

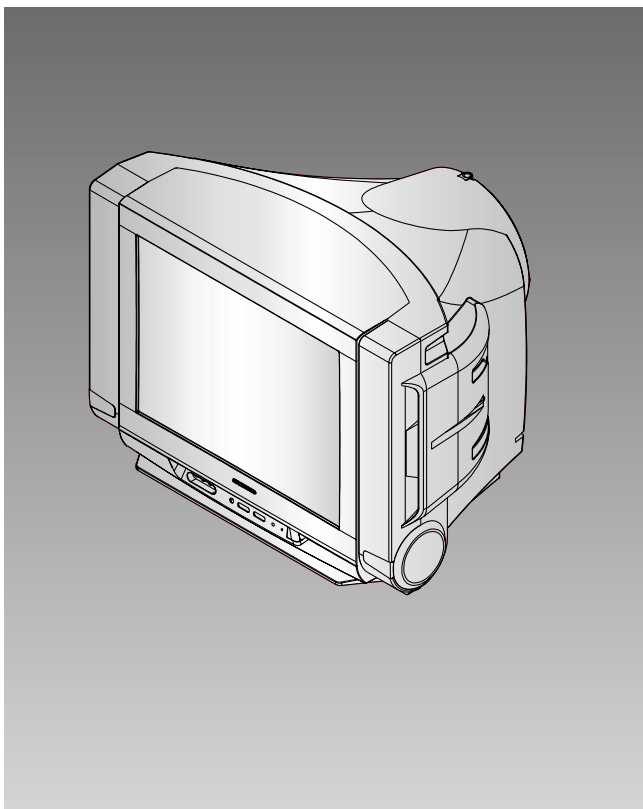
SAMSUNG

COLOR TELEVISION RECEIVER

Chassis : KS2A(P) (Rev. 2)
Model : CS21S8NAS/MUR

SERVICE *Manual*

COLOR TELEVISION RECEIVER



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1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. **Leakage Current Hot Check (Figure 1-1):**
Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

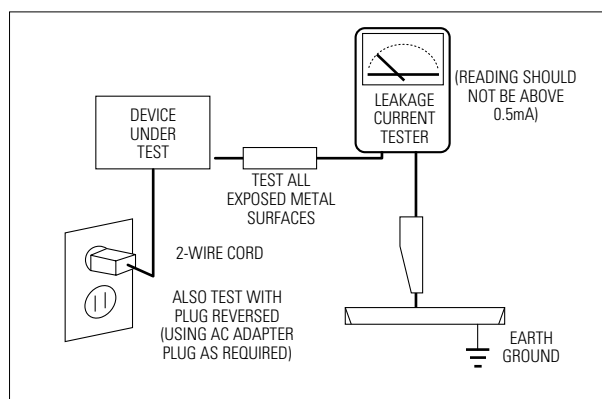


Fig. 1-1 AC Leakage Test



6. **Antenna Cold Check:**
With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
7. **X-ray Limits:**
The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.
8. **High Voltage Limits:**
High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced.
(X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

Heed the high voltage limits. These include the X-ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

1-1 Safety Precautions (Continued)

9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
10. Design Alteration Warning:
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
11. Hot Chassis Warning:
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.
13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
16. Picture Tube Implosion Warning:
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
18. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.

Components that are critical for safety are indicated in the circuit diagram by shading, () or (). Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to:
(a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

2. Reference Information

2-1 Tables of Abbreviations and Acronyms

Table 2-1 Abbreviations

A	Ampere	MV	Megavolt
Ah	Ampere-hour	MW	Megawatt
Å	Angstrom	MΩ	Megohm
dB	Decibel	m	Meter
dBm	Decibel Referenced to One Milliwatt	μA	Microampere
°C	Degree Celsius	μF	Microfarad
°F	Degree Fahrenheit	μH	Microhenry
°K	degree Kelvin	μm	Micrometer
F	Farad	μs	Microsecond
G	Gauss	μW	Microwatt
GHz	Gigahertz	mA	Milliampere
g	Gram	mg	Milligram
H	Henry	mH	Millihenry
Hz	Hertz	ml	Milliliter
h	Hour	mm	Millimeter
ips	Inches Per Second	ms	Millisecond
kWh	Kilowatt-hour	mV	Millivolt
kg	Kilogram	nF	Nanofarad
kHz	Kilohertz	Ω	Ohm
kΩ	Kilohm	pF	Picofarad
km	Kilometer	lb	Pound
km/h	Kilometer Per Hour	rpm	Revolutions Per Minute
kV	Kilovolt	rps	Revolutions Per Second
kVA	Kilovolt-ampere	s	Second (Time)
kW	Kilowatt	V	Volt
l	Liter	VA	Volt-ampere
MHz	Megahertz	W	Watt
		Wh	Watt-hour

Table 2-2 Table of Acronyms

ABL	Automatic Brightness Limiter	I/O	Input/output
AC	Alternating Current	L	Left
ACC	Automatic Chroma Control	L	Low
AF	Audio Frequency	LED	Light Emitting Diode
AFC	Automatic Frequency Control	LF	Low Frequency
AFT	Automatic Fine Tuning	MOSFET	Metal-Oxide-Semiconductor-Field-Effect-Tr
AGC	Automatic Gain Control	MTS	Multi-channel Television Sound
AM	Amplitude Modulation	NAB	National Association of Broadcasters
ANSI	American National Standards Institute	NEC	National Electric Code
APC	Automatic Phase Control	NTSC	National Television Systems Committee
APC	Automatic Picture Control	OSD	On Screen Display
A/V	Audio-Video	PCB	Printed Circuit Board
AVC	Automatic Volume Control	PLL	Phase-Locked Loop
BAL	Balance	PWM	Pulse Width Modulation
BPF	Bandpass Filter	QIF	Quadrature Intermediate Frequency
B-Y	Blue-Y	R	Right
CATV	Community Antenna Television (Cable TV)	RC	Resistor & Capacitor
CB	Citizens Band	RF	Radio Frequency
CCD	Charge Coupled Device	R-Y	Red-Y
CCTV	Closed Circuit Television	SAP	Second Audio Program
Ch	Channel	SAW	Surface Acoustic Wave(Filter)
CRT	Cathode Ray Tube	SIF	Sound Intermediate Frequency
CW	Continuous Wave	SMPS	Switching Mode Power Supply
DC	Direct Current	S/N	Signal/Noise
DVM	Digital Volt Meter	SW	Switch
EIA	Electronics Industries Association	TP	Test Point
ESD	Electrostatic Discharge	TTL	Transistor Transistor Logic
ESD	Electrostatically Sensitive Device	TV	Television
FBP	Feedback Pulse	UHF	Ultra High Frequency
FBT	Flyback Transformer	UL	Underwriters Laboratories
FF	Flip-Flop	UV	Ultraviolet
FM	Frequency Modulation	VCD	Variable-Capacitance Diode
FS	Fail Safe	VCO	Voltage Controlled Oscillator
GND	Ground	VCXO	Voltage Controlled Crystal Oscillator
G-Y	Green-Y	VHF	Very High Frequency
H	High	VIF	Video Intermediate Frequency
HF	High-Frequency	VR	Variable Resistor
HI-FI	High Fidelity	VTR	Video Tape Recorder
IC	Inductance-Capacitance	VTVM	Vacuum Tube Voltmeter
IC	Integrated Circuit	TR	Transistor
IF	Intermediate Frequency		

2-2 IC Line Up

Table 2 - 3 IC Line - Up					
NO	BOARD	LOC. NO	SPEC	DESCRIPTION	REMARK
1	MAIN	IC201S	VDP3112B	Video Processor	Refer to Table 2-3-1
		IC601	MSP3410D	Multistandard Sound Processor	Refer to Table 2-3-2
		IC901	SDA555X	MICOM, TTX(MTP)	
		IC902	KS24L161	EEPROM	
		IC602	TDA7297	Audio AMP	Refer to Table 2-3-3
		HIC201	DRGB001	RGB Drive AMP Hybrid IC	VM Option
		IC301	LA7845	Vertical IC	
		Q401	KSD5703	Horizontal Drive IC	DH01
		D409	FMP-3FU		
		IC401	KA393	E/W Drive IC	
		Q404	IRF620		
		IC801S	3S1265RD 3S1265R	SPS Controllor	
		D801S	RBV606	Bridge Diode	
		PC801S	PC123Y	Photo Coupler	
		IC805	KA78R05	5V Controlled Regulator	DDR01
		D806	FML-G12S	Rectifier Diode	
		D807	F10V20S		
		D805	FMG-G26S F10V60S		
		IC804	KA7806	6V Regulator	
		IC803	KA78R08	8V Controlled Regulator	
		IC903	KA78RM33	3.3V Regulator	
		IC904	KIA7025AP	MICOM Reset IC	
		Q909	2N7000	IIC Level Shifter	
		Q910			
		TU01	TCPS3001PD09D(S)	Main Tuner with IF Block	Refer to Table 2-3-4
		D813	FML-G12S	Rectifier Diode	

Table 2 - 3 IC Line - Up

NO	BOARD	LOC. NO	SPEC	DESCRIPTION	REMARK
2	CRT	IC501	TDA6101Q	Video Output AMP R.G.B Drive	PCB Version A,B,C,D
		IC502			
		IC503			
		IC501	STV5109	Video Output AMP R.G.B Drive	PCB Version F,G,H,J
3	V-S/W	ICS01	TEA6425	Video Switching IC with Adder Output	Option
4	PIP	ICP01	SDA9488X	High-end Picture-In Picture IC	Option

Table 2-3-1 VIDEO IC

SPEC	FUNCTION	REMARK
VDP3112B	50Hz Basic 1H Comb Filter	
VDP3130Y-B2	50Hz, 2H Comb Filter, DVD Input	

Table 2-3-2 SOUND IC

SPEC	FUNCTION	REMARK
MSP3400D	Multistandard, A2 Stereo, Equalizer, 2 Scart, RCA9P	
MSP3410D	Multistandard, A2 Stereo, Nicam, Equalizer, 2 Scart, RCA9P	
MSP3405D/BSP3505D	Multistandard, Line-Stereo, Mono, RCA9P	

Table 2-3-3 SOUND AMP

SPEC	FUNCTION	REMARK
TDA7297	15W x 2CH, 10W x 2CH	
TDA7266S	5W x 2CH	

Table 2-3-4 TUNER

SPEC	FUNCTION	REMARK
TCPS3001PD09A(S)	CS, Stereo	IF IC = Sanyo
TCPS3001PD09D(S)	CS, Stereo	IF IC = Philips
TCPS3001PD09C(S)	CS, Stereo, India	
TAFC-Z141D	CS, Stereo	

Table 2-3-5 HORIZONTAL DRIVE IC (Q401)

SPEC	FUNCTION	REMARK
KSD5703	50Hz, With EW Model	
KSC5386	50Hz, W/O EW Model	

MEMO

3. Specifications

Television System	CS	PAL/SECAM-B/G,D/K,I, NTSC-M	Depending on Tuner
	CZ	PAL/SECAM-B/G,D/K,I, NTSC4.43	
Antena Input		75ohms, Coaxial Cable	
Power	Consumption	65W (Applied When 21" Flat)	
	Requirements	220V Only	
		Free Voltage	Not Present R815
Frequency	50/60Hz		
Sound	Output	15W x 2CH	
		10W x 2CH	
		5W x 2CH	
	Effect	Turbo Sound	
		Pseudo Stereo	
Jacks	Front (AV2)	RCA Input	
		S-VHS	Option
		Head-Phone	
	Back	2Scart Input/Output	AV1 : Scart I/O, RGB Input, RF Out AV2 : Scart I/O, Monitor Out
		DVD Input(YPbPr)	Option
		RCA Input/Output	AV1: Video/Audio-R/Audio-L AV2: Video/Audio-R/Audio-L Monitor Out : Video/Audio-R/Audio-L
		S-VHS	Option

Specifications are subject to change.

MEMO

4. Alignment and Adjustments

4-1 General Alignment Instructions

1. Usually, a color TV-VCR needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. Observe the picture for good black and white details. There should be objectionable color shading; if color shading is present, demagnetize, perform purity and convergence adjustments described below.
3. Use the specified test equipment or its equivalent.
4. Correct impedance matching is essential.
5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.
6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
8. To protect against shock hazard, use an isolation transformer.

4-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set is moved or turned in a different direction, the power should be OFF for at least 10 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before turning power OFF.

If color shading persists, perform the following Color purity and Convergence adjustments.

4-3 High Voltage Check

CAUTION : There is no high voltage adjustment on this chassis. The B+ power supply should be +135 volts (with full color- bar input and normal picture level).

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 30 KV under any conditions.

4-4 FOCUS Adjustment

1. Input a black and white signal.
2. Adjust the tuning control for the clearest picture.
3. Adjust the FOCUS control for well defined scanning lines in the center area of the screen.

4-5 SCREEN Adjustment

1. Input Toshiba Pattern
2. Enter "Service Mode".(Refer to "4-8-1 Service Mode")
3. Select "G2-Adjust".
4. Set the values as below.

Table 1. Screen Adjustment Table

No	INCH / CRT	IBRM		WDRV		CDL		COLR G B (Smallesz Value)		REGION
		6101	5109	6101	5109	6101	5109	6101	5109	
1	14" / SDI	205	205	35	35	100	100	100	100	Noraml
2	15PF / SDI	220	225	35	35	200	160	65	100	
		215	215	35	35	100	100	100	100	CIS
3	21" 1.7R / SDI	220	215	35	45	230	160	65	80	Noraml
4	21" 1.7R / JCT	220	220	35	35	200	200	150	150	
5	21PF / TSB	220	225	35	45	230	185	65	75	
6	21PF / LG	230	225	35	45	230	175	65	165	
7	21PF / SDI	220	220	35	35	230	200	65	145	
8	25PF / SDI	210	205	35	45	150	150	65	140	
9	29" 1.3R / SDI	220	200	35	45	180	180	65	150	
10	25" 1.3R/SDI	220	210	35	35	230	220	65	130	
11	30"	210	200	35	45	160	180	100	130	

5. Turn the SCREEN VR until "MRCR G B" and "MRWDG" are green and those value are about 100.
(The incorrect SCREEN Voltage may result that "MRCR G B" and "MRWDG" should be red)

4-6 E²PROM (IC902) Replacement

1. When IC902 is replaced, all adjustment data revert to the initial values.
So, all adjustment values when servicing should be readjusted.
2. After IC902 is replaced, connect the AC power supply cord.
3. Turn the power switch ON.
4. In stand-by, warm up the TV for at least 10 seconds.
5. Power on the TV.

4-7 White Balance Adjustment

■ Equipment : Color-Analyzer (CA-100)

■ Input Signal : Pattern signal (Toshiba pattern)

1. Select STANDARD from the menu.
2. Input an 100% White pattern.
3. Enter the "Service Mode". (Refer to "4-8 Service Mode")
4. Warm up the TV set at least for 30 minutes.
5. Input a Toshiba pattern signal.
6. Enter the "Video Adjust1". (Refer to table 2.)
 - Adjust "Sub Contrast" so that Y (luminance) becomes $65 \text{ ft} \pm 3$.
 - Use "Red Drive" and "Blue Drive" to adjust High-Light (x : 265, y : 265)
 - Adjust "Sub Bright" so that Y (luminance) becomes $1.2\text{ft} \pm 0.3$.
 - Use "Red Cutoff" and "Blue Cutoff" to adjust Low-Light (x : 265, y : 265).
7. Adjust CA-100 so that the final adjustment value can be fixed.
8. Use the Channel Up/Down (▲/▼) buttons to move the cursor on the adjustment modes.
9. Use the Volume +/- buttons to change the adjustment value.

Table 2. White Balance Table

Area	Inch	High			Low		
		X	Y	Luminance (ft)	X	Y	Luminance (ft)
East South Asia	15PF	265	265	85	265	265	1.8
	21" 1.7R	265	265	50	265	265	1.2
	21PF	265	265	60	265	265	1.0
	25"1.3R	265	265	45	265	265	1.0
	25PF	265	265	40	265	265	1.2
	29"1.3R	265	265	35	265	265	1.0
	30"	265	265	35	265	265	1.0
Middle East Asia & Africa	14"	290	300	55	290	300	1.8
	15PF	290	300	85	290	300	1.8
	21" 1.7R	290	300	50	290	300	1.2
	21PF	290	300	60	290	300	1.0
	25" 1.3R	290	300	45	290	300	1.0
	25PF	290	300	40	290	300	1.2
	29"1.3R	290	300	35	290	300	1.0
	30"	290	300	35	290	300	1.0
CIS	15PF	272	270	50	265	266	2.2
	21PF	272	270	50	265	266	2.0
	25" 1.3R	272	270	40	265	266	2.2
	25PF	272	270	30	265	266	2.2
	29" 1.3R	272	270	30	265	266	2.2
Australia	15PF	292	307	85	301	311	1.8
	21PF	292	307	60	301	311	1.0
	25" 1.3R	292	307	45	301	311	1.0
	25PF	292	307	40	301	311	1.2
	29" 1.3R	292	307	35	301	311	1.0

4-8 Factory Adjustment

4-8-1 Service Mode

1. To enter the "Service Mode", Press the remote-control keys in this sequence :

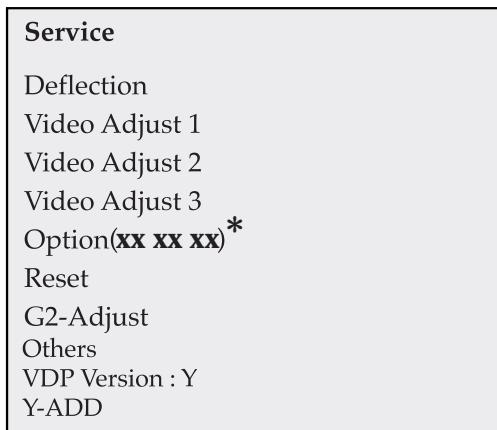
- If you do not have Factory remote-control



- If you have Factory remote-control



2. After the Service Mode is entered, the initial screen is as shown in the figure below.



* These hexa digits are check sum value which depends on the MICOM version. If check sum value is changed, the value of E²PROM Data newly initialed.

3. Use the Channel Up/Down buttons to move the cursor in the adjustment parameters.

Note :

- When CRT, CRT PCB, FBT, E²PROM (sometimes MICOM) is replaced, the adjustment values should be controlled.
- After the Service adjustment is completed, Do not select "Reset" in the service mode menu. (After above procedure is done, power is on initially and the "Plug and Play" will be operated.)

Area	Micom Version	Excluded Model	Main Problems & History of Corrections
EUROPE	SIM-806EW (KS2A/KS3A)	MSP3410 94 58 VERSION	At the current mass production (MP), MASK is applying to ks2a/ks3a chassis
	SIM-806EW1 (KS2A/KS3A)		<ol style="list-style-type: none"> 1. Improvement of Secam-L Sound Noise when using MSP3410 94 58 VERSION 2. Improvement of repetition of SECAM-L in AUTO SEARCH 3. Improvement of the gap between SCART RGB and CVBS image centers .(Added to RGB SHIFT FACTORY) 4. Correction of Greek OSD 5. Fixation of Zoom Mode Offset Changed in order to adjust in Service mode. Application of REMASK via an improvement in picture quality
	SIM-806EW2		Application of REMASK via an improvement in picture quality
	OIM-806EW (KS2A/KS3A)		TOSHIBA OEM MODEL ONLY MICOM (Applied to SEH MP)
Middle East Asia & Africa & CIS	SIM-806MA (KS2A)	CONTROL 6KEY,PIP MODEL, All 22-Q models	MTP is used for all models (excluding KS2A 22Q)
	SIM-806MA1 (KS2A/KS3A)		<p>MTP used for KS2A 22Q models</p> <ol style="list-style-type: none"> 1. VM related items (Delay1, Gain1, Limit, Delay, Coring) Adjust3) 2. Addition of PIP VSPDEL to FACTORY items 3. No color when PIP NTSC 4.43 is received 4. NICAM POP NOISE 5. Av by channel key added 6. When English is used for the language of Libia models, the Libian must be added and PROGRAM_OSD box must be reduces (Libian Only) 7. RGB SHIFT/HB START/HB STOP added 8. Countermeasure on RADIATION (Option: Pin49 output software) 9. In NTSC system, a transient phenomenon happens during the channel
	SIM-806MA2 (KS2A/KS3A)	Decided to apply MASK (June 2001)	Correction of Libian about child lock
	SIM-806MA3 (KS2A/KS3A)		<ol style="list-style-type: none"> 1. Improvement of SECAM/PAL Color Hysteresis characteristics 2. Correction of instantaneous LNA error
East South Asia & Australia	SIM-806EA (KS2A)	Thailand, Vietnam, PIP MODEL, 6-KEY, CONTROL	
	SIM-806EAY (KS2A)		<p>MTP used for KS2A</p> <ol style="list-style-type: none"> 1. Correction of Thailand/Vietnam OSD problems ("Not available", "S-Video")
	SIM-806EA1 (KS2A/KS3A)		<ol style="list-style-type: none"> 1. Change of Indonesia sports string 2. Addition of VM related items (Delay1, Gain1, Limit, Delay, Coring) to Adjust3 3. Addition of PIP VSPDEL to FACTORY items 4. Improvement of No Color when PIP NTSC 4.43 is received 5. Improvement of NICAM POP NOISE 6. Addition of AV by channel key service 7. Addition of RGB SHIFT/HB START/HB STOP 8. Addition of countermeasure on RADIATION (Option: pin49 output software) 9. Transient phenomena when switching CH in NTSC system 10. In Temperature Low test, the color of SECAM CH' late follows

Area	Micom Version	Excluded Model	Main Problems & History of Corrections
East South Asia & Australia	SIM-806EA1 (KS2A/KS3A)	Checking the improvement in quality: Vietnam/Thailand 28.Dec.2000	
China	SIM-806C (KS2A/KS3A)		Same with MTP (developed in 22 Sep. 2000)
	SIM-806C1 (KS2A/KS3A)		<ol style="list-style-type: none"> 1. Improvement of color noise in LOW BURST 2. A sound saw filter switching error happens when changing Manual Color System (For a PAL channel, when switching NTSC3.58 into Auto) 3. Addition of PIP VSPDEL to FACTORY items 4. Improvement of No Color when PIP NTSC 4.43 is received 5. Addition of RGB SHIFT/HB START/HB STOP 6. Addition of countermeasure on RADIATION (Option: pin 49 output software) 7. Transient phenomena happens when switching CH' in NTSC system
India	SIM-806E1 (KS2A/KS3A)		Same with MTP (developed in 6 Sep. 2000)
	SIM-806E11 (KS2A/KS3A)		<ol style="list-style-type: none"> 1. Addition of PIP VSPDEL to FACTORY items 2. Improvement of No Color when PIP NTSC 4.43 is received 3. Addition of RGB SHIFT/HB START/HB STOP 4. Addition of countermeasure on RADIATION (Option: pin49 output software) 5. Transient phenomena happens when switching CH' in NTSC system 6. In Temperature Low test, the color of SECAM CH' late follows. 7. Addition of woofer to FACTORY items 8. Change of the value of equalizer (Factory Woofer in EQ ON)

4-8-2 Deflection (Memory Data)

4-8-2(A) GEOMETRIC ADJUSTMENT VALUE BY MODEL

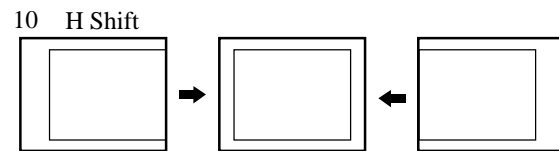
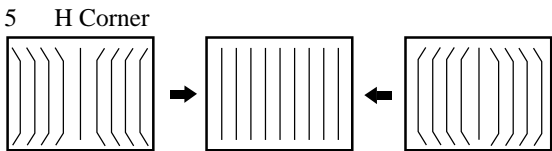
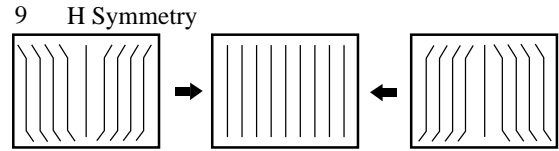
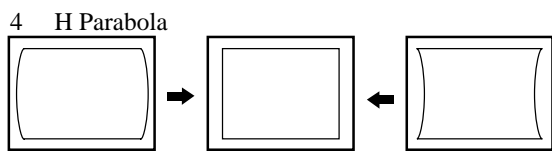
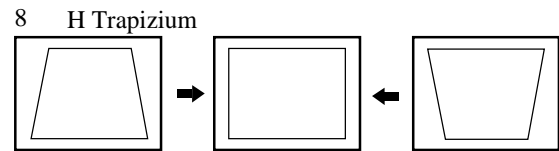
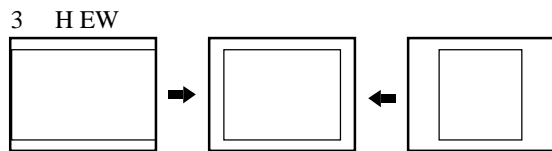
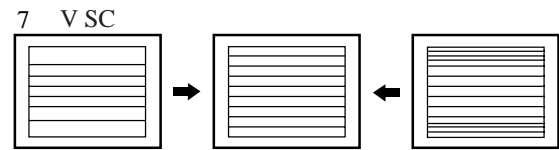
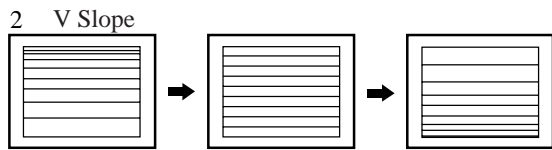
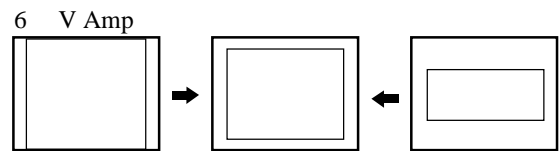
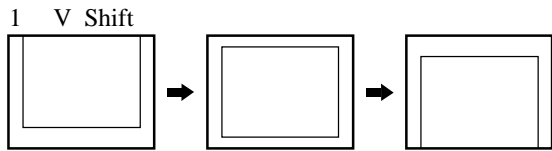
OSD	RANGE	INITIAL DATA				
		TSB 21-FLAT	LG-CPT 21-FLAT	SDI 21" FALT	SDI 14"	SDI 15" FLA
		A51LSH196X03(+380) A51LSH198X03(-250)	A51QDJ279X14	A51QDX991X001	A34KQV42X	A36QDT351X
V SHIFT	-128~127	-40	-40	-40	-20	-18
V AMP	-128~127	20	20	-15	-40	18
V SLOPE	-128~127	0	-5	0	-5	-4
V SC	-128~127	-13	-6	-13	0	-17
H EW	-128~127	50	-30	20	61	24
H TRAPEZIUM	-128~127	20	20	-40	-8	20
H PARABOLA	-128~127	15	15	20	-3	17
H SYMMETRY	-128~127	13	13	13	12	5
H CORNER	-128~127	40	40	40	-32	69
H SHIFT	-128~127	0	0	0	0	0
PIP CONTRAST	0~15	7	15	7	7	7
PIP TINT	0~63	0	0	0	0	0
PIP VSPDEL	0~32	0	8	8	0	0
PIP PAL V. POS	0~255	33	33	33	33	33
PIP NTSC V. POS	0~255	33	33	33	33	33
PIP H. POS	0~255	45	45	45	45	45
PIP BLKLG	0~15	6	6	6	6	6

OSD	RANGE	INITIAL DATA				
		SDI 21"1.7R	SDI 25" 1.3R	SDI 25" FLAT	SDI 29" 1.3R	SDI 30"
		A51KQJ63X01	A59KPR84X01	A59QDF891X002	A68QBT891X002 A68KVL74X01	A70QBZ791X001
V SHIFT	-128~127	-40	-50	-50	-50	-40
V AMP	-128~127	5	-10	-15	-20	-48
V SLOPE	-128~127	-2	0	0	0	-2
V SC	-128~127	-7	-6	-13	0	0
H EW	-128~127	64	10	10	-55	20
H TRAPEZIUM	-128~127	-20	-50	-10	-40	-80
H PARABOLA	-128~127	-13	-40	-60	-60	-75
H SYMMETRY	-128~127	13	13	13	13	13
H CORNER	-128~127	15	40	69	70	60
H SHIFT	-128~127	0	0	0	0	-2
PIP CONTRAST	0~15	7	7	7	7	7
PIP TINT	0~63	0	0	0	0	0
PIP VSPDEL	0~32	0	0	8	0	14
PIP PAL V. POS	0~255	33	33	33	33	33
PIP NTSC V. POS	0~255	33	33	33	33	33
PIP H. POS	0~255	45	45	45	45	45
PIP BLKLG	0~15	6	6	6	6	6

4-8-2(B) GEOMETRIC ADJUSTMENT

OSD	RANGE	FUNCTION
V SHIFT	-128~127	Adjusts Vertical picture position
V AMP	-128~127	Adjusts Vertical picture size. Adjust 4:4 upper and below picture size in lion head pattern at factory
V SLOPE	-128~127	Adjusts Vertical Slope Correction
V SC	-128~127	Adjusts Vertical s-correction
H EW	-128~127	Horizontal east west width. Adjust 5:5 left and right picture size in lion head pattern at factory.
H TRAPEZIUM	-128~127	Adjusts horizontal Trapezium.
H PARABOLA	-128~127	Adjusts Horizontal Parabola.
H SYMMETRY	-128~127	Adjusts the top and bottom horizontal symmetry of picture.
H CORNER	-128~127	Adjusts the top and bottom horizontal corner of picture. Adjusts so that the top and bottom of H corner can be linear.
H SHIFT	-128~127	Adjusts Horizontal Position.
PIP CONTRAST	0~15	Adjusts PIP contrast.
PIP TINT	0~63	Adjusts PIP Tint. When a NTSC signal is received, this PIP Tint adjusts color phase
PIP VSPDEL	0~32	PIP vertical sync pulse delay. When changing data, PIP jitters at two points. In this case, the PIP VSPDEL is set to the center between two points.
PIP PAL V. POS	0~255	Adjust Vertical position the PIP of PAL system.
PIP NTSC V. POS	0~255	Adjust Vertical position the PIP of NTSC system.
PIP H. POS	0~255	Adjust Horizontal Position the PIP.
PIP BLKLG	0~15	Adjusts PIP blanking level green (PIP low light white balance).

4-8-2(C) SCREEN CHANGE (I2C BUS GEOMETRIC ADJUSTMENT)



4-8-2(D) VIDEO ADJUSTMENT 1

VIDEO ADJUST1	RANGE	INITIAL DATA				
		TSB 21-FLAT	LG-CPT 21-FLAT	SDI 21" FALT	SDI 14"	SDI 15" FLA
		A51LSH196X03(+380) A51LSH198X03(-250)	A51QDJ279X14	A51QDX991X001	A34KQV42X	A36QDT351X
RED CUTOFF	0~255	127	127	127	127	127
GREEN CUTOFF	0~255	127	127	127	127	127
BLUE CUTOFF	0~255	127	127	127	127	127
RED DRIVE	0~255	127	127	127	127	127
GREEN DRIVE	0~255	127	127	127	127	127
BLUE DRIVE	0~255	127	127	127	127	127
SUB BRIGHT	0~200	100	100	100	100	100
SUB CONTRAST	0~63	52	52	52	52	52
SUB COLOR	0~27	27	27	27	27	27
SUB TINT	0~100	30	30	30	30	30
BCL THRESHOLD	0~255	62	54	62	30	35
BCL GAIN	0~15	9	8	8	8	8
BCL TIME	0~15	5	13	13	13	13
TTX CONTRAST	0~255	90	90	90	90	100
P. BG YC DELAY	RF	3	3	3	3	3
P. DK YC DELAY		6	6	6	6	6
P.I YC DELAY		6	6	6	6	6
P.M YC DELAY		3	3	3	3	3
S. BG YC DELAY		3	3	3	3	3
S. DK YC DELAY		5	5	5	5	5
S.I YC DELAY		5	7	7	7	7
N.M YC DELAY		7	3	3	3	3
P. YC DELAY		VIDEO MODE	4	4	4	4
S. YC DELAY	1		1	1	1	1
N. YC DELAY	4		4	4	4	4
VIDEO ADJUST1	RANGE	INITIAL DATA				
		SDI 21"1.7R	SDI 25" 1.3R	SDI 25" FLAT	SDI 29" 1.3R	SDI 30"
		A51KQJ63X01	A59KPR84X01	A59QDF891X002	A68QBT891X002 A68KVL74X01	A70QBZ791X001
RED CUTOFF	0~255	127	127	127	127	127
GREEN CUTOFF	0~255	127	127	127	127	127(FIX)
BLUE CUTOFF	0~255	127	127	127	127	127
RED DRIVE	0~255	127	127	127	127	127
GREEN DRIVE	0~255	127	127	127	127	127(FIX)
BLUE DRIVE	0~255	127	127	127	127	127
SUB BRIGHT	0~200	100	100	110	100	100
SUB CONTRAST	0~63	52	52	52	52	52
SUB COLOR	0~27	27	27	27	27	27

VIDEO ADJUST1	RANGE	INITIAL DATA				
		SDI 21"1.7R	SDI 25" 1.3R	SDI 25" FLAT	SDI 29" 1.3R	SDI 30"
		A51KQJ63X01	A59KPR84X01	A59QDF891X002	A68QBT891X002 A68KVL74X01	A70QBZ791X001
SUB TINT	0~100	30	30	30	30	30
BCL THRESHOLD	0~255	40	60	67	67	64
BCL GAIN	0~15	8	9	9	8	9
BCL TIME	0~15	13	7	13	13	7
TTX CONTRAST	0~255	90	70	90	90	70
P. BG YC DELAY	RF	3	3	3	3	3
P. DK YC DELAY		6	6	6	6	6
P.I YC DELAY		6	6	6	6	6
P.M YC DELAY		3	3	3	3	3
S. BG YC DELAY		3	3	3	3	3
S. DK YC DELAY		5	5	5	5	5
S.I YC DELAY		7	7	7	7	7
N.M YC DELAY		3	3	3	3	3
P. YC DELAY	VIDEO	4	4	4	4	4
S. YC DELAY	MODE	1	1	1	1	1
N. YC DELAY		4	4	4	4	4

VIDEO ADJUST 1	RANGE	FUNCTION
RED CUTOFF	0~255	Adjusts the gain red output of low light.
GREEN CUTOFF	0~255	Adjusts the gain green output of low light. Fix this agin to 127.
BLUE CUTOFF	0~255	Adjusts the gain blue output of low light.
RED DRIVE	0~255	Adjusts the red blue output of high light.
GREEN DRIVE	0~255	Adjusts the green output of high light. After "G2-Adjustment" and White Balance adjustments are complete, this data is fixed
BLUE DRIVE	0~255	Adjusts the gain blue output of high light.
SUB BRIGHT	0~200	Adjust sub brightness level to set the low luminance in Picture Standard mode.
SUB CONTRAST	0~63	Adjusts sub contrast level to set the high luminance in Pitture Standard mode.
		Set the value of sub contrast to near 50. The user control " contrast" depends on this value.
		User contrast=[sub cont x 2/100] If sub contrast data is 10, user contrast changes into 1/5 step
SUB COLOR	0~27	Adjusts sub color level to set the gain for color in Picture Standard mode.
SUB TINT	0~100	Adjusts the sub tint level of NTSC color system.
BCL THRESHOLD	0~255	Short for Beam Current Limit Threshold. Adjusts the current of CRT long term.
BCL GAIN	0~15	Beam current limit gain
BCL TIME	0~15	Adjusts BCL Time constant. Beam current limit actual time
TTX CONTRAST	0~255	Adjusts contrast on TTX picture.
YC DELAY	0~8	Compensates the time gap between color and luminance boundaries and cotrolls data difference by system(See table above)

Note 1. Beam Control Limit Characteristic

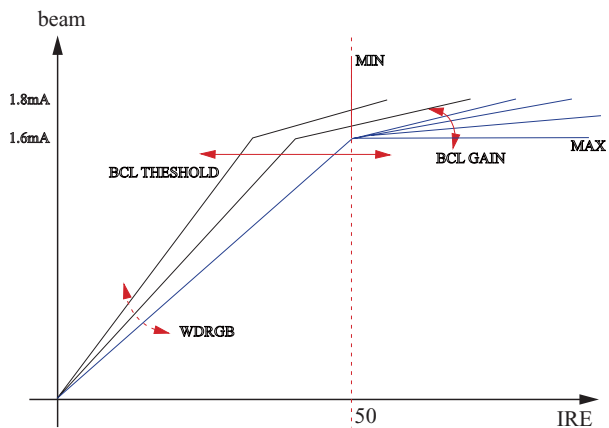
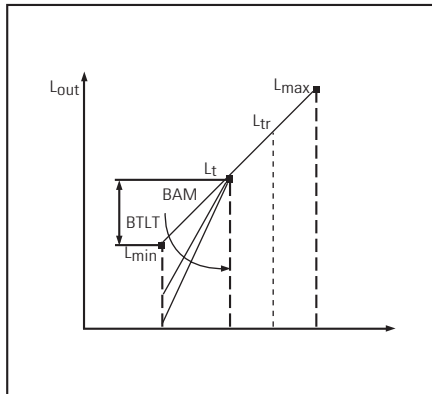


Table 3. YC Delay Adjustment Table

YC Delay	PAL				SECAM				NTSC	
	Def.	BG	DK	I	Def.	BG	DK	I	Def.	M
Value	4	3	6	6	1	3	5	7	4	0

4-8-2(E) VIDEO 2 ADJUST

OSD	RANGE	INITIAL VALUE	FUNCTION	REMARKS
B STRETCH-BTHR	0 ~ 55	50	Black stretch threshold	
B STRETCH-BTLT	0 ~ 15	8	Black stretch tilt position	
B STRETCH-BAM	0 ~ 31	4	Black stretch amount	
CORING	0 ~ 31	31	Luminance peaking filter coring	DIGITAL NR OFF VALUE
RGB BRIGHT	0 ~ 255	45	External RGB brightness	SCARTS MODEL ONLY
RGB CONTRAST	0 ~ 80	0	External RGB contrast	SCARTS MODEL ONLY
EHT TIME	0 ~ 15	3112B:0 3130Y:3	Electronics high tension time EHT vertical correction time(according to beam change)	VDP3130Y NO USED '0'
EHT VERTICAL	0 ~ 255	60	EHT compensation coefficient vertical	



4-8-2(F) VIDEO 3 ADJUST

ADD ITEM

OSD	RANGE	INITIAL VALUE	FUNCTION	REMARKS
PEAK THRESHOLD	0~255	255	White peak level threshold	Design factor
SOFT LIMIT SLOPE B	0~15	4	Refer to picture below	Design factor
HARD LIMIT	0~255	255		
PEAK VIDEO REF	0~4	0	White peak levelthreshold reference	Design factor
PEAK VIDEO GAIN	0~5	0	White peak level threshold gain	Design factor
ACC-REF(PAL/NTSC)	0~40	33	Auto color control gain(PAL/NTSC)	Picture standard color gain setting
ACCR(SECAM)	0~39	21	Auto color control gain(SECAM)	Picture standard color gain setting
Gain1(video)	0~31	11	Velocity video gain	Not used(design factor)
Delay1(video)	0~15	3	Velocity video delay	Not used(design factor)
Velocity Limt	0~127	74	Velocity limit	Not used(design factor)
Velocity Delay	0~15	7	Velocity delay	Not used(design factor)
Velocity Coring	0~15	10	Velocity frequency coring	Not used(design factor)
RGB SHIFT	0~255	109	Adjust RGB input signal Horizontal position	Used to scarts model only. VDP3130Y:Not used
HB START	0~255	117	Horizontal blanking start	Picture right edge position SAG or cut problem countermeasure
HB STOP	0~255	168	Horizontal blanking stop	Picture left edge position SAG or cut problem countermeasure
2H Comb Filter	0~1	1	Comb filter on/off (0 : Comb filter off 1 : Comb filter on) VDP3108:No comb filter, VDP3112B/ VDP3130Y/VDP3120B:Comb Filter function present	OFF(0):Cross color and Dot crawl phenomenons happen. Detailed characteristics are a little good. ON(1): Cross color and Dot crawl characteristics are good, but Detaile characteristics aren't
NR OFF Value	0~10	0	Adjust Digital NR off value	Picture standard mode detail
Color Hys(SECAM)	0~255	166	Color killing hysteresys(SECAM)	0 ~ 155 Not used(SECAM NO COLOR)
Color Hys(PAL)	0~255	200	Color killing hysteresys(PAL)	

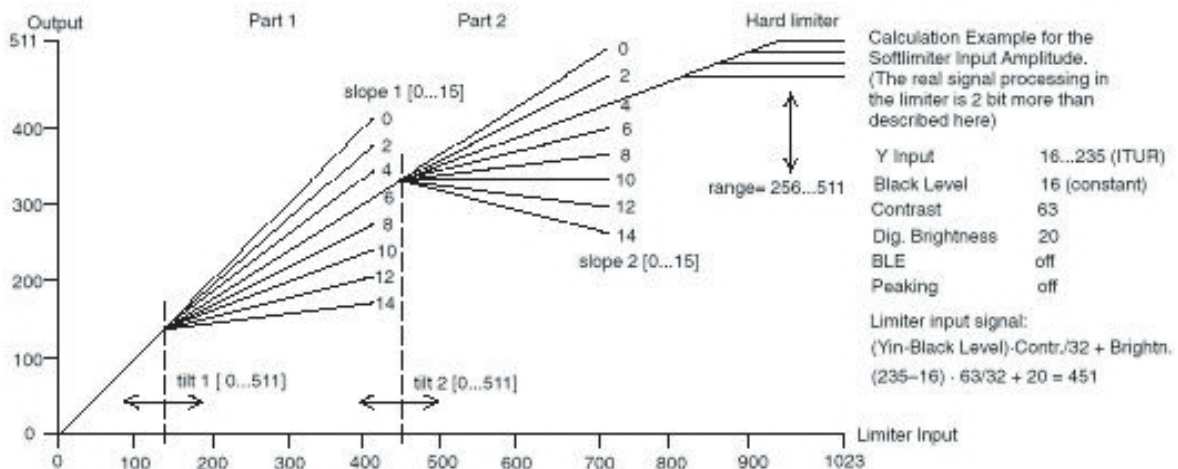


Fig. 2-17: Characteristic of soft limiter a and b and hard limiter

4-8-2(G) OPTION 1

Micom Spec : SIM-806EA

No.	ITEM(OSD)	Control	Description
1	Language	ESAsia	ENGLISH/VIETNAM/THAI/INDONESIA/MALAYSIA
2	Sound	A2/NICAM	A2 Stereo / Nicam Stereo Model
		Virtual Dolby	Virtual Dolby Model
		Mono	Mono Model
		Line-Stereo	Line stereo Model
3	CRT	4:3	Normal / Zoom / 16:9
		Wide	Wide CRT (16:9)
		Q(12.8:9)	Plus / Normal / Zoom / 16:9
		4:3-16:9	Normal / Zoom
		Q - 16:9	Plus / Normal / Zoom
4	AV Mode	1Scart	Built in 1 Scart Model
		2Scart	Built in 2 Scart Model
		2scart+S	Built in 2 Scart +SVHS JACK Model
		1RCA	Built in RCA 6P / RCA 4P Model
		2RCA	Built in RCA 9P Model
		2RCA+S	Built in RCA 9P + SVHS JACK Model
		2RCA+D	Built in RCA 9P + DVD JACK Model
2RCA+S+D	Built in RCA 9P + SVHS JACK Model +DVD JACK Model		
5	x-ray	On	X-ray detection function on
		Off	X-ray detection function off
6	Tilt Control	On	CRT Tilt control function on (wide / 29PF CRT)
		Off	CRT Tilt control function off
7	Auto FM	On	automatic change from NICAM to FM depends on NICAM error rate
		Off	automatic change from NICAM to FM depends on NICAM synchronization
8	PIP	Off	no PIP function
		1 - tuner	1 Tuner PIP function
		2 - tuner	2 Tuner PIP function
9	Txt Language	West Europe	English/German/Skandinavian/Italian French/Spainsh/Czech
		East Europe	Polish/Czech/Rumanian/Slovenian/Croatian/ French/Skandinavian/German/Italian
		Russian	Russian/Ukranian/Estonian/Czech/German/ Lettish/English
		Greek-Turkey	English/Turkey/Greek/French/Skandinavian/German/Spainsh/Italian
		Arabic	English/Arabic/French
		Farsi	English/Farsi/French
		Arab-Hebrew	Arabic/Hebrew
10	LNA	On	Built in LNA Tuner
		Off	Built in Normal Tuner
11	Equalizer	On	Include in Equalizer function (MSP34X0D)
		Off	Without Equalizer function (MSP34X5D)
12	High deviate	On	High deviation mode on MSP34XX
		Off	Normal mode on MSP34XX
13	TTX On/OFF	On	TTX Model
		Off	W/O-TTX Model
14	AV by CH Key	On	Without Video Pannel Key
		Off	With Video Pannel Key

4-8-2(H) OPTION 2

Micom Spec : SIM-806MA

No.	ITEM(OSD)	Control	Description
1	Language	Arab	English/Arab/French/Pakistan
		Iran	English/Persian/French/Turkey
		Libya	English/Libya/French
		CIS	English/Russia
2	Sound	A2/NICAM	A2 Stereo / Nicam Stereo Model
		Virtual Dolby	Virtual Dolby Model
		Mono	Mono Model
		Line-Stereo	Line stereo Model
3	CRT	4:3	Normal / Zoom / 16:9
		Wide	Wide CRT (16:9)
		Q(12.8:9)	Plus / Normal / Zoom / 16:9
		4:3-16:9	Normal / Zoom
		Q - 16:9	Plus / Normal / Zoom
4	AV Mode	1Scart	Built in 1 Scart Model
		2Scart	Built in 2 Scart Model
		2scart+S	Built in 2 Scart +SVHS JACK Model
		1RCA	Built in RCA 6P / RCA 4P Model
		2RCA	Built in RCA 9P Model
		2RCA+S	Built in RCA 9P + SVHS JACK Model
		2RCA+D	Built in RCA 9P + DVD JACK Model
		2RCA+S+D	Built in RCA 9P + SVHS JACK Model + DVD JACK Model
5	x-ray	On	X-ray detection function on
		Off	X-ray detection function off
6	Tilt Control	On	CRT Tilt control function on (wide / 29PF CRT)
		Off	CRT Tilt control function off
7	Auto FM	On	automatic change from NICAM to FM depends on NICAM error rate
		Off	automatic change from NICAM to FM depends on NICAM synchronization
8	PIP	Off	no PIP function
		1- tuner	1 Tuner PIP function
		2 - tuner	2 Tuner PIP function
9	Txt Language	West Europe	English/German/Skandinavian/Italian/French/Spainsh/Czech
		East Europe	Polish/Czech/Rumanian/Slovenian/Croatian/ French/Skandinavian/German/Italian
		TRussian	Russian/Ukranian/Estonian/Czech/German/Lettish/English
		Greek-Turkey	English/Turkey/Greek/French/Skandinavian/German/Spainsh/Italian
		Arabic	English/Arabic/French
		Farsi	English/Farsi/French
		Arab-Hebrew	Arabic/Hebrew
10	LNA	On	Built in LNA Tuner
		Off	Built in Normal Tuner
11	Equalizer	On	Include in Equalizer function (MSP34X0D)
		Off	Without Equalizer function (MSP34X5D)
12	High deviate	On	High deviation mode on MSP34XX
		Off	Normal mode on MSP34XX
13	TTX On/OFF	On	TTX Model
		Off	W/O-TTX Model
14	AV by CH Key	On	Without Video Pannel Key
		Off	With Video Pannel Key

4-8-2(I) OPTION 3

Micom Spec : SIM-806EI/SIM-806C

No.	ITEM(OSD)	Control	Description
1	SOUND	A2/NICAM	A2 Stereo / Nicam Stereo Model
		Virtual Dolby	Virtual Dolby Model
		Mono	Mono Model
		Line-Stereo	Line stereo Model
2	CRT	4:3	Normal / Zoom / 16:9
		Wide	Wide CRT (16:9)
		Q(12.8:9)	Plus / Normal / Zoom / 16:9
		4:3-16:9	Normal / Zoom
		Q - 16:9	Plus / Normal / Zoom
3	A/V Mode	1Scart	Built in 1 Scart Model
		2Scart	Built in 2 Scart Model
		2scart+S	Built in 2 Scart +SVHS JACK Model
		1RCA	Built in RCA 6P / RCA 4P Model
		2RCA	Built in RCA 9P Model
		2RCA+S	Built in RCA 9P + SVHS JACK Model
		2RCA+D	Built in RCA 9P + DVD JACK Model
4	x-ray	On	X-ray detection function on
		Off	X-ray detection function off
5	Tilt Control	On	CRT Tilt control function on (wide / 29PF CRT)
		Off	CRT Tilt control function off
6	Auto FM	On	automatic change from NICAM to FM depends on NICAM error rate
		Off	automatic change from NICAM to FM depends on NICAM synchronization
7	PIP	Off	no PIP function
		1 - tuner	1 Tuner PIP function
		2 - tuner	2 Tuner PIP function
8	LNA	On	Built in LNA Tuner
		Off	Built in Normal Tuner
9	Equalizer	On	Include in Equalizer function (MSP34X0D)
		Off	Without Equalizer function (MSP34X5D)
10	High deviate	On	High deviation mode on MSP34XX
		Off	Normal mode on MSP34XX
11	AKB	On	AKB Function On
		Off	AKB Function Off
12	AV by CH Key	On	Without Video Pannel Key
		Off	With Video Pannel Key
13	Woofer	On	Woofer Function ON
		Off	Woofer Function OFF

India only

4-8-2(J) G2 - ADJUSTMENT

□ When using RGB AMP STV-5109

G2 ADJUST	RANGE	CRT				
		TSB 21-FLAT	LG-CPT 21-FLAT	SDI 21" FALT	SDI 14"	SDI 15" FLAT
		A51LSH196X03(+380) A51LSH198X03(-250)	A51QDJ279X14	A51QDX991X001	A34KQV42X	A36QDT351X
MRC R G B	NO CONTROL	110	110	110	110	110
MRWDG	NO CONTROL	110	110	110	110	110
IBRM	0~255	225	225	220	205	215
WDRV	0~255	45	45	35	45	45
CDL	0~255	185	175	200	100	160
COL R G B	0~255	75	165	145	100	80
COL G	0~255	75	165	145	100	80
COL B	0~255	75	165	145	100	80

G2 ADJUST	RANGE	CRT				
		SDI 21" 1.7R	SDI 25" 1.3R	SDI 25" FLAT	SDI 29" 1.3R	SDI 30"
		A51KQJ63X01	A59KPR84X01	A59QDF891X002	A68QBT891X002 A68KVL74X01	A70QBZ791X001
MRC R G B	NO CONTROL	110	110	110	110	110
MRWDG	NO CONTROL	110	110	110	110	110
IBRM	0~255	215	210	205	200	200
WDRV	0~255	45	35	45	45	45
CDL	0~255	160	220	150	190	180
COL R G B	0~255	80	130	140	150	130
COL G	0~255	80	130	140	150	130
COL B	0~255	80	130	140	150	130

□ When using RGB AMP TDA6101Q

G2 ADJUST	RANGE	CRT				
		TSB 21-FLAT	LG-CPT 21-FLAT	SDI 21" FALT	SDI 14"	SDI 15" FLAT
		A51LSH196X03(+380) A51LSH198X03(-250)	A51QDJ279X14	A51QDX991X001	A34KQV42X	A36QDT351X
MRC R G B	0~255	110	110	110	110	110
MRWDG	0~255	110	110	110	110	110
IBRM	0~255	220	230	220	180	220
WDRV	0~255	35	35	35	35	35
CDL	0~255	230	230	230	100	200
COL R G B	0~255	65	65	65	100	150
COL G	0~255	65	65	65	100	150
COL B	0~255	65	65	65	100	150

G2 ADJUST	RANGE	CRT				
		SDI 21" 1.7R	SDI 25" 1.3R	SDI 25" FLAT	SDI 29" 1.3R	SDI 30"
		A51KQJ63X01	A59KPR84X01	A59QDF891X002	A68QBT891X002 A68KVL74X01	A70QBZ791X001
MRC R G B	NO CONTROL	110	110	110	110	110
MRWDG	NO CONTROL	110	110	110	110	110
IBRM	0~255	220	220	210	220	210
WDRV	0~255	35	35	35	35	35
CDL	0~255	230	230	150	180	160
COL R G B	0~255	65	65	150	65	130
COL G	0~255	65	65	150	65	130
COL B	0~255	65	65	150	65	130

G2-ADJUST	RANGE	DESCRIPTION
MRC R G B	0~255	Measure of Cutoff Gain, the data comes when adjusting the screen voltage. It is set to the point where changing red into green. RGB Output. By sending the standard pulse data, it receives feedback from RGB drive. It is low light data.
MRWDG	0~255	Measure of Green of Drive Gain, the data that indicates the value of High Light. It has the same principle as MRC R G B
IBRM	0~255	Internal brightness measurement. For AKB, an 1-chip sends RGB standard pulse and sets the level of the standard pulse.
WDRV	0~255	White drive measure control. IBRM is the standard pulse of low light. WDRV is the standard pulse of high light.
CDL	0~255	Cathode drive level. Sets the standard luminance of high light different by CRT and inch. This uses the same register as the RED//GREEN/BLUE drive in video adjust-1.
COL R G B COL G COL B	0~255	Cutoff level R. Uses the same register as the RED cutoff in Video adjust-1. Cutoff level G. Uses the same register as the GREEN cutoff in Video adjust-1. Cutoff level B. Uses the same register as the BLUE cutoff in Video adjust-1.

4-8-2(K) OTHERS

OTHERS	RANGE	Application CRT				
		TSB CPT 21-FLAT	LG-CPT 21-FLAT	SDI 21" FALT	SDI 15" FLAT	SDI 21" 1.7R
		A51LSH196X03(+380) A51LSH198X03(-250)	A51QDJ279X14	A51QDX991X001	A36QDT351X	A51KQJ63X01
VSU (VDP3130Y) (VDP3112B)	96~111	100	100	100	100	98
		100	110	108	110	108
H QEW	-30~30	0	0	0	0	0
H ZOOM Parabola	-30~30	8	8	25	8	8
H 16:9 Parabola	-30~30	-10	-18	-30	-18	-10
TTX H Shift	-30~30	0	0	0	0	0
Mono Sound System	BG	BG	BG	BG	BG	BG
V Slice Level	0~3	2	2	2	2	2
Melody Volume	0~20	5	5	5	5	5
AKB	ON/OFF	ON	ON	ON	ON	ON
TTX LIST PRIOR	ON/OFF	OFF				
OTHERS	RANGE	Application CRT				
		SDI 25" 1.3R	SDI 25" FLAT	SDI 29" 1.3R	SDI 30"	
		A59KPR84X01	A59QDF891X002	A68QBT891X002 A68KVL74X01	A70QBZ791X001	
VSU (VDP3130Y) (VDP3112B)	96~111	98	100	98	110	
		108	100	108	110	
H QEW	-30~30	0	0	0	-7	
H ZOOM Parabola	-30~30	0	-12	0	-10	
H 16:9 Parabola	-30~30	0	0	-10	0	
TTX H Shift	-30~30	0	0	0	0	
Mono Sound System	BG	BG	BG	BG	BG	
V Slice Level	0~3	2	2	2	2	
Melody Volume	0~20	5	5	5	5	
AKB	ON/OFF	OFF	ON	OFF	OFF	
TTX LIST PRIOR	ON/OFF					

OTHERS	RANGE	DESCRIPTION
VSU	96~111	Vertical Setup Time. Delays the vertical sync to solve the jitter of OSD and TTX .
		Check OSD while varying 96 111 step by step and an 1H line moves at two points.
		If the value is set at the first point or second point, an OSD jitter may happen. Also, if the value is set between the first and second points, a TTX jitter may happen. So, the value of VSU should be set after giving some margins (three steps).
		For example, OSD moves as much as 1H-line when changing data 98 to 99 and 106 to 107, respectively.
		At this time, VSU should be set to 110 by allowing for the margin of three steps (If the value within 99 to 106 is set, a jitter may happen in TTX mode.)
H QEW	-30~30	Short for Q-CRT HORIZONTAL EAST WEST, data used only for Q-CRT MODEL.
		In NORMAL mode, the horizontal picture size is within 5 5.5. In Q mode, the horizontal picture size is within 6.5 7. This H QEW function sets the gap between horizontal picture size in NORMAL mode and horizontal picture size in Q mode.
H ZOOM Parabola	-30~30	Corrects the vertical linearity in Zoom mode of P-SIZE. The data differs according to CRT (see data above)
H 16:9 Parabola	-30~30	Corrects the vertical linearity in 16:9 mode of P-SIZE. The data differs according to CRT (see data above).
TTX H Shift	-30~30	Horizontal blanking pulse duty determines the position of TTX and FBT determines horizontal blanking pulse duty.
		Because FBT depends on model, this TTX H Shift allows the microm to set the start position of pixel to prevent the TTX screen from being shifted.
Mono Sound System	BG	Not Used
V Slice Level	0~3	Allows the sync slice level of sync separate block to be changed. This item corresponds to the case where a vertical bouncing happens according to signal conditions by area
		(overmodulation, especially). 0: 100% 1: 90% 2: 75% 3: 60%
Melody Volume	0~20	Sets the level of melody volume in Picture ON. Differently controlled according to buyer and area.
AKB	ON/OFF	Short for Auto Kined Bias, a function that maintains uniformity in brightness and white balance by automatically correcting the variance of brightness and white balance according to temperature and characteristics of AMP in the CRT drive. It is designed to be turned ON/OFF so that the AKB line can't be seen at top when a DY of lower deflection sensitivity is used
TTX LIST PRIORITY	ON/OFF	TTX mode has two different types; List and FLOF. When switching into the TTX mode, this function determines which type has priority.

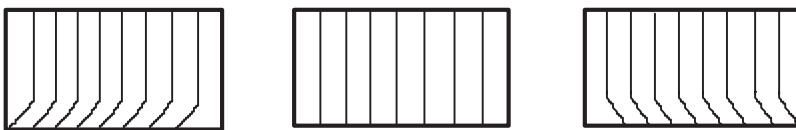
Table 5.

VDP Version		Remark
OSD	Description	
B	Chroma IC is VDP3108B/VDP3112B/VDP3120B	Normal Version IC
Y	Chroma IC is VDP3130Y/VDP3130Y-B2	DVD Version IC

Table 6.

NO	Y-ADD			
	ITEM(OSD)	RANGE	INITIAL VALUE	FUNCTION
1	H BOW	-128~127	0	Horizontal bow control: Actually doesn't operate (see figure below)
2	H ANGLE	-128~127	0	Horizontal angle control: Actually doesn't operate (see figure below)
3	H DSCC	1~7	2	Discharge sample counter for deflection retrace
4	DVD TINT CONTROL	0~1	1	Determines the presence of use of DVD SUB TINT control. When VDP3130Y B1 is used, it is set to 1 and When VDP3130Y B2 is used, it is set to 0.
5	DVD SUB TINT	0~100	25	After the NTSC DVD signal is input, this function set a proper phase in Picture Standard mode. Initial Value = 25
6	EHT OFFSET	0~535	0	EHT Compensation east/west offset coefficient (Not used)
7	EHT HORIZONTAL	-128~127	0	EHT Compensation east/west gain coefficient (Not used)
8	VDPY B2-VERSION	ON/OFF	ON	Switches VDP3130Y IC version On/Off. When VDP3130Y B2-version is used, it is set ON. When B1-version is used, it is set OFF.

① H-BOW

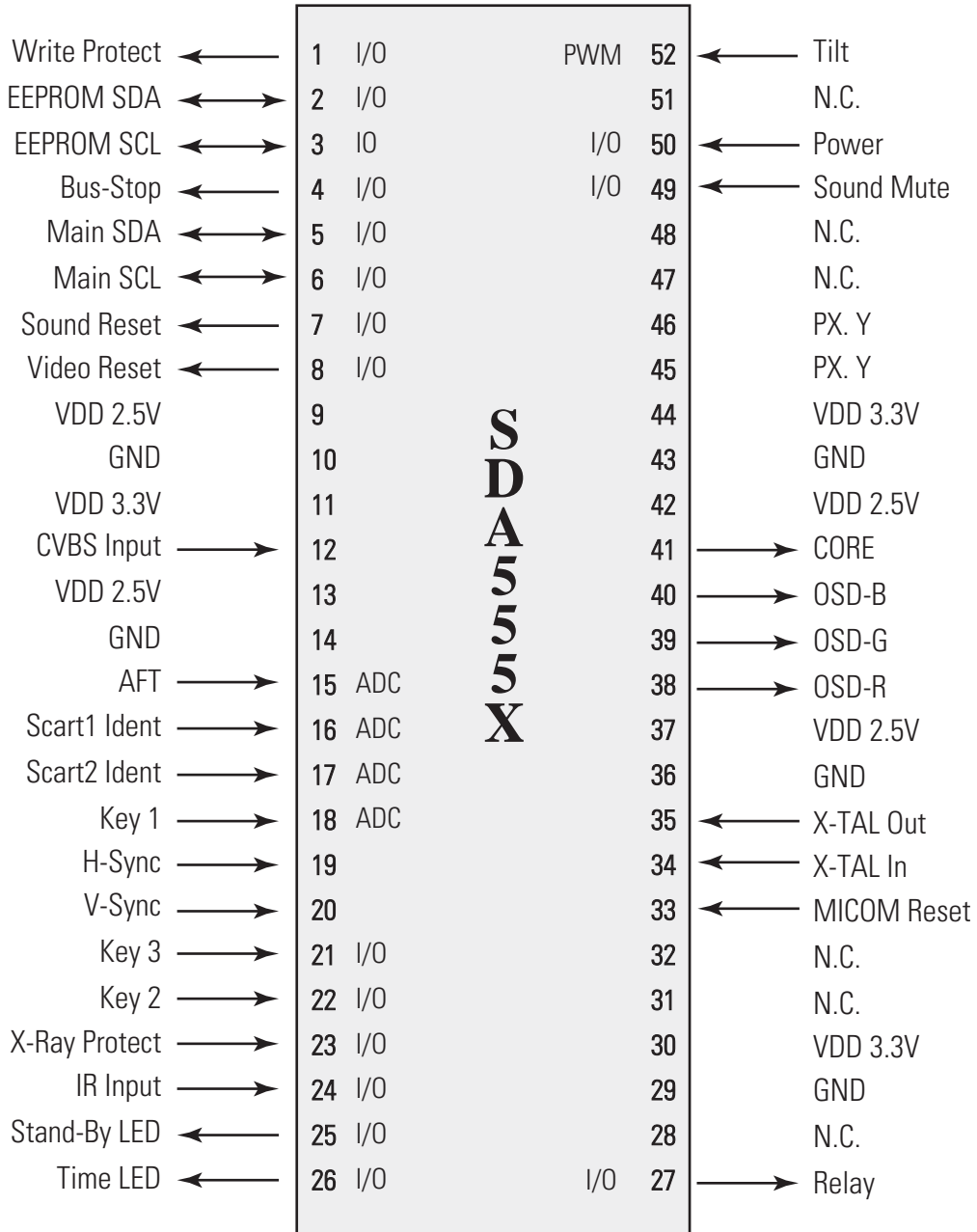


② H-ANGLE



4-9 MICOM

4-9-1 Pin Layout



4-9-2 Pin Assignment Specification

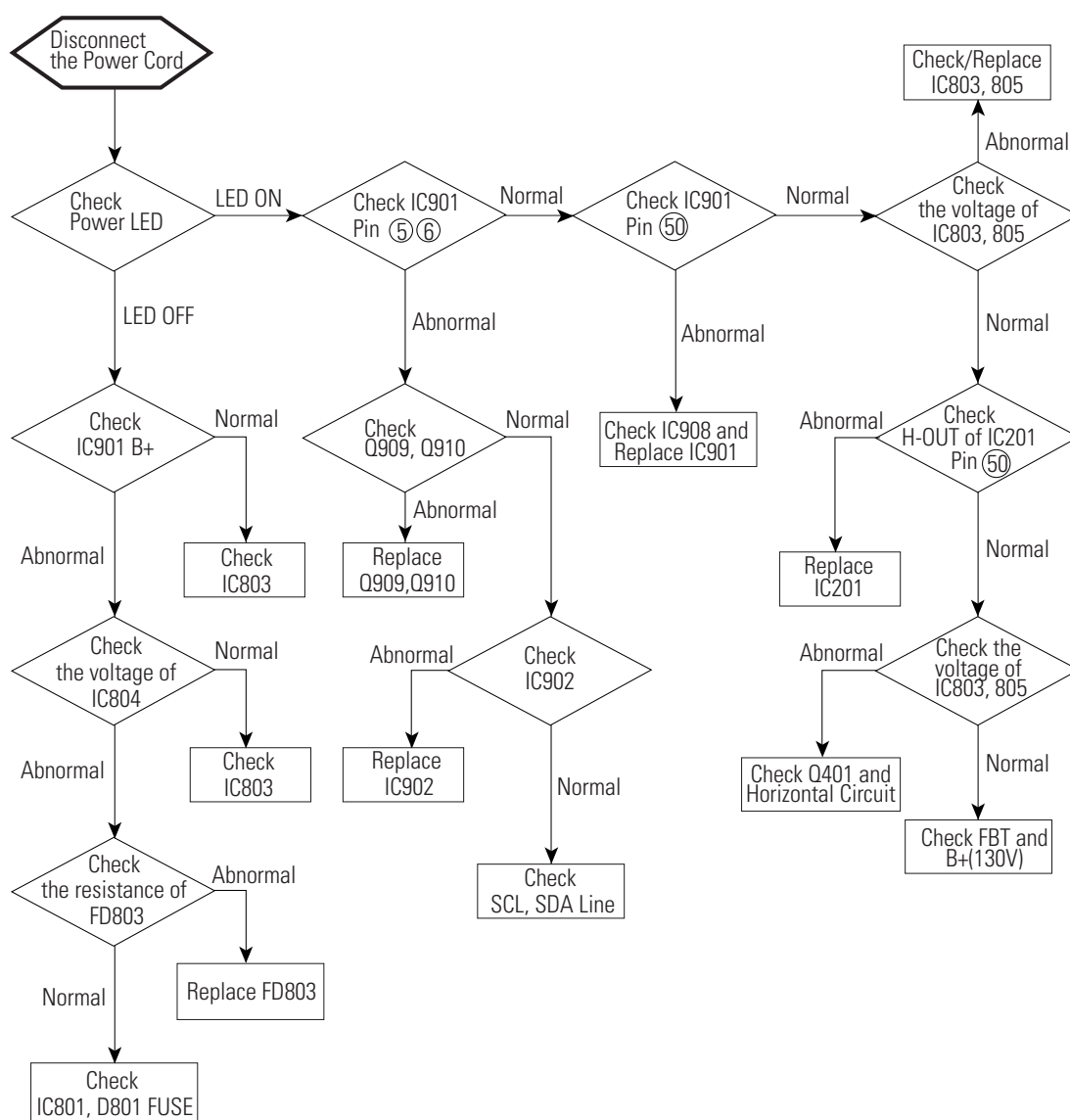
PIN NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	DESCRIPTION
1	I/O	Write Protect	Out	Low	EEPROM Write Protection
2	I/O	ROM SDA	I/O		EEPROM Serial Data Line
3	I/O	ROM SCL	I/O		EEPROM Serial Clock Line
4	I/O	Bus Stop	In	Low	Disable Micom IIC
5	I/O	Main SDA	I/O		Peripheral IC Serial Data Line
6	I/O	Main SCL	I/O	Low	Peripheral IC Serial Clock Line
7	I/O	Sound Reset	Out	Low	MSP IC Initial Control
8	I/O	Video Reset	Out		VDP IC Initial Control
9	Vdd	VDD 2.5V			
10	GND				
11	Vdd	VDD 3.3V			
12	CVBS	CVBS Input	In		TTX CVBS Input
13	Vdd	VDD 2.5V			Analog B+
14	GND				Analog Ground
15	ADC	AFT	In		Auto Fine Tuning Control
16	ADC	SC1-ID	In		Scart1 Ident
17	ADC	SC2-ID	In		Scart2 Ident
18	ADC	Key1	In		Key1 Input
19	HS	H-Sync	In		Horizontal Sync Input
20	VS	V-Sync	In		Vertical Sync Input
21	I/O	Key3	In		Key3 Input
22	I/O	Key2	In		Key2 Input
23	I/O	X-Ray	In		X-Ray Protection
24	I/O	IR-In	In		Remocon Signal Input
25	I/O	STD-LED	Out		LED Drive Output(Red)
26	I/O	TIM-LED	Out		LED Drive Output(Green)

4-9-2 Pin Assignment Specification (Continued)

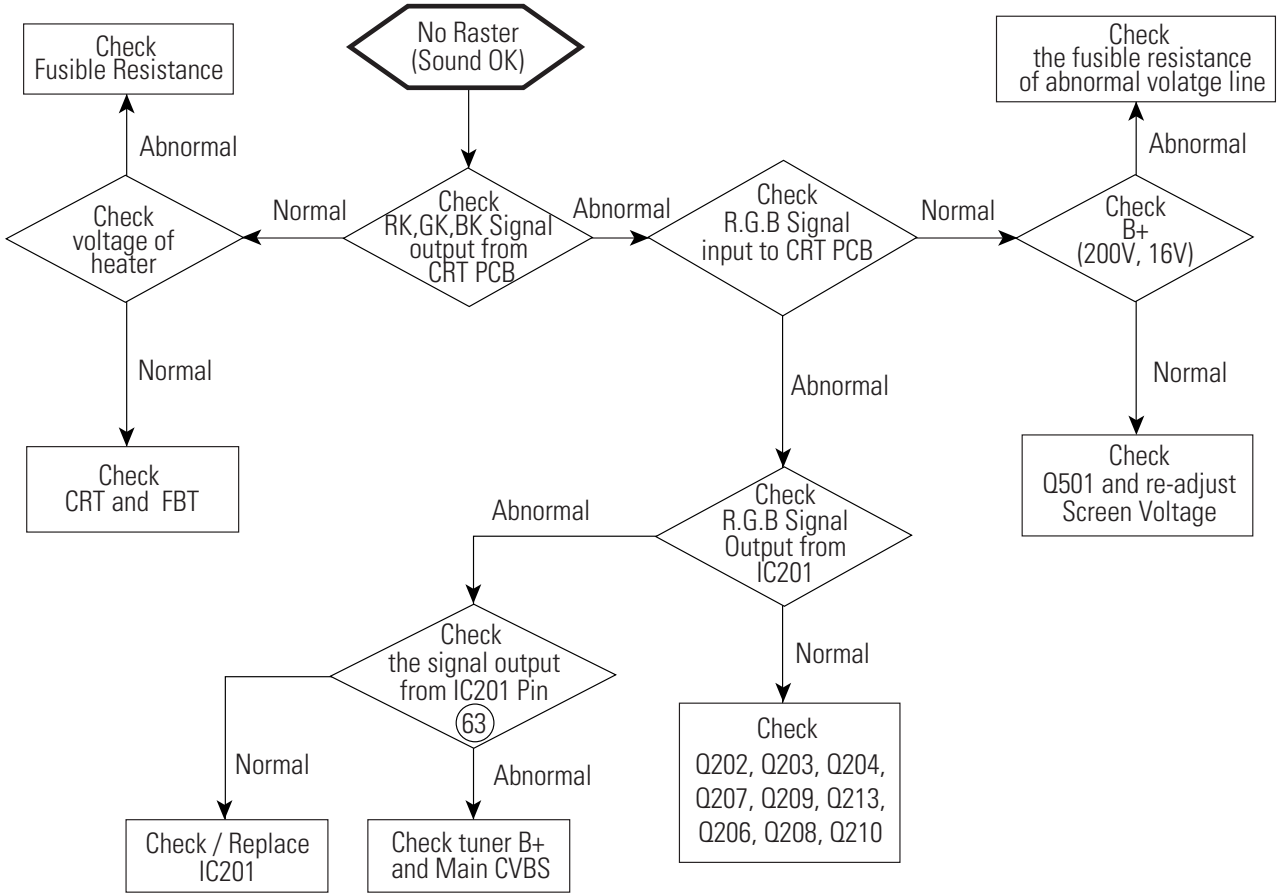
PIN NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	DESCRIPTION
27	I/O	Relay	Out	Low	Activate Degaussing Coil
28	N.C.				Not Used (Programmed Gound Level)
29	GND				Analog Ground
30	Vdd	VDD 3.3V			Not Used (Programmed Gound Level)
31	N.C.				Not Used (Programmed Gound Level)
32	N.C.				Micom Hardware Reset
33	Reset	Reset	In	Low	Crystal Oscillation Input
34	X-In	X-TAL In	In	6MHz	Crystal Oscillation Output
35	X-Out	X-TAL Out	Out	6MHz	Analog Ground
36	GND				Analog B+
37	Vdd	VDD 2.5V			OSD/TTX Output (Red)
38	R	OSD-R	Out		OSD/TTX Output (Green)
39	G	OSD-G	Out		OSD/TTX Output (Blue)
40	B	OSD-B	Out		Fast Blank/Half Contrast Output
41	COR	CORE	Out		
42	Vdd	VDD 2.5V			
43	GND				
44	Vdd	VDD 3.3V			
45	I/O	PX.Y	In		When The Caption Function Adopted, Used.
46	I/O	PX.Y	Out		
47	N.C.				Not Used (Programmed Gound Level)
48	N.C.				
49	I/O	S-Mute	Out	High	Sound Amp Mute
50	I/O	Power	Out	Low	Picture On/Off Control
51	N.C.				Not Used (Programmed Gound Level)
52	I/O				

5. Troubleshooting

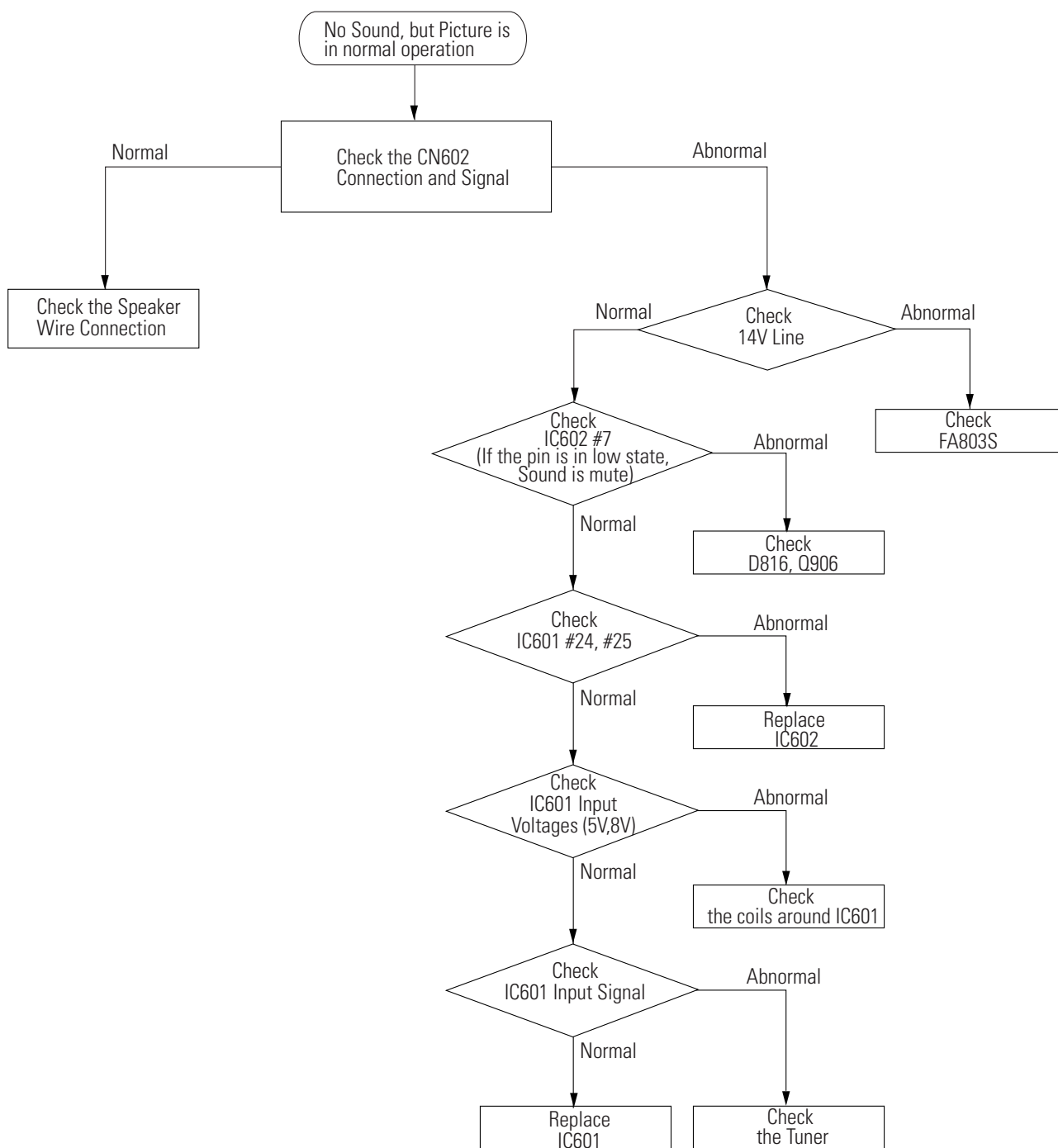
5-1 No Power



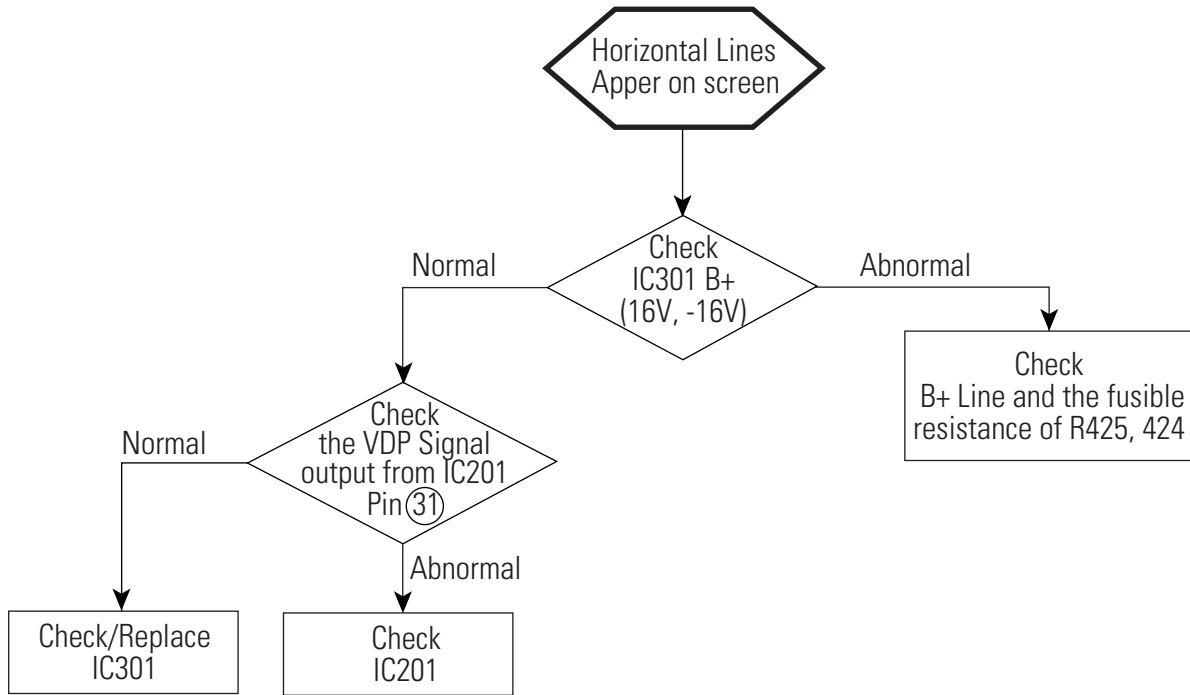
5-2 No Raster (Sound OK)



5-3 No Sound

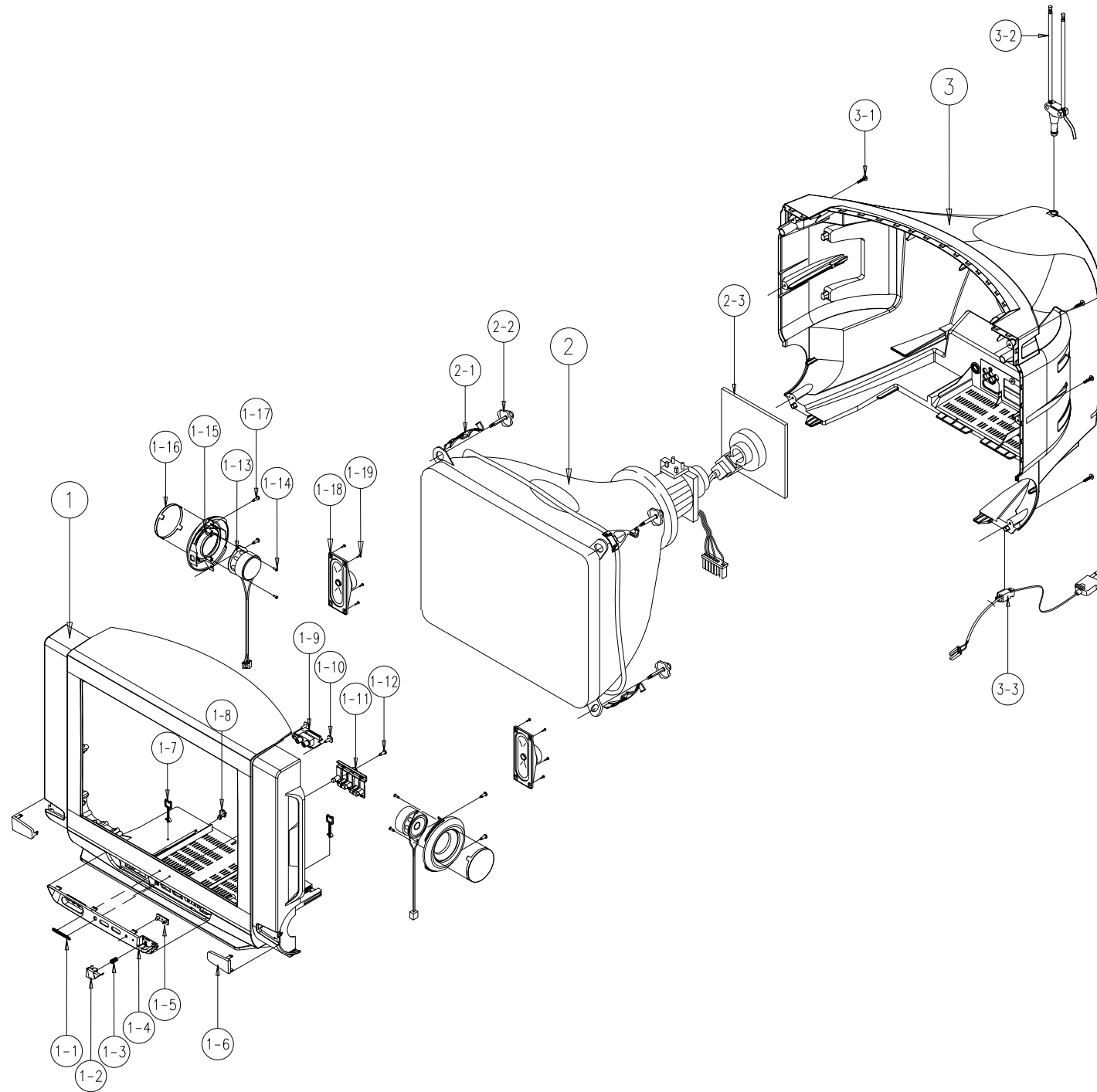


5-4 Horizontal Lines Appear on screen



6. Exploded View & Parts List

6-1 CS21S8NAS/MUR



No	Code No	Description;Specification	Q'ty	Remark	S.N.A
1	AA64-02233A	CABINET-BACK;21S8,HIPS,HB,G4309	1		
1-1	AA64-70123B	BADGE-BRAND;ALL,AL,8.5,L50,BLK,SILVER,SA	1		
1-2	AA64-02235B	KNOB POWER;21S8,ABS,HB,G3676,GDM3130	1		
1-3	AA61-60003J	SPRING ETC-CS;-;SUS304,-,-,OD6,N7,OD6,-,	1	KNOPOW	
1-4	AA64-02234B	DECORATION-CONTROL;21S8,HIPS,HB,G4309,GD	1		
1-5	AA64-02237A	WINDOW-RMC,LED;21S8,ACRYL,CLR	1		
1-6	AA64-02239D	DECORATION-TWEETER,R;21S8 NEW,HIPS,HB,G4	1		
1-7	AA65-00011C	CLAMPER CORE-WIRE;ALL MODEL,NYLON 66,V2,	1		
1-8	AA61-40113A	STOPPER-PCB;501H,HIPS,-,-,HB,NTR,-	1		
1-9	AA95-01784V	ASSY SUB-PCB,A/V FRONT;DP,21A8,KS2AAA95-	1		
1-10	6006-001095	SCREW-ASS'Y TAPT;WP,BH,+;M4,L12,ZPC(YEL)	2	AV+CF	
1-11	AA64-02236B	KNOB CONTROL;21S8,ABS,HB,G3676,GDM3130	1		
1-12	6003-001026	SCREW-TAPTITE;RH,+;B,M4,L15,ZPC(BLK),SWR	1	T0081	
1-13	AA91-00862B	ASSY HOLDER SPK;;40HM,μ0≤æΔSOUND∞≠j∂««,	2		
1-14	6003-001019	SCREW-TAPTITE;RH,+;B,M4,L12,ZPC(BLK),SWR	2	T0081	
1-15	AA61-00870B	HOLDER-TWEETER;21S8,HIPS HB,G4309,SV012P	2		
1-16	AA64-02238B	GRILLE-TWEETER;21S8,SECC,T0.5,GDM-S130	2		
1-17	6003-001019	SCREW-TAPTITE;RH,+;B,M4,L12,ZPC(BLK),SWR	2	SPK+HT	
1-18	AA91-00861B	ASSY HOLDER SPK;;80HM,15W,21S8	1		
1-19	6002-000512	SCREW-TAPPING;RH,+;2,M4,L12,ZPC(BLK),SWR	4	SPK+HT	
2	AA03-00302A	CRT COLOR;A51QDX992X001(NF),+380MG,1.85M	1		
2-1	AA65-00009B	CLAMPER CORE-D,COIL;21A8,NYLON 66,V0,-,-	4	D-COIL	
2-2	AA60-10050R	SCREW-ASSY;-;SWRCH18A,M5,L31.5,HH,+;WC,-	4	CRT+CF	
2-3	3704-001105	SOCKET-CRT;11P,20PI,26.5PI,NI,-	1	V999S	
3	AA64-02647D	CABINET BACK;DP,21S8,HB,AA64-02233A(12KG	1		
3-1	AA60-10050T	SCREW-TAPPING;-;SWRCH18A,M4,L20,RH,+;2S,	6	CB+CF	
3-2	AA42-00003A	ANT ROD;-;3S,720mm,ABS,UL/CSA,-	1		
3-3	AA96-00697A	ASSY POWER CORD;;KKP419C,CP2/NO(4.0),H/C	1		

You can search for the updated part code through ITSELF web site.
 URL : http://itself.sec.samsung.co.kr

7. Electrical Parts List

7-1 CS21S8NAS/MUR

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
ASSY COVER REAR					ASSY CHASSIS				
1		AA90-02009W	ASSY COVER REAR:CS21S8NAS/MUR		4		AA64-02239D	DECORATION-TWEETER,R:21S8 NEW,HIPS,HB,G4	
2		AA60-00091J	SPACER-FELT,-,FELT,330X10,-,-,BLK,TO.5,-		4	166	AA69-01401A	PAD-PLATE,;CB SW-2,YEL,100,100	
2		AA64-00892F	INLAY-BACK:D2,D3,PS SHEET,TO.3,-,-,BLK,R		4	811	AA69-01410A	MASTER CARTON,;CB DW-3,100,100,100,YEL	
2		AA64-02647D	CABINET BACK:DP,21S8,HB,AA64-02233A(12KG		ASSY CHASSIS				
3		0203-001269	TAPE-OPP MASKING;#301,TO.06,W75,L50000,N		1		AA91-06212H	ASSY CHASSIS,KS2A	
3		AA64-02233A	CABINET-BACK:21S8,HIPS,HB,G4309		2		AA91-06904A	ASSY MISC-CHASSISPACK:2	
3	800	AA69-01410A	MASTER CARTON,;CB DW-3,100,100,100,YEL		3		AA68-02713A	LABEL-AUTO:A/P,15,35,WHITE,ALL MODEL	
3		AA69-01559U	PAD,;PS,660,475,T18		3		AA94-12299J	ASSY PCB MAIN,;KS2A	
3		AA69-01897D	BAG-VINYL,;HDPE TO.02,1400,1400		4		0202-000008	SOLDER-WIRE:S63S-W3.0,S63S,D3,63Sn/37Pb,	
3		AA69-01897E	BAG-VINYL,;HDPE TO.02,1400,2100		4		0202-000187	SOLDER-WIRE FLUX,;-RS60S,D1.2,63Sn/37Pb	
3		AA69-01948A	PAD-TYPE,;SW-2,805,625		4		0202-000188	SOLDER-BAR:S63S-B20,S63A,22x335,63Sn/37P	
ASSY COVER FRONT					4		0204-000441	FLUX:JS95TVS,FLUX,20,-	
1		AA90-04489J	ASSY COVER FRONT:CS21S8NAS/MUR		4		0204-000442	SOLVENT;1M-1000,C3H7OH,96,-	
2	C/F	0203-001290	TAPE-OPP MASKING;ANT 100C,TO.073,W30,L50		△	4	D813	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-
2	SPK+HT	6002-000512	SCREW-TAPPING;RH,+2,M4,L12,ZPC(BLK),SWR		△	4	D801S	0402-001160	DIODE-BRIDGE:D5SB60,600V,6A,SIP-4,-
2	CF+KC	6002-000514	SCREW-TAPPING;RH,+2,M4,L15,ZPC(BLK),SWR		4	DH02	0402-001296	DIODE-RECTIFIER:FMP-3FU,1.5KV,5A,TO-3PF,	
2	HTW+CF	6002-000522	SCREW-TAPPING;TH,+2,M4,L15,ZPC(BLK),SWR		4	DH01	0502-001136	TR-POWER:KSD5703,NPN,70W,TO-3PF,ST-8-	
2	SPK+CF	6006-001095	SCREW-ASS'Y TAPT;WPBH,+M4,L12,ZPC(YEL)		△	4	PC801S	0604-001038	PHOTO-COUPLER:TR,130-260%,200mW,DIP-4,ST
2	AV+CF	6006-001095	SCREW-ASS'Y TAPT;WPBH,+M4,L12,ZPC(YEL)		4	IC902	1103-001177	IC-EEPROM:24WC16,2048x8Bit,DIP8P,-,-,2	
2	CRT+CF	AA60-10050R	SCREW-ASSY,-,SWRCH18A,M5,L31.5,HH,+WC,-		4	IC803	1203-002085	IC-VOLTAGE REGULATOR:78R08,TO-220,4P,-,P	
2	CB+JAC	AA60-10050T	SCREW-TAPPING,;-SWRCH18A,M4,L20,RH,+2S,		△	4	IC201S	1204-001812	IC-VIDEO PROCESS;VDP3130Y-B2,DIP64P,760
2	CB+CF	AA60-10050T	SCREW-TAPPING,;-SWRCH18A,M4,L20,RH,+2S,		4	IC601	1204-002038	IC-SOUND PROCESSOR;MSP3410G-PO-83V3,PSDI	
2		AA64-02670A	KNOB CONTROL:DP,21S8,AA64-02236B		△	4	NT802S	1404-001045	THERMISTOR-NTC;4.7ohm,15%,2900K,35.0mW,T
3		0203-001269	TAPE-OPP MASKING;#301,TO.06,W75,L50000,N		△	4	P801S	1404-001156	THERMISTOR-PTC;90HM,+30%/-20%,220VRMS,27
3	109	AA64-02236B	KNOB CONTROL:21S8,ABS,HB,G3676,GDM3130		△	4	CY802S	2201-000446	C-CERAMIC,DISC;3.3NF,20%,400V,Y5U,BK,15X
3	468	AA69-01410A	MASTER CARTON,;CB DW-3,100,100,100,YEL		4	C407	2301-001338	C-FILM,LEAD-OTHER;0.68NF,5%,1.6KV,BK,28X	
2	D-COIL	AA65-00009B	CLAMPER CORE-D;COIL:21A8,NYLON 66,V0,-,-		△	4	CR402S	2301-001467	C-FILM,LEAD-PPF;3.9NF,3%,1.6KV,BK,29X8.X
2		AA91-00861B	ASSY HOLDER SPK,;80HM,15W,21S8		△	4	CR401S	2301-001468	C-FILM,LEAD-PPF;3.3NF,3%,1.6KV,BK,29X13.
2		AA91-00862B	ASSY HOLDER SPK,;40HM,100≤200SOUND$0.05\mu\text{m}$		△	4	CX802S	2306-000318	C-FILM,LEAD-PPF;220NF,20%,250V,BK,-,22.5
2		AA91-00983A	ASSY-HOLDER TWEETER:DPHB G4309,SV012P,2		△	4	CX801S	2306-000318	C-FILM,LEAD-PPF;220NF,20%,250V,BK,-,22.5
3		AA61-00870B	HOLDER-TWEETER:21S8,HIPS,HB,G4309,SV012P		△	4	CR405S	2306-000350	C-FILM,LEAD-PPF;270NF,5%,400V,BK,26X18.5
3		AA64-02238B	GRILLE-TWEETER:21S8,SECC,TO.5,GDM-S130		4	C806	2401-001426	C-AL;470uF,20%,400V,GP,-,35x45mm,10	
2		AA91-01008A	ASSY CABINET FRONT:DP,21S8 PAL,SV012P+GD		4	C815	2401-003633	C-AL;220UF,20%,160V,GP,ST,22X25MM,10	
3	FRONT	0203-001085	TAPE-DOUBLE FACE;#4929,TO.64,W12,-,BLK		4	X201	2801-004019	CRYSTAL-UNIT;20.25MHz,30ppm,28-AAAM,13pF,	
3		AA60-00091F	SPACER-FELT,-,FELT,150X10,-,-,BLK,TO.5,-		4	X601	2801-004020	CRYSTAL-UNIT;18.432MHz,30ppm,28-AAAM,12pF	
3		AA61-40113A	STOPPER-PCB;5011H,HIPS,-,-,HB,NTR,-		△	4	SW801S	3403-001107	SWITCH-PUSH;250V,5A,DPST,-,KDC-A04
3	KNOPOW	AA61-60003J	SPRING ETC-CS,-,SUS304,-,-,OD6,N7,OD6,-,		△	4	FP801S	3601-000281	FUSE-CARTRIDGE;250V,4A,TIME-LAG,GLASS,5.
3		AA64-02668B	CABINET-FRONT:DP,21S8,AA64-02232D		△	4	V999S	3704-001105	SOCKET-CRT;11P,20P,26.5PI,NI,-
3		AA64-02234B	DECORATION-CONTROL:21S8,HIPS,HB,G4309,GD		4	JA701	3722-001333	JACK-PIN;9P;3.2mm,NI,BLK,-	
3		AA64-02235B	KNOB POWER:21S8,ABS,HB,G3676,GDM3130		4	JA702	3722-001596	JACK-PIN;9P;3.5mm,NI,BLK(GRN/BLU/RED)	
3		AA64-02237A	WINDOW-RVC,LED:21S8,ACRYL,CLR		△	4	T801S	AA26-00044A	TRANS SWITCHING,-,-,AC90-260V,DC135/15
3		AA64-70123B	BADGE-BRAND-ALL,AL,8.5,L50,BLK,SILVER,SA		△	4	T444S	AA26-00057A	TRANS FBT,-,FUH-29A001B(S),25/29,130
3		AA65-00011C	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,		△	4	T401	AA26-50001M	TRANS-HORIZ.DRIVE,-,-,80mH,-,520uH,-
3		AA65-30105C	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,		4	L808	AA27-00098A	COIL CHOKE,-,-,24uH,10%,-,0.1,3.0A,DR10X	
3		AA64-02671B	DECORATION-TWEETER,L:DP,21S8,AA64-02239C		△	4	CR404S	AA27-00147A	COIL HORIZ. WIDTH;170UH,BK,54T+2.2
4		0203-001269	TAPE-OPP MASKING;#301,TO.06,W75,L50000,N		△	4	LR401S	AA27-00281A	COIL LINEARITY;64UH,64UH,DR1215 C:4.5,7.
4		AA61-01109H	CASE-PP BOX,;PP,385,310,35		△	4	LX801S	AA29-30002F	FILTER LINE NOISE,-,-,6mH,2.45A,-,-
4	BOX	AA63-70002A	SHEET,-,PE FOAM,T1.0,-,-,-,50G		4	RM901	AA32-00015A	MODULE REMOCON;FRP-3521H31,38KHZ,940MM,M	
4		AA64-02239C	DECORATION-TWEETER,L:21S8 NEW,HIPS,HB,G4		4		AA39-20010B	LEAD CONNECTOR-ASSY,;1P500,YFH800-01,S,	
4	166	AA69-01401A	PAD-PLATE,;CB SW-2,YEL,100,100		4		AA39-20010H	LEAD CONNECTOR-ASSY,;1P300,YFH800-01,S,	
4	811	AA69-01410A	MASTER CARTON,;CB DW-3,100,100,100,YEL		4	CN502B	AA39-20053A	LEAD CONNECTOR-ASSY,;5P,400,YBNH025-05,S	
3		AA64-02671C	DECORATION-TWEETER,R:DP,21S8,AA64-02239D		4	CN501B	AA39-20054B	LEAD CONNECTOR-ASSY,;6P500,YBNH025-06,S	
4		0203-001269	TAPE-OPP MASKING;#301,TO.06,W75,L50000,N		△	4	TU01S	AA40-00082A	TUNER;TCPS3001PD16D(S),PAL-M(MTSC),181CH
4		AA61-01109H	CASE-PP BOX,;PP,385,310,35		4	GT301	AA60-40012D	PIN-GT,ASSY;T1.6,6-12.5,-,NYLON66	
4	BOX	AA63-70002A	SHEET,-,PE FOAM,T1.0,-,-,-,50G		4		AA61-00707B	HOLDER-COVER:ALL MODEL,NYLON-66 T1.0 V2,	
					4		AA68-02713A	LABEL-AUTO:A/P,15,35,WHITE,ALL MODEL	
					△	4	IC804	AA96-00243C	ASSY H/S,-,REGULATOR,AA62-00045A,K7806,
					5			1203-000284	IC-POSI.FIXED REG.;7806,TO-220,3P,-,PLAS
					5			6003-000335	SCREW-TAPTITE;RH,+2S,M3,L8,ZPC(YEL),SWR
					5			AA62-00065A	HEAT SINK-PS;DP,-,-,AA62-00045A,-,-,-

Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
4	LD901	AA96-00461A	ASSY LED GUIDE;-,SL-255D,RED/GRN		5	DZ701	0403-000720	DIODE-ZENER:MTZJ9.1B,9.1V,8.57-9.01V,500	
4	DDR01	AA96-00469F	ASSY H/S;-REGULATOR,AA62-00053B,D10U60S		5	DZ702	0403-000720	DIODE-ZENER:MTZJ9.1B,9.1V,8.57-9.01V,500	
5		0205-000129	GREASE-SILICON:SC102,JAPAN		5	DZ803	0403-001167	DIODE-ZENER:MTZJ30D,30V,29.02-30.51V,500	
5		0402-001358	DIODE-RECTIFIER:FFFP10U60S,600V,10A,TO-2		5	DZ509	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500mW,D	
5		0402-001375	DIODE-RECTIFIER:FFFP10U20S,200V,10A,TO-2		5	DZ305	0403-001221	DIODE-ZENER:UZ39BSB,35.36-37.19V,500mW,D	
5		1203-001006	IC-VOLTAGE REGULATOR:78R05,TO-220F,4P,-		5	DZ202	0403-001321	DIODE-ZENER:MTZJ6.8C,6.66-7.01V,500mW,DO	
5		6003-000334	SCREW-TAPTITE:RH,+2S,M3,L6,ZPC(YEL),SWR		5	DZ801	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO	
5		AA62-00053B	HEAT SINK:DREAM (D2,D3),AL,T1.0,147,50,		5	DZ808	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO	
4	IC501	AA96-00582A	ASSY H/S;-CRTAA62-00096A,STV5109,KS1A		5	DZ501	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D	
5		1201-001687	IC-VIDEO AMP:STV5109,ZIP15P,-,SINGLE,50		5	DZ301	0403-001328	DIODE-ZENER:MTZJ22A,20.15-21.20V,500mW,D	
5		6003-000334	SCREW-TAPTITE:RH,+2S,M3,L6,ZPC(YEL),SWR		5	DZ302	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D	
5		AA62-00096A	HEAT SINK:KS2A,AL5052,T1.0,W36.0,H35.0,S		5	DZ303	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D	
△	IC801S	AA96-50373F	ASSY H/S;-PVM,AA62-30181K,KA3A1265RD,IC		5	DZ304	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D	
5		0205-000129	GREASE-SILICON:SC102,JAPAN		5	D203	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
5		6003-000335	SCREW-TAPTITE:RH,+2S,M3,L8,ZPC(YEL),SWR		5	D204	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
5		AA13-00101A	IC-HYBRID:KA3S1265RD,CN5039,5PIN,-50T012		5	D205	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
5		AA61-10386A	BRACKET-IC:100,SECC,T1.0,KA2S0680		5	D206	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
5		AA62-30181K	HEAT SINK-ES;-AL6063 EXTR.,2,WHT,40MM,-		5	D901	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
4	IC602	AA96-50398A	ASSY H/S;-AA62-30182E,TA7297,-		5	D902	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
5		1201-001064	IC-POWER AMP:7297,ZIP15P,-,DUAL,32dB,PL		5	D903	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
5		6003-000335	SCREW-TAPTITE:RH,+2S,M3,L8,ZPC(YEL),SWR		5	D904	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
5		AA62-30182E	HEAT SINK-ES;-A6063 EXTR.,-WHT,-,-,40		5	D905	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
4	IC301	AA96-50406G	ASSY H/S;-POWER,AA62-30180K,K57A		5	O206	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T	
5	CIS	1204-001807	IC-VERTICAL PROCESSOR:LA7841,SIP7P,708MI		5	O208	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T	
5	CIS	6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW		5	O210	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T	
5	CIS	AA62-00058A	HEAT SINK-ES:DP;-AA62-30180K,-,-,-		5	O201	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
4		AA97-04058A	ASSY AUTO-MAIN:CS21A9WAX/MUR,KS2A,MYANMA		5	O202	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D201	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O203	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D202	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O204	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D207	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O207	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D208	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O209	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D209	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O211	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D210	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O212	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D212	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O213	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D501	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O222	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D502	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O602	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D503	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O902	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D508	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O903	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D602	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O904	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D604	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O905	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
△	D804	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O906	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D906	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O907	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	D908	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O908	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
5	DZ402	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		5	O402	0502-001007	TR-POWER:KSC2073-H2,NPN,25W,TO-220,ST,6	
5	D403	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		5	DZ805	1203-001217	IC-POS.ADJ.UST.REG.:431,TO-92,3P4,58MIL	
5	D406	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		5	IC904	1203-001943	IC-VOL. DETECTOR:7025,TO-92,3P,-,PLASTIC	
5	D504	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		5	IC903	1203-001944	IC-POS.FIXED REG.:78RM33,TO-220,3P,-,PL	
△	D810	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		△	VP801S	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP	
△	D811	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		△	VX801S	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP	
5	D907	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		5	R223	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
5	D407	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L		5	R224	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
5	D413	0402-000537	DIODE-RECTIFIER:RH1A,600V,0.6A,DO-20AC		5	R225	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
5	D401	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP		5	R226	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
5	D402	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP		5	R264	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
5	D301	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		5	R265	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
5	D411	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		5	R267	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
△	D803	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		5	R911	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
△	D816	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		5	R245	2001-000005	R-CARBON:390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
△	D801	0402-001111	DIODE-RECTIFIER:1N5397CP600V,1.5A,DO-20		5	R250	2001-000005	R-CARBON:390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
5	DZ201	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R255	2001-000005	R-CARBON:390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
5	DZ203	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R916	2001-000007	R-CARBON:3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ204	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R214	2001-000008	R-CARBON:15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ601	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R918	2001-000009	R-CARBON:20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ602	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R303	2001-000016	R-CARBON(S):10HM,5%,1/2W,AA,TP,2.4X6.4MM	
5	DZ802	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R412	2001-000020	R-CARBON(S):22OHM,5%,1/2W,AA,TP,2.4X6.4MM	
5	DZ806	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R527	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP,2.4X6.4MM	
5	DZ901	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R307	2001-000066	R-CARBON(S):10KOHM,5%,1/2W,AA,TP,2.4X6.4MM	
5	DZ902	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R825	2001-000066	R-CARBON(S):10KOHM,5%,1/2W,AA,TP,2.4X6.4MM	
5	DZ903	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R228	2001-000117	R-CARBON(S):680HM,5%,1/2W,AA,TP,2.4X6.4MM	
5	DZ904	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R621	2001-000214	R-CARBON:1.1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ905	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R622	2001-000214	R-CARBON:1.1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ906	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R209	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ907	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R914	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ908	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		5	R222	2001-000232	R-CARBON:1.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ306	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,T		5	R822	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
5	DZ804	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,T		5	R823	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2MM	

Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark	
	5	R515	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP,3.7		5	C632	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T	
	5	R518	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP,3.7		5	C642	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T	
	5	R521	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP,3.7		5	C644	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T	
△	5	RP801S	2002-001010	R-COMPOSITION:1.8Mohm,5%,1/2W,AA,TP,3.7x		5	C647	2202-000286	C-CERAMIC,MLC-AXIAL:56pF,5%,50V,SL,TP,1.	
△	5	RX801S	2002-001011	R-COMPOSITION:3.3Mohm,5%,1/2W,AA,TP,3.7x		5	C654	2202-000286	C-CERAMIC,MLC-AXIAL:56pF,5%,50V,SL,TP,1.	
△	5	RY801S	2002-001011	R-COMPOSITION:3.3Mohm,5%,1/2W,AA,TP,3.7x		5	C912	2202-000719	C-CERAMIC,MLC-AXIAL:6.8nF,20%,16V,Y5R,TP	
△	5	RY802S	2002-001013	R-COMPOSITION:4.7Mohm,5%,1/2W,AA,TP,3.7x		5	C211	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
	5	R426	2003-000540	R-METAL OXIDE(S):1Kohm,5%,2W,AF,TP,4x12m		5	C504	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
	5	R227	2003-000592	R-METAL OXIDE(S):22ohm,5%,2W,AF,TP,4x12m		5	C505	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
	5	R434	2003-000664	R-METAL OXIDE(S):33ohm,5%,2W,AF,TP,4x12m		5	C506	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
	5	R807	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m		5	C607	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
	5	R808	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m		5	C608	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
	5	R802	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP,3.9x		5	C905	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
	5	R803	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP,3.9x		5	C908	2202-000863	C-CERAMIC,MLC-AXIAL:560pF,10%,50V,Y5P,TP	
	5	R804	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP,3.9x		5	C206	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R403	2003-002037	R-METAL OXIDE(S):270ohm,5%,2W,AF,TP,3.9x		5	C218	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R436	2003-002151	R-METAL OXIDE:18KOHM,5%,2W,AG,TP,6X16MM		5	C219	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R305	2003-002182	R-METAL OXIDE(S):470ohm,5%,2W,AG,TP,3.9x		5	C220	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R306	2003-002182	R-METAL OXIDE(S):470ohm,5%,2W,AG,TP,3.9x		5	C226	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R401	2003-002186	R-METAL OXIDE(S):22Kohm,5%,2W,AG,TP,3.9x		5	C232	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R402	2003-002186	R-METAL OXIDE(S):22Kohm,5%,2W,AG,TP,3.9x		5	C901	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R835	2003-002211	R-METAL OXIDE(S):91Kohm,5%,2W,AG,TP,3.9x		5	C921	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R836	2003-002211	R-METAL OXIDE(S):91Kohm,5%,2W,AG,TP,3.9x		5	C960	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
	5	R212	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		5	C412	2301-000148	C-FILM,LEAD-PEF:10nF,5%,100V,TP,7x3.2x7m	
	5	R313	2004-001137	R-METAL:6.8Kohm,1%,1/8W,AA,TP,1.8x3.2m		5	C821	2301-000192	C-FILM,LEAD-PEF:1nF,5%,50V,TP,5.3x10mm,5	
	5	R821	2004-001377	R-METAL(S):120Kohm,1%,1/2W,AA,TP,2.4x6.4		5	C811	2301-000254	C-FILM,LEAD-PEF:39nF,5%,50V,TP,7.5x3.5x6	
	5	R301	2004-001397	R-METAL(S):4.7Kohm,1%,1/2W,AA,TP,2.4x6.4		5	C213	2301-000310	C-FILM,LEAD-PEF:68nF,5%,50V,TP,8.0x8.5x4	
	5	R429	2004-001397	R-METAL(S):4.7Kohm,1%,1/2W,AA,TP,2.4x6.4		5	C242	2301-000310	C-FILM,LEAD-PEF:68nF,5%,50V,TP,8.0x8.5x4	
	5	R432	2004-001397	R-METAL(S):4.7Kohm,1%,1/2W,AA,TP,2.4x6.4		5	C610	2301-000314	C-FILM,LEAD-PEF:8.2nF,5%,50V,TP,6.5x3.0x	
	5	R819	2004-001983	R-METAL(S):2.49Kohm,1%,1/2W,AA,TP,2.4x6.		5	C611	2301-000314	C-FILM,LEAD-PEF:8.2nF,5%,50V,TP,6.5x3.0x	
	5	R314	2004-001986	R-METAL(S):35.7Kohm,1%,1/2W,AA,TP,2.4x6.		5	C306	2301-000342	C-FILM,LEAD-PEF:2.2nF,5%,50V,TP,7.4x3.9x	
	5	R315	2004-004970	R-METAL(S):62Kohm,1%,1/8W,AA,TP,1.8x3.2m		5	C228	2301-000356	C-FILM,LEAD-PEF:47nF,5%,50V,TP,7.5x4.0x6	
	5	R302	2004-005020	R-METAL(S):27.5KOHM,1%,1/2W,AA,TP,2.5x6.		5	C803	2301-000356	C-FILM,LEAD-PEF:47nF,5%,50V,TP,7.5x4.0x6	
	5	R522	2008-000206	R-FUSIBLE(S):1ohm,5%,1/2W,AF,TP,2.5x6.5m		5	C809	2301-000356	C-FILM,LEAD-PEF:47nF,5%,50V,TP,7.5x4.0x6	
	5	R424	2008-000253	R-FUSIBLE(S):0.47ohm,5%,1W,AF,TP,3.9x10m		5	C103	2301-000383	C-FILM,LEAD-PEF:10nF,5%,50V,TP,6x7x3.2mm	
	5	R425	2008-000253	R-FUSIBLE(S):0.47ohm,5%,1W,AF,TP,3.9x10m		5	C105	2301-000383	C-FILM,LEAD-PEF:10nF,5%,50V,TP,6x7x3.2mm	
	5	R828	2008-000266	R-FUSIBLE(S):1ohm,5%,2W,AF,TP,3.9x10mm		5	C420	2301-001065	C-FILM,LEAD-PPF:47nF,5%,630V,TP,19x15.5x	
	5	R829	2008-000266	R-FUSIBLE(S):1ohm,5%,2W,AF,TP,3.9x10mm		△	5	CR403S	2301-001067	C-FILM,LEAD-PPF:82nF,5%,400V,TP,19x15.5x
	5	R827	2008-000284	R-FUSIBLE(S):0.1OHM,10%,2W,AF,TP,3.9x10M		5	C807	2301-001435	C-FILM,LEAD-PPF:1.5nF,5%,1.2KV,TP,15x8x1	
	5	R405	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP,3.9x10		5	C305	2305-000149	C-FILM,LEAD-PEF:100nF,5%,100V,TP,12x12.5	
	5	R433	2008-001127	R-FUSIBLE(S):6.8Kohm,5%,1W,AF,TP,3.9x10m		5	C304	2305-000285	C-FILM,LEAD-PEF:220nF,5%,100V,TP,10.5x5.	
	5	R523	2008-001129	R-FUSIBLE(S):1.5ohm,5%,1/2W,AF,TP,2.5x6.		5	C408	2305-000382	C-FILM,LEAD-PEF:4.7nF,5%,400V,TP,5mm	
	5	R304	2008-001140	R-FUSIBLE(S):0.9OHM,5%,2W,AF,TP,3.9x10MM		5	C233	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,7.5x4.0x	
	5	C424	2201-000132	C-CERAMIC,DISC:0.1NF,10%,500V,Y5P,TP,6.5		5	C234	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,5mm	
	5	C656	2201-000304	C-CERAMIC,DISC:0.001NF,0.25PF,50V,COG,TP		5	C235	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,5mm	
	5	C657	2201-000304	C-CERAMIC,DISC:0.001NF,0.25PF,50V,COG,TP		5	C236	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,5mm	
	5	C804	2201-000332	C-CERAMIC,DISC:2.2NF,20%,250V,Y5U,TP,9X4		5	C214	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C805	2201-000332	C-CERAMIC,DISC:2.2NF,20%,250V,Y5U,TP,9X4		5	C216	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C428	2201-000406	C-CERAMIC,DISC:0.27NF,10%,2KV,Y5P,TP,6.3		5	C308	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C205	2201-000504	C-CERAMIC,DISC:0.039NF,5%,50V,SL,TP,5X3M		5	C513	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C401	2201-000556	C-CERAMIC,DISC:0.47NF,10%,500V,Y5P,TP,5.		5	C605	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C403	2201-000556	C-CERAMIC,DISC:0.47NF,10%,500V,Y5P,TP,5.		5	C620	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C421	2201-000556	C-CERAMIC,DISC:0.47NF,10%,500V,Y5P,TP,5.		5	C635	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C650	2201-000558	C-CERAMIC,DISC:0.47NF,10%,50V,Y5P,TP,5X3		5	C646	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C817	2201-000599	C-CERAMIC,DISC:0.56NF,10%,500V,Y5P,TP,5.		5	C823	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C819	2201-000599	C-CERAMIC,DISC:0.56NF,10%,500V,Y5P,TP,5.		5	C825	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C822	2201-000599	C-CERAMIC,DISC:0.56NF,10%,500V,Y5P,TP,5.		5	C829	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C425	2201-000599	C-CERAMIC,DISC:0.56NF,10%,500V,Y5P,TP,5.		5	C831	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C843	2201-000681	C-CERAMIC,DISC:0.082NF,5%,50V,SL,TP,5X3M		5	C837	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C509	2201-000723	C-CERAMIC,DISC:4.7NF,20%,3KV,Y5U,TP,16X5		5	C839	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C910	2201-000980	C-CERAMIC,DISC:0.03NF,5%,50V,COG,TP,5X3M		5	C907	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C911	2201-000980	C-CERAMIC,DISC:0.03NF,5%,50V,COG,TP,5X3M		5	C914	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C814	2201-000991	C-CERAMIC,DISC:0.56NF,10%,2KV,Y5P,TP,7.5		5	C916	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C224	2201-002031	C-CERAMIC,DISC:0.005NF,0.5PF,50V,COG,TP,		5	C919	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x	
	5	C225	2201-002031	C-CERAMIC,DISC:0.005NF,0.5PF,50V,COG,TP,		5	C508	2305-000704	C-FILM,LEAD-PEF:100nF,5%,250V,TP,16.5x10	
	5	C303	2201-002031	C-CERAMIC,DISC:0.005NF,0.5PF,50V,COG,TP,		5	C511	2305-000704	C-FILM,LEAD-PEF:100nF,5%,250V,TP,16.5x10	
	5	C115	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		5	C202	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C116	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		5	C210	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C243	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		5	C215	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C244	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		5	C227	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C245	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		5	C229	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C501	2202-000205	C-CERAMIC,MLC-AXIAL:22pF,5%,50V,SL,TP,1.		5	C231	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C502	2202-000205	C-CERAMIC,MLC-AXIAL:22pF,5%,50V,SL,TP,1.		5	C630	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C503	2202-000205	C-CERAMIC,MLC-AXIAL:22pF,5%,50V,SL,TP,1.		5	C631	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C627	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T		5	C645	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	
	5	C629	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T		5	C827	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5	

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
5	C840	2401-000050	C-AL:10uF,20%,16V,GP,TP5x11,2,5		5	L902	2701-000183	INDUCTOR-AXIAL:39uH,5%,2534	
5	C903	2401-000050	C-AL:10uF,20%,16V,GP,TP5x11,2,5		5	L102	2701-001090	INDUCTOR-AXIAL:0.56uH,10%,3070	
5	C104	2401-000142	C-AL:1000uF,20%,16V,WVT,TP10x20,5		5	L201	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
5	C816	2401-000262	C-AL:100uF,20%,160V,HR,TP16x25,7,5		5	L204	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
5	C913	2401-000287	C-AL:100uF,20%,16V,WVT,TP6.3x11,5		5	L601	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
5	C915	2401-000287	C-AL:100uF,20%,16V,WVT,TP6.3x11,5		5	L609	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
5	C904	2401-000302	C-AL:100uF,20%,25V,GP,TP6.3x11,5		5	L901	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
5	C302	2401-000360	C-AL:100uF,20%,50V,GP,TP8x11,5,5		5	L903	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
5	C307	2401-000360	C-AL:100uF,20%,50V,GP,TP8x11,5,5		5	L904	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
5	C920	2401-000480	C-AL:10uF,20%,50V,GP,TP5x11,5		5	R519	2702-001096	INDUCTOR-RADIAL:33uH,10%,4x6mm	
5	C230	2401-000493	C-AL:10uF,20%,50V,LZ,TP5x11mm,5mm		5	X901	2801-003728	CRYSTAL-UNIT:6MHz,30ppm,28-AA,20pF,40oh	
5	C617	2401-000493	C-AL:10uF,20%,50V,LZ,TP5x11mm,5mm		5	L407	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP-	
5	C201	2401-000553	C-AL:1uF,10%,50V,GP,TP5x11,5		5	L501	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP-	
5	C618	2401-000553	C-AL:1uF,10%,50V,GP,TP5x11,5		5	L804	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP-	
5	C902	2401-000553	C-AL:1uF,10%,50V,GP,TP5x11,5		5	L807	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP-	
5	C106	2401-000603	C-AL:1uF,20%,50V,GP,TP5x11,2		5	L302	3301-000287	BEAD-AXIAL-AA,3.5x1.0x6.0mm,1500,2400G	
5	C239	2401-000603	C-AL:1uF,20%,50V,GP,TP5x11,2		5	L303	3301-000287	BEAD-AXIAL-AA,3.5x1.0x6.0mm,1500,2400G	
5	C841	2401-000611	C-AL:1uF,20%,50V,WVT,TP5x11,5		5	L610	3301-000287	BEAD-AXIAL-AA,3.5x1.0x6.0mm,1500,2400G	
5	C818	2401-000711	C-AL:2200uF,20%,25V,GP,TP16x25,7,5		5	L801	3301-000287	BEAD-AXIAL-AA,3.5x1.0x6.0mm,1500,2400G	
5	C237	2401-000913	C-AL:22uF,20%,16V,GP,TP5x11,5		5	L802	3301-000287	BEAD-AXIAL-AA,3.5x1.0x6.0mm,1500,2400G	
5	C217	2401-001026	C-AL:3.3uF,20%,50V,GP,TP5x11,5		5	L803	3301-000287	BEAD-AXIAL-AA,3.5x1.0x6.0mm,1500,2400G	
5	C636	2401-001026	C-AL:3.3uF,20%,50V,GP,TP5x11,5		5	L806	3301-000287	BEAD-AXIAL-AA,3.5x1.0x6.0mm,1500,2400G	
5	C820	2401-001054	C-AL:3300uF,20%,25V,GP,TP18x25,7,5		5	L809	3301-000287	BEAD-AXIAL-AA,3.5x1.0x6.0mm,1500,2400G	
5	C510	2401-001232	C-AL:4.7uF,20%,250V,GP,TP10x12,5,5		5	SW901	3404-001252	SWITCH-TACT:12VDC,50MA,130GF,7.5X7,1,1	
5	C626	2401-001989	C-AL:4.7uF,20%,50V,BP,TP5x11,5		5	SW902	3404-001252	SWITCH-TACT:12VDC,50MA,130GF,7.5X7,1,1	
5	C628	2401-001989	C-AL:4.7uF,20%,50V,BP,TP5x11,5		5	SW903	3404-001252	SWITCH-TACT:12VDC,50MA,130GF,7.5X7,1,1	
5	C637	2401-001271	C-AL:4.7uF,20%,50V,GP,TP4x7mm,5mm		5	SW904	3404-001252	SWITCH-TACT:12VDC,50MA,130GF,7.5X7,1,1	
5	C640	2401-001271	C-AL:4.7uF,20%,50V,GP,TP4x7mm,5mm		5	SW905	3404-001252	SWITCH-TACT:12VDC,50MA,130GF,7.5X7,1,1	
5	C641	2401-001271	C-AL:4.7uF,20%,50V,GP,TP4x7mm,5mm		5	FD801S	3601-001086	FUSE-AXIAL LEAD:125V/5A,FAST-ACTING,GLAS	
5	C643	2401-001271	C-AL:4.7uF,20%,50V,GP,TP4x7mm,5mm		5	FD803S	3601-001086	FUSE-AXIAL LEAD:125V/5A,FAST-ACTING,GLAS	
5	C402	2401-001397	C-AL:470uF,20%,25V,GP,TP10x16,5		5	FD802S	3601-001228	FUSE-AXIAL LEAD:125V/10A,FAST-ACTING,EPO	
5	C404	2401-001397	C-AL:470uF,20%,25V,GP,TP10x16,5		5	F801A	3602-000114	FUSE-HOLDER:-,30mohm	
5	C203	2401-001495	C-AL:47uF,20%,16V,GP,TP5x11,5		5	F801B	3602-000114	FUSE-HOLDER:-,30mohm	
5	C422	2401-001527	C-AL:47uF,20%,250V,HR,TP13x25mm,5m		5	CN602	3711-002644	CONNECTOR-HEADER:BOX,5P,1R,2.5mm,STRAIGH	
5	C634	2401-001840	C-AL:100uF,20%,16V,GP,TP6.3x11,5		5	CN701	3711-002647	CONNECTOR-HEADER:BOX,8P,1R,2.5mm,STRAIGH	
5	C652	2401-001840	C-AL:100uF,20%,16V,GP,TP6.3x11,5		5	J102	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C660	2401-001840	C-AL:100uF,20%,16V,GP,TP6.3x11,5		5	J103	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C838	2401-001840	C-AL:100uF,20%,16V,GP,TP6.3x11,5		5	J104	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C917	2401-001840	C-AL:100uF,20%,16V,GP,TP6.3x11,5		5	J106	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C918	2401-001840	C-AL:100uF,20%,16V,GP,TP6.3x11,5		5	J107	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C612	2401-001914	C-AL:1uF,20%,50V,BP,TP5x11,5		5	J108	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C613	2401-001914	C-AL:1uF,20%,50V,BP,TP5x11,5		5	J109	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C621	2401-001998	C-AL:1000uF,20%,25V,GP,TP10x20,5mm		5	J110	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C427	2401-002267	C-AL:2.2uF,20%,250V,GP,TP8x11,5,5		5	J112	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C507	2401-002267	C-AL:2.2uF,20%,250V,GP,TP8x11,5,5		5	J113	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C808	2401-002300	C-AL:47uF,20%,50V,GP,TP6.3x11,5		5	J115	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C102	2401-002463	C-AL:470uF,20%,16V,GP,TP8x11,5,5		5	J116	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C512	2401-002463	C-AL:470uF,20%,16V,GP,TP8x11,5,5		5	J117	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C826	2401-002463	C-AL:470uF,20%,16V,GP,TP8x11,5,5		5	J118	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C414	2401-002597	C-AL:220uF,20%,35V,GP,TP10x12,5,5		5	J119	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C248	2401-002619	C-AL:47uF,20%,25V,GP,TP5x11,5		5	J120	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C832	2401-003036	C-AL:100uF,20%,16V,GP,TP5x11mm,5mm		5	J122	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C250	2401-003102	C-AL:100uF,20%,10V,GP,TP5x11,5		5	J126	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	C835	2401-003139	C-AL:1000uF,20%,25V,WVT,TP10*20,5mm		5	J127	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	CW901	2503-000156	C-NETWORK:100pFx4,20%,50V		5	J128	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L202	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		5	J202	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L301	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		5	J204	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L602	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		5	J205	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L603	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		5	J206	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L906	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		5	J209	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L907	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		5	J210	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	R604	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		5	J211	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	R605	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		5	J212	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L103	2701-000115	INDUCTOR-AXIAL:10uH,10%,3070		5	J213	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	J705	2701-000142	INDUCTOR-AXIAL:1uH,10%,2534		5	J215	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	J706	2701-000142	INDUCTOR-AXIAL:1uH,10%,2534		5	J216	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	J707	2701-000142	INDUCTOR-AXIAL:1uH,10%,2534		5	J217	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	J699	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534		5	J219	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L207	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534		5	J221	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L208	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534		5	J222	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L209	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534		5	J223	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L604	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534		5	J224	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	J920	2701-000180	INDUCTOR-AXIAL:33uH,5%,2534		5	J225	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L607	2701-000180	INDUCTOR-AXIAL:33uH,5%,2534		5	J226	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L608	2701-000180	INDUCTOR-AXIAL:33uH,5%,2534		5	J227	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L705	2701-000180	INDUCTOR-AXIAL:33uH,5%,2534		5	J228	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	
5	L706	2701-000180	INDUCTOR-AXIAL:33uH,5%,2534		5	J229	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)	

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
5	L605	3812-000219	WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING)		5	EY814	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	L606	3812-000219	WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING)		5	EY815	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	L701	3812-000219	WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING)		5	EY816	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	L702	3812-000219	WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING)		5	EY817	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	L711	3812-000219	WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING)		5	EY819	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	R623	3812-000219	WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING)		5	EY821	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	R820	3812-000219	WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING)		5	EY823	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL401	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY824	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL402	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY825	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL404	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY826	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL405	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY827	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL802	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY828	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL803	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY830	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL805	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY831	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL806	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY832	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL807	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY833	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL808	6042-000001	EYELET;ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H		5	EY834	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EL801	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY835	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY301	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY836	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY303	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY837	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY401	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY838	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY402	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY839	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY403	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY841	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY405	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY842	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY406	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY844	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY409	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY845	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY410	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY846	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY411	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY847	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY412	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY848	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY413	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY849	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY414	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY850	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY415	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY851	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY416	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY852	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY417	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY853	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY418	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY854	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY419	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY855	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY421	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY856	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY422	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY858	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY423	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY859	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY424	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY860	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY425	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY861	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY426	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY863	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY429	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY864	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY430	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY865	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY431	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY866	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY432	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY867	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY433	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY870	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY434	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	EY871	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	
5	EY435	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	PCB	AA41-00132K	PCB-MAIN;CS2139T,FR:1,1L,K.1,6T,33OX245,	
5	EY436	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT101	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY437	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT102	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY438	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT407	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY439	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT501	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY440	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT502	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY441	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT503	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY445	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT801	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY601	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT802	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY602	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT803	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY603	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT804	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY604	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT805	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY605	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5	GT806	AA60-40014A	PIN-GT,ASSY:AUTO	
5	EY606	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	IC901	AA97-06805C	ASSY MICOM;:KS3A,SDA555X,SIM806EA3,02111	
5	EY701	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		5		AA09-00041A	IC MICOM;:SDA555X-OTP,3.3V,-,128K,SDIP,-	
5	EY702	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		3		AA98-00314F	ASSY K/D-PACKING,PCB;KS2,3A,T/W,KS1B,S56	
5	EY801	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA61-30009A	LOCKER-BAND,CLIP;-,SPC-1,-,-,18MM TO.5,-	
5	EY802	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA63-10007C	BAND-PP;W18,CLEA,1G	
5	EY803	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA69-01087K	PALLET-CKD;CKD,SKD,PAPER,1150,840,130	
5	EY804	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA69-01205H	PAD;PS,1110,800,T36	
5	EY805	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA69-01375B	CUSHION-CHASSIS;KS2A/3A,EPS C=0.02	
5	EY806	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA69-01381B	PAD-CHASSIS;KS2A,KS3A,EX300,LINER,240,32	
5	EY807	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA69-01396A	BAG PE-SKD CHASSIS,LDPE,TO.03,240,180,NO	
5	EY808	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA69-01403A	WRAP VINYL-PACKING;SKD CHASSIS,LDPE,TO.0	
5	EY809	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		4	CHASIS	AA69-01808B	BAG-SHEET;,LDPE(ANTISTATIC),TO.05,800,50	
5	EY810	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		2		AA95-01784V	ASSY SUB-PCB,A/V FRONT;DP:21A8,KS2AAA95-	
5	EY811	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		3		0202-000008	SOLDER-WIRE;S63S-W3.0,S63S,D3.63Sn/37Pb,	
5	EY812	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		3		0202-000187	SOLDER-WIRE FLUX;-;RS60S,D1.2,63Sn/37Pb,	
5	EY813	6042-000002	EYELET;ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H		3		0203-001269	TAPE-OPP MASKING;#301,TO.06,W75,L50000,N	

Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
3		0204-000441	FLUX:JS95TVS,FLUX,20,-		2		AA65-30009A	CLAMPER CORE-FBT:-,ABS,VO,-,BLK,-	
3		0204-000442	SOLVENT:1M-1000,C3H7OH,96,-		2	FBT	AA65-30018A	CLAMPER CORE-WIRE-DONG-A,NYLON-66,-,-,-,-	
3	JE01	3722-000143	JACK-PHONE:1P(WER),3.4PI,AG,BLK,NO		2		AA65-30105C	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,	
3	JR01	3722-001031	JACK-PIN:3P,3.6mm,#18,AU		2		AA65-30110A	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,	
3	CN06A	AA39-00070A	LEAD CONNECTOR-ASSY,4P,200MM,YBNH250-04		2		AA68-01767A	LABEL-CRT:21A8,9,21K2,3,15K2,8,PET,KT-10	
3	CN01A	AA39-20068E	LEAD CONNECTOR-ASSY,8P,500,YBNH025-08,6		2	TSE	AA68-50067B	LABEL-RATING:ART PAPER(90),ALL MODEL,LAM	
3	CN05A	AA39-20069D	LEAD CONNECTOR-ASSY,5P,300,YBNH025-05,6		2		AA96-00697A	ASSY POWER CORD;KPK419C,CP2/NO(4.0),H/C	
3		AA63-10002A	BAND-TIE:NYLON66 V2,L100,NTR		3		AA65-30008A	CLAMPER CORE-CORD:-,PE,HB,-,BLK,-	
3	PACKING	AA69-10040L	PAD-PLATE:CB SW-3,YEL,550,360,-,B-TYPE,-						
3	PACKING	AA69-10145G	PAD-CROSS:CB DW-2,YEL,555,75,-,-,-,-						
3	PACKING	AA69-10145H	PAD-CROSS:CB DW-2,YEL,365,75,-,-,-,-						
3	PACKING	AA69-40013C	MASTER CARTON:-,CB DW-3,-,560,370,275,YE						
3		AA97-03575A	ASSY AUTO-MAIN:21A9,KS2A,INDIA						
4	RA01	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP,2.4X6.4		1	A	AA98-01629A	ASSY K/D-SKD P/MATERIAL:CTV,SKD FORMAT-3	
4	RA02	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP,2.4X6.4		2	SMALL	0203-001269	TAPE-OPP MASKING:#301,TO.06,W75,L50000,N	
4	CA02	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		2		6902-000001	BAG AIR-LDPE,TO.2,L1800,W1000,TRP,,LDPE	
4	CA03	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		2		6902-000061	BAG AIR-LDPE,TO.2,L1000,W500,TRP,,	
4	CA04	2202-000720	C-CERAMIC,MLC-AXIAL:8.2nF,20%,16V,Y5R,TP		2		AA60-40006A	PIN-STAPLE:AUTO,33X17.8X2.4,H18,33X17.8X	
4	CA05	2202-000720	C-CERAMIC,MLC-AXIAL:8.2nF,20%,16V,Y5R,TP		2		AA61-30009A	LOCKER-BAND,CLIP,-,SPC-1,-,-,18MM TO.5,-	
4	CA06	2401-003102	C-AL:100uF,20%,10V,GPTP,5x11.5		2	WOODEN	AA63-10007C	BAND-PP:W18,CLEA,1G	
4	CA07	2401-003102	C-AL:100uF,20%,10V,GPTP,5x11.5		2	15	AA68-50359A	LABEL-SHPG,MARK:KRAFT LINER,-,-,-,YEL,ST	
4	LA04	2701-000180	INDUCTOR-AXIAL:33uH,5%,2534		2	WOODEN	AA69-01574B	PAD-UNICOM;UNICOM,1082,822,T30	
4	LA05	2701-000180	INDUCTOR-AXIAL:33uH,5%,2534		2	WOODEN	AA69-01574C	PAD-UNICOM;UNICOM,1060,800,T30	
4	LA02	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)		2	WOODEN	AA69-01618A	MASTER CARTON-IN;CB DW-3,YEL,1067,807.5	
4	LA03	3812-000219	WIRE-NO SHEATH CU:TCWA,300V,52mm(TAPING)		2	WOODEN	AA69-01619A	MASTER CARTON-OUT;CB DW-3,1085,825,540,	
4	PCB	AA41-10358C	PCB-FRONT AV;CHASSIS-ALL,FR-1,1L,C,1.6T,		2		AA69-02444A	PALLET-CKD:CKD,PAPER,1130,600,120	

ASSY K/D-SKD P/MATERIAL

ASSY CPT

1		AA91-06959A	ASSY CPT;1	
2		AA27-00113A	COIL DEGAUSSING:-,4.8mH,-,48T,9ohm,-,2	
2		AA98-00293C	ASSY K/D-CRT:A51QDJ279X34,+380MG,21FALT	
3		AA03-00302A	CRT COLOR:A51QDX992X001(NF),+380MG,1.85M	
2		AA98-70014D	ASSY TBC WIRE(P):-,22 Q,NTSC,PAL,1P,TVI	

ASSY P/MATERIAL

1		AA92-03098R	ASSY P/MATERIAL:CS21S8NAS/MUR	
2	ACCERY	0203-001269	TAPE-OPP MASKING:#301,TO.06,W75,L50000,N	
2	BOX	0203-001269	TAPE-OPP MASKING:#301,TO.06,W75,L50000,N	
2		6902-000005	BAG PE-HDPE/NITRON/HDPE,TO.015/TO.5/TO.0	
2		AA60-40007A	PIN-STAPLE	
2		AA69-01388A	CUSHION-SET:21S8,EPS FOAMED,C=0.02	

ASSY ACCESSORY

1		AA92-03235M	ASSY ACCESSORY:CS21S8NAX/MUR	
2		4301-000120	BATTERY-MIN:1.5V,-,AA,14.5x50mm,-	
2		AA26-90001C	TRANS MATCHING:-,300ohm/75ohm,PAL,40-890	
2		AA42-00003A	ANT ROD:-,3S,720mm,ABS,UL/CSA,-	
2		AA59-00104M	REMOCON;TM59,KS2A,29,L/GRAY,NON-TTX,GRA	
2		AA68-00886D	MANUAL USERS,-,ENG,W/P100G,B5,KS2A	
2		AA69-30002A	BAG-SHEET:LDPE,TO.05,W240,L400,-,L-TYPE,	

ASSY BOX

1		AA92-07521J	ASSY BOX:CS21S8NAS/MUR	
2	TSE	AA68-01204A	LABEL-PACKING:ALL MODEL,-,-,9MM,25MM,-,-	
2		AA69-02202H	PACKING CASE:21S8(OVERSEA),D-3 AB,A1,YEL	

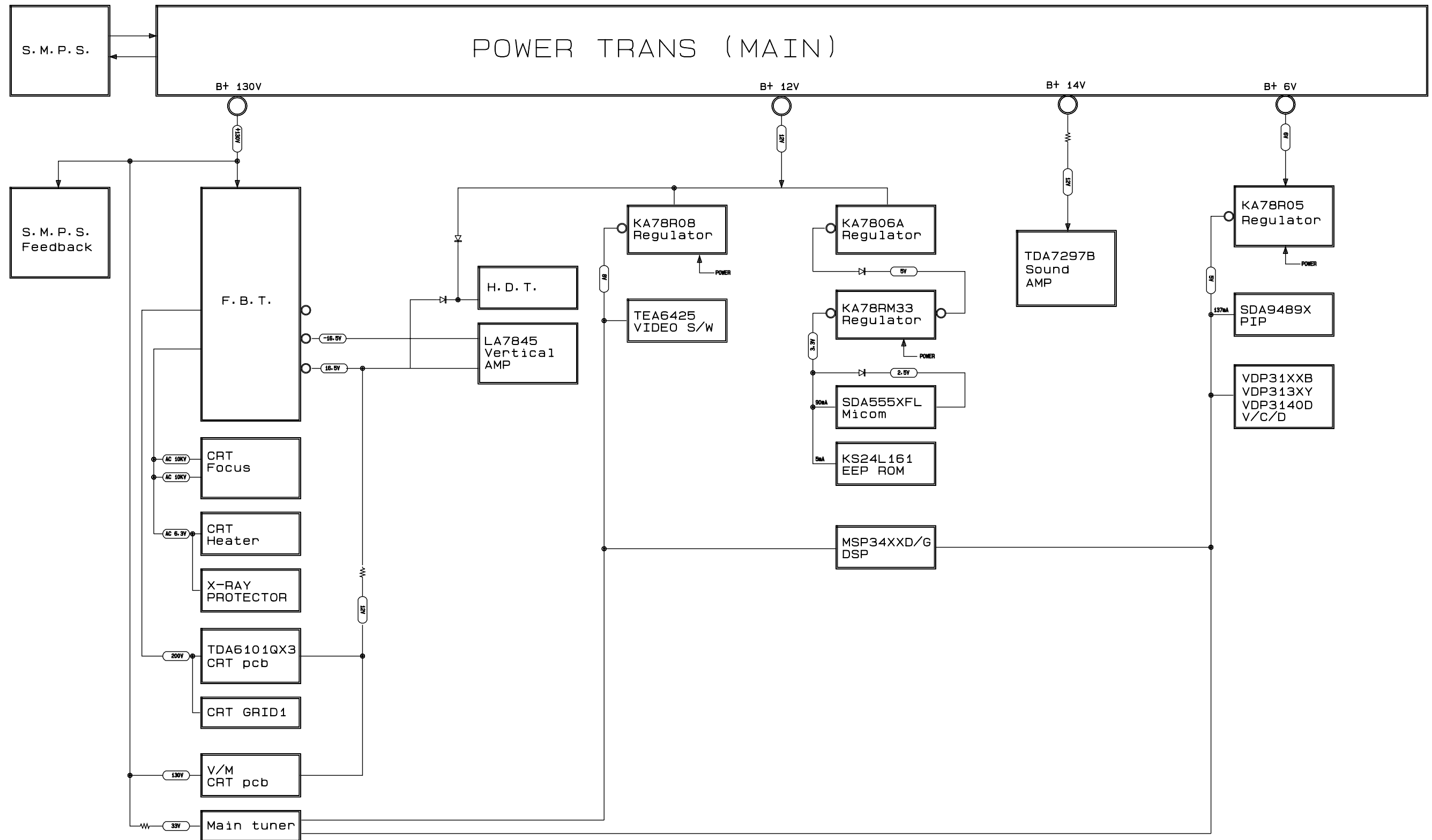
ASSY SKD PART

1		AA92-08297A	ASSY SKD PART:6	
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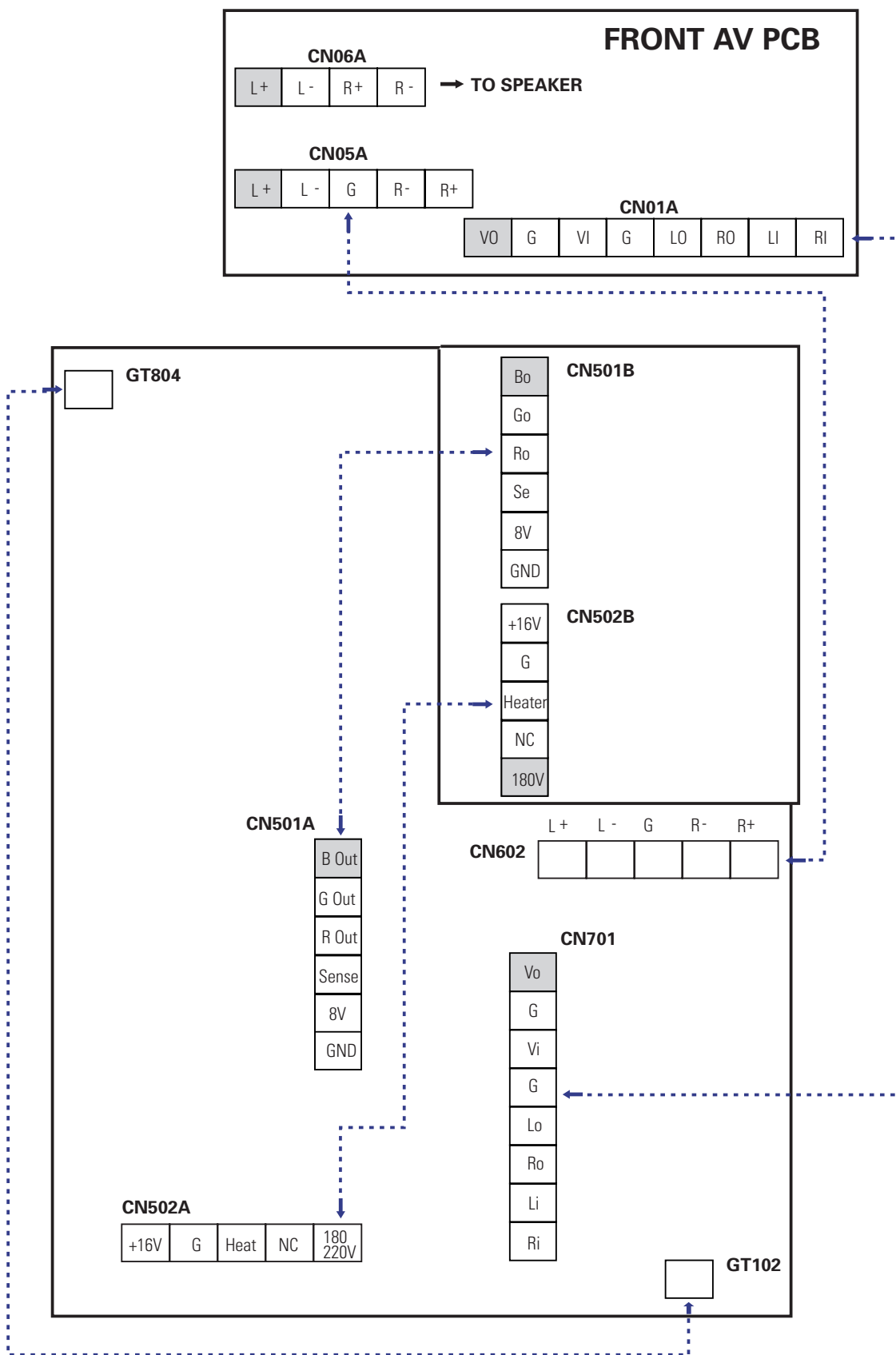
8. Block Diagrams

8-1 Power Diagram

KS2A POWER DIAGRAMS

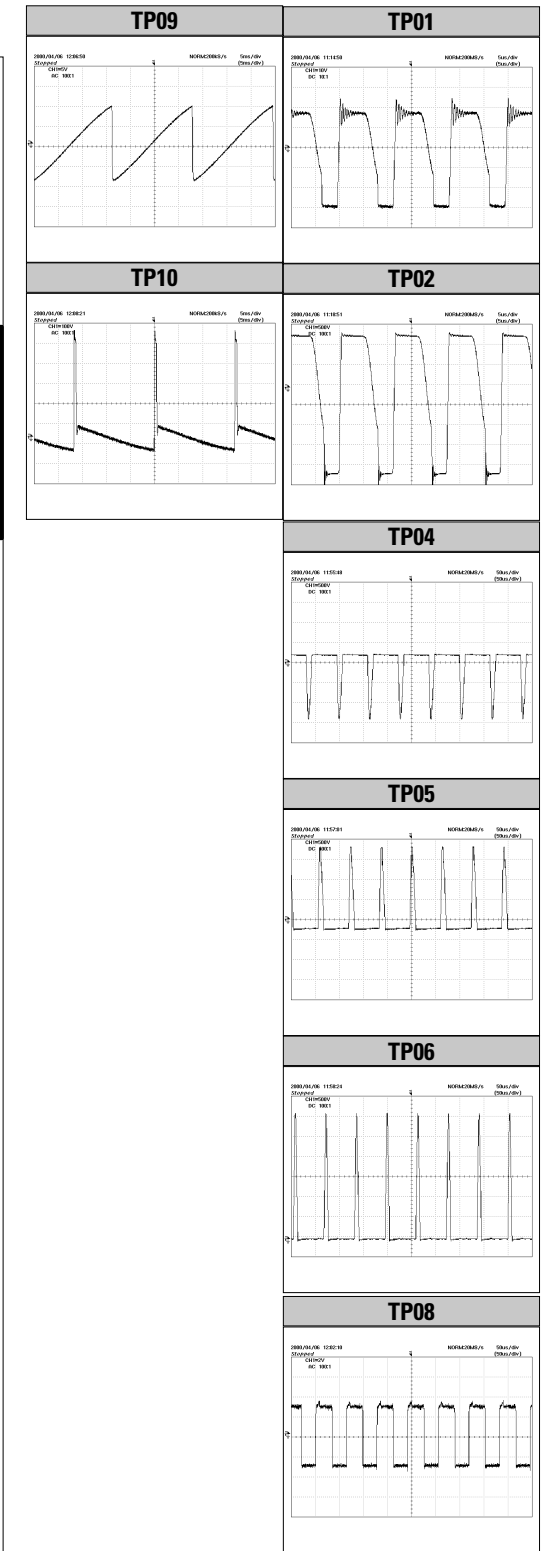
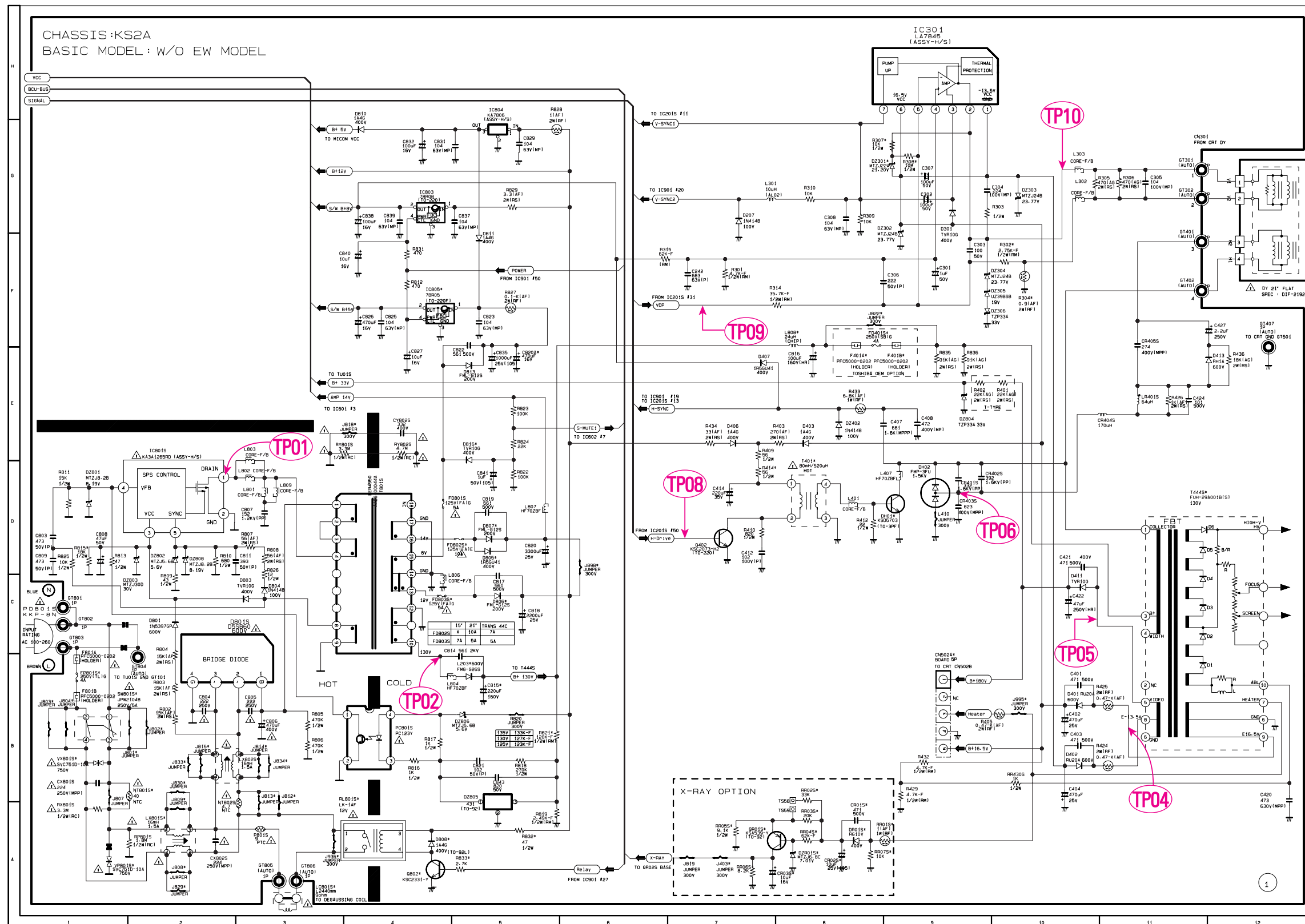


9. Wiring Diagram



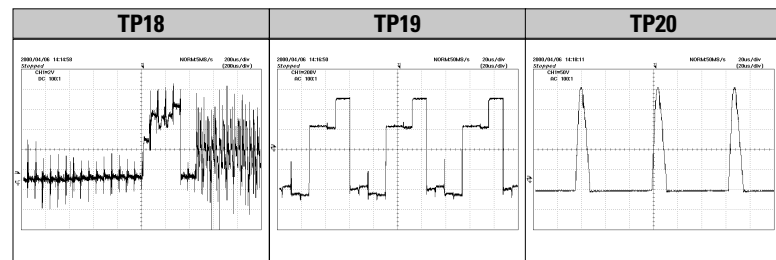
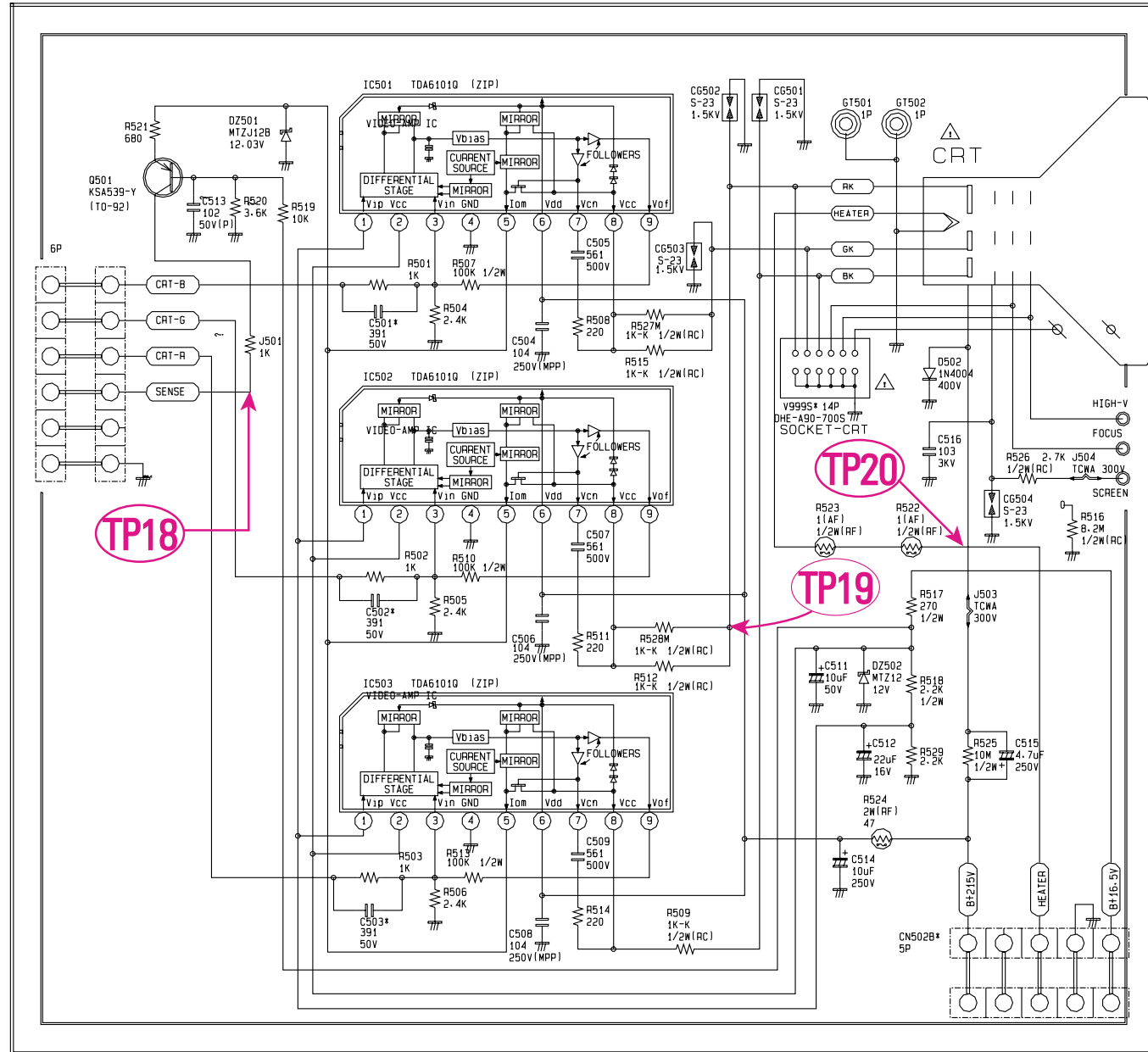
MEMO

10-2 MAIN 1-2

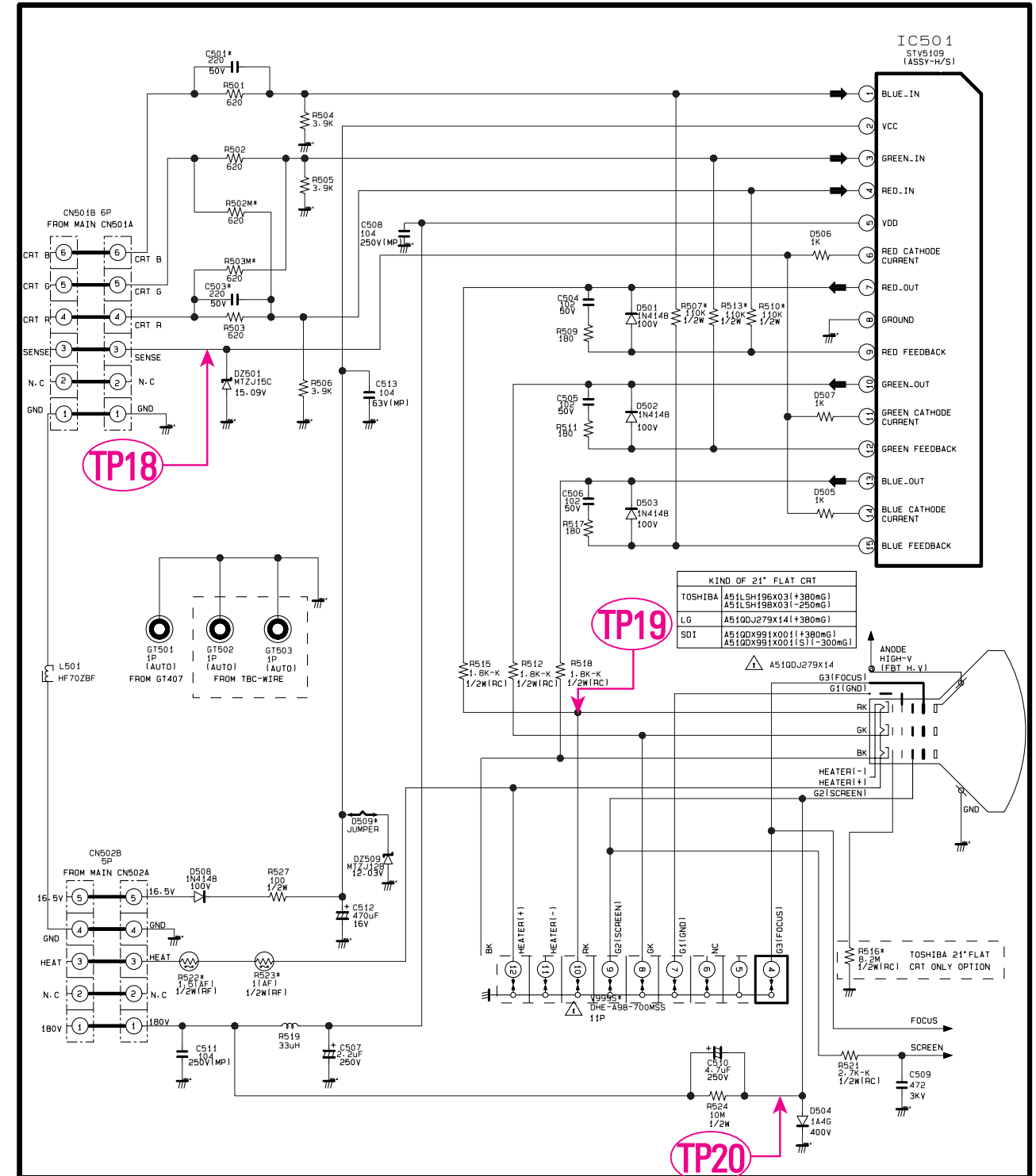


10-4 MAIN 2(CRT)

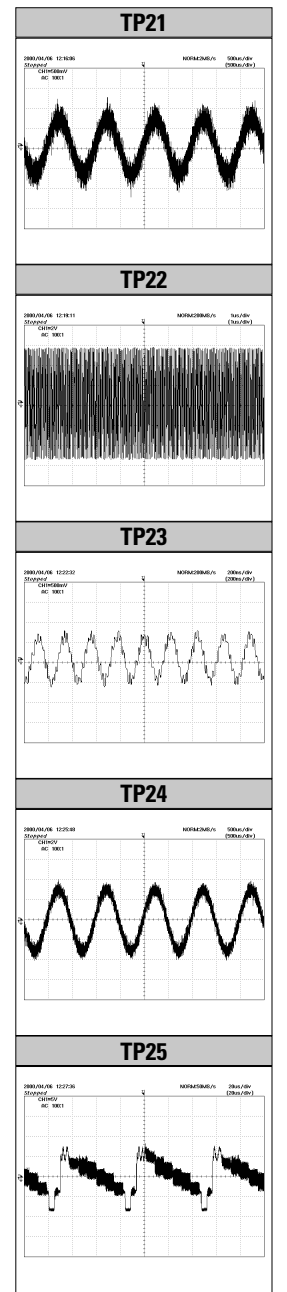
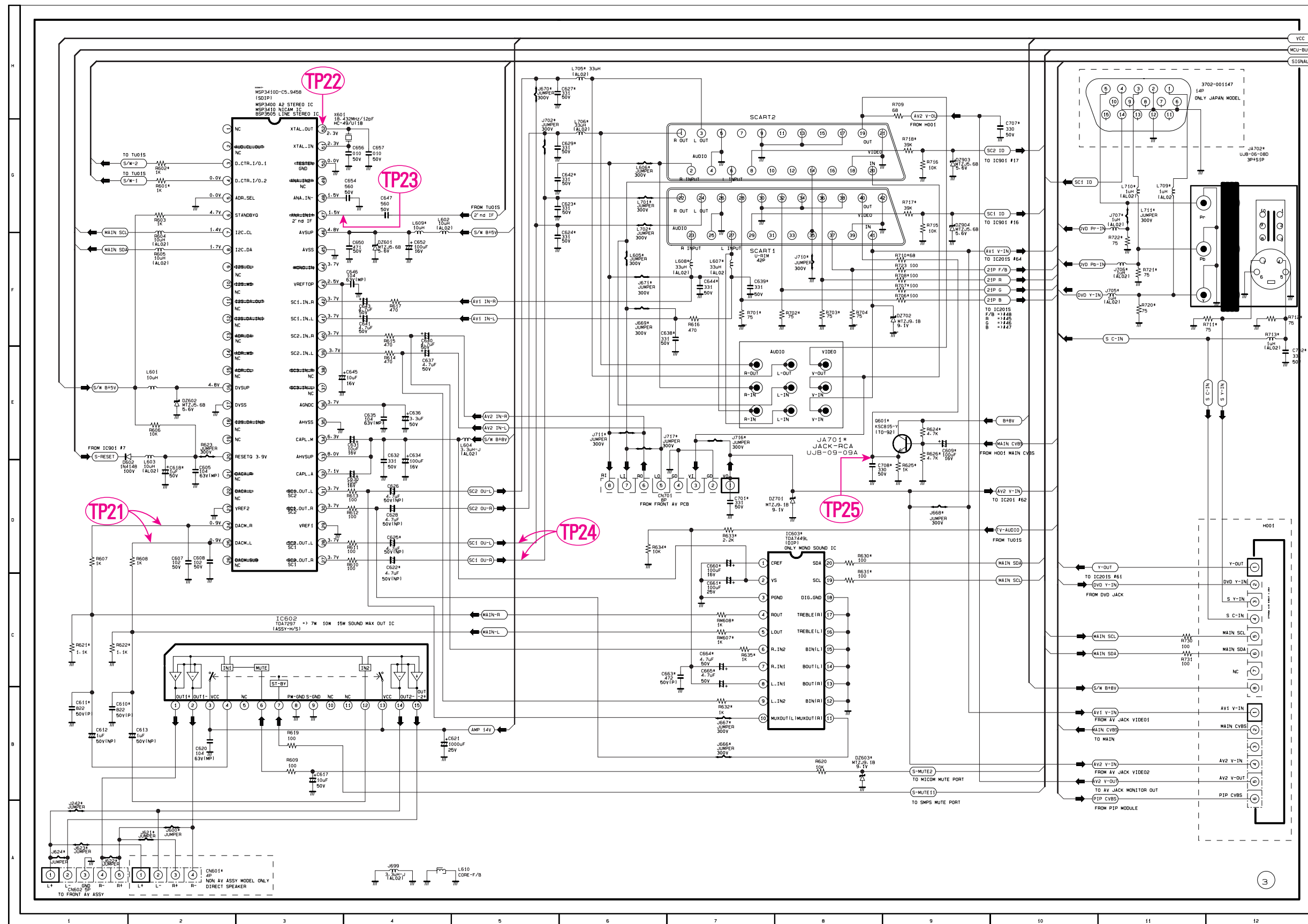
REVISION 1



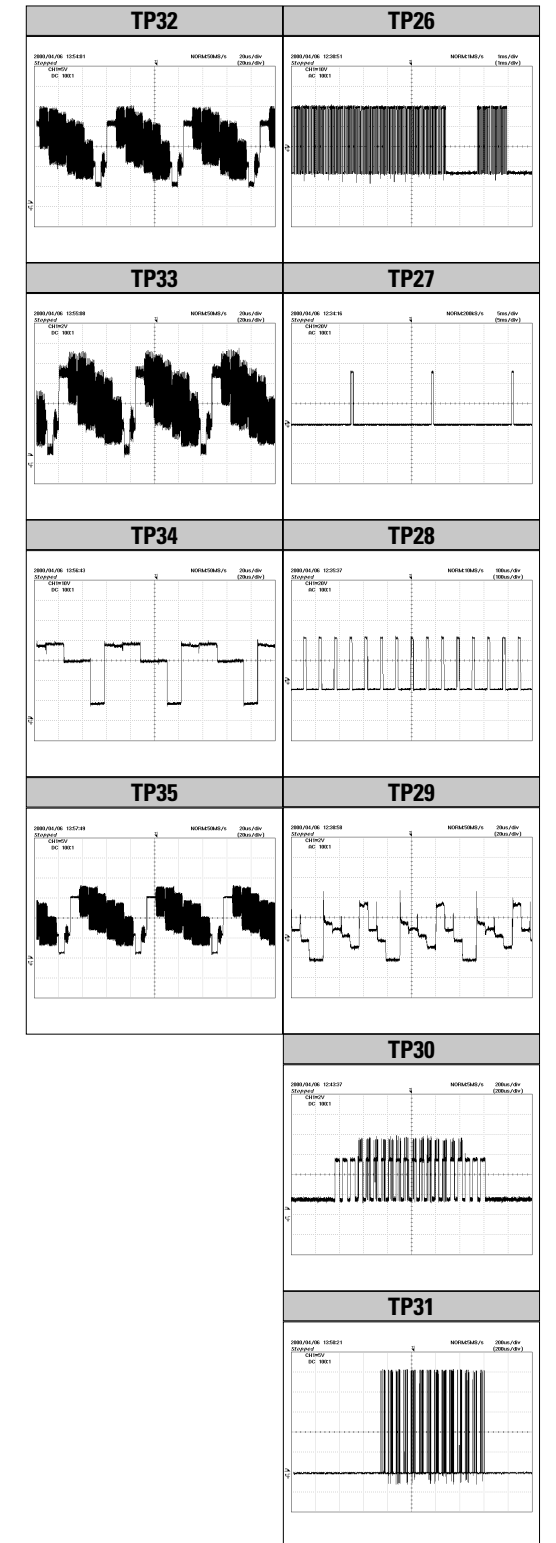
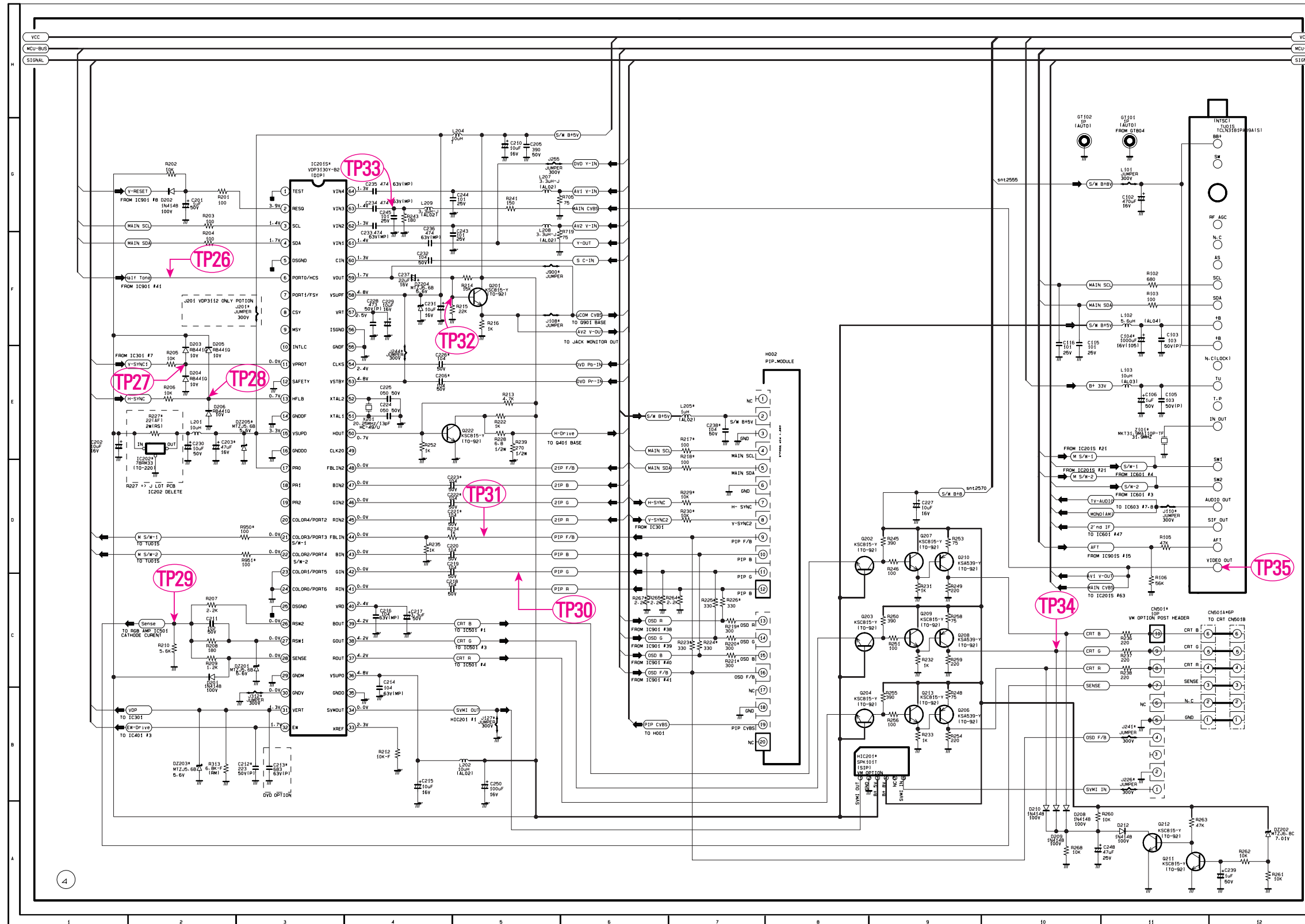
REVISION 2



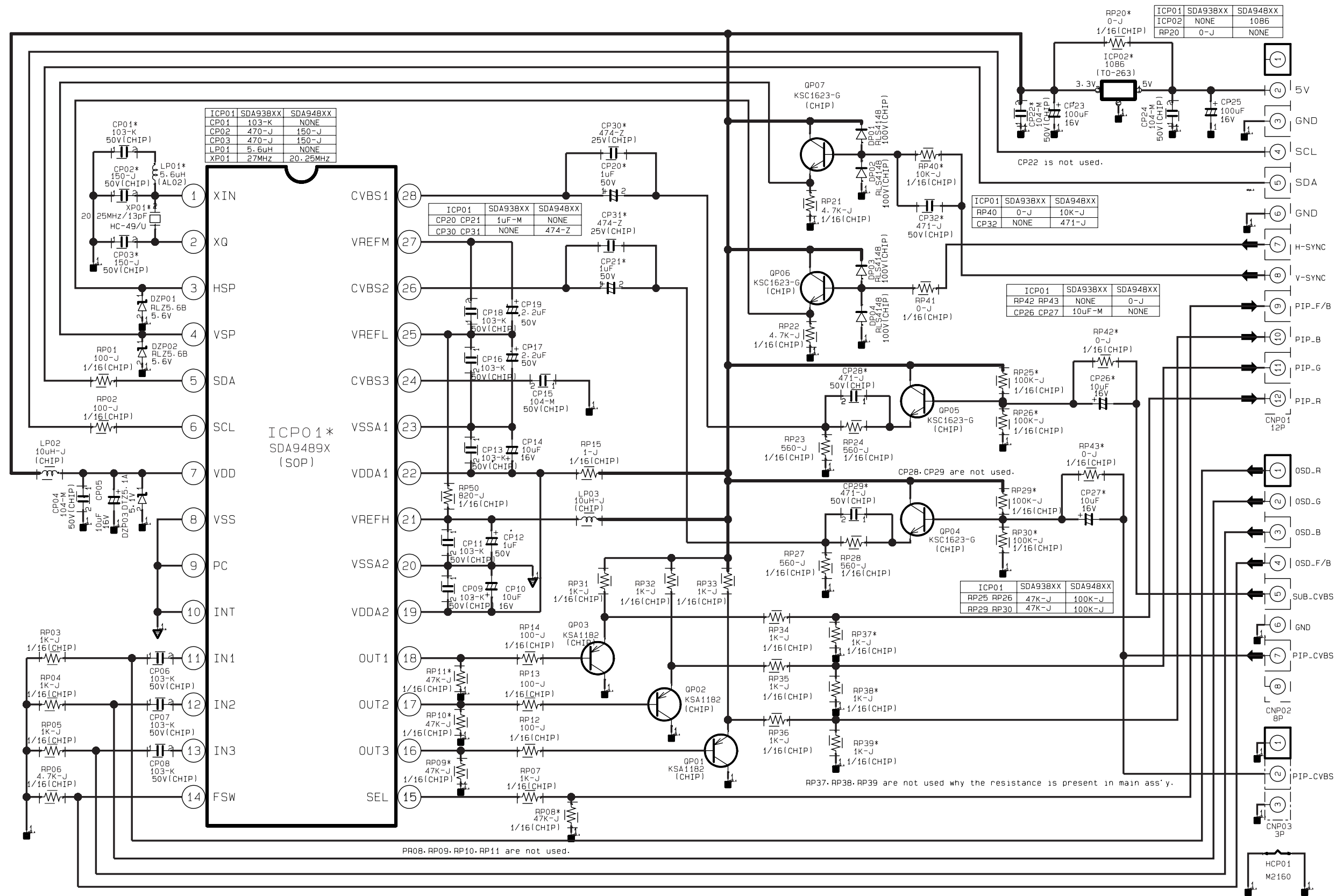
10-5 MAIN 3/4



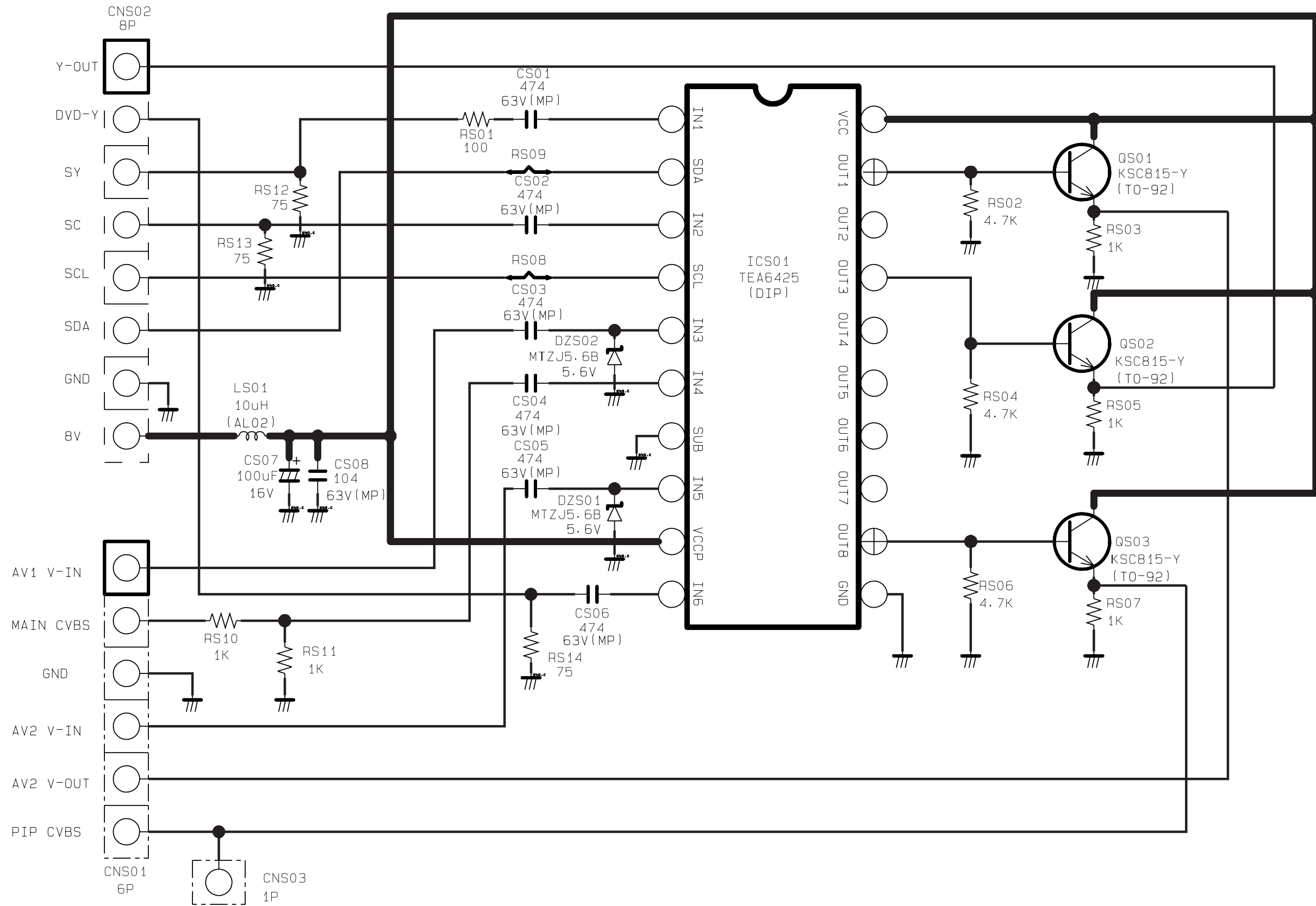
10-6 MAIN 4/4



10-7 PIP



10-8 VIDEO SWITCH





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