (HR29N90, HR34N90)
C6107	1-165-528-31	MYLAR	0.1µF	10	0V
C6108	1-165-528-31	MYLAR	0.1µF	10	0V
C6110	1-126-934-11	ELECT	220µF	20%	16V (HR29N90, HR34N90)
C6110	1-126-964-11	ELECT	10µF	20%	50V (HR29M61, HR34M61)
C6111	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C6112	1-126-965-91	ELECT	22µF	20%	50V
C6114	1-126-961-11	ELECT	2.2µF	20%	50V
C6115	1-126-943-11	ELECT	2200µF	20%	25V (HR29N90, HR34N90)
C6116	1-128-562-11	ELECT	47µF	20%	100V (HR29N90, HR34N90)
C6118	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C6119	1-126-960-11	ELECT	1µF	20%	50V
C6120	1-126-968-11	ELECT	100µF	20%	50V
C6123	1-126-968-11	ELECT	100µF	20%	50V
C6200	1-128-954-11	ELECT	1000µF	20%	25V
C6201	1-128-954-11	ELECT	1000µF	20%	25V
C6202	1-128-954-11	ELECT	1000µF	20%	25V
C6203	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C6204	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C6205	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C6212	1-128-950-31	ELECT	1000µF	20%	16V
C6213	1-128-945-31	ELECT	1000µF	20%	10V
C6214	1-128-942-31	ELECT	1000µF	20%	6.3V
C6215	1-126-935-11	ELECT	470µF	20%	16V
C6216	1-126-926-11	ELECT	1000µF	20%	10V
C6217	1-126-916-11	ELECT	1000µF	20%	6.3V
C6220	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C6222	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C6225	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C6227	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C6230	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C6234	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C6237	1-126-939-11	ELECT	10000µF	20%	16V
C6240	1-126-926-11	ELECT	1000µF	20%	10V
C6242	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C6246	1-126-941-11	ELECT	470µF	20%	25V
C6247	1-164-156-11	CERAMIC CHIP	0.1µF		25V

< CONNECTOR >

CN2001*	1-564-509-11	PLUG, CONNECTOR 6P	
CN2003*	1-793-495-11	CONNECTOR, BOARD TO BOARD 50P	
CN2004*	1-793-495-11	CONNECTOR, BOARD TO BOARD 50P	
CN2005*	1-793-495-11	CONNECTOR, BOARD TO BOARD 50P	
CN2006*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN2007*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN2011*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN2012*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN2015*	1-793-495-11	CONNECTOR, BOARD TO BOARD 50P	
CN2017*	1-564-509-11	PLUG, CONNECTOR 6P	
CN2019	1-695-915-11	TAB (CONTACT)	
CN6000*	1-580-843-11	PIN, CONNECTOR (POWER)	
CN6001*	1-580-843-11	PIN, CONNECTOR (POWER)	
CN6002	1-695-915-11	TAB (CONTACT)	
CN6003	1-695-915-11	TAB (CONTACT)	
CN6004	1-695-915-11	TAB (CONTACT)	
CN6005*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN6006*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN6008*	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN6009*	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN6010*	1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
CN6011*	1-564-512-11	PLUG, CONNECTOR 9P	
CN6013	1-695-915-11	TAB (CONTACT)	
CN6100*	1-766-241-11	PIN, CONNECTOR (PC BOARD) 3P	
CN6101*	1-766-241-11	PIN, CONNECTOR (PC BOARD) 3P	
CN6102*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	

< DIODE >

D2001	6-500-028-01	DIODE	MM3Z9V1ST1
D2004	8-719-081-97	DIODE	MMDL914T1 (HR29M61, HR34M61)
D2005	8-719-081-97	DIODE	MMDL914T1
D6000	8-719-081-97	DIODE	MMDL914T1 (HR29M61, HR34M61)
D6005	8-719-022-99	DIODE	D6SB60L (HR29N90, HR34N90)
D6006	8-719-083-78	DIODE	10ERA60-TP
D6007	8-719-083-78	DIODE	10ERA60-TP
D6108	8-719-056-93	DIODE	UDZ-TE-17-18B
D6109	8-719-510-02	DIODE	D1NS4
D6110	8-719-081-97	DIODE	MMDL914T1
D6112	8-719-081-97	DIODE	MMDL914T1
D6113	6-500-582-01	DIODE	KBP153G-A2(HR29N90, HR34N90)
D6114	6-500-567-21	DIODE	10ERB20-TB5
D6115	8-719-081-97	DIODE	MMDL914T1
D6116	8-719-081-97	DIODE	MMDL914T1(HR29N90, HR34N90)
D6117	8-719-081-97	DIODE	MMDL914T1(HR29N90, HR34N90)
D6118	6-500-555-01	DIODE	MM3Z27VT1(HR29N90, HR34N90)
D6119	8-719-081-97	DIODE	MMDL914T1(HR29N90, HR34N90)
D6120	8-719-081-97	DIODE	MMDL914T1
D6121	8-719-081-97	DIODE	MMDL914T1
D6122	8-719-081-97	DIODE	MMDL914T1
D6123	8-719-081-97	DIODE	MMDL914T1
D6200	8-719-078-04	DIODE	EC31QS03L-TE12L
D6201	8-719-078-04	DIODE	EC31QS03L-TE12L
D6202	8-719-078-04	DIODE	EC31QS03L-TE12L
D6203	8-719-036-94	DIODE	RD5.6SB-T1
D6204	8-719-081-97	DIODE	MMDL914T1
D6205	8-719-056-83	DIODE	UDZ-TE-17-6.8B

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The components identified by shading and mark ⚠ are critical for safety.
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REF. NO.	PART NO.	DESCRIPTION	REMARK
D6206	8-719-081-97	DIODE MMDL914T1	
D6207	8-719-977-28	DIODE DTZ10B	
D6208	8-719-081-97	DIODE MMDL914T1	
D6209	8-719-977-28	DIODE DTZ10B	
D6210	6-500-527-01	DIODE EC21QS04-TE12L	
D6211	8-719-036-94	DIODE RD5.6SB-T1	
D6212	8-719-081-97	DIODE MMDL914T1	
D6214	8-719-063-70	DIODE D1NL20U-TA2	
D6215	6-500-654-01	DIODE MM3Z3V0T1	
		< FUSE >	
F6000 ⚠	1-532-325-00	FUSE 6.3A 250V	
		< FERRITE BEAD >	
FB2000	1-469-578-11	FERRITE 1.1µH	
FB2001	1-469-578-11	FERRITE 1.1µH	
FB2002	1-469-578-11	FERRITE 1.1µH	
FB2003	1-469-578-11	FERRITE 1.1µH	
FB2004	1-469-578-11	FERRITE 1.1µH	
FB2005	1-469-578-11	FERRITE 1.1µH	
FB6101	1-469-578-11	FERRITE 1.1µH	
FB6102	1-469-578-11	FERRITE 1.1µH	
FB6200	1-412-911-11	FERRITE 0µH	
FB6201	1-412-911-11	FERRITE 0µH	
FB6202	1-412-911-11	FERRITE 0µH	
		< IC >	
IC2000	6-704-237-01	IC TDA7490L	
IC2001	8-759-584-38	IC TDA7296	
IC2002	6-703-781-01	IC S-80843CLUA-B64T2G	
IC6100	6-704-655-01	IC NJU7223F50	
IC6200	6-703-656-01	IC SI-8090S	
IC6201	8-759-474-09	IC SI-8050S-LF1101	
IC6202	8-759-659-28	IC SI-8033S	
IC6203	6-700-813-01	IC SI-8033JF	
		< JUMPER RESISTOR >	
JR1	1-216-295-91	SHORT CHIP 0	
JR2	1-216-295-91	SHORT CHIP 0	
JR3	1-216-295-91	SHORT CHIP 0	
JR4	1-216-295-91	SHORT CHIP 0	
JR5	1-216-295-91	SHORT CHIP 0	
JR6	1-216-295-91	SHORT CHIP 0	
JR7	1-216-295-91	SHORT CHIP 0	
JR8	1-216-295-91	SHORT CHIP 0	
JR9	1-216-295-91	SHORT CHIP 0	
JR10	1-216-295-91	SHORT CHIP 0	
JR11	1-216-295-91	SHORT CHIP 0	
JR13	1-216-295-91	SHORT CHIP 0	
JR14	1-216-295-91	SHORT CHIP 0	
JR15	1-216-295-91	SHORT CHIP 0	
JR16	1-216-295-91	SHORT CHIP 0	
JR17	1-216-295-91	SHORT CHIP 0	
JR18	1-216-864-11	SHORT CHIP 0	
JR19	1-216-864-11	SHORT CHIP 0	
JR20	1-216-295-91	SHORT CHIP 0	
JR21	1-216-295-91	SHORT CHIP 0	
JR22	1-216-864-11	SHORT CHIP 0	
JR30	1-216-864-11	SHORT CHIP 0	
JR31	1-216-864-11	SHORT CHIP 0	
JR32	1-216-864-11	SHORT CHIP 0	
JR33	1-216-864-11	SHORT CHIP 0	
JR34	1-216-864-11	SHORT CHIP 0	
JR35	1-216-864-11	SHORT CHIP 0	
JR36	1-216-864-11	SHORT CHIP 0	
JR37	1-216-864-11	SHORT CHIP 0	
JR38	1-216-864-11	SHORT CHIP 0	
JR39	1-216-864-11	SHORT CHIP 0	
JR40	1-216-864-11	SHORT CHIP 0	
JR41	1-216-864-11	SHORT CHIP 0	
JR42	1-216-864-11	SHORT CHIP 0	
JR43	1-216-864-11	SHORT CHIP 0	
JR44	1-216-864-11	SHORT CHIP 0	
JR45	1-216-864-11	SHORT CHIP 0	
JR46	1-216-864-11	SHORT CHIP 0	
JR47	1-216-864-11	SHORT CHIP 0	
JR48	1-216-864-11	SHORT CHIP 0	
JR49	1-216-864-11	SHORT CHIP 0	
JR50	1-216-864-11	SHORT CHIP 0	
JR51	1-216-864-11	SHORT CHIP 0	
JR52	1-216-864-11	SHORT CHIP 0	
JR53	1-216-864-11	SHORT CHIP 0	
JR54	1-216-864-11	SHORT CHIP 0	
JR55	1-216-864-11	SHORT CHIP 0	
JR2003	1-216-864-11	SHORT CHIP 0	
JR6101	1-216-864-11	SHORT CHIP 0	
JR6200	1-216-864-11	SHORT CHIP 0	
JR6201	1-216-864-11	SHORT CHIP 0	
JR6202	1-216-864-11	SHORT CHIP 0	
JR6204	1-216-864-11	SHORT CHIP 0	
JR6206	1-216-295-91	SHORT CHIP 0	
JR6207	1-216-864-11	SHORT CHIP 0	
JR6209	1-216-864-11	SHORT CHIP 0	
JR6211	1-216-864-11	SHORT CHIP 0	
JR6213	1-216-864-11	SHORT CHIP 0	
JR6507	1-216-864-11	SHORT CHIP 0 (HR29N90, HR34N90)	
		< COIL >	
L2000	1-456-451-11	INDUCTOR 65µH	
L2001	1-456-450-11	INDUCTOR 30µH	
L2002	1-456-450-11	INDUCTOR 30µH	
L2003	1-469-320-21	INDUCTOR 100µH	
L2004	1-469-320-21	INDUCTOR 100µH	
L2005	1-456-451-11	INDUCTOR 65µH	
L2006	1-469-317-21	INDUCTOR 10µH	
L2007	1-400-397-11	INDUCTOR 10µH (HR29M61, HR34M61)	
L2008	1-414-856-11	INDUCTOR 10µH	
L2009	1-414-856-11	INDUCTOR 10µH	
L2010	1-414-856-11	INDUCTOR 10µH (HR29M61, HR34M61)	
L2010	1-414-856-11	INDUCTOR 10µH (HR29N90, HR34N90)	
L2011	1-414-856-11	INDUCTOR 10µH (HR29M61, HR34M61)	
L6000 ⚠	1-433-900-31	TRANSFORMER, LINE FILTER (HR29N90, HR34N90)	
L6000 ⚠	1-437-479-11	TRANSFORMER, LINE FILTER (HR29M61, HR34M61)	
L6001 ⚠	1-433-900-31	TRANSFORMER, LINE FILTER (HR29N90, HR34N90)	

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REF. NO.	PART NO.	DESCRIPTION		REMARK
L6001 ⚠	1-437-479-11	TRANSFORMER, LINE FILTER		
				(HR29M61, HR34M61)
L6002	1-406-977-21	INDUCTOR	100µH	
L6203	1-412-525-31	INDUCTOR	10µH	
L6204	1-412-525-31	INDUCTOR	10µH	
L6205	1-412-537-31	INDUCTOR	100µH	
L6206	1-456-414-11	COIL, CHOPPER		
L6207	1-456-414-11	COIL, CHOPPER		
L6208	1-456-414-11	COIL, CHOPPER		
L6209	1-412-525-31	INDUCTOR	10µH	
L6210	1-412-525-31	INDUCTOR	10µH	
L6211	1-412-525-31	INDUCTOR	10µH	
L6212	1-412-537-31	INDUCTOR	100µH	
L6213	1-456-214-11	COIL, CHOPPER		
L6215	1-412-525-31	INDUCTOR	10µH	

< IC LINK >

PS2000⚠	1-576-390-91	IC LINK	2.5A	50V
PS2001⚠	1-576-390-91	IC LINK	2.5A	50V
PS2003⚠	1-576-390-91	IC LINK	2.5A	50V
PS2005⚠	1-576-390-91	IC LINK	2.5A	50V

< TRANSISTOR >

Q2000	8-729-010-05	TRANSISTOR	MSB709-RT1
Q2001	8-729-010-25	TRANSISTOR	MSD601-RT1
Q2005	8-729-010-25	TRANSISTOR	MSD601-RT1
Q2006	8-729-010-25	TRANSISTOR	MSD601-RT1
Q2007	8-729-010-05	TRANSISTOR	MSB709-RT1
Q2008	8-729-010-05	TRANSISTOR	MSB709-RT1
Q2009	8-729-010-25	TRANSISTOR	MSD601-RT1
			(HR29N90, HR34N90)
Q2010	8-729-010-05	TRANSISTOR	MSB709-RT1
Q2011	8-729-010-25	TRANSISTOR	MSD601-RT1
			(HR29N90, HR34N90)
Q2012	8-729-010-05	TRANSISTOR	MSB709-RT1
Q2013	8-729-010-05	TRANSISTOR	MSB709-RT1
Q6102	8-729-010-25	TRANSISTOR	MSD601-RT1
Q6103	8-729-271-31	TRANSISTOR	2SC2713G-TE85L
Q6104	8-729-216-31	TRANSISTOR	2SA1163G-TE85L
Q6105	8-729-010-05	TRANSISTOR	MSB709-RT1
Q6106	8-729-010-05	TRANSISTOR	MSB709-RT1
			(HR29M61, HR34M61)
Q6107	8-729-140-96	TRANSISTOR	2SD774-T-34
Q6108	8-729-010-25	TRANSISTOR	MSD601-RT1
Q6109	8-729-010-05	TRANSISTOR	MSB709-RT1
Q6110	8-729-010-05	TRANSISTOR	MSB709-RT1
Q6111	8-729-010-25	TRANSISTOR	MSD601-RT1
Q6112	8-729-010-25	TRANSISTOR	MSD601-RT1
Q6209	8-729-010-25	TRANSISTOR	MSD601-RT1
Q6210	8-729-010-25	TRANSISTOR	MSD601-RT1

< RESISTOR >

R2000	1-216-855-11	METAL CHIP	680K	5%	1/10W
R2001	1-216-864-11	SHORT CHIP	0		
R2002	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2004	1-216-819-11	METAL CHIP	680	5%	1/10W
R2006	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2007	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2008	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2009	1-216-815-11	METAL CHIP	330	5%	1/10W
R2010	1-216-815-11	METAL CHIP	330	5%	1/10W
R2012	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2013	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2014	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2015	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R2016	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2018	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R2019	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2020	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R2021	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2022	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2023	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2024	1-216-817-11	METAL CHIP	470	5%	1/10W
R2025	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2026	1-216-809-11	METAL CHIP	100	5%	1/10W
R2027	1-216-843-11	METAL CHIP	68K	5%	1/10W
R2028	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R2029	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2030	1-216-835-11	METAL CHIP	15K	5%	1/10W
R2031	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2032	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R2033	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2034	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2036	1-216-843-11	METAL CHIP	68K	5%	1/10W
R2037	1-216-846-11	METAL CHIP	120K	5%	1/10W
R2038	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2039	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2041	1-216-817-11	METAL CHIP	470	5%	1/10W
R2042	1-216-805-11	METAL CHIP	47	5%	1/10W
R2043	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2044	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2045	1-216-805-11	METAL CHIP	47	5%	1/10W
R2046	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R2047	1-216-857-11	METAL CHIP	1M	5%	1/10W
R2048	1-216-847-11	METAL CHIP	150K	5%	1/10W
R2049	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R2050	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2051	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2052	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R2053	1-216-833-11	METAL CHIP	10K	5%	1/10W
					(HR29N90, HR34N90)
R2054	1-216-833-11	METAL CHIP	10K	5%	1/10W
					(HR29N90, HR34N90)
R2057	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
					(HR29N90, HR34N90)
R2058	1-216-815-11	METAL CHIP	330	5%	1/10W
R2059	1-216-815-11	METAL CHIP	330	5%	1/10W
R2060	1-216-795-11	METAL CHIP	6.8	5%	1/10W
R2061	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2062	1-216-837-11	METAL CHIP	22K	5%	1/10W
					(HR29N90, HR34N90)
R2063	1-216-839-11	METAL CHIP	33K	5%	1/10W
					(HR29N90, HR34N90)
R2063	1-216-864-11	SHORT CHIP	0		(HR29M61, HR34M61)
R2064	1-216-847-11	METAL CHIP	150K	5%	1/10W
					(HR29N90, HR34N90)
R2065	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2067	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2068	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2069	1-216-833-11	METAL CHIP	10K	5%	1/10W
					(HR29N90, HR34N90)
R2070	1-216-864-11	SHORT CHIP	0		(HR29M61, HR34M61)
R2071	1-216-864-11	SHORT CHIP	0		(HR29N90, HR34N90)
R2072	1-249-389-11	CARBON	4.7	5%	1/4W
R2073	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2075	1-216-809-11	METAL CHIP	100	5%	1/10W
					(HR29M61, HR34M61)

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION				REMARK
R2076	1-216-833-11	METAL CHIP	10K	5%	1/10W	
			(HR29M61, HR34M61)			
R2077	1-216-864-11	SHORT CHIP	0	(HR29N90, HR34N90)		
R2079	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R2080	1-216-809-11	METAL CHIP	100	5%	1/10W	
R2081	1-216-809-11	METAL CHIP	100	5%	1/10W	
R2082	1-216-857-11	METAL CHIP	1M	5%	1/10W	
R2083	1-216-847-11	METAL CHIP	150K	5%	1/10W	
R2084	1-216-837-11	METAL CHIP	22K	5%	1/10W	
			(HR29N90, HR34N90)			
R2085	1-216-837-11	METAL CHIP	22K	5%	1/10W	
			(HR29N90, HR34N90)			
R2086	1-216-864-11	SHORT CHIP	0	(HR29N90, HR34N90)		
R2087	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	
R2089	1-216-864-11	SHORT CHIP	0			
R2090	1-216-809-11	METAL CHIP	100	5%	1/10W	
R2091	1-216-809-11	METAL CHIP	100	5%	1/10W	
R2092	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
R2093	1-216-809-11	METAL CHIP	100	5%	1/10W	
R2096	1-216-847-11	METAL CHIP	150K	5%	1/10W	
			(HR29N90, HR34N90)			
R2097	1-216-864-11	SHORT CHIP	0	(HR29N90, HR34N90)		
R2098	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R2099	1-216-837-11	METAL CHIP	22K	5%	1/10W	
			(HR29N90, HR34N90)			
R2101	1-216-839-11	METAL CHIP	33K	5%	1/10W	
			(HR29N90, HR34N90)			
R2101	1-216-864-11	SHORT CHIP	0	(HR29M61, HR34M61)		
R2102	1-216-864-11	SHORT CHIP	0			
R2103	1-216-809-11	METAL CHIP	100	5%	1/10W	
R2104	1-216-864-11	SHORT CHIP	0			
R2105	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R2109	1-216-815-11	METAL CHIP	330	5%	1/10W	
R2110	1-216-815-11	METAL CHIP	330	5%	1/10W	
R2111	1-216-815-11	METAL CHIP	330	5%	1/10W	
R2112	1-216-815-11	METAL CHIP	330	5%	1/10W	
R2114	1-216-864-11	SHORT CHIP	0			
R2117	1-216-815-11	METAL CHIP	330	5%	1/10W	
R2119	1-216-815-11	METAL CHIP	330	5%	1/10W	
R2121	1-216-815-11	METAL CHIP	330	5%	1/10W	
R2123	1-216-815-11	METAL CHIP	330	5%	1/10W	
R6001	1-247-289-00	METAL	8.2M	5%	1W	
R6002	1-240-303-31	CEMENTED	0.22	5%	10W	
R6004	1-240-303-31	CEMENTED	0.22	5%	10W	
R6009	1-240-303-31	CEMENTED	0.22	5%	10W	
			(HR29M61, HR34M61)			
R6010	1-240-876-41	CEMENTED	1	5%	15W	
			(HR29M61, HR34M61)			
R6011	1-240-876-41	CEMENTED	1	5%	15W	
			(HR29M61, HR34M61)			
R6012	1-219-510-11	METAL	470K	5%	1/2W	
R6012	1-219-510-41	METAL	470K	5%	1/2W	
R6013	1-219-510-11	METAL	470K	5%	1/2W	
R6015	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6016	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6017	1-219-759-11	METAL	1M	5%	1/2W	
R6111	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6112	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6113	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R6114	1-216-857-11	METAL CHIP	1M	5%	1/10W	
R6115	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R6116	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6117	1-216-833-11	METAL CHIP	10K	5%	1/10W	
			(HR29M61, HR34M61)			

REF. NO.	PART NO.	DESCRIPTION				REMARK
R6118	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R6119	1-216-837-11	METAL CHIP	22K	5%	1/10W	
			(HR29M61, HR34M61)			
R6120	1-216-841-11	METAL CHIP	47K	5%	1/10W	
			(HR29N90, HR34N90)			
R6120	1-216-864-11	SHORT CHIP	0	(HR29M61, HR34M61)		
R6121	1-216-841-11	METAL CHIP	47K	5%	1/10W	
			(HR29N90, HR34N90)			
R6122	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6123	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6124	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R6125	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R6126	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R6127	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R6128	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R6129	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R6130	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R6132	1-216-864-11	SHORT CHIP	0			
R6206	1-211-977-11	METAL CHIP	22	0.5%	1/10W	
R6207	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W	
R6208	1-211-969-11	METAL CHIP	10	0.5%	1/10W	
R6209	1-218-847-11	METAL CHIP	1K	0.5%	1/10W	
R6210	1-211-981-11	METAL CHIP	33	0.5%	1/10W	
R6211	1-218-847-11	METAL CHIP	1K	0.5%	1/10W	
R6222	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	
R6223	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R6225	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
R6226	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6227	1-211-981-11	METAL CHIP	33	0.5%	1/10W	
R6229	1-218-847-11	METAL CHIP	1K	0.5%	1/10W	
R6230	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R6231	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R6232	1-249-377-11	CARBON	0.47	5%	1/4W	
R6233	1-249-377-11	CARBON	0.47	5%	1/4W	
		< RELAY >				
RY6000	1-755-388-11	RELAY (AC POWER)				
RY6100⚠	1-755-198-11	RELAY, AC POWER				
		< TRANSFORMER >				
T6101 ⚠	1-437-783-11	TRANSFORMER, STANDBY				
						(HR29N90, HR34N90)
		< THERMISTOR >				
TH6101⚠	1-803-540-11	THERMISTOR	(HR29M61, HR34M61)			
TH6101⚠	1-803-970-11	THERMISTOR, POSITIVE				
						(HR29N90, HR34N90)
		< TUNER >				
TU2000	8-598-452-20	TUNER, FSS BTF-WG442				
						(HR29M61, HR34M61)
TU2000	8-598-593-20	TUNER, FSS BTF-WA421				
						(HR29N90, HR34N90)
TU2001	8-598-450-10	TUNER, FSS BTF-LG434				
						(HR29M61, HR34M61)
TU2001	8-598-594-10	TUNER, FSS BTF-FA421				
						(HR29N90, HR34N90)

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
		< VARISTOR >			
VD6000⚠	1-804-991-21	VARISTOR	(HR29N90, HR34N90)		
VD6000⚠	1-804-995-21	VARISTOR	(HR29M61, HR34M61)		
VD6002	1-803-614-11	VARISTOR ENE471D-20A	(HR29M61, HR34M61)		
**********					
*	A-1302-619-A	BM BOARD, COMPLETE			
		**********			
	7-682-948-01	SCREW +PSW 3X8			
		< CAPACITOR >			
C3032	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3035	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3036	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3037	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3038	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3039	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3040	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3100	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3101	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3102	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3104	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3105	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3106	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3107	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3108	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3109	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3110	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3111	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3112	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3113	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3114	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3115	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3116	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3117	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3118	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3119	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3120	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3121	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3122	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3123	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3124	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3125	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3126	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3127	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3128	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3129	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3130	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3131	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3132	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3133	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3134	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3135	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3136	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3137	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3138	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3139	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3140	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3141	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3142	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3143	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3144	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3145	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3146	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3147	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3148	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3149	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3150	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3151	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3152	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3153	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3154	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3155	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3156	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3157	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3158	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3159	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3160	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3161	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3162	1-128-357-11	ELECT CHIP	10µF	20%	16V
C3163	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3164	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3165	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3166	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3167	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3168	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3169	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3170	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3171	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3172	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3173	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3174	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C3178	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3179	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3180	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3181	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3182	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3183	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3184	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3185	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3186	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3188	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3189	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3201	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3202	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3203	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3204	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3205	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3206	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3207	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3208	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3209	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3210	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3211	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3212	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3213	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3214	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3215	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3216	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3217	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3218	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3219	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C3222	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3224	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3225	1-107-726-91	CERAMIC CHIP	0.01µF	10%	16V
C3227	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3229	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3231	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3232	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3233	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3235	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3236	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3237	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3238	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3239	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3240	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3241	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3242	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3243	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3244	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3245	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3246	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3247	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3248	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3250	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3251	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3252	1-128-996-11	ELECT CHIP	4.7µF	20%	50V
C3253	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3254	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3255	1-127-760-11	CERAMIC CHIP	4.7µF	10%	6.3V
C3256	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3304	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3305	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3306	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3307	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3308	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3309	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3310	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3311	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3312	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3313	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3316	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3318	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3319	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3320	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3321	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3322	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3323	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3325	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3326	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3328	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3329	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3330	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3332	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C3333	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3334	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3335	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3336	1-128-994-21	ELECT CHIP	47µF	20%	10V
C3337	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3338	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3339	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3340	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3341	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3342	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3343	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C3344	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3345	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3346	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3347	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3348	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3351	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3352	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3353	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3354	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3355	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3356	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3357	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3358	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3360	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3361	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3362	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3363	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3366	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3367	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3368	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3369	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3370	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3371	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3372	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3373	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3374	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3375	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3376	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3377	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3380	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3381	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3382	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3383	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3384	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3385	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3386	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3387	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3388	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3389	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3390	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3391	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3392	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3393	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3394	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3395	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3396	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3397	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3398	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3405	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3406	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3407	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3409	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3412	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3453	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3454	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3455	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3456	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3457	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3458	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3459	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3460	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3461	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

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REF. NO.	PART NO.	DESCRIPTION				REMARK
C3462	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	
C3463	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	
C3465	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	
C3466	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	
		< CONNECTOR >				
CN3001*	1-816-448-11	CONNECTOR, BOARD TO BOARD 50P				
CN3401*	1-816-638-21	CONNECTOR, BOARD TO BOARD 60P				
		< DIODE >				
D3101	8-719-066-11	DIODE 1PS184-115				
D3102	8-719-066-10	DIODE 1PS181-115				
D3205	8-719-066-11	DIODE 1PS184-115				
D3206	8-719-066-10	DIODE 1PS181-115				
D3301	8-719-066-11	DIODE 1PS184-115				
D3302	8-719-066-10	DIODE 1PS181-115				
		< FERRITE BEAD >				
FB3101	1-414-234-22	FERRITE	0µH			
FB3203	1-469-110-21	FERRITE	0µH			
FB3204	1-216-864-11	SHORT CHIP	0			
FB3302	1-216-864-11	SHORT CHIP	0			
FB3303	1-216-864-11	SHORT CHIP	0			
FB3401	1-414-554-21	FERRITE	0µH			
FB3402	1-414-554-21	FERRITE	0µH			
FB3416	1-414-760-21	FERRITE	0µH			
FB3417	1-414-760-21	FERRITE	0µH			
		< FILTER >				
FL3000	1-234-177-21	FERRITE	0µH			
FL3001	1-234-177-21	FERRITE	0µH			
FL3003	1-234-177-21	FERRITE	0µH			
FL3100	1-234-677-21	FILTER, EMI				
FL3101	1-234-560-21	FILTER, LOW PASS				
FL3102	1-234-559-21	FILTER, LOW PASS				
FL3103	1-234-559-21	FILTER, LOW PASS				
FL3104	1-234-177-21	FERRITE	0µH			
FL3105	1-234-177-21	FERRITE	0µH			
FL3106	1-234-177-21	FERRITE	0µH			
FL3107	1-234-177-21	FERRITE	0µH			
FL3200	1-234-177-21	FERRITE	0µH			
FL3201	1-234-177-21	FERRITE	0µH			
FL3301	1-781-923-21	FILTER, LOW PASS (SMD)				
FL3302	1-234-177-21	FERRITE	0µH			
FL3304	1-234-177-21	FERRITE	0µH			
FL3305	1-234-177-21	FERRITE	0µH			
FL3306	1-234-177-21	FERRITE	0µH			
FL3401	1-234-177-21	FERRITE	0µH			
		< IC >				
IC3101	8-752-425-02	IC CXD3802BQ				
IC3102	6-702-954-01	IC K4S643232F-UC60T				
IC3102	6-703-430-01	IC MT48LC2M32B2TG-6-Y94W				
IC3103	6-705-529-01	IC LmH6658MMX/J5000172				
IC3104	6-705-529-01	IC LmH6658MMX/J5000172				
IC3105	8-759-712-65	IC PQ070XZ01ZP				
IC3106	8-759-712-65	IC PQ070XZ01ZP				
IC3201	8-752-422-52	IC CXD2097BQ				
IC3202	6-703-791-01	IC MSM56V16160F-8T3FM1				

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC3202	8-759-663-74	IC HY57V161610DTC-7TR	
IC3204	8-759-669-78	IC TLC2933IPWR-12	
IC3205	8-759-712-65	IC PQ070XZ01ZP	
IC3301	8-759-672-57	IC CXD9509AQ	
IC3302	6-702-954-01	IC K4S643232F-UC60T	
IC3302	6-703-430-01	IC MT48LC2M32B2TG-6-Y94W	
IC3303	8-752-409-20	IC CXD2309AQ	
IC3305	8-759-669-75	IC TLC2932IPWR	
IC3306	8-759-485-79	IC TC7SET08FU(TE85L)	
IC3307	8-759-485-79	IC TC7SET08FU(TE85L)	
IC3308	8-759-485-79	IC TC7SET08FU(TE85L)	
IC3309	8-759-082-57	IC TC7W04FU	
IC3310	8-759-712-65	IC PQ070XZ01ZP	
IC3311	8-759-833-72	IC NJM2870F25-TE2	
IC3404	6-702-951-01	IC SN65LVDT41PWR	
IC3405	8-759-698-08	IC SN74CBTLV1G125DCKR	
		< COIL >	
L3101	1-412-029-11	INDUCTOR 10µH	
L3102	1-469-555-21	INDUCTOR 10µH	
L3103	1-412-029-11	INDUCTOR 10µH	
L3104	1-412-026-11	INDUCTOR 1µH	
L3105	1-412-026-11	INDUCTOR 1µH	
L3106	1-412-026-11	INDUCTOR 1µH	
L3107	1-412-029-11	INDUCTOR 10µH	
L3201	1-412-026-11	INDUCTOR 1µH	
L3202	1-469-561-21	INDUCTOR 100µH	
L3203	1-469-561-21	INDUCTOR 100µH	
L3204	1-412-026-11	INDUCTOR 1µH	
L3205	1-412-026-11	INDUCTOR 1µH	
L3302	1-469-561-21	INDUCTOR 100µH	
L3303	1-469-561-21	INDUCTOR 100µH	
L3304	1-469-555-21	INDUCTOR 10µH	
L3305	1-469-555-21	INDUCTOR 10µH	
L3306	1-469-555-21	INDUCTOR 10µH	
L3307	1-469-555-21	INDUCTOR 10µH	
L3308	1-412-029-11	INDUCTOR 10µH	
L3311	1-469-555-21	INDUCTOR 10µH	
L3312	1-412-026-11	INDUCTOR 1µH	
L3313	1-412-029-11	INDUCTOR 10µH	
L3314	1-412-026-11	INDUCTOR 1µH	
L3315	1-412-026-11	INDUCTOR 1µH	
L3316	1-469-555-21	INDUCTOR 10µH	
L3317	1-412-026-11	INDUCTOR 1µH	
L3318	1-469-555-21	INDUCTOR 10µH	
L3401	1-419-370-21	INDUCTOR 0µH	
L3402	1-419-370-21	INDUCTOR 0µH	
L3403	1-419-370-21	INDUCTOR 0µH	
L3404	1-419-370-21	INDUCTOR 0µH	
L3405	1-419-370-21	INDUCTOR 0µH	
		< TRANSISTOR >	
Q3101	8-729-102-07	TRANSISTOR 2SC2223-T1F13F14	
Q3102	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q3103	8-729-102-07	TRANSISTOR 2SC2223-F13	
Q3104	8-729-122-63	TRANSISTOR 2SA1226-E4	
Q3105	8-729-102-07	TRANSISTOR 2SC2223-F13	
Q3106	8-729-122-63	TRANSISTOR 2SA1226-E4	
Q3107	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
Q3108	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
Q3109	8-729-010-25	TRANSISTOR MSD601-RT1	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
Q3110	8-729-102-07	TRANSISTOR	2SC2223-F13		
Q3111	8-729-102-07	TRANSISTOR	2SC2223-F13		
Q3112	8-729-102-07	TRANSISTOR	2SC2223-F13		
Q3113	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3201	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
Q3202	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
Q3203	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3204	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q3301	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3302	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3304	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3305	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3306	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
Q3307	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
Q3308	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3309	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q3310	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3311	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q3312	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q3313	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q3314	8-729-102-07	TRANSISTOR	2SC2223-F13		
Q3315	8-729-102-07	TRANSISTOR	2SC2223-F13		
Q3316	8-729-102-07	TRANSISTOR	2SC2223-F13		
Q3317	8-729-122-63	TRANSISTOR	2SA1226-E4		
Q3318	8-729-122-63	TRANSISTOR	2SA1226-E4		
Q3319	8-729-122-63	TRANSISTOR	2SA1226-E4		
		< RESISTOR >			
R3023	1-216-864-11	SHORT CHIP	0		
R3024	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3032	1-216-864-11	SHORT CHIP	0		
R3034	1-216-864-11	SHORT CHIP	0		
R3035	1-543-949-22	FERRITE	0µH		
R3036	1-543-949-22	FERRITE	0µH		
R3037	1-543-949-22	FERRITE	0µH		
R3038	1-216-864-11	SHORT CHIP	0		
R3039	1-216-864-11	SHORT CHIP	0		
R3040	1-216-864-11	SHORT CHIP	0		
R3041	1-543-949-22	FERRITE	0µH		
R3042	1-543-949-22	FERRITE	0µH		
R3043	1-216-805-11	METAL CHIP	47	5%	1/10W
R3044	1-216-805-11	METAL CHIP	47	5%	1/10W
R3045	1-216-805-11	METAL CHIP	47	5%	1/10W
R3046	1-543-949-22	FERRITE	0µH		
R3047	1-543-949-22	FERRITE	0µH		
R3048	1-543-949-22	FERRITE	0µH		
R3049	1-543-949-22	FERRITE	0µH		
R3050	1-543-949-22	FERRITE	0µH		
R3051	1-543-949-22	FERRITE	0µH		
R3052	1-216-805-11	METAL CHIP	47	5%	1/10W
R3053	1-216-805-11	METAL CHIP	47	5%	1/10W
R3054	1-216-805-11	METAL CHIP	47	5%	1/10W
R3055	1-543-949-22	FERRITE	0µH		
R3056	1-543-949-22	FERRITE	0µH		
R3101	1-216-805-11	METAL CHIP	47	5%	1/10W
R3102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3103	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R3104	1-216-805-11	METAL CHIP	47	5%	1/10W
R3105	1-218-830-11	METAL CHIP	200	0.5%	1/10W
R3106	1-216-809-11	METAL CHIP	100	5%	1/10W
R3107	1-216-820-11	METAL CHIP	820	5%	1/10W
R3108	1-218-830-11	METAL CHIP	200	0.5%	1/10W
R3109	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R3110	1-216-805-11	METAL CHIP	47	5%	1/10W
R3111	1-218-834-11	METAL CHIP	300	0.5%	1/10W
R3112	1-216-809-11	METAL CHIP	100	5%	1/10W
R3113	1-216-820-11	METAL CHIP	820	5%	1/10W
R3114	1-218-834-11	METAL CHIP	300	0.5%	1/10W
R3115	1-216-805-11	METAL CHIP	47	5%	1/10W
R3116	1-216-805-11	METAL CHIP	47	5%	1/10W
R3117	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R3118	1-216-805-11	METAL CHIP	47	5%	1/10W
R3119	1-216-805-11	METAL CHIP	47	5%	1/10W
R3120	1-218-834-11	METAL CHIP	300	0.5%	1/10W
R3121	1-216-809-11	METAL CHIP	100	5%	1/10W
R3122	1-216-820-11	METAL CHIP	820	5%	1/10W
R3123	1-218-834-11	METAL CHIP	300	0.5%	1/10W
R3124	1-216-864-11	SHORT CHIP	0		
R3125	1-216-864-11	SHORT CHIP	0		
R3129	1-216-805-11	METAL CHIP	47	5%	1/10W
R3130	1-216-805-11	METAL CHIP	47	5%	1/10W
R3131	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3132	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3133	1-216-809-11	METAL CHIP	100	5%	1/10W
R3134	1-216-809-11	METAL CHIP	100	5%	1/10W
R3135	1-543-949-22	FERRITE	0µH		
R3136	1-543-949-22	FERRITE	0µH		
R3137	1-216-864-11	SHORT CHIP	0		
R3138	1-216-864-11	SHORT CHIP	0		
R3141	1-218-839-11	METAL CHIP	470	0.5%	1/10W
R3142	1-218-839-11	METAL CHIP	470	0.5%	1/10W
R3143	1-218-839-11	METAL CHIP	470	0.5%	1/10W
R3144	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R3145	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R3146	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R3147	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W
R3148	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R3150	1-218-861-11	METAL CHIP	3.9K	0.5%	1/10W
R3151	1-218-861-11	METAL CHIP	3.9K	0.5%	1/10W
R3152	1-218-861-11	METAL CHIP	3.9K	0.5%	1/10W
R3153	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R3154	1-216-809-11	METAL CHIP	100	5%	1/10W
R3155	1-216-809-11	METAL CHIP	100	5%	1/10W
R3156	1-216-847-11	METAL CHIP	150K	5%	1/10W
R3158	1-216-809-11	METAL CHIP	100	5%	1/10W
R3159	1-216-819-11	METAL CHIP	680	5%	1/10W
R3160	1-216-819-11	METAL CHIP	680	5%	1/10W
R3161	1-216-819-11	METAL CHIP	680	5%	1/10W
R3162	1-216-864-11	SHORT CHIP	0		
R3163	1-218-851-11	METAL CHIP	1.5K	0.5%	1/10W
R3164	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R3165	1-216-864-11	SHORT CHIP	0		
R3170	1-216-801-11	METAL CHIP	22	5%	1/10W
R3171	1-216-864-11	SHORT CHIP	0		
R3172	1-216-864-11	SHORT CHIP	0		
R3176	1-216-864-11	SHORT CHIP	0		
R3178	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R3179	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R3181	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3182	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3183	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R3184	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R3185	1-218-873-11	METAL CHIP	12K	0.5%	1/10W
R3186	1-216-833-11	METAL CHIP	10K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R3190	1-216-864-11	SHORT CHIP	0		
R3192	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3193	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3194	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3195	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3196	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3197	1-216-864-11	SHORT CHIP	0		
R3198	1-216-864-11	SHORT CHIP	0		
R3199	1-216-855-11	METAL CHIP	680K	5%	1/10W
R3201	1-216-801-11	METAL CHIP	22	5%	1/10W
R3219	1-216-864-11	SHORT CHIP	0		
R3221	1-216-864-11	SHORT CHIP	0		
R3236	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3237	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3239	1-216-864-11	SHORT CHIP	0		
R3240	1-216-809-11	METAL CHIP	100	5%	1/10W
R3241	1-216-809-11	METAL CHIP	100	5%	1/10W
R3244	1-216-864-11	SHORT CHIP	0		
R3246	1-216-864-11	SHORT CHIP	0		
R3247	1-216-864-11	SHORT CHIP	0		
R3248	1-216-864-11	SHORT CHIP	0		
R3249	1-216-864-11	SHORT CHIP	0		
R3251	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3252	1-216-813-11	METAL CHIP	220	5%	1/10W
R3253	1-216-864-11	SHORT CHIP	0		
R3255	1-216-801-11	METAL CHIP	22	5%	1/10W
R3256	1-218-860-11	METAL CHIP	3.6K	0.5%	1/10W
R3257	1-216-809-11	METAL CHIP	100	5%	1/10W
R3258	1-218-831-11	METAL CHIP	220	0.5%	1/10W
R3259	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R3260	1-218-831-11	METAL CHIP	220	0.5%	1/10W
R3261	1-218-831-11	METAL CHIP	220	0.5%	1/10W
R3262	1-216-809-11	METAL CHIP	100	5%	1/10W
R3264	1-216-815-11	METAL CHIP	330	5%	1/10W
R3265	1-216-853-11	METAL CHIP	470K	5%	1/10W
R3266	1-216-837-11	METAL CHIP	22K	5%	1/10W
R3267	1-216-813-11	METAL CHIP	220	5%	1/10W
R3268	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3269	1-216-853-11	METAL CHIP	470K	5%	1/10W
R3270	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3271	1-218-842-11	METAL CHIP	620	0.5%	1/10W
R3272	1-216-805-11	METAL CHIP	47	5%	1/10W
R3273	1-216-814-11	METAL CHIP	270	5%	1/10W
R3276	1-543-949-22	FERRITE	0μH		
R3277	1-543-949-22	FERRITE	0μH		
R3280	1-218-838-11	METAL CHIP	430	0.5%	1/10W
R3281	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R3282	1-218-873-11	METAL CHIP	12K	0.5%	1/10W
R3302	1-216-801-11	METAL CHIP	22	5%	1/10W
R3303	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3304	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3305	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R3306	1-216-801-11	METAL CHIP	22	5%	1/10W
R3307	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3308	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3310	1-216-801-11	METAL CHIP	22	5%	1/10W
R3311	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3315	1-216-809-11	METAL CHIP	100	5%	1/10W
R3316	1-216-801-11	METAL CHIP	22	5%	1/10W
R3317	1-216-801-11	METAL CHIP	22	5%	1/10W
R3318	1-216-813-11	METAL CHIP	220	5%	1/10W
R3320	1-216-864-11	SHORT CHIP	0		

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3321	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R3322	1-216-805-11	METAL CHIP	47	5%	1/10W
R3323	1-216-815-11	METAL CHIP	330	5%	1/10W
R3325	1-216-809-11	METAL CHIP	100	5%	1/10W
R3329	1-216-864-11	SHORT CHIP	0		
R3330	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3331	1-216-819-11	METAL CHIP	680	5%	1/10W
R3333	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3334	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3335	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3336	1-216-855-11	METAL CHIP	680K	5%	1/10W
R3337	1-216-801-11	METAL CHIP	22	5%	1/10W
R3340	1-216-864-11	SHORT CHIP	0		
R3341	1-216-864-11	SHORT CHIP	0		
R3342	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3343	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3344	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3345	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3346	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3347	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3348	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3349	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3350	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3351	1-216-809-11	METAL CHIP	100	5%	1/10W
R3353	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3354	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3355	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3356	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3357	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3358	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3359	1-216-809-11	METAL CHIP	100	5%	1/10W
R3360	1-216-805-11	METAL CHIP	47	5%	1/10W
R3362	1-216-817-11	METAL CHIP	470	5%	1/10W
R3363	1-216-809-11	METAL CHIP	100	5%	1/10W
R3367	1-216-805-11	METAL CHIP	47	5%	1/10W
R3368	1-216-864-11	SHORT CHIP	0		
R3369	1-216-864-11	SHORT CHIP	0		
R3370	1-216-864-11	SHORT CHIP	0		
R3371	1-216-809-11	METAL CHIP	100	5%	1/10W
R3374	1-216-817-11	METAL CHIP	470	5%	1/10W
R3375	1-543-949-22	FERRITE	0μH		
R3376	1-543-949-22	FERRITE	0μH		
R3377	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R3378	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R3383	1-216-805-11	METAL CHIP	47	5%	1/10W
R3384	1-211-987-11	METAL CHIP	56	0.5%	1/10W
R3385	1-211-985-11	METAL CHIP	47	0.5%	1/10W
R3386	1-211-987-11	METAL CHIP	56	0.5%	1/10W
R3387	1-211-985-11	METAL CHIP	47	0.5%	1/10W
R3388	1-216-864-11	SHORT CHIP	0		
R3389	1-216-864-11	SHORT CHIP	0		
R3391	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3392	1-216-818-11	METAL CHIP	560	5%	1/10W
R3393	1-216-809-11	METAL CHIP	100	5%	1/10W
R3395	1-216-817-11	METAL CHIP	470	5%	1/10W
R3396	1-216-864-11	SHORT CHIP	0		
R3401	1-216-805-11	METAL CHIP	47	5%	1/10W
R3402	1-216-801-11	METAL CHIP	22	5%	1/10W
R3403	1-216-809-11	METAL CHIP	100	5%	1/10W
R3404	1-216-809-11	METAL CHIP	100	5%	1/10W
R3405	1-216-809-11	METAL CHIP	100	5%	1/10W
R3406	1-216-801-11	METAL CHIP	22	5%	1/10W

BM

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3407	1-216-801-11	METAL CHIP	22	5%	1/10W
R3408	1-216-801-11	METAL CHIP	22	5%	1/10W
R3409	1-216-809-11	METAL CHIP	100	5%	1/10W
R3410	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W
R3411	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R3412	1-216-817-11	METAL CHIP	470	5%	1/10W
R3413	1-216-801-11	METAL CHIP	22	5%	1/10W
R3414	1-211-987-11	METAL CHIP	56	0.5%	1/10W
R3415	1-211-985-11	METAL CHIP	47	0.5%	1/10W
R3416	1-216-809-11	METAL CHIP	100	5%	1/10W
R3417	1-216-817-11	METAL CHIP	470	5%	1/10W
R3418	1-216-801-11	METAL CHIP	22	5%	1/10W
R3419	1-216-809-11	METAL CHIP	100	5%	1/10W
R3420	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R3421	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R3422	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R3425	1-216-817-11	METAL CHIP	470	5%	1/10W
R3426	1-216-801-11	METAL CHIP	22	5%	1/10W
R3429	1-216-801-11	METAL CHIP	22	5%	1/10W
R3430	1-216-864-11	SHORT CHIP	0		
R3431	1-216-864-11	SHORT CHIP	0		
R3435	1-216-864-11	SHORT CHIP	0		
R3436	1-216-864-11	SHORT CHIP	0		
R3437	1-216-864-11	SHORT CHIP	0		
R3438	1-216-864-11	SHORT CHIP	0		
R3440	1-216-864-11	SHORT CHIP	0		
R3443	1-543-949-22	FERRITE	0µH		
R3444	1-543-949-22	FERRITE	0µH		
R3445	1-216-809-11	METAL CHIP	100	5%	1/10W
R3446	1-216-864-11	SHORT CHIP	0		
R3448	1-216-864-11	SHORT CHIP	0		
R3450	1-211-969-11	METAL CHIP	10	0.5%	1/10W
R3451	1-218-825-11	METAL CHIP	120	0.5%	1/10W
R3452	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3453	1-211-973-11	METAL CHIP	15	0.5%	1/10W
R3454	1-218-825-11	METAL CHIP	120	0.5%	1/10W
R3455	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3456	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R3457	1-218-825-11	METAL CHIP	120	0.5%	1/10W
R3458	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3459	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R3460	1-218-825-11	METAL CHIP	120	0.5%	1/10W
R3461	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3462	1-218-825-11	METAL CHIP	120	0.5%	1/10W
R3463	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3464	1-218-825-11	METAL CHIP	120	0.5%	1/10W
R3465	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3466	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3467	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3468	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R3469	1-218-844-11	METAL CHIP	750	0.5%	1/10W
R3470	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3471	1-216-864-11	SHORT CHIP	0		
R3472	1-216-864-11	SHORT CHIP	0		
R3473	1-216-864-11	SHORT CHIP	0		
R3474	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3475	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3476	1-216-864-11	SHORT CHIP	0		
R3477	1-543-949-22	FERRITE	0µH		
R3478	1-216-864-11	SHORT CHIP	0		
R3479	1-216-864-11	SHORT CHIP	0		
R3480	1-543-949-22	FERRITE	0µH		
R3481	1-216-864-11	SHORT CHIP	0		

REF. NO.	PART NO.	DESCRIPTION	REMARK
R3482	1-216-864-11	SHORT CHIP 0	
		< NETWORK RESISTOR >	
RB3101	1-236-908-11	RES, CHIP NETWORK 10K	(3216)
RB3102	1-239-409-11	RES, CHIP NETWORK 47	(3216)
RB3103	1-239-409-11	RES, CHIP NETWORK 47	(3216)
RB3104	1-239-409-11	RES, CHIP NETWORK 47	(3216)
RB3105	1-239-409-11	RES, CHIP NETWORK 47	(3216)
RB3106	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3107	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3108	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3109	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3110	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3111	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3112	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3113	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3114	1-236-908-11	RES, CHIP NETWORK 10K	(3216)
RB3115	1-236-908-11	RES, CHIP NETWORK 10K	(3216)
RB3116	1-236-908-11	RES, CHIP NETWORK 10K	(3216)
RB3117	1-236-908-11	RES, CHIP NETWORK 10K	(3216)
RB3201	1-239-409-11	RES, CHIP NETWORK 47	(3216)
RB3202	1-239-409-11	RES, CHIP NETWORK 47	(3216)
RB3203	1-239-409-11	RES, CHIP NETWORK 47	(3216)
RB3204	1-239-409-11	RES, CHIP NETWORK 47	(3216)
RB3205	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3206	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3207	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3208	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3209	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3210	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3303	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3304	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3305	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3306	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3309	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3310	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3311	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3312	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3313	1-233-813-11	RES, NETWORK 150	(3216)
RB3314	1-233-813-11	RES, NETWORK 150	(3216)
RB3315	1-233-813-11	RES, NETWORK 150	(3216)
RB3316	1-233-813-11	RES, NETWORK 150	(3216)
RB3318	1-233-813-11	RES, NETWORK 150	(3216)
RB3319	1-233-813-11	RES, NETWORK 150	(3216)
RB3401	1-233-575-11	RES, CHIP NETWORK 22	(3216)
RB3402	1-233-575-11	RES, CHIP NETWORK 22	(3216)
RB3403	1-233-575-11	RES, CHIP NETWORK 22	(3216)
RB3404	1-233-575-11	RES, CHIP NETWORK 22	(3216)
		< VIBRATOR >	
X3101	1-795-951-21	QUARTZ CRYSTAL OSCILLATOR(SMD)	
X3301	1-781-887-21	VIBRATOR, CRYSTAL	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1410-419-A	C BOARD, COMPLETE			
		**********			
*	4-042-408-02	PIN(45), WIRE			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		< CAPACITOR >			
C9004	1-115-350-51	CERAMIC	0.0047µF		2KV
C9009	1-163-104-00	CERAMIC CHIP	30pF	5%	50V
C9010	1-163-104-00	CERAMIC CHIP	30pF	5%	50V
C9011	1-161-830-00	CERAMIC	0.0047µF		500V
C9012	1-161-830-00	CERAMIC	0.0047µF		500V
C9013	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C9014	1-161-830-00	CERAMIC	0.0047µF		500V
C9015	1-163-104-00	CERAMIC CHIP	30pF	5%	50V
C9018	1-107-961-91	ELECT	10µF	20%	250V
C9019	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C9020	1-107-961-91	ELECT	10µF	20%	250V
C9021	1-107-961-91	ELECT	10µF	20%	250V
C9022	1-101-004-00	CERAMIC	0.01µF		50V
C9023	1-101-004-00	CERAMIC	0.01µF		50V
C9024	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C9025	1-104-653-11	ELECT	220µF	20%	16V
C9026	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C9027	1-101-004-00	CERAMIC	0.01µF		50V
C9031	1-115-350-51	CERAMIC	0.0047µF		2KV
C9032	1-162-116-00	CERAMIC	680pF	10%	2KV
C9033	1-107-662-11	ELECT	22µF	20%	250V
C9036	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C9042	1-128-527-11	ELECT	330µF	20%	25V
C9044	1-126-934-11	ELECT	220µF	20%	16V
C9045	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C9046	1-126-933-11	ELECT	100µF	20%	16V
C9048	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C9049	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C9050	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
		< CONNECTOR >			
CN9001*	1-764-334-11	PLUG, CONNECTOR 11P			
CN9002*	1-564-507-11	PLUG, CONNECTOR 4P			
CN9003	1-695-915-11	TAB (CONTACT)			
CN9004	1-695-915-11	TAB (CONTACT)			
CN9009	1-785-879-11	CONNECTOR, ONE TOUCH			
		< DIODE >			
D9005	8-719-404-50	DIODE MA111-TX			
D9006	8-719-051-85	DIODE HSS83TD			
D9007	8-719-051-85	DIODE HSS83TD			
D9008	8-719-051-85	DIODE HSS83TD			
D9009	8-719-908-03	DIODE GP08DPKG23			
D9010	8-719-110-17	DIODE RD10ES			
		< IC >			
IC9001	8-759-680-01	IC TDA6120Q/N2/S1			
IC9002	8-759-680-01	IC TDA6120Q/N2/S1			
IC9003	8-759-680-01	IC TDA6120Q/N2/S1			
		< JACK >			
J9001	⚠ 1-451-544-11	SOCKET, CRT			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		< COIL >			
L9002	1-408-592-11	INDUCTOR	1.2µH		
L9003	1-408-592-11	INDUCTOR	1.2µH		
L9004	1-408-592-11	INDUCTOR	1.2µH		
L9005	1-406-666-21	INDUCTOR	150µH		
L9006	1-412-526-11	INDUCTOR	12µH		
		< NEON LAMP >			
NL9003	1-519-421-11	GAP, DISCHARGE			
		< TRANSISTOR >			
Q9001	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q9003	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q9004	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q9005	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q9007	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
Q9009	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q9010	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q9011	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q9013	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
Q9014	8-729-823-81	TRANSISTOR	2SC4632LS-CB7		
Q9015	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
		< RESISTOR >			
R9001	1-216-633-11	METAL CHIP	180	0.5%	1/10W
R9006	1-216-073-91	RES-CHIP	10K	5%	1/10W
R9007	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R9012	1-216-295-91	SHORT CHIP	0		
R9013	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9014	1-216-033-00	RES-CHIP	220	5%	1/10W
R9015	1-249-409-11	CARBON	220	5%	1/4W
R9016	1-216-033-00	RES-CHIP	220	5%	1/10W
R9018	1-216-633-11	METAL CHIP	180	0.5%	1/10W
R9018	1-216-633-11	METAL CHIP	180	0.5%	1/10W
R9019	1-216-633-11	METAL CHIP	180	0.5%	1/10W
R9019	1-216-633-11	METAL CHIP	180	0.5%	1/10W
R9020	1-216-025-11	RES-CHIP	100	5%	1/10W
R9021	1-216-103-00	RES-CHIP	180K	5%	1/10W
R9022	1-216-073-91	RES-CHIP	10K	5%	1/10W
R9023	1-216-103-00	RES-CHIP	180K	5%	1/10W
R9025	1-216-025-11	RES-CHIP	100	5%	1/10W
R9026	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R9027	1-216-099-00	RES-CHIP	120K	5%	1/10W
R9028	1-216-103-00	RES-CHIP	180K	5%	1/10W
R9029	1-216-073-91	RES-CHIP	10K	5%	1/10W
R9030	1-216-073-91	RES-CHIP	10K	5%	1/10W
R9031	1-208-784-11	METAL CHIP	1.2K	0.5%	1/10W
R9032	1-216-099-00	RES-CHIP	120K	5%	1/10W
R9033	1-215-435-00	METAL	3.9K	1%	1/4W
R9034	1-215-428-00	METAL	2K	1%	1/4W
R9035	1-216-103-00	RES-CHIP	180K	5%	1/10W
R9036	1-216-083-00	RES-CHIP	27K	5%	1/10W
R9037	1-215-926-00	METAL OXIDE	33K	5%	3W
R9039	1-216-025-11	RES-CHIP	100	5%	1/10W
R9041	1-216-083-00	RES-CHIP	27K	5%	1/10W
R9042	1-216-083-00	RES-CHIP	27K	5%	1/10W
R9043	1-215-926-00	METAL OXIDE	33K	5%	3W
R9044	1-215-926-00	METAL OXIDE	33K	5%	3W
R9047	1-219-744-11	METAL	220	5%	1/2W

C D

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R9048	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9049	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9051	1-219-744-11	METAL	220	5%	1/2W
R9052	1-219-744-11	METAL	220	5%	1/2W
R9056	1-219-743-11	METAL	100	5%	1/2W
R9057	1-219-510-11	METAL	470K	5%	1/2W
R9059	1-219-746-11	METAL	1K	5%	1/2W
R9061	1-219-743-11	METAL	100	5%	1/2W
R9062	1-260-123-11	CARBON	100K	5%	1/2W
R9063	1-216-097-11	RES-CHIP	100K	5%	1/10W
R9070	1-247-807-31	CARBON	100	5%	1/4W
R9071	1-247-807-31	CARBON	100	5%	1/4W
R9072	1-216-025-11	RES-CHIP	100	5%	1/10W
R9073	1-216-049-11	RES-CHIP	1K	5%	1/10W
R9074	1-208-782-11	METAL CHIP	1K	0.5%	1/10W
R9077	1-216-073-91	RES-CHIP	10K	5%	1/10W
R9089	1-208-803-11	METAL CHIP	7.5K	0.5%	1/10W
R9091	1-215-429-00	METAL	2.2K	1%	1/4W
R9092	1-216-295-91	SHORT CHIP	0		
R9094	1-216-295-91	SHORT CHIP	0		
R9095	1-216-295-91	SHORT CHIP	0		
		< RELAY >			
RV9001⚠	1-241-714-11	RES, ADJ, METAL FILM 110M (H STAT)			

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* A-1302-616-A D BOARD, COMPLETE (HR34N90)
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* A-1302-624-A D BOARD, COMPLETE (HR34M61)
****
* A-1302-628-A D BOARD, COMPLETE (HR29N90)
****
* A-1302-692-A D BOARD, COMPLETE (HR29M61)
****

	3-710-578-01	COVER, VOLUME, 6 MOLD			
*	4-042-408-02	PIN(45), WIRE			
	4-382-854-01	SCREW (M3X8), P, SW (+)			
	4-382-854-21	SCREW (M3X14), P, SW (+)			
		< CAPACITOR >			
C5001	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C5002	1-162-116-00	CERAMIC	680pF	10%	2KV
C5003	1-117-832-11	FILM	4700pF	3%	1.5KV (HR29M61, HR29N90)
C5003	1-117-839-11	FILM	9100pF	3%	1.5KV (HR34M61, HR34N90)
C5004	1-117-833-21	FILM	5100pF	3%	1.5KV (HR29M61, HR29N90)
C5004	1-117-839-11	FILM	9100pF	3%	1.5KV (HR34M61, HR34N90)
C5005	1-137-401-11	MYLAR	0.22µF	5%	100V
C5006	1-162-116-00	CERAMIC	680pF	10%	2KV
C5008	1-117-768-91	CERAMIC	470pF	10%	2KV
C5009	1-162-318-11	CERAMIC	0.001µF	10%	500V
C5010	1-104-989-91	MYLAR	0.0022µF	5%	200V
C5015	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5016	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5017	1-104-989-91	MYLAR	0.0022µF	5%	200V
C5103	1-126-934-11	ELECT	220µF	20%	16V
C5104	1-126-941-11	ELECT	470µF	20%	25V
C5105	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
C5106	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
C5107	1-130-783-71	MYLAR	0.33µF	10%	100V
C5108	1-126-968-11	ELECT	100µF	20%	50V
C5109	1-126-941-11	ELECT	470µF	20%	25V
C5110	1-162-318-11	CERAMIC	0.001µF	10%	500V
C5201	1-137-367-11	MYLAR	0.0033µF	5%	50V
C5202	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5203	1-126-964-11	ELECT	10µF	20%	50V
C5204	1-107-648-91	ELECT	100µF	20%	200V
C5205	1-115-416-11	CERAMIC CHIP	0.001µF	20%	25V
C5206	1-136-187-11	MYLAR	0.047µF	10%	250V
C5207	1-165-727-31	ELECT	120µF	20%	16V
C5208	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5210	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5211	1-216-864-11	SHORT CHIP	0		
C5212	1-126-965-91	ELECT	22µF	20%	50V
C5213	1-126-965-91	ELECT	22µF	20%	50V
C5214	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5216	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C5217	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V
C5219	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C5221	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5223	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5227	1-128-563-11	ELECT	100µF	20%	100V
C5401	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5402	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5403	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C5404	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5405	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5406	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C5408	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5409	1-115-519-11	FILM	0.56µF	5%	250V (HR34M61, HR34N90)
C5409	1-117-664-11	FILM	0.27µF	5%	250V (HR29M61, HR29N90)
C5410	1-109-921-11	CERAMIC	0.0015µF	10%	500V
C5412	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
C5415	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C5417	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5418	1-115-342-11	FILM	0.47µF	5%	400V (HR34M61, HR34N90)
C5418	1-117-665-11	FILM	0.33µF	5%	250V (HR29M61, HR29N90)
C5421	1-130-495-00	MYLAR	0.1µF	5%	50V
C5422	1-126-947-11	ELECT	47µF	20%	35V
C5423	1-126-947-11	ELECT	47µF	20%	35V
C5424	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V (HR29M61, HR29N90)
C5552	1-126-964-11	ELECT	10µF	20%	50V
C5553	1-126-933-11	ELECT	100µF	20%	16V
C5554	1-115-349-51	CERAMIC	0.01µF		2KV
C5600	1-100-122-31	FILM	0.022µF	5%	400V
C5601	1-100-139-31	FILM	0.001µF	5%	630V (HR34M61, HR34N90)
C5601	1-100-142-31	FILM	0.0033µF	5%	630V (HR29M61, HR29N90)
C5604	1-100-123-31	FILM	0.033µF	5%	400V
C5606	1-128-582-11	ELECT	10µF	20%	100V
C5650	1-126-947-11	ELECT	47µF	20%	35V
C5652	1-126-947-11	ELECT	47µF	20%	35V
C5653	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5655	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5656	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5657	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V
C5658	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C5659	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5660	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5661	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5662	1-126-947-11	ELECT	47µF	20%	35V
C5663	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C5702	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C5703	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C6400	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C6401	1-126-964-11	ELECT	10µF	20%	50V
C6402	1-126-963-11	ELECT	4.7µF	20%	50V
C6403	1-126-968-11	ELECT	100µF	20%	50V
C6405	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C6406	1-136-479-11	FILM	0.001µF	2%	100V
C6407	1-130-495-00	MYLAR	0.1µF	5%	100V
C6409	1-126-947-11	ELECT	47µF	20%	35V
C6411	1-100-613-81	CERAMIC	470pF	5%	1KV
C6412	1-100-613-81	CERAMIC	470pF	5%	1KV
C6413	1-165-954-11	FILM	56000pF	3%	800V
C6414	1-117-228-71	MYLAR	2.2µF	10%	450V
C6415	1-126-968-11	ELECT	100µF	20%	50V
C6416	1-126-948-11	ELECT	100µF	20%	35V
C6418	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C6500	1-126-942-61	ELECT	1000µF	20%	25V
C6501	1-126-942-61	ELECT	1000µF	20%	25V
C6504	1-126-942-61	ELECT	1000µF	20%	25V
C6505	1-131-970-11	ELECT	1500µF	20%	25V
C6506	1-128-953-31	ELECT	470µF	20%	25V
C6509	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C6511	1-104-332-11	CERAMIC	470pF	10%	2KV
C6512	1-165-441-81	ELECT	33µF	20%	160V
C6513	1-128-563-11	ELECT	100µF	20%	100V (HR29M61, HR29N90)
C6513	1-165-766-31	ELECT	82µF	20%	100V (HR34M61, HR34N90)
C6514	1-107-662-11	ELECT	22µF	20%	350V
C6515	1-165-733-31	ELECT	100µF	20%	25V
C6517	1-126-933-11	ELECT	100µF	20%	16V
C6519	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C6601	1-102-228-00	CERAMIC	470pF	10%	500V
C6602	1-126-935-11	ELECT	470µF	20%	16V
C6603	1-102-228-00	CERAMIC	470pF	10%	500V
C6604	1-165-728-31	ELECT	330µF	20%	16V
C6607	1-165-729-31	ELECT	470µF	20%	16V
C6611	1-104-658-91	ELECT	100µF	20%	10V
C6613	1-104-658-91	ELECT	100µF	20%	10V
C6615	1-115-349-51	CERAMIC	0.01µF		2KV
C6616	1-126-941-11	ELECT	470µF	20%	25V
C6617	1-126-941-11	ELECT	470µF	20%	25V
C6618	1-102-228-00	CERAMIC	470pF	10%	500V
C6619	1-102-228-00	CERAMIC	470pF	10%	500V
C6700	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
C6707	1-162-318-11	CERAMIC	0.001µF	10%	500V
C6803	1-104-658-91	ELECT	100µF	20%	10V
C6804	1-126-964-11	ELECT	10µF	20%	50V
C8001	1-126-964-11	ELECT	10µF	20%	50V
C8002	1-126-964-11	ELECT	10µF	20%	50V
C8003	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8004	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C8006	1-126-960-11	ELECT	1µF	20%	50V
C8007	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C8012	1-126-947-11	ELECT	47µF	20%	35V
C8016	1-130-495-00	MYLAR	0.1µF	5%	50V
C8017	1-126-964-11	ELECT	10µF	20%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C8020	1-130-495-00	MYLAR	0.1µF	5%	50V
C8021	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C8024	1-126-947-11	ELECT	47µF	20%	35V
C8025	1-126-947-11	ELECT	47µF	20%	35V
C8027	1-130-495-00	MYLAR	0.1µF	5%	50V
C8028	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C8030	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8031	1-126-947-11	ELECT	47µF	20%	35V
C8032	1-117-160-51	FILM	680pF	2%	100V
C8033	1-126-964-11	ELECT	10µF	20%	50V
C8035	1-100-614-81	CERAMIC	330pF	5%	1KV
C8036	1-100-614-81	CERAMIC	330pF	5%	1KV
C8037	1-165-953-11	FILM	47000pF	3%	800V
C8038	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8040	1-126-969-11	ELECT	220µF	20%	50V
C8041	1-130-495-00	MYLAR	0.1µF	5%	50V
C8042	1-136-189-00	MYLAR	0.1µF	10%	250V
C8045	1-130-471-00	MYLAR	0.001µF	5%	50V
C8046	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C8048	1-130-495-00	MYLAR	0.1µF	5%	50V
C8063	1-135-945-22	FILM	10000pF	3%	800V
C8065	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C8073	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C8074	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8075	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8076	1-126-963-11	ELECT	4.7µF	20%	50V
C8077	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

< CONNCTOR >

CN5002*	1-580-798-11	CONNECTOR PIN (DY) 6P
CN5004*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN5005*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN5006*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN5007*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN5012*	1-564-507-11	PLUG, CONNECTOR 4P
CN5017*	1-564-509-11	PLUG, CONNECTOR 6P
CN6400*	1-580-843-11	PIN, CONNECTOR (POWER)

< DIODE >

D5001	8-719-061-21	DIODE FMQ-G5FMS
D5003	8-719-081-97	DIODE MMDL914T1
D5005	8-719-081-97	DIODE MMDL914T1
D5101	6-500-021-01	DIODE MM3Z4V7ST1
D5102	8-719-028-45	DIODE D2L20U-TA
D5201	8-719-110-39	DIODE RD15ESB1
D5202	8-719-028-45	DIODE D2L20U-TA
D5203	8-719-081-97	DIODE MMDL914T1
D5204	8-719-081-97	DIODE MMDL914T1
D5205	8-719-081-97	DIODE MMDL914T1
D5206	8-719-081-97	DIODE MMDL914T1
D5207	8-719-081-97	DIODE MMDL914T1
D5209	8-719-066-11	DIODE 1PS184-115
D5401	8-719-081-97	DIODE MMDL914T1
D5402	8-719-081-97	DIODE MMDL914T1
D5405	8-719-081-97	DIODE MMDL914T1
D5406	8-719-109-63	DIODE RD3.0ESB2
D5600	8-719-052-90	DIODE D1NL40-TA2
D5601	8-719-052-90	DIODE D1NL40-TA2
D5602	8-719-052-90	DIODE D1NL40-TA2
D5603	8-719-110-39	DIODE RD15ESB1
D5604	8-719-063-70	DIODE D1NL20U

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REF. NO.	PART NO.	DESCRIPTION	REMARK
D5650	8-719-081-97	DIODE MMDL914T1	
D5651	8-719-081-97	DIODE MMDL914T1	
D5652	8-719-062-51	DIODE 1PS226-115	
D5653	8-719-082-03	DIODE MM3Z15VT1	
D5701	8-719-082-03	DIODE MM3Z15VT1	
D6401	8-719-083-78	DIODE 10ERA60-TP	
D6406	8-719-082-03	DIODE MM3Z15VT1	
D6407	8-719-082-03	DIODE MM3Z15VT1	
D6408	1-216-864-11	SHORT CHIP 0	
D6409	6-500-567-21	DIODE 10ERB20-TB5	
D6410	6-500-567-21	DIODE 10ERB20-TB5	
D6411	8-719-082-03	DIODE MM3Z15VT1	
D6413	8-719-082-03	DIODE MM3Z15VT1	
D6415	8-719-082-03	DIODE MM3Z15VT1	
D6502	8-719-060-88	DIODE D4SBS6	
D6504	8-719-510-13	DIODE D10SC4MR	
D6508	8-719-062-40	DIODE D4SBL20µF3	
D6509	8-719-052-90	DIODE D1NL40-TA2	
D6510	8-719-052-37	DIODE F10P04Q	
D6511	8-719-074-79	DIODE YG911S2R	
D6601	8-719-028-45	DIODE D2L20U	
D6602	8-719-028-45	DIODE D2L20U	
D6604	8-719-075-66	DIODE D5LC20U-4012	
D6606	8-719-028-72	DIODE RGP02-17EL-6433	
D6607	8-719-028-45	DIODE D2L20U	
D6608	8-719-028-45	DIODE D2L20U	
D6800	8-719-150-92	DIODE RD33EB3T	
D6803	8-719-081-97	DIODE MMDL914T1	
D6804	6-500-654-01	DIODE MM3Z3V0T1	
D6805	8-719-081-97	DIODE MMDL914T1	
D8001	8-719-081-97	DIODE MMDL914T1	
D8003	8-719-081-97	DIODE MMDL914T1	
D8005	8-719-081-97	DIODE MMDL914T1	
D8006	6-500-567-21	DIODE 10ERB20-TB5	
D8008	8-719-082-03	DIODE MM3Z15VT1	
D8009	8-719-082-03	DIODE MM3Z15VT1	
D8010	8-719-083-78	DIODE 10ERA60-TP	
D8011	8-719-082-03	DIODE MM3Z15VT1	
D8012	8-719-082-03	DIODE MM3Z15VT1	
D8015	8-719-081-97	DIODE MMDL914T1	
D8022	8-719-063-73	DIODE D1NL20U-TR	
D8023	8-719-109-85	DIODE RD5.1ESB2	
D8024	8-719-036-94	DIODE RD5.6SB-T1	
D8026	8-719-081-97	DIODE MMDL914T1	
D8027	6-500-654-01	DIODE MM3Z3V0T1	
D8030	8-719-056-93	DIODE UDZ-TE-17-18B	
D8034	8-719-056-84	DIODE UDZ-TE-17-7.5B	
D8038	8-719-082-03	DIODE MM3Z15VT1	
D8039	8-719-082-03	DIODE MM3Z15VT1	
D8041	8-719-082-03	DIODE MM3Z15VT1	

< FERRITE BEAD >

FB5001	1-543-298-11	FERRITE	0µH
FB5201	1-469-578-11	FERRITE	1.1µH
FB5203	1-469-127-21	FERRITE	0µH
FB5205	1-469-578-11	FERRITE	1.1µH
FB6400	1-469-579-11	FERRITE	0.45µH
FB6401	1-469-579-11	FERRITE	0.45µH
FB6402	1-469-579-11	FERRITE	0.45µH
FB6403	1-469-579-11	FERRITE	0.45µH
FB6500	1-469-579-11	FERRITE	0.45µH
FB6501	1-469-579-11	FERRITE	0.45µH
FB6506	1-469-578-11	FERRITE	1.1µH
FB6507	1-469-578-11	FERRITE	1.1µH
FB6508	1-469-578-11	FERRITE	1.1µH
FB8001	1-469-579-11	FERRITE	0.45µH
FB8002	1-469-579-11	FERRITE	0.45µH
FB8003	1-469-579-11	FERRITE	0.45µH

< IC >

IC5101	8-759-696-71	IC	STV9379A
IC5201	8-759-585-82	IC	BA9759F-E2
IC5401	8-759-700-07	IC	NJM2903M
IC5402	8-759-803-42	IC	LA6500-FA
IC5403	8-759-701-01	IC	NJM2904M
IC5650	8-759-701-01	IC	NJM2904M
IC5651	8-759-701-01	IC	NJM2904M
IC5652	8-759-981-61	IC	LM2901M
IC6400	6-705-810-01	IC	MCZ3001DB
IC6501	8-759-518-68	IC	PQ12RF21
IC6503	6-704-264-01	IC	EK1135
IC6602	8-749-013-76	IC	PQ6RD83B
IC6801	8-749-921-86	IC	SE-140N
IC8001	8-759-700-07	IC	NJM2903M
IC8002	6-705-810-01	IC	MCZ3001DB
IC8004	8-759-701-01	IC	NJM2904M
IC8005	8-759-586-17	IC	TL1431CZ-AP
IC8104	8-759-586-17	IC	TL1431CZ-AP

< JUMPER RESISTOR >

JR1001	1-216-864-11	SHORT CHIP	0
JR1002	1-216-864-11	SHORT CHIP	0
JR1003	1-216-864-11	SHORT CHIP	0
JR1004	1-216-864-11	SHORT CHIP	0
JR1005	1-216-864-11	SHORT CHIP	0
JR1006	1-216-864-11	SHORT CHIP	0
JR1007	1-216-864-11	SHORT CHIP	0
JR1008	1-216-864-11	SHORT CHIP	0
JR1009	1-216-864-11	SHORT CHIP	0
JR1010	1-216-864-11	SHORT CHIP	0
JR1011	1-216-864-11	SHORT CHIP	0
JR1013	1-216-864-11	SHORT CHIP	0
JR1014	1-216-864-11	SHORT CHIP	0
JR1015	1-216-864-11	SHORT CHIP	0
JR1016	1-216-864-11	SHORT CHIP	0
JR1017	1-216-864-11	SHORT CHIP	0
JR1018	1-216-864-11	SHORT CHIP	0
JR1019	1-216-864-11	SHORT CHIP	0
JR1020	1-216-864-11	SHORT CHIP	0
JR1021	1-216-864-11	SHORT CHIP	0
JR1022	1-216-864-11	SHORT CHIP	0
JR1023	1-216-864-11	SHORT CHIP	0
JR1024	1-216-864-11	SHORT CHIP	0
JR1025	1-216-864-11	SHORT CHIP	0
JR1028	1-216-864-11	SHORT CHIP	0
JR1030	1-216-864-11	SHORT CHIP	0
JR1031	1-216-864-11	SHORT CHIP	0
JR1032	1-216-864-11	SHORT CHIP	0
JR1034	1-216-864-11	SHORT CHIP	0
JR1036	1-216-864-11	SHORT CHIP	0
JR1038	1-216-864-11	SHORT CHIP	0
JR5402	1-216-864-11	SHORT CHIP	0
JR5404	1-216-864-11	SHORT CHIP	0

REF. NO.	PART NO.	DESCRIPTION		REMARK
JR5407	1-216-864-11	SHORT CHIP	0	
JR6501	1-216-864-11	SHORT CHIP	0	
JR6502	1-216-864-11	SHORT CHIP	0	
JR6503	1-216-864-11	SHORT CHIP	0	
JR6504	1-216-864-11	SHORT CHIP	0	
JR6602	1-216-864-11	SHORT CHIP	0	
JR6702	1-216-864-11	SHORT CHIP	0	
		< COIL >		
L5101	1-406-665-11	INDUCTOR	100µH	
L5202	1-414-189-31	INDUCTOR	100µH	
L5403	1-424-874-11	COIL, HORIZONTAL LINEARITY		
L5404	1-428-932-11	INDUCTOR	4mH	
L5600	1-406-667-11	INDUCTOR	220µH	(HR29M61, HR29N90)
L5600	1-406-668-21	INDUCTOR	330µH	(HR34M61, HR34N90)
L6400	1-414-187-11	INDUCTOR	47µH	
L6503	1-412-525-31	INDUCTOR	10µH	
L6504	1-412-525-31	INDUCTOR	10µH	
L6505	1-406-668-21	INDUCTOR	330µH	
L6507	1-412-537-31	INDUCTOR	100µH	(HR29M61, HR29N90)
L6508	1-412-525-31	INDUCTOR	10µH	
L6513	1-456-166-11	COIL, CHOPPER		
L8002	1-428-950-31	INDUCTOR	125µH	
		< PHOTOCOUPLER >		
PH6700	8-749-016-81	PHOTOCOUPLER PC123Y22		
PH8003	8-749-016-81	PHOTOCOUPLER PC123Y22		
		< IC LINK >		
PS6501	1-576-688-11	FUSE	0.4A 32V	
		< TRANSISTOR >		
Q5001	6-550-077-01	TRANSISTOR	2SC5778-RB	
Q5004	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5005	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5006	8-729-038-83	TRANSISTOR	2SK2251-01-F19	
Q5008	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5009	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q5101	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5102	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5103	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5201	6-550-153-11	TRANSISTOR	FQpF12P20YDTU	
Q5202	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5203	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5401	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5402	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5403	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5404	8-729-048-49	TRANSISTOR	2SK3262-01MR-F119	
Q5405	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q5406	8-729-048-47	TRANSISTOR	2SC2688(5)-LK	
Q5407	8-729-010-05	TRANSISTOR	MSB709-RT1	(HR29M61, HR29N90)
Q5522	8-729-046-80	TRANSISTOR	2SC4634LS-CB11	
Q5600	8-729-050-48	TRANSISTOR	IRF614-005	
Q5602	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5604	8-729-800-32	TRANSISTOR	2SC2362K-G	
Q5605	8-729-010-25	TRANSISTOR	MSD601-RT1	

REF. NO.	PART NO.	DESCRIPTION		REMARK
Q5606	8-729-045-65	TRANSISTOR	2SA1776TV2Q	
Q5650	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5701	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5702	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q5703	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q6400	6-550-526-11	TRANSISTOR	2SK2842(LBS2SONY)	
Q6401	6-550-526-11	TRANSISTOR	2SK2842(LBS2SONY)	
Q6802	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q6803	8-729-019-57	TRANSISTOR	2SA1208S-TP	
Q8003	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8004	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8007	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8009	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8011	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q8013	6-550-526-11	TRANSISTOR	2SK2842(LBS2SONY)	
Q8014	6-550-526-11	TRANSISTOR	2SK2842(LBS2SONY)	
Q8021	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q8028	8-729-421-22	TRANSISTOR	UN2211	
Q8034	8-729-421-22	TRANSISTOR	UN2211	
Q8035	8-729-010-05	TRANSISTOR	MSB709-RT1	
		< RESISTOR >		
R5001	1-243-601-71	METAL OXIDE	390 5% 3W	(HR34M61, HR34N90)
R5001	1-243-608-71	METAL OXIDE	1.5K 5% 3W	(HR29M61, HR29N90)
R5002	1-243-601-71	METAL OXIDE	390 5% 3W	(HR34M61, HR34N90)
R5002	1-243-608-71	METAL OXIDE	1.5K 5% 3W	(HR29M61, HR29N90)
R5003	1-215-915-21	METAL OXIDE	470 5% 3W	
R5004	1-243-601-71	METAL OXIDE	390 5% 3W	(HR34M61, HR34N90)
R5010	1-243-949-71	METAL OXIDE	0.47 5% 2W	(HR34M61, HR34N90)
R5011	1-243-601-71	METAL OXIDE	390 5% 3W	(HR34M61, HR34N90)
R5013	1-243-949-71	METAL OXIDE	0.47 5% 2W	
R5014	1-243-949-71	METAL OXIDE	0.47 5% 2W	
R5017	1-215-880-00	METAL OXIDE	10 5% 2W	
R5019	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R5020	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R5021	1-216-809-11	METAL CHIP	100 5% 1/10W	
R5023	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R5024	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R5025	1-216-809-11	METAL CHIP	100 5% 1/10W	
R5028	1-216-821-11	METAL CHIP	1K 5% 1/10W	
R5029	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R5031	1-249-393-11	CARBON	10 5% 1/4W	
R5032	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R5101	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R5102	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R5103	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R5104	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R5106	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R5107	1-218-865-11	METAL CHIP	5.6K 0.5% 1/10W	
R5108	1-218-865-11	METAL CHIP	5.6K 0.5% 1/10W	
R5109	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R5110	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R5111	1-249-383-11	CARBON	1.5 5% 1/4W	
R5112	1-218-859-11	METAL CHIP	3.3K 0.5% 1/10W	
R5113	1-218-859-11	METAL CHIP	3.3K 0.5% 1/10W	
R5115	1-218-863-11	METAL CHIP	4.7K 0.5% 1/10W	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R5116	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R5117	1-214-798-21	METAL	1.8	1%	1/2W
R5118	1-214-796-00	METAL	1.5	1%	1/2W
R5119	1-243-572-71	METAL OXIDE	470	5%	2W
R5120	1-243-572-71	METAL OXIDE	470	5%	2W
R5121	1-249-414-11	CARBON	560	5%	1/4W
R5201	1-218-877-11	METAL CHIP	18K	0.5%	1/10W
R5202	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R5206	1-249-425-11	CARBON	4.7K	5%	1/4W
R5207	1-218-891-11	METAL CHIP	68K	0.5%	1/10W
R5208	1-249-409-11	CARBON	220	5%	1/4W
R5209	1-216-864-11	SHORT CHIP	0		
R5210	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5211	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R5213	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5214	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5215	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5216	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5217	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R5218	1-216-857-11	METAL CHIP	1M	5%	1/10W
R5221	1-218-891-11	METAL CHIP	68K	0.5%	1/10W
R5223	1-218-891-11	METAL CHIP	68K	0.5%	1/10W
R5227	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5229	1-216-864-11	SHORT CHIP	0		
R5231	1-216-839-11	METAL CHIP	33K	5%	1/10W
R5233	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R5235	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R5239	1-218-895-11	METAL CHIP	100K	0.5%	1/10W (HR29M61, HR29N90)
R5241	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5243	1-216-843-11	METAL CHIP	68K	5%	1/10W
R5245	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5247	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5249	1-216-837-11	METAL CHIP	22K	5%	1/10W
R5251	1-218-891-11	METAL CHIP	68K	0.5%	1/10W
R5252	1-218-891-11	METAL CHIP	68K	0.5%	1/10W
R5401	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5402	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R5403	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5404	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5405	1-216-813-11	METAL CHIP	220	5%	1/10W
R5406	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R5407	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W
R5408	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5409	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R5410	1-249-393-11	CARBON	10	5%	1/4W
R5411	1-216-809-11	METAL CHIP	100	5%	1/10W
R5412	1-249-437-11	CARBON	47K	5%	1/4W
R5413	1-249-401-11	CARBON	47	5%	1/4W
R5415	1-215-888-00	METAL OXIDE	220	5%	2W
R5419	1-216-853-11	METAL CHIP	470K	5%	1/10W
R5420	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5422	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R5423	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5424	1-216-389-11	METAL OXIDE	1	5%	3W
R5426	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5428	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5429	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5430	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R5431	1-216-833-11	METAL CHIP	10K	5%	1/10W (HR29M61, HR29N90)
R5431	1-216-834-11	METAL CHIP	12K	5%	1/10W (HR34M61, HR34N90)

REF. NO.	PART NO.	DESCRIPTION			REMARK
R5432	1-216-809-11	METAL CHIP	100	5%	1/10W
R5433	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5434	1-216-835-11	METAL CHIP	15K	5%	1/10W
R5436	1-249-389-11	CARBON	4.7	5%	1/4W
R5437	1-218-881-11	METAL CHIP	27K	0.5%	1/10W
R5438	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5439	1-218-883-11	METAL CHIP	33K	0.5%	1/10W (HR29M61, HR29N90)
R5440	1-218-909-11	METAL CHIP	390K	0.5%	1/10W (HR29M61, HR29N90)
R5441	1-218-891-11	METAL CHIP	68K	0.5%	1/10W (HR29M61, HR29N90)
R5573	1-216-864-11	SHORT CHIP	0		
R5581	1-218-865-11	METAL CHIP	5.6K	0.5%	1/10W
R5582	1-218-857-11	METAL CHIP	2.7K	0.5%	1/10W
R5584	1-243-598-71	METAL OXIDE	68K	5%	2W
R5585	1-243-598-71	METAL OXIDE	68K	5%	2W
R5586	1-218-853-11	METAL CHIP	1.8K	0.5%	1/10W
R5587	1-260-328-11	CARBON	1K	5%	1/2W
R5607	1-249-441-11	CARBON	100K	5%	1/4W
R5608	1-249-441-11	CARBON	100K	5%	1/4W
R5609	1-249-441-11	CARBON	100K	5%	1/4W
R5610	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5613	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5614	1-249-401-11	CARBON	47	5%	1/4W
R5617	1-216-837-11	METAL CHIP	22K	5%	1/10W
R5619	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5620	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5621	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R5622	1-216-839-11	METAL CHIP	33K	5%	1/10W
R5623	1-216-839-11	METAL CHIP	33K	5%	1/10W
R5624	1-216-843-11	METAL CHIP	68K	5%	1/10W
R5625	1-216-843-11	METAL CHIP	68K	5%	1/10W
R5626	1-216-843-11	METAL CHIP	68K	5%	1/10W (HR29M61, HR29N90)
R5626	1-216-845-11	METAL CHIP	100K	5%	1/10W (HR34M61, HR34N90)
R5627	1-243-613-71	METAL OXIDE	3.9K	5%	3W (HR29M61, HR29N90)
R5627	1-243-614-71	METAL OXIDE	4.7K	5%	3W (HR34M61, HR34N90)
R5628	1-243-613-71	METAL OXIDE	3.9K	5%	3W (HR29M61, HR29N90)
R5628	1-243-614-71	METAL OXIDE	4.7K	5%	3W (HR34M61, HR34N90)
R5629	1-243-614-71	METAL OXIDE	4.7K	5%	3W
R5630	1-216-809-11	METAL CHIP	100	5%	1/10W
R5631	1-260-292-11	CARBON	1	5%	1/2W
R5632	1-218-901-11	METAL CHIP	180K	0.5%	1/10W
R5633	1-218-887-11	METAL CHIP	47K	0.5%	1/10W
R5634	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R5635	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W
R5651	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5652	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5653	1-249-377-11	CARBON	0.47	5%	1/4W
R5654	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5655	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5656	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R5657	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R5658	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5659	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5660	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5661	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5662	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R5663	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5664	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R5665	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R5666	1-218-887-11	METAL CHIP	47K	0.5%	1/10W
R5667	1-218-891-11	METAL CHIP	68K	0.5%	1/10W
R5668	1-216-853-11	METAL CHIP	470K	5%	1/10W
R5670	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5671	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5672	1-216-839-11	METAL CHIP	33K	5%	1/10W
R5673	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5674	1-218-875-11	METAL CHIP	15K	0.5%	1/10W
R5675	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R5676	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R5677	1-216-837-11	METAL CHIP	22K	5%	1/10W
R5678	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5679	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5680	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5681	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5683	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R5685	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R5701	1-260-107-11	CARBON	4.7K	5%	1/2W
R5702	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R5704	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R5706	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R5708	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R5709	1-216-813-11	METAL CHIP	220	5%	1/10W
R5710	1-249-377-11	CARBON	0.47	5%	1/4W
R6402	1-218-870-11	METAL CHIP	9.1K	0.5%	1/10W
R6405	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R6406	1-245-478-21	METAL	470K	1%	1/4W
R6407	1-218-875-11	METAL CHIP	15K	0.5%	1/10W
R6409	1-218-830-11	METAL CHIP	200	0.5%	1/10W
R6410	1-249-417-11	CARBON	1K	5%	1/4W
R6411	1-249-393-11	CARBON	10	5%	1/4W
R6412	1-249-393-11	CARBON	10	5%	1/4W
R6413	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6414	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6417	1-245-315-71	METAL OXIDE	0.1	5%	2W
R6418	1-245-315-71	METAL OXIDE	0.1	5%	2W
R6419	1-249-393-11	CARBON	10	5%	1/4W
R6420	1-249-393-11	CARBON	10	5%	1/4W
R6421	1-202-933-61	FUSIBLE	0.1	10%	1/2W
R6427	1-216-857-11	METAL CHIP	1M	5%	1/10W
R6428	1-216-857-11	METAL CHIP	1M	5%	1/10W
R6429	1-245-478-21	METAL	470K	1%	1/4W
R6500	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6501	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6503	1-243-588-71	METAL OXIDE	10K	5%	2W
R6504	1-260-298-51	CARBON	3.3	5%	1/2W
R6512	1-249-377-11	CARBON	0.47	5%	1/4W
R6590	1-249-409-11	CARBON	220	5%	1/4W
R6601	1-249-379-11	CARBON	0.68	5%	1/4W
R6602	1-249-380-11	CARBON	0.82	5%	1/4W
R6604	1-249-377-11	CARBON	0.47	5%	1/4W
R6605	1-249-377-11	CARBON	0.47	5%	1/4W
R6612	1-249-377-11	CARBON	0.47	5%	1/4W
R6613	1-260-288-11	CARBON	0.47	5%	1/2W
R6614	1-260-288-11	CARBON	0.47	5%	1/2W
R6700	1-216-817-11	METAL CHIP	470	5%	1/10W
R6702	1-216-821-11	METAL CHIP	1K	5%	1/10W
R6703	1-218-484-11	METAL CHIP	750	5%	1/10W
R6704	1-218-484-11	METAL CHIP	750	5%	1/10W
R6705	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6708	1-216-864-11	SHORT CHIP	0		
R6809	1-249-417-11	CARBON	1K	5%	1/4W
R6810	1-216-821-11	METAL CHIP	1K	5%	1/10W
R6811	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R6812	1-243-511-71	METAL OXIDE	2.2	5%	3W
R6813	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6814	1-218-851-11	METAL CHIP	1.5K	0.5%	1/10W (HR29M61, HR29N90)
R6814	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W (HR34M61, HR34N90)
R6815	1-216-837-11	METAL CHIP	22K	5%	1/10W
R6816	1-216-846-11	METAL CHIP	120K	5%	1/10W
R6817	1-216-846-11	METAL CHIP	120K	5%	1/10W
R6818	1-245-471-21	METAL	240K	1%	1/4W
R6821	1-245-471-21	METAL	240K	1%	1/4W
R8001	1-219-512-11	METAL	2.2M	5%	1/2W
R8002	1-219-512-11	METAL	2.2M	5%	1/2W
R8003	1-216-839-11	METAL CHIP	33K	5%	1/10W
R8004	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R8005	1-216-837-11	METAL CHIP	22K	5%	1/10W
R8008	1-218-877-11	METAL CHIP	18K	0.5%	1/10W (HR29M61, HR29N90)
R8010	1-218-484-11	METAL CHIP	750	5%	1/10W
R8011	1-216-849-11	METAL CHIP	220K	5%	1/10W
R8012	1-247-828-11	CARBON	750	5%	1/4W
R8013	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8014	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R8015	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W
R8016	1-247-843-11	CARBON	3.3K	5%	1/4W
R8017	1-218-857-11	METAL CHIP	2.7K	0.5%	1/10W (HR29M61, HR29N90)
R8017	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W (HR34M61, HR34N90)
R8019 ⚠	1-218-875-11	METAL CHIP	15K	0.5%	1/10W (HR29M61, HR29N90)
R8019 ⚠	1-218-881-11	METAL CHIP	27K	0.5%	1/10W (HR34M61, HR34N90)
R8020	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8022	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8025	1-216-821-11	METAL CHIP	1K	5%	1/10W
R8026	1-218-853-11	METAL CHIP	1.8K	0.5%	1/10W
R8027	1-218-891-11	METAL CHIP	68K	0.5%	1/10W
R8028	1-218-865-11	METAL CHIP	5.6K	0.5%	1/10W
R8030	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R8033	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R8035 ⚠	1-218-861-11	METAL CHIP	3.9K	0.5%	1/10W
R8036	1-215-419-00	METAL	820	1%	1/4W
R8037 ⚠	1-215-447-00	METAL	12K	1%	1/4W
R8038 ⚠	1-215-447-00	METAL	12K	1%	1/4W
R8039 ⚠	1-215-447-00	METAL	12K	1%	1/4W (HR34M61, HR34N90)
R8039 ⚠	1-215-449-00	METAL	15K	1%	1/4W (HR29M61, HR29N90)
R8040 ⚠	1-215-432-00	METAL	3K	1%	1/4W (HR29M61, HR29N90)
R8040 ⚠	1-215-437-00	METAL	4.7K	1%	1/4W (HR34M61, HR34N90)
R8041	1-216-864-11	SHORT CHIP	0		
R8043 ⚠	1-215-447-00	METAL	12K	1%	1/4W
R8046 ⚠	1-218-851-11	METAL CHIP	1.5K	0.5%	1/10W (HR34M61, HR34N90)
R8046 ⚠	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W (HR29M61, HR29N90)
R8049	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R8050	1-211-979-11	METAL CHIP	27	0.5%	1/10W

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• The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R8051	1-202-933-61	FUSIBLE	0.1	10% 1/2W	
R8052 ⚠	1-218-879-11	METAL CHIP	22K	0.5% 1/10W	
					(HR34M61, HR34N90)
R8052 ⚠	1-218-893-11	METAL CHIP	82K	0.5% 1/10W	
					(HR29M61, HR29N90)
R8054	1-245-478-21	METAL	470K	1% 1/4W	
R8055	1-245-478-21	METAL	470K	1% 1/4W	
R8056	1-218-870-11	METAL CHIP	9.1K	0.5% 1/10W	
R8057	1-218-874-11	METAL CHIP	13K	0.5% 1/10W	
R8058	1-249-393-11	CARBON	10	5% 1/4W	
R8059	1-216-864-11	SHORT CHIP	0		
R8060	1-218-839-11	METAL CHIP	470	0.5% 1/10W	
R8061	1-249-393-11	CARBON	10	5% 1/4W	
R8062	1-216-833-11	METAL CHIP	10K	5% 1/10W	
R8063	1-216-833-11	METAL CHIP	10K	5% 1/10W	
R8066	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R8070	1-245-315-71	METAL OXIDE	0.1	5% 2W	
R8072	1-249-377-11	CARBON	0.47	5% 1/4W	
R8073	1-216-857-11	METAL CHIP	1M	5% 1/10W	
R8074	1-216-857-11	METAL CHIP	1M	5% 1/10W	
R8076	1-249-411-11	CARBON	330	5% 1/4W	
R8078 ⚠	1-218-895-11	METAL CHIP	100K	0.5% 1/10W	
R8079	1-215-449-00	METAL	15K	1% 1/4W	
R8082	1-216-863-11	METAL CHIP	3.3M	5% 1/10W	
R8085	1-219-749-91	METAL	10K	5% 1/2W	
R8086	1-219-750-91	METAL	22K	5% 1/2W	
R8088	1-216-833-11	METAL CHIP	10K	5% 1/10W	
R8089	1-216-845-11	METAL CHIP	100K	5% 1/10W	
R8090	1-216-833-11	METAL CHIP	10K	5% 1/10W	
R8091	1-215-485-00	METAL	470K	1% 1/4W	
R8092	1-249-377-11	CARBON	0.47	5% 1/4W	
R8093	1-216-833-11	METAL CHIP	10K	5% 1/10W	
R8095	1-215-485-00	METAL	470K	1% 1/4W	
R8096	1-216-864-11	SHORT CHIP	0		
R8097	1-216-797-11	METAL CHIP	10	5% 1/10W	
R8144	1-216-849-11	METAL CHIP	220K	5% 1/10W	
R8145	1-216-841-11	METAL CHIP	47K	5% 1/10W	
R8146	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R8158	1-216-809-11	METAL CHIP	100	5% 1/10W	
R8159	1-216-835-11	METAL CHIP	15K	5% 1/10W	
R8160	1-216-853-11	METAL CHIP	470K	5% 1/10W	
R8161	1-216-833-11	METAL CHIP	10K	5% 1/10W	
R8165 ⚠	1-218-897-11	METAL CHIP	120K	0.5% 1/10W	
R8166	1-216-809-11	METAL CHIP	100	5% 1/10W	
		< VARIABL RESISTOR >			
⋈ RV8002 ⚠	1-225-627-91	RES, VAR, ADJ, CERMET 2K			
		< SPARK GAP >			
SG8002	1-517-499-21	GAP, SPARK			
		< TRANSFORMER >			
T5001	1-435-636-31	TRANSFORMER, HORIZONTAL DRIVE			
					(HR29M61, HR29N90)
T5001	1-439-822-11	TRANSFORMER, HORIZONTAL DRIVE			
					(HR34M61, HR34N90)
T5200	1-439-907-31	TRANSFORMER, HORIZONTAL OUTPUT			
T5600	1-437-942-11	DYNAMIC FOCUS TRANSFORMER(DFT)			
T6400	1-439-820-21	TRANSFORMER, CONVERTER (PIT)			
T8001 ⚠	1-453-387-61	FBT ASSY NX-6020//M3J4			
					(HR34M61, HR34N90)
T8001 ⚠	1-453-445-21	FBT ASSY NX-6020//M3B4			
					(HR29M61, HR29N90)
		< THERMISTOR >			
TH5101	1-800-193-00	THERMISTOR			
TH5401	1-807-796-11	THERMISTOR			

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* A-1410-408-A G1 BOARD, COMPLETE
(HR29M61, HR34M61)
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		< CAPACITOR >			
C6301	1-104-665-11	ELECT	100µF	20%	25V
C6302	1-107-674-91	ELECT	0.47µF	20%	450V
C6303	1-107-679-91	ELECT	10µF	20%	450V
C6305	1-126-965-91	ELECT	22µF	20%	50V
C6306	1-126-940-11	ELECT	330µF	20%	25V
C6307	1-104-665-11	ELECT	100µF	20%	25V
		< CONNECTOR >			
CN6301*	1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P			
CN6303*	1-564-512-11	PLUG, CONNECTOR 9P			
CN6304*	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
		< DIODE >			
D6301	8-719-032-12	DIODE D1NS6			
D6302	8-719-083-78	DIODE 10ERA60-TP			
D6303	8-719-077-76	DIODE D2SB60A-F04			
D6304	8-719-068-00	DIODE ERC04-06SE			
D6306	8-719-063-70	DIODE D1NL20U			
D6307	8-719-032-12	DIODE D1NS6			
D6309	8-719-032-12	DIODE D1NS6			
		< IC >			
IC6301	1-761-541-11	SELECTION UNIT, RECTIFIER			
		< COIL >			
L6302	1-412-537-31	INDUCTOR	100µH		
		< PHOTOCOUPLER >			
PH6301	8-749-016-81	PHOTOCOUPLER PC123Y22			
		< TRANSISTOR >			
Q6301	8-729-040-89	TRANSISTOR 2SK1590-T1B			
		< RESISTOR >			
R6301	1-260-316-51	CARBON	100	5%	1/2W
R6302	1-249-389-11	CARBON	4.7	5%	1/4W
R6305	1-249-389-11	CARBON	4.7	5%	1/4W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R6306	1-249-425-11	CARBON	4.7K	5%	1/4W
R6307	1-249-433-11	CARBON	22K	5%	1/4W
R6308	1-219-759-41	METAL	1M	5%	1/2W
R6308	1-219-759-11	METAL	1M	5%	1/2W
R6309	1-215-469-00	METAL	100K	1%	1/4W
R6312	1-240-938-41	METAL	1.5M	5%	1/2W
R6312	1-240-938-91	METAL	1.5M	5%	0.5W
R6313	1-219-512-41	METAL	2.2M	5%	1/2W
R6313	1-219-512-11	METAL	2.2M	5%	1/2W
		< RELAY >			
RY6301	1-755-395-11	RELAY (AC POWER)			
		< TRANSFORMER >			
T6301	1-437-851-11	TRANSFORMER ASSY, POWER (HST)			
		< THERMISTOR >			
TH6302	1-803-586-11	THERMISTOR, NTC			
		< VARISTOR >			
VD6301	1-804-993-21	VARISTOR			
VD6303	1-804-995-21	VARISTOR			

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* A-1410-416-A H3 BOARD, COMPLETE
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		< CAPACITOR >			
C1003	1-126-964-11	ELECT	10µF	20%	50V
C1004	1-126-964-11	ELECT	10µF	20%	50V
C1005	1-136-497-81	FILM	0.1µF	5%	50V
		< CONNECTOR >			
CN1001*	1-764-333-11	PLUG, CONNECTOR 10P			
CN1002*	1-564-508-11	PLUG, CONNECTOR 5P			
CN1003*	1-564-506-11	PLUG, CONNECTOR 3P			
		< DIODE >			
D1000	8-719-050-84	DIODE RB441Q-40T-77			
D1001	8-719-050-84	DIODE RB441Q-40T-77			
		< IC >			
IC1001	8-759-700-42	IC NJM2904D			
		< RESISTOR >			
R1004	1-249-413-11	CARBON	470	5%	1/4W
R1005	1-249-415-11	CARBON	680	5%	1/4W
R1006	1-249-417-11	CARBON	1K	5%	1/4W
R1007	1-249-421-11	CARBON	2.2K	5%	1/4W
R1008	1-249-425-11	CARBON	4.7K	5%	1/4W
R1009	1-249-413-11	CARBON	470	5%	1/4W
R1010	1-249-415-11	CARBON	680	5%	1/4W
R1011	1-249-417-11	CARBON	1K	5%	1/4W
R1012	1-249-421-11	CARBON	2.2K	5%	1/4W
R1013	1-249-425-11	CARBON	4.7K	5%	1/4W
R1014	1-247-891-00	CARBON	330K	5%	1/4W
R1015	1-247-897-11	CARBON	560K	5%	1/4W
R1016	1-215-439-00	METAL	5.6K	1%	1/4W
R1017	1-249-441-11	CARBON	100K	5%	1/4W
R1018	1-249-429-11	CARBON	10K	5%	1/4W
		< SWITCH >			
S1001	1-762-837-11	SWITCH, TACTILE (VOL +/-)			
S1002	1-762-837-11	SWITCH, TACTILE (PROG +/-)			
S1003	1-692-431-21	SWITCH, TACTILE (TV/VIDEO)			
S1004	1-762-837-11	SWITCH, TACTILE (SELECT)			
S1005	1-692-431-21	SWITCH, TACTILE (RIGHT)			
S1006	1-762-837-11	SWITCH, TACTILE (UP/DOWN)			
S1007	1-692-431-21	SWITCH, TACTILE (LEFT)			
S1008	1-762-837-11	SWITCH, TACTILE (AUTO PROG/MENU)			
		< THERMISTOR >			
TH1001	1-807-796-11	THERMISTOR			

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* A-1410-417-A H4 BOARD, COMPLETE
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*	4-055-304-01	HOLDER, LED			
		< CAPACITOR >			
C1051	1-126-947-11	ELECT	47µF	20%	25V
C1052	1-136-497-81	FILM	0.1µF	5%	50V
C1055	1-102-824-00	CERAMIC	470pF	5%	50V
C1056	1-126-947-11	ELECT	47µF	20%	25V
		< CONNECTOR >			
CN1052*	1-564-508-11	PLUG, CONNECTOR 5P			
CN1054*	1-580-844-11	PIN, CONNECTOR (POWER)			
CN1055*	1-580-844-11	PIN, CONNECTOR (POWER)			
		< DIODE >			
D1056	8-719-109-66	DIODE RD3.3ESB2			
D1057	8-719-083-18	DIODE SPB-25MVWF			
		< IC >			
IC1051	6-704-532-01	IC RPM7240-H5			
		< TRANSISTOR >			
Q1053	8-729-030-02	TRANSISTOR DTC144ESA			
Q1054	8-729-030-02	TRANSISTOR DTC144ESA			
		< RESISTOR >			
R1054	1-247-807-31	CARBON	100	5%	1/4W
R1055	1-249-413-11	CARBON	470	5%	1/4W
R1059	1-249-411-11	CARBON	330	5%	1/4W
R1060	1-247-807-31	CARBON	100	5%	1/4W
R1061	1-249-411-11	CARBON	330	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1062	1-247-807-31	CARBON	100	5%	1/4W
		< SWITCH >			
S1051	! 1-571-433-21	SWITCH, PUSH (AC POWER)			
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	* A-1410-415-A	H5 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C9300	1-126-964-11	ELECT	10µF	20%	50V
C9301	1-126-961-11	ELECT	2.2µF	20%	50V
C9302	1-126-961-11	ELECT	2.2µF	20%	50V
C9303	1-126-964-11	ELECT	10µF	20%	50V
C9306	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9309	1-136-497-81	FILM	0.1µF	5%	50V
C9310	1-136-497-81	FILM	0.1µF	5%	50V
		< CONNECTOR >			
CN9302*	1-764-334-11	PLUG, CONNECTOR 11P			
CN9303*	1-564-509-11	PLUG, CONNECTOR 6P			
		< DIODE >			
D9300	8-719-056-82	DIODE UDZ-TE-17-6.2B			
D9301	8-719-083-79	DIODE UDTZ10B			
D9302	8-719-083-79	DIODE DTZ10B			
D9303	8-719-083-79	DIODE DTZ10B			
D9304	8-719-083-79	DIODE DTZ10B			
		< FILTER >			
FL9300	1-239-583-22	FERRITE	0µH		
FL9301	1-239-583-22	FERRITE	0µH		
		< JACK >			
J9301	1-779-947-11	TERMINAL BLOCK, S (VIDEO IN 4)			
J9302	1-815-325-11	JACK (HEADPHONES)			
		< RESISTOR >			
R9301	1-216-811-11	METAL CHIP	150	5%	1/10W
R9304	1-216-849-11	METAL CHIP	220K	5%	1/10W
R9305	1-216-849-11	METAL CHIP	220K	5%	1/10W
R9306	1-216-811-11	METAL CHIP	150	5%	1/10W
R9307	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9309	1-216-021-00	RES-CHIP	68	5%	1/10W
R9310	1-216-021-00	RES-CHIP	68	5%	1/10W
R9311	1-216-025-11	RES-CHIP	100	5%	1/10W
R9314	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R9315	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R9321	1-216-811-11	METAL CHIP	150	5%	1/10W
R9322	1-216-811-11	METAL CHIP	150	5%	1/10W
R9323	1-216-864-11	SHORT CHIP	0		
R9324	1-216-811-11	METAL CHIP	150	5%	1/10W
R9326	1-216-811-11	METAL CHIP	150	5%	1/10W
		< VARISTOR >			
VD9300	1-803-974-21	VARISTOR, CHIP (1608)			
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REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1410-418-A	HMG BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C7201	1-126-390-11	ELECT CHIP	22µF	20%	6.3V
C7202	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C7203	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C7204	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7205	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C7208	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C7209	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C7210	1-126-390-11	ELECT CHIP	22µF	20%	6.3V
		< CONNECTOR >			
CN7201*	1-816-124-11	PIN, CONNECTOR (FOR PWB) 18P			
CN7202*	1-816-402-12	CONNECTOR, MEMORY STICK			
		< DIODE >			
D7201	8-719-158-02	DIODE RD3.9SB2			
D7202	8-719-024-77	DIODE HN1D03FU-TE85R			
D7203	8-719-024-77	DIODE HN1D03FU-TE85R			
D7204	8-719-024-77	DIODE HN1D03FU-TE85R			
D7205	8-719-024-77	DIODE HN1D03FU-TE85R			
D7206	8-719-024-77	DIODE HN1D03FU-TE85R			
D7207	6-500-182-01	DIODE L1503CB/ID			
D7208	8-719-024-77	DIODE HN1D03FU-TE85R			
D7209	8-719-024-77	DIODE HN1D03FU-TE85R			
D7210	8-719-158-02	DIODE RD3.9SB2			
		< FERRITE BEAD >			
FB7201	1-414-229-11	FERRITE	0µH		
		< IC >			
IC7201	6-702-952-01	IC SN65LVDT14PWR			
IC7203	8-759-698-08	IC SN74CBTLV1G125DCKR			
		< TRANSISTOR >			
Q7201	8-729-140-63	TRANSISTOR 2SA1611T1-M5M6			
Q7202	8-729-029-14	TRANSISTOR DTC144EUA-T106			
Q7203	8-729-010-05	TRANSISTOR MSB709-RT1			
Q7204	8-729-029-14	TRANSISTOR DTC144EUA-T106			
		< RESISTOR >			
R7202	1-216-864-11	SHORT CHIP	0		
R7205	1-216-864-11	SHORT CHIP	0		
R7206	1-216-864-11	SHORT CHIP	0		
R7209	1-216-864-11	SHORT CHIP	0		
R7211	1-216-864-11	SHORT CHIP	0		
R7213	1-216-864-11	SHORT CHIP	0		
R7214	1-216-864-11	SHORT CHIP	0		
R7216	1-216-864-11	SHORT CHIP	0		
R7217	1-216-864-11	SHORT CHIP	0		
R7218	1-216-864-11	SHORT CHIP	0		
R7219	1-216-809-11	METAL CHIP	100	5%	1/10W
R7220	1-216-821-11	METAL CHIP	1K	5%	1/10W
R7221	1-216-833-11	METAL CHIP	10K	5%	1/10W
R7222	1-216-801-11	METAL CHIP	22	5%	1/10W
R7223	1-216-801-11	METAL CHIP	22	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R7224	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R7225	1-216-801-11	METAL CHIP	22	5%	1/10W
R7226	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7227	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R7228	1-216-837-11	METAL CHIP	22K	5%	1/10W

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* A-1302-615-A MG BOARD, COMPLETE (HR34N90)
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* A-1302-623-A MG BOARD, COMPLETE (HR34M61)
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* A-1302-627-A MG BOARD, COMPLETE (HR29N90)
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* A-1302-691-A MG BOARD, COMPLETE (HR29M61)
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< CAPACITOR >

C0002	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C0003	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0004	1-126-947-11	ELECT	47µF	20%	35V
C0005	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C0007	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0008	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0009	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0012	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0014	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0022	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C0024	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0025	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C0027	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0028	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C0029	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C0031	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0032	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0033	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0034	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0035	1-126-767-11	ELECT	1000µF	20%	16V
C0036	1-126-933-11	ELECT	100µF	20%	16V
C0038	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C0040	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C0041	1-162-907-11	CERAMIC CHIP	2pF	0.25pF	50V
C0042	1-164-245-11	CERAMIC CHIP	0.015µF	10%	25V
C0044	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0045	1-126-933-11	ELECT	100µF	20%	16V
C0046	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0047	1-126-933-11	ELECT	100µF	20%	16V
C0048	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0049	1-128-945-31	ELECT	1000µF	20%	10V
C0050	1-128-949-31	ELECT	470µF	20%	16V
C0051	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C0052	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0053	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0054	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C0055	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C0071	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0072	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0073	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0074	1-126-925-91	ELECT	470µF	20%	10V
C0075	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
C0076	1-126-933-11	ELECT	100µF	20%	16V
C0077	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0078	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C0079	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0080	1-126-965-91	ELECT	22µF	20%	50V
C0081	1-126-964-11	ELECT	10µF	20%	50V
C0082	1-126-964-11	ELECT	10µF	20%	50V
C0083	1-126-933-11	ELECT	100µF	20%	16V
C0084	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0085	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0086	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0087	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C0088	1-126-767-11	ELECT	1000µF	20%	16V
C0089	1-126-964-11	ELECT	10µF	20%	50V
C0091	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0092	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0301	1-126-965-91	ELECT	22µF	20%	50V
C0302	1-126-933-11	ELECT	100µF	20%	16V
C0303	1-126-965-91	ELECT	22µF	20%	50V
C0304	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0305	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0306	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0307	1-126-933-11	ELECT	100µF	20%	16V
C0308	1-126-947-11	ELECT	47µF	20%	35V
C0309	1-126-947-11	ELECT	47µF	20%	35V
C0310	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C0311	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0312	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0313	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C0314	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
C0315	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C0316	1-137-194-81	FILM	0.47µF	5%	50V
C0317	1-136-497-81	FILM	0.1µF	5%	50V
C0318	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C0319	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C0320	1-136-497-81	FILM	0.1µF	5%	50V
C0321	1-136-497-81	FILM	0.1µF	5%	50V
C0322	1-136-497-81	FILM	0.1µF	5%	50V
C0323	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C0324	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C0325	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C0326	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C0327	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
C0328	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
C0329	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C0330	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C0331	1-137-190-91	FILM	0.22µF	5%	50V
C0332	1-128-934-91	CERAMIC CHIP	0.33µF	20%	10V
C0333	1-136-167-00	FILM	0.15µF	5%	50V
C0334	1-126-960-11	ELECT	1µF	20%	50V
C0335	1-125-889-91	CERAMIC CHIP	2.2µF	10%	10V
C0336	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0337	1-125-889-91	CERAMIC CHIP	2.2µF	10%	10V
C0338	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0339	1-126-768-11	ELECT	2200µF	20%	16V
C0340	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0341	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0342	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0343	1-126-933-11	ELECT	100µF	20%	16V
C0344	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0345	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0400	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0403	1-126-933-11	ELECT	100µF	20%	16V
C0404	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0405	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C0406	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0407	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C0408	1-164-156-11	CERAMIC CHIP	0.1µF		25V

MG

REF. NO.	PART NO.	DESCRIPTION			REMARK
C0409	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C0410	1-126-933-11	ELECT	100µF	20%	16V
C0411	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0412	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C0413	1-126-933-11	ELECT	100µF	20%	16V
C0414	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C0415	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0416	1-126-935-11	ELECT	470µF	20%	16V
C0417	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0418	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0419	1-126-933-11	ELECT	100µF	20%	16V
C0420	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0421	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0422	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0423	1-126-962-11	ELECT	3.3µF	20%	50V
C0424	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C0425	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C0426	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C0427	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0428	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0429	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0430	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V
C0431	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0432	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0433	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0434	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0435	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0436	1-126-933-11	ELECT	100µF	20%	16V
C0437	1-126-963-11	ELECT	4.7µF	20%	50V
C0438	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0439	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0441	1-126-933-11	ELECT	100µF	20%	16V
C0442	1-126-933-11	ELECT	100µF	20%	16V
C0444	1-126-933-11	ELECT	100µF	20%	16V
C0445	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C0446	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0447	1-110-563-11	CERAMIC CHIP	0.068µF	10%	16V
C0448	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0449	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C0450	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0451	1-126-933-11	ELECT	100µF	20%	16V
C0452	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0453	1-126-933-11	ELECT	100µF	20%	16V
C0454	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C0455	1-126-933-11	ELECT	100µF	20%	16V
C0456	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C0458	1-126-933-11	ELECT	100µF	20%	16V
C0459	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0460	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C0461	1-165-733-31	ELECT	100µF	20%	25V
C0462	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0463	1-162-969-11	CERAMIC CHIP	0.0068µF	10%	25V
C0464	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C0465	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0466	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C0467	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C0468	1-165-908-11	CERAMIC CHIP	1µF	10%	10V

< CONNECTOR >

CN0001*	1-793-498-11	CONNECTOR, BOARD TO BOARD 50P
CN0002*	1-793-498-11	CONNECTOR, BOARD TO BOARD 50P
CN0004*	1-764-333-11	PLUG, CONNECTOR 10P
CN0005*	1-564-512-11	PLUG, CONNECTOR 9P
CN0050*	1-564-506-11	PLUG, CONNECTOR 3P
CN0301*	1-564-509-11	PLUG, CONNECTOR 6P
CN0401*	1-764-334-11	PLUG, CONNECTOR 11P
CN0402	1-764-334-11	PLUG, CONNECTOR 11P
CN0405*	1-564-508-11	PLUG, CONNECTOR 5P (HR29M61, HR34M61)
CN0406*	1-564-511-11	PLUG, CONNECTOR 8P (HR29M61, HR34M61)
CN1164*	1-564-510-11	PLUG, CONNECTOR 7P

< DIODE >

D0001	8-719-083-57	DIODE	UDZSTE-173.6B
D0002	8-719-914-43	DIODE	DAN202
D0003	8-719-914-43	DIODE	DAN202K
D0007	8-719-914-43	DIODE	DAN202K
D0008	8-719-080-69	DIODE	M1FS4-4063
D0009	8-719-081-97	DIODE	MMDL914T1
D0010	8-719-081-97	DIODE	MMDL914T1
D0052	8-719-083-66	DIODE	UDZSTE-1718B
D0053	8-719-158-18	DIODE	RD5.6SB3
D0054	8-719-914-43	DIODE	DAN202K
D0055	8-719-081-97	DIODE	MMDL914T1
D0056	8-719-081-97	DIODE	MMDL914T1
D0057	8-719-081-97	DIODE	MMDL914T1
D0058	8-719-081-97	DIODE	MMDL914T1
D0059	8-719-081-97	DIODE	MMDL914T1
D0403	8-719-081-97	DIODE	MMDL914T1
D0404	8-719-069-55	DIODE	UDZSTE-175.6B
D0405	8-719-056-82	DIODE	UDZ-TE-17-6.2B
D0406	8-719-081-97	DIODE	MMDL914T1
D0407	8-719-081-97	DIODE	MMDL914T1
D0501	8-719-914-43	DIODE	DAN202K
D0502	8-719-977-28	DIODE	DTZ10B

< FERRITE BEAD >

FB0001	1-414-921-11	FERRITE	0µH
FB0002	1-414-921-11	FERRITE	0µH
FB0004	1-414-921-11	FERRITE	0µH
FB0005	1-414-921-11	FERRITE	0µH
FB0006	1-414-921-11	FERRITE	0µH
FB0008	1-414-921-11	FERRITE	0µH
FB0301	1-414-921-11	FERRITE	0µH
FB0401	1-414-921-11	FERRITE	0µH
FB0402	1-414-921-11	FERRITE	0µH
FB0403	1-414-921-11	FERRITE	0µH

< FILTER >

FL0001	1-239-895-11	FILTER, EMI (SMD)
FL0002	1-239-895-11	FILTER, EMI (SMD)

< IC >

IC0001	8-753-213-34	IC	CXP961048-013Q(HR29M61, HR34M61)
IC0001	8-753-215-04	IC	CXP961048-014Q(HR29N90, HR34N90)
IC0002	6-803-843-01	IC	M306VSMG-535FP
IC0003	6-704-573-01	IC	M24C32-WMN6T(B)
IC0005	6-704-573-01	IC	M24C32-WMN6T(B)
IC0007	8-759-488-29	IC	TC7W66FU(TE12R)
IC0008	6-801-375-01	IC	PST9129NL
IC0050	6-702-474-01	IC	MM1482BFBE

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC0051	8-759-488-29	IC TC7W66FU(TE12R)	
IC0301	8-759-745-64	IC NJM4560M	
IC0302	6-704-236-01	IC NJW1148	
IC0401	8-752-102-68	IC CXA2170Q	
IC0403	8-759-642-22	IC UPC29M05T-E2	
		< JUMPER RESISTOR >	
JR1001	1-216-864-11	SHORT CHIP 0	
JR1002	1-216-864-11	SHORT CHIP 0	
JR1003	1-216-864-11	SHORT CHIP 0	
JR1004	1-216-864-11	SHORT CHIP 0	
JR1005	1-216-864-11	SHORT CHIP 0	
JR1006	1-216-864-11	SHORT CHIP 0	
JR1007	1-216-864-11	SHORT CHIP 0	
JR1008	1-216-864-11	SHORT CHIP 0	
JR1009	1-216-864-11	SHORT CHIP 0	
JR1010	1-216-864-11	SHORT CHIP 0	
JR1011	1-216-864-11	SHORT CHIP 0	
JR1012	1-216-864-11	SHORT CHIP 0	
JR1013	1-216-864-11	SHORT CHIP 0	
JR1014	1-216-864-11	SHORT CHIP 0	
JR1015	1-216-864-11	SHORT CHIP 0	
JR1016	1-216-864-11	SHORT CHIP 0	
JR1017	1-216-864-11	SHORT CHIP 0	
JR1018	1-216-864-11	SHORT CHIP 0	
JR1019	1-216-864-11	SHORT CHIP 0	
JR1020	1-216-864-11	SHORT CHIP 0	
JR1021	1-216-864-11	SHORT CHIP 0	
JR1022	1-216-864-11	SHORT CHIP 0	
JR1023	1-216-864-11	SHORT CHIP 0	
JR1024	1-216-864-11	SHORT CHIP 0	
JR1025	1-216-864-11	SHORT CHIP 0	
JR1026	1-216-864-11	SHORT CHIP 0	
JR1027	1-216-864-11	SHORT CHIP 0	
JR1028	1-216-864-11	SHORT CHIP 0	
		< COIL >	
L0001	1-400-397-11	INDUCTOR 10µH	
L0004	1-400-397-11	INDUCTOR 10µH	
L0005	1-400-397-11	INDUCTOR 10µH	
L0051	1-400-397-11	INDUCTOR 10µH	
L0053	1-400-397-11	INDUCTOR 10µH	
L0054	1-400-397-11	INDUCTOR 10µH	
L0301	1-400-397-11	INDUCTOR 10µH	
L0401	1-400-397-11	INDUCTOR 10µH	
L0402	1-400-397-11	INDUCTOR 10µH	
L0403	1-400-397-11	INDUCTOR 10µH	
L0404	1-469-559-21	INDUCTOR 47µH	
L0405	1-400-397-11	INDUCTOR 10µH	
L0406	1-400-397-11	INDUCTOR 10µH	
L0407	1-400-397-11	INDUCTOR 10µH	
L0408	1-400-397-11	INDUCTOR 10µH	
L0409	1-400-397-11	INDUCTOR 10µH	
L0410	1-400-397-11	INDUCTOR 10µH	
		< TRANSISTOR >	
Q0004	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0007	8-729-905-35	TRANSISTOR 2SC4081-R	(HR29M61, HR34M61)
Q0008	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0009	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0010	8-729-028-23	TRANSISTOR 2SJ344(TE85L)	
Q0016	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0020	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0021	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0022	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0023	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0050	8-729-905-35	TRANSISTOR 2SC4081-R	(HR29M61, HR34M61)
Q0051	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0053	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0054	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0056	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0057	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0058	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0059	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0060	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0061	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0063	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0067	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0068	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0069	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0070	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0302	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0303	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0304	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0305	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0306	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0401	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0402	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0403	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0405	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0406	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0408	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0409	8-729-122-63	TRANSISTOR 2SA1226-E4	
Q0415	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0416	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0417	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0418	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0419	8-729-122-63	TRANSISTOR 2SA1226-E4	
Q0420	8-729-122-63	TRANSISTOR 2SA1226-E4	
Q0422	8-729-122-63	TRANSISTOR 2SA1226-E4	
Q0423	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0424	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0425	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0426	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0427	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0428	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0429	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0430	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0431	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0434	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0435	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0436	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q0437	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0438	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0439	8-729-010-25	TRANSISTOR MSD601-RT1	
Q0440	8-729-010-25	TRANSISTOR MSD601-RT1	
		< RESISTOR >	
R0005	1-216-835-11	METAL CHIP 15K 5% 1/10W	(HR29M61, HR34M61)
R0006	1-216-835-11	METAL CHIP 15K 5% 1/10W	(HR29M61, HR34M61)

MG

REF. NO.	PART NO.	DESCRIPTION			REMARK
R0007	1-216-857-11	METAL CHIP	1M	5%	1/10W
R0015	1-216-809-11	METAL CHIP	100	5%	1/10W
R0016	1-216-809-11	METAL CHIP	100	5%	1/10W
R0020	1-216-809-11	METAL CHIP	100	5%	1/10W
R0021	1-216-809-11	METAL CHIP	100	5%	1/10W
R0022	1-216-809-11	METAL CHIP	100	5%	1/10W
R0023	1-216-809-11	METAL CHIP	100	5%	1/10W
R0026	1-216-809-11	METAL CHIP	100	5%	1/10W
R0029	1-216-809-11	METAL CHIP	100	5%	1/10W
R0030	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0031	1-216-809-11	METAL CHIP	100	5%	1/10W
R0032	1-216-809-11	METAL CHIP	100	5%	1/10W
R0034	1-216-809-11	METAL CHIP	100	5%	1/10W
R0035	1-216-817-11	METAL CHIP	470	5%	1/10W
R0036	1-216-797-11	METAL CHIP	10	5%	1/10W
R0037	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0039	1-216-809-11	METAL CHIP	100	5%	1/10W
R0040	1-216-809-11	METAL CHIP	100	5%	1/10W
R0041	1-216-809-11	METAL CHIP	100	5%	1/10W
R0042	1-216-820-11	METAL CHIP	820	5%	1/10W
R0044	1-216-809-11	METAL CHIP	100	5%	1/10W
R0045	1-216-809-11	METAL CHIP	100	5%	1/10W
R0046	1-216-809-11	METAL CHIP	100	5%	1/10W
R0047	1-216-809-11	METAL CHIP	100	5%	1/10W
R0048	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0050	1-216-809-11	METAL CHIP	100	5%	1/10W
R0051	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0052	1-216-809-11	METAL CHIP	100	5%	1/10W
R0053	1-216-809-11	METAL CHIP	100	5%	1/10W
R0054	1-216-809-11	METAL CHIP	100	5%	1/10W
R0056	1-216-809-11	METAL CHIP	100	5%	1/10W
R0057	1-216-809-11	METAL CHIP	100	5%	1/10W
R0058	1-216-809-11	METAL CHIP	100	5%	1/10W
R0059	1-216-809-11	METAL CHIP	100	5%	1/10W
R0061	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0064	1-216-812-11	METAL CHIP	180	5%	1/10W
R0065	1-218-675-11	METAL CHIP	200	0.5%	1/10W
R0067	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R0069	1-216-812-11	METAL CHIP	180	5%	1/10W
R0070	1-218-675-11	METAL CHIP	200	0.5%	1/10W
R0071	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0072	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0073	1-216-809-11	METAL CHIP	100	5%	1/10W
R0075	1-216-809-11	METAL CHIP	100	5%	1/10W
R0076	1-216-812-11	METAL CHIP	180	5%	1/10W
R0077	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0078	1-218-675-11	METAL CHIP	200	0.5%	1/10W
R0079	1-216-839-11	METAL CHIP	33K	5%	1/10W
R0080	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0081	1-216-841-11	METAL CHIP	47K	5%	1/10W
R0082	1-216-841-11	METAL CHIP	47K	5%	1/10W
R0084	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0085	1-216-841-11	METAL CHIP	47K	5%	1/10W
R0086	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0088	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0089	1-216-809-11	METAL CHIP	100	5%	1/10W
R0092	1-216-797-11	METAL CHIP	10	5%	1/10W
R0093	1-216-797-11	METAL CHIP	10	5%	1/10W
R0094	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0095	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0096	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0097	1-216-864-11	SHORT CHIP	0		
R0098	1-216-809-11	METAL CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R0100	1-216-809-11	METAL CHIP	100	5%	1/10W
R0101	1-216-864-11	SHORT CHIP	0		
R0102	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0105	1-216-864-11	SHORT CHIP	0		
R0106	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0107	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0111	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0115	1-216-809-11	METAL CHIP	100	5%	1/10W
R0116	1-216-809-11	METAL CHIP	100	5%	1/10W
R0118	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0119	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0120	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0121	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0122	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0123	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0124	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0125	1-216-809-11	METAL CHIP	100	5%	1/10W
R0126	1-216-809-11	METAL CHIP	100	5%	1/10W
R0127	1-216-809-11	METAL CHIP	100	5%	1/10W
R0128	1-216-864-11	SHORT CHIP	0 (HR29N90, HR34N90)		
R0129	1-216-864-11	SHORT CHIP	0 (HR29N90, HR34N90)		
R0133	1-216-809-11	METAL CHIP	100	5%	1/10W
R0134	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0135	1-216-809-11	METAL CHIP	100	5%	1/10W
R0136	1-216-809-11	METAL CHIP	100	5%	1/10W
R0137	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0139	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0140	1-216-809-11	METAL CHIP	100	5%	1/10W
R0141	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0142	1-216-809-11	METAL CHIP	100	5%	1/10W
R0143	1-216-797-11	METAL CHIP	10	5%	1/10W
R0144	1-216-809-11	METAL CHIP	100	5%	1/10W
R0145	1-216-797-11	METAL CHIP	10	5%	1/10W
R0146	1-216-809-11	METAL CHIP	100	5%	1/10W
R0147	1-216-797-11	METAL CHIP	10	5%	1/10W
R0148	1-216-809-11	METAL CHIP	100	5%	1/10W
R0149	1-216-809-11	METAL CHIP	100	5%	1/10W
R0150	1-216-809-11	METAL CHIP	100	5%	1/10W
R0151	1-216-809-11	METAL CHIP	100	5%	1/10W
R0152	1-216-809-11	METAL CHIP	100	5%	1/10W
R0153	1-216-864-11	SHORT CHIP	0		
R0154	1-216-864-11	SHORT CHIP	0		
R0155	1-216-809-11	METAL CHIP	100	5%	1/10W
R0157	1-216-864-11	SHORT CHIP	0		
R0159	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0182	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0183	1-216-809-11	METAL CHIP	100	5%	1/10W
R0184	1-216-849-11	METAL CHIP	220K	5%	1/10W
R0188	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0189	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0190	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0191	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0192	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0195	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0196	1-216-809-11	METAL CHIP	100	5%	1/10W
R0197	1-216-809-11	METAL CHIP	100	5%	1/10W
R0198	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0199	1-216-809-11	METAL CHIP	100	5%	1/10W
R0200	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0201	1-216-813-11	METAL CHIP	220	5%	1/10W
R0202	1-216-813-11	METAL CHIP	220	5%	1/10W
R0203	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0204	1-216-864-11	SHORT CHIP	0		

MG

REF. NO.	PART NO.	DESCRIPTION			REMARK
R0205	1-216-864-11	SHORT CHIP	0		
R0206	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0207	1-216-809-11	METAL CHIP	100	5%	1/10W
R0208	1-216-821-11	METAL CHIP	1K	5%	1/10W (HR29N90, HR34N90)
R0208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (HR29M61, HR34M61)
R0209	1-216-821-11	METAL CHIP	1K	5%	1/10W (HR29N90, HR34N90)
R0209	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (HR29M61, HR34M61)
R0212	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0213	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0214	1-216-813-11	METAL CHIP	220	5%	1/10W
R0215	1-216-817-11	METAL CHIP	470	5%	1/10W
R0216	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0218	1-216-813-11	METAL CHIP	220	5%	1/10W
R0219	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0220	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0221	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0222	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0223	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0224	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0225	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0226	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0227	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0228	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0229	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0236	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0237	1-216-809-11	METAL CHIP	100	5%	1/10W
R0240	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0241	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0242	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0243	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0244	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0245	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0246	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0247	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0248	1-216-841-11	METAL CHIP	47K	5%	1/10W
R0249	1-216-841-11	METAL CHIP	47K	5%	1/10W
R0250	1-216-853-11	METAL CHIP	470K	5%	1/10W
R0301	1-216-834-11	METAL CHIP	12K	5%	1/10W
R0302	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R0303	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R0304	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0305	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0306	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0309	1-216-807-11	METAL CHIP	68	5%	1/10W
R0310	1-216-807-11	METAL CHIP	68	5%	1/10W
R0311	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0312	1-216-853-11	METAL CHIP	470K	5%	1/10W
R0313	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0314	1-216-853-11	METAL CHIP	470K	5%	1/10W
R0315	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0316	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0317	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0319	1-216-853-11	METAL CHIP	470K	5%	1/10W
R0325	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0326	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0327	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R0328	1-218-873-11	METAL CHIP	12K	0.5%	1/10W
R0329	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R0330	1-218-873-11	METAL CHIP	12K	0.5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R0331	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R0332	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0333	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0334	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0335	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0337	1-216-864-11	SHORT CHIP	0		
R0339	1-216-864-11	SHORT CHIP	0		
R0340	1-216-864-11	SHORT CHIP	0		
R0341	1-216-809-11	METAL CHIP	100	5%	1/10W
R0342	1-216-864-11	SHORT CHIP	0		
R0343	1-216-864-11	SHORT CHIP	0		
R0344	1-216-841-11	METAL CHIP	47K	5%	1/10W
R0345	1-216-841-11	METAL CHIP	47K	5%	1/10W
R0350	1-216-864-11	SHORT CHIP	0		
R0357	1-216-864-11	SHORT CHIP	0		
R0359	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0360	1-216-864-11	SHORT CHIP	0		
R0402	1-216-813-11	METAL CHIP	220	5%	1/10W
R0404	1-216-813-11	METAL CHIP	220	5%	1/10W
R0405	1-216-813-11	METAL CHIP	220	5%	1/10W
R0410	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0411	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0413	1-216-819-11	METAL CHIP	680	5%	1/10W
R0414	1-216-819-11	METAL CHIP	680	5%	1/10W
R0415	1-216-819-11	METAL CHIP	680	5%	1/10W
R0416	1-216-809-11	METAL CHIP	100	5%	1/10W
R0417	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R0418	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0421	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R0422	1-216-809-11	METAL CHIP	100	5%	1/10W
R0424	1-216-809-11	METAL CHIP	100	5%	1/10W
R0425	1-216-809-11	METAL CHIP	100	5%	1/10W
R0426	1-216-809-11	METAL CHIP	100	5%	1/10W
R0427	1-216-809-11	METAL CHIP	100	5%	1/10W
R0428	1-216-818-11	METAL CHIP	560	5%	1/10W
R0429	1-216-809-11	METAL CHIP	100	5%	1/10W
R0430	1-216-864-11	SHORT CHIP	0		
R0431	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0432	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0433	1-216-809-11	METAL CHIP	100	5%	1/10W
R0434	1-216-809-11	METAL CHIP	100	5%	1/10W
R0435	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0436	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0437	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R0438	1-216-809-11	METAL CHIP	100	5%	1/10W
R0439	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0441	1-216-809-11	METAL CHIP	100	5%	1/10W
R0442	1-216-834-11	METAL CHIP	12K	5%	1/10W
R0443	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R0444	1-216-809-11	METAL CHIP	100	5%	1/10W
R0445	1-216-809-11	METAL CHIP	100	5%	1/10W
R0446	1-216-809-11	METAL CHIP	100	5%	1/10W
R0448	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0449	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R0450	1-216-809-11	METAL CHIP	100	5%	1/10W
R0452	1-216-809-11	METAL CHIP	100	5%	1/10W
R0453	1-216-863-11	METAL CHIP	3.3M	5%	1/10W
R0454	1-216-809-11	METAL CHIP	100	5%	1/10W
R0455	1-216-809-11	METAL CHIP	100	5%	1/10W
R0456	1-216-809-11	METAL CHIP	100	5%	1/10W
R0457	1-216-809-11	METAL CHIP	100	5%	1/10W
R0458	1-216-809-11	METAL CHIP	100	5%	1/10W

MG MS2

REF. NO.	PART NO.	DESCRIPTION			REMARK
R0469	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0470	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0471	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0472	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0474	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0476	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0477	1-216-819-11	METAL CHIP	680	5%	1/10W
R0478	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R0479	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0480	1-216-809-11	METAL CHIP	100	5%	1/10W
R0481	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0482	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0484	1-216-809-11	METAL CHIP	100	5%	1/10W
R0485	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0486	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0487	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0488	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0489	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R0490	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0492	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0493	1-216-864-11	SHORT CHIP	0		
R0494	1-216-864-11	SHORT CHIP	0		
R0496	1-216-809-11	METAL CHIP	100	5%	1/10W
R0497	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0498	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0499	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0500	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0501	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0502	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0503	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0504	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0505	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0506	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0507	1-216-809-11	METAL CHIP	100	5%	1/10W
R0508	1-216-809-11	METAL CHIP	100	5%	1/10W
R0509	1-216-809-11	METAL CHIP	100	5%	1/10W
R0510	1-216-809-11	METAL CHIP	100	5%	1/10W
R0511	1-216-809-11	METAL CHIP	100	5%	1/10W
R0512	1-216-809-11	METAL CHIP	100	5%	1/10W
R0513	1-216-809-11	METAL CHIP	100	5%	1/10W
R0514	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0515	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0516	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0517	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0518	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0519	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0520	1-216-809-11	METAL CHIP	100	5%	1/10W
R0528	1-216-805-11	METAL CHIP	47	5%	1/10W
R0553	1-216-805-11	METAL CHIP	47	5%	1/10W
R0555	1-211-985-11	METAL CHIP	47	0.5%	1/10W
R0556	1-211-985-11	METAL CHIP	47	0.5%	1/10W
R0557	1-211-985-11	METAL CHIP	47	0.5%	1/10W
R0558	1-216-864-11	SHORT CHIP	0		
R0560	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0561	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0562	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0563	1-216-813-11	METAL CHIP	220	5%	1/10W
R0564	1-216-837-11	METAL CHIP	22K	5%	1/10W
R0565	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0566	1-216-853-11	METAL CHIP	470K	5%	1/10W
R0567	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0568	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R0569	1-216-839-11	METAL CHIP	33K	5%	1/10W
R0570	1-216-855-11	METAL CHIP	680K	5%	1/10W
R0571	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R0572	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0573	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0574	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0575	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0577	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0578	1-216-817-11	METAL CHIP	470	5%	1/10W
R0579	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0580	1-216-817-11	METAL CHIP	470	5%	1/10W
R0581	1-216-817-11	METAL CHIP	470	5%	1/10W

< VIBRATOR >

X0001	1-781-282-51	VIBRATOR, CERAMIC	
X0002	1-781-589-21	VIBRATOR, CRYSTAL	
X0401	1-760-895-21	VIBRATOR, CERAMIC	

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* A-1302-842-A MS2 BOARD, COMPLETE
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< CAPACITOR >

C4000	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4001	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4002	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4003	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4004	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4007	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4008	1-119-667-11	CERAMIC CHIP	22µF		10V
C4009	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4010	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4011	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4012	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4013	1-164-943-11	CERAMIC CHIP	0.01µF	10%	16V
C4015	1-119-667-11	CERAMIC CHIP	22µF		10V
C4017	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4019	1-117-370-11	CERAMIC CHIP	10µF		10V
C4021	1-117-370-11	CERAMIC CHIP	10µF		10V
C4022	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4023	1-117-370-11	CERAMIC CHIP	10µF		10V
C4024	1-119-667-11	CERAMIC CHIP	22µF		10V
C4025	1-119-667-11	CERAMIC CHIP	22µF		10V
C4026	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4027	1-117-370-11	CERAMIC CHIP	10µF		10V
C4028	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C4029	1-127-692-11	CERAMIC CHIP	10µF	10%	16V
C4030	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C4031	1-127-692-11	CERAMIC CHIP	10µF	10%	16V
C4032	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C4033	1-127-692-11	CERAMIC CHIP	10µF	10%	16V
C4034	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4035	1-127-692-11	CERAMIC CHIP	10µF	10%	16V
C4036	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C4037	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C4100	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4101	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4102	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4103	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4104	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4105	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4106	1-107-820-11	CERAMIC CHIP	0.1µF		16V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C4107	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4108	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4109	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4110	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4111	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4112	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4113	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4114	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4115	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4116	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4117	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4118	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4119	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4120	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4121	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4122	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4123	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4124	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4125	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4126	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4127	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4128	1-119-667-11	CERAMIC CHIP	22µF		10V
C4129	1-119-667-11	CERAMIC CHIP	22µF		10V
C4130	1-119-667-11	CERAMIC CHIP	22µF		10V
C4131	1-117-370-11	CERAMIC CHIP	10µF		10V
C4200	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4201	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4202	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4203	1-119-667-11	CERAMIC CHIP	22µF		10V
C4204	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4205	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4206	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4207	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4208	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4209	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4210	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4211	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4212	1-119-667-11	CERAMIC CHIP	22µF		10V
C4213	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4214	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4215	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4216	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4217	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4218	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4219	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4220	1-119-667-11	CERAMIC CHIP	22µF		10V
C4221	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4222	1-107-820-11	CERAMIC CHIP	0.1µF		16V
C4223	1-164-943-11	CERAMIC CHIP	0.01µF	10%	16V
C4224	1-164-943-11	CERAMIC CHIP	0.01µF	10%	16V
		< CONNECTOR >			
CN4000*	1-816-933-21	CONNECTOR, BOARD TO BOARD 60P			
		< DIODE >			
D4001	8-719-081-97	DIODE	MMDL914T1		
D4002	6-500-019-01	DIODE	MM3Z3V9ST1		
D4004	8-719-024-77	DIODE	HN1D03FU-TE85R		
D4006	8-719-024-77	DIODE	HN1D03FU-TE85R		
D4007	8-719-024-77	DIODE	HN1D03FU-TE85R		

REF. NO.	PART NO.	DESCRIPTION			REMARK
		< FERRITE BEAD >			
FB4000	1-414-921-11	FERRITE	0µH		
FB4001	1-414-921-11	FERRITE	0µH		
FB4002	1-414-921-11	FERRITE	0µH		
FB4003	1-500-451-11	FERRITE	0µH		
FB4100	1-414-921-11	FERRITE	0µH		
FB4101 *	1-469-670-21	FERRITE	0µH		
FB4102	1-414-921-11	FERRITE	0µH		
FB4200	1-414-921-11	FERRITE	0µH		
FB4201	1-414-921-11	FERRITE	0µH		
FB4202	1-414-921-11	FERRITE	0µH		
		< IC >			
IC4000	6-702-607-01	IC	MB93491		
IC4001	6-704-001-01	IC	BR24L02F-WE2		
IC4003	8-759-665-50	IC	AK4352VT-E2		
IC4004	8-759-832-05	IC	BA18BC0FP-E2		
IC4005	8-759-331-71	IC	NJM4558E(TE2)		
IC4006	6-801-375-01	IC	PST9129NL		
IC4100	6-702-595-01	IC	MB93401A		
IC4200	6-700-628-01	IC	HY57V281620HCT-H-TR		
IC4201	6-702-812-11	IC	CY27027ZCT		
IC4202	6-700-628-01	IC	HY57V281620HCT-H-TR		
IC4203	6-803-914-01	IC	MBM29LV160BE-90TN-AX005		
IC4204	8-759-698-31	IC	TC7WH74FK(TE85R)		
IC4205	8-759-698-31	IC	TC7WH74FK(TE85R)		
IC4206	8-759-698-08	IC	SN74CBTLV1G125DCKR		
IC4207	8-759-698-08	IC	SN74CBTLV1G125DCKR		
		< COIL >			
L4000	1-414-770-91	INDUCTOR	4.7µH		
L4001	1-412-029-11	INDUCTOR	10µH		
L4101	1-412-029-11	INDUCTOR	10µH		
L4200	1-412-030-11	INDUCTOR	22µH		
		< TRANSISTOR >			
Q4001	8-729-927-99	TRANSISTOR	2SC4617TR		
Q4002	8-729-928-81	TRANSISTOR	DTC144EE		
Q4003	8-729-928-27	TRANSISTOR	DTA144EE		
Q4004	8-729-927-99	TRANSISTOR	2SC4617R		
Q4005	8-729-927-99	TRANSISTOR	2SC4617R		
Q4006	8-729-026-53	TRANSISTOR	2SA1576A-T106-QR		
Q4007	8-729-026-53	TRANSISTOR	2SA1576A-T106-QR		
Q4008	8-729-927-99	TRANSISTOR	2SC4617R		
		< RESISTOR >			
R4000	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4001	1-218-933-11	RES-CHIP	22	5%	1/16W
R4002	1-218-933-11	RES-CHIP	22	5%	1/16W
R4003	1-218-933-11	RES-CHIP	22	5%	1/16W
R4004	1-218-933-11	RES-CHIP	22	5%	1/16W
R4006	1-218-933-11	RES-CHIP	22	5%	1/16W
R4007	1-218-933-11	RES-CHIP	22	5%	1/16W
R4008	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4009	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R4010	1-218-933-11	RES-CHIP	22	5%	1/16W
R4011	1-218-933-11	RES-CHIP	22	5%	1/16W
R4012	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R4013	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R4014	1-218-933-11	RES-CHIP	22	5%	1/16W

MS2

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4015	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4016	1-218-933-11	RES-CHIP	22	5%	1/16W
R4017	1-218-933-11	RES-CHIP	22	5%	1/16W
R4018	1-218-933-11	RES-CHIP	22	5%	1/16W
R4019	1-218-933-11	RES-CHIP	22	5%	1/16W
R4020	1-218-933-11	RES-CHIP	22	5%	1/16W
R4021	1-218-933-11	RES-CHIP	22	5%	1/16W
R4022	1-218-990-11	SHORT CHIP	0		
R4023	1-218-990-11	SHORT CHIP	0		
R4025	1-218-933-11	RES-CHIP	22	5%	1/16W
R4026	1-218-933-11	RES-CHIP	22	5%	1/16W
R4027	1-218-933-11	RES-CHIP	22	5%	1/16W
R4028	1-218-933-11	RES-CHIP	22	5%	1/16W
R4029	1-218-990-11	SHORT CHIP	0		
R4030	1-218-990-11	SHORT CHIP	0		
R4031	1-218-990-11	SHORT CHIP	0		
R4032	1-218-990-11	SHORT CHIP	0		
R4033	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4037	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4042	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4043	1-216-841-11	METAL CHIP	47K	5%	1/10W
R4044	1-216-841-11	METAL CHIP	47K	5%	1/10W
R4045	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4046	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4047	1-216-809-11	METAL CHIP	100	5%	1/10W
R4048	1-216-809-11	METAL CHIP	100	5%	1/10W
R4049	1-216-837-11	METAL CHIP	22K	5%	1/10W
R4052	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4053	1-216-841-11	METAL CHIP	47K	5%	1/10W
R4054	1-216-837-11	METAL CHIP	22K	5%	1/10W
R4055	1-218-933-11	RES-CHIP	22	5%	1/16W
R4056	1-218-933-11	RES-CHIP	22	5%	1/16W
R4057	1-218-933-11	RES-CHIP	22	5%	1/16W
R4058	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4059	1-216-841-11	METAL CHIP	47K	5%	1/10W
R4060	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R4061	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R4062	1-216-821-11	METAL CHIP	1K	5%	1/10W
R4063	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4064	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4065	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4068	1-216-841-11	METAL CHIP	47K	5%	1/10W
R4070	1-218-990-11	SHORT CHIP	0		
R4072	1-208-635-11	RES-CHIP	10	0.5%	1/16W
R4073	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4074	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4075	1-216-845-11	METAL CHIP	100K	5%	1/10W
R4076	1-216-845-11	METAL CHIP	100K	5%	1/10W
R4077	1-216-809-11	METAL CHIP	100	5%	1/10W
R4078	1-216-809-11	METAL CHIP	100	5%	1/10W
R4079	1-216-809-11	METAL CHIP	100	5%	1/10W
R4080	1-216-809-11	METAL CHIP	100	5%	1/10W
R4100	1-218-990-11	SHORT CHIP	0		
R4101	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4102	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4103	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4104	1-218-933-11	RES-CHIP	22	5%	1/16W
R4105	1-218-937-11	RES-CHIP	47	5%	1/16W
R4106	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4107	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4108	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4109	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4110	1-218-965-11	RES-CHIP	10K	5%	1/16W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4111	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4112	1-218-933-11	RES-CHIP	22	5%	1/16W
R4113	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4114	1-218-933-11	RES-CHIP	22	5%	1/16W
R4126	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4127	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4200	1-218-990-11	SHORT CHIP	0		
R4201	1-218-990-11	SHORT CHIP	0		
R4202	1-218-990-11	SHORT CHIP	0		
R4203	1-218-990-11	SHORT CHIP	0		
R4205	1-218-937-11	RES-CHIP	47	5%	1/16W
R4206	1-218-937-11	RES-CHIP	47	5%	1/16W
R4207	1-218-937-11	RES-CHIP	47	5%	1/16W
R4208	1-218-937-11	RES-CHIP	47	5%	1/16W
R4209	1-218-990-11	SHORT CHIP	0		
R4210	1-218-990-11	SHORT CHIP	0		
R4213	1-208-635-11	RES-CHIP	10	0.5%	1/16W
R4214	1-208-635-11	RES-CHIP	10	0.5%	1/16W

< NETWORK RESISTOR >

RB4000	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4001	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4002	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4003	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4004	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4005	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4006	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4007	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4008	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4009	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4010	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4011	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4012	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4013	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4014	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4015	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4016	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4017	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4018	1-234-370-21	RES, NETWORK 22X4	(1005)
RB4100	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB4101	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB4102	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB4103	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB4104	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB4105	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB4106	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB4107	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB4200	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4201	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4202	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4203	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4204	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4205	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4206	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4207	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4208	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4209	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4210	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4211	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4212	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4213	1-234-371-21	RES, NETWORK 47X4	(1005)
RB4214	1-234-371-21	RES, NETWORK 47X4	(1005)

REF. NO.	PART NO.	DESCRIPTION				REMARK
RB4215	1-234-371-21	RES, NETWORK 47X4	(1005)			
RB4216	1-234-371-21	RES, NETWORK 47X4	(1005)			
RB4217	1-234-371-21	RES, NETWORK 47X4	(1005)			
RB4218	1-234-371-21	RES, NETWORK 47X4	(1005)			
RB4219	1-234-371-21	RES, NETWORK 47X4	(1005)			
		< VIBRATOR >				
X4200	1-795-690-22	OSCILLATOR, CRYSTAL (SMD)				
**********						
*	A-1410-399-A	SF BOARD, COMPLETE (HR34N90)				
		**********				
*	A-1410-428-A	SF BOARD, COMPLETE (HR29N90)				
		**********				
*	A-1410-906-A	SF BOARD, COMPLETE (HR34M61)				
		**********				
*	A-1410-907-A	SF BOARD, COMPLETE (HR29M61)				
		**********				
*	4-042-408-02	PIN(45), WIRE				
	4-382-854-01	SCREW (M3X8), P, SW (+)				
		< CAPACITOR >				
C3802	1-162-923-11	CERAMIC CHIP	47pF	5%	50V	
C3803	1-126-964-11	ELECT	10µF	20%	50V	(HR34N90)
C3805	1-164-156-11	CERAMIC CHIP	0.1µF		25V	(HR34N90)
C3809	1-164-156-11	CERAMIC CHIP	0.1µF		25V	
C3810	1-162-923-11	CERAMIC CHIP	47pF	5%	50V	
C3813	1-126-964-11	ELECT	10µF	20%	50V	
C3814	1-126-960-11	ELECT	1µF	20%	50V	
C3815	1-126-964-11	ELECT	10µF	20%	50V	
C3816	1-164-156-11	CERAMIC CHIP	0.1µF		25V	
C3817	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3818	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	(HR29M61, HR29N90)
C3819	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3820	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3821	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3823	1-117-722-11	ELECT	2200µF	20%	10V	
C3824	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	(HR29M61, HR29N90)
C3825	1-126-925-91	ELECT	470µF	20%	10V	
C3826	1-126-964-11	ELECT	10µF	20%	50V	
C3827	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3828	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3829	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3830	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3831	1-126-925-91	ELECT	470µF	20%	10V	
C3832	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3833	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3834	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3835	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3836	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3837	1-126-960-11	ELECT	1µF	20%	50V	
C3838	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3839	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3840	1-126-964-11	ELECT	10µF	20%	50V	
C3841	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3842	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3844	1-126-963-11	ELECT	4.7µF	20%	50V	
C3845	1-164-156-11	CERAMIC CHIP	0.1µF		25V	
C3846	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V	
C3847	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V	
C3848	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V	
C3849	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V	
C3850	1-164-156-11	CERAMIC CHIP	0.1µF		25V	
C3852	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	
C3853	1-162-923-11	CERAMIC CHIP	47pF	5%	50V	
C3854	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	
C3855	1-104-665-11	ELECT	100µF	20%	25V	
C3856	1-164-156-11	CERAMIC CHIP	0.1µF		25V	
C3857	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3858	1-136-497-81	FILM	0.1µF	5%	50V	(HR29N90, HR34N90)
C3858	1-808-441-11	VARISTOR ERZV09D180				(HR29M61, HR34M61)
C3859	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3860	1-126-947-11	ELECT	47µF	20%	35V	
C3861	1-164-156-11	CERAMIC CHIP	0.1µF		25V	
C3862	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	
C3864	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V	
C3865	1-107-701-11	ELECT	47µF	20%	25V	
C3866	1-104-665-11	ELECT	100µF	20%	25V	
C3867	1-136-497-81	FILM	0.1µF	5%	50V	(HR29N90, HR34N90)
C3867	1-808-441-11	VARISTOR ERZV09D180				(HR29M61, HR34M61)
C3868	1-107-701-11	ELECT	47µF	20%	25V	
C3869	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	
C3870	1-162-923-11	CERAMIC CHIP	47pF	5%	50V	
C3871	1-136-497-81	FILM	0.1µF	5%	50V	
C3872	1-104-665-11	ELECT	100µF	20%	25V	
C3873	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3874	1-126-964-11	ELECT	10µF	20%	50V	
C3875	1-126-947-11	ELECT	47µF	20%	35V	
C3876	1-126-934-11	ELECT	220µF	20%	16V	(HR29M61,HR29N90)
C3877	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	
C3878	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	
		< CONNECTOR >				
CN3803*	1-564-512-11	PLUG, CONNECTOR 9P				
CN3804*	1-564-506-11	PLUG, CONNECTOR 3P				
CN3805*	1-564-507-11	PLUG, CONNECTOR 4P				
CN3806*	1-564-506-11	PLUG, CONNECTOR 3P				
CN3807*	1-564-507-11	PLUG, CONNECTOR 4P				
CN3808*	1-564-507-11	PLUG, CONNECTOR 4P				
CN3809*	1-564-507-11	PLUG, CONNECTOR 4P				
		< DIODE >				
D3801	8-719-081-97	DIODE MMDL914T1(HR29M61,HR29N90)				
D3802	8-719-081-97	DIODE MMDL914T1(HR29M61,HR29N90)				
D3805	8-719-081-97	DIODE MMDL914T1				
D3806	8-719-081-97	DIODE MMDL914T1				
		< FILTER >				
FL3801	1-216-864-11	SHORT CHIP	0			
		< IC >				
IC3801	8-759-700-78	IC NJM082M				

SF

REF. NO.	PART NO.	DESCRIPTION			REMARK
IC3802	8-759-700-07	IC NJM2903M	(HR29M61,HR29N90)		
IC3803	8-759-700-07	IC NJM2903M			
IC3804	8-759-647-10	IC UPC2933HF			
IC3805	6-803-081-01	IC CXD9761Q			
IC3806	8-759-100-96	IC UPC4558G2			
IC3807	8-759-822-38	IC LA6510			
IC3808	8-749-018-54	IC STK391-120			
IC3809	8-759-803-42	IC LA6500-FA			
		< TRANSISTOR >			
Q3801	8-729-010-05	TRANSISTOR MSB709-RT1			
Q3802	8-729-010-25	TRANSISTOR MSD601-RT1			
Q3803	8-729-010-05	TRANSISTOR MSB709-RT1			
		< RESISTOR >			
R3801	1-216-851-11	METAL CHIP	330K	5%	1/10W
R3802	1-216-815-11	METAL CHIP	330	5%	1/10W
R3803	1-216-815-11	METAL CHIP	330	5%	1/10W
R3804	1-216-809-11	METAL CHIP	100	5%	1/10W
R3805	1-216-809-11	METAL CHIP	100	5%	1/10W
R3809	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3811	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3812	1-216-849-11	METAL CHIP	220K	5%	1/10W
R3813	1-249-383-11	CARBON	1.5	5%	1/4W
R3814	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3818	1-216-851-11	METAL CHIP	330K	5%	1/10W
			(HR34M61,HR34N90)		
R3818	1-216-857-11	METAL CHIP	1M	5%	1/10W
			(HR29M61,HR29N90)		
R3820	1-249-383-11	CARBON	1.5	5%	1/4W
R3821	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3822	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3823	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3824	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3825	1-216-833-11	METAL CHIP	10K	5%	1/10W
			(HR29M61,HR29N90)		
R3826	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3827	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3828	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3831	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3833	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3835	1-216-837-11	METAL CHIP	22K	5%	1/10W
R3836	1-216-833-11	METAL CHIP	10K	5%	1/10W
			(HR29M61,HR29N90)		
R3837	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3838	1-216-833-11	METAL CHIP	10K	5%	1/10W
			(HR29M61,HR29N90)		
R3839	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R3840	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R3841	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R3842	1-211-986-11	METAL CHIP	51	0.5%	1/10W
R3843	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R3844	1-216-818-11	METAL CHIP	560	5%	1/10W
R3845	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3846	1-211-976-11	METAL CHIP	20	0.5%	1/10W
R3847	1-211-986-11	METAL CHIP	51	0.5%	1/10W
R3848	1-216-864-11	SHORT CHIP	0		
R3849	1-216-864-11	SHORT CHIP	0		
R3850	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3853	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R3854	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3855	1-216-821-11	METAL CHIP	1K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3858	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3859	1-216-818-11	METAL CHIP	560	5%	1/10W
R3860	1-216-797-11	METAL CHIP	10	5%	1/10W
R3862	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3864	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3865	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3866	1-218-858-11	METAL CHIP	3K	0.5%	1/10W
R3867	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3868	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3869	1-218-878-11	METAL CHIP	20K	0.5%	1/10W
R3870	1-218-878-11	METAL CHIP	20K	0.5%	1/10W
R3871	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3872	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3873	1-218-858-11	METAL CHIP	3K	0.5%	1/10W
R3874	1-218-878-11	METAL CHIP	20K	0.5%	1/10W
R3875	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3877	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3878	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R3879	1-218-834-11	METAL CHIP	300	0.5%	1/10W
R3880	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R3881	1-218-834-11	METAL CHIP	300	0.5%	1/10W
R3882	1-218-446-11	METAL CHIP	1	5%	1/10W
R3883	1-218-446-11	METAL CHIP	1	5%	1/10W
R3884	1-218-865-11	METAL CHIP	5.6K	0.5%	1/10W
R3885	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R3886	1-216-851-11	METAL CHIP	330K	5%	1/10W
R3887	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3888	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3889	1-249-383-11	CARBON	1.5	5%	1/4W
R3890	1-215-869-11	METAL OXIDE	1K	5%	1W
R3891	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R3892	1-218-878-11	METAL CHIP	20K	0.5%	1/10W
R3893	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R3894	1-249-383-11	CARBON	1.5	5%	1/4W
R3895	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R3896	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R3897	1-218-446-11	METAL CHIP	1	5%	1/10W
R3898	1-218-446-11	METAL CHIP	1	5%	1/10W
R3899	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R3900	1-243-831-71	METAL OXIDE	12	5%	1W
R3901	1-243-693-71	METAL OXIDE	270	5%	1W
R3902	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R3903	1-216-851-11	METAL CHIP	330K	5%	1/10W
R3904	1-243-546-71	METAL OXIDE	3.3	5%	2W
R3905	1-249-383-11	CARBON	1.5	5%	1/4W
R3906	1-216-843-11	METAL CHIP	68K	5%	1/10W
R3907	1-249-383-11	CARBON	1.5	5%	1/4W
R3908	1-243-831-71	METAL OXIDE	12	5%	1W
R3909	1-215-869-11	METAL OXIDE	1K	5%	1W
R3910	1-249-383-11	CARBON	1.5	5%	1/4W
R3911	1-249-383-11	CARBON	1.5	5%	1/4W
R3912	1-249-381-11	CARBON	1	5%	1/4W
R3913	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R3914	1-249-381-11	CARBON	1	5%	1/4W
R3915	1-249-441-11	CARBON	100K	5%	1/4W
R3916	1-215-857-11	METAL OXIDE	10	5%	1W
R3917	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R3918	1-249-383-11	CARBON	1.5	5%	1/4W
R3919	1-218-865-11	METAL CHIP	5.6K	0.5%	1/10W
R3920	1-249-383-11	CARBON	1.5	5%	1/4W
R3921	1-243-693-71	METAL OXIDE	270	5%	1W
R3922	1-243-546-71	METAL OXIDE	3.3	5%	2W
R3923	1-249-383-11	CARBON	1.5	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R3924	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3925	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3926	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3927	1-218-865-11	METAL CHIP	5.6K	0.5%	1/10W
R3928	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R3929	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3930	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3931	1-216-851-11	METAL CHIP	330K	5%	1/10W (HR29M61,HR29N90)
R3932	1-216-821-11	METAL CHIP	1K	5%	1/10W (HR29M61,HR29N90)
R3933	1-216-833-11	METAL CHIP	10K	5%	1/10W (HR29M61,HR29N90)
R3934	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R3935	1-216-833-11	METAL CHIP	10K	5%	1/10W (HR29M61,HR29N90)
R3936	1-216-837-11	METAL CHIP	22K	5%	1/10W (HR29M61,HR29N90)
R3937	1-218-885-11	METAL CHIP	39K	0.5%	1/10W

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* A-1410-454-A T BOARD, COMPLETE (HR29M61, HR34M61)

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< CAPACITOR >

C5802	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5805	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5806	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5815	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5816	1-126-963-11	ELECT	4.7µF	20%	50V
C5817	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5818	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
C5820	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
C5821	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5822	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C5823	1-126-963-11	ELECT	4.7µF	20%	50V
C5826	1-126-963-11	ELECT	4.7µF	20%	50V
C5830	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5831	1-126-933-11	ELECT	100µF	20%	16V
C5835	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C5837	1-126-933-11	ELECT	100µF	20%	16V
C5853	1-126-963-11	ELECT	4.7µF	20%	50V
C5854	1-165-908-11	CERAMIC CHIP	1µF	10%	10V

< CONNECTOR >

CN5801*	1-564-508-11	PLUG, CONNECTOR 5P
CN5803*	1-564-511-11	PLUG, CONNECTOR 8P

< DIODE >

D5802	8-719-914-44	DIODE DAP202K
D5803	8-719-036-66	DIODE HZS361-TE

< FERRITE BEAD >

FB5801	1-414-921-11	FERRITE	0µH
FB5803	1-414-921-11	FERRITE	0µH
FB5804	1-414-921-11	FERRITE	0µH
FB5805	1-414-921-11	FERRITE	0µH
FB5806	1-414-921-11	FERRITE	0µH
FB5807	1-414-921-11	FERRITE	0µH

REF. NO.	PART NO.	DESCRIPTION	REMARK

< IC >

IC5801	6-803-172-11	IC SAA5360HL/M1/0004,518
IC5802	8-759-828-44	IC NJM2870F33(TE2)

< TRANSISTOR >

Q5801	8-729-010-05	TRANSISTOR	MSB709-RT1
Q5803	8-729-010-25	TRANSISTOR	MSD601-RT1
Q5806	8-729-010-05	TRANSISTOR	MSB709-RT1
Q5807	8-729-010-05	TRANSISTOR	MSB709-RT1
Q5808	8-729-010-05	TRANSISTOR	MSB709-RT1
Q5809	8-729-010-25	TRANSISTOR	MSD601-RT1
Q5811	8-729-010-25	TRANSISTOR	MSD601-RT1

< RESISTOR >

R5821	1-218-880-11	METAL CHIP	24K	0.5%	1/10W
R5822	1-216-809-11	METAL CHIP	100	5%	1/10W
R5823	1-216-809-11	METAL CHIP	100	5%	1/10W
R5824	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5828	1-216-809-11	METAL CHIP	100	5%	1/10W
R5829	1-216-809-11	METAL CHIP	100	5%	1/10W
R5830	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5841	1-216-809-11	METAL CHIP	100	5%	1/10W
R5842	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5843	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5845	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5846	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5847	1-216-809-11	METAL CHIP	100	5%	1/10W
R5848	1-216-809-11	METAL CHIP	100	5%	1/10W
R5849	1-216-809-11	METAL CHIP	100	5%	1/10W
R5859	1-216-811-11	METAL CHIP	150	5%	1/10W
R5860	1-216-811-11	METAL CHIP	150	5%	1/10W
R5861	1-218-835-11	METAL CHIP	330	0.5%	1/10W
R5862	1-216-811-11	METAL CHIP	150	5%	1/10W
R5863	1-218-835-11	METAL CHIP	330	0.5%	1/10W
R5864	1-216-813-11	METAL CHIP	220	5%	1/10W
R5866	1-243-832-71	METAL OXIDE	15	5%	1W
R5871	1-216-812-11	METAL CHIP	180	5%	1/10W
R5875	1-216-817-11	METAL CHIP	470	5%	1/10W
R5876	1-216-817-11	METAL CHIP	470	5%	1/10W
R5877	1-216-817-11	METAL CHIP	470	5%	1/10W
R5878	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5882	1-218-835-11	METAL CHIP	330	0.5%	1/10W
R5883	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R5884	1-216-809-11	METAL CHIP	100	5%	1/10W
R5886	1-216-815-11	METAL CHIP	330	5%	1/10W
R5887	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R5892	1-216-809-11	METAL CHIP	100	5%	1/10W
R5893	1-218-841-11	METAL CHIP	560	0.5%	1/10W

< VIBRATOR >

X5801	1-578-774-11	VIBRATOR, CRYSTAL

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UG

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1302-556-A	UG BOARD, COMPLETE (HR29N90, HR34N90)			
		**********			
	* A-1302-622-A	UG BOARD, COMPLETE (HR29M61, HR34M61)			
		**********			
	* 7-322-065-48	RUBBER, SILICONE RTV (KE-3490)			
		< CAPACITOR >			
C1501	1-126-961-11	ELECT	2.2µF	20%	50V
C1504	1-126-961-11	ELECT	2.2µF	20%	50V
C1505	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1506	1-126-961-11	ELECT	2.2µF	20%	50V
C1507	1-126-961-11	ELECT	2.2µF	20%	50V
C1508	1-115-156-11	CERAMIC CHIP	1µF		10V
C1509	1-115-156-11	CERAMIC CHIP	1µF		10V
C1510	1-115-156-11	CERAMIC CHIP	1µF		10V
C1511	1-115-156-11	CERAMIC CHIP	1µF		10V
C1512	1-115-156-11	CERAMIC CHIP	1µF		10V
C1513	1-115-156-11	CERAMIC CHIP	1µF		10V
C1514	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1515	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1516	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1517	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1518	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1519	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C1520	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C1521	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1523	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1524	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1525	1-126-933-11	ELECT	100µF	20%	16V
C1526	1-126-964-11	ELECT	10µF	20%	50V
C1527	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1528	1-126-933-11	ELECT	100µF	20%	16V
C1529	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1530	1-126-964-11	ELECT	10µF	20%	50V
C1531	1-126-941-11	ELECT	470µF	20%	25V
C1532	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1533	1-126-933-11	ELECT	100µF	20%	16V
C1534	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1535	1-126-933-11	ELECT	100µF	20%	16V
C1536	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1537	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1538	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1539	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1542	1-126-934-11	ELECT	220µF	20%	16V
C1543	1-126-934-11	ELECT	220µF	20%	16V
C1550	1-115-156-11	CERAMIC CHIP	1µF		10V
C1551	1-115-156-11	CERAMIC CHIP	1µF		10V
C1552	1-115-156-11	CERAMIC CHIP	1µF		10V
C1553	1-115-156-11	CERAMIC CHIP	1µF		10V
C1554	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1555	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1563	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1564	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1565	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1566	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C1567	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C1568	1-126-964-11	ELECT	10µF	20%	50V
C1569	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C1573	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C1574	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C1575	1-126-961-11	ELECT	2.2µF	20%	50V
C1576	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C1577	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C1578	1-126-961-11	ELECT	2.2µF	20%	50V
C1579	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1580	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1581	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C1582	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C1583	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1584	1-126-947-11	ELECT	47µF	20%	25V
C1585	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1586	1-126-925-91	ELECT	470µF	20%	10V
C1587	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1588	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1589	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1590	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1591	1-126-947-11	ELECT	47µF	20%	25V
C1592	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1593	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1594	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1595	1-126-941-11	ELECT	470µF	20%	25V
C1596	1-126-933-11	ELECT	100µF	20%	16V
C1597	1-126-941-11	ELECT	470µF	20%	25V
C1598	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1599	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1600	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C1601	1-115-156-11	CERAMIC CHIP	1µF		10V
C1602	1-115-156-11	CERAMIC CHIP	1µF		10V
C1603	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1604	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1605	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C1606	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C1607	1-107-698-11	ELECT	10µF	20%	25V
C1608	1-115-156-11	CERAMIC CHIP	1µF		10V
C1609	1-115-156-11	CERAMIC CHIP	1µF		10V
C1612	1-115-156-11	CERAMIC CHIP	1µF		10V
C1613	1-115-156-11	CERAMIC CHIP	1µF		10V
C1703	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V (HR29M61, HR34M61)
C1704	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V (HR29M61, HR34M61)
C1705	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V (HR29M61, HR34M61)
C1706	1-115-156-11	CERAMIC CHIP	1µF		10V (HR29M61, HR34M61)
C1707	1-126-961-11	ELECT	2.2µF	20%	50V (HR29M61, HR34M61)
C1708	1-126-947-11	ELECT	47µF	20%	25V (HR29M61, HR34M61)
C1709	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V (HR29M61, HR34M61)
C1710	1-126-947-11	ELECT	47µF	20%	25V (HR29M61, HR34M61)
C1711	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V (HR29M61, HR34M61)
C1716	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V (HR29M61, HR34M61)
C1717	1-126-964-11	ELECT	10µF	20%	50V (HR29M61, HR34M61)
C1718	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V (HR29M61, HR34M61)
C1719	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V (HR29M61, HR34M61)
C1722	1-126-947-11	ELECT	47µF	20%	25V (HR29M61, HR34M61)
C1723	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V (HR29M61, HR34M61)

REF. NO.	PART NO.	DESCRIPTION	REMARK
C1724	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	(HR29M61, HR34M61)
C1727	1-126-947-11	ELECT 47µF 20% 25V	(HR29M61, HR34M61)
C1728	1-126-963-11	ELECT 4.7µF 20% 50V	(HR29M61, HR34M61)
C1729	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1732	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1733	1-164-315-11	CERAMIC CHIP 470pF 5% 50V	(HR29M61, HR34M61)
C1734	1-115-156-11	CERAMIC CHIP 1µF 10V	(HR29M61, HR34M61)
C1735	1-162-970-11	CERAMIC CHIP 0.01µF 10% 25V	(HR29M61, HR34M61)
C1801	1-125-891-11	CERAMIC CHIP 0.47µF 10% 10V	
C1803	1-164-227-11	CERAMIC CHIP 0.022µF 10% 25V	
C1804	1-126-961-11	ELECT 2.2µF 20% 50V	
C1805	1-162-970-11	CERAMIC CHIP 0.01µF 10% 25V	
C1808	1-115-156-11	CERAMIC CHIP 1µF 10V	
C1809	1-115-156-11	CERAMIC CHIP 1µF 10V	
C1810	1-162-970-11	CERAMIC CHIP 0.01µF 10% 25V	
C1811	1-126-925-91	ELECT 470µF 20% 10V	
C1812	1-126-947-11	ELECT 47µF 20% 25V	
C1813	1-162-915-11	CERAMIC CHIP 10pF 0.50pF 50V	
C1814	1-126-947-11	ELECT 47µF 20% 25V	
C1815	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1816	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1817	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1818	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1819	1-126-964-11	ELECT 10µF 20% 50V	
C1820	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1822	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1823	1-162-970-11	CERAMIC CHIP 0.01µF 10% 25V	
C1824	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1826	1-162-970-11	CERAMIC CHIP 0.01µF 10% 25V	
C1829	1-126-963-11	ELECT 4.7µF 20% 50V	
C1830	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1831	1-107-826-11	CERAMIC CHIP 0.1µF 10% 16V	
C1832	1-126-947-11	ELECT 47µF 20% 25V	

< CONNECTOR >

CN1501*	1-564-526-31	PLUG, CONNECTOR 11P	
CN1502*	1-793-498-11	CONNECTOR, BOARD TO BOARD 50P	
CN1504*	1-785-531-11	PIN, CONNECTOR (PC BOARD) 12P	
CN1801	1-695-915-11	TAB (CONTACT)	

< DIODE >

D1501	8-719-977-28	DIODE UDZSTE-1710B	
D1502	8-719-977-28	DIODE UDZSTE-1710B	
D1503	8-719-977-28	DIODE UDZSTE-1710B	
D1507	8-719-977-28	DIODE UDZSTE-1710B	
D1508	8-719-977-28	DIODE UDZSTE-1710B	
D1509	8-719-977-28	DIODE UDZSTE-1710B	
D1510	8-719-977-28	DIODE UDZSTE-1710B	
D1511	8-719-977-28	DIODE UDZSTE-1710B	
D1512	8-719-977-28	DIODE UDZSTE-1710B	
D1513	8-719-977-28	DIODE UDZSTE-1710B	
D1514	8-719-977-28	DIODE UDZSTE-1710B	
D1515	8-719-977-28	DIODE UDZSTE-1710B	
D1516	8-719-977-28	DIODE UDZSTE-1710B	
D1517	8-719-977-28	DIODE UDZSTE-1710B	
D1521	8-719-977-28	DIODE UDZSTE-1710B	
D1522	8-719-977-28	DIODE UDZSTE-1710B	
D1525	8-719-977-28	DIODE UDZSTE-1710B	
D1526	8-719-977-28	DIODE UDZSTE-1710B	
D1527	8-719-977-28	DIODE UDZSTE-1710B	
D1528	8-719-977-28	DIODE UDZSTE-1710B	
D1529	8-719-977-28	DIODE UDZSTE-1710B	
D1530	8-719-977-28	DIODE UDZSTE-1710B	
D1531	8-719-977-28	DIODE UDZSTE-1710B	
D1532	8-719-977-28	DIODE UDZSTE-1710B	
D1533	8-719-977-28	DIODE UDZSTE-1710B	
D1534	8-719-977-28	DIODE UDZSTE-1710B	
D1535	8-719-977-28	DIODE UDZSTE-1710B	
D1538	8-719-977-28	DIODE UDZSTE-1710B	
D1539	8-719-977-28	DIODE UDZSTE-1710B	
D1540	8-719-081-97	DIODE MMDL914T1	
D1541	8-719-081-97	DIODE MMDL914T1	
D1542	8-719-081-97	DIODE MMDL914T1	
D1543	8-719-081-97	DIODE MMDL914T1	
D1544	8-719-977-28	DIODE UDZSTE-1710B	
D1545	8-719-056-82	DIODE UDZ-TE-17-6.2B	

< FERRITE BEAD >

FB1701	1-469-179-21	FERRITE	0µH
FB1702	1-469-179-21	FERRITE	0µH
FB1703	1-216-864-11	SHORT CHIP	0
FB1704	1-216-864-11	SHORT CHIP	0
FB1705	1-216-864-11	SHORT CHIP	0
FB1801	1-216-864-11	SHORT CHIP	0
FB1802	1-216-864-11	SHORT CHIP	0
FB1803	1-216-864-11	SHORT CHIP	0

< IC >

IC1501	8-752-108-00	IC CXA2189Q-TL
IC1502	8-752-107-98	IC CXA2188Q-T4
IC1701	8-752-099-05	IC CXA2163AQ-T6
IC1703	8-759-481-08	IC TC7SET02FU(TE85R)
IC1801	8-752-099-05	IC CXA2163AQ-T6
IC1802	8-759-642-22	IC UPC29M05T-E2

< JACK >

J1501	1-774-748-11	TERMINAL BLOCK, S	
J1502	1-750-517-21	JACK BLOCK, PIN 3P	
J1503	1-750-517-21	JACK BLOCK, PIN 3P	
J1504	1-750-517-21	JACK BLOCK, PIN 3P	
J1505	1-537-712-11	TERMINAL, PUSH	
J1508	1-774-358-11	JACK BLOCK, PIN	
J1509	1-774-358-11	JACK BLOCK, PIN	
J1510	1-816-597-11	PIN JACK BLOCK 2P	
JR1501	1-216-864-11	SHORT CHIP	0
JR1507	1-216-864-11	SHORT CHIP	0
JR1508	1-216-864-11	SHORT CHIP	0
JR1552	1-216-864-11	SHORT CHIP	0
JR1701	1-216-864-11	SHORT CHIP	0 (HR29M61, HR34M61)
JR1801	1-216-864-11	SHORT CHIP	0

< COIL >

L1501	1-400-397-11	INDUCTOR	10µH
L1502	1-400-397-11	INDUCTOR	10µH
L1503	1-400-397-11	INDUCTOR	10µH

UG

REF. NO.	PART NO.	DESCRIPTION		REMARK
L1504	1-400-397-11	INDUCTOR	10µH	
L1505	1-400-397-11	INDUCTOR	10µH	
L1506	1-400-397-11	INDUCTOR	10µH	
L1507	1-400-397-11	INDUCTOR	10µH	
L1508	1-400-397-11	INDUCTOR	10µH	
L1509	1-400-397-11	INDUCTOR	10µH	
L1701	1-400-397-11	INDUCTOR	10µH	
L1702	1-400-397-11	INDUCTOR	10µH	(HR29M61, HR34M61)
L1703	1-400-397-11	INDUCTOR	10µH	(HR29M61, HR34M61)
L1704	1-400-397-11	INDUCTOR	10µH	(HR29M61, HR34M61)
L1801	1-400-397-11	INDUCTOR	10µH	
L1802	1-400-397-11	INDUCTOR	10µH	
L1803	1-400-397-11	INDUCTOR	10µH	
		< TRANSISTOR >		
Q1501	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1502	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1503	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1504	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1505	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1506	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1507	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1508	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q1510	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q1511	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1512	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1513	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1514	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1515	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1516	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q1517	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q1523	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q1524	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q1545	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1701	8-729-010-25	TRANSISTOR	MSD601-RT1	(HR29M61, HR34M61)
Q1702	8-729-010-05	TRANSISTOR	MSB709-RT1	(HR29M61, HR34M61)
Q1705	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1707	8-729-010-05	TRANSISTOR	MSB709-RT1	(HR29M61, HR34M61)
Q1711	8-729-010-05	TRANSISTOR	MSB709-RT1	(HR29M61, HR34M61)
Q1712	8-729-010-05	TRANSISTOR	MSB709-RT1	(HR29M61, HR34M61)
Q1713	8-729-010-25	TRANSISTOR	MSD601-RT1	(HR29M61, HR34M61)
Q1714	8-729-010-05	TRANSISTOR	MSB709-RT1	(HR29M61, HR34M61)
Q1715	8-729-010-25	TRANSISTOR	MSD601-RT1	(HR29M61, HR34M61)
Q1716	8-729-010-05	TRANSISTOR	MSB709-RT1	(HR29M61, HR34M61)
Q1801	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1802	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q1803	8-729-010-05	TRANSISTOR	MSB709-RT1	
		< RESISTOR >		
R1501	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1502	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1503	1-216-811-11	METAL CHIP	150 5%	1/10W
R1506	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1507	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1508	1-216-811-11	METAL CHIP	150 5%	1/10W
R1509	1-216-811-11	METAL CHIP	150 5%	1/10W
R1510	1-216-811-11	METAL CHIP	150 5%	1/10W
R1511	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1512	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1513	1-216-811-11	METAL CHIP	150 5%	1/10W
R1518	1-216-825-11	METAL CHIP	2.2K 5%	1/10W
R1519	1-216-809-11	METAL CHIP	100 5%	1/10W
R1520	1-216-825-11	METAL CHIP	2.2K 5%	1/10W
R1521	1-216-825-11	METAL CHIP	2.2K 5%	1/10W
R1522	1-216-824-11	METAL CHIP	1.8K 5%	1/10W
R1523	1-216-824-11	METAL CHIP	1.8K 5%	1/10W
R1524	1-216-809-11	METAL CHIP	100 5%	1/10W
R1525	1-216-809-11	METAL CHIP	100 5%	1/10W
R1526	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1527	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1528	1-216-809-11	METAL CHIP	100 5%	1/10W
R1530	1-216-809-11	METAL CHIP	100 5%	1/10W
R1531	1-216-809-11	METAL CHIP	100 5%	1/10W
R1532	1-216-809-11	METAL CHIP	100 5%	1/10W
R1533	1-216-825-11	METAL CHIP	2.2K 5%	1/10W
R1534	1-216-833-11	METAL CHIP	10K 5%	1/10W
R1535	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1536	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1537	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1538	1-216-808-11	METAL CHIP	82 5%	1/10W
R1539	1-216-845-11	METAL CHIP	100K 5%	1/10W
R1540	1-216-845-11	METAL CHIP	100K 5%	1/10W
R1541	1-216-825-11	METAL CHIP	2.2K 5%	1/10W
R1542	1-216-817-11	METAL CHIP	470 5%	1/10W
R1543	1-216-817-11	METAL CHIP	470 5%	1/10W
R1544	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1545	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1548	1-216-841-11	METAL CHIP	47K 5%	1/10W
R1549	1-216-809-11	METAL CHIP	100 5%	1/10W
R1550	1-216-809-11	METAL CHIP	100 5%	1/10W
R1551	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1552	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1553	1-216-817-11	METAL CHIP	470 5%	1/10W
R1554	1-216-817-11	METAL CHIP	470 5%	1/10W
R1555	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1556	1-216-853-11	METAL CHIP	470K 5%	1/10W
R1558	1-216-821-11	METAL CHIP	1K 5%	1/10W
R1559	1-211-990-11	METAL CHIP	75 0.5%	1/10W
R1560	1-216-809-11	METAL CHIP	100 5%	1/10W
R1561	1-216-809-11	METAL CHIP	100 5%	1/10W
R1562	1-216-809-11	METAL CHIP	100 5%	1/10W
R1563	1-216-843-11	METAL CHIP	68K 5%	1/10W
R1564	1-218-871-11	METAL CHIP	10K 0.5%	1/10W
R1565	1-216-809-11	METAL CHIP	100 5%	1/10W
R1566	1-216-809-11	METAL CHIP	100 5%	1/10W
R1568	1-216-809-11	METAL CHIP	100 5%	1/10W
R1569	1-216-809-11	METAL CHIP	100 5%	1/10W
R1570	1-216-809-11	METAL CHIP	100 5%	1/10W
R1571	1-216-809-11	METAL CHIP	100 5%	1/10W
R1572	1-216-809-11	METAL CHIP	100 5%	1/10W
R1573	1-216-809-11	METAL CHIP	100 5%	1/10W
R1574	1-216-843-11	METAL CHIP	68K 5%	1/10W
R1575	1-216-809-11	METAL CHIP	100 5%	1/10W
R1576	1-216-809-11	METAL CHIP	100 5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1578	1-216-813-11	METAL CHIP	220	5%	1/10W
R1579	1-216-813-11	METAL CHIP	220	5%	1/10W
R1580	1-216-809-11	METAL CHIP	100	5%	1/10W
R1581	1-216-809-11	METAL CHIP	100	5%	1/10W
R1582	1-216-811-11	METAL CHIP	150	5%	1/10W
R1583	1-216-809-11	METAL CHIP	100	5%	1/10W
R1584	1-216-809-11	METAL CHIP	100	5%	1/10W
R1585	1-216-809-11	METAL CHIP	100	5%	1/10W
R1586	1-216-811-11	METAL CHIP	150	5%	1/10W
R1587	1-216-809-11	METAL CHIP	100	5%	1/10W
R1588	1-216-809-11	METAL CHIP	100	5%	1/10W
R1589	1-216-809-11	METAL CHIP	100	5%	1/10W
R1590	1-216-811-11	METAL CHIP	150	5%	1/10W
R1591	1-216-809-11	METAL CHIP	100	5%	1/10W
R1592	1-216-811-11	METAL CHIP	150	5%	1/10W
R1593	1-216-811-11	METAL CHIP	150	5%	1/10W
R1594	1-216-813-11	METAL CHIP	220	5%	1/10W
R1595	1-216-813-11	METAL CHIP	220	5%	1/10W
R1596	1-216-809-11	METAL CHIP	100	5%	1/10W
R1597	1-216-809-11	METAL CHIP	100	5%	1/10W
R1598	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1599	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1600	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1601	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1602	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1603	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1604	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1605	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1606	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1607	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1608	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1609	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1610	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1611	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1612	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1613	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1614	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1615	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1616	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1617	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1618	1-216-809-11	METAL CHIP	100	5%	1/10W
R1619	1-216-809-11	METAL CHIP	100	5%	1/10W
R1623	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1624	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1628	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1629	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1630	1-216-819-11	METAL CHIP	680	5%	1/10W
R1631	1-216-819-11	METAL CHIP	680	5%	1/10W
R1632	1-216-819-11	METAL CHIP	680	5%	1/10W
R1633	1-216-861-11	METAL CHIP	2.2M	5%	1/10W
R1634	1-216-861-11	METAL CHIP	2.2M	5%	1/10W
R1649	1-216-811-11	METAL CHIP	150	5%	1/10W
R1650	1-216-811-11	METAL CHIP	150	5%	1/10W
R1651	1-216-811-11	METAL CHIP	150	5%	1/10W
R1652	1-216-811-11	METAL CHIP	150	5%	1/10W
R1653	1-216-811-11	METAL CHIP	150	5%	1/10W
R1654	1-216-811-11	METAL CHIP	150	5%	1/10W
R1655	1-216-811-11	METAL CHIP	150	5%	1/10W
R1656	1-216-811-11	METAL CHIP	150	5%	1/10W
R1657	1-216-811-11	METAL CHIP	150	5%	1/10W
R1658	1-216-811-11	METAL CHIP	150	5%	1/10W
R1659	1-216-811-11	METAL CHIP	150	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1660	1-216-811-11	METAL CHIP	150	5%	1/10W
R1677	1-216-814-11	METAL CHIP	270	5%	1/10W
R1678	1-216-814-11	METAL CHIP	270	5%	1/10W
R1679	1-216-809-11	METAL CHIP	100	5%	1/10W
R1680	1-216-809-11	METAL CHIP	100	5%	1/10W
R1681	1-216-809-11	METAL CHIP	100	5%	1/10W
R1689	1-216-813-11	METAL CHIP	220	5%	1/10W
R1690	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1691	1-216-809-11	METAL CHIP	100	5%	1/10W
R1692	1-216-809-11	METAL CHIP	100	5%	1/10W
R1693	1-216-813-11	METAL CHIP	220	5%	1/10W
R1694	1-216-813-11	METAL CHIP	220	5%	1/10W
R1695	1-216-813-11	METAL CHIP	220	5%	1/10W
R1696	1-216-813-11	METAL CHIP	220	5%	1/10W
R1701	1-216-821-11	METAL CHIP	1K	5%	1/10W (HR29M61, HR34M61)
R1702	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)
R1703	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)
R1704	1-216-809-11	METAL CHIP	100	5%	1/10W (HR29M61, HR34M61)
R1709	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1710	1-216-809-11	METAL CHIP	100	5%	1/10W
R1711	1-216-809-11	METAL CHIP	100	5%	1/10W
R1712	1-216-809-11	METAL CHIP	100	5%	1/10W
R1715	1-216-838-11	METAL CHIP	27K	5%	1/10W (HR29M61, HR34M61)
R1716	1-218-861-11	METAL CHIP	3.9K	0.5%	1/10W (HR29M61, HR34M61)
R1717	1-220-397-11	METAL CHIP	4.7M	5%	1/10W (HR29M61, HR34M61)
R1722	1-216-809-11	METAL CHIP	100	5%	1/10W (HR29M61, HR34M61)
R1723	1-216-809-11	METAL CHIP	100	5%	1/10W (HR29M61, HR34M61)
R1724	1-216-809-11	METAL CHIP	100	5%	1/10W (HR29M61, HR34M61)
R1725	1-216-809-11	METAL CHIP	100	5%	1/10W (HR29M61, HR34M61)
R1726	1-216-809-11	METAL CHIP	100	5%	1/10W (HR29M61, HR34M61)
R1730	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)
R1736	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)
R1738	1-218-829-11	METAL CHIP	180	0.5%	1/10W (HR29M61, HR34M61)
R1739	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)
R1740	1-211-991-11	METAL CHIP	82	0.5%	1/10W (HR29M61, HR34M61)
R1741	1-218-845-11	METAL CHIP	820	0.5%	1/10W (HR29M61, HR34M61)
R1745	1-218-834-11	METAL CHIP	300	0.5%	1/10W
R1746	1-218-834-11	METAL CHIP	300	0.5%	1/10W
R1747	1-249-415-11	CARBON	680	5%	1/4W
R1748	1-249-415-11	CARBON	680	5%	1/4W
R1749	1-249-415-11	CARBON	680	5%	1/4W
R1750	1-249-415-11	CARBON	680	5%	1/4W
R1751	1-220-397-11	METAL CHIP	4.7M	5%	1/10W
R1752	1-220-397-11	METAL CHIP	4.7M	5%	1/10W
R1753	1-216-821-11	METAL CHIP	1K	5%	1/10W (HR29M61, HR34M61)
R1754	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)

UG **W**

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1755	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)
R1756	1-216-809-11	METAL CHIP	100	5%	1/10W (HR29M61, HR34M61)
R1757	1-216-821-11	METAL CHIP	1K	5%	1/10W (HR29M61, HR34M61)
R1758	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)
R1759	1-216-817-11	METAL CHIP	470	5%	1/10W (HR29M61, HR34M61)
R1760	1-216-809-11	METAL CHIP	100	5%	1/10W (HR29M61, HR34M61)
R1761	1-220-397-11	METAL CHIP	4.7M	5%	1/10W (HR29M61, HR34M61)
R1803	1-216-838-11	METAL CHIP	27K	5%	1/10W
R1804	1-220-397-11	METAL CHIP	4.7M	5%	1/10W
R1805	1-220-397-11	METAL CHIP	4.7M	5%	1/10W
R1806	1-218-861-11	METAL CHIP	3.9K	0.5%	1/10W
R1807	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1808	1-216-809-11	METAL CHIP	100	5%	1/10W
R1809	1-216-809-11	METAL CHIP	100	5%	1/10W
R1810	1-216-809-11	METAL CHIP	100	5%	1/10W
R1811	1-216-809-11	METAL CHIP	100	5%	1/10W
R1812	1-216-809-11	METAL CHIP	100	5%	1/10W
R1813	1-216-809-11	METAL CHIP	100	5%	1/10W
R1814	1-216-817-11	METAL CHIP	470	5%	1/10W
R1815	1-216-817-11	METAL CHIP	470	5%	1/10W
R1816	1-216-817-11	METAL CHIP	470	5%	1/10W
R1817	1-216-809-11	METAL CHIP	100	5%	1/10W
R1818	1-216-833-11	METAL CHIP	10K	5%	1/10W

< TRANSFORMER >

T1501	1-437-982-11	SOUND INPUT TRANSFORMER

< VARISTOR >

VD1534	1-803-974-21	VARISTOR, CHIP (1608)
VD1535	1-803-974-21	VARISTOR, CHIP (1608)
VD1536	1-803-974-21	VARISTOR, CHIP (1608)
VD1537	1-803-974-21	VARISTOR, CHIP (1608)
VD1538	1-803-974-21	VARISTOR, CHIP (1608)
VD1539	1-803-974-21	VARISTOR, CHIP (1608)
VD1540	1-803-974-21	VARISTOR, CHIP (1608)
VD1543	1-803-974-21	VARISTOR, CHIP (1608)

< VIBRATOR >

X1501	1-781-282-11	VIBRATOR, CERAMIC
X1701	1-781-612-11	VIBRATOR, CRYSTAL (HR29M61, HR34M61)
X1801	1-781-612-11	VIBRATOR, CRYSTAL

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*	A-1410-400-A	W BOARD, COMPLETE (HR34N90)
		**********
*	A-1410-421-A	W BOARD, COMPLETE (HR34M61)
		**********
*	A-1410-429-A	W BOARD, COMPLETE (HR29N90)
		**********
*	A-1410-557-A	W BOARD, COMPLETE (HR29M61)
		**********
	4-382-854-01	SCREW (M3X8), P, SW (+)

REF. NO.	PART NO.	DESCRIPTION			REMARK

< CAPACITOR >

C9101	1-104-999-11	MYLAR	0.1µF	10%	200V
C9103	1-126-947-11	ELECT	47µF	20%	35V
C9104	1-126-933-11	ELECT	100µF	20%	16V
C9105	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9106	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9108	1-107-662-11	ELECT	22µF	20%	350V
C9109	1-161-830-00	CERAMIC	0.0047µF	500V	
C9110	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9111	1-126-964-11	ELECT	10µF	20%	50V
C9112	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9113	1-137-528-11	MYLAR	0.1µF	10%	250V
C9114	1-107-636-11	ELECT	10µF	20%	160V
C9115	1-137-528-11	MYLAR	0.1µF	10%	250V
C9116	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9117	1-117-450-11	MYLAR	0.47µF	10%	250V
C9118	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9119	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C9120	1-130-495-00	MYLAR	0.1µF	5%	50V
C9121	1-126-947-11	ELECT	47µF	20%	35V
C9122	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9123	1-126-934-11	ELECT	220µF	20%	16V
C9125	1-130-495-00	MYLAR	0.1µF	5%	50V
C9126	1-126-947-11	ELECT	47µF	20%	35V
C9127	1-130-495-00	MYLAR	0.1µF	5%	50V
C9128	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9130	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9131	1-126-947-11	ELECT	47µF	20%	25V
C9133	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C9134	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C9136	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9137	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9138	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9139	1-136-167-00	FILM	0.15µF	5%	50V
C9140	1-126-947-11	ELECT	47µF	20%	35V
C9141	1-129-709-61	FILM	0.0039µF	5%	630V
C9142	1-100-121-11	FILM	0.015µF	5%	400V
C9143	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9144	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9145	1-130-495-00	MYLAR	0.1µF	5%	50V
C9146	1-137-194-81	FILM	0.47µF	5%	50V
C9147	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9148	1-126-947-11	ELECT	47µF	20%	35V
C9151	1-126-947-11	ELECT	47µF	20%	35V
C9152	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C9153	1-165-727-31	ELECT	120µF	20%	16V
C9154	1-162-974-11	CERAMIC CHIP	0.01µF		50V

< CONNECTOR >

CN9100*	1-564-510-11	PLUG, CONNECTOR 7P
CN9101*	1-564-506-11	PLUG, CONNECTOR 3P
CN9102	1-764-334-11	PLUG, CONNECTOR 11P
CN9103*	1-770-747-11	CONNECTOR, BOARD TO BOARD 12P
CN9104*	1-564-506-11	PLUG, CONNECTOR 3P

< DIODE >

D9102	8-719-081-97	DIODE MMDL914T1
D9104	8-719-062-51	DIODE 1PS226-115
D9106	8-719-060-90	DIODE S2L60F
D9107	8-719-081-97	DIODE MMDL914T1
D9108	8-719-081-97	DIODE MMDL914T1

W

REF. NO.	PART NO.	DESCRIPTION				REMARK
		< FERRITE BEAD >				
FB9100	1-469-578-11	FERRITE	1.1µH			
FB9101	1-469-578-11	FERRITE	1.1µH			
		< IC >				
IC9100	8-759-822-38	IC LA6510				
IC9101	8-759-700-07	IC NJM2903M				
IC9102	8-759-701-01	IC NJM2904M				
IC9103	8-759-822-38	IC LA6510				
		< JUMPER RESISTOR >				
JR9102	1-216-864-11	SHORT CHIP	0			
JR9103	1-216-864-11	SHORT CHIP	0			
JR9104	1-216-864-11	SHORT CHIP	0			
JR9105	1-216-864-11	SHORT CHIP	0			
JR9106	1-216-864-11	SHORT CHIP	0			
JR9108	1-216-864-11	SHORT CHIP	0			
		< COIL >				
L9100	1-412-525-31	INDUCTOR	10µH			
L9101	1-406-987-21	INDUCTOR	4.7mH			
L9102	1-406-987-21	INDUCTOR	4.7mH			
L9103	1-412-537-31	INDUCTOR	100µH			
L9106	1-406-987-21	INDUCTOR	4.7mH			
L9107	1-406-987-21	INDUCTOR	4.7mH			
		< TRANSISTOR >				
Q9100	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9101	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9102	8-729-010-05	TRANSISTOR	MSB709-RT1			
Q9103	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9104	8-729-010-05	TRANSISTOR	MSB709-RT1			
Q9105	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9106	8-729-010-05	TRANSISTOR	MSB709-RT1			
Q9107	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9108	8-729-010-05	TRANSISTOR	MSB709-RT1			
Q9109	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9110	8-729-045-04	TRANSISTOR	2SC5511			
Q9111	8-729-045-05	TRANSISTOR	2SA2005			
Q9112	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9113	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9115	8-729-010-05	TRANSISTOR	MSB709-RT1			
Q9116	8-729-010-25	TRANSISTOR	MSD601-RT1			
Q9117	8-729-052-29	TRANSISTOR	2SK2876-01MR-F122			
Q9119	8-729-010-05	TRANSISTOR	MSB709-RT1			
Q9120	8-729-010-25	TRANSISTOR	MSD601-RT1			
		< RESISTOR >				
R9101	1-216-805-11	METAL CHIP	47	5%	1/10W	
R9102	1-260-322-11	CARBON	330	5%	1/2W	
R9103	1-216-819-11	METAL CHIP	680	5%	1/10W	
R9104	1-216-820-11	METAL CHIP	820	5%	1/10W	
R9105	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R9106	1-218-870-11	METAL CHIP	9.1K	0.5%	1/10W	
R9107	1-216-809-11	METAL CHIP	100	5%	1/10W	
R9108	1-216-817-11	METAL CHIP	470	5%	1/10W	
R9109	1-216-817-11	METAL CHIP	470	5%	1/10W	
R9110	1-216-805-11	METAL CHIP	47	5%	1/10W	
R9111	1-216-805-11	METAL CHIP	47	5%	1/10W	
R9112	1-249-389-11	CARBON	4.7	5%	1/4W	
R9113	1-249-389-11	CARBON	4.7	5%	1/4W	
R9114	1-249-389-11	CARBON	4.7	5%	1/4W	
R9115	1-249-389-11	CARBON	4.7	5%	1/4W	
R9116	1-249-389-11	CARBON	4.7	5%	1/4W	
R9117	1-249-389-11	CARBON	4.7	5%	1/4W	
R9118	1-249-389-11	CARBON	4.7	5%	1/4W	
R9119	1-249-389-11	CARBON	4.7	5%	1/4W	
R9120	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
R9121	1-216-848-11	METAL CHIP	180K	5%	1/10W	
R9122	1-216-847-11	METAL CHIP	150K	5%	1/10W	
R9123	1-216-848-11	METAL CHIP	180K	5%	1/10W	
R9124	1-216-847-11	METAL CHIP	150K	5%	1/10W	
R9125	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
R9126	1-216-805-11	METAL CHIP	47	5%	1/10W	
R9127	1-216-805-11	METAL CHIP	47	5%	1/10W	
R9128	1-243-572-71	METAL OXIDE	470	5%	2W	
R9130	1-218-853-11	METAL CHIP	1.8K	0.5%	1/10W	
R9131	1-218-885-11	METAL CHIP	39K	0.5%	1/10W	
R9132	1-218-865-11	METAL CHIP	5.6K	0.5%	1/10W	(EXCEPT HR29N90)
R9132	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	(HR29N90)
R9133	1-249-391-11	CARBON	6.8	5%	1/4W	
R9134	1-249-383-11	CARBON	1.5	5%	1/4W	
R9135	1-218-847-11	METAL CHIP	1K	0.5%	1/10W	
R9136	1-218-849-11	METAL CHIP	1.2K	0.5%	1/10W	
R9137	1-218-887-11	METAL CHIP	47K	0.5%	1/10W	
R9138	1-218-869-11	METAL CHIP	8.2K	0.5%	1/10W	
R9139	1-218-847-11	METAL CHIP	1K	0.5%	1/10W	
R9140	1-216-864-11	SHORT CHIP	0			
R9141	1-214-657-11	METAL	1	1%	1/4W	
R9142	1-214-657-11	METAL	1	1%	1/4W	
R9143	1-243-693-71	METAL OXIDE	270	5%	1W	
R9144	1-243-696-71	METAL OXIDE	470	5%	1W	
R9146	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R9147	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R9148	1-218-875-11	METAL CHIP	15K	0.5%	1/10W	
R9149	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
R9152	1-218-887-11	METAL CHIP	47K	0.5%	1/10W	
R9154	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R9155	1-249-377-11	CARBON	0.47	5%	1/4W	
R9156	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R9157	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R9158	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R9160	1-218-847-11	METAL CHIP	1K	0.5%	1/10W	
R9161	1-218-847-11	METAL CHIP	1K	0.5%	1/10W	
R9163	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
R9164	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
R9166	1-249-401-11	CARBON	47	5%	1/4W	
R9167	1-216-809-11	METAL CHIP	100	5%	1/10W	
R9168	1-218-897-11	METAL CHIP	120K	0.5%	1/10W	
R9170	1-218-899-11	METAL CHIP	150K	0.5%	1/16W	
R9171	1-218-897-11	METAL CHIP	120K	0.5%	1/10W	
R9172	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W	
R9174	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R9175	1-216-853-11	METAL CHIP	470K	5%	1/10W	
R9176	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R9177	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W	
R9178	1-216-834-11	METAL CHIP	12K	5%	1/10W	
R9179	1-218-895-11	METAL CHIP	100K	0.5%	1/10W	
R9180	1-216-353-00	METAL OXIDE	2.2	5%	1W	
R9181	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	

W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R9182	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R9183	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9184	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R9186	1-218-887-11	METAL CHIP	47K	0.5%	1/10W
R9187	1-218-885-11	METAL CHIP	39K	0.5%	1/10W
R9188	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R9190	1-218-873-11	METAL CHIP	12K	0.5%	1/10W
R9191	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R9192	1-218-881-11	METAL CHIP	27K	0.5%	1/10W
R9195	1-216-853-11	METAL CHIP	470K	5%	1/10W
R9196	1-218-887-11	METAL CHIP	47K	0.5%	1/10W
R9197	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9198	1-218-841-11	METAL CHIP	560	0.5%	1/10W (HR29M61, HR29N90)
R9198	1-218-847-11	METAL CHIP	1K	0.5%	1/10W (HR34M61, HR34N90)
R9199	1-218-849-11	METAL CHIP	1.2K	0.5%	1/10W
R9200	1-218-893-11	METAL CHIP	82K	0.5%	1/10W
R9203	1-216-837-11	METAL CHIP	22K	5%	1/10W
R9204	1-216-849-11	METAL CHIP	220K	5%	1/10W
R9205	1-214-800-11	METAL	2.2	1%	1/2W
R9206	1-216-849-11	METAL CHIP	220K	5%	1/10W
R9207	1-216-837-11	METAL CHIP	22K	5%	1/10W

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MISCELLANEOUS
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	1-251-658-41	SPLITTER RF	(HR29M61, HR34M61)
	1-417-333-11	RF SPLITTER	(HR29N90, HR34N90)
⚠	1-451-498-21	COIL, NA ROTATION	
⚠	1-451-568-11	DEFLECTION YOKE (Y29SEC2-T)	(HR29M61, HR29N90)
⚠	1-456-570-11	COIL, LANDING CORRECTION	(HR34M61, HR34N90)
⚠	1-456-571-11	DEGAUSSING COIL (WITH LCC)(HR34M61)	
⚠	1-456-571-21	DEGAUSSING COIL (WITH LCC)(HR34M61)	
⚠	1-456-590-11	DEGAUSSING COIL (WITH LCC)(HR29N90)	
⚠	1-456-590-21	DEGAUSSING COIL (WITH LCC)(HR29N90)	
⚠	1-456-591-11	DEGAUSSING COIL (WITH LCC)(HR34N90)	
⚠	1-456-591-21	DEGAUSSING COIL (WITH LCC)(HR34N90)	
⚠	1-456-618-11	COIL, LANDING CORRECTION	(HR29M61, HR29N90)
⚠	1-456-633-11	DEGAUSSING COIL (WITH LCC)(HR29M61)	
⚠	1-456-633-21	DEGAUSSING COIL (WITH LCC)(HR29M61)	
	1-500-497-11	FILTER, CLAMP (FERRITE CORE)	
	1-543-993-11	CORE, FERRITE	
	1-555-110-00	P-P CABLE	
⚠	1-791-439-11	CORD, POWER (WITH CONNECTOR)	(HR29M61, HR34M61)
	1-825-574-11	LOUDSPEAKER (5.5X13cm)	
	1-825-575-11	LOUDSPEAKER (5cm)	
	1-825-576-11	LOUDSPEAKER (16cm)	
⚠	1-828-022-11	POWER-SUPPLY CORD	(HR29N90, HR34N90)
	1-900-275-97	LEAD ASSY (B), SPEAKER	
⚠	8-451-539-11	DY Y34RFC2-M	(HR34M61, HR34N90)
⚠	8-453-022-21	NA2920-M2	(HR29N90)
⚠	8-453-023-21	NA328-M2	(HR34M61, HR34N90)
⚠	8-735-122-05	CRT 34RFN (EQUATORIAL)	(HR34M61)
⚠	8-735-126-05	CRT 34RFN(NORTH)	(HR34N90)
⚠	8-735-139-05	CRT 29RFEN (FOR NORTH)	(HR29M61, HR29N90)

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ACCESSORIES & PACKING MATERIALS
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	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)	
	4-065-210-01	JOINT	(HR29M61, HR34M61)
*	4-067-995-01	HANDLE (E)	(HR29N90)
*	4-091-319-01	BAG, PROTECTION	(HR34M61, HR34N90)
*	4-096-667-01	INDIVIDUAL CARTON	(HR29M61)
*	4-096-668-01	TRAY	(HR29M61)
*	4-096-669-01	POST, CORNER	(HR29M61)
*	4-096-670-01	CUSHION, UPPER	(HR29M61)
*	4-096-671-01	CUSHION, LOWER	(HR29M61)
*	4-096-749-01	TRAY	(HR34N90)
*	4-096-750-01	POST, CORNER (REAR)	(HR34N90)
*	4-096-751-01	CUSHION, UPPER	(HR34N90)
*	4-096-752-01	CUSHION, LOWER	(HR34N90)
	4-098-756-22	MANUAL, INSTRUCTION	(HR29N90, HR34N90)
	4-098-756-41	MANUAL, INSTRUCTION	(HR29M61, HR34M61)
*	4-099-723-01	INDIVIDUAL CARTON	(HR34M61)
*	4-099-724-01	TRAY	(HR34M61)
*	4-099-726-01	POST, CORNER (REAR)	(HR34M61)
*	4-099-728-01	CUSHION, UPPER	(HR34M61)
*	4-099-729-01	CUSHION, LOWER	(HR34M61)
*	4-100-169-01	INDIVIDUAL CARTON	(HR29N90)
*	4-100-170-01	TRAY	(HR29N90)
*	4-100-171-01	POST, CORNER	(HR29N90)
*	4-100-172-02	POST, CORNER (REAR)	(HR29N90)
*	4-100-173-01	CUSHION, UPPER	(HR29N90)
*	4-100-174-02	CUSHION, LOWER	(HR29N90)
*	4-100-175-01	POST, CORNER (REAR)	(HR29M61)
*	4-101-260-02	PINDIVIDUAL CARTON	(HR34N90)
	4-392-003-01	BAND, HOLD	(HR29N90, HR34N90)
	4-392-003-11	BAND, HOLD	(HR29M61, HR34M61)
	4-392-004-01	CLIP	(HR29N90, HR34N90)
	4-392-004-11	CLIP	

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REMOTE COMMANDER
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1-478-194-11	STANDARD TYPE COMMANDER	(RM-1007)(HR29M61, HR34M61)
1-478-267-11	STANDARD TYPE COMMANDER	(RM-1011)(HR29N90, HR34N90)
9-885-019-97	LID, BATTERY CASE	(FOR REMOTE COMMANDER)

SONY

4-098-756-**42** (1)

SONY

Trinitron Color TV KV-HR34/HR29

Trinitron Color TV

Operating Instructions **GB**

- Before operating the unit, please read this manual thoroughly and retain it for future reference.

使用說明書 **CT**

- 使用本電視機之前請先詳細閱讀此手冊，並妥善保存以備日後用作參考。

Panduan Pengendalian **MY**

- Sebelum mengendalikan unit, baca buku panduan ini dengan teliti dan simpan untuk rujukan masa depan.

FD Trinitron WEGA

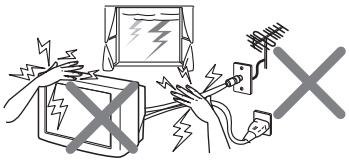
MEMORY STICK

KV-HR34
KV-HR29

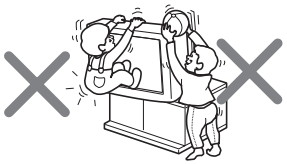
M61

WARNING

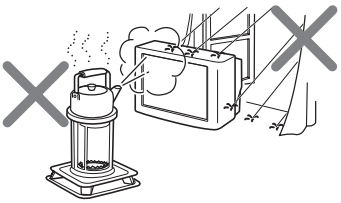
- Dangerously high voltages are present inside the TV.
- TV operating voltage: 110–240 V AC.
- Do not plug in the power cord until you have completed making all other connections; otherwise a minimum leakage current might flow through the antenna and other terminals to ground.
- To avoid battery leakage and damage to the remote, remove the batteries from the remote if you are not going to use it for several days. If any liquid leaks from the batteries and touches your skin, immediately wash it away with water.



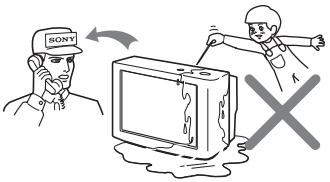
For your own safety, do not touch any part of the TV, the power cord and the antenna cable during lightning storms.



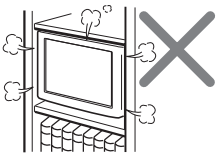
For children's safety, do not leave children alone with the TV. Do not allow children to climb onto it.



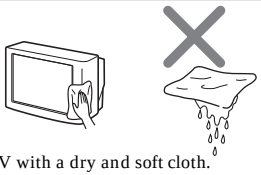
To prevent fire or shock hazard, do not expose the TV to rain or moisture.



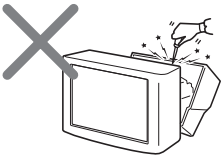
Do not operate the TV if any liquid or solid object falls into it. Have it checked immediately by qualified personnel only.



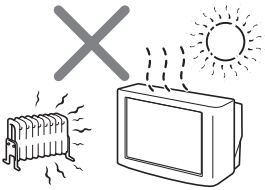
Do not block the ventilation openings of the TV. Do not install the TV in a confined space, such as a bookcase or built-in cabinet.



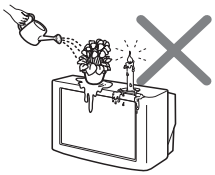
Clean the TV with a dry and soft cloth.
Do not use benzine, thinner, or any other chemicals to clean the TV. Do not attach anything (e.g., adhesive tape, cellophane tape, glue) on the painted cabinet of the TV. Do not scratch the picture tube.



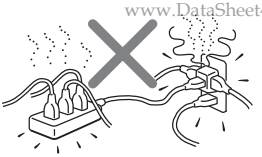
Do not open the cabinet and the rear cover of the TV as high voltages and other hazards are present inside the TV. Refer servicing and disposal of the TV to qualified personnel.



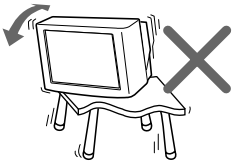
Your TV is recommended for home use only.
Do not use the TV in any vehicle or where it may be subject to excessive dust, heat, moisture or vibrations.



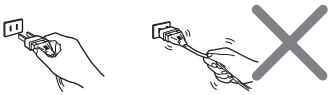
Do not place any objects on the TV. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.



Do not plug in too many appliances to the same power socket. Do not damage the power cord.



Install the TV on a stable TV stand and floor which can support the TV set weight. Ensure that the TV stand surface is flat and its area is larger than the bottom area of the TV.



Pull the power cord out by the plug. Do not pull the power cord itself. Even if your TV is turned off, it is still connected to the AC power source (mains) as long as the power cord is plugged in. Unplug the TV before moving it or if you are not going to use it for several days.

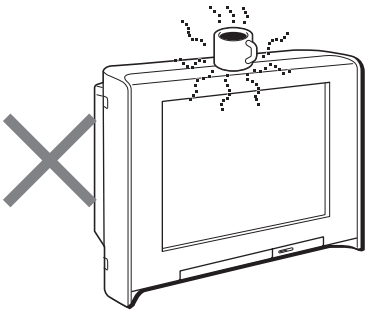
GB

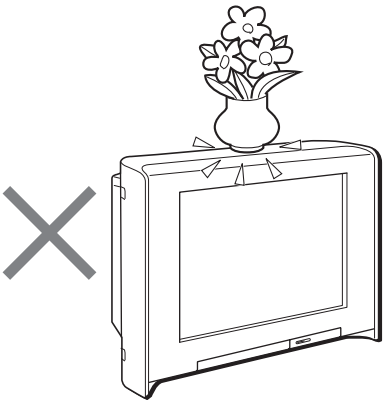
About the glazed finish on the top and side panels of your TV

The top and side panels of your TV are glaze finished.

To keep them from discoloring, deterioration or scratching:

- Avoid hitting your TV with an object.
- Do not put a hot object such as a cup of coffee, or heavy object such as a flower vase with water, on the TV top. If any liquid fall into the cabinet, it may cause fire or shock hazard.





The features you will enjoy include:

- "DRC-MF" for viewing higher quality pictures (page 21)
- "TWIN" for viewing two programs (page 24)
- "PROGRAM INDEX" for displaying multiple programs (page 27)
- "Picture Mode" / "Sound Mode" / "Surround" for customizing your TV (pages 20 and 29)
- "MEMORY STICK" button on the remote control for viewing still pictures and movies stored in a "Memory Stick"(page 38)

Your TV also offers the following features:

- Initial Setup function for on-screen language selection, picture position adjustment and automatic channel presetting. (page 9)
- Menu language options
  — English / Chinese / Arabic (page 78)
- "Program Block" for locking out specific channels (page 87)
- "Intelligent Volume" for automatic volume adjustment (page 74)
- "Fine" tuning feature (page 83)
- Button Joystick ⊕ on the remote control for easier operation (page 69)
- "Eco Mode" to save energy (page 79)
- "Game Mode" for video games (page 79)

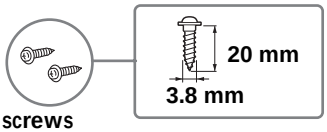
Table of Contents

Getting Started

Step 1

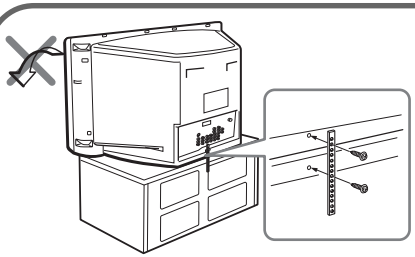
Secure the TV

To prevent the TV from falling, use the supplied screws, clamps and band to secure the TV.



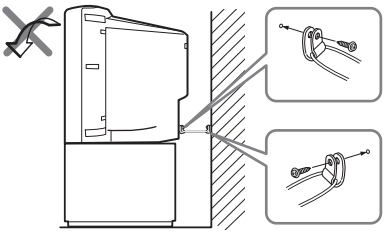

clamps


band



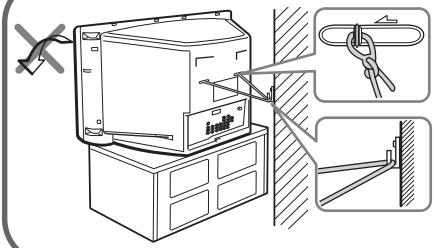
Screw the band to the TV stand and to the provided hole at the rear of your TV.

or



(1) Put a cord or chain through the clamps.
(2) Screw one clamp to a wall or pillar and the other clamp to the provided hole at the rear of your TV.

or



(1) Attach each end of a cord or chain to the provided holders at the rear of your TV.
(2) Securely fix the attached cord or chain to a wall or pillar using an attachment which can support the TV set weight.

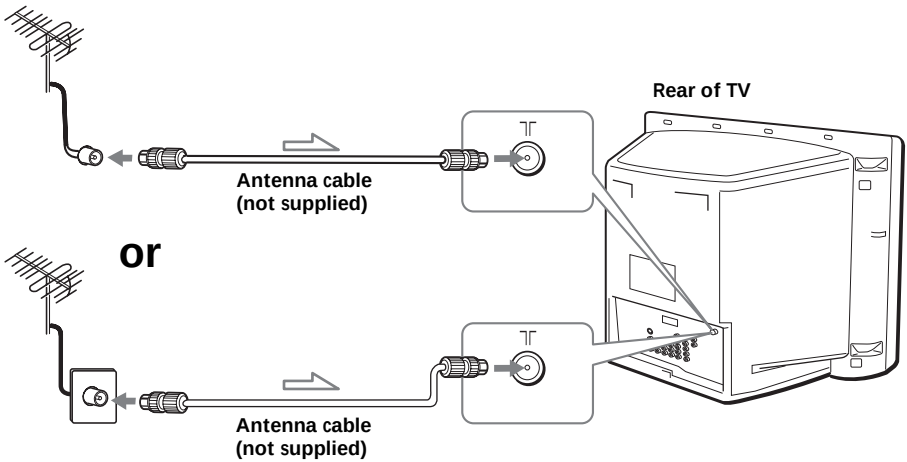
Note

• Use only the supplied screws. Use of other screws may damage the TV.

Step 2

Connect the antenna

If you wish to connect a VCR, see the “Connect a VCR” diagram on page 8.



For optimum Performance

To connect the TV to the antenna or the VCR, use an antenna cable (not supplied).

Note that one end of the cable has a male plug fitted while the other end is fitted with a female socket. Connect the male plug to the ⅂⅃ (antenna) terminal of the TV.

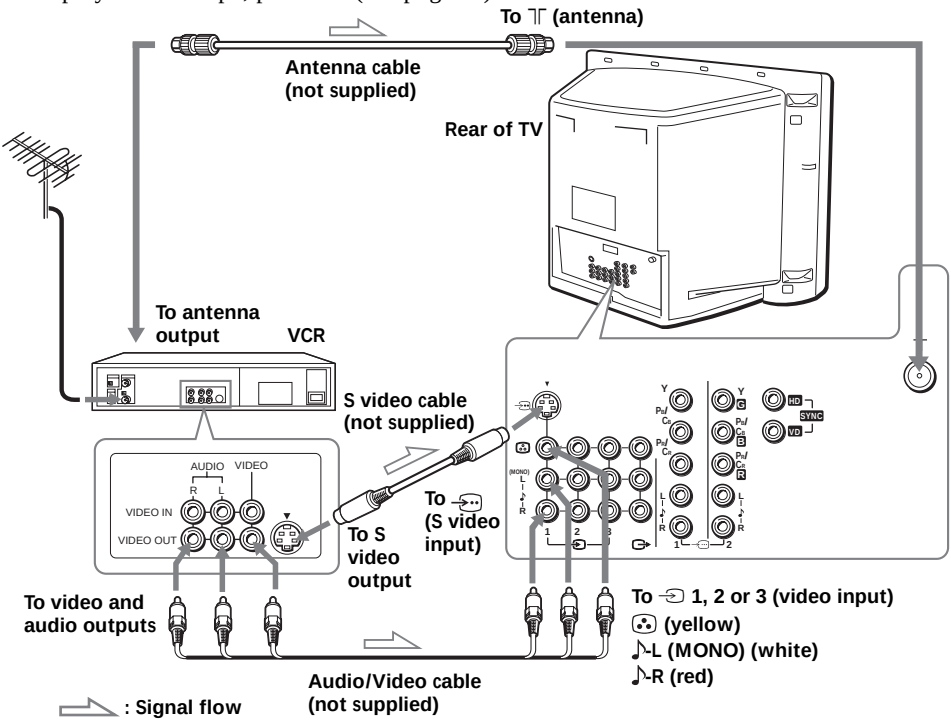
CAUTION

Do not connect the power cord until all other connections are complete; otherwise, a minimal current leakage through the antenna and / or other terminals to the ground could occur.

continued

Connect a VCR

To play a video tape, press ⊜ (see page 18).

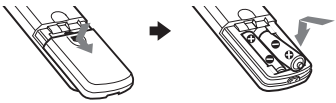


Notes

- If you connect a monaural VCR, connect the yellow plug to (the yellow jack) and the black plug to ♪-L (MONO) (the white jack).
- If you connect a VCR to the ⊤ (antenna) terminal, preset the signal output from the VCR to the program number 0 on the TV.
- When you connect a VCR to the S video input, display the "Setup" menu and select "Auto" for "S Input" (see page 80). If the signals are input to both ⊜ (S video input) and (video input), the S video signal is automatically selected. To view the video signal input to (video input), select "Off" for "S Input".

Step 3

Insert the batteries into the remote



Note

- Do not use old batteries or different types of batteries together.

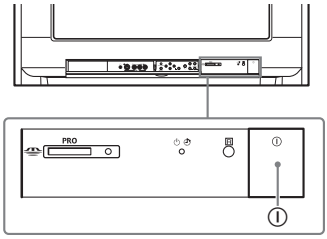
Step 4

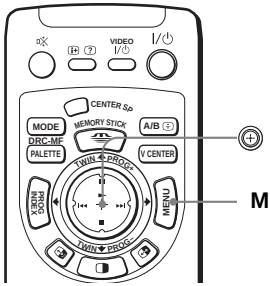
Set up your TV automatically

When you first turned on the TV, the “Picture Rotation” and “Picture V-Position” menus will appear in the process of “Initial Setup”. These menus allow you to adjust the inclination of picture, shift of the picture vertical position, and color patches caused by the earth’s magnetic field. (These phenomena do not indicate the TV’s problem.) Adjust “Picture Rotation” and “Picture V-Position” appropriately.

Tip

- When you install the TV to another location, make sure to adjust “Picture Rotation” and “Picture V-Position” using the menu (see page 81).

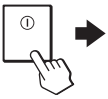


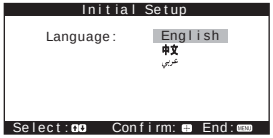


MENU

1 **Press ⏻ to turn on the TV.**

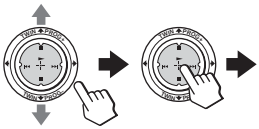
The “Initial Setup” menu appears, and you can select the on-screen language.

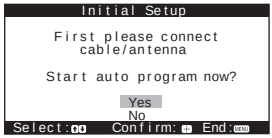




2 **Move ⊕ up or down to select the desired language, then press ⊕.**

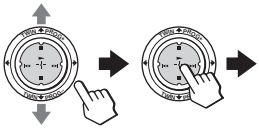
“Start auto program now?” appears.

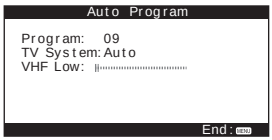




3 **Move ⊕ up or down to select “Yes”, then press ⊕ to preset the channels automatically.**

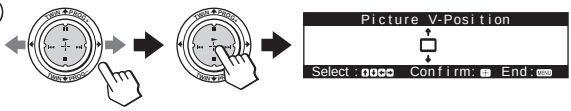
The screen will indicate automatic presetting is in progress. After channel presetting is complete, the “Picture Rotation” menu appears.





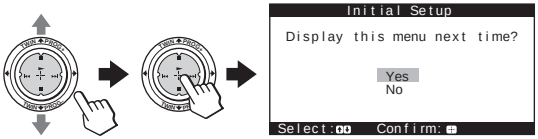
continued

4 **If the upper and lower bars are slanted, move ⊕ left or right so that they become horizontal, then press ⊕.**



"Picture V-Position" menu appears.

5 **If the upper and lower bars are not equally positioned to the top and bottom of the screen, move ⊕ up or down to adjust them, then press ⊕.**



"Display this menu next time?" appears.

6 **Move ⊕ up or down to select "No", then press ⊕.**

The "Initial Setup" menu will not appear again the next time you turn on the TV by pressing ⏻.

To allow this menu to appear again, select "Yes", then press ⊕.

Tips

- You can immediately go to the end of the "Initial Setup" menu by pressing MENU.
- If your TV has preset an unwanted channel or cannot preset a particular channel, then preset your TV manually (see page 82).

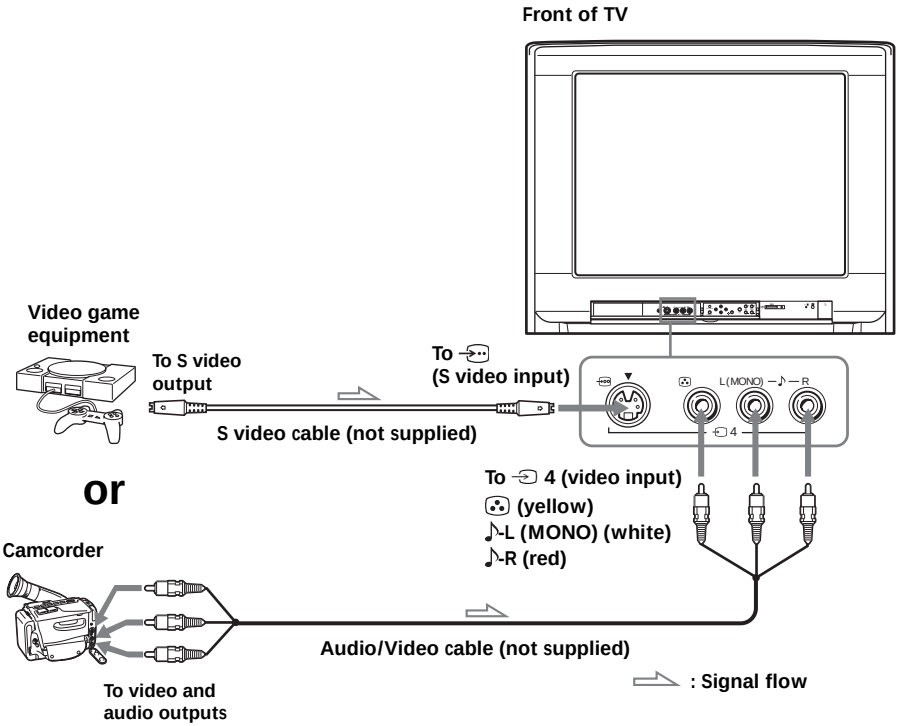
Notes

- Before adjusting "Picture Rotation" and "Picture V-Position", keep external speakers or other electrical equipment away from the TV. The magnetic disturbance from these equipment or the direction of the earth's magnetic field may affect the TV.
- If you do not succeed in adjusting "Picture Rotation" and "Picture V-Position", turn off the TV and change its location or direction, then try to adjust using the menu. Do not move the TV while the TV is turned on. If you do, abnormal color patches may appear on the picture. Press ⏻ on the TV to turn off the TV for about 15 minutes, then turn it on again to demagnetize the TV.
- When adjusting "Picture Rotation", adjust the value step by step. If you rotate the bars largely at a time, color distortion may occur.
- You cannot adjust "Picture Rotation" and "Picture V-Position" when HD signals are input or "Memory Stick" mode is selected.

Connecting optional components

You can connect optional audio / video components, such as a VCR, a DTV (Digital Television) receiver, multi disc player, camcorder, video game, or stereo system. To watch and operate the connected equipment, see pages 18 and 34.

Connecting a camcorder/video game equipment using 4 (video input 4) jacks

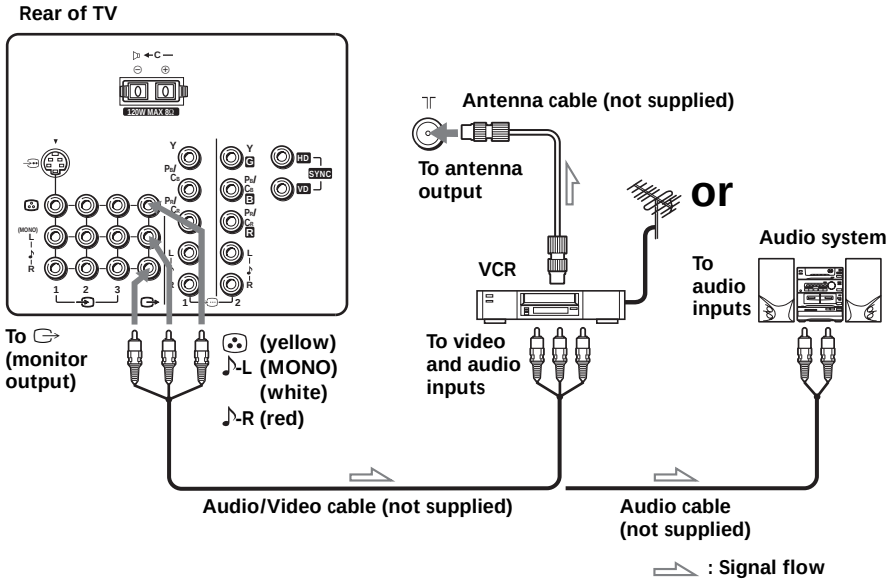


Notes

- When connecting video game equipment, display the “Setup” menu and select “On” for “Game Mode” to adjust the picture setting that is suitable for video games (see page 79).
- You can also connect video equipment to the 1, 2, or 3 (video input) jacks at the rear of your TV.
- When you connect video equipment to the S video input, display the “Setup” menu and select “Auto” for “S Input” (see page 80). If the signals are input to both (S video input) and (video input), the S video signal is automatically selected. To view the video signal input to (video input), select “Off” for “S Input”.

continued

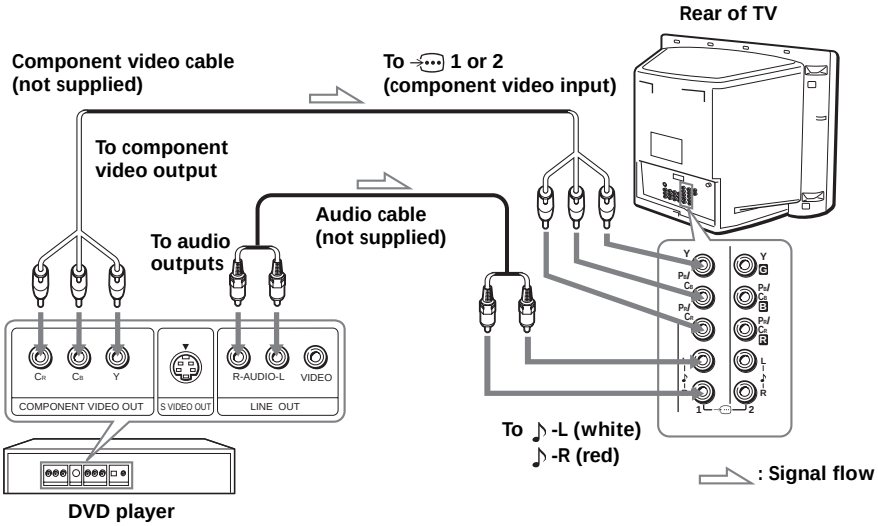
Connecting audio/video equipment using the ⇨ (monitor output) jacks



Note

- If you select "HD / DVD 1" or "HD / DVD 2" on your TV screen (see page 18), sound will be heard but no picture will be output from ⇨ (monitor output). This does not indicate a malfunction.

Connecting a DVD player to (component video input) 1 or 2 jacks



Notes

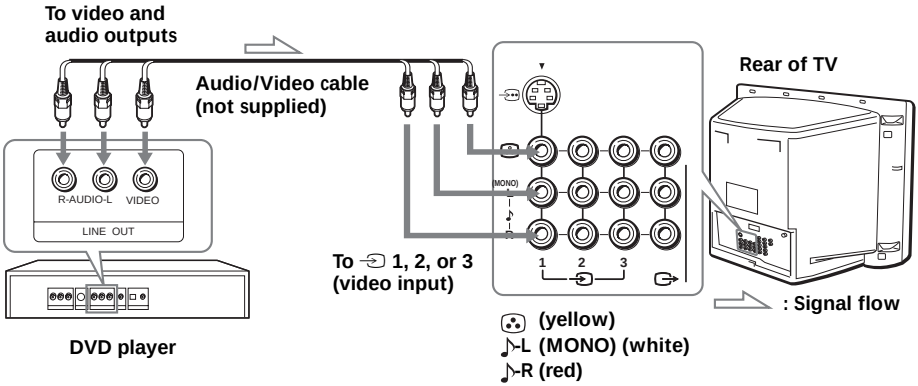
- Some DVD player terminals may be labeled differently:

Connect	To (on the DVD player)
Y (green)	Y
P_B / C_B (blue)	C_b, B-Y or P_B
P_R / C_R (red)	C_r, R-Y or P_R

- Connect nothing to the HD / VD jacks when connecting a DVD player to 1 or 2 (component video input).
- If you select “HD / DVD 1” or “HD / DVD 2” on your TV screen (see page 18), sound will be heard but no picture will be output from (monitor output). This does not indicate a malfunction.
- When receiving a progressive signal through (component video input), TWIN pictures and PROGRAM INDEX features are not available, and “DRC-MF”, “DRC Palette” and “Game Mode” are not selectable.

continued

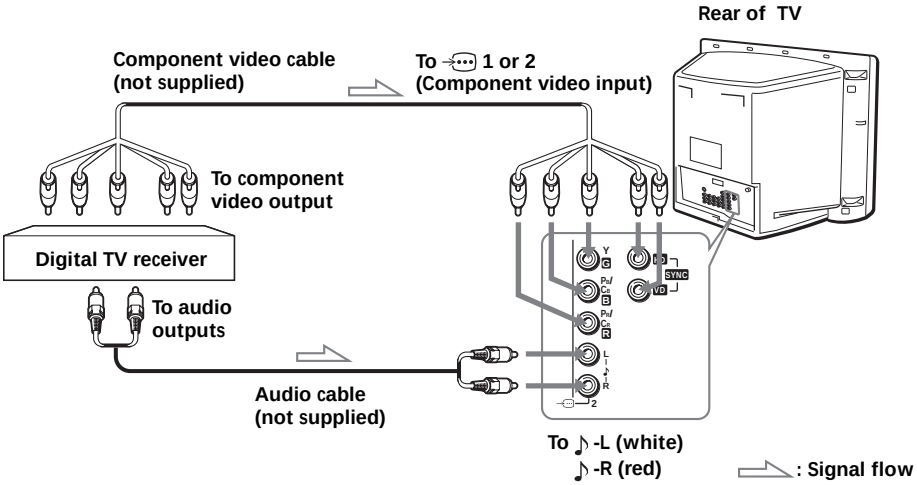
Connecting a DVD player to ⇨ (video input) 1, 2 or 3 jacks



Notes

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, display the “Picture” menu and select “Personal” for “Picture Mode”, then adjust the sharpness (“Sharpness”) under “Picture Adjustment” (see page 72).
- You can also connect a DVD player to ⇨ (S video input) on the TV.

Connecting a DTV (digital television) receiver to 1 or 2 (component video input) jacks



Note

- The TV is equipped with the G / B / R / HD / VD inputs.
  If your DTV receiver is equipped with the Y / P_B / P_R output connectors, connect it to the Y / P_B / P_R connectors of 1 or 2. Connect nothing to the HD / VD connectors of 2.
  If your DTV receiver is not equipped with the Y / P_B / P_R output connectors, connect it to the G / B / R / HD / VD connectors of 2.

Tip

- The TV accepts the following signal formats:

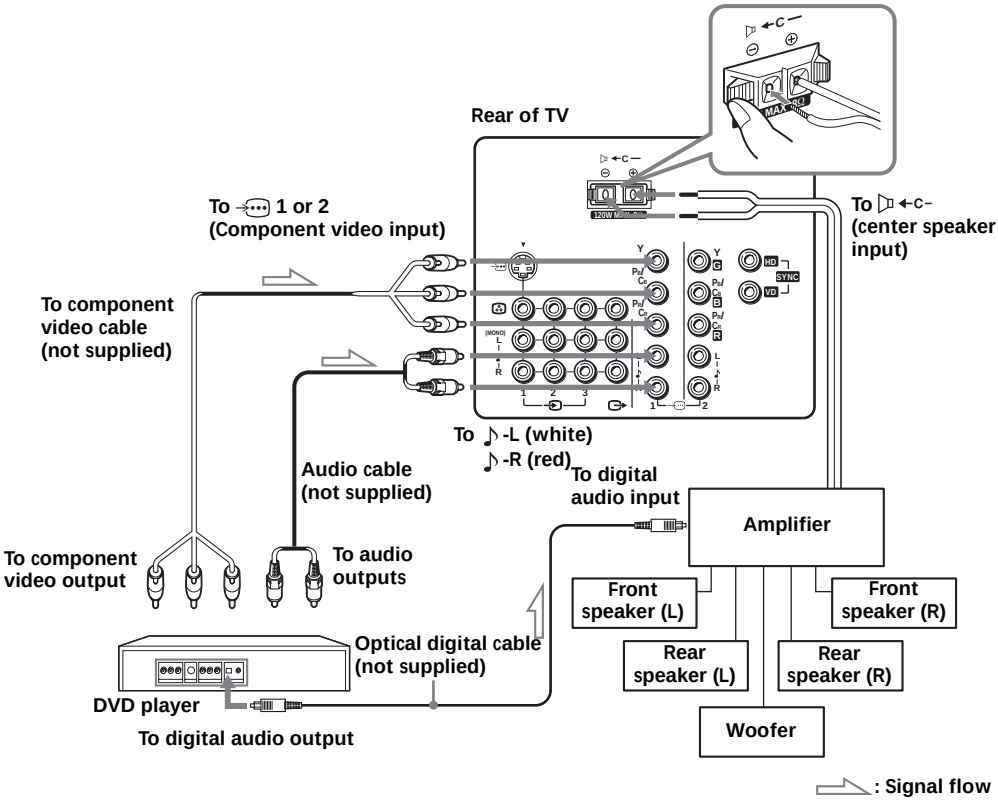
Total scanning line	Effective scanning line	fV (Hz)
1125i	1080i	50 / 60
750p	720p	50 / 60
625p	576p	50
625i	576i	50
525p	480p	60
525i	480i	60

continued

Connecting an amplifier

If you use an amplifier with a Dolby* surround decoder instead of the TV's audio system, you can use the TV's speakers as the center speaker for your audio system.

Using the speaker cords supplied with the amplifier, connect the speaker terminals of the amplifier to the ▷ ←C– (center speaker input) terminals on the TV.



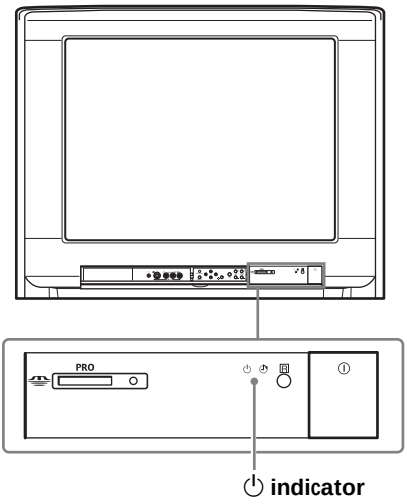
Note

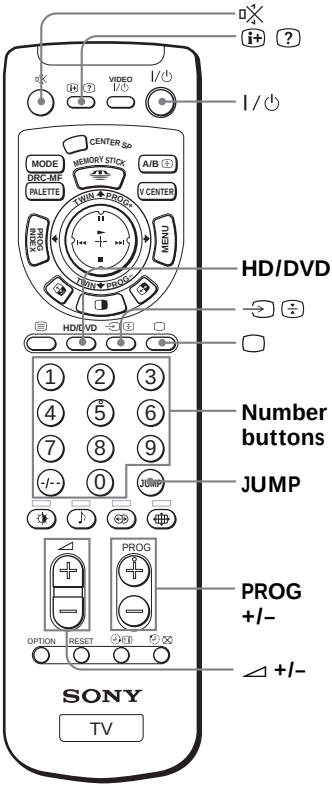
- To use the TV's speakers as the center speaker, display the "Sound" menu and select "CENTER IN" for "Speaker" (see page 74).

* "Dolby" is a trademark of Dolby Laboratories.

Watching the TV

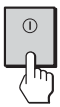
This section explains various functions and operations used while watching the TV. Most operations can be done using the remote.





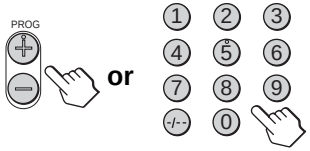
1 Press ⏻ to turn on the TV.

When the TV is in standby mode (the ⏻ indicator on the TV is lit red), press I / ⏻ on the remote.



2 Press PROG +/– or the number buttons to select the TV channel.

For double digit numbers, press -/--, then the number (e.g., for 25, press -/--, then 2 and 5).



Note

- When you turn on the TV, either the program number or video mode is displayed for approximately 40 seconds. The Eco Mode (ECO) icon will also appear if “Eco Mode” in the “Setup” menu is set to “On” (see page 79).

continued

To select a TV program quickly

1 Press and hold PROG +/–.

2 Release PROG +/– when the desired program number appears.

Note

- When you select a TV program quickly, the picture may be disrupted. This does not indicate a malfunction.

Additional tasks

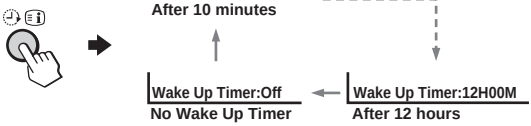
To	Press
Turn off temporarily	I/⏻. The ⏻ indicator on the TV lights up red.
Turn off completely	⏻ on the TV.
Adjust the volume	+/–.
Mute the sound	🔇.
Watch the video input (VCR, camcorder, etc.)	⏎ (or ⏎ on the TV) to select "VIDEO 1", "VIDEO 2", "VIDEO 3", "VIDEO 4", "HD/DVD 1" or "HD/DVD 2". To return to the TV screen, press 🖵 (or ⏎ on the TV).
Watch the component input (DVD, DTV receiver)	HD/DVD to select "HD/DVD 1" or "HD/DVD 2". To return to the TV screen, press 🖵 (or ⏎ on the TV).
Jump back to the previous channel	JUMP.
Display the on-screen information*	ⓘ.

* Some picture/sound settings, and either the program number or video mode are displayed. The on-screen display for the picture/sound settings disappears after about 3 seconds.

Setting the Wake Up timer

1 Press ◴ until the desired period of time appears.

The Wake Up timer starts immediately after you have set it.



2 Select the TV channel or video mode you want to wake up to.

3 Press I/⏻, or set the Sleep timer if you want the TV to turn off automatically.
The ◴ indicator on the TV lights up orange.

To cancel the Wake Up timer

Press ◴ until “Wake Up Timer: Off” appears, or press ⏻ on the TV to turn it off.

Note

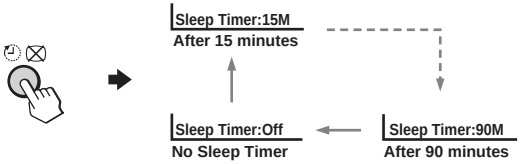
- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up timer, the TV automatically goes into standby mode. To resume watching the TV, press any button on the TV or the remote.

Setting the Sleep timer

Press ◴ until the desired period of time appears.

You can select the period of time from among 15, 30, 45, 60, 75 and 90 minutes.

The Sleep timer starts immediately after you have set it.

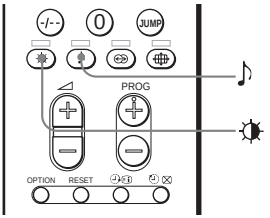


To cancel the Sleep timer

Press ◴ until “Sleep Timer: Off” appears, or turn the TV off.

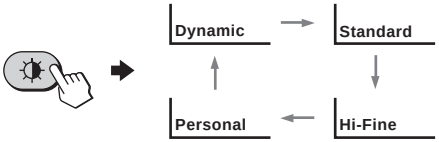
Selecting the picture and sound modes

You can select picture and sound modes and adjust the setting to your preference in the “Personal” option.



Selecting the picture mode

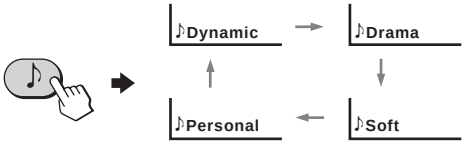
Press ☼ repeatedly until the desired picture mode is selected.



Select	To
“Dynamic”	receive high contrast pictures.
“Standard”	receive normal pictures.
“Hi-Fine”	receive higher resolution pictures with mild contrast.
“Personal”	receive the last adjusted picture setting from the “Picture Adjustment” menu under the “Picture” menu (see page 72).

Selecting the sound mode

Press ♪ repeatedly until the desired sound mode is selected.



Select	To
“Dynamic”	listen to dynamic and clear sound that emphasizes both the low and high tones.
“Drama”	listen to sound that emphasizes voice and high tones.
“Soft”	receive soft sound.
“Personal”	receive the last adjusted sound setting from the “Sound Adjustment” menu under the “Sound” menu (see page 75).

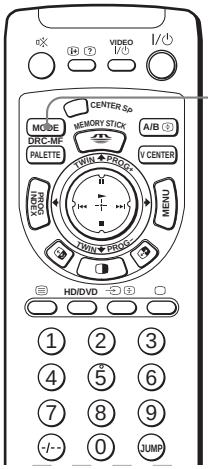
Tip

- You can also set the picture and sound modes using the menu (see “Changing the “Picture” setting” on page 70 and “Changing the “Sound” setting” on page 73).

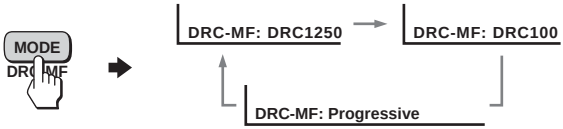
Viewing higher quality pictures

— “DRC-MF MODE”

The Digital Reality Creation-Multi Function (DRC-MF) feature allows you to enjoy higher quality pictures on your TV. You can select from among three DRC-MF modes: “DRC1250” to watch super real (higher resolution) pictures, or “DRC100” for moving pictures or “Progressive” for still pictures to reduce flicker if necessary.



Press DRC-MF MODE repeatedly until you receive the desired picture quality.



Select	To
“DRC1250”	select higher resolution pictures.
“DRC100”	reduce flicker on the screen.
“Progressive”	reduce jitter of any small areas or scanning lines (e.g., letters or the edge of objects) on the screen.

Tip

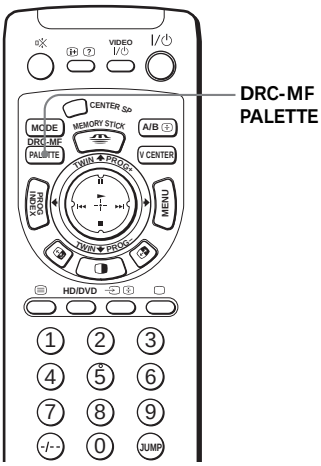
- When the broadcast signal is weak, you may see some dots or noise on the TV screen. To reduce this interference, display the “Picture” menu and select “Personal” for “Picture” mode, then adjust “Sharpness” under “Picture Adjustment” to reduce the sharpness (see page 72).

Note

- The DRC-MF mode is not selectable when using the PROGRAM INDEX feature, or when the “Game Mode” or “Twin” mode is turned “On”. The mode is not available for HD (high-definition) or progressive input signal, or the picture recorded on a “Memory Stick”.

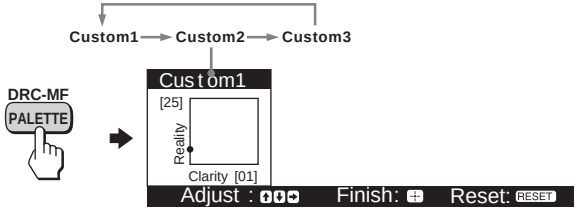
Customizing the picture Reality and Clarity levels

— "DRC-MF PALETTE"



The DRC-MF PALETTE feature allows you to customize the level of detail (Reality) and smoothness (Clarity) for various input sources. For example, you can create one Custom setting to optimize your antenna input's picture, and create another to optimize your DVD player's picture. You can create up to three Custom settings for each of the antenna input's signal, the signals input to video 1 to 4 inputs, and the component input signal separately, and each for the "Dynamic" and "Standard / Hi-Fine / Personal" picture modes, separately (max. 18 settings).

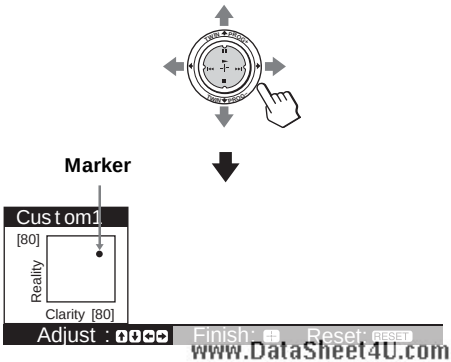
1 Press DRC-MF PALETTE repeatedly to select "Custom 1", "Custom 2" or "Custom 3" to which you want to create the setting.



2 Move ⊕ up, down, right or left to adjust the position of the marker "•".

As you move "•" higher along the "Reality" axis, the picture becomes more detailed.

As you move "•" to the right, along the "Clarity" axis, the picture becomes smoother.



3 Press ⊕ to return to the normal screen.

To switch to the last adjusted Custom setting

Display the picture and press DRC-MF PALETTE repeatedly to select your desired Custom setting.

To reset to the factory preset values

Press RESET on the remote.

The dotted-lined circle indicator in the Custom 1 mode for the "Standard/Hi-Fine/Personal" picture mode

This indicates the factory setting.
This position is optimum for a normal TV broadcast in good tuning condition.

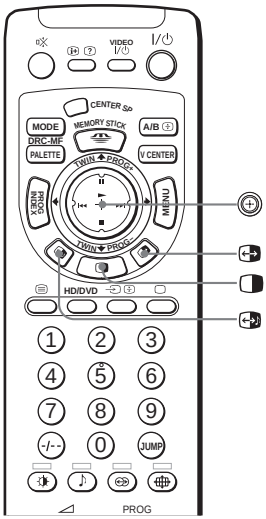
Note

- The DRC-MF PALETTE is not selectable when using the PROGRAM INDEX feature, or when the "Game Mode" or "Twin" mode is turned "On". The mode is not available for HD (high-definition) or progressive input signal, or the picture recorded on a "Memory Stick".

Watching two programs at the same time

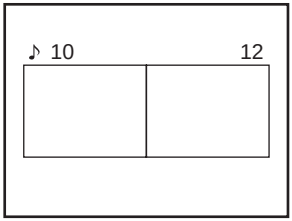
— "TWIN"

With the TWIN pictures feature, you can display a different TV program beside the main picture.



Displaying TWIN pictures

Press ◨.



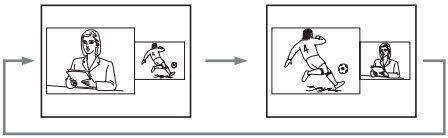
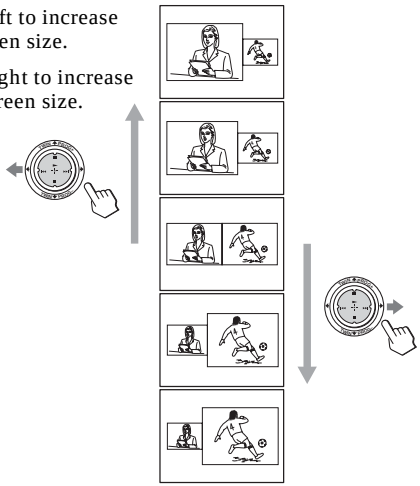
To return to the normal screen

Press ◨.
The left picture is displayed in full screen.

Tip

- You can also display the Twin pictures using the menu (see "Operating the "Multi Picture" using the menu" on page 77).

Additional tasks

To	Press/Move
change a TV program in the right picture	Move ⊕ up or down (TWIN PROG + or –).
swap the left and right pictures	Press ⇄. 
swap sound between the left and right pictures.	Press ⇄. The "♪" symbol will appear to indicate which screen you are hearing.
change the screen size of the TWIN pictures	Move ⊕ left to increase the left screen size. Move ⊕ right to increase the right screen size. 

Notes

- Swapping the pictures is not available for HD or DVD input signal.
- The TWIN pictures feature is not available for HD (high-definition) and progressive signals. If you change the left main picture to an HD or progressive signal, a message appears and the TWIN pictures feature is cancelled. The selected HD or progressive picture will be displayed in full screen.
- The TWIN pictures feature is not available when the TV is in the center speaker mode (page 37) and you cannot set the TV to the center speaker mode while viewing the TWIN pictures.
- You cannot enjoy stereo sound in the right picture.
- You cannot change the picture to a video input in the right picture. You can only display a video input, except for HD and progressive signals, in the right picture by swapping the pictures when a video input is displayed in the left picture.
- When the ◑ button is pressed, the TV screen flickers or goes blank for about one second before the TWIN pictures appear. This does not indicate a malfunction of the TV.

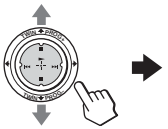
continued

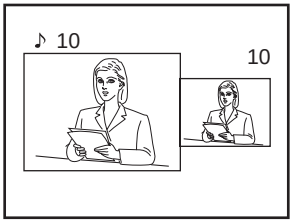
Selecting a TV program using PAP (Picture And Picture)

You can select your desired TV program directly from the right picture by using ⊕ (TWIN PROG +/–).

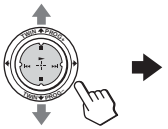
1 Move ⊕ up or down (TWIN PROG +/–).

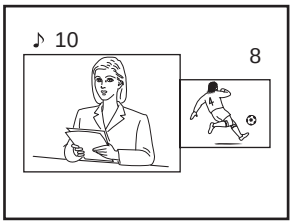
The two pictures of the same channel appear on the screen (PAP).



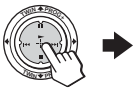


2 Move ⊕ up or down (TWIN PROG +/–) until the desired program appears on the right screen.





3 Press ⊕ to display the right picture in full screen.



To change the left picture channel

Press PROG +/– or the number buttons.

To return to the normal screen from the PAP mode

Press ◨.
The left picture is displayed in full screen.

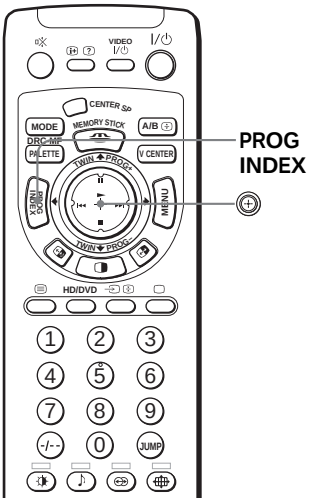
Notes

- You cannot change the picture size or swap the two pictures in the PAP mode. (You can swap the sounds of the two pictures.)
- The PAP feature is not available for HD (high-definition) and progressive signals. If you change the left main picture to an HD or progressive signal, a message appears and the PAP feature is cancelled. The selected HD or progressive picture will be displayed in full screen.

Displaying multiple programs

— "PROGRAM INDEX"

The PROGRAM INDEX feature displays all tuned TV programs scrolling on the screen for direct selection.

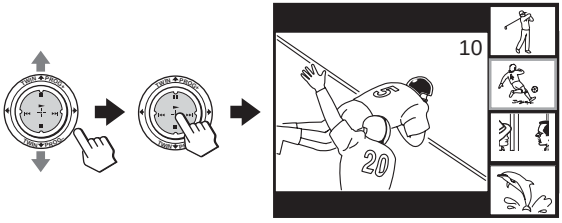


1 Press PROG INDEX.

The current program is reduced in size and displayed on the left. The first tuned program is briefly displayed on the bottom-right side of the screen, then frozen. It scrolls up and the next program appears on the bottom-right, and all tuned programs appear one by one.

2 Move ⊕ up or down so that the program you want to view is displayed in the frame, and press ⊕.

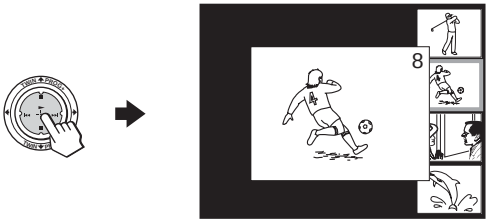
To return to scrolling, move ⊕ up or down again.



continued

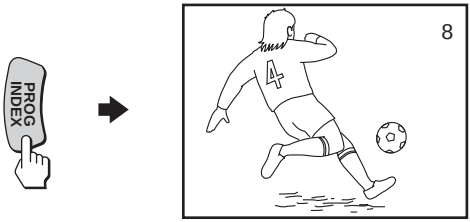
3 Press ⊕ again to enlarge the selected program into the left frame.

The selected program is displayed in normal motion picture, and the sound also switches to this program.



4 Press PROG INDEX.

The selected program is displayed in full screen.



Tip

- To change the direction of scrolling, move ⊕ up or down once. To increase scrolling speed, hold ⊕ up or down.

To return to the normal screen

Press PROG INDEX again, or:

1 Select "Program Index" from the "Multi Picture" menu.
2 Press ⊕.

Tip

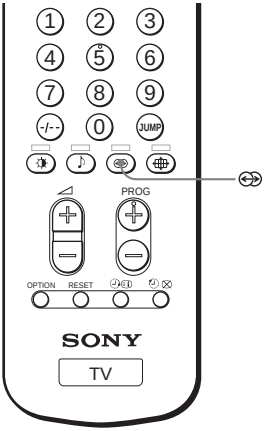
- You can also display multiple programs using the menu (see "Operating the "Multi Picture" using the menu" on page 77).

Notes

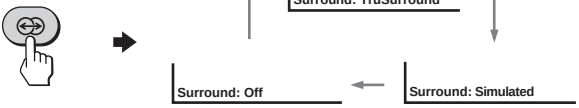
- When displaying multiple programs, only the sound of the left screen is heard.
- The PROGRAM INDEX feature is not available for HD (high-definition) and progressive signals. The selected HD or progressive picture will be displayed in full screen.

Listening with surround sound

The surround feature enables you to enjoy the sound effects of a concert hall or movie theater.



Press ⇔ repeatedly until you receive the desired surround sound.



Select	To
“TruSurround”*	listen to the surround sound that spreads out to the rear of a room.
“Simulated”	listen to monaural sound with a stereo-like effect.
“Off”	turn off the surround sound.

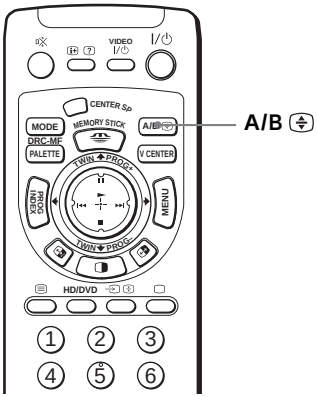
* TruSurround, SRS and the (●)® symbol are trademarks of SRS Labs, Inc. TruSurround technology is incorporated under license from SRS Labs, Inc.

Note

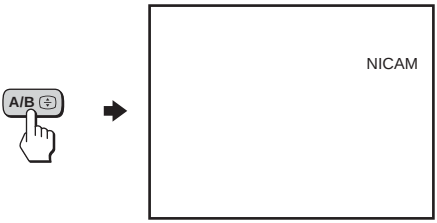
- You cannot change the surround sound when the TV is in the center speaker mode (page 37).

Enjoying stereo or bilingual programs

You can enjoy stereo sound or bilingual programs of NICAM and A2 (German) stereo systems.



Press A/B repeatedly until you receive the sound you want.



When receiving a NICAM program

Broadcasting	On-screen display (Selected sound)
NICAM stereo	NICAM (Stereo sound) → Mono (Regular sound)
NICAM bilingual	NICAM Main (Main sound) → NICAM Sub (Sub sound) → Mono (Regular sound)
NICAM monaural	NICAM Main (Main sound) → Mono (Regular sound)

When receiving an A2 (German) program

Broadcasting	On-screen display (Selected sound)
A2 (German) stereo	
A2 (German) bilingual	

Receiving area for NICAM and A2 (German) programs

System	Receiving area
NICAM	Singapore, Malaysia, Thailand, Hong Kong, New Zealand, etc.
A2 (German)	Malaysia, Thailand, Australia, etc.

Notes

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM program, select “Mono”. The sound becomes monaural, but the noise is reduced.
- Before receiving a NICAM stereo program in China, please check the NICAM broadcast condition at your area. When receiving a NICAM stereo program, the receiving conditions might vary depending on area. In addition, different strength of the NICAM broadcast signal might affect the receiving quality.

If the sound is distorted or noisy when receiving a monaural program through the ⅂⅂ (antenna) terminal

Press A / B repeatedly until “Mono” appears on the screen.

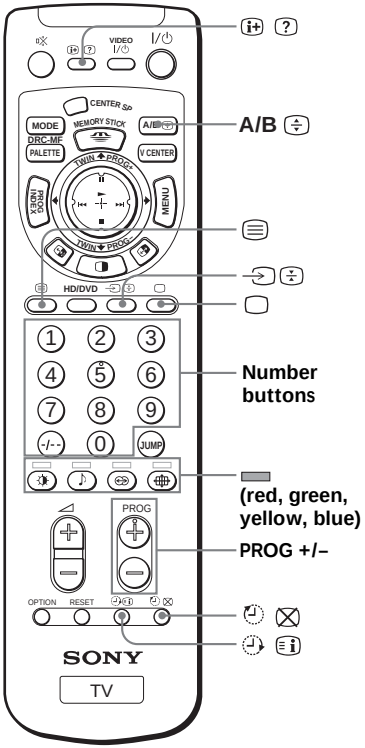
To cancel the monaural sound setting, press A / B again until “Auto” appears on the screen.

Notes

- The “Mono” or “Auto” setting is memorized for each program position.
- You cannot receive a stereo broadcast signal when the TV is in the “Mono” setting. Normally, set the TV to “Auto”.

Viewing Teletext

Some TV stations broadcast an information service called Teletext which allows you to receive various information, such as stock market reports and news.

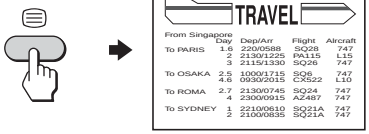


Displaying Teletext

1 Select a TV channel that carries the Teletext broadcast you want to watch.

2 Press ☰ to display the text.

A Teletext page (normally the index page) is displayed. If there is no Teletext broadcast, “100” is displayed at the top left corner of the screen.



To turn off Teletext

Press ▭.

Additional Teletext tasks

To	Do this
display a Teletext page on the TV picture	Press ☰. Each time you press ☰ , the screen changes as follows: Teletext → Teletext and TV → TV.
check the contents of a Teletext service	Press ☰i. An overview of the Teletext contents, including page numbers, appears on the screen.
select a Teletext page	Press the number buttons to enter the three-digit page number of the desired Teletext page.* If you make a mistake, reenter the correct page number. To access the next or previous page, press PROG +/–.
hold (pause) a Teletext page (stop the page from scrolling)	Press ☰ to display the symbol "☰" at the top left corner of the screen. To resume normal Teletext viewing, press ☰ or ☰.
reveal concealed information (e.g., an answer to a quiz)	Press ?. To conceal the information, press the button again.
enlarge the Teletext display	Press ☰. Each time you press ☰, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.
stand by for a Teletext page while watching a TV program	1 Enter the Teletext page number that you want to refer to, then press ⊠. 2 When the page number is displayed, press ☰ to show the text.

* You can also select a Teletext page of any page number that appears in the colored column at the bottom of the screen using the corresponding color-coded button on the remote.

Using FASTEXT

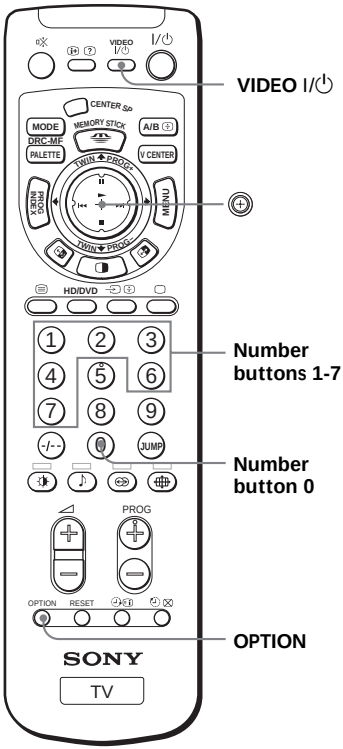
This feature allows you to quickly access a Teletext page that uses FASTEXT. When a FASTEXT program is broadcast, colored menus appear at the bottom of the screen. The color of each menu corresponds to the color-coded buttons on the remote (red ▬, green ▬ , yellow ▬ , and blue ▬).

To access a FASTEXT menu

Press the color-coded button on the remote corresponding to the menu you want. The menu page appears on the screen after a few seconds.

Operating optional components

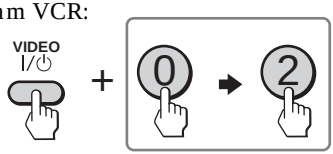
You can use the supplied remote to operate Sony video equipment such as Beta, 8 mm, VHS or DVD.



Setting up the remote to work with other connected equipment

While keeping VIDEO I/⏻ pressed, press the number button 0, then the corresponding number button for the desired equipment (see the chart below).

For example, to operate a Sony 8 mm VCR:



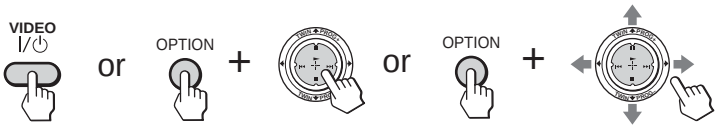
To control	While holding down	First press the number button	Next press the number button
DVD	VIDEO I/⏻	0	0
VTR1 (Beta)	VIDEO I/⏻	0	1
VTR2 (8 mm)	VIDEO I/⏻	0	2
VTR3 (VHS)	VIDEO I/⏻	0	3
MDP	VIDEO I/⏻	0	4
CD	VIDEO I/⏻	0	6
MD	VIDEO I/⏻	0	7

Note

- If the equipment does not have a certain function, the corresponding button on the remote will not operate.

Operating video equipment

Press VIDEO I/⏻, or while keeping OPTION pressed, press ⊕ (►) or move ⊕ up (II), down (■), left (I◄◄) or right (►►I) (see the chart below).



Operating a VCR using the remote

To	Press/Move
turn on/off	VIDEO I/⏻
play	► while keeping OPTION pressed.
stop	■ while keeping OPTION pressed.
fast forward (►►)	►►I while keeping OPTION pressed.
rewind the tape (◄◄)	I◄◄ while keeping OPTION pressed.
pause	II while keeping OPTION pressed. Press again to resume normal playback.
search the picture forward (►►) or backward (◄◄)	►►I or I◄◄ during playback while keeping OPTION pressed. Release to resume normal playback.

Operating a DVD player using the remote

To	Press/Move
turn on/off	VIDEO I/⏻
play	► while keeping OPTION pressed.
stop	■ while keeping OPTION pressed.
pause	II while keeping OPTION pressed. Press again to resume normal playback.
step through different tracks of an audio disc	►►I to step forward or I◄◄ to step backward while keeping OPTION pressed.

continued

Operating an MDP using the remote

To	Press/Move
turn on / off	VIDEO I / ⏻
play	► while keeping OPTION pressed.
stop	■ while keeping OPTION pressed.
pause	II while keeping OPTION pressed. Press again to resume normal playback.
search the picture forward or backward	►►I or I◄◄ during playback while keeping OPTION pressed. Release to resume normal playback.

Operating a CD or MD player using the remote

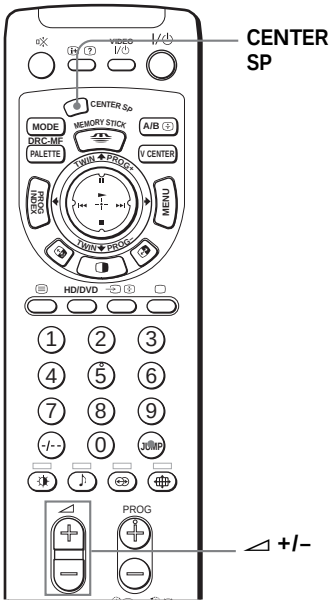
To	Press/Move
turn on / off	VIDEO I / ⏻
play	► while keeping OPTION pressed.
stop	■ while keeping OPTION pressed.
pause	II while keeping OPTION pressed. Press again to resume normal playback.
step through different tracks	►►I to step forward or I◄◄ to step backward while keeping OPTION pressed.

Using the TV's center speaker

You can use the TV's speakers as the center speaker of your audio system and control its sound volume from the remote of the TV.

Notes

- For the speaker connection, see "Connecting an amplifier" on page 16.
- You cannot switch to the center speaker mode while viewing the TWIN pictures.



To switch to the center speaker mode

1 Press CENTER SP.

2 Press +/– to adjust the volume of the sound from the TV's center speaker.

To return to the normal speaker mode

Press CENTER SP again.

Tip

- The center speaker mode is automatically cancelled when you select the video input or the "Memory Stick" viewer, or turn the TV off and on again. It is not cancelled, however, when using the PROGRAM INDEX feature.

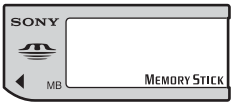
Notes

- If "CENTER IN" is selected for "Speaker" in the "Sound" menu and nothing is connected to the center speaker input terminals on the rear of the TV, no sound is heard from the TV's speakers.
- No sound is heard from the TV's center speakers if the sound source emitted from the amplifier does not contain the center speaker channel.
- When the TV is in the center speaker mode, you cannot use the TWIN pictures feature, or change the surround sound, the wide mode or the "BBE" mode.

Using the “Memory Stick” viewer

About “Memory Stick”

“Memory Stick” (sold separately) is a new, compact, portable, and versatile Integrated Circuit recording medium with a data capacity that exceeds that of a floppy disk. “Memory Stick” is specially designed for exchanging and sharing digital data among “Memory Stick” compatible products such as digital cameras and digital video cameras. Because it is removable, “Memory Stick” can also be used for external data storage.



The “Memory Stick” viewer on your TV allows you to view still images (JPEG* files) and movies (MPEG1** files) stored on “Memory Stick” media.

For more information on using “Memory Stick” media, see “Notes on using “Memory Stick”, “Memory Stick PRO” media” on page 40 and “Notes on Memory Stick Duo” on page 41.

“Memory Stick”, “Memory Stick PRO”, “Memory Stick Duo” and “” are registered trademarks of Sony Corporation.

Notes

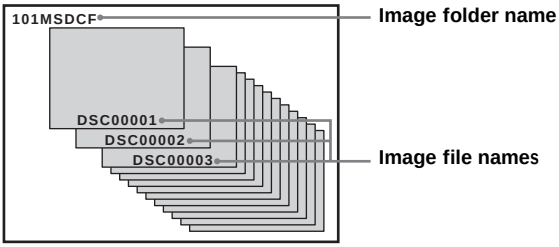
- The data loading speed may differ depending on the “Memory Stick”.
- When you view a still image stored on “Memory Stick” media, the sound is not output from the TV’s speakers. Do not attempt to adjust the volume.
- A “Memory Stick” formatted by a computer may not be used with this TV.

File Compatibility

The “Memory Stick” viewer can display still images and movies that are stored on “Memory Stick” media using the following compression format:

– JPEG* files (DCF compliant*) with an extension, .jpg
– MPEG1** files, MPEG MOVIE, MPEG MOVIE AD, MPEG MOVIE EX, MPEG MOVIE HQ, MPEG MOVIE HQX, MPEG MOVIE CV, VAIO Giga Pocket MPEG1.
– Images with more than 16 horizontal and / or vertical dots per line
– Images with less than 4096 horizontal and / or vertical dots per line

Example: Still images recorded with a Sony digital still camera
Folder name: /DCIM/101MSDCF
File name: DSC00001.JPG



Example: Movie files recorded with a Sony digital still camera
Folder name: /MSSONY/MOML0001
File name: MOV00001.MPG

Note

- The TV's "Memory Stick" viewer cannot display still images and movies stored in TIFF or any other non-JPEG or non-MPEG1 compression format.

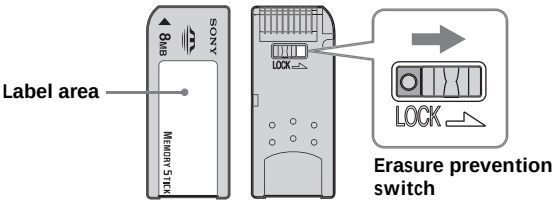
* JPEG stands for "Joint Photographic Experts Group," which is the organization that implemented this format. DCF stands for "Design Rules for Camera File Systems," which are specifications established by the Japan Electronics and Information Technology Industries Association (JEITA).

** MPEG1 stands for "Motion Picture Experts Group" which is the organization that implemented this format and is the typical compression format for movie files.

To prevent accidental erasure of still images and movies

Set the "Memory Stick" erasure prevention switch to "LOCK".

In this position, you cannot rotate the images. (See page 51.)



Tip

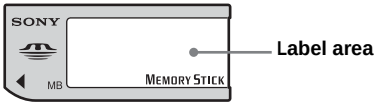
- When you set the erasure prevention switch on a "Memory Stick Duo", use a sharp object such as a ballpoint pen.

continued

Notes on using "Memory Stick", "Memory Stick PRO" media

When using "Memory Stick", "Memory Stick PRO" media, follow these precautions:

- To avoid permanent damage to still image data, do not turn off the TV or remove "Memory Stick" media from the insertion slot while data is being read (as indicated by the "Memory Stick" indicator light being on).
- Avoid touching the terminal of "Memory Stick" media or bringing it into contact with a metal object.
- Do not drop, bend, or submit "Memory Stick" media to external shock.
- Do not disassemble or modify "Memory Stick" media.
- Avoid getting liquid on "Memory Stick" media.
- Apply labels only within the designated label area.



- To avoid permanent damage to still image data, do not use or store "Memory Stick" media in a location subject to:
  - — High temperature (such as near a heater or inside a hot car)
  - — High humidity
  - — Direct sunlight
  - — Corrosive substances
  - — Magnetic fields
  - — Excessive dust
  - — Static electricity or electric noise
  - — Electric surgess
- Store and carry "Memory Stick" media in its original case to ensure protection of stored data.
- Save a backup of stored data.

Notes on “Memory Stick Duo”

“Memory Stick Duo” is a new, compact version of the standard-sized “Memory Stick” recording medium. You can use a “Memory Stick Duo” on your TV by inserting a “Memory Stick Duo” into an adapter before inserting it into the TV.

- Be sure to attach a “Memory Stick Duo” to the adapter with the correct orientation.
- Be sure to insert the “Memory Stick Duo” adapter into the “Memory Stick” slot with the correct orientation. Otherwise, the TV may be damaged.
- Do not insert the “Memory Stick Duo” adapter without the “Memory Stick Duo” attached. Doing so may result in malfunction of the TV.

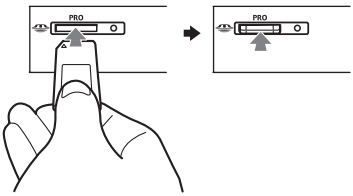
continued

Inserting and removing a "Memory Stick"

To insert a "Memory Stick"

Locate the "Memory Stick" slot (see page 103) and insert the "Memory Stick" into the "Memory Stick" slot as illustrated.

Insert the "Memory Stick" media with the ▲ symbol upward.
When inserted properly, it should slide in with little resistance and click into place. The "Memory Stick" indicator flashes and goes off.



Notes

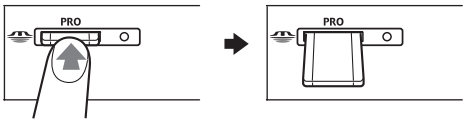
- Be sure to insert the "Memory Stick" in the correct direction. If the "Memory Stick" is forced in the wrong way, it may become damaged.
- Insert only "Memory Stick" media into the "Memory Stick" slot. Attempting to insert other objects into the slot may damage the TV.

To remove a "Memory Stick"

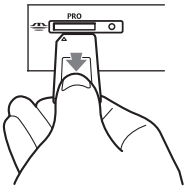
1 Check that the "Memory Stick" indicator is off. (When the light is on, this indicates that the TV is reading data from the "Memory Stick".)

2 Push the "Memory Stick" gently into the slot, and then release it.

The "Memory Stick" media is ejected.



3 Pull the "Memory Stick" completely out of the slot.



Tip

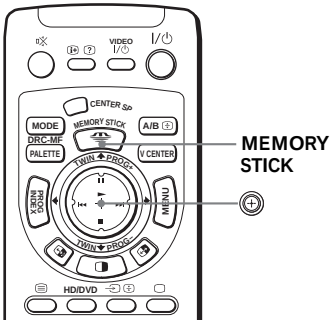
- When removing the "Memory Stick", do not attempt to just pull it from its slot.

Note

- To protect small children from injury from "Memory Stick" media, remove all "Memory Stick" media from the TV's "Memory Stick" slot and store it in a safe location when it is not in use.

Displaying thumbnails of still images and movie files

You can view up to 20 still images and movies on the “Memory Stick” index.

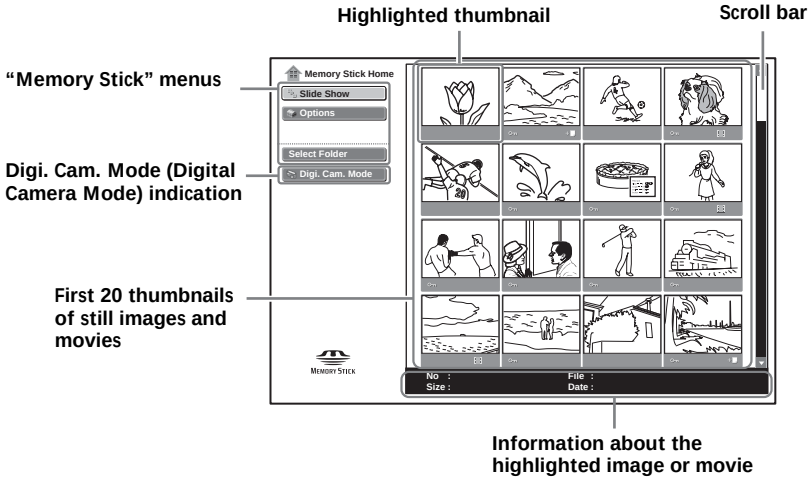


1 Insert a “Memory Stick” into the “Memory Stick” slot of the TV.

For details on inserting a “Memory Stick”, see page 42.

2 Press MEMORY STICK.

The “Memory Stick Home” appears, which displays thumbnails of still image and movie files stored on the “Memory Stick”.



continued

When there are more than 20 still images and movies

Move ⊕ right to elect the scroll bar at the right end of the "Memory Stick Home", then move ⊕ down to display the next 20 thumbnails.

About the "Digi. Cam. Mode" (Digital Camera Mode)

"Digi. Cam. Mode" displays all JPEG and MPEG1 files recorded with the DCF compliant digital cameras. When you set the "Digi. Cam. Mode" to "Off", only the selected files or all the files with the extension .jpg and .mpg can be displayed. The "Memory Stick" viewer of this TV sets "Digi. Cam. Mode" to "On" at the factory. To set "Digi. Cam. Mode" to "Off", see page 62.

Digi. Cam. Mode	Viewable images
"On"	Still images in DCF compliant JPEG files recorded on a Sony digital still camera or digital video camera recorder. Movies in MPEG1 files recorded on a Sony digital still camera or digital video camera.
"Off"	JPEG still pictures and MPEG1 movies in the folder whose name has been changed by a computer.

Notes

- When "Digi. Cam. Mode" is "On", you cannot set "Sort" and "Filter" in the "Options" menu (pages 64 and 65).
- When "Digi. Cam. Mode" is set to "On", the maximum 2000 pieces of still images and / or movies can be displayed. When you want to display more than 2000 pictures, set "Digi. Cam. Mode" to "Off".

To view still images and movies that have been arranged and saved as in a computer

You need to select the folder. To select the folder, set "Digi. Cam. Mode" to "Off".

About the icons on the thumbnail images

(Movie)	Indicates the thumbnail is a movie (MPEG1) file.
(Protect)	Indicates the thumbnail is protected. Protected files cannot be changed or deleted. For details, see "Protecting still images and movies" on page 57.
(Relative file)	Indicates another file named the same in the last four digits exists in the "Memory Stick" but is not displayed. (appears only when the Digi. Cam. Mode is "On".)

Notes

- The Relative file icon is added with the first file of those in the same file format (JPEG, MPEG1, and others) and having the file name with the same last 4-digits.
- If you delete the file with the Relative file icon, the other related files are all deleted at the same time.

About caution displays

	This image data is the JPEG or MPEG1 format that is not compatible.
	There is the thumbnail but it is not DCF compliant.
	There is the image data but the thumbnail is broken.
	The image data is broken.

To return to the normal screen

Press the number buttons or PROG +/–.

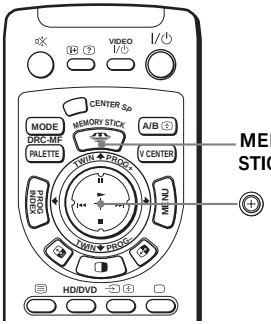
Tip

- When you press PROG +/–, the last selected channel appears.

continued

Viewing still images and movies in sequence — Slide Show

You can view the still images and movies stored on a "Memory Stick" with a specified interval.



1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up or down to select "Slide Show", then press ⊕.

The "Slide Show" menu appears.

4 Move ⊕ up or down to select "Start", then press ⊕.

Still images and movies are displayed according to the setting.

A movie is played automatically. At the end of the movie, the next image appears.

Tip

- You can start the Slide Show even when a still image or movie is selected.

Note

- The still images and movies do not change automatically if "Advance" is in the "Slide Show" menu is set to "Manual".

To exit the “Slide Show”

Press ⊕ on the remote.

To change still images and movies in “Slide Show” manually

1 Press MEMORY STICK to display the “Memory Stick Home”.
2 Move ⊕ up or down to select “Slide Show”, then press ⊕.
The “Slide Show” menu appears.
3 Move ⊕ up or down to select “Advance”, then press ⊕.
4 Move ⊕ up or down to select “Manual”, then press ⊕.
5 Move ⊕ up or down to select “Start”, then press ⊕.
If you move ⊕ right, the next still image or movie appears; if you move ⊕ left, the previous still image or movie appears.

To change the slide advance interval

You can select a time interval with which still images or movies change, from among “5 sec”, “10 sec”, “30 sec”, “1 min”, “5 min” and “10 min”. The factory setting is “5 sec”.

The interval can be changed when “Advance” in the “Slide Show” menu is set to “Auto”.

1 Press MEMORY STICK to display the “Memory Stick Home”.
2 Move ⊕ up or down to select “Slide Show”, then press ⊕.
The “Slide Show” menu appears.
3 Move ⊕ up or down to select “Interval”, then press ⊕.
4 Move ⊕ up or down to select the interval you want to set, then press ⊕.
5 Move ⊕ up or down to select “Start”, then press ⊕.
The “Slide Show” starts.

To start the “Slide Show” from the specified still image or movie

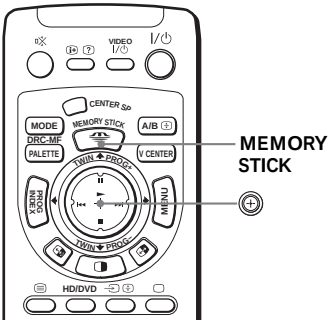
1 Press MEMORY STICK to display the “Memory Stick Home”.
2 Move ⊕ up or down to select the still image or movie from which you want to start the “Slide Show”, then press ⊕.
The “Memory Stick Home” (index menu) appears.
3 Move ⊕ up or down to select “Slide Show”, then press ⊕.

continued

Notes

- The "Movie Player" (page 53) cannot be displayed when "Advance" is set to "Auto".
- You cannot specify the interval when "Advance" is set to "Manual".
- When "Advance" is set to "Auto", a movie file is played to the end regardless of the specified interval. When playback is finished, the next image file is displayed.
- The "Interval" setting does not show the exact time, because the time required for displaying an image depends on its file size.

Viewing a still image on the full screen



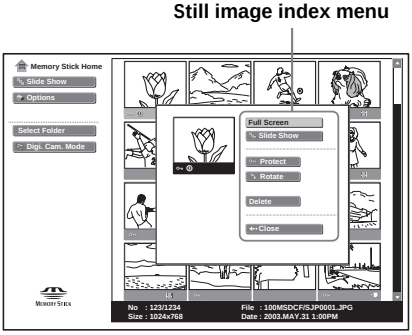
1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up/down/right/left to select the still image you want to view, then press ⊕.

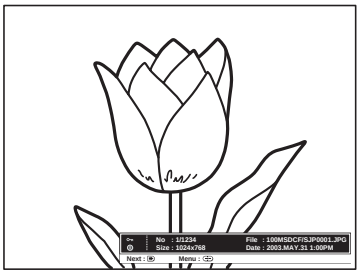
The still image index menu appears.



4 Move ⊕ up or down to select "Full Screen", then press ⊕.

The selected still image is displayed on the full screen.

To go to the previous or next still image, move ⊕ left or right.



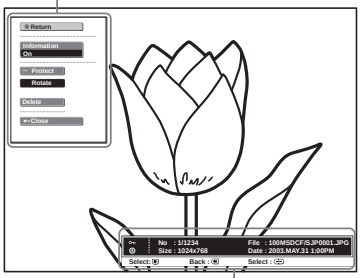
continued

5 Press ⊕.

The image setup menu appears.

To display another still image that is not the previous or next image, move ⊕ up to select "Return", then press ⊕. The "Memory Stick Home" appears.

Image setup menu



File information

Tip

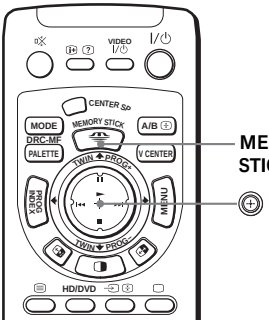
- The file information automatically appears at the bottom right when a still image is displayed on the full screen. You can turn off the display of file information by setting "Information" in the image setup menu to "Off".

Notes

- The full screen display may be rough depending on the still image quality.
- Small size images may not be enlarged on the full screen.
- Displaying a large file will take a longer time.

Rotating a still image

You can rotate a thumbnail of the still image that you have selected from the "Memory Stick Home" or a still image displayed on the full screen, in 90 degree increments clockwise or counterclockwise.



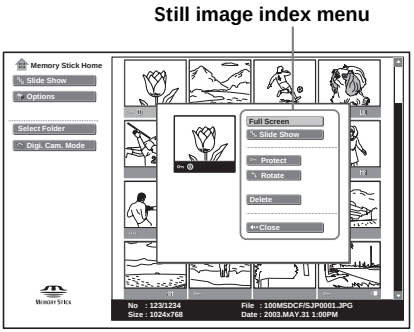
1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up/down/right/left to select the still image you want to rotate, then press ⊕.

The still image index menu appears.



4 Move ⊕ up or down to select "Rotate", then press ⊕.

5 Move ⊕ up or down to select the rotating direction "↻" (clockwise) or "↺"(counterclockwise) , then press ⊕.

Each time you press ⊕, the still image is rotated 90 degrees.

6 Move ⊕ down to select "Close", then press ⊕.

The rotated image is stored.

continued

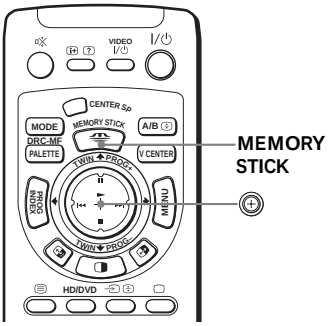
To rotate a full screen image

1 After displaying an image on the full screen (see page 49), press ⊕.
The image setup menu appears.
2 Move ⊕ up or down to select "Rotate", then press ⊕.
3 Move ⊕ up or down to select the rotating direction, then press ⊕.
Each time you press ⊕, the still image is rotated 90 degrees in the selected direction.
4 Move ⊕ down to select "Close", then press ⊕.

Notes

- You cannot rotate movie files.
- You cannot rotate a still image that has been protected (see page 57). Confirm the protect icon in the file information and unlock the protect before rotating.
- You cannot rotate a still image if the "Memory Stick" is locked.

Playing movies — Movie Player



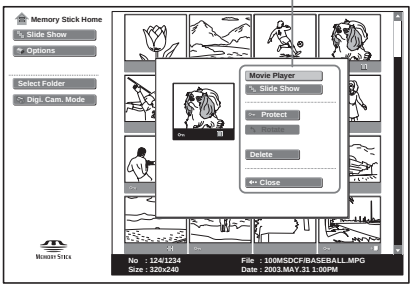
1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up/down/right/left to select the movie you want to play, then press ⊕.

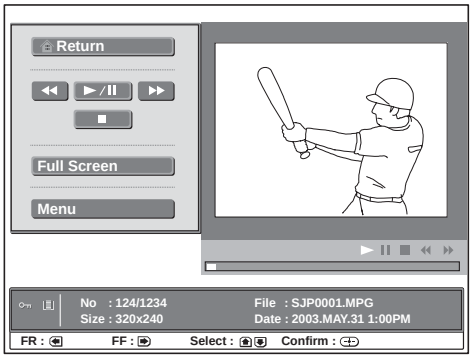
The movie index menu appears.



continued

4 Move ⊕ up or down to select "Movie Player", then press ⊕.

The Movie Player appears.



Movie Player Operation menu

Item	To
"Return"	return to the "Memory Stick Home".
"▶ / ❚❚"	play the movie. Select this item during playback to pause playing.
"■"	stop playback.
"⏮"	Move ⊕ left during movie stop mode to display the previous file on the "Memory Stick". During playback, the control changes to "◀◀" (Fast-reverse) and the movie is rewound rapidly.
"⏭"	Move ⊕ right during movie stop mode to display the next file on the "Memory Stick". During playback, the control changes to "▶▶" (Fast-forward) and the movie is forwarded rapidly.
"Full Screen"	display the movie full screen.
"Menu"	display the movie setup menu to access additional options.

Notes

- If you select ⏮ or ⏭ during the movie stop mode, it may take a longer time to load the previous or next file. During loading the file, "Return" lights up. If you press ⊕ when "Return" is lit, the TV returns to the "Memory Stick Home".
- "◀◀" (Fast-reverse) and "▶▶" (Fast-forward) may not work due to the movie file.

5 Move ⊕ up or down to select "►/❚❚", then press ⊕.

The movie playback starts. At the end of the movie, it returns to the beginning and stops.

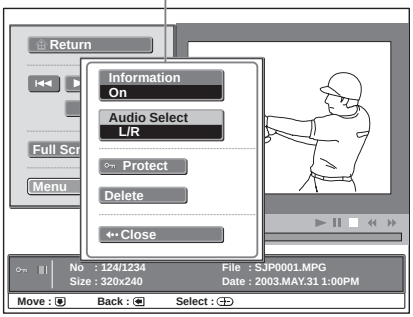
To stop playback manually, move ⊕ up or down to select "■" and press ⊕.

To select the sound

1 On the Movie Player screen, move ⊕ up or down to select "Menu", then press ⊕.

The Movie setup menu appears.

Movie setup menu



2 Move ⊕ up or down to select "Audio Select", then press ⊕.

3 Move ⊕ up or down to select the sound to be heard, then press ⊕.

Audio Select menu and selectable sounds

Item	Stereo program	Bilingual program
L/R	left and right sounds	main and sub sounds
L	left sound	main sound
R	right sound	sub sound

Note

• The "Audio Select" menu is disabled when the movie does not contain sound.

continued

To display the movie on the full screen

1 Display the Movie Player, following steps 1 to 4 on page 53.
2 Move ⊕ up or down to select "Full Screen", then press ⊕.
The movie is displayed on the full screen, and playback starts automatically.

To return to the Movie Player

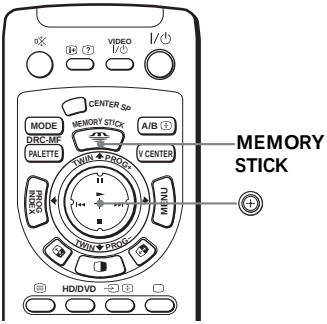
During movie playback, move ⊕ up / down / right / left or press ⊕.

Notes

- Small size movies may not be enlarged on the full screen.
- The full screen display may be rough depending on the movie qualify.
- Enlarging a file may take a time and a short file may not be played.
- "◀◀" and "▶▶" are disabled when a movie is displayed on the full screen.

Protecting still images or movies

You can protect a still image or movie from inaccidental erasure. The protect can be unlocked.



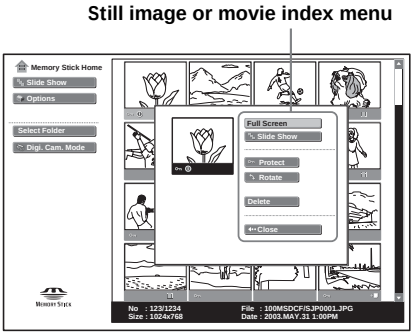
1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up/down/right/left to select the movie you want to protect, then press ⊕.

The still image or movie index menu appears.



4 Move ⊕ up or down to select "Protect", then press ⊕.

5 Move ⊕ up or down to select "On", then press ⊕.

The (protect) icon is displayed.

To unlock the protect, select "Off", then press ⊕.

continued

To protect a full screen image

1 After displaying a still image on the full screen (see page 49), press ⊕.
The image setup menu appears.
2 Move ⊕ up or down to select "Protect", then press ⊕.
3 Move ⊕ up or down to select "On", then press ⊕.

To protect a movie on the Movie Player

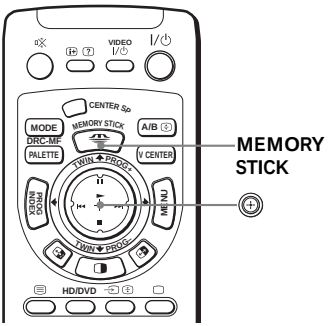
1 After displaying the Movie Player (see page 53), move ⊕ up or down to select "Menu", then press ⊕.
The movie setup menu appears.
2 Move ⊕ up or down to select "Protect", then press ⊕.
3 Move ⊕ up or down to select "On", then press ⊕.

Tip

- The property of the protected image is shown as "Read-only" on a computer.

Deleting a still image or movie

You can delete unnecessary still image and movie files from the "Memory Stick". Before deleting, make sure they are really unnecessary because the deleted images cannot be restored.



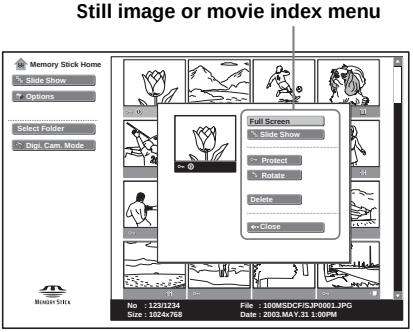
1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up/down/right/left to select the movie you want to delete, then press ⊕.

The still image or movie index menu appears.



4 Move ⊕ up or down to select "Delete", then press ⊕.

5 Move ⊕ up to select "Selected", then press ⊕.

A confirmation message appears.

6 Move ⊕ left to select "Yes", then press ⊕.

To cancel deleting, select "No", then press ⊕.

continued

Notes

- When "Digi. Cam. Mode" is set to "On", deleting a file with the Relative file icon deletes the other related files at the same time. (See page 44).
- Before performing deleting, confirm the file information.
- You cannot delete protected image (see page 57). First unlock the protect.
- If the erasure prevention switch on the "Memory Stick" is in the LOCK position, you cannot delete the still images and movies in that "Memory Stick".

To erase a full screen image

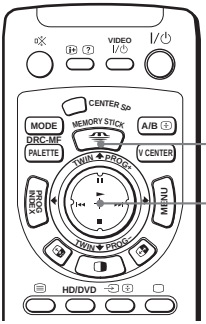
1 After displaying a still image on the full screen (see page 49), press ⊕.
The image setup menu appears.
2 Move ⊕ up or down to select "Delete", then press ⊕.
3 Move ⊕ up to select "Selected", then press ⊕.
A confirmation message appears.
4 Move ⊕ left to select "Yes", then press ⊕.

To erase a movie on the Movie Player

1 After displaying the Movie Player (see page 53), move ⊕ up or down to select "Menu", then press ⊕.
The movie setup menu appears.
2 Move ⊕ up or down to select "Delete", then press ⊕.
3 Move ⊕ up to select "Selected", then press ⊕.
4 Move ⊕ left to select "Yes", then press ⊕.

Displaying the current status of “Memory Stick”

You can display the “Memory Stick” type, total capacity, used capacity and free capacity of the “Memory Stick”.



1 Insert a “Memory Stick” into the “Memory Stick” slot of the TV.

For details on inserting a “Memory Stick”, see page 42.

2 Press MEMORY STICK to display the “Memory Stick Home”.

3 Move ⊕ up or down to select “Options”, then press ⊕.

The “Options” menu appears.

4 Move ⊕ up or down to select “Memory Stick”.

The current status of the “Memory Stick” appears.

continued

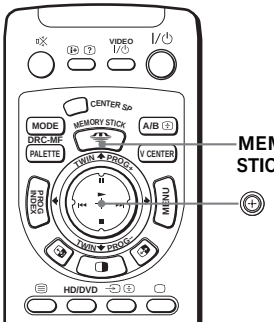
Selecting folders

To view the still images and movies stored in different folders using a computer, you need to select the folder.

Before operating this function, make sure that "Digi. Cam. Mode" is set to "Off".

Tip

- If you set "Digi. Cam. Mode" to "Off", you can display more than 2,000 images and movies on the screen.



1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

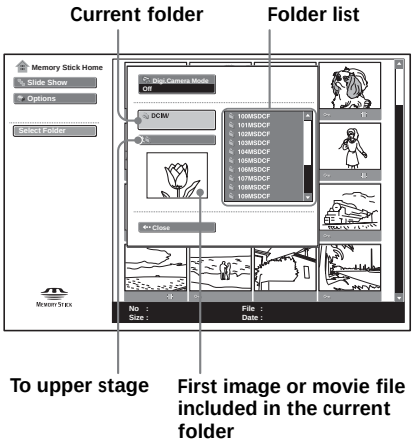
2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up or down to select "Select Folder", then press ⊕.

The "Select Folder" menu appears.

4 Move ⊕ up or down to select "Digi. Cam. Mode", then press ⊕.

5 Move ⊕ up or down to select "Off", then press ⊕.



6 Move ⊕ right to select the folder list.

7 Move ⊕ up or down to select the folder which includes the file you want to view, then press ⊕.

8 Move ⊕ up or down to select “Close”, then press ⊕ or move ⊕ left.

The still images and movies included in the selected folder are displayed on “Memory Stick Home”.

continued

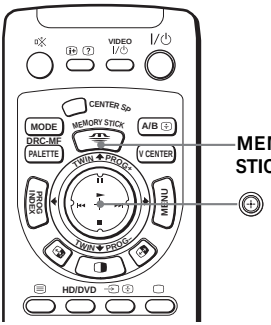
Sorting images — Options

You can change the displaying order of the images in a "Memory Stick", in alphabetical order by filename, in chronological order by recording date.

Before operating this function, make sure that "Digi. Cam. Mode" is set to "Off".

Tip

- If you set "Digi. Cam. Mode" to "Off", you can display more than 2,000 images and movies on the screen.



1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up or down to select "Options", then press ⊕.

The "Options" menu appears.

4 Move ⊕ up or down to select "File", then press ⊕.

5 Move ⊕ up or down to select "Sort", then press ⊕.

6 Move ⊕ up or down to select the desired item, then press ⊕.

Sort menu

Item	To
Name Order ↓A Z	sort in alphabetical order (A to Z) by filename
Name Order ↓Z A	sort in reverse alphabetical order (Z to A) by filename
Date Order ↓1 9	sort in chronological order by recording (1 to 9)
Date Order ↓9 1	sort in reverse chronological order by recording (9 to 1)

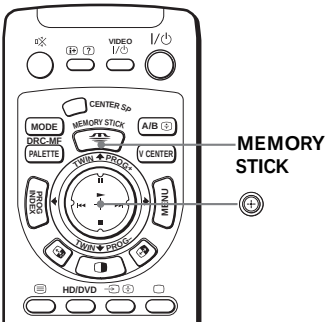
Note

- If an image file has been processed by a computer, the modified date may be displayed for that file.

Displaying either still images or movies — Options

You can display either the still images or the movies that are stored in a "Memory Stick".

Before operating this function, make sure that "Digi. Cam. Mode" is set to "Off".



1 Insert a "Memory Stick" into the "Memory Stick" slot of the TV.

For details on inserting a "Memory Stick", see page 42.

2 Press MEMORY STICK to display the "Memory Stick Home".

3 Move ⊕ up or down to select "Options", then press ⊕.

The "Options" menu appears.

4 Move ⊕ up or down to select "File", then press ⊕.

5 Move ⊕ up or down to select "Filter", then press ⊕.

6 Move ⊕ up or down to select the desired item, then press ⊕.

Filter menu

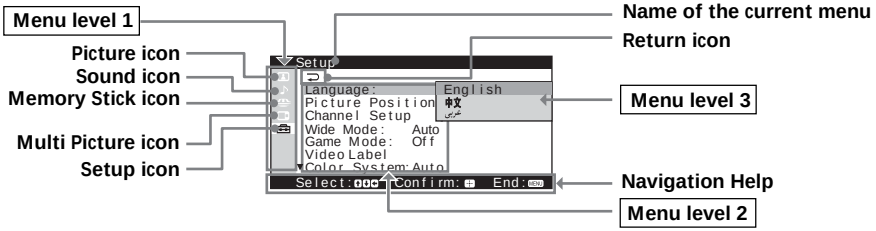
Item	Images to be displayed
"Show Stills"	Still images only
"Show Movies"	Movies only
"Off"	Still images and movies

Tip

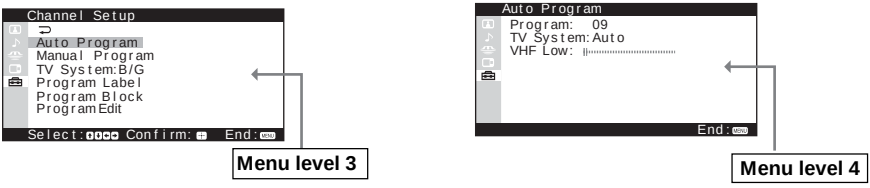
- If"Show Stills" or "Show Movies" is selected on "Filter" , the selected image type (still image or movie) is displayed on "Memory Stick Home".

Introducing the menu system

The MENU button lets you open a menu and change the settings of your TV. The following is an overview of the menu system.



Selecting some items in Menu level 2 of Setup menu displays another menu (Menu level 3), and selecting some options in this menu also displays the adjustment menu (Menu level 4).



Level 1	Level 2/Level 3	Level 3/Level 4/Function
"Picture"	"DRC-MF"	Selects the "DRC-MF" mode: "DRC1250" → "DRC100" → "Progressive"
	"DRC Palette"	Selects one of the three custom DRC palettes. "Custom 1" → "Custom 2" → "Custom 3"
	"Picture Mode"	Selects the picture mode: "Dynamic" → "Standard" → "Hi-Fine" → "Personal"
	"Picture Adjustment"	Adjusts the "Personal" option: "Picture" → "Brightness" → "Color" → "Hue" → "Sharpness" → "Color Temperature" → "Reset"
	"3D-NR"	Activates or deactivates picture noise reduction mode.
"Sound"	"Sound Mode"	Selects the sound mode: "Dynamic" → "Drama" → "Soft" → "Personal"
	"Sound Adjustment"	Adjusts the "Personal" option: "Treble" → "Bass" → "BBE"* → "Reset"
	"Balance"	Adjusts the balance between the left and right speaker volume.
	"Intelligent Volume"	Activates or deactivates the Intelligent Volume feature.
	"Surround"	Selects the "Surround" mode: "TruSurround" → "Simulated" → "Off"
	"Speaker"	Selects the speaker mode: "MAIN" or "CENTER IN".

* Licensed by BBE Sound, Inc. under USP4638258, 4482866.
"BBE" and BBE symbol are trademarks of BBE Sound, Inc.

Level 1	Level 2/Level 3	Level 3/Level 4/Function
"Memory Stick" 	"Memory Stick Menu"	Displays still pictures and movies stored in a "Memory Stick". You can also display this menu by pressing MEMORY STICK on the remote.
"Multi Picture" 	"Twin"	Displays a TV program beside the main screen.
	"Swap"	Swaps the pictures between the left and right screens.
	"Program Index"	Scrolls all tuned programs one by one for direct selection.
"Setup" 	"Language"	Changes the menu language: "English" → "中文" (Chinese) → "عربي" (Arabic)
	"Picture Position"	Adjusts the picture position if it is not aligned with the TV screen.
	"Picture Rotation"	Adjusts the declination of the picture.
	"Picture V-Position"	Adjusts the vertical position of the picture.
	"Channel Setup"	Presets channels, or select the TV system.
	"Auto Program"	The "Auto Program" menu is displayed. Presets channels automatically.
	"Manual Program"	The "Manual Program" menu is displayed. Presets channels manually.
	"TV System"	Selects the TV system: "B / G" → "I" → "D / K" → "M"
	"Program Label"	Assigns labels (such as station names) to the preset channels.
	"Program Block"	Locks out specific channels.
	"Program Edit"	Changes the order of the preset channels.
	"Wide Mode"	Activates or desactivates "Wide Mode" feature.
	"Game Mode"	Activates or deactivates GAME MODE feature.
	"Video Label"	Assigns labels to the audio / video equipment connected to the TV.
	"Video Input"	Selects the input to which the audio / video equipment is connected. "Video 1" → "Video 2" → "Video 3" → "Video 4" → "HD / DVD 1" → "HD / DVD 2"
	"Label"	Selects one of the prefixed labels or assign your own label in "Edit" position. "Video 1" → "VCR" → "SAT" → "Game" → "Edit"
	"Color System"	Selects the color system: "Auto" → "PAL" → "SECAM" → "NTSC3.58" → "NTSC4.43"
	"Eco Mode"	Activates or deactivates ECO MODE feature.
	"S Input"	Selects the S video input mode: "Auto" or "Off".

continued

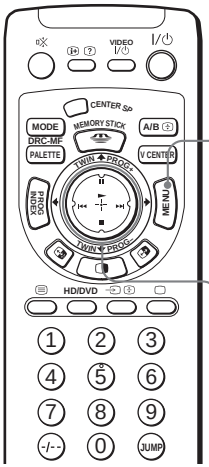
To restore the factory settings

Press the RESET button on the remote.

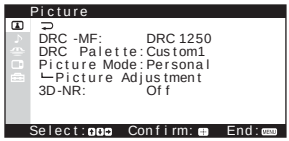
The settings other than the following items in the menu can be reset by using the RESET button:

– “Language”
– “Program” and “Skip” in “Manual Program”
– “Fine” in “Manual Program”
– “TV System”
– “Memory Stick Menu” items
– “Picture Position”
– “Personal” in “Picture Mode” and “Sound Mode“
– “Program Label”
– “Video Label”
– “DRC Palette“ Custom settings

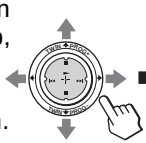
How to use the menu

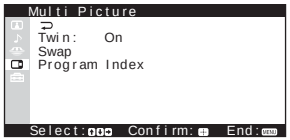


Press MENU to display the menu.

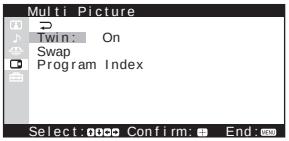


Move the button joystick ( ) up, down, left or right to select the desired item.





Press the button joystick ( ) to confirm the selection and/or go to the next level.



Other menu operations

To	Press/Move
Adjust the setting value	Move up, down, left or right.
Move to the next / previous menu level	Move left or right.
Cancel the menu	Press MENU.

Tips

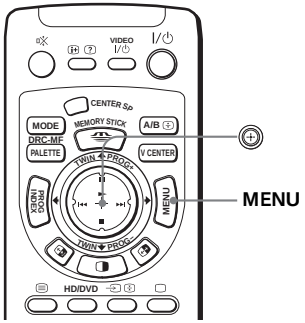
- If you want to exit from Menu level 2 to Menu level 1, move up or down until the return icon ( ) is highlighted, then press .
- The MENU, (Enter), and ↑/↓/←/→ (up / down / left / right) buttons on the TV can also be used for the operations above.

Note

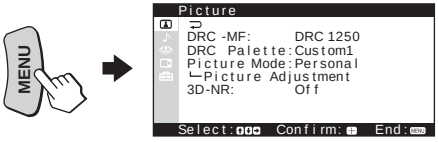
- If more than 90 seconds elapse between entries, the menu screen other than that for “Memory Stick” menu automatically disappears.

Changing the “Picture” setting

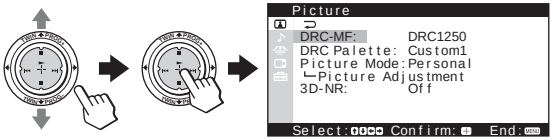
The “Picture” menu allows you to: adjust the picture setting, view higher quality pictures and reduce picture noise.



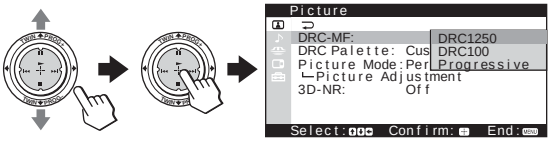
1 Press MENU.



2 Move ⊕ up or down to select 🎨, then press ⊕.

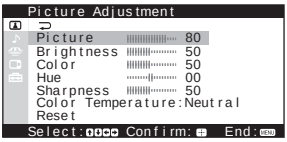


3 Move ⊕ up or down to select the desired option (see the table below), then press ⊕.



Select	To
“DRC-MF”	activate the Digital Reality Creation-Multi function feature to display higher quality pictures. Move ⊕ up or down to select “DRC1250”, “DRC100” or “Progressive”, then press ⊕.
“DRC Palette”	select one of the customized settings of the picture Reality and Clarity levels. Move ⊕ up or down to select “Custom 1”, “Custom 2” or “Custom 3”, then press ⊕.
“Picture Mode”	receive suitable picture mode. Move ⊕ up or down to select “Dynamic”, “Standard”, “Hi-Fine”, “Personal”*, then press ⊕.

* When the “Personal” mode is selected, the last adjusted picture setting in the “Picture Adjustment” menu is received (see page 72).

Select	To
“Picture Adjustment”	adjust the picture quality when “Picture Mode” is set to “Personal”. 
“3D-NR”	improve the picture quality of TV or video if a signal received is weak. Move ⊕ up or down to select “On”, then press ⊕. To cancel, select “Off”, then press ⊕.

Tips

- For details on the options under the “DRC-MF” and “DRC Palette” modes, see pages 21 and 22, respectively.
- When high-definition (HD) or progressive signals are input, “DRC-MF” and “DRC Palette” do not function.
- When using the “Memory Stick” viewer, “DRC-MF”, “DRC Palette” and “3D-NR” do not function.
- Some items of the “Picture Adjustment” menu are not available for the pictures stored in a “Memory Stick”.

To return to the normal screen

Press MENU.

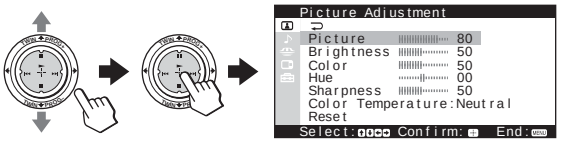
continued

Adjusting the "Picture Adjustment" options

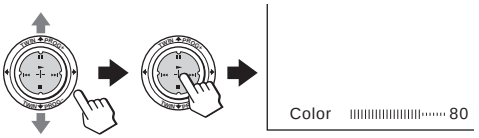
You can access the "Picture Adjustment" menu only when you have selected "Personal" for "Picture Mode".

1 Display the "Picture" menu and select "Personal" for "Picture Mode".

2 Move ⊕ up or down to select "Picture Adjustment", then press ⊕.



3 Move ⊕ up or down to select the desired item (e.g., "Color"), then press ⊕.



4 Adjust the value or select the desired option according to the following table, then press ⊕.

For	Move ⊕ down or left to	Move ⊕ up or right to
"Picture"	decrease picture contrast	increase picture contrast
"Brightness"	darken the picture	brighten the picture
"Color"	decrease color intensity	increase color intensity
"Hue"*	increase red picture tones	increase green picture tones
"Sharpness"	soften the picture	sharpen the picture
"Color Temperature"	Move ⊕ up or down to select "Cool", "Neutral" or "Warm".	
"Reset"	Select "Reset" and press ⊕ to reset the picture to the factory preset settings.	

* You can adjust "Hue" for the NTSC color system only.

5 Repeat steps **3** and **4** to adjust other items.

The adjusted settings will be received when you select "Personal".

Specifications

	KV-HR34 M61	KV-HR29 M61
Power requirements	110–240 V AC, 50/60 Hz	
Power consumption (W)	Indicated on the rear of the TV.	
Television system	B/G, I, D/K, M	
Color system	PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58	
Available language for Teletext	English, Farsi, French	
Stereo/Bilingual system	NICAM Stereo/Bilingual B/G, I, D/K; A2 Stereo/Bilingual (German) B/G	
Channel coverage		
B/G	VHF : E2 to E12 / UHF : E21 to E69 / CATV : S01 to S03, S1 to S41	
I	UHF : B21 to B68 / CATV : S01 to S03, S1 to S41	
D/K	VHF : C1 to C12, R1 to R12 / UHF : C13 to C57, R21 to R60 / CATV : S01 to S03, S1 to S41, Z1 to Z39	
M	VHF : A2 to A13 / UHF : A14 to A79/ CATV : A-8 to A-2, A to W+4, W+6 to W+84	
(Antenna)	75-ohm external terminal	
Audio output (Speaker)	7.5W + 7.5W	
3D Woofer	15W	
Number of terminal		
(Video)	Input: 4 Output: 1	Phono jacks; 1 Vp-p, 75 ohms
(Audio)	Input: 6 Output: 1	Phono jacks; 500 mVrms
(S Video)	Input: 2	Y: 1 Vp-p, 75 ohms, unbalanced, sync negative C: 0.286 Vp-p, 75 ohms
(Component Video)	Input: 2	Phono jacks Y: 1 Vp-p, 75 ohms, sync negative P_B/C_B: 0.7 Vp-p, 75 ohms P_R/C_R: 0.7 Vp-p, 75 ohms Audio: 500 mVrms
(G/B/R/HD/VD Video)	Input: 1	Phono jacks G: 0.7 Vp-p, 75 ohms, B: 0.7 Vp-p, 75 ohms, R: 0.7 Vp-p, 75 ohms HD: 0.7 Vp-p, 75 ohms, VD: 0.7 Vp-p, 75 ohms
(Center Speaker)	Input:1	120 W max., 8 ohms
(Headphones)	Output: 1	Stereo minijack
Picture tube	34in.	29in.
Tube size (cm) (measured diagonally)	86	72
Screen size (cm) (measured diagonally)	80	68
Dimensions (w/h/d, mm)	898 × 706 × 575	775 × 617 × 506
Mass (kg)	85	58

Design and specifications are subject to change without notice.