ImageQuest

V570/V770

Multiscanning Color Monitor

TECHNICAL SERVICE MANUAL

HYUNDAI

http://hyundaiQ.com

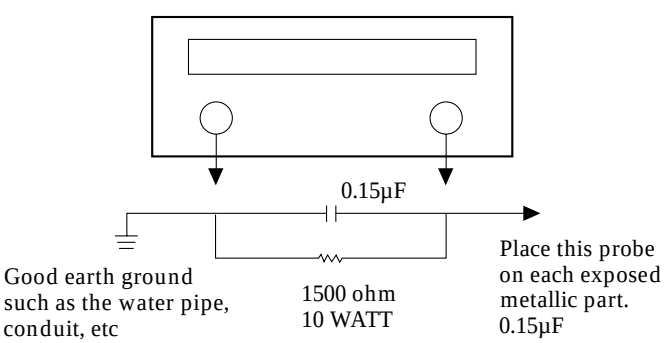
Safety Precaution

WARNING

Service should not be attempted by anyone unfamiliar with the necessary precautions on this monitor. The followings are the necessary precautions to be observed before servicing.

1. Always discharge the high voltage to the CRT conductive coating before handling the CRT. The picture tube is highly evacuated and if broken, glass fragments will be violently exploded. Use shatter proof goggles and keep picture tube away from the bare body while handling.
2. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as nonmetallic control knobs, insulating covers, shields, isolation resistor capacitor network etc.
3. Before returning the monitor to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as signal connectors, terminals, screw heads, metal overlays, control shafts etc, to be sure the monitor is safe to operate without danger of electrical shock. Plug the AC line cord directly into a AC outlet (do not use a line isolation trasformer during this check.). Use an AC voltmeter having 1500 ohm per volt or more sensitivity in the following manner : Connect ground(water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC Voltage across the combination of 1500 ohm resistor and 0.15§ capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. The Voltage must not exceed 0.3 volts RMS. This corresponds to 0.2 milliamp AC. Any value exceeded this limit constitutes a potential shock hazard and must be corrected immediately.

AC VOLTMETER



INSTRUCTIONS TO USER

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instruction, may cause interference to radio and television. It has been tested and found to comply with the limits for the specifications in Subpart J of Part 15 FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- reorient the receiving antenna
- relocate the computer with respect to the receiver
- plug the computer into a different outlet so that computer and receiver are on different branch circuits.

X-Ray Radiation Precaution

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must be under the specified limit. The nominal value of the high voltage of this monitor is 26KV¡ 1.0KV at zero beam current(minimun brightness) under a 120V AC power source. The high voltage must not(under any circumstances) exceed30KV. Each time a monitor requires servicing, the high voltage should be checked.
   It is recommended the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This monitor is equipped with a protection circuit which prevents the monitor from producing excessively high voltage. Each time the monitor is serviced, the protection circuit must be checked to determine that the circuit is properly functioning.
3. The only source of X-RAY RADIATION in this monitor is the picture-tube.
   For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some parts in this monitor have special safety-related characteristics for X-RAY RADIATION protection.
   For continued safety, parts replacement should be undertaken only after referring to the product safety notice.

RODUCT SAFETY NOTICE

Many electrical and mechanical parts in this monitor have special safety-related characteristics. These characteristics are often not evident from visual inspection.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features identified by "⚠" in the replacement parts list and schematic diagram.
For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which dose not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-RAY RADIATION or other hazards.

PRODUCT CDRH NOTICE

Electrical potentiometers which is marked as caution "⚠" in parts list are crititial components of safety & CDRH.
Therefore, for continued protection, replacements parts must be used it which is used in original PCB ASS'Y.

General Inforormation

1. Description

This 15" (13.8" viewable) color display monitor is operated in R, G, B, drive mode input.

This 17" (15.7" viewable) color display monitor is operated in R, G, B, drive mode input.

2. Operating instructions

2-1. Front

Menu, Select,Down(¡),Up(¡ª) DPMS(Power)LED, Soft Power.

2-2. Rear

Input connection¡ AC & SIGNAL CABLE¡

2-3 Service Instruction(internal controls)

- V570 : H-Center
- V770 : H-Center , H / V Focus

2-4. OSD Controls

Brightness / Contrast, H / V-Position, H / V-Size, Pincushion / Trapezoid, Pin Balance, Parallel, Rotation, H / V Moire, Degauss, Color Control, Information, Language, OSD H / V Position ,Recall

3. Electrical Characteristics

3-1. Power supply

Input Voltage : 100-240 V AC

Input Current :
- V570 : 1.3A Max.
- V770 : 1.5A Max.

Input Frequency : 50 - 60Hz

Power Consumption :
- V570 : 75W Max.
- V770 : 75W Max.

3-2. Video input signal

Input : 0.7 Vp-p analog signal(at 75 ohm terminated to ground)

Polarity : Positive

Rise / Fall time : < 5ns

3-3. Horizontal Synchronization Signal

Level : TTL High : 2.4V min

! Low : 0.4V max

Polarity : Negative or Positive

Frequency : 30kHz - 70kHz

Timing Limits : Pulse width (0.1µs ¡´Thp ¡´6µs)

3-4. Vertical Synchronization Signal

Level : TTL High : 2.0V min

Low : 0.4V max

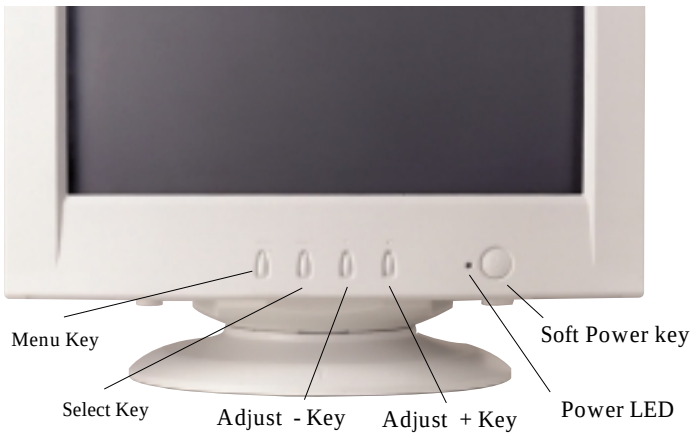
Polarity : Negative or Positive

Frequency : 50Hz - 150Hz

Timing Limits : Pulse width (8µs ¡´Tvp ¡´2.048ms)

Control Desciption

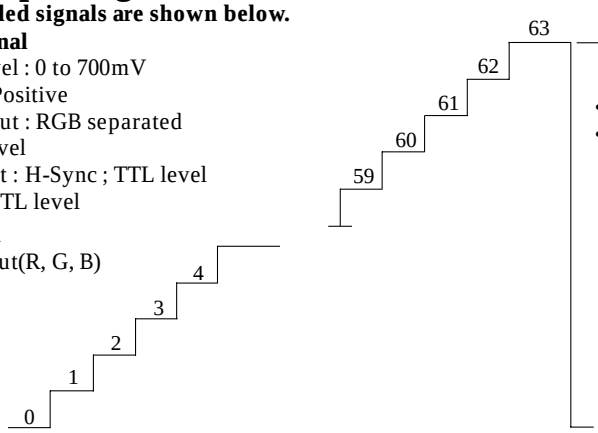
Front View



Video Input Signal

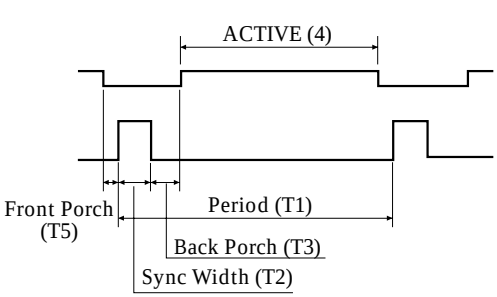
Recommended signals are shown below.

- **Video Signal**
  Video Level : 0 to 700mV
  Polarty : Positive
  Video Input : RGB separated
  Analog level
  Sync input : H-Sync ; TTL level
  V-Sync ; TTL level
- **Waveform**
  Video input(R, G, B)

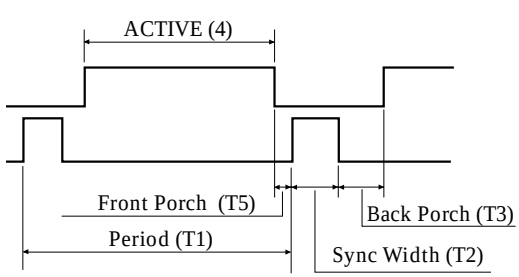


- Signal: 64 level gray scale
- Linear stepping:
  (11.1mV-64 Steps)

- **H-Sync**



- **V-Sync**



• **Timing Table**

Horizontal	Dot	720	640	640	800	800	800	1024	1024
Frequency	kHz	31.469	43.269	50.625	46.875	53.674	63.920	60.023	68.677
Period(T1)	µs	31.778	23.111	19.752	21.333	18.631	15.645	16.660	14.561
Sync Width(T2)	µs	3.813	1.556	1.580	1.616	1.138	1.185	1.219	1.016
Back Porch(T3)	µs	1.907	2.222	1.975	3.232	2.702	2.015	2.235	2.201
Active(T4)	µs	25.422	17.778	15.802	16.162	14.222	11.852	13.003	10.836
Front Porch(T5)	µs	0.636	1.556	0.395	0.323	0.569	0.593	0.203	0.508

Vertical	Line	400	480	480	600	600	600	768	768
Frequency	Hz	70.080	85.008	100.05	75.000	85.061	100.03	75.029	84.997
Period(T1)	ms	14.268	11.764	9.995	13.333	11.756	9.997	13.328	11.765
Sync Width(T2)	ms	0.064	0.069	0.059	0.064	0.056	0.063	0.050	0.044
Back Porch(T3)	ms	1.081	0.570	0.435	0.448	0.503	0.501	0.466	0.524
Active(T4)	ms	12.711	11.093	9.481	12.800	11.179	9.387	12.795	11.183
Front Porch(T5)	ms	0.413	0.023	0.020	0.021	0.019	0.047	0.017	0.015
Interlaced	ms	1.577	0.671	0.514	0.553	0.577	0.610	0.533	0.582
Sync Polar	H	-	-	-	+	+	+	+	+
	V	+	-	-	+	+	+	+	+
Interlaced	Y/N	N	N	N	N	N	N	N	N

The monitor is compatible with additional modes within the specified frequency ranges provided that they are different at least for one of the following :
Horizontal Freq.: ¡ 1.0kHz
Vertical Freq.: ¡ 1Hz

Note: Even if the monitor detects the input timing as a factory preset mode, the size and position may not be able to be set as desired. Check the input timings are under the specifications and adjust the image as you want.

For better quality of display image, use the timing and polarity shown in the table above. Please see your video card user's guide to ensure compatibility.

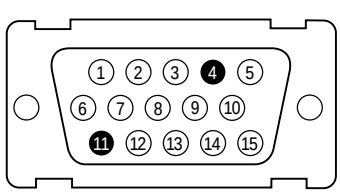
Video Input Terminal

A 15 Pin D-sub male connector is used as the input signal connector.
Pin and input signals are shown in the table below.

Pin Description

SIGNAL / PIN NO.	SEPERATE SYNC	COMPOSITE SYNC
1	RED	RED
2	GREEN	GREEN
3	BLUE	BLUE
4	N.C	N.C
5	DDC RETURN	DDC RETURN
6	RED GROUND	RED GROUND
7	GREEN GROUND	GREEN GROUND
8	BLUE GROUND	BLUE GROUND
9	+5	+5
10	LOGIC GROUND	LOGIC GROUND
11	N.C	N.C
12	SDA	SDA
13	H-SYNC(TTL)	(H+V) SYNC
14	V-SYNC(VCLK)	VCLK
15	SCL	SCL

D-Sub male connector



Theory of Operation

1. Power Supply

The AC line voltage range is from 100V to 240V.
The SMPS has +55V, +7.0V, +14V,+5V
The conducted noise is filtered by X(CP01, CP04) and Y (CP02, CP03, CP11)capacitors and a common mode line filter (LP01).
The input rectifier (DP01¡ ›DP04) converts the AC line voltage into a DC voltage to power the SMPS.
The UC3842 (ICP01) drives the power FET(QP04) according to the PWM signals generated by the R_T and C_T (RP07, CP10) connected pin 4 of ICP01.
The ICP01 is an integrated current mode PWM.
It consists of an oscillator, error amplifier, current sense comparator, under voltage lock-out and an MOSFET drive stage.
The switching frequency is locked to horizontal scan frequency by horizontal flyback pulse.
When the monitor is in OFF mode with no pulsed syncs. QP05 and QP06 is turned off. The total power consumption must be less than 5W in off mode.

2. DPMS and Self test mode

The power supply supports the DPMS function. Its operation is shown in the table below.

MODE	H-SYNC	V-SYNC	BRI MCU PIN35	MCU PIN 9	MCU PIN 10	QP07	14V	7.0V	REMARK
NORMAL	O	O	CONTROL	H	H	ON	14V	7.0V	
SELFTEST	X	X	5 V	H	H	ON	14V	7.0V	
STAND-BY	X	O	0 V	L	H	OFF	0V	7.0V	
SUSPEND	O	X	0 V	L	H	OFF	0V	7.0V	
OFF	X	X	0 V	L	L	OFF	0V	0V	

3. Signal Processing and MCU Control

The X-TAL resonates at 12MHz.
When the H and V sync or TTL composite sync are input to MCU, MCU can measures the H and V frequency to detect the video mode.
MCU has digital to analog converter(DACS) control function like ABL, H-LIN, SBU-SIZE, rotation, brightness. and MCU can control , Recall, H / V-Size, H / V-Position, Pincushion / Trapezoide, Parallel / Pin Balance, H / V Moire, Color Control, Information, Language, Soft Power by I2C BUS Line.
The operation of MCU is shown in the table below.

H-FREQ (kHz)	H-LIN1 PIN 30	H-LIN2 PIN 29	H-LIN3 PIN 28	REMARK
31 < H ¡ ´ 33	L	L	L	
33.1 < H ¡ ´ 36	L	L	H	
36.1 < H ¡ ´ 41	L	H	H	
41.1 < H ¡ ´ 45	H	L	L	
45.1 < H ¡ ´ 59	H	L	H	
60.0 < H ¡ ´ 66	H	H	L	
66.1< H ¡ ´ 69	H	H	H	

4. Horizontal Deflection

TDA4857/9113is an I2C autosync deflection controller for H/V sync and drive processing.
All functions are controlled by I2C bus.
When H-Sync is applied, the internal oscillator is automatically locked.
The duty-cycle of H-output pulse Pin 8/26 is variable by frequency.
QH08 and TH01 are used to drive the H-output transistor (QH09). QH09 is turned on, it conducts current through the deflection yoke on the right hand side of the screen.
This current comes from the S correction capacitors (CH27, CH29, CH32, CH34), which have a charge equal to the effective supply voltage.
When the QH09 is opened up, the damper diode(DH12) allows current for left hand side of the screen to flow back through the deflection yoke to the S capacitors.
The flyback capacitor (CH23) determines the size and length of the flyback pulse.
The S capacitors correct outside versus center linearity in horizontal scan.
THREE FETs (QH11, QH12, QH13) select the value of S capacitors.
H-centering is controlled by a switch(SWH01). The switch selects DC offset current flow through the yoke.
A diode modulator is used to control the E-W correction and H-size. ICH01 generates the E-W parabora wave using vertical amp.
A power buffer (QH02, QH03) drives the diode modulator.
In order to keep the high voltage constant independent of the horizontal scan frequency, the supply voltage of FBT must increase with increasing scan frequency proportionally. A step-up mode DC-DC converter with PWM is used to realize this demand.
ICH01 compares high-voltage feedback with reference voltage. Its output pulse switches a FET(QH07). To adjust the high voltage, TDA4857/9113(ICH01) has a control terminal (Pin5/14).

5. Vertical Deflection

In vertical section of TDA4857/TDA9302H there is auto-sync processing.
The vertical output stage consists of a power OP-AMP with extra flyback grnerator.
TDA4866/TDA9302(ICV01) is used as vertical output stage.

6. X-Ray Protection and Beam Current Limiting.

A failure in the horizontal scan control section could cause a dangerous situation; the high voltage might rise to an unacceptable high level. When the flyback voltage rise to unacceptable level, the pin2(Pin25) of ICH01 detects these states over 6.2V TDA9113/over 8.6V TDA9113
It causes the H-drive stage and oscillator to be turned off. Then high voltage is shut down until the power switch is on.
The average anode current is measured at lower side of the High Voltage winding of the FBT. The anode current flows through Connectors(CON04.CNC01) connected ICC01(KA2500) and through RM07 Connected ICM01 Pin38. and ABL is controlled by ICC01.

7. Video Amplifier and OSD Interface

KA2500(ICC01) is a Very High Freguncy video amplifier with three matched video amplifiers, OSD Contrast Control SDA, SCL,OSD Interface, OSD BLK drive controls, blanking gate and clamp gate. H-blank signal is applied to Pin 19. During blanking all three outputs are thrown to the pedestal level. An inserted H-sync is used to a clamp signal.
The signal is applied to ICC01 Pin 18.
Three OSD inputs (Pin 1,2,3 of ICC01) are TTL compatible and typical bandwidth is 80MHz.
A fast commutate pin is provided to select either the video or the OSD inputs as a source for amplification.
OSD contrast control is made by controlling simultaneously the gain of three internal variable gain amplifiers through the I2C bus interface. MTV021 is designed for monitor application to display built-in characters or fonts on to monitor screen.
The display operation occurs by transferring data and control information from the MCU to RAM through a serial data interface.
The output stage is made of 3-channel power amplifier (ICC03, LM2437 or LM2439). The output is capable of 40 Volts swing in less than 11 Sec?
The three cathodes are AC coupled to the video amplifiers. The DC level on each cathode is set by a cut-off amplifier and clamp diode. The value of the DC voltage is adjusted by DACS.

Visual Characteristics

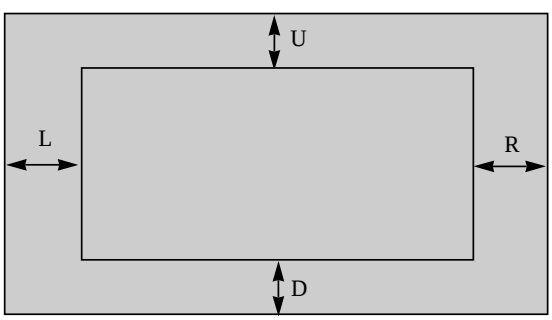
1. Test condition

- Resolution : Any of Preset modes
- Input level : 700mV
- Pattern : Central White box covering 20% of the data area
- Brightness Control : Default position (cut off)
- Contrast Control : Adjust to 100 cd / m2 of luminance (Center of the white field)
- Image duty cycle : 10% to 90%
- Magentic field : Horizontal = 0.3 Gauss
  Vertical = 0.4 Gauss
- Supply Voltage : 100 ¡ ›240 VAC
- Operating Condition
  Temperature (0 to 40)°C
  Humidity (35 to 80)% (W / O condensation)
  Altitude (0 to 3000)m
- Stroage condition
  Temperature (-20 to 60)°C
  Humidity (5 to 85)% (W / O condensation)
  Altitude (0 to 15,000)m

2. Display Centering

The following describes the pattern for this test. Basically it is composed by a single pixel white line around the perimeter of the data area, with marks for the horizontal and vertical axes, the background is black.
The display centering shall be met as following specification at adjustied centering function (user's control)

[L-R] ¡ ´4mm [U-D] ¡ ´4mm

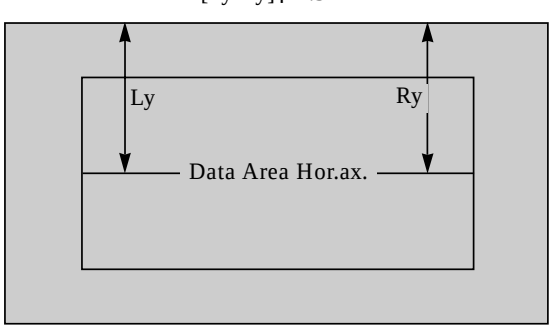


Display Cextering

3. Tilt

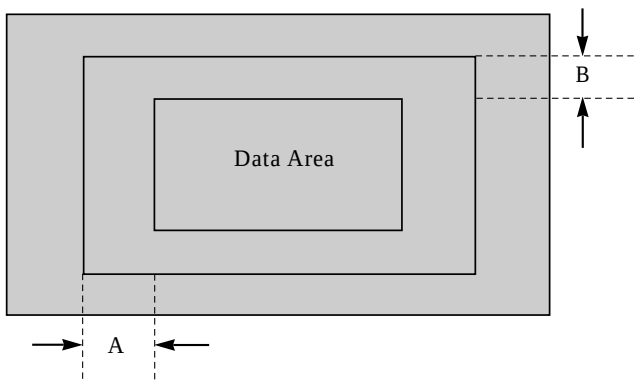
The maximum variation of the display rotation(tilt) shall be with in 2.5 mm based on the following formula.

[Ly-Ry] ¡ ´2.5mm



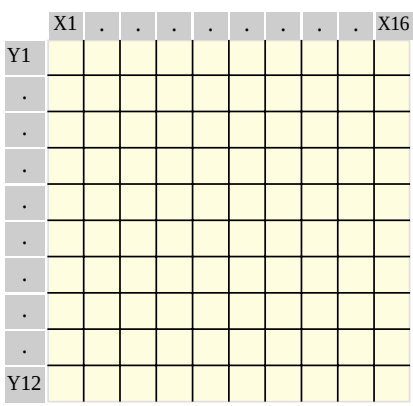
4. Geometric Distortion

All kind of Geometric Distortion
(Pincushion, Barallel, Parallelogram and Trapezoid) shall be with in 2mm boundary (to tolerance frame) Refer to belows tolerance frame.
A ¡ ´2mm B ¡ ´2mm
The tolerance frame sides are parallel to the window of enclosure axes.



5. Linearity

The linearity of an image displayed on the CRT must meet the following requirements, with reference to figure for both X and Y axis.



• Formula : $\frac{XMax - XMin}{XMax + XMin}$ ¡ ¿100 = ¡ ´6% overall

$\frac{XMax - XMin}{XMax + XMin}$ ¡ ¿100 = ¡ ´5% adjacent cells

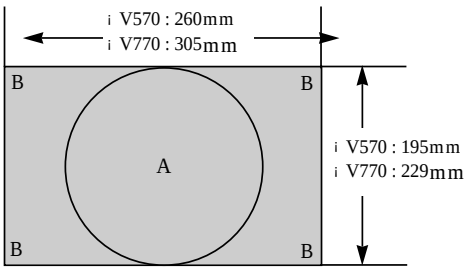
• Where : X1=X2=....X16
Y1=Y2=....Y12

6. Misconvergence

The display must confirm to all following requirements:
Maximum convergence error.

MODEL	Area	Horiz. Direction	Vert. Direction
V570	A Central circle field of(195) mm diameter	0.3mm	0.3mm
	B All screen Area (260 ¡ ¿195) except Area A	0.4mm	0.4mm
V770	A Central circle field of(229) mm diameter	0.3mm	0.3mm
	B All screen Area (305 ¡ ¿229) except Area A	0.4mm	0.4mm

The maximum convergence error shall be measures for a white spot of line, and represents the maximum distance between the energy centers of any two primary colors.



Active Area

Power Management System

The automatic power management function saves electricity and reduces heat. Used in conjunction with a PC having Power Management function, or a PC running Screen Blanking software, this monitor automatically reduces its power consumption when the PC is not in use.
This monitor runs in four states:ON(Normal Operating), Stand-by(No Video Signal), Suspend(Minimum Power for Quick Recovery) and OFF(Non-Operating).

This monitor is in complaince with U.S EPA Energy Star and NUTEK requirements.

Please refer to the following specifications.

State	Signals			Power consumption	Recovery time	LED Description
	H-Sync	V-Sync	Video			
On	pulses	pulses	active	75W	-	Green
Stand by	no pulse	pulses	blanked	Less Than 15W	within 3 sec	Orange / Green blinking about 1 sec
Suspend	pulses	no pulse	blanked	Less than 15W	within 3 sec	Orange / Green blinking about 0.5 sec
Off	no pulse	no pulse	blanked	Less than 5W	within 15 sec	Orange

ƒ_(*) ; It is capable to select by user.

Trouble Shooting

1. Introduction

This trouble shooting guide is arranged by fault conditions. Following each fault condition is a check for a signal on condition to be answered YES or NO.
For NO answer proceed to the right and continue until the fault is located.
For a YES answer continue in the left column to the next numbered check.
Again followed this procedure until the fault is located.

2. Trouble shooting procedure

When Troubleshooting this monitor, some precaution should be observed.
Use a high quality isolation tranformer is capable of providing 3 Amps or more.
Never connect primary ground and secondary ground together including use with an isolation transformer.
Measure high voltage with respect to chassing ground only, and with a high impedance prove of 1000 mega-ohm or higher and rated for 30KV DC or higher.
Measure QH09 collector pulse with a high quality 100:1 probe rated for 1500 volts or higher.

3. Troubleshooting procedure

Symptom	Check(YES)	Action(NO)
a) Image is scrolling.	1) Check for Vsync at pin 40 of ICM01	Check 15 pin D-sub connector, cable, ZDM02.
	2) Check for positive going Vsync at pin 14 of ICH01.	Check ICM01, ICH01
	3) Will V-oscillator is locked with input signal? (pin 24 of ICH01)	Check CH01, CH02, RH05
	4) Check V-ramp at pin 12, 13 of ICH01.	Replace ICH01.
	5) Check V-out at pin 4, 6 of ICV01.	Check B+ at pin 3, 7 of ICV01.
b) Image is unstable.	1) Check for Hsync at pin 39 of ICM01	Check 15 pin D-sub connector, cable, ZDM01.
	2) Check for positive going Hsync at pin 15 of ICH01.	Check ICM01 , ICH01
	3) Will H-oscillator is locked with input signal? (pin 29 of ICH01)	Check CH05, CH06, RH07, RH08
	4) Check H-out at pin 8 of ICH01	ReplaceICH01
	5) Check for flyback pulse at pin 1 of ICH01.	Check RH10

Symptom	Check(YES)	Action(NO)
c) Screen is black but high voltage is present.	1) Check for G2, pin4 of CRT. Around 500 volts?	Check DH28, RH94, RH92, CH53, CRT socket. G2 Wire
	2) Check for heater voltage at pin 6 of CRT. (about 6.3V)	Check DP13, RP24, RP25, QP05, QP06 CRT socket. RC35, BC05, CNC01
	3) Can screen be lit with brightness control at MAX?	Check DH21, DH25, QH18, QH20. PH26 CRT socket. RH82, RH83
	4) Check for video at pin 5, 8, 10 of ICC01	Check 15 pin D-sub connector, cable, DC13, DC14, DC15
	5) Check for positive pulse for clamp at pin 18 of ICC01.	Check ICM01, ICH01
	6) Check if contrast controls video level at pin 21, 24, 26 of ICC01.	Check ICM01, RH24, ICC01
	7) Check for video at pin 1, 2, 3 of ICC03.	Check ICC03,80 75V_{DC}(pin 4) 12V_{DC}(pin 8)
	8) Check if R, G, B cut-off control the video DC level at pin 6, 8, 11 of CRT.	Check QC03 to QC08
	9) Check CRT.	
d) Screen is black with no high voltage.	1) Is the LED01 lighting in Green color.	Check H.V Sync at pin39, 40 of ICM01. Check pin 7, 8 of ICM01. Check ICM01, ICM02,ICC03
	2) Check for 14V at collector of QP07.	Check QP07, QP08. Check pin 9 of ICM01.
	3) Check output pulse at pin 6, 8 of ICH01.	Check for Vcc at pin 10 of ICH01. Check oscilation pulse at pin 29 of ICH01. Check X-Ray voltage below 6.2V at pin 2 of ICH01.
		Check RH11, RH12, RH13
	4) Check Hor-Drive pulse at Base of QH09.	Check QH08, TH01.
	5) Check B+ at pin 2 of TH04.	Check DH07, LH01, QH07, QH04, QH05, QH06, QH51, RH41, RH42, RH39, RH18, ICH01
e) No power	1) Check ICP01 pin 4, 7	Check QP01, QP02, DP05, DP09, TP02
	2) Check switch pulse at Drain of QP04.	Check pin 6, 3 of ICP01.
	3) Check voltage for, 55V at Cathode of Dp11 and for 7V at Cathode of DP13 and for 14V at cathode of DP15	Recheck above Item(d).

Adjustment Method

1. Caution

Extremely high voltage are present in the area around the FBT(TH04) and the anode high voltage Lead.

2. Equipment Required

Digital Voltmeter
Frequency Counter : about 40 Hz to 100 KHz
Color Analyzer
Video Signal Generator
High Voltmeter : up to 30 KV
Alignment Templete : Attachment 1

3. Before Adjustment

Verify that the video output level is 0.7 Vpp at 75 ohm termination and the video timmings are same as standard timming given in specification. Place the AC power switch to the ON position.
Allow the monitor to stabillize thermally for 15 minutes at least before any adjustment about the image parameters. The electron optics of the CRT and electronics of system require time of stabillize.

4. Adjustment Procedure

4-1 Horizontal raster center setting

- Video Signal : Back Raster pattern in 60kHz, 768 mode
- Measuring Point : SWH01, main board
- Place the Raster in center of the bezel.

4-2 Factory mode setting

- Turn off the power.
- Keep pressing the menu select key until the power turns on.
- Press the menu select key one more time.
- You can see the “F” message in 5the bottom on the right of the OSD main menu.
- This is the factory mode.
- Turn off the power to save the adjusted state.
- Select the "Mode Information" menu after you exit the factory mode.

4-3 Rotation setting

- Video Signal : Cross Hatch pattern in 31.5kHz, 400 mode
- Adjust the rotation of screen by using the menu select key and adjustment dial.

4-4 Color setting

- Adhere color Analyzer sensor closely to CRT center.
- Set Factory mode.
- Video mode : 68.677kHz, 768 mode

1 Color Temperature 9300°K setting
- Select " 93 " by using the menu select key and adjustment up / down KEY.

¤ Back Raster Setting
- Video signal : Back Raster Pattern
- Adjust the brightness of back raster by rotating the adjustment up / down KEY in “Bright”
- Limits : 2.5 ¡ 0.5 cd / m^2

¤Ł Cut-off Setting
- Video signal : Back Raster Pattern
- Select “Cut-off” by using the menu select key and adjustment up / down KEY.
- Press the menu select key to get the desired R, G or B Cut-off.
- Rotate the adjustment dial to limit the x and y color coordinate.
- Limits : x=0.283 ¡ 0.01, y=0.297 ¡ 0.01

¤Ø Drive Setting
- Video signal : 20% white box
- Select the "9300" by using the menu select key and adjustment up / down KEY.
- Adjust the brightness go to 200 cd / m^2
- Press the menu select key to get the desired R or B
- Rotate the adjustment up / down KEY to limit the x and y color coordinate.
- Limits : x=0.283 ¡ 0.01, y=0.297 ¡ 0.01

¤Œ Contrast Setting
- Video Signal : 20% white box
- Adjust the brightness go to 0.1 cd / m2 by using the adjustment up / down KEY in “Bright”
- Adjust the brightness of 20% white box by rotating the adjustment in “Contra”
- Limits : 150 ¡ 0.155 cd / m^2

¤° Back Raster Setting again
- The method of adjustment is same to section ¤

2) Color Temperature 6500°K Setting
- Select " 65 " by using the menu select key and adjustment up / down KEY.

¤ Back Raster, Cut-off Setting
- The method of adjustment is same to 9300°K
- The color coordinate is x=0.313 ¡ 0.01, y=0.329 ¡ 0.01

¤Ł Drive, contrast Setting
- The method of adjustment is same to 9300°K
- The color coordinate is x=0.313 ¡ 0.01, y=0.329 ¡ 0.01

4-5 Geometry Setting

- Adhere template closely to the CRT surface
- Video Signal : Cross hatch pattern in 31.5kHz to 69kHz expectively.
- Adjust the all items by using the menu / select key and adjustment .

1) Horizontal Position Setting
- Place the screen in center of the horizontal direction.

2) Horizontal Size Setting
-in case of the V770 : Adjust the horizontal size of the screen to 305 ¡ 5 mm ; in case of the V570 ajust the honitonfal size of the screen to 260 ¡ 4mm.

3) Vertical Position Setting
- ”Place the screen in center of the vertical direction.

4) Vertical Size Setting
- in case of the V770 : Adjust the vertical size of the screen to 229 ¡ 5 mm; in cast of the V570 adjust the verfical size of the screen to 195 ¡ 4mm .

5) Pincushion Setting
- Make the straight line to the vertical right and left line of screen.

6) Trapezoid Setting
- Make the same size to the horizontal up and bottom size of screen.

7) Parallelogram & Pin Balance
- Adjust parallerogram until vertical lines are parallel to the vertical vezel.

8) Corner Pin
- Adjust corner pin until 4 corners are parallel to the vertical vezel.

9) Rotation Setting
- Adjust rotate until horizontal lines are parallel to the vezel.

4-6 Focus

- Video Signal : " Full H " character pattern in 64kHz 1024 mode
- Adjust H / V Focus VR on the top and middle of the FBT so that the image of whole screen looks clear(Oniy V770)

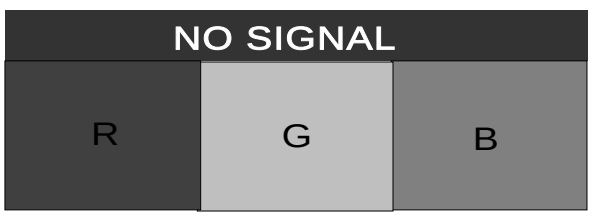
5. X-Ray Protection Test

- In any signal input condition, short RH11 (main board) by using the JIG.
- At this moment, check out whether raster disappears.
- Remove the JIG.
- After the power switch of the set off and on, check out proper working

6. AGING and Self Test Mode

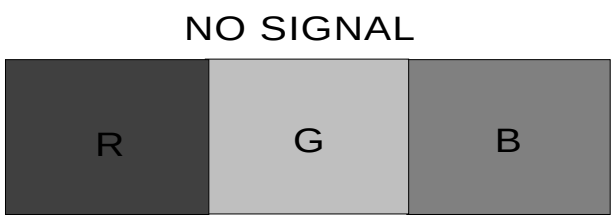
The monitor has an enhanced level of self-diagonostics.
When the signal cable is removed or signal isn't detected, the monitor is operated to OFF-Mode. If menu / select key is pushed on OFF-Mode, the system has the ability to generate an R.G.B test pattern and the following OSD image is displayed on screen.

Picture A (MODE FOR END USER)



(OSD MESSAGE is moving around the screen)

Picture B (MODE ONLY FOR AGING OPERATION)



(OSD MESSAGE is fixed at the center of the screen)

1. Picture A on screen

Firstly, connect signal cable and Power on, and then remove signal cable again Secondly, push the select key and the image of " sync off " will be displayed on screen.
about 3 second later.
And last, Power Off and On again. And then Picture A on screen.

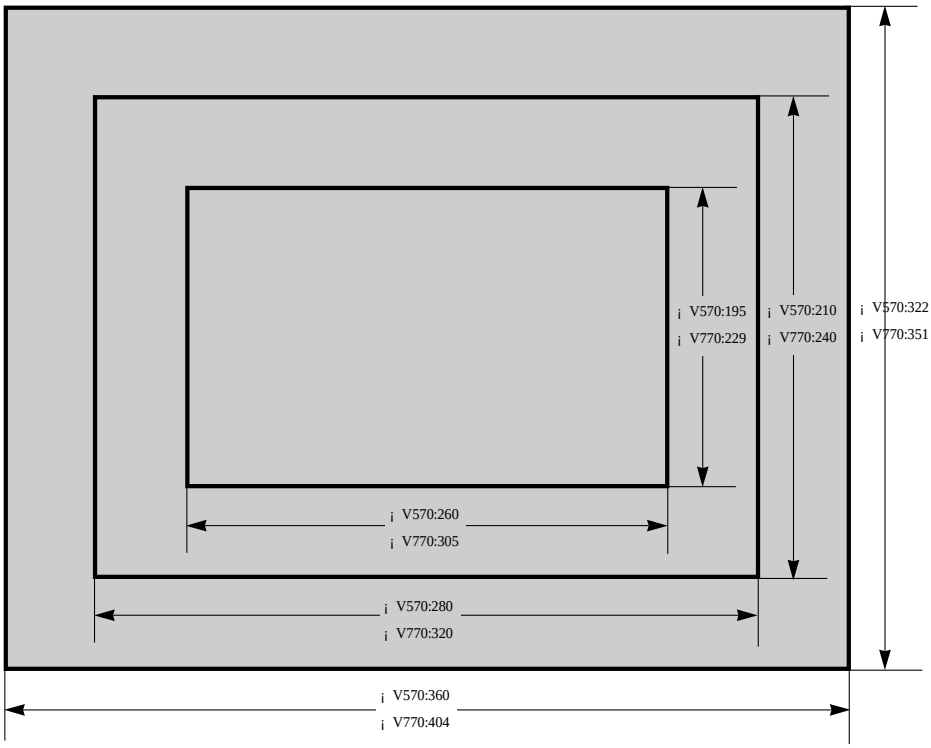
2. TRANSIT Picture A TO Picture B

Power Off and push the "select" key. And later Power on again.
About 3 second later Picture B on screen. This mode for aging

3, TRANSIT Picture B TO Picture A

Firstly, Power Off, and connect signal cable, and then push menu key.
Choose "information" from menu on screen.
Secondly remove signal cable, and later Power Off On again.
And then Picture A on screen again.

Attachment 1. Alignment Template



Specification

CRT	SIZE	•15"(13.8" viewable) Diagonal
		•17"(15.7" viewable) Diagonal
	Dot Pitch	•V570 : 0.28 mm • V770 :0.27 mm
	Type	•V570 : Non-glare, Anti-Static & Malti-layer Coated •V770 : Non-glare, Anti-Static & TCO Coated
Input	Signal	R.G.B Analog
	Cable	15 pin D-Type male Connector
SYNC	H-F	30 kHz ¡ ›70 kHz(Automatic)
	V-F	50 Hz ¡ ›150 Hz(Automatic)
Video Bandwidth		108 MHz (-3dB)
Display	Area(H ¡ ¿V) Color	•V570 : 260 ¡ ¿195mm (Max. Over Scan) Infinite •V770 : 305 ¡ ¿229mm (Max. Over Scan) Infinite
Resolution	Max.	1280 ¡ ¿1024(64kHz / 60Hz)
User Controls & OSD Controls		Recall, Brightness / Contrast, H / V-Position, H / V-Size, Pincushion / Trapezoid, Rotation, H / V-Moire, Degauss, Color Control, Parallel, Information, Language, OSD H / V Poistion, Pin Balpance
Power Management		As per VESA Standard, Lower than EPA's recommendation
VESA DDC 1 / 2B		Basic
Compatibility		VESA, 8514 / A, XGA, EVGA, MAC II
Power Source		100-240 VAC(Universal Power) •V570:1.3A 75W
		100-240 VAC(Universal Power) •V770:1.5A 75W
Safety & Regulation	TCO	Basic
	EMC	FCC Class B, CE,EMC
	Safety	cULus, TÜV-GS, NEMKO,DEMKO, FIMKO, SEMKO, DHHS, PCBC, GOST-R, VCCI
Temperature	Storage	-20 to 60 degree celsius
	Operating	0 to 40 degree celsius
Humidity	Operating	35% to 80% (Non-condensing)
	Storage	5% to 85%
Weight		•V570 Unit : 11.7Kg • Gross Weight :13.5Kg(with carton)
		•V770 Unit : 13.7Kg • Gross Weight :16.0Kg(with carton)
Dimension(W ¡ ¿H ¡ ¿D mm)		•V570 : 360 ¡ ¿377 ¡ ¿392mm •V770 : 404 ¡ ¿408 ¡ ¿420mm

¢″Specification is subject to change without notice for performance improvement.

Critical Parts Specification

TDA4857

I²C-bus autosync deflection controller for PC monitor

FUNCTIONAL DESCRIPTION

Horizontal sync separator and polarity correction

- HSYNC (pin 15) is the input for the horizontal synchronization signals, which can DC-coupled TTL signals (horizontal or composite sync).
- For DC-coupled TTL signal the input clamping current is limited. The slicing level for TTL signals is 1.4V.
- The separated sync signals is integrated on an internal capacitor to detect and normalize the sync polarity
- Normalized horizontal sync pulses are used as input signals for the vertical sync integrator, the PLL1 phase detector and the frequency-locked loop.

Vertical sync integrator

- Normalized composite sync signals from HSYNC are integrated on an internal capacitor in order to extract vertical sync pulses. The integration time is dependent on the horizontal oscillator reference current at HREF (pin 28). The integrator output directly triggers the vertical oscillator.

Vertical sync slicer and polarity correction

- Vertical sync signals(TTL)applied to VSYNC(pin 14) are sliced at 1.4V . The output signal of the sync slicer is integrated on an internal capacitor to detect and normalize the sync polarity. The output signals of vertical sync integrator and sync normalizer are disjuncted before they are fed to the vertical oscillator.

Video clamping/vertical blanking generator

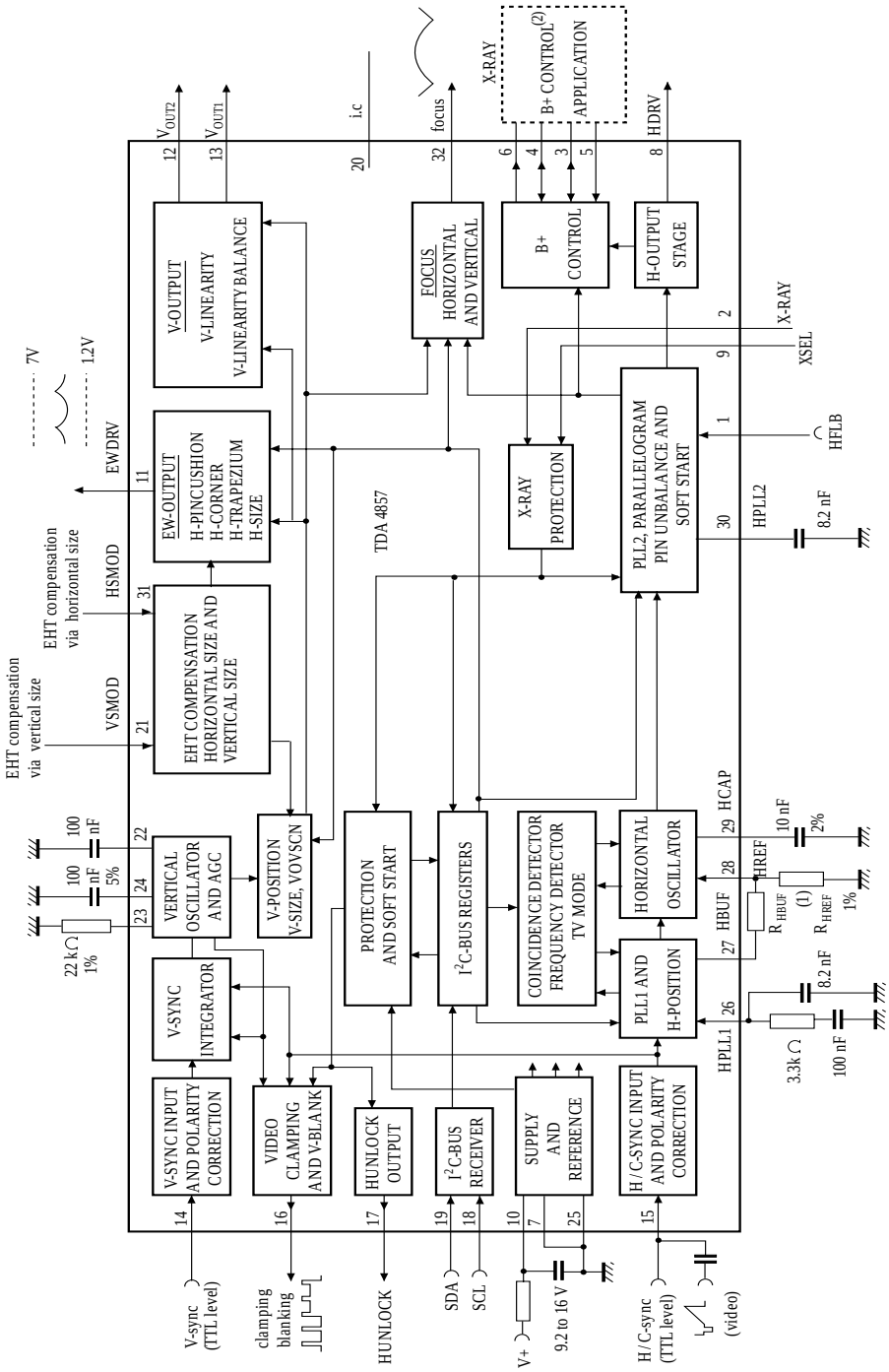
- The video clamping / vertical blanking signal at CLBL(pin 16)is a two-level sandcastle pulse which is especially suitable for video ICs such as the TDA488x family, but also for direct applications in video output stages.
- The upper level is the video clamping pulse, which is triggered by the horizontal sync pulse. Either the leading or trailing edge can be selected by setting control bit CLAMP via the I²C-bus. The width of the video clamping pulse is determined by an internal single-shot multivibrator.
- The lower level of the sandcastle pulse is the vertical blanking pulse, which is derived directly from the internal oscillator waveform. It is started by the vertical sync and stopped with the start of the vertical scan This results in optimum vertical blanking. Two different vertical blanking times are accessible, by control bit VBLK, via the I²C bus.
- Blanking will be activated continuously if one of the following conditions is true:
  Soft start of horizontal and B+ drive<voltage at HPLL2(pin 30) pulled down exterally or by the I²C bus> PLL1 is unlocked while frequency-locked loop is in search mode or if horizontal sync pulses are absent No horizontal fiyback pulses at HFLB(pin 1)X-ray protection is activated Supply voltage at Vcc(pin 10)is low(see Fig. 21)
- Horizontal unlock blanking can be switched off, by control bit BLKDIS, via the 1²C-bus while vertical blanking and protectjon blanking is maintained.

Frequency-locked loop

- The frequency-locked loop can lock the horizontal oscillator over a wide frequenct range. This is achieved by a combined search and PLL operation. The frequency range is preset by two external resistors and the

recommended maximum ratio is $\frac{f_{max}}{f_{max}} = \frac{6.5}{1}$

BLOCK DIAGRAM



PINNING

SYMBOL TDA4854	PIN	DESCRIPTION
HFLB	1	Horizontal flyback input
XRAY	2	X-ray protection input
BOP	3	B+ control OTA output
BSENS	4	B+ control comparator input
BIN	5	B+ control OTA input
BDRV	6	B+ control driver output
PGND	7	Power ground
HDRV	8	Horizontal driver output
DGND	9	Digital ground
VCC	10	Supply voltage
EWDRV	11	EW waveform output
VOUT2	12	Vertical output 2 (ascending sawtooth)
VOUT1	13	Vertical output 1 (descending sawtooth)
VSYNC	14	Vertical synchronization input
HSYNC	15	Horizontal / composite synchronization input
CLBL	16	Video clamping pulse / vertical blanking output
HUNLOCK	17	Horizontal synchronization unlock / protection / vertical blanking output
SCL	18	I^2C-bus clock input
SDA	19	I^2C-bus data input
ASCOR	20	Output for asymmetric EW corrections
VSMOD	21	Input for EHT compensation (via vertical size)
n.c.	21	Not connected
VAGC	22	External capacitor for vertical amplitude control
VREF	23	External resistor for vertical oscillator
VCAP	24	External capacitor for vertical oscillator
SGND	25	Signal ground
HPLL1	26	External filter for PLL1
HBUF	27	Buffered f / v voltage output
HREF	28	Reference current for horizontal oscillator
HCAP	29	External capacitor for horizontal oscillator
HPLL2	30	External filter for PLL2 / soft start
i.c.	31	Internal connected
HSMOD	32	Input for EHT compensation (via horizontal size)
FOCUS	32	Output for horizontal and vertical focus

GENERAL DESCRIPTON

- The TDA4857 is a high performance and efficient solution for autosync monitors. All functions are controllable by I^2C-bus.
- The TDA4857 provides synchronization processing horizontal and vertical synchronization with full autosync capability and very short settling times after mode changes. External power components are given a great deal of protection. The IC generates the drive waveforms for DC-coupled vertical boosters such as the TDA486x and TDA835x.
- The TDA4857 provides extended functions e.g as a flexibe B+ control, an extensive set of geometry control facilities, and an output for vertical foucs signals.
- Together with the I2C-bus driven philips TDA488x video processor family, a very advanced system solution is offered.

QUICK REFERENCE DATA

SYMBOL	PARAMETER	MIN	TYP	MAX	UNIT
Vcc	Supply voltage	9.2	-	16	V
Icc	supply current	-	70	-	mA
Icc(stb)	supply current during standby mode	-	9	-	mA
VSIZE	vertical size	60	-	100	%
VGA	VGA overscan for vertical size	-	16.8	-	%
VPOS	vertical position	-	-¡ 11.5	-	%
VLIN	vertical liearity(S-correction)	-2	-	-46	%
VLINBAL	vertical linearity balance	-	¡ 2.5	-	%
V_{HSIZE}	horizontal size voltage	0.13	-	3.6	V
V_{HPIN}	horizontal pincushion voltage(EW parabola)	0.04	-	1.42	V
V_{HEHT}	horizontal size modulation voltage	0.02	-	0.69	V
V_{HTRAP}	horizontal trapezium correctin voltage	-	¡ 0.33	-	V
V_{HCOR}	horizontal corner correction voltage	-0.64	-	+0.08	V
HPOS	horizontal position	-	¡ 13	-	%
HPARAL	horizontal parallelogram	-	¡ 1	-	%
HPINBAL	EW pin unbalance	-	¡ 1	-	%
T_{amb}	operation ambient temperature	-20	-	+70	¡

ORDERING INFORMATION

TYPE NUMBER	PACKAGE		
	NAME	DESCRIPTION	VERSION
TDA4857	SDIP32	plastic shrink dual in-line package 32 leads(400 mil)	SOT232-1

I^2C-bus autosync deflection controller for pc monitors

FEATURES

Concept features

- Full horizontal plus vertical autosync capability
- Extended horizontal frequency range from 15 to 130 KHz
- Comprehensive set of I^2C-bus driven geometry adjustments and function, including standby mode
- Very good vertical linearity
- Moire cancellation
- Start-up and switch - off sequence for safe operation of all power components
- X-ray protection
- Flexible switched mode B+ supply function block for feedback and feed forward converter
- interrally stabilized voltage reference
- Drive signal for focus amplifier with vertical parabola waveforms
- DC controllable inputs for Extremely High Tension(EHT) compensation
- SDIP32 package.

Synchronization

- Can handle all sync signals (horizontal, vertical, composite and sync-on-video)
- Output for video clamping(leading / trailing edge selectable by I^2C-bus),vertical blanking and protection blanking
- Output for fast unlock status of horizontal synchronization and blanking on grid 1 of picture tube.

Horizontal section

- I^2C-bus controllable wide range linear picture position, pin unbalance and parallelogram correction via horizontal phase
- Frequency-locked loop for smooth catching of horizontal frequency
- Simple frequency preset of f_{min} and f_{max} by extermal resistors
- Low jitter
- Soft start for horizontal and B+ control drive signals.

Vertical section

- I^2C-bus controllable vertical picture size, picture position, linearity(S-correction) and linearity balance
- Output for I^2C-bus controllable vertical sawtooth and parabola(for pin unbalance and parallelogram)
- Vertical picture size independent of frequency
- Differential current ourputs for DC coupling to vertical booster
- 50 to 160Hz vertical autosync range

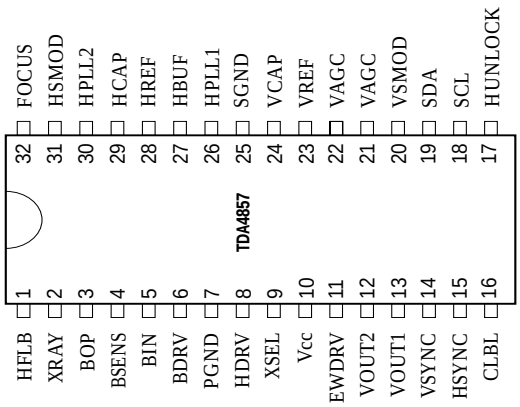
East-Weat(EW)section

- I^2C-bus controllable output for horizontal pincushion, horizontal size, corner and trapezium correction
- Optional tracking of EW drive waveform with line frequency selectable by I^2C-bus

Focus section

- I^2C-bus controllable output for vertical parabola
- Vertical parabola is independent of frequency and tracks with vertical adjustments.

PIN CONFIGURATION



WT62P1

GENERAL DESCRIPTION

The WT62P1 is a microcontroller for digital controlled monitor with Universal Serial Bus(USB)interface. It contains an 8-bit CPU, 32k bytes flash memory, 512 bytes RAM, 14 PWMs, parallel I/Os, SYNC signal processor, time, DDC 1/2B interface, master/slave I2C interface, low speed USB device module, 6-bit A/D converter and watch-dog timer.

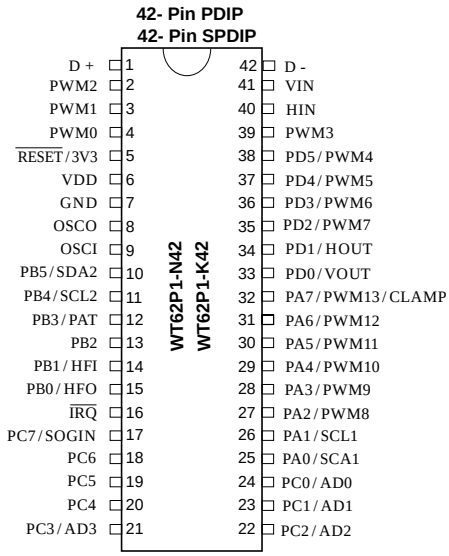
FEATURES

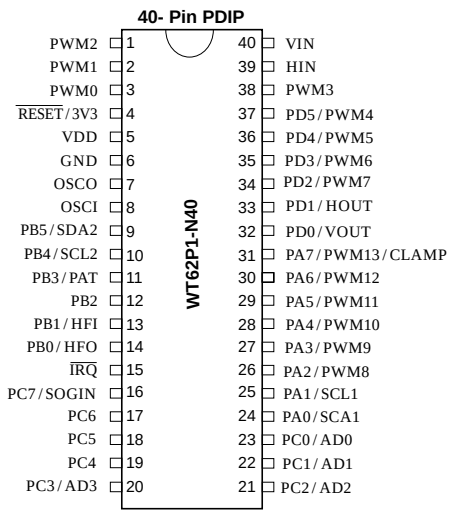
- 8-bit 6502 compatible CPU with 6MHz operating frequency
- 32768 bytes flash memory, 512 bytes SRAM.
- 12 MHz crystal oscillator
- 4 channels processor with H+V separation , H/V frequency counter, H/V polarity detection/control and clamp pulse output
- Sync signal processor with H+V separation, H/V frequency counter, H/V polarity detection/control and clamp pulse output
- Six free-running sync signal outputs(Horizontal frequency up to 106KHz)
- Self-test pattern
- DDC 1/2B supported
- Fast mode master slave I^2C interface(up to 400KHz)
- Embedded USB function with endpoint 0 and endpoint 1
- Built-In 3.3V regulator for USB tranceiver
- Watch-dog timer
- Maximum 28 progammable I/O pins
- One 8-bit programmable timer
- 6-bit A/D converter with 4 selectable inputs
- One external interrupt request input
- Low V_{DD} reset

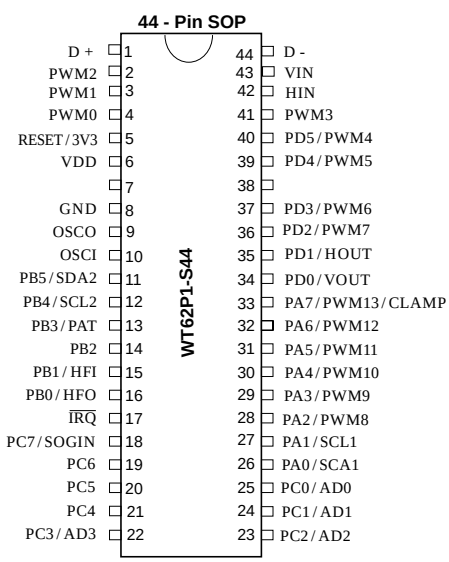
ORDERINF ING ORMATION

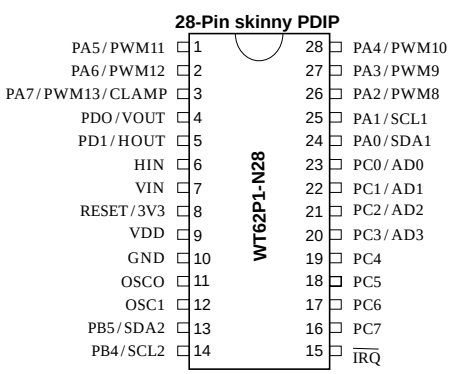
Package Type	Part Number
42-pin PDIP	WT62P1-N42
42-oin shrink PDIP	WT62P1-K42
40-pin PDIP	WT62P1-N40
28-pin skinny PDIP	WT62P1-N28
44--pin SOP	WT62P1-S44

PIN CONFIGURATION









KS24C08

4K 2.5V CMOS Serial EEPROMs

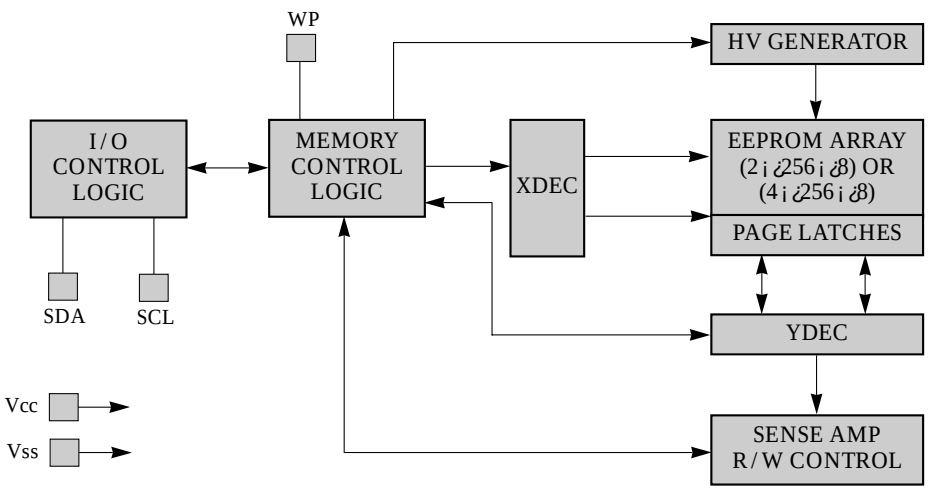
FEATURES

- Single supply with operation down to 2.5V
- Low power CMOS technology
  - 1 mA active current typical
  - 10µA standby current typical at 5.5V
  - 5 µA standby current typical at 3.0V
- Organized as two or fore blocks of 256 bytes (2 ¡ ¿256 ¡ ¿8) and (4 ¡ ¿256 ¡ ¿8)
- Two wire serial interface bus, 12CTM
- Schmitt tigger, filtered inputs for noise suppression
- Output slope control to eliminate ground bounce
- 100kHz (2.5V) and 400kHz (5V) compatibility
- Self-timed write cycle (including auto-erase)
- Page-write buffer for up to 16 bytes
- 2 ms typical write cycle time for page-write
- Hardware write cycle time for page-write
- Can be operated as a serial ROM
- Factory programming (OTP) available
- ESD protection > 4,000V
- 1,000,000 ERASE / WRITE cycles (typical)
- Data retention > 40 years
- 8-pin DIP, 8-lead or 14-lead SOIC packages
- Available for extended temperature ranges
  - Commercial : 0°C to +70°C
  - Industrial : -40°C to +85°C

DESCRIPTION

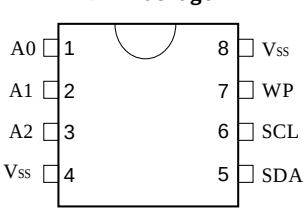
The Microchip Technology Inc. 24LC04B / 08B is a 4K-or 8K-bit Electrically Erasable PROM.
The device is organized as two or four blocks of 256¡¿8 bit memory with a two wire serial interface.
Low voltage design permits operation down to 2.5 volts with standby and active currents of obly 5µA and 1mA respectively.
The 24LC04B / 08B also has a page-write capability for up to 16 bytes of data. The 24LC04B / 08B is available in the standard 8-pin DIP and both 8-lead and 14-lead surface mount SOIC packages.

BLOCK DIAGRAM

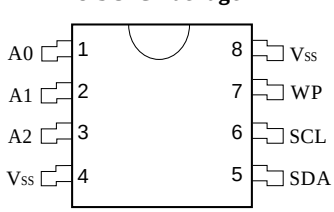


PIN CONFIGURATION

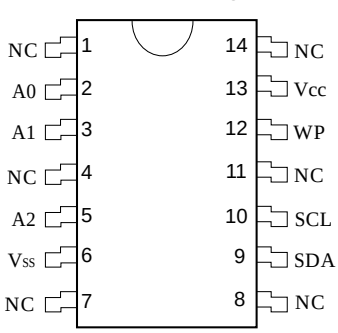
DIP Package



8-SOIC Package



14-SOIC Package



PC is a trademark of Philips Corporation

TDA4866

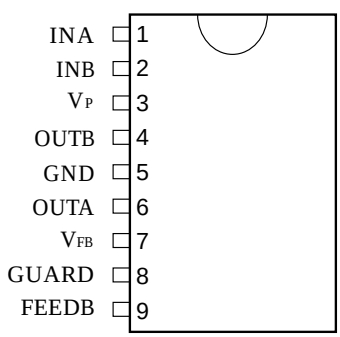
FEATURES

- Fully integrated, few external components
- No additional components in combination with the deflection controller TDA4850/51/55
- Pre-amplifier with differential high CMRR current mode inputs
- Low offsets
- High linear sawtooth signal amplification
- High efficient DC-coupled vertical output bridge circuit
- Power supply and flyback supply voltage independent adjustable to optimize power consumption and flyback time
- Powerless vertical shift
- High deflection frequency up to 140Hz
- Excellent transition behaviour during flyback
- Guard circuit for screen protection.

GENERAL DESCRIPTION

The TDA4866 is a power amplifier for use in 90 degree color vertical deflection systems for frame frequencies of 50 to 140Hz. The circuit provides a high CMRR current driven differential input. Due to the bridge configuration of the two output stages DC-coupling of the deflection coil is achieved. In conjunction with TDA4850/51/55 the ICs offer an extremely advanced system solution.

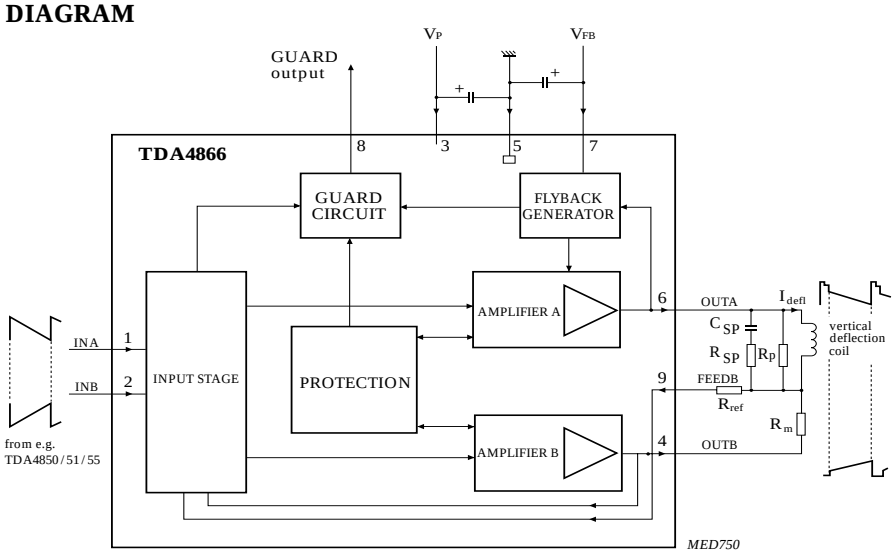
PIN CONFIGURATION



PINNING

SYMBOL	PIN	DESCRIPTION
INA	1	input A
INB	2	input B
V_P	3	supply voltage
OUTB	4	output B
GND	5	ground
OUTA	6	output A
V_{FB}	7	flyback supply voltage
GUARD	8	guard output
FEEDB	9	feedback input

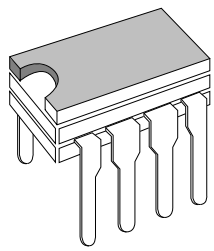
BLOCK DIAGRAM



UC3842

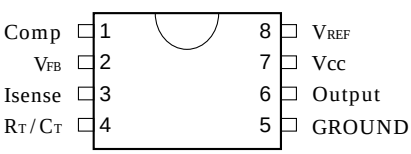
CURRENT MODE PWM CONTROLLER

- OPTIMIZED FOR OFF-LINE AND DC TO DC CONVERTERS
- LOW START-UP CURRENT (<1mA)
- AUTOMATIC FEED FORWARD COMPENSATION
- PULSE-BY-PULSE CURRENT LIMITING
- ENHANCED LOAD RESPONSE CHARACTERISTICS
- UNDER-VOLTAGE LOCKOUT WITH HYSTERESIS
- DOUBLE PULSE SUPPRESSION
- HIGH CURRENT TOTEM POLE OUTPUT
- INTERNALLY TRIMMED BANDGAP REFERENCE
- 500kHz OPERATION
- LOW Ro ERROR AMP

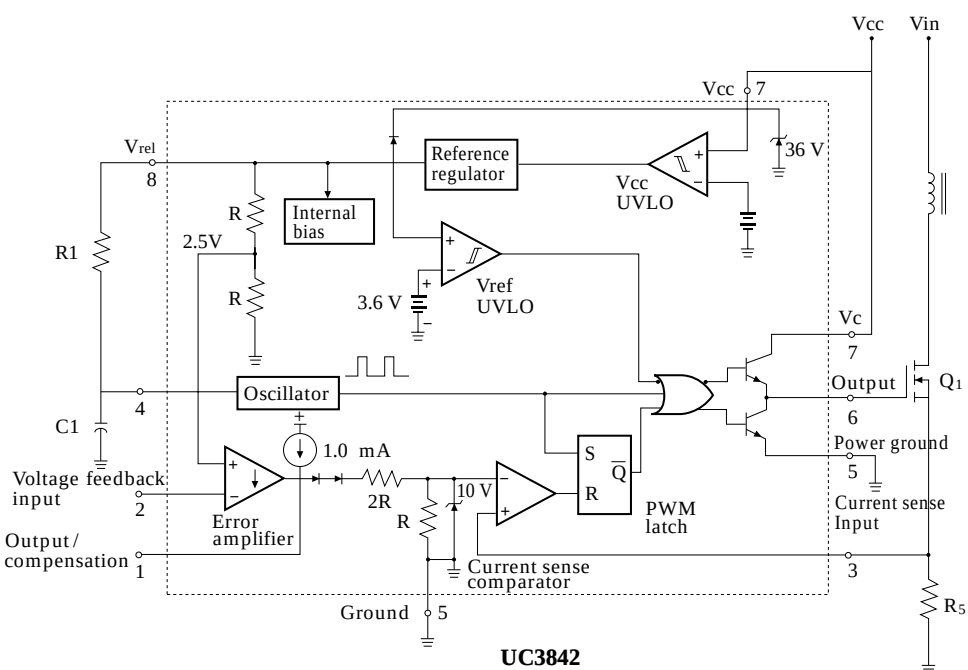


Minidip

PIN CONNECTIONS



BLOCK DIAGRAM



UC3842

TDA9113

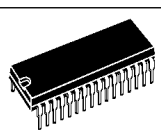
FEATURES

General
- ADVANCED I²C BUS CONTROLLED DEFLECTION PROCESSOR DEDICATED FOR HIGH-END CRT MONITORS
- SINGLE SUPPLY VOLTAGE 12V
- VERY LOW JITTER
- DC / DC CONVERTER CONTROLLER
- ADVANCED EW DRIVE
- ADVANCED ASYMMETRY CORRECTIONS
- AUTOMATIC MULTISTANDARD SYNCHRONIZATION
- 2 DYNAMIC CORRECTION WAVEFORM OUTPUTS
- X-RAY PROTECTION AND SOFT-START & STOP ON HORIZONTAL AND DC / DC DRIVE OUTPUTS
- I2C BUS STATUS REGISTER

Horizontal section
- 150kHz maximum frequency
- Corrections of geometric asymmetry Pin cushion asymmetry, Paralleiogram
- Tracking of asymmetry corrections with vertical size and position
- Fully integrated horizontal moire cancellation

Vertical section
- 290 Hz maximum frequency
- Vertical ramp for DC-coupled output stage with adjustments of: C-correction, S-correction for super-flat CRT, Vertical size, Vertical position
- Vertical moire cancellation through vertical ramp waveform
- Compensation of vertical breathing with EHT variation

EW section
- Symmetrcal geometry corrections:Pin cushion, Keystone, Top / Bottom corners separately
- Horizontal size adjustment
- Tracking of EW waveform with Vertical size and position and adaptation to frquency
- Compensation of horizontal breathing through EW waveform



SHRINK32(Plastic Package)
ORDER CODE: TDA9113

Dynamic correction section
- Generates waveform for dynamic corrections like focus, brightness uniformity,.....
- 1 output with vertical dynamic correction waveform
- 1 output with horizontal dynamic correction waveform
- Fixed on screen by means of tracking system

DC / DC controller section
- Step-up and step-down conversion modes
- External sawtooth configuration
- Bus-controlled output voltage
- Synchronization on hor, frequency with phase selection
- Selectable polarity of drive signal

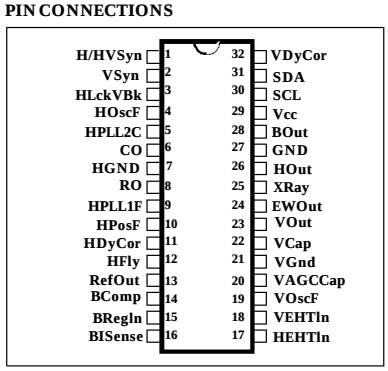
DESCRIPTION

The TDA9113 is a monolithic integrated circuit assembled in a a 32-pin shrink dual-in-line plastic package. This IC controls all the functions related to horizontal and vertical deflection in multimode or multi-frequency computer display monitors.

The internal sync p:ocessor, combined with the powerful geometry correction block, makes the TDA9113 suitable for very high performance monitors, using few external components.

Combined with other ST components dedicated for CRT monitors(microcontroller,video preampli-fier, video amplifier, OSD controller)the TDA9113 allows fully I²C bus-controllrf computer display monitors to be built with a reduced number of ex-ternal components.

PIN CONNECTIONS

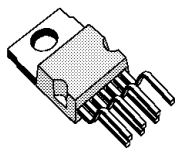


PIN FUNCTION REFERENCE

Pin	Name	Function
1	H/HVSyn	TTL compatible Horizontal / Horizontal and Vertical Sync. Input
2	VSyn	TTL compatible Vertical Sync. input
3	HLckVBK	Horizontal PLL1 Lock datection and Vertical early Blanking composite output
4	HOscF	High Horizontal Oscillator sawtooth threshold level filter input
5	HPLL2C	Horizontal PLL2 loop Capacitive filter input
6	CO	Horizontal Oscillator Capacitor input
7	HGND	Horizontal section Ground
8	RO	Horizontal Oscillator Resistor input
9	HPLL1F	Horizontal PLL1 loop Filter input
10	HPos1F	Horizontal Position Filter and soft-start time constant capacitor input
11	HDyCor	Horizontal Dynamic Correction output
12	HFly	Horizontal Flyback input
13	RefOut	Reference voltage Output
14	BComp	B+ DC/DC error amplifier(Comparator)output
15	BRegln	Regulation feedback input of the B+ DC/DC converter controller
16	BISense	B+ DC/DC converter current(1) Sense input
17	HEHTln	Input for compensation of Horizontal amplitude versus EHT variation
18	VEHTln	Input for compensation of Vertical amplitude versus EHT variation
19	VOscf	Vertical Oscillator sawtooth low threshold Filter(capacitor to be connected to VGND)
20	VAGCCap	Input for storage Capacitor for Automatic Gain Control loop in Vertical oscillator
21	VGND	Vertical section Ground
22	VCap	Vertical sawtooth generator Capacitor
23	Vout	Vertical deflection drive Output for a DC-coupled output stage
24	EWOut	E/W Output
25	X-Ray	X-Ray protection input
26	HOut	Horizontal drive output
27	GND	Main Ground
28	BOut	B+ DC/DC converter controller Output
29	Vcc	Supply voltage
30	SCL	I^2C bus serial CLock input
31	SDA	I^2C bus serial DAta input/output
32	VDyCOr	Vertical Dynamic Correction output

TDA9302H

- POWER AMPLIHER
- FLYBACKGENERATOR
- THERMAL PROTECTION



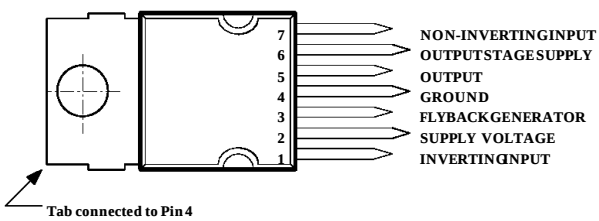
HEPTAWATT
(Plastic Package)

ORDER CODE : TDA9302H

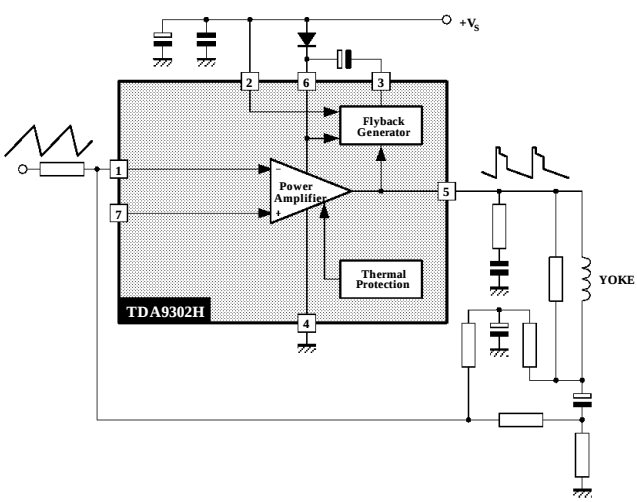
DESCRIPTION

The TDA9302H is a monolithic integrated circuit in HEPTAWATT™ package. It is a high effciency power booster fordirectdriving of vertical windings of TV yokes. It is intended foruse in Color and B & W televisionas wellas in monitors and displays.

PIN CONNECTIONS(top view)



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS AT $T_A = 25^oC$

Symbol	Parameter	Value	Unit
V_S	Supply Voltage (pin 2)	35	V
V_5, V_6	Flyback Peak Voltage	60	V
V_3	Voltage at Pin 3	+ V_s	
V_1, V_7	Amplifier Input Voltage	+ V_s ± 0.5	V
I_o	Deflection Output Current	+ 1.8	A
I_3	Pin 3 DC Current at $V_5 < V_2$	100	mA
P_{tot}	Total Power Dissipation at $T_{case} = 90^oC$	15	W
T_{stg}, T_j	Storage and Junction Temperature	± 40, +150	5C

THERMAL DATA

Symbol	Parameter		Value	Unit
$R_{th\ (j±c)}$	Thermal Resistance Junction-case	Max.	4	5C/W

RECOMMENDED OPERATING CHARACTERISTICS AT $T_A = 25^oC$

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V_{2M}	Recommended Supply Voltage			25		V
V_{2R}	Operating Supply Voltage Range		15		30	V
I_{5PP}	Deflection Output Current				2	App

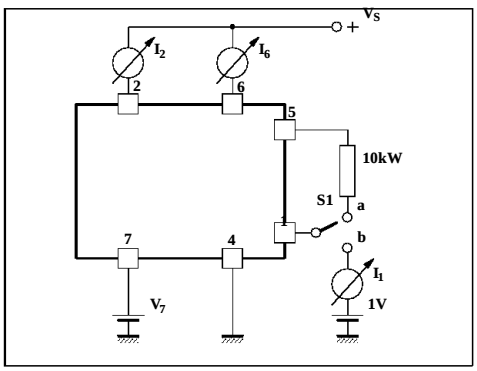
ELECTRICAL CHARACTERISTICS

(refer to the test circuits, V_S = 35V, $T_{amb} = 25^oC$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit	Fig.
I_2	Pin 2 Quiescent Current	$I_3 = 0$, $I_5 = 0$			16	mA	1a
I_6	Pin 6 Quiescent Current	$I_3 = 0$, $I_5 = 0$			36	mA	1a
I_1	Amplifier Input Bias Current	$V_1 = 1$ V, $V_7 = 2$ V		± 0.1	± 1	mA	1a
		$V_1 = 2$ V, $V_7 = 1$ V		± 0.1	± 1	mA	1a
V_{3L}	Pin 3 Saturation Voltage to GND	$I_3 = 20$ mA		1	1.5	V	1c
V_5	Quiescent Output Voltage	$V_s = 35$V, $R_a = 39$ kW		18		V	1d
V_{5L}	Output Saturation Voltage to GND	$I_5 = 1$ A		0.9	1.3	V	1c
		$I_5 = 0.7$ A		0.7	1	V	1c
V_{5H}	Output Saturation Voltage to Supply	± $I_5 = 1$ A		1.5	2	V	1b
		± $I_5 = 0.7$ A		1.3	1.8	V	1b
T_j	Junction Temperature for Thermal Shut Down			140		5C	

Figure 1 : DC Test Circuits.

Figure 1 a : Measurement of I_1 ; I_2 ; I_6



S_1 : (a) I_2 and I_6 ; (b) I_1

Figure 1 b : Measurement of V_{5H}

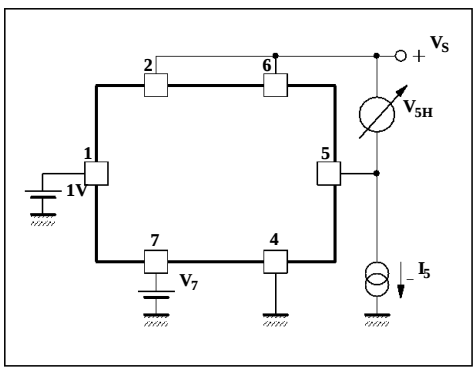
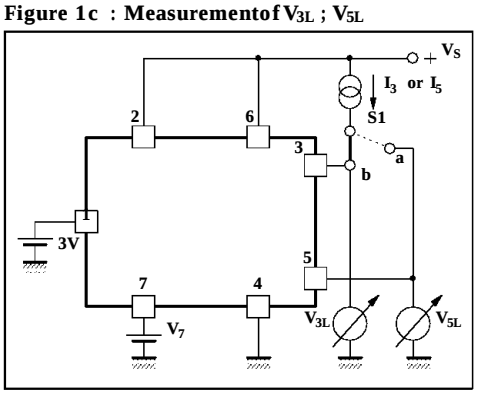
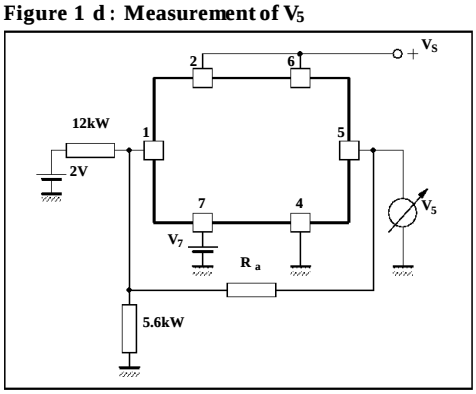


Figure 1c : Measurement of V_{3L} ; V_{5L}

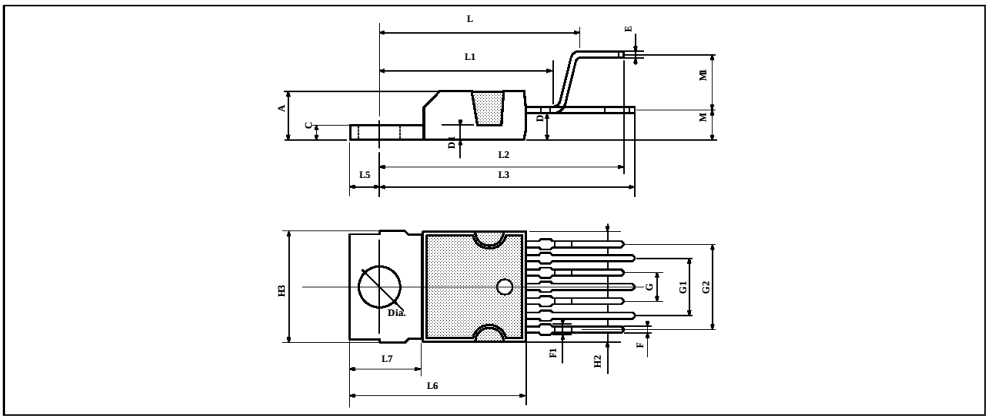


S_1 : (a) V_{3L} ; (b) V_{5L}

Figure 1 d : Measurement of V_5



PACKAGE MECHANCAL DATA : 9 PINS - PLASTIC HEPTAWATT

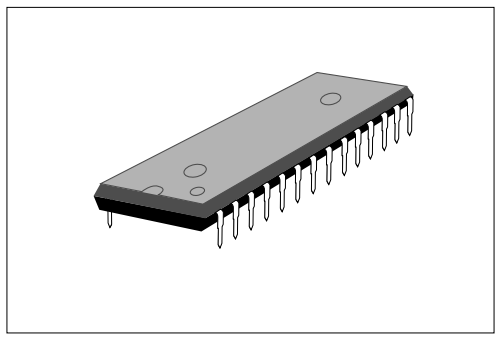


Dimensions	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A			4.8			0.189
C			1.37			0.054
D	2.4		2.8	0.094		0.110
D1	1.2		1.35	0.047		0.053
E	0.35		0.55	0.014		0.022
F	0.6		08	0.024		0.031
F1			0.9			0.035
G	2.41	2.54	2.67	0.095	0.100	0.105
G1	4.91	5.08	5.21	0.193	0.200	0.205
G2	7.49	7.62	7.8	0.295	0.300	0.307
H2			10.4			0.409
H3	10.05		10.4	0.396		0.409
L		16.97			0.668	
L1		14.92			0.587	
L2		21.54			0.848	
L3		22.62			0.891	
L5	2.6		3	0.102		0.118
L6	15.1		15.8	0.594		0.622
L7	6		6.6	0.236		0.260
M		2.8			0.110	
M1		5.08			0.200	
Dia.	3.65		3.85	0.144		0.152

KA2500B

IIC BUS CONTROLLED R/G/B VIDEO AMPLIFIER

The KA2500 is a very high frequency video amplifier system with IIC Bus controlled used in Monitor with high resolution up to 1280X1024 It contains 3 matched R/G/B video Amplifiers with OSD interface and provides a flexible interfacing to IIC Bus controlled adjustment system.



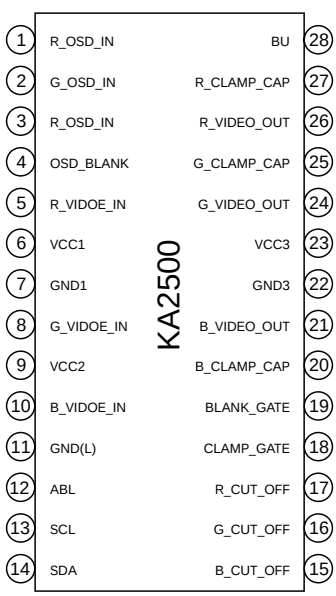
FUNCTIONS

- R/G/B Video Amplifier
- OSD Interface
- IIC BUS Control
- Contrast/OSD Control
- Brightness Control
- Cut-off Brightness Control
- R/G/B SUB Contrast / Cut Off Control
- Blank / Clamp Gate
- Half tone
- Brightness Uniformity

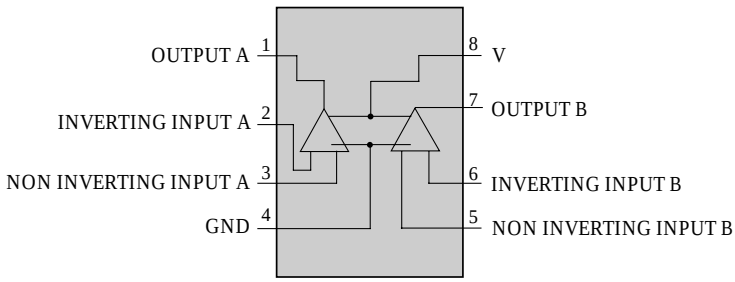
FEATURES

- 3Channel R/G/B Video Amplifier, 150MHz @f-3dB
- IIC Bus Control Items
  - Contrast Control
  - SUB Contrast Control For Each Channel
  - Brightness Control
  - OSD Contrast Control
  - Cut-off Brightness Control
  - Cut-off Control For Each Channel
  - Switch Registers for SBLK and Video Half Tone and cut-off INT/EXT
- SUB Contrast Control Range : 11dB
- Capable of 7.0V_{p-p} Output Swing Range
- Video / OSD High speed Switch
- Clamp Gate With Anti OSD sagging
- B/U(Brightness Uniformity) Interface
- Video Input Clamp, BRT Clamp
- Video Half Tone Function on OSD Picture
- OSD Interface, OSD BLK
- ABL
- TTL R/G/B OSD Inputs, 800MHz bandwidth
- Contrast Control Range : 38dB
- OSD Contrast Control Range : 38dB

PIN CONFIGURATIONS



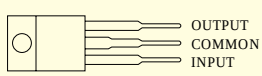
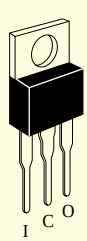
LM358



Voltage Detector ICs

Type No.	Function	Operating Voltage (V)	Package
KIA7019P/F ¡ ›7045P/F	CPU Reset, Low Voltage Detector	1.9 ¡ ›4.5	TO - 92 
KIA7419P/F ¡ ›7445P/F	CPU Reset, High Voltage Detector	1.9 ¡ ›4.5	

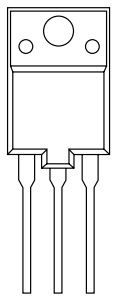
Voltage Regulator ICs

Type No.	Function	Typ Vo(V)	Max.			Package
			Io(A)	Vin(V)	PD(W)	
KIA7805P/PI	1.0A 3-Terminal Regulator	5	1.0	35	20.8	 TO-220AB
KIA7806P/PI		6				
KIA7808P/PI		8				
KIA7809P/PI		9				
KIA7810P/PI		10				
KIA7812P/PI		12				
KIA7815P/PI		15				
KIA7818P/PI		18		40		
KIA7820P/PI		20				
KIA7824P/PI		24				

2SC5404

Horizontal Deflection Output For High Resolution Display, Color TV
High Speed Switching Applications

- High Voltage : V_{CBO}=1500V
- Low Saturation Voltage : $V_{CE(sat)}$=3V(Max.)
- High Speed : tf=0.15μs(Typ.)
- Collector Metal (Fin) is Fully covered with Mold Resin

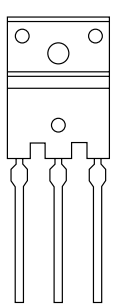


Maximum Ratings (Ta=25°C)

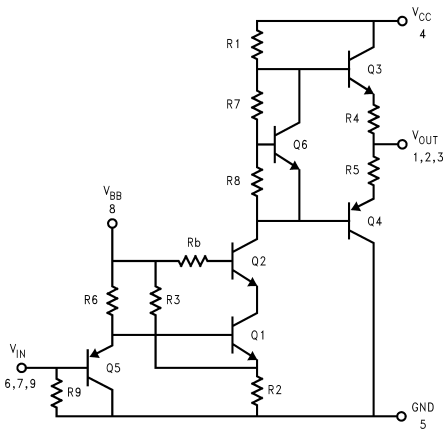
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	1500	V
Collector-Emitter Voltage		V_{CEO}	600	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	8	A
	Pulse	I_{CP}	16	
Base Current		I_B	4	A
Collector Power Dissipation (Tc=25°C)		P_C	50	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ¡ ›150	°C

FMP-2FUR

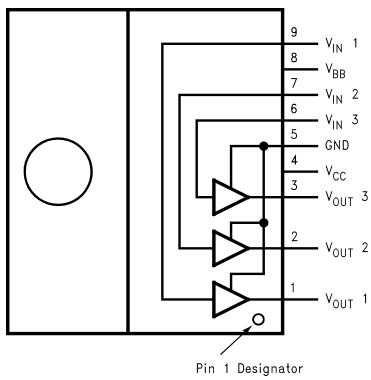
CHARACTERISTIC	SYMBOL	RATING		UNIT
		A	B	
Transient Peak Reverse Voltage	V_{RSM}	600	1500	V
Peak Reverse Voltage	V_{RM}	600	1500	V
Average Forward Current	$I_{F(AV)}$	5.0		V
Peak Surge Forward Current	I_{FSM}	50		A
I^2t Limiting Value	I^2t	12.5		A^2s
Junction Temperature	T_j	-40 ¡ › +150		°C
Storage Temperature	T_{stg}	-40 ¡ › +150		°C



LM2437



Simplified Schematic Diagram (One Channel)



Top View

General Description

The LM2437 is an integrated high voltage CRT drive circuit designed for use in color monitor applications. The IC con-tains three high input impedance. wide band amplifiers which directly drive the RGB cathodes of a CRT. Each chan-nel has its gain intemally set to-14 and can drive CRT ca-pacitive loads as well as resistive loads present in other ap-plications, limited only by the package's power dissipation.

The IC is packaged in an industry standard 9-lead TO-220 molded plastic power package.See Thermal Considerations section.

Features

- Well matched with LM1279 video preamp
- 0V to 4.5V input range
- Stable with 0-20 pF capacitive loads and inductive peaking networks
- Convenient TO-220 staggered lead package style
- Srandard LM243X Family pinout which is designed for easy PCB layout

Applications

- 1024 x 768 displays up to 85Hz refresh
- Pixel clock frequencies up to 100MHz
- Monitors using video blanking

LM2439

LM2439
Monolithic Triple 9.5 ns CRT Driver

General Description

The LM2439 is an integrated high voltage CRT driver circuit designed for use in color monitor applications. The IC contains three high input impedance, wide band amplifiers which directly drive the RGB cathodes of a CRT. Each channel has its gain internally set to ¸14 and can drive CRT capacitive loads as well as resistive loads present in other applications, limited only by the package's power dissipation.

The IC is packaged in an industry standard 9-lead TO-220 molded plastic power package. See Thermal Considerations section.

Features

- Dissipates approximately 50% less power than the LM2406
- Well matched with LM1279 video preamp
- 0V to 5V input range
- Stable with 0 pF±20 pF capacitive loads and inductive peaking networks
- Convenient TO-220 staggered lead package style
- Standard LM243X Family Pinout which is designed for easy PCB layout

Applications

- 1024 x 768 Displays up to 70 Hz Refresh
- Pixel clock frequencies up to 75 MHz
- Monitors using video blanking

Schematic and Connection Diagrams

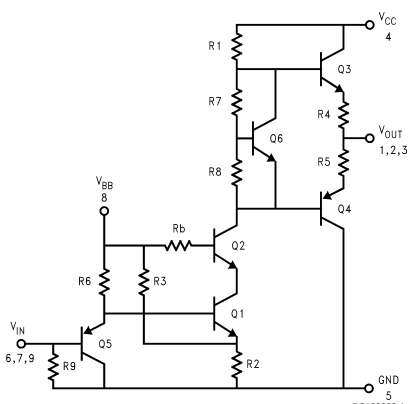
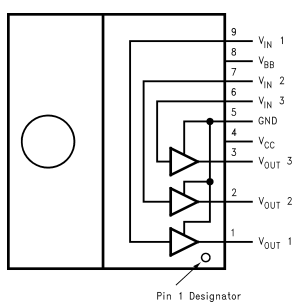


FIGURE 1. Simplified Schematic Diagram (One Channel)



Note: Tab is at GND

Top View
Order Number LM2439T

Absolute Maximum Ratings (Notes 1, 3)

If Military/Aerospace specified devices are required, please contact the National Semiconductor Sales Office/ Distributors for availability and specifications.

Supply Voltage, (V_{CC})	+90V
Bias Voltage, (V_{BB})	+16V
Input Voltage, (V_{IN})	0V to 6V
Storage Temperature Range, (T_{STG})	−65 C to +150 C
Lead Temperature	
(Soldering, <10 sec.)	300 C
ESD Tolerance, Human Body Model	2 kV
Machine Model	250V

Operating Range (Note 2)

V_{CC}	+60V to +85V
V_{BB}	+8V to +15V
V_{IN}	+0V to +5V
V_{OUT}	+15V to +75V
Case Temperature	−20 C to +115 C

Do not operate the part without a heat sink.

Electrical Characteristics

(See *Figure 2* for Test Circuit)
Unless otherwise noted: V_{CC} = +80V, V_{BB} = +12V, V_{IN} = +2.7 V_{DC}, C_L = 8 pF, Output = 40 V_{PP} at 1 MHz, T_C = 50 C.

Symbol	Parameter	Condition	LM2439			Units
			Min	Typ	Max	
I_{CC}	Supply Current	Per Channel, No Input Signal, No Output Load		8		mA
I_{BB}	Bias Current	All Three Channels		12		mA
V_{OUT}	DC Output Voltage	No AC Input Signal, V_{IN} = 1.2V	62	65	68	V_{DC}
A_V	DC Voltage Gain	No AC Input Signal	12	14	16	
ΔA_V	Gain Matching	(Note 4), No AC Input Signal		1.0		dB
LE	Linearity Error	(Notes 4, 5), No AC Input Signal		8		%
t_R	Rise Time	(Note 6), 10% to 90%		9		ns
t_F	Fall Time	(Note 6), 90% to 10%		11		ns
OS	Overshoot	(Note 6)		1		%

Note 1: Absolute Maximum Ratings indicate limits beyond which damage to the device may occur.

Note 2: Operating ratings indicate conditions for which the device is functional, but do not guarantee specific performance limits. For guaranteed specifications and test conditions, see the Electrical Characteristics. The guaranteed specifications apply only for the test conditions listed. Some performance characteristics may change when the device is not operated under the listed test conditions.

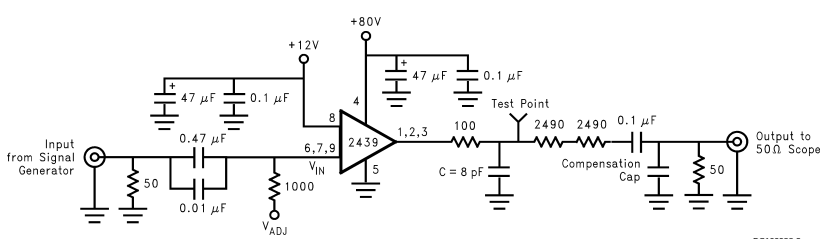
Note 3: All voltages are measured with respect to GND, unless otherwise specified.

Note 4: Calculated value from Voltage Gain test on each channel.

Note 5: Linearity Error is the variation in dc gain from V_{IN} = 1.0V to V_{IN} = 4.5V.

Note 6: Input from signal generator: t_r, t_f < 1 ns.

AC Test Circuit



Note: 8 pF load includes parasitic capacitance.

FIGURE 2. Test Circuit (One Channel)

Figure 2 shows a typical test circuit for evaluation of the LM2439. This circuit is designed to allow testing of the LM2439 in a 50Ω environment without the use of an expensive FET probe. The two 2490Ω resistors form a 200:1 divider with the 50Ω resistor and the oscilloscope. A test point is included for easy use of an oscilloscope probe. The compensation capacitor is used to compensate the stray capacitance of the two 2490Ω resistors to achieve flat frequency response.

MTV021

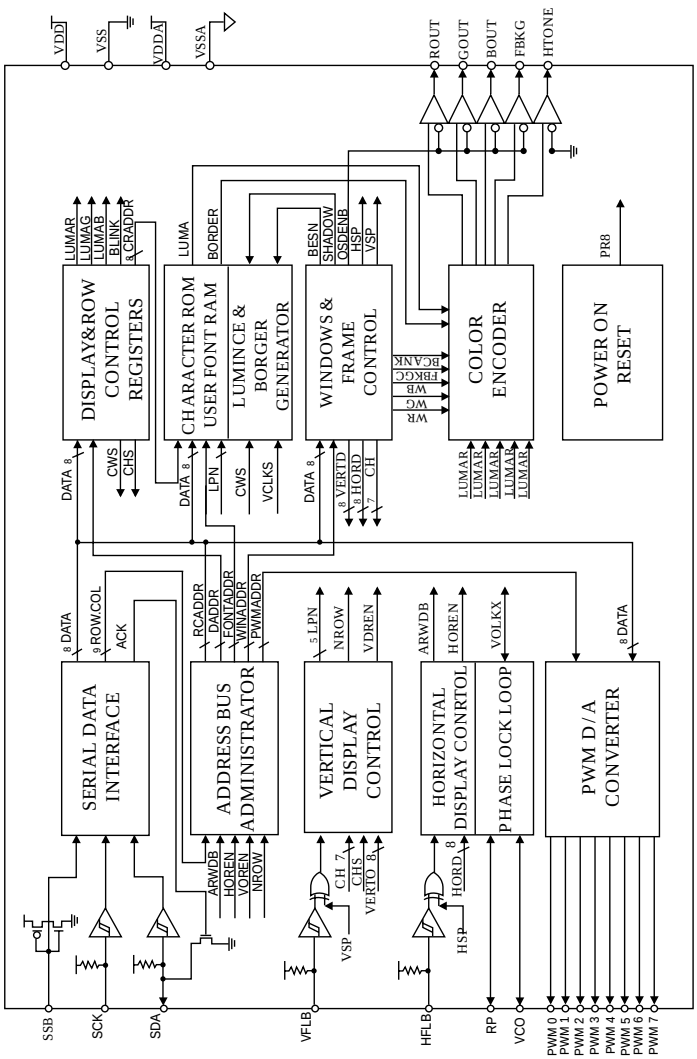
FEATURES

- Horizontal SYNC input up to 120 KHz.
- On-chip PLL circuitry up to 96MHz
- Programmable horizontal resolutions up to 1524 dots per display row
- Full-screen display consists of 15(rows) by 30(columns) characters.
- 12 x 18 dot matrices per character.
- Total of 272 characters and graphic fonts, including 256 standard and 16 multi-color mark ROM fonts.
- 8 color-selectable maximum per display character.
- 7 color-selectable maximum for charater background.
- Double character height and / or width conrrol.
- Programmable positioning for display screen center.
- Bordering, shadowing and blinking effect.
- Programmable character height(18 to 71 nl lines)control.
- Row to row spacing register to manipulate the constant display height.
- 4 programmable background windows with multi-level operation and shadowing on window effect.
- Software clears bit for full-screen erasing.
- Half tone and fast blanking output.
- Fade-in fade-out effect.
- 8-channel / 8-bit PWM D / A converter output.
- Compatible with SPI bus or I^2C interface with slave address 7AH(slave address is mask option)
- 16-pin,20-pin or 24-pin PDIP package.

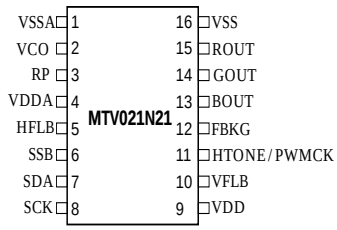
GENERAL DESCRIPTION

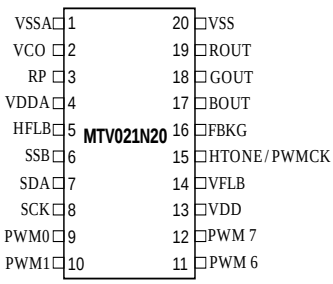
- MTV021 is designed for monitor applications to display built-in characters or fonts onto monitor screen. The display operation occurs by transferring data and control information from the micro-controller to RAM through a serial data interface. It can execute full-screen display automatically, as well as specific functions such as character background color, bordering, shadowing, blinking, double height and width, font by font color control, frame positioning, frame size control by character height and row-to-row spac-ing, horizontal display resolution, full-screen erasing, fade-in.fade-out effect, windowing effect and shad-owing on window.
- MTV021 provides 256 standard and 16 multi-color characters and graphic fonts for more efficacious applications. The full OSD menu is formed by 15 rows x30 columns, which can be positioned any-where on the monitor screen by changing vertical or horizontal delay
- Moreover, MTV021 also provides 8 PWM DAC channels with 8-bit resolution and a PWM clock out put for external digital-to-analog control.

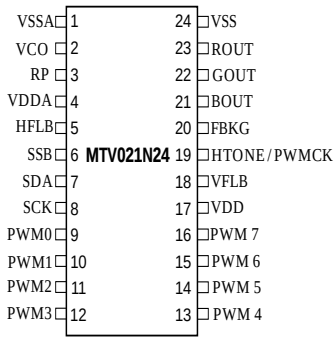
BLOCK DIAGRAM



PIN CONNECTION







PIN DESCRIPTIONS

Name	I/O	PIN NO.			Descriptions
		N16	N20	N24	
VSSA	-	1	1	1	Analog ground. This ground pin is used to internal analog circuitry.
VCO	I/O	2	2	2	Voltage Control Oscillator. This pin is used to control the internal oscillator frequency by DC voltage input from external low pass filter.
RP	I/O	3	3	3	Bias Resistor. The bias resistor is used to requlate the appropriate bias current for internal oscillator to resonate at specific dot frequency.
VDDA	-	4	4	4	Analog power supply. Positive 5V DC supply for internal analog circuity, Any a 0.1uF decoupling capacitor shouid be connected across to VDDA and VSSA.
HFLB	I	5	5	5	Horizontal input. This pin is used to input the horizontal synchronizing signal. It is a leading edge triggered and has an internal pull-up resistor.
SSB	I	6	6	6	Serial interface enable. It is used to enable the serial data and is also used to select the operation of I^2C or SPI bus. If this pin is left floating, I2C bus is enabled, otherwise the SPI bus is enabled.
SDA	I	7	7	7	Serial data input . The external data transfer through this pin to internal display registers and control registers. lt has an internal pull-up resistor.
SCK	I	8	8	8	Serial clock input. The clock-input pin is used to synchronize the data transfer. It has an internal pull-up resistor.
PWM0	O	-	9	9	Open-Drain PWM D/A converter 0. The output pulse width is programmable by the register of Row 15, Column 23.
PWM1	O	-	10	10	Open-Drain PWM D/A converter 1. The output pulse width is programmable by the register of Row 15, Column 24.
PWM2	O	-	-	11	Open-Drain PWM D/A converter 2. The output pulse width is programmable by the register of Row 15, Column 25.
PWM3	O	-	-	12	Open-Drain PWM D/A converter 3. The output pulse width is programmable by the register of Row 15, Column 26.

Name	I/O	PIN NO.			Descriptions
		N16	N20	N24	
PWM4	O	-	-	13	Open-Drain PWM D/A converter 4. The output pulse width is programmable by the register of Row 15, Column 27.
PWM5	O	-	-	14	Open-Drain PWM D/A converter 5. The output pulse width is programmable by the register of Row 15, Column 28.
PWM6	O	-	11	15	Open-Drain PWM D/A converter 6. The output pulse width is programmable by the register of Row 15, Column 29.
PWM7	O	-	12	16	Open-Drain PWM D/A converter 7. The output pulse width is programmable by the register of Row 15, Column 30.
VDD	-	9	13	17	Digital power supply. Positive 5V DC supply for internal digital circuitry and a 0.1uF decoupling capacitor should be connected across to VDD and VSS.
VFLB	I	10	14	18	Vertical input. This pin is used to input the vertical synchronizing signal. it is leading triggered and has an internal pull-up resistor.
HTONE/ PWMCK	O	11	15	19	Half tone output /PWM clock output. This is a multiplexed pin selected by PWMCK bit. This pin can be a PWM clock or used to attenuate R.G.B gain of VGA for the transparent windowing effect.
FBKG	O	12	16	20	Fast Blanking output. It is used to cut off external R,G,B signals of VGA white this chip is displaying characters or windows.
BOUT	O	13	17	21	Blue color output. It is a blue color video signal output.
GOUT	O	14	18	22	Green Color output. It is a green color video signal output.
ROUT	O	15	19	23	Red Color output. It is a red color video signal output.
VSS	O	16	20	24	Digital ground. This ground pin is used to internal digital circuity.

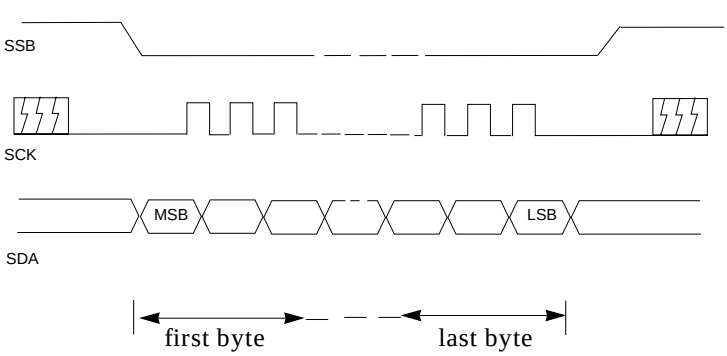
FUNCTIONAL DESCRIPTIONS

SERIAL DATA INTERFACE

The serial data interface receives data transmitted from an external controller. And there are 2 types of bus can be accessed through the serial data interface, one is SPI bus and other is I^2C bus.

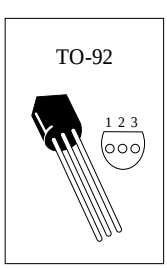
SPI bus

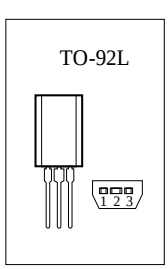
While SSB pin is pulled to " high" or " low" level, the SPI bus operation is selected. And a valid transmission should be starting from pulling SSB to "low" level, enabling MTV021 to receiving mode, and retain "low"level until the last cycle for a complete data packet transfer. The protocol is shown in Figure 1.

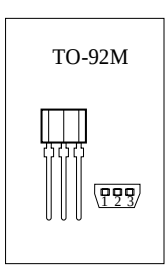


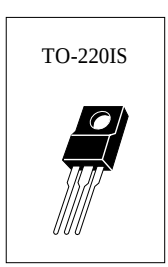
TRANSISTORS

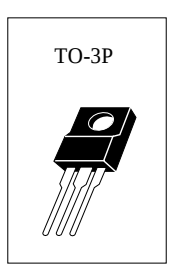
Type No.	MAX. RATINGS			$V_{CE(SET)}$		Max				Package
	V_{CEO} (V)	I_C (mA)	P_C (mW)	(V)	I_C (mA)	I_B (mA)	1	2	3	
KSP45	350	300	1.5W	0.5	10	1	E	B	C	TO-92
KTA1273Y	-30	-2.0	1W	-2.0	-1.5	-30	E	C	B	TO-92L
KSA928Y	-30	-2.0A	1W	-2.0	-1.5A	-30	E	C	B	TO-92L
KSA1013	-160	-1.0A	0.9W	-1.5	-500	-50	E	C	B	TO-92L
KSD1616Y	50	1	0.75W	0.3	1A	50	E	C	B	TO-92
KSA733CY	-50	-150	250	-0.3	-100	-10	E	C	B	TO-92
IRF630A	200V	9A	72W	0.4§ (MAX) RDS(ON)		¡ 30V (VGSS)	G	D	S	TO-220AB
KTC3198Y	50	150	625	0.25	100	10	E	C	B	TO-92
KSC945CY	50	150	250	0.15	100	10	E	C	B	TO-92
KTC3205Y	30	2A	1W	2.0	1.5A	30	E	B	C	TO-92L
KSP42	300	500	0.625	0.5	20	2	E	B	C	TO-92
KSP92	-300	-500	0.625	-0.5	-20	-2	B	B	C	TO-92
KRC102M	50	100	400	-0.3	-100	-0.88	E	C	B	TO-92M
2SK2545	600V (VDSS)	6A(ID)	40W (PT)	1.2§ (MAX) RDS(ON)		¡ 30V (VGSS)	G	D	S	TO-220IS
YTA630	200V (VDSS)	10A(ID)	75W (PT)	0.8§ (MAX) RDS(ON)		¡ 20V (VGSS)	G	D	S	TO-220AB

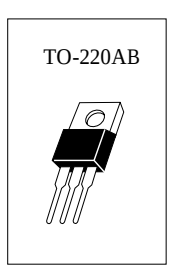












Replacement Parts List

PRODUCT SAFETY NOTICE : COMPONENTS MARKED WITH ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY.

ABBREVIATIONS :

RD R-CARBON
RS R-METAL OXIDE
RX R-CEMENT
RN R-METAL(¡ 1%)

CK C-CERAMIC, HK
CE C-ELECTROLYTIC
CC C-CERAMIC, TEMP
CQ C-POLYESTER, C-POLYPROPYLENE
CF C-METAL POLYESTER C-METAL POLYPROPYLENE

NOTE : COMPONENTS OF THIS PARTS LIST CAN BE CHANGED FOR QUALITY IMPROVEMENT WITHOUT INFORMATION.

V770A0/A1 MAIN BOARD

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
1	AI01	372010121702	CONN-M,AC INNET DSC-14S2	
2	AR01	2502001003	RES NET,2K 1/8W J SIP 6P	
3	BH01	3540200058	BD-FER,BFS3550	
4	BH02	3540200058	BD-FER,BFS3550	
5	BH03	3540200103	BD-FER,HF70 BTL 3.5*6B	
6	BH04	3540200059	BD-FER,BFS3580	
7	BH05	3540200058	BD-FER,BFS3550	
8	BH06	3540200058	BD-FER,BFS3550	
9	BH07	3540200059	BD-FER,BFS3580	
10	BP01	3540200059	BD-FER,BFS3580	
11	BV01	3540200058	BD-FER,BFS3550	
12	BV02	3540200059	BD-FER,BFS3580	
13	CH01	CF93BT1J474J	CAP-MPE,63V 0.47UF J	V770A1
14	CH01	CQ92BT2A104J	CAP-PE,100V 0.1UF J	V770A0
15	CH02	CQ92BT2A104J	CAP-PE,100V 0.1UF J	V770A0
16	CH02	CQ92BT2A154J	CAP-PE,100V 0.15UF J	V770A1
17	CH03	CQ92BT2A822J	CAP-PE,100V 0.0082UF J	V770A0
18	CH04	CQ92BT2A104J	CAP-PE,100V 0.1UF J	V770A1
19	CH04	CQ92BT2A473J	CAP-PE,100V 0.047UF J	V770A0
20	CH05	CQ92BT2A103J	CAP-PE,100V 0.01UF J	V770A1
21	CH05	E42007019070	CAP-PP/PE,100V 0.01UF J	V770A0
22	CH06	CQ92BT2A562J	CAP-PE,100V 0.0056UF J	V770A0
23	CH06	E42007019220	CAP-PP/PE,100V 680PF J	V770A1
24	CH07	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	V770A1
25	CH07	CE04BT1E470M	CAP-EL,SMS 25V 47UF M	V770A0
26	CH08	CQ92BT2A102J	CAP-PE,100V 0.001UF J	V770A1
27	CH08	CQ92BT2A104J	CAP-PE,100V 0.1UF J	V770A0
28	CH09	CC45CT1H101J	CAP-CD,50V 100 PF J TAP	V770A1
29	CH09	CQ92BT2A152J	CAP-PE,100V 1500PF J	V770A0
30	CH10	CE04BT1H220M	CAP-EL,SMS 50V 22UF M	V770A0
31	CH10	CE04BT1HR47M	CAP-EL,SMS 50V 0.47UF M	V770A1
32	CH11	CQ92BT2A222J	CAP-PE,100V 0.0022UF J	V770A1
33	CH11	CQ92BT2A473J	CAP-PE,100V 0.047UF J	V770A0
34	CH12	CE04BT1H4R7M	CAP-EL,SMS 50V 4.7UF M	V770A1
35	CH12	CQ92BT2A104J	CAP-PE,100V 0.1UF J	V770A0
36	CH13	CE04BT1H2R2M	CAP-EL,SMS 50V 2.2UF M	V770A0
37	CH13	CQ92BT2A473J	CAP-PE,100V 0.047UF J	V770A1
38	CH14	CQ92BT2A102J	CAP-PE,100V 0.001UF J	
39	CH15	CQ92BT2A332J	CAP-PE,100V 3300PF J	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
40	CH16	CF93BT1J105J	CAP-MPE,63V 1UF J	
41	CH17	CK45BT3A331K	CAP-CE,1KV 330PF K TAP	
42	CH18	214474001702	CAP-M-P,0.47UF 250V J 7.5	
43	CH19	CE04BT1H100M	CAP-EL,SMS 50V 10UF M	
44	CH20	CQ92BT2A102J	CAP-PE,100V 0.001UF J	
45	CH21	CE04IT1E470M	CAP-EL,KME 25V 47UF M	
46	CH22	2001010098	CAP-AL,100UF 63V M 10*20	
47	CH23	2174920002	CAP-P-F,4900PF 1.6KV J RA	
48	CH24	2004700096	CAP-AL,47UF 35V M 6.3*11	
49	CH25	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
50	CH26	CK45BT3A681K	CAP-CD,1KV 680PF K TAP	
51	CH27	214304000201	CAP-M-P,0.3UF 250V J MPP	
52	CH28	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
53	CH29	2148540002	CAP-M-P,0.85UF 250V J PP	V770A0
54	CH29	214684000501	CAP-M-P,0.68UF 250V J 20	V770A1
55	CH30	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
56	CH31	2174420006	CAP-P-F,4400PF 800V J RAD	
57	CH32	2142440003	CAP-M-P,0.24UF 150V J PP	
58	CH33	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
59	CH34	214104001703	CAP-M-P,0.1UF 250V J 7.5	
60	CH35	CQ92BT2A333J	CAP-PE,100V 0.033UF J	
61	CH36	CQ92BT2A333J	CAP-PE,100V 0.033UF J	
62	CH37	CQ92BT2A333J	CAP-PE,100V 0.033UF J	
63	CH38	CK45BT3A102K	CAP-CD,1KV 1000PF 10%	
64	CH39	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	V770A1
65	CH40	CE04BT1C100M	CAP-EL,SMS 16V 10UF M TAP	
66	CH41	2171530016	CAP-P-F,0.015UF 250V J RA	
67	CH42	2103300010	CAP-CER,33PF 1KV J SL	V770A0
68	CH43	CQ92BT2A473J	CAP-PE,100V 0.047UF J	
69	CH44	CE04BT1V101M	CAP-EL,SMS 35V 100UF M	
70	CH45	2101520006	CAP-CER,1500PF 1000V K Y5	
71	CH46	CE04BT1E101M	CAP-EL,SMS 25V 100UF M	
72	CH47	2002280012	CAP-AL,0.22UF 160V M 5*11	
73	CH48	CE04BT2E100M	CAP-EL,SMS 250V 10UF M	
74	CH49	CQ92BT2A102J	CAP-PE,100V 0.001UF J	V770A1
75	CH50	CE04BT1E101M	CAP-EL,SMS 25V 100UF M	V770A1
76	CH51	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
77	CH52	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
78	CH53	2102230017	CAP-CER,0.022UF 1KV J Z4U	
79	CH54	CE04BT2C220M	CAP-EL,SMS 160V 22UF M	
80	CH55	CQ92BT2A103J	CAP-PE,100V 0.01UF J	V770A1

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
81	CH55	CQ92BT2A273J	CAP-PE,100V 0.027UF J	V770A0
82	CH56	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
83	CH57	2001020050	CAP-AL,1000UF 16V M 10*1	V770A1
84	CH57	CE04BT1C331M	CAP-EL,SMS 16V 330UF M	V770A0
85	CH58	2172230011	CAP-P-F,0.022UF 250V J RA	
86	CH59	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	V770A1
87	CH60	CE04BT1E220M	CAP-EL,SMS 25V 22UF M	
88	CH61	CQ92BT2A333J	CAP-PE,100V 0.033UF J	V770A0
89	CH62	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	V770A0
90	CM01	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
91	CM02	CE04BT1HR33M	CAP-EL,SMS 50V 0.33UF M	V770A1
92	CM02	CE04BT1HR47M	CAP-EL,SMS 50V 0.47UF M	V770A0
93	CM03	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
94	CM04	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
95	CM05	CC45CT1H220J	CAP-CD,50V 22PF J	
96	CM06	CC45CT1H220J	CAP-CD,50V 22PF J	
97	CM07	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	V770A0
98	CM08	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
99	CM09	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
100	CM10	CC45CT1H330J	CAP-CD,50V 33PF J	
101	CM11	E42007019220	CAP-PP/PE,100V 680PF J	
102	CM12	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
103	CM13	CE04BT1E470M	CAP-EL,SMS 25V 47UF M	
104	CM14	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
105	CM15	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
106	CON01	3720101389	CONN-M,SMW200-07P	
107	CON02	3720101227	CONN-M,5045-3A 3	
108	CON03	372010105301	CONN-M,POST 1P DEGT235 14	
109	CON04	3720101916	CONN-M,SMW200-14 14	
110	CP01	2141540010	CAP-M-P,0.15UF 250V M PP	
111	CP02	E42007027050	CAP-CD,Y2 2200PF M TAP	
112	CP03	E42007027050	CAP-CD,Y2 2200PF M TAP	
113	CP04	2141540010	CAP-M-P,0.15UF 250V M PP	
114	CP05	2001810001	CAP-AL,180UF 400V M 25.4*	
115	CP05	6130014100	EYELET,2.7PAI BRASS T=0.4	
116	CP07	CK45BF2H103K	CAP-CD,500V 0.01UF K	
117	CP08	2001010091	CAP-AL,100UF 25V M 6.3*11	
118	CP09	2102230017	CAP-CER,0.022UF 1KV J Z4	V770A1
119	CP10	CQ92BT2A272J	CAP-PE,100V 0.0027UF J	
120	CP11	210332001101	CAP-CER,Y1 3300PF M N-CUT	
121	CP13	2104710018	CAP-CER,470PF 50V J SL	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
122	CP14	2104710018	CAP-CER,470PF 50V J SL	
123	CP15	CQ92BT2A332J	CAP-PE,100V 3300PF J	
124	CP16	CF93BT1J334J	CAP-MPE,63V 0.33UF J	
125	CP17	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
126	CP18	CQ92BT2A332J	CAP-PE,100V 3300PF J	
127	CP19	CE04BT1H2R2M	CAP-EL,SMS 50V 2.2UF M	
128	CP21	2002210068	CAP-AL,220UF 100V M 13*25	
129	CP23	CE04BT2C220M	CAP-EL,SMS 160V 22UF M	
130	CP24	2004710059	CAP-AL,470UF 16V M 8*12 P	
131	CP25	2004710043	CAP-AL,470UF 16V M 10*12	V770A1
132	CP27	CE04BT1E681M	CAP-EL,SMS 25V 680UF M	
133	CP28	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
134	CP29	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
135	CP30	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
136	CP31	CE04BT1E471M	CAP-EL,SMS 25V 470UF M	
137	CV01	CQ92BT2A222J	CAP-PE,100V 0.0022UF J	
138	CV02	CQ92BT2A222J	CAP-PE,100V 0.0022UF J	V770A0
139	CV02	CQ92PT2A471J	CAP-PP,100V 470PF J	V770A1
140	CV03	2004710049	CAP-AL,470UF 25V M 10*16	V770A0
141	CV03	2004710059	CAP-AL,470UF 16V M 8*12	V770A1
142	CV04	2001010122	CAP-AL,100UF 100V M 10*20	V770A0
143	CV04	2004710059	CAP-AL,470UF 16V M 8*12	V770A1
144	CV05	2001010093	CAP-AL,100UF 35V M 8*11.	V770A1
145	CV06	2141040020	CAP-M-P,0.1UF 250V J RAD	V770A1
146	CV06	CQ92BT2A224J	CAP-PE,100V 0.22UF J	V770A0
147	CV07	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
148	CV08	CE04BT1C220M	CAP-EL,SMS 16V 22UF M	V770A1
149	CV09	CQ92BT2A224J	CAP-PE,100V 0.22UF J	V770A1
150	CV10	CQ92BT2A102J	CAP-PE,100V 0.001UF J	V770A1
151	DH01	DT1N4148	DIODE,1N4148 TAPING	V770A0
152	DH02	DT1N4148	DIODE,1N4148 TAPING	V770A0
153	DH03	DT1N4148	DIODE,1N4148 TAPING	
154	DH04	DT1N4148	DIODE,1N4148 TAPING	V770A0
155	DH04	DT1N4937	DIODE,1N4937 TAPING	V770A1
156	DH05	DT1N4148	DIODE,1N4148 TAPING	
157	DH06	DT1N4148	DIODE,1N4148 TAPING	
158	DH07	3100500178	DI-SW,UF1G-5705 LEAD	
159	DH10	DTUF4004	DIODE,UF4004	
160	DH11	3100500094	DI-SW,ERD07-15L LEAD	
161	DH12	3102000221	DI-REC,FMP-2FUR(LF664) LE	
162	DH12	6120043201	CONTACT-PL,SPRING CLIP	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
163	DH13	3100500144	DI-SW,D1NL40 LEAD	
164	DH14	DT1N4007	DIODE,1000V 1.0A TAP	
165	DH15	DT1N4007	DIODE,1000V 1.0A TAP	
166	DH16	DT1N4007	DIODE,1000V 1.0A TAP	
167	DH17	DT1N4007	DIODE,1000V 1.0A TAP	
168	DH18	DT1N4007	DIODE,1000V 1.0A TAP	
169	DH19	DTUF4007	DIODE,UF4007	
170	DH20	DT1N4937	DIODE,1N4937 TAPING	
171	DH21	DT1N4936	DIODE,400V 1.0A 1N4936	
172	DH22	DT1N4148	DIODE,1N4148 TAPING	
173	DH23	DT1N4148	DIODE,1N4148 TAPING	
174	DH24	DT1N4007	DIODE,1000V 1.0A TAP	
175	DH25	DT1N4148	DIODE,1N4148 TAPING	
176	DH26	DT1N4007	DIODE,1000V 1.0A TAP	
177	DH27	DT1N4937	DIODE,1N4937 TAPING	
178	DH28	DTUF4007	DIODE,UF4007	
179	DH30	DT1N4148	DIODE,1N4148 TAPING	V770A0
180	DM01	DT1N4148	DIODE,1N4148 TAPING	
181	DP01	DT1N5398	DIODE 1N5398 TAPING	
182	DP02	DT1N5398	DIODE 1N5398 TAPING	
183	DP03	DT1N5398	DIODE 1N5398 TAPING	
184	DP04	DT1N5398	DIODE 1N5398 TAPING	
185	DP05	DT1N4148	DIODE,1N4148 TAPING	
186	DP06	DT1N4937	DIODE,1N4937 TAPING	
187	DP07	DT1N4937	DIODE,1N4937 TAPING	
188	DP08	DT1N4148	DIODE,1N4148 TAPING	
189	DP09	DT1N4148	DIODE,1N4148 TAPING	
190	DP11	3100500169	DI-SW,SUF30JL-5702 LEAD	
191	DP12	DTUF4007	DIODE,UF4007	
192	DP13	DTUF4004	DIODE,UF4004	
193	DP14	DTUF4004	DIODE,UF4004	V770A1
194	DP15	3100500183	DI-SW,UG4DL-5703 LEAD	
195	DV01	DT1N4004	DIODE,400V 1.0A TAP	V770A1
196	FP01	E42025012060	FUSE,TIME LAG 19181 3.15A	
197	FP01	E42076013010	FUSE CLIP,TAPING	
198	G2	375500076901	WIRE-ASS'Y,G2 300MM 7687B	
199	ICH01	3200001396	IC-LIN,TDA4857 DIP	V770A0
200	ICH01	3200001464	IC-LIN,TDA9113 32P SDIP	V770A1
201	ICH02	ULM358N	IC,OP-AMP LM358N	
202	ICM01	3205001375	IC-U,WT62P1-N40 DIP MTP	V770A1
203	ICM01	320500136601	IC-U,6124-N400HD-15D DIP	V770A0

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
204	ICM02	3203000819	IC-MEMO,S524C80D81-DCB0	
205	ICP01	UUC3842N	IC,CURRENT PWM CTRL 8P DI	
206	ICP02	ULM7805CT	IC,VOL REGULATOR,LM7805CT	
207	ICV01	3200000763	IC-LIN,TDA4866 SIP	V770A0
208	ICV01	6120043101	CONTACT-PL,SPRING CLIP	V770A0
209	ICV01	6120043101	CONTACT-PL,SPRING CLIP	V770A1
210	ICV01	6124035000	H-SINK VERTICAL ASSY,V770	V770A0
211	ICV01	6124036600	H-SINKINK V,L=35 H=18.0	V770A1
212	ICV01	UTDA9302H	IC,TDA9302H VER AMP	V770A1
213	JP00	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
214	JP01	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
215	JP02	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
216	JP03	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
217	JP04	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
218	JP05	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
219	JP06	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
220	JP07	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
221	JP08	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
222	JP09	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
223	JP10	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
224	JP11	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
225	JP12	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
226	JP13	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
227	JP14	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
228	JP15	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
229	JP16	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
230	JP17	375300002401	WIRE-NS-S43MM TAP. SDA 1/	V770A0
231	JP18	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
232	JP19	375300002401	WIRE-NS-S43MM TAP. SDA 1/	V770A0
233	JP20	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
234	JP21	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
235	JP22	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
236	JP23	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
237	JP24	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
238	JP25	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
239	JP26	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
240	JP27	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
241	JP28	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
242	JP29	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
243	JP30	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
244	JP31	375300002401	WIRE-NS-S43MM TAP. SDA 1/	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
245	JP32	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
246	JP33	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
247	JP34	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
248	JP35	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
249	JP36	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
250	JP37	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
251	JP38	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
252	JP39	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
253	JP40	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
254	JP41	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
255	JP42	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
256	JP43	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
257	JP44	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
258	JP45	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
259	JP46	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
260	JP47	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
261	JP48	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
262	JP49	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
263	JP50	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
264	JP51	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
265	JP52	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
266	JP53	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
267	JP54	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
268	JP55	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
269	JP56	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
270	JP57	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
271	JP58	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
272	JP59	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
273	JP60	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
274	JP61	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
275	JP62	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
276	JP64	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
277	JP65	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
278	JP66	375300002401	WIRE-NS-S43MM TAP. SDA 1/	V770A0
279	JP67	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
280	JP68	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
281	JP69	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
282	JP70	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
283	JP71	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
284	JP72	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
285	JP73	375300002401	WIRE-NS-S43MM TAP. SDA 1/	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
286	JP74	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
287	JP75	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
288	JP76	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
289	JP77	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
290	JP78	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
291	JP79	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
292	JP80	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
293	JP82	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
294	JP83	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
295	LED01	3330600441	LED,A1329B/GYC/R2	
296	LH01	3500101612	INDUCT-FIX,AR5*30 V770 K	
297	LH02	3500100523	INDUCT-FIX,DR0808 8.2MH M	
298	LH03	3500100511	INDUCT-FIX,SIZE DR1523 5P	
299	LH04	E42019097250	COIL,PEAKING 22 UH AXIAL	V770A1
300	LP01	6130014200	EYELET,1.6PAI BRASS T=0.4	
301	LP01	352020008601	FLT-LC,SEQ2828 13MH	
302	NTC01	6130014200	EYELET,1.6PAI BRASS T=0.4	
303	NTC01	E4207708409A	THERMISTOR 18OHM 13PAI TA	
304	PTC01	341130000901	POSISTOR,9OHM 2P CASE STI	
305	QH01	TTKSC945CY	TR,KSC945C-Y	
306	QH02	3110100687	TR-GEN,KSA928AY LEAD	
307	QH03	3110100665	TR-GEN,KTD2061-Y LEAD	
308	QH03	6120043201	CONTACT-PL,SPRING CLIP	
309	QH04	TTKRC102M	TR,SWITCHING KRC102M	V770A1
310	QH04	TTKSC945CY	TR,KSC945C-Y	V770A0
311	QH05	TTKSC945CY	TR,KSC945C-Y	
312	QH06	TTKSA733CY	TR,KSA733C-Y	
313	QH07	3114000140	FET,YTA630 LEAD S770	
314	QH07	B4212501010A	HEAT SINK PWR,26MM NON-AN	
315	QH07	M11143006012	SCREW,BIN(+) M3*6 MSZPC	
316	QH08	TT2N7000	TR,2N7000	
317	QH09	3110100731	TR-GEN,2SC5404(HFE) LEAD	
318	QH09	6120043101	CONTACT-PL,SPRING CLIP	
319	QH09	6130014200	EYELET,1.6PAI BRASS T=0.4	
320	QH10	3110100730	TR-GEN,KSD1616-YTA LEAD	
321	QH11	3114000124	FET,IRF630A LEAD	
322	QH11	6124020508	H-SINK POWER,B790 L=22MM	
323	QH11	M11143006012	SCREW,BIN(+) M3*6 MSZPC	
324	QH12	3114000124	FET,IRF630A LEAD	
325	QH13	3114000124	FET,IRF630A LEAD	
326	QH14	TTKSC945CY	TR,KSC945C-Y	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
327	QH15	TTKSC945CY	TR,KSC945C-Y	
328	QH16	TTKSC945CY	TR,KSC945C-Y	
329	QH17	TTKSP45	TR,KSP45	
330	QH18	3110100689	TR-GEN,KSA1013Y LEAD	
331	QH19	TTKSC945CY	TR,KSC945C-Y	
332	QH20	TTKSP45	TR,KSP45	
333	QH21	TTKSA733CY	TR,KSA733C-Y	V770A1
334	QH22	TTKSC945CY	TR,KSC945C-Y	V770A1
335	QM01	TTKTC3205Y	TR,SWITCHING KTC3205Y	
336	QM02	TTKTA966AY	TR,KTA1273Y	
337	QM03	TTKTC1815Y	TR,KTC3198Y	
338	QM04	TTKSC945CY	TR,KSC945C-Y	
339	QM05	TTKRC102M	TR,SWITCHING KRC102M	V770A1
340	QM05	TTKSC945CY	TR,KSC945C-Y	V770A0
341	QP01	TTKSP45	TR,KSP45	
342	QP02	TTKSC945CY	TR,KSC945C-Y	
343	QP03	TTKRC102M	TR,SWITCHING KRC102M	
344	QP04	3114000106	FET,2SK2545-LB104 LEAD	
345	QP04	6120043201	CONTACT-PL,SPRING CLIP	
346	QP04	6124035100	H-SINK POWER ASSY,V770	
347	QP05	3110100687	TR-GEN,KSA928AY LEAD	
348	QP06	TTKRC102M	TR,SWITCHING KRC102M	
349	QP07	TTKSA614Y	TR,KSA614Y	
350	QP08	TTKRC102M	TR,SWITCHING KRC102M	
351	QP09	TTKTA1015Y	TR,KTA1266Y	
352	QV01	TTKSC945CY	TR,KSC945C-Y	
353	RH01	RD-4P0T0103J	RES-CF,RD 1/4W 10K OHM J	V770A1
354	RH01	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	V770A0
355	RH02	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	V770A0
356	RH03	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
357	RH04	2444532002	RES-MF,45.3K 0.125W F A	V770A0
358	RH04	RN-8P0T1722F	RES-MF,RN 1/8W 17.2KOHM	V770A1
359	RH05	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	V770A0
360	RH05	RN-8P0T1002F	RES-MF,RN 1/8W 10K OHM F	V770A1
361	RH06	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM J	V770A0
362	RH06	RN-8P0T6491F	RES-MF,RN 1/8W 6.49KOHM	V770A1
363	RH07	2441181001	RES-MF,1.18K 0.125W F A	V770A0
364	RH07	RD-8P0T0134J	RES-CF,RD 1/8W 130KOHM J	V770A1
365	RH08	RN-8P0T1002F	RES-MF,RN 1/8W 10K OHM F	V770A1
366	RH08	RN-8P0T2701F	RES-MF,RN 1/8W 2.7KOHM F	V770A0
367	RH09	RN-8P0T1502F	RES-MF,RN 1/8W 15K OHM F	V770A1

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
368	RH09	RN-8P0T9102F	RES-MF,RN 1/8W 91K OHM F	V770A0
369	RH10	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	V770A0
370	RH10	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM	V770A1
371	⚠ RH11	RD-8P0T0203J	RES-CF,RD 1/8W 20K OHM J	V770A0
372	⚠ RH11	RN-8P0T2052F	RES-MF,RN 1/8W 20.5KOHM	V770A1
373	⚠ RH12	2442432002	RES-MF,24.3K 0.125W F A	
374	⚠ RH13	RD-8P0T0123J	RES-CF,RD 1/8W 12KOHM J	V770A0
375	⚠ RH13	RD-8P0T0163J	RES-CF,RD 1/8W 16KOHM J	V770A1
376	RH14	RD-8P0T0302J	RES-CF,RD 1/8W 3K OHM J	V770A0
377	RH14	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM	V770A1
378	RH15	RD-8P0T0113J	RES-CF,RD 1/8W 11K J	V770A0
379	RH15	RN-8P0T1502F	RES-MF,RN 1/8W 15K OHM F	V770A1
380	RH16	2403909006	RES-CF,39 0.5W J M	V770A1
381	RH16	RD-4P0T0472J	RES-CF,RD 1/4W 4.7K OHM J	V770A0
382	RH17	RD-4P0T0471J	RES-CF,RD 1/4W 470 OHM J	V770A0
383	RH17	RD-4P0T0821J	RES-CF,RD 1/4W 820 OHM J	V770A1
384	RH18	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	V770A0
385	RH18	RD-8P0T0752J	RES-CF,RD 1/8W 7.5K OHM	V770A1
386	RH19	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	V770A0
387	RH19	RD-8P0T0203J	RES-CF,RD 1/8W 20K OHM J	V770A1
388	RH20	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	V770A0
389	RH20	RD-8P0T0123J	RES-CF,RD 1/8W 12KOHM J	V770A1
390	RH21	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
391	RH22	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
392	RH23	2548208003	RES-FUS,8.2 0.5W J M	V770A0
393	RH23	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	V770A1
394	RH24	RD-8P0T0184J	RES-CF,RD 1/8W 180K OHM J	V770A0
395	RH24	RD-8P0T0912J	RES-CF,RD 1/8W 9.1K OHM	V770A1
396	RH25	RD-8P0T0303J	RES-CF,RD 1/8W 30K OHM J	V770A1
397	RH25	RN-8P0T7501F	RES-MF,RN 1/8W 7.5KOHM F	V770A0
398	RH26	2446981001	RES-MF,6.98K 0.125W F A	V770A0
399	RH26	RN-8P0T1502F	RES-MF,RN 1/8W 15K OHM F	V770A1
400	RH27	RN-8P0T6802F	RES-MF,RN 1/8W 68K F	
401	RH28	RD-8P0T0362J	RES-CF,RD 1/8W 3.6K OHM	V770A1
402	RH28	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM J	V770A0
403	RH29	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM	V770A1
404	RH29	RD-8P0T0244J	RES-CF,RD 1/8W 240KOHM J	V770A0
405	RH30	RD-8P0T0274J	RES-CF,RD 1/8W 270K OHM J	
406	RH31	RD-8P0T0623J	RES-CF,RD 1/8W 62K OHM J	V770A0
407	RH31	RD-8P0T0683J	RES-CF,RD 1/8W 68K OHM J	V770A1
408	RH32	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
409	RH33	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
410	RH34	2401201007	RES-CF,1.2K 0.5W J M	V770A1
411	RH34	2402201007	RES-CF,2.2K 0.5W J M	V770A0
412	RH35	2401801006	RES-CF,1.8K 0.5W J M	
413	RH36	RD-4P0T0332J	RES-CF,RD 1/4W 3.3K OHM J	V770A0
414	RH36	RD-4P0T0362J	RES-CF,RD 1/4W 3.6K OHM	V770A1
415	RH37	2461201006	RES-MOF,1.2K 2W J M	
416	RH38	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
417	RH39	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	V770A0
418	RH39	RD-8P0T0820J	RES-CF,RD 1/8W 82 OHM J	V770A1
419	RH40	RD-4P0T0332J	RES-CF,RD 1/4W 3.3K OHM J	
420	RH41	RD-4P0T0220J	RES-CF,RD 1/4W 22 OHM J	
421	RH42	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
422	RH43	246100800701	RES-MOF,1 2W J M R-FORMIN	
423	RH44	246100800701	RES-MOF,1 2W J M R-FORMIN	
424	RH45	246180100601	RES-MOF,1.8K 2W J M R-FOR	
425	RH46	RD-8P0T0150J	RES-CF,RD 1/8W 15 OHM J	
426	RH47	RD-8P0T0473J	RES-CF,RD 1/8W 47K OHM J	
427	RH48	RD-4P0T0121J	RES-CF,RD 1/4W 120 OHM J	
428	RH49	RS03P0F0390J	RES-MOF,RS 3W 39 OHM J	
429	RH50	RD-4P0T0104J	RES-CF,RD 1/4W 100K OHM J	
430	RH51	2460628001	RES-MOF,0.62 1W J A	
431	RH52	2461000007	RES-MOF,100 1W J M	
432	RH53	RD-8P0T0222J	RES-CF,RD 1/8W 2.2K OHM J	
433	RH54	246680900201	RES-MOF,68 2W J M R-FOR	
434	RH55	RD-4P0T0122J	RES-CF,RD 1/4W 1.2K OHM J	
435	RH56	2401200006	RES-CF,120 0.5W J M	
436	RH57	2461201005	RES-MOF,1.2K 1W J M	
437	RH58	RD-4P0T0223J	RES-CF,RD 1/4W 22K OHM J	
438	RH59	RD-4P0T0223J	RES-CF,RD 1/4W 22K OHM J	
439	RH60	RD-4P0T0223J	RES-CF,RD 1/4W 22K OHM J	
440	RH61	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
441	RH62	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
442	RH63	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
443	RH64	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
444	RH65	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
445	RH66	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
446	RH67	2466809003	RES-MOF,68 1W J M	
447	RH68	2403303008	RES-CF,330K 0.5W J M	
448	RH69	RD-4P0T0434J	RES-CF,RD 1/4W 430K OHM J	
449	RH70	RD-8P0T0244J	RES-CF,RD 1/8W 240KOHM J	V770A1

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
450	RH70	RD-8P0T0334J	RES-CF,RD 1/8W 330K OHM J	V770A0
451	RH71	RD-8P0T0183J	RES-CF,RD 1/8W 18K OHM J	V770A0
452	RH71	RD-8P0T0183J	RES-CF,RD 1/8W 18K OHM J	V770A1
453	RH72	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
454	RH73	2445842001	RES-MF,58.4K 0.125W F A	V770A1
455	RH74	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	V770A1
456	RH75	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM	V770A1
457	RH75	RD-8P0T0913J	RES-CF,RD 1/8W 91K OHM J	V770A0
458	RH76	RD-8P0T0222J	RES-CF,RD 1/8W 2.2K OHM J	
459	RH77	RD-8P0T0513J	RES-CF,RD 1/8W 51K OHM J	
460	RH78	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
461	RH79	RD-8P0T0563J	RES-CF,RD 1/8W 56K OHM J	
462	RH80	RD-8P0T0682J	RES-CF,RD 1/8W 6.8K OHM J	
463	RH81	RD-8P0T0105J	RES-CF,RD 1/8W 1M OHM J	
464	RH82	2407503002	RES-CF,750K 0.25W J A	
465	RH83	RD-4P0T0364J	RES-CF,RD 1/4W 360K OHM J	
466	RH84	RD-8P0T0182J	RES-CF,RD 1/8W 1.8K OHM J	
467	RH85	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
468	RH86	2401809003	RES-CF,18 0.5W J M	
469	RH87	RD-8P0T0473J	RES-CF,RD 1/8W 47K OHM J	V770A1
470	RH88	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	V770A1
471	RH89	RD-8P0T0243J	RES-CF,RD 1/8W 24K OHM J	V770A1
472	RH90	RD-4P0T0101J	RES-CF,RD 1/4W 100 OHM J	V770A1
473	RH91	RD-8P0T0362J	RES-CF,RD 1/8W 3.6K OHM	V770A1
474	RH91	RD-8P0T0394J	RES-CF,RD 1/8W 390K OHM J	V770A0
475	RH92	RD-4P0T0475J	RES-CF,RD 1/4W 4.7M OHM J	
476	RH93	RD-8P0T0152J	RES-CF,RD 1/8W 1.5K OHM J	
477	RLP01	3710100085	RELAY,DY3M-DC12V 5A 250V	
478	RM01	RD-8P0T0273J	RES-CF,RD 1/8W 27K OHM J	V770A1
479	RM02	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
480	RM04	RD-8P0T0105J	RES-CF,RD 1/8W 1M OHM J	
481	RM05	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
482	RM06	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
483	RM07	RD-8P0T0152J	RES-CF,RD 1/8W 1.5K OHM J	
484	RM08	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM J	
485	RM09	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	V770A0
486	RM11	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
487	RM12	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
488	RM13	RD-8P0T0473J	RES-CF,RD 1/8W 47K OHM J	
489	RM14	RD-8P0T0752J	RES-CF,RD 1/8W 7.5K OHM J	
490	RM16	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
491	RM17	RD-8P0T0473J	RES-CF,RD 1/8W 47K OHM J	
492	RM18	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
493	RM19	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
494	RM20	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
495	RM21	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
496	RM22	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
497	RM23	RD-8P0T0752J	RES-CF,RD 1/8W 7.5K OHM J	
498	RM24	RN-4P0T1742F	RES-MF,RN 1/4W 17.4KOHM F	
499	RM25	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
500	RM26	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM J	
501	RM28	RD-4P0T0103J	RES-CF,RD 1/4W 10K OHM J	
502	RM29	RD-8P0T0432J	RES-CF,RD 1/8W 4.3KOHM J	
503	RM30	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
504	RM31	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
505	RM32	RD-4P0T0100J	RES-CF,RD 1/4W 10 OHM J	
506	RM33	RD-4P0T0272J	RES-CF,RD 1/4W 2.7K OHM J	
507	RM34	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
508	RM35	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	V770A0
509	RM36	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
510	RM37	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
511	RP01	2401004008	RES-CF,1M 0.5W J M	
512	RP02	2465602004	RES-MOF,56K 1W J M	
513	RP03	2401004008	RES-CF,1M 0.5W J M	
514	RP04	2464702005	RES-MOF,47K 2W J M	
515	RP05	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
516	RP06	RD-8P0T0154J	RES-CF,RD 1/8W 150K OHM J	
517	RP07	2442402005	RES-MF,24K 0.125W F A	
518	RP08	RD-4P0T0220J	RES-CF,RD 1/4W 22 OHM J	
519	RP09	RD-4P0T0102J	RES-CF,RD 1/4W 1K OHM J	
520	RP10	RD-4P0T0102J	RES-CF,RD 1/4W 1K OHM J	
521	RP11	2460228004	RES-MOF,0.22 2W J M	
522	RP12	RD-8P0T0204J	RES-CF,RD 1/8W 200K OHM J	
523	RP13	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
524	RP14	RD-8P0T0154J	RES-CF,RD 1/8W 150K OHM J	
525	RP15	RD-4P0T0221J	RES-CF,RD 1/4W 220 OHM J	
526	RP16	2442322002	RES-MF,23.2K 0.125W F A	
527	RP17	RD-4P0T04R7J	RES-CF,RD 1/4W 4.7 OHM J	
528	RP18	2401004008	RES-CF,1M 0.5W J M	
529	RP19	RD-4P0T0473J	RES-CF,RD 1/4W 47K OHM J	
530	RP21	RD-4P0T0154J	RES-CF,RD 1/4W 150K OHM J	
531	RP22	2404702010	RES-CF,47K 0.5W J M	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
532	RP24	RD-4P0T0102J	RES-CF,RD 1/4W 1K OHM J	
533	RP25	RD-4P0T0681J	RES-CF,RD 1/4W 680 OHM J	
534	RP27	2406800008	RES-CF,680 0.5W J M	
535	RP28	2461001005	RES-MOF,1K 1W J M	
536	RP29	2463309006	RES-MOF,33 1W J M	
537	RP30	RD-8P0T0271J	RES-CF,RD 1/8W 270 OHM J	
538	RV01	2541508003	RES-FUS,1.5 1W J M	V770A0
539	RV01	2543308002	RES-FUS,3.3 1W J A	V770A1
540	RV02	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	V770A0
541	RV02	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM	V770A1
542	RV03	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	V770A0
543	RV04	2400828003	RES-CF,0.82 0.5W J M	V770A1
544	RV04	2461008006	RES-MOF,1 1W J M	V770A0
545	RV05	2442601001	RES-MF,2.6K 0.25W F A	V770A0
546	RV05	RD-4P0T01R5J	RES-CF,RD 1/4W 1.5 OHM	V770A1
547	RV06	RD-4P0T0473J	RES-CF,RD 1/4W 47K OHM J	V770A0
548	RV07	2541001001	RES-FUS,1K 1W J A	V770A0
549	RV07	254100800301	RES-FUS,1 1W J M	V770A1
550	RV08	RD-4P0T0103J	RES-CF,RD 1/4W 10K OHM J	V770A0
551	RV08	RD-4P0T0332J	RES-CF,RD 1/4W 3.3K OHM	V770A1
552	RV09	2401800007	RES-CF,180 0.5W J M	V770A0
553	RV09	2402200009	RES-CF,220 0.5W J M	V770A1
554	RV10	RD-8P0T0222J	RES-CF,RD 1/8W 2.2K OHM J	V770A0
555	RV10	RD-8P0T0512J	RES-CF,RD 1/8W 5.1K OHM	V770A1
556	RV11	RD-8P0T0123J	RES-CF,RD 1/8W 12KOHM J	V770A0
557	RV11	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM	V770A1
558	RV18	2443402002	34KOHM 0.125 W F A	V770A1
559	RV19	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM	V770A1
560	SGH01	3411100043	VARISTOR,S23 1500V 1500V	V770A0
561	SK01	372110057702	CONN-F,ISDS04S-P DBL FOCU	
562	SW01	E42027039010	SWITCH TACT,5MM 160GF VER	
563	SW02	E42027039010	SWITCH TACT,5MM 160GF VER	
564	SW03	E42027039010	SWITCH TACT,5MM 160GF VER	
565	SW04	E42027039010	SWITCH TACT,5MM 160GF VER	
566	SW05	E42027039010	SWITCH TACT,5MM 160GF VER	
567	SWH01	E42027014010	LEVER SWITCH,30'C 3P	
568	TH01	3510300159	TRAN-SW,HDT EI1916 V770	
569	TH02	3500101380	INDUCT-FIX,LIN. COIL DR14	
570	TH02	6130014200	EYELET,1.6PAI BRASS T=0.4	
571	TH03	3510300158	TRAN-SW,FOCUS EE2017 V770	
572	TH04	3540400005	MAG-FER,TR 19-12.5-11	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
573	TH04	6120043400	SHLD-CASE,FBT ASSY V770	
574	TH04	6130014100	EYELET,2.7PAI BRASS T=0.4	
575	⚠ TH04	3510500074	FBT,V770	
576	TP01	3510200126	TRAN-PW,EER4042 V770 II	V770A1
577	TP01	351020011801	TRAN-PW,EER3541 V770 TUBE	V770A0
578	TP02	E4203109004A	TRANS SYNC,UU1116 TUBE	
579	WHV01	372010105301	CONN-M,POST 1P DEGT235 14	
580	XM01	3530200581	VIB-QUARTZ,12MHZ 22PF ATS	
581	ZDH01	DTUZ-12BSB	DIODE,ZENER UZ-12BSB TAP	
582	ZDH03	DTUZ-13B	DIODE,ZENER UZ-13B	V770A1
583	ZDM01	DTUZ-6.2BSB	DIODE,ZENER UZ-6.2BSB T	
584	ZDM02	DTUZ-6.2BSB	DIODE,ZENER UZ-6.2BSB T	
585	ZDM03	DTUZ-5.1BSB	DIODE,ZENER UZ-5.1BSB TAP	
586	ZDM04	DTUZ-5.1BSB	DIODE,ZENER UZ-5.1BSB TAP	
587		304010085005	PCB-SINGLE,V770 MAIN	V770A0
588		304010086804	PCB-SINGLE,V770II MAIN PC	V770A1
589		612 0043 305	SHLD-CASE COVER ASSY,V770	V770A1
590		6120043300	SHLD-CASE COVER ASSY,V770	V770A0

V770A0/A1 CRT BOARD

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
1	LC01	3500101368	INDUCT-FIX,AL04TBR33M M A	
2	LC02	3500101368	INDUCT-FIX,AL04TBR33M M A	
3	LC03	3500101368	INDUCT-FIX,AL04TBR33M M A	
4	LC04	E42019097250	COIL,PEAKING 22 UH AXIAL	
5	LC05	E42029012020	NOISE FILTER,TH28123MA	
6		304010085102	PCB-SINGLE,V770 CRT	
7	RC01	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
8	RC02	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
9	RC03	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
10	RC04	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
11	RC05	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
12	RC06	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
13	RC07	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
14	RC08	RD-4P0T0391J	RES-CF,RD 1/4W 390 OHM J	
15	RC09	RD-4P0T0391J	RES-CF,RD 1/4W 390 OHM J	
16	RC10	RD-4P0T0391J	RES-CF,RD 1/4W 390 OHM J	
17	RC11	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
18	RC12	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
19	RC13	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
20	RC14	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
21	RC15	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
22	RC16	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
23	RC17	RD-8P0T0221J	RES-CF,RD 1/8W 220 OHM J	
24	RC18	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
25	RC19	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
26	RC20	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
27	RC21	RD-8P0T0151J	RES-CF,RD 1/8W 150 OHM J	
28	RC22	RD-8P0T0105J	RES-CF,RD 1/8W 1M OHM J	
29	RC23	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM J	
30	RC24	RD-8P0T0622J	RES-CF,RD 1/8W 6.2K OHM J	
31	RC25	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM J	
32	RC26	RD-4P0T0100J	RES-CF,RD 1/4W 10 OHM J	
33	RC27	RD-4P0T0100J	RES-CF,RD 1/4W 10 OHM J	
34	RC28	RD-4P0T0100J	RES-CF,RD 1/4W 10 OHM J	
35	RC29	RD-4P0T0820J	RES-CF,RD 1/4W 82 OHM J	
36	RC30	RD-4P0T0820J	RES-CF,RD 1/4W 82 OHM J	
37	RC31	RD-4P0T0820J	RES-CF,RD 1/4W 82 OHM J	
38	RC32	2403309005	RES-CF,33 0.5W J M	
39	RC33	2403309005	RES-CF,33 0.5W J M	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
40	RC34	2403309005	RES-CF,33 0.5W J M	
41	RC35	2401000008	RES-CF,100 0.5W J M	
42	RC36	2422205001	RES-CC,22M 0.5W K A	
43	RC37	RD-8P0T0824J	RES-CF,RD 1/8W 820K OHM J	
44	RC38	RD-8P0T0824J	RES-CF,RD 1/8W 820K OHM J	
45	RC39	RD-8P0T0824J	RES-CF,RD 1/8W 820K OHM J	
46	RC40	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
47	RC41	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
48	RC42	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
49	RC43	RD-4P0T0101J	RES-CF,RD 1/4W 100 OHM J	
50	RC44	RD-4P0T0101J	RES-CF,RD 1/4W 100 OHM J	
51	RC45	RD-4P0T0101J	RES-CF,RD 1/4W 100 OHM J	
52	RC46	2542009002	RES-FUS,20 0.5W J A	
53	RC49	RD-8P0T0750J	RES-CF,RD 1/8W 75 OHM J	
54	RC50	RD-8P0T0750J	RES-CF,RD 1/8W 75 OHM J	
55	RC51	RD-8P0T0750J	RES-CF,RD 1/8W 75 OHM J	
56	RC52	RD-8P0T0330J	RES-CF,RD 1/8W 33 OHM J	
57	RC53	RD-8P0T0330J	RES-CF,RD 1/8W 33 OHM J	
58	RC54	RD-8P0T0330J	RES-CF,RD 1/8W 33 OHM J	
59	RC55	246180800301	RES-MOF,1.8 1W J R-FORMIN	
60	DC01	DTISS81	DIODE,SWITCHING ISS81	
61	DC02	DTISS81	DIODE,SWITCHING ISS81	
62	DC03	DTISS81	DIODE,SWITCHING ISS81	
63	DC04	DTISS81	DIODE,SWITCHING ISS81	
64	DC05	DTISS81	DIODE,SWITCHING ISS81	
65	DC06	DTISS81	DIODE,SWITCHING ISS81	
66	DC07	DTISS81	DIODE,SWITCHING ISS81	
67	DC08	DTISS81	DIODE,SWITCHING ISS81	
68	DC09	DTISS81	DIODE,SWITCHING ISS81	
69	DC10	DT1N4148	DIODE,1N4148 TAPING	
70	DC11	DT1N4148	DIODE,1N4148 TAPING	
71	DC12	DT1N4148	DIODE,1N4148 TAPING	
72	DC13	DT1N4148	DIODE,1N4148 TAPING	
73	DC14	DT1N4148	DIODE,1N4148 TAPING	
74	DC15	DT1N4148	DIODE,1N4148 TAPING	
75	DC16	DT1N4004	DIODE,400V 1.0A TAP	
76	DC17	DTUZ-8.2BSB	DIODE,ZENER UZ-8.2BSB TAP	
77	JC01	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
78	JC02	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
79	JC03	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
80	JC04	375300002401	WIRE-NS-S43MM TAP. SDA 1/	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
81	JC05	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
82	JC06	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
83	JC07	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
84	JC08	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
85	JC09	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
86	JC10	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
87	CC01	CE04BT1C100M	CAP-EL,SMS 16V 10UF M TAP	
88	CC02	CE04BT1C100M	CAP-EL,SMS 16V 10UF M TAP	
89	CC03	CE04BT1C100M	CAP-EL,SMS 16V 10UF M TAP	
90	CC04	CE04BT1C331M	CAP-EL,SMS 16V 330UF M	
91	CC05	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
92	CC06	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
93	CC07	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
94	CC08	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
95	CC09	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
96	CC10	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
97	CC11	2176810010	CAP-P-F,680PF 100V J RAD	
98	CC12	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
99	CC13	CE04BT1C221M	CAP-EL,SMS 16V 220UF M	
100	CC14	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
101	CC15	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
102	CC16	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
103	CC17	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
104	CC18	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
105	CC19	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
106	CC20	CE04BT1C221M	CAP-EL,SMS 16V 220UF M	
107	CC21	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
108	CC22	CE04BT2A101M	CAP-EL,SMS 100V 100UF M	
109	CC23	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
110	CC24	2001090053	CAP-AL,1UF 100V M 5*11 NP	
111	CC25	2001090053	CAP-AL,1UF 100V M 5*11 NP	
112	CC26	2001090053	CAP-AL,1UF 100V M 5*11 NP	
113	CC27	2002280012	CAP-AL,0.22UF 160V M 5*11	
114	CC28	2002280012	CAP-AL,0.22UF 160V M 5*11	
115	CC29	2002280012	CAP-AL,0.22UF 160V M 5*11	
116	CC30	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
117	CC31	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
118	CC32	CK45BT2H102K	CAP-CD,500V 1000PF K	
119	CC33	2102230017	CAP-CER,0.022UF 1KV J Z4U	
120	CC34	CE04BT2C100M	CAP-EL,SMS 160V 10UF M	
121	CC35	CQ92BT2A562J	CAP-PE,100V 0.0056UF J	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
122	CC36	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
123	CC37	CQ92BT2A472J	CAP-PE,100V 0.0047UF J	
124	CC38	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
125	CC39	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
126	BC02	3540200058	BD-FER,BFS3550	
127	BC03	3540200058	BD-FER,BFS3550	
128	BC04	3540200058	BD-FER,BFS3550	
129	BC05	3540200059	BD-FER,BFS3580	
130	BC06	3540200059	BD-FER,BFS3580	
131	BC07	3540200058	BD-FER,BFS3550	
132	BC08	3540200058	BD-FER,BFS3550	
133	BC09	3540200058	BD-FER,BFS3550	
134	QC01	3110100737	TR-GEN,KTA1266GR LEAD	
135	QC02	3110100737	TR-GEN,KTA1266GR LEAD	
136	QC03	TTKSP92	TR,KSP92	
137	QC04	TTKSP42	TR,KSP42	
138	QC05	TTKSP92	TR,KSP92	
139	QC06	TTKSP42	TR,KSP42	
140	QC07	TTKSP92	TR,KSP92	
141	QC08	TTKSP42	TR,KSP42	
142	ICC01	3200001232	IC-LIN,S1D2500A01-D0B0	
143	ICC02	3204000577	IC-INT,MTV021 9LANGUAGE D	
144	ICC03	3200001415	IC-LIN,LM2437T	
145	ICC03	M11143006012	SCREW,BIN(+) M3*6 MSZPC	
146	ICC03	6124035201	H-SINK VIDEO ASSY,V770	
147	FC01	E42029026410	FILTER,EMI 50V 0.1UF M	
148	SGC01	3411100083	VARISTOR,SURGE ABSORBER R	
149	SGC02	3411100083	VARISTOR,SURGE ABSORBER R	
150	SGC03	3411100083	VARISTOR,SURGE ABSORBER R	
151	SGC04	3411100084	VARISTOR,SURGE ABSORBER R	
152	SGC05	3411100043	VARISTOR,S23 1500V 1500V	
153	CNC01	3725004907	CONN-A,14P FLAT 200MM V77	
154	CNC02	3720101388	CONN-M,SMW200-06P	
155	CGND	372010105301	CONN-M,POST 1P DEGT235 14	
156	G2	372010105301	CONN-M,POST 1P DEGT235 14	

V770A0/A1 Miscellaneous

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
1	⚠	3010100131	CRT,M41QAR361X102(T4/HE)	
2		3758500444	CBL-SGN,PBE 1.5M MW ATTAC	
3		5004000199	SCR-TT,WAL + 3*8	
4		5004000202	SCR-TT,BIN W MC 4*12	
5		6101197305	CHASSIS MAIN,A526 SECC T=	
6		6101197405	CHASSIS MAIN ASSY,A526 SE	
7		6120042500	SHLD-CASE FENCE CRT,V770	
8		6120042600	CRT SPRING,V770	
9		6120042700	SHLD-CASE COVER,V770	
10		6120042800	SHIELD GROUND SPRING,V770	
11		6120042900	SHLD-CASE FBT,V770	
12		6120043000	SOLDER GRIP,V770	
13		6120043000	SOLDER GRIP,V770	
14		6120043000	SOLDER GRIP,V770	
15		6120043000	SOLDER GRIP,V770	
16		6120043700	SHIELD GROUND SPRING B,V7	
17		6120044300	GND-PL,VIDEO SPRING G910	
18		6120044600	SHLD-PL,FENCE CRT ASSY	
19		6124034700	H-SINK VERTICAL,V770	
20		6124034800	H-SINK POWER,V770	
21		6124034901	H-SINK VIDEO,V770	
22		6129027600	SPECIAL,T.T/W(+) 3*8 MSZP	
23		6129027600	SPECIAL,T.T/W(+) 3*8 MSZP	
24		6129033500	SPECIAL SCREW TOOTH WASHE	
25		6201279000	COVER FRONT,V770	
26		6201279100	COVER REAR,V770	
27		6201279400	COVER F/ASSY,V770	
28		6215227600	KNOB POWER,V770	
29		6215227700	KNOB CONTROL,V770	
30		6215227800	CAP SHIELD,V770	
31		6220080700	LENS LED,V770	
32		6225031400	INSULATION MCU,V570/V770	
33		6253101801	CUSHION LEFT,V770	
34		6253101901	CUSHION RIGHT,V770	
35		6261042100	RUBBER CRT	
36		6301186401	BOX CTN,SW-3 A726 PBE	
37		304010085004	PCB-SINGLE,V770 MAIN	
38		350010133308	INDUCT-FIX,D-COIL+CRT V77	
39		372500463202	CONN-A,3P CBL 130M A725	
40		375400001602	WIRE-NS-M,1.0T<-TBC->1.0T	
41		631634520501	LABEL BACK,V570/V770(99)	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
42		620 1279 200	SWIVEL BASE,V770	
43		620 1279 300	SWIVEL UPPER,V770	
44		620 1279 500	SWIVEL&TILT ASSY,V770	
45		B4008500100A	CABLE TIE	
46		B4204505100C	LABEL,X-RAY WARNING	
47		B4204513263B	LABEL,B/CODE 64KHZ(DIC21)	
48		B4209501203A	BAG PE,SET(RECYCLE MARK'G	
49		B4209501301C	BAG PE,MANUAL T0.03	
50		B4210321601	KIT COVER,V770(ABS) EXP	
51		B4210321701	PACKING ASSY,V770	
52		CODE	DESCRIPTION	
53		E4205014901	MAIN ASSY,V770 EXP	V770A0
54		E4205014951	MAIN ASSY,V770A1 EXP(SGS)	V770A1
55		E4208416941	PCBA MAIN(A4*),V770	V770A0
56		E4208416942	PCBA CRT(A4*),V770	V770A0
57		E4208416951	PCBA MAIN(A5*),V770	V770A0
58		E4208416952	PCBA CRT(A5*),V770	V770A0
59		E4208416961	PCBA MAIN(A6*),V770	V770A0
60		E4208416962	PCBA CRT(A6*),V770	V770A0
61		E4208416971	PCBA MAIN(A4*),V770A1	V770A1
62		E4208416972	PCBA CRT(A4*),V770A1	V770A1
63		E4208416981	PCBA MAIN(A5*),V770A1	V770A1
64		E4208416982	PCBA CRT(A5*),V770A1	V770A1
65		E4208416991	PCBA MAIN(A6*),V770A1	V770A1
66		E4208416992	PCBA CRT(A6*),V770A1	V770A1
67		E4208516901	PCBA MAIN(I1*),V770	V770A0
68		E4208516902	PCBA CRT(I1*),V770 EXP	V770A0
69		E4208516951	PCBA MAIN(I1*),V770A1 EXP	V770A1
70		E4208516952	PCBA CRT(I1*),V770A1	V770A1
71		E4208616902	PCBA CRT(T1*),V770 EXP	V770A0
72		E4208616952	PCBA CRT(T1*),V770A1 EXP	V770A1
73		E4208716901	PCB ASSY,V770 EXP	V770A0
74		E4208716951	PCB ASSY,V770A1 EXP(SGS)	V770A1
75		E4208816901	PCBA MAIN(I2*),V770	V770A0
76		E4208816951	PCBA MAIN(I2*),V770A1 EXP	V770A1
77		E4208916901	PCBA MAIN(I3*),V770	V770A0
78		E4208916902	PCBA CRT(I3*),V770 EXP	V770A0
79		E4208916951	PCBA MAIN(I3*),V770A1 EXP	V770A1
80		E4208916952	PCBA CRT(I3*),V770A1	V770A1
81		M13443008012	SCREW ST2 BIN(+)3*8 MSZPC	

V570 MAIN BOARD

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
1	A	6130014200	EYELET,1.6PAI BRASS T=0.4	
2	AI01	372500448603	CONN-A,AC INLET ASSY V770	
3	AR01	2502001003	RES NET,2K 1/8W J SIP 6P	
4	B	6130014200	EYELET,1.6PAI BRASS T=0.4	
5	BH01	3540200058	BD-FER,BFS3550	
6	BH02	3540200058	BD-FER,BFS3550	
7	BH03	3540200103	BD-FER,HF70 BTL 3.5*6B	
8	BH04	3540200059	BD-FER,BFS3580	
9	BH05	3540200058	BD-FER,BFS3550	
10	BH06	3540200058	BD-FER,BFS3550	
11	BH07	3540200059	BD-FER,BFS3580	
12	BP01	3540200059	BD-FER,BFS3580	
13	BV01	3540200058	BD-FER,BFS3550	
14	BV02	3540200059	BD-FER,BFS3580	
15	CH01	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
16	CH02	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
17	CH03	CQ92BT2A822J	CAP-PE,100V 0.0082UF J	
18	CH04	CQ92BT2A473J	CAP-PE,100V 0.047UF J	
19	CH05	E42007019070	CAP-PP/PE,100V 0.01UF J	
20	CH06	CQ92BT2A562J	CAP-PE,100V 0.0056UF J	
21	CH07	CE04BT1E470M	CAP-EL,SMS 25V 47UF M	
22	CH08	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
23	CH09	CQ92BT2A152J	CAP-PE,100V 1500PF J	
24	CH10	CE04BT1H220M	CAP-EL,SMS 50V 22UF M	
25	CH11	CQ92BT2A473J	CAP-PE,100V 0.047UF J	
26	CH12	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
27	CH13	CE04BT1H2R2M	CAP-EL,SMS 50V 2.2UF M	
28	CH14	CQ92BT2A102J	CAP-PE,100V 0.001UF J	
29	CH15	CQ92BT2A332J	CAP-PE,100V 3300PF J	
30	CH16	CF93BT1J105J	CAP-MPE,63V 1UF J	
31	CH17	CK45BT3A331K	CAP-CE,1KV 330PF K TAP	
32	CH18	214474001702	CAP-M-P,0.47UF 250V J 7.5	
33	CH19	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
34	CH20	CQ92BT2A102J	CAP-PE,100V 0.001UF J	
35	CH21	CE04BT1E470M	CAP-EL,SMS 25V 47UF M	
36	CH22	2001010098	CAP-AL,100UF 63V M 10*20	
37	CH23	217442000201	CAP-P-F,4400PF 1600V J 7.	⚠
38	CH24	2004700096	CAP-AL,47UF 35V M 6.3*11	
39	CH25	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
40	CH26	CK45BT3A221K	CAP-CD,1KV 220PF K TAP	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
41	CH27	214304000201	CAP-M-P,0.3UF 250V J MPP	
42	CH28	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
43	CH29	2148540002	CAP-M-P,0.85UF 250V J PP	
44	CH30	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
45	CH31	2174420006	CAP-P-F,4400PF 800V J RAD	
46	CH32	214244000201	CAP-M-P,0.24UF 250V J MPP	
47	CH33	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
48	CH34	214104001703	CAP-M-P,0.1UF 250V J 7.5	
49	CH35	CQ92BT2A333J	CAP-PE,100V 0.033UF J	
50	CH36	CQ92BT2A333J	CAP-PE,100V 0.033UF J	
51	CH37	CQ92BT2A333J	CAP-PE,100V 0.033UF J	
52	CH43	CQ92BT2A333J	CAP-PE,100V 0.033UF J	
53	CH44	CE04BT1V101M	CAP-EL,SMS 35V 100UF M	
54	CH46	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
55	CH47	2002280012	CAP-AL,0.22UF 160V M 5*11	
56	CH48	CE04BT2E100M	CAP-EL,SMS 250V 10UF M	
57	CH51	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
58	CH52	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
59	CH53	2102230017	CAP-CER,0.022UF 1KV J Z4U	
60	CH54	CE04BT2C220M	CAP-EL,SMS 160V 22UF M	
61	CH55	CQ92BT2A273J	CAP-PE,100V 0.027UF J	
62	CH56	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
63	CH57	CE04BT1C331M	CAP-EL,SMS 16V 330UF M	
64	CH58	2172230011	CAP-P-F,0.022UF 250V J RA	
65	CH60	CE04BT1E220M	CAP-EL,SMS 25V 22UF M	
66	CH61	CQ92BT2A273J	CAP-PE,100V 0.027UF J	
67	CH62	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
68	CH63	CK45BT3A331K	CAP-CE,1KV 330PF K TAP	
69	CM01	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
70	CM02	CE04BT1HR47M	CAP-EL,SMS 50V 0.47UF M	
71	CM03	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
72	CM04	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
73	CM05	CC45CT1H220J	CAP-CD,50V 22PF J	
74	CM06	CC45CT1H220J	CAP-CD,50V 22PF J	
75	CM07	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
76	CM08	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
77	CM09	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
78	CM10	CC45CT1H330J	CAP-CD,50V 33PF J	
79	CM11	E42007019220	CAP-PP/PE,100V 680PF J	
80	CM12	CE04BT1H470M	CAP-EL,SMS 50V 47UF M	
81	CM13	CE04BT1E470M	CAP-EL,SMS 25V 47UF M	
82	CM14	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
83	CM15	CE04BT1H010M	CAP-EL,SMS 50V 1UF M	
84	CON01	3720101389	CONN-M,SMW200-07P	
85	CON02	3720101227	CONN-M,5045-3A 3	
86	CON03	372010105301	CONN-M,POST 1P DEGT235 14	
87	CON04	3720101916	CONN-M,SMW200-14 14	
88	CP01	2141540010	CAP-M-P,0.15UF 250V M PP	
89	CP02	E42007027050	CAP-CD,Y2 2200PF M TAP	
90	CP03	E42007027050	CAP-CD,Y2 2200PF M TAP	
91	CP04	2141540010	CAP-M-P,0.15UF 250V M PP	
92	CP05	6130014100	EYELET,2.7PAI BRASS T=0.4	
93	CP05	200151000401	CAP-AL,150UF 400V M 25.4*	
94	CP07	CK45BF2H103K	CAP-CD,500V 0.01UF K	
95	CP08	2001010091	CAP-AL,100UF 25V M 6.3*11	
96	CP10	CQ92BT2A272J	CAP-PE,100V 0.0027UF J	
97	CP11	210332001101	CAP-CER,Y1 3300PF M N-CUT	
98	CP13	2104710018	CAP-CER,470PF 50V J SL	
99	CP14	2104710018	CAP-CER,470PF 50V J SL	
100	CP15	CQ92BT2A332J	CAP-PE,100V 3300PF J	
101	CP16	CF93BT1J334J	CAP-MPE,63V 0.33UF J	
102	CP17	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
103	CP18	CQ92BT2A332J	CAP-PE,100V 3300PF J	
104	CP19	CE04BT1H2R2M	CAP-EL,SMS 50V 2.2UF M	
105	CP21	2002210068	CAP-AL,220UF 100V M 13*25	
106	CP23	CE04BT2A220M	CAP-EL,SMS 100V 22UF M	
107	CP24	2004710059	CAP-AL,470UF 16V M 8*12 P	
108	CP27	2004710049	CAP-AL,470UF 25V M 10*16	
109	CP28	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
110	CP29	CE04BT1H4R7M	CAP-EL,SMS 50V 4.7UF M	
111	CP30	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
112	CP31	CE04BT1E471M	CAP-EL,SMS 25V 470UF M	
113	CV01	CQ92BT2A222J	CAP-PE,100V 0.0022UF J	
114	CV02	CQ92BT2A222J	CAP-PE,100V 0.0022UF J	
115	CV03	2004710049	CAP-AL,470UF 25V M 10*16	
116	CV04	2001010122	CAP-AL,100UF 100V M 10*20	
117	CV06	CQ92BT2A224J	CAP-PE,100V 0.22UF J	
118	CV07	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
119	DH01	DT1N4148	DIODE,1N4148 TAPING	
120	DH02	DT1N4148	DIODE,1N4148 TAPING	
121	DH03	DT1N4148	DIODE,1N4148 TAPING	
122	DH04	DT1N4148	DIODE,1N4148 TAPING	
123	DH05	DT1N4148	DIODE,1N4148 TAPING	
124	DH06	DT1N4148	DIODE,1N4148 TAPING	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
125	DH07	3100500178	DI-SW,UF1G-5705 LEAD	
126	DH10	DTUF4004	DIODE,UF4004	
127	DH11	3100500094	DI-SW,ERD07-15L LEAD	
128	DH11	6130014200	EYELET,1.6PAI BRASS T=0.4	
129	DH12	3102000221	DI-REC,FMP-2FUR(LF664) LE	
130	DH12	6120043200	CONTACT-PL,SPRING CRIP SA	
131	DH13	3100500144	DI-SW,D1NL40 LEAD	
132	DH14	DT1N4007	DIODE,1000V 1.0A TAP	
133	DH15	DT1N4007	DIODE,1000V 1.0A TAP	
134	DH16	DT1N4007	DIODE,1000V 1.0A TAP	
135	DH17	DT1N4007	DIODE,1000V 1.0A TAP	
136	DH18	DT1N4007	DIODE,1000V 1.0A TAP	
137	DH20	DT1N4937	DIODE,1N4937 TAPING	
138	DH21	DT1N4936	DIODE,400V 1.0A 1N4936	
139	DH22	DT1N4148	DIODE,1N4148 TAPING	
140	DH23	DT1N4148	DIODE,1N4148 TAPING	
141	DH24	DT1N4007	DIODE,1000V 1.0A TAP	
142	DH25	DT1N4148	DIODE,1N4148 TAPING	
143	DH26	DT1N4007	DIODE,1000V 1.0A TAP	
144	DH27	DT1N4937	DIODE,1N4937 TAPING	
145	DH28	DTUF4007	DIODE,UF4007	
146	DH30	DT1N4148	DIODE,1N4148 TAPING	
147	DH31	DT1N4937	DIODE,1N4937 TAPING	
148	DM01	DT1N4148	DIODE,1N4148 TAPING	
149	DP01	DT1N5398	DIODE 1N5398 TAPING	
150	DP02	DT1N5398	DIODE 1N5398 TAPING	
151	DP03	DT1N5398	DIODE 1N5398 TAPING	
152	DP04	DT1N5398	DIODE 1N5398 TAPING	
153	DP05	DT1N4148	DIODE,1N4148 TAPING	
154	DP06	DT1N4937	DIODE,1N4937 TAPING	
155	DP07	DT1N4937	DIODE,1N4937 TAPING	
156	DP08	DT1N4148	DIODE,1N4148 TAPING	
157	DP09	DT1N4148	DIODE,1N4148 TAPING	
158	DP11	3100500169	DI-SW,SUF30JL-5702 LEAD	
159	DP12	DTUF4007	DIODE,UF4007	
160	DP13	DTUF4004	DIODE,UF4004	
161	DP15	3100500140	DI-SW,UF5404L-5705 LEAD	
162	FP01	E42025012060	FUSE,TIME LAG 19181 3.15A	
163	FP01	E42076013010	FUSE CLIP,TAPING	
164	G2	372010105301	CONN-M,POST 1P DEGT235 14	
165	ICH01	3200001396	IC-LIN,TDA4857 DIP	
166	ICH02	ULM358N	IC,OP-AMP LM358N	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
167	ICM01	3205001327	IC-U,WT62P1-N40 DIP MTP	
168	ICM02	3203000819	IC-MEMO,KS24C081C DIP	
169	ICP01	UUC3842N	IC,CURRENT PWM CTRL 8P DI	
170	ICP02	ULM7805CT	IC,VOL REGULATOR,LM7805CT	
171	ICV01	3200000763	IC-LIN,TDA4866 SIP	
172	ICV01	6120043100	CONTACT-PL,SPRING CRIP V7	
173	ICV01	6124035000	H-SINK VERTICAL ASSY,V770	
174	JP00	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
175	JP01	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
176	JP02	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
177	JP03	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
178	JP04	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
179	JP05	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
180	JP06	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
181	JP07	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
182	JP08	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
183	JP09	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
184	JP10	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
185	JP11	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
186	JP12	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
187	JP13	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
188	JP14	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
189	JP15	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
190	JP16	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
191	JP17	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
192	JP18	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
193	JP19	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
194	JP20	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
195	JP21	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
196	JP22	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
197	JP23	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
198	JP24	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
199	JP25	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
200	JP26	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
201	JP27	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
202	JP28	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
203	JP29	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
204	JP30	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
205	JP32	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
206	JP33	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
207	JP34	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
208	JP35	375300002401	WIRE-NS-S43MM TAP. SDA 1/	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
209	JP36	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
210	JP37	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
211	JP38	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
212	JP39	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
213	JP40	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
214	JP41	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
215	JP42	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
216	JP43	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
217	JP44	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
218	JP45	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
219	JP46	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
220	JP47	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
221	JP48	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
222	JP50	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
223	JP51	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
224	JP52	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
225	JP53	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
226	JP54	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
227	JP55	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
228	JP58	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
229	JP59	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
230	JP60	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
231	JP61	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
232	JP64	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
233	JP65	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
234	JP66	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
235	JP67	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
236	JP68	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
237	JP69	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
238	JP70	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
239	JP71	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
240	JP72	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
241	JP73	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
242	JP74	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
243	JP75	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
244	JP76	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
245	JP77	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
246	JP78	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
247	JP79	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
248	JP80	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
249	JP82	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
250	JP83	375300002401	WIRE-NS-S43MM TAP. SDA 1/	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
251	LED01	3330600441	LED,A1329B/GYC/R2	
252	LH01	3500101612	INDUCT-FIX,AR5*30 V770 K	⚠
253	LH02	3500100523	INDUCT-FIX,DR0808 8.2MH M	
254	LH03	3500100511	INDUCT-FIX,SIZE DR1523 5P	
255	LP01	6130014200	EYELET,1.6PAI BRASS T=0.4	
256	LP01	352020018301	FLT-LC,LINE SQE2424 22MH	
257	NTC01	6130014200	EYELET,1.6PAI BRASS T=0.4	
258	NTC01	E4207708409A	THERMISTOR 18OHM 13PAI TA	
259	PTC01	341130000901	POSISTOR,9OHM 2P CASE STI	
260	QH01	TTKSC945CY	TR,KSC945C-Y	
261	QH02	3110100687	TR-GEN,KSA928AY LEAD	
262	QH03	3110100665	TR-GEN,KTD2061-Y LEAD	
263	QH03	6120043200	CONTACT-PL,SPRING CRIP SA	
264	QH04	TTKSC945CY	TR,KSC945C-Y	
265	QH05	TTKSC945CY	TR,KSC945C-Y	
266	QH06	TTKSA733CY	TR,KSA733C-Y	
267	QH07	3114000140	FET,YTA630 LEAD S770	
268	QH07	B4212501005A	HEAT SINK PWR(N)ANODIZE 4	
269	QH07	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
270	QH08	TT2N7000	TR,2N7000	
271	QH09	3110100731	TR-GEN,2SC5404(HFE) LEAD	
272	QH09	6120043100	CONTACT-PL,SPRING CRIP V7	
273	QH09	6130014200	EYELET,1.6PAI BRASS T=0.4	
274	QH10	3110100730	TR-GEN,KSD1616-YTA LEAD	
275	QH11	3114000124	FET,IRF630A LEAD	
276	QH11	6124020508	H-SINK POWER,B790 L=22MM	
277	QH11	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
278	QH12	3114000124	FET,IRF630A LEAD	
279	QH13	3114000124	FET,IRF630A LEAD	
280	QH14	TTKSC945CY	TR,KSC945C-Y	
281	QH15	TTKSC945CY	TR,KSC945C-Y	
282	QH16	TTKSC945CY	TR,KSC945C-Y	
283	QH18	3110100689	TR-GEN,KSA1013Y LEAD	
284	QH19	TTKSC945CY	TR,KSC945C-Y	
285	QH20	TTKSP45	TR,KSP45	
286	QM01	TTKTC3205Y	TR,SWITCHING KTC3205Y	
287	QM02	TTKTA966AY	TR,KTA1273Y	
288	QM03	TTKTC1815Y	TR,KTC3198Y	
289	QM04	TTKSC945CY	TR,KSC945C-Y	
290	QM05	TTKSC945CY	TR,KSC945C-Y	
291	QP01	TTKSP45	TR,KSP45	
292	QP02	TTKSC945CY	TR,KSC945C-Y	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
293	QP03	TTKRC102M	TR,SWITCHING KRC102M	
294	QP04	3114000106	FET,2SK2545-LB104 LEAD	
295	QP04	6120043200	CONTACT-PL,SPRING CRIP SA	
296	QP04	6124035100	H-SINK POWER ASSY,V770	
297	QP05	3110100687	TR-GEN,KSA928AY LEAD	
298	QP06	TTKRC102M	TR,SWITCHING KRC102M	
299	QP07	TTKSA614Y	TR,KSA614Y	
300	QP08	TTKRC102M	TR,SWITCHING KRC102M	
301	QP09	TTKTA1015Y	TR,KTA1266Y	
302	QV01	TTKSC945CY	TR,KSC945C-Y	
303	RH01	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
304	RH02	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
305	RH03	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
306	RH04	2446342002	RES-MF,63.4K 0.125W F A	
307	RH05	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
308	RH06	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM J	
309	RH07	2441181001	RES-MF,1.18K 0.125W F A	
310	RH08	RN-8P0T2701F	RES-MF,RN 1/8W 2.7KOHM F	
311	RH09	2447152002	RES-MF,71.5K 0.125W F A	
312	RH10	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
313	RH11	RD-8P0T0203J	RES-CF,RD 1/8W 20K OHM J	⚠
314	RH12	2442432002	RES-MF,24.3K 0.125W F A	⚠
315	RH13	RD-8P0T0123J	RES-CF,RD 1/8W 12KOHM J	⚠
316	RH14	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
317	RH15	RD-8P0T0113J	RES-CF,RD 1/8W 11K J	
318	RH16	RD-4P0T0472J	RES-CF,RD 1/4W 4.7K OHM J	
319	RH17	RD-4P0T0471J	RES-CF,RD 1/4W 470 OHM J	
320	RH18	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
321	RH19	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
322	RH20	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
323	RH21	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
324	RH22	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
325	RH23	2548208003	RES-FUS,8.2 0.5W J M	
326	RH24	RD-8P0T0184J	RES-CF,RD 1/8W 180K OHM J	
327	RH25	RN-8P0T7501F	RES-MF,RN 1/8W 7.5KOHM F	
328	RH26	2446981001	RES-MF,6.98K 0.125W F A	
329	RH27	RN-8P0T6802F	RES-MF,RN 1/8W 68K F	
330	RH28	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM J	
331	RH29	RD-8P0T0244J	RES-CF,RD 1/8W 240KOHM J	
332	RH30	RD-8P0T0274J	RES-CF,RD 1/8W 270K OHM J	
333	RH31	RD-8P0T0623J	RES-CF,RD 1/8W 62K OHM J	
334	RH32	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
335	RH33	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
336	RH34	2402201007	RES-CF,2.2K 0.5W J M	
337	RH35	2401801006	RES-CF,1.8K 0.5W J M	
338	RH36	RD-4P0T0332J	RES-CF,RD 1/4W 3.3K OHM J	
339	RH37	2461201006	RES-MOF,1.2K 2W J M	
340	RH38	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
341	RH39	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
342	RH40	RD-4P0T0332J	RES-CF,RD 1/4W 3.3K OHM J	
343	RH41	RD-4P0T0151J	RES-CF,RD 1/4W 150 OHM J	
344	RH42	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
345	RH43	2461008006	RES-MOF,1 1W J M	
346	RH44	2461008006	RES-MOF,1 1W J M	
347	RH45	2461801006	RES-MOF,1.8K 2W J M	
348	RH46	RD-8P0T0150J	RES-CF,RD 1/8W 15 OHM J	
349	RH47	RD-8P0T0473J	RES-CF,RD 1/8W 47K OHM J	
350	RH48	RD-4P0T0121J	RES-CF,RD 1/4W 120 OHM J	
351	RH49	2464709009	RES-MOF,47 3W J M	
352	RH50	RD-4P0T0104J	RES-CF,RD 1/4W 100K OHM J	
353	RH51	2460628001	RES-MOF,0.62 1W J A	
354	RH52	2461000007	RES-MOF,100 1W J M	
355	RH53	RD-8P0T0222J	RES-CF,RD 1/8W 2.2K OHM J	
356	RH54	2466809002	RES-MOF,68 2W J M	
357	RH55	RD-4P0T0122J	RES-CF,RD 1/4W 1.2K OHM J	
358	RH56	2402200009	RES-CF,220 0.5W J M	
359	RH57	2461201005	RES-MOF,1.2K 1W J M	
360	RH58	RD-4P0T0223J	RES-CF,RD 1/4W 22K OHM J	
361	RH59	RD-4P0T0223J	RES-CF,RD 1/4W 22K OHM J	
362	RH60	RD-4P0T0223J	RES-CF,RD 1/4W 22K OHM J	
363	RH61	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
364	RH62	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
365	RH63	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
366	RH64	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
367	RH65	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
368	RH66	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
369	RH75	RD-8P0T0273J	RES-CF,RD 1/8W 27K OHM J	
370	RH76	RD-8P0T0222J	RES-CF,RD 1/8W 2.2K OHM J	
371	RH77	RD-8P0T0513J	RES-CF,RD 1/8W 51K OHM J	
372	RH78	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
373	RH79	RD-8P0T0563J	RES-CF,RD 1/8W 56K OHM J	
374	RH80	RD-8P0T0682J	RES-CF,RD 1/8W 6.8K OHM J	
375	RH81	RD-8P0T0105J	RES-CF,RD 1/8W 1M OHM J	
376	RH82	2407503002	RES-CF,750K 0.25W J A	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
377	RH83	2442873001	RES-MF,287K 0.25W F A	
378	RH84	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM J	
379	RH85	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
380	RH86	2401809003	RES-CF,18 0.5W J M	
381	RH91	RD-8P0T0394J	RES-CF,RD 1/8W 390K OHM J	
382	RH92	RD-4P0T0475J	RES-CF,RD 1/4W 4.7M OHM J	
383	RH93	RD-8P0T0152J	RES-CF,RD 1/8W 1.5K OHM J	
384	RLP01	3710100085	RELAY,DY3M-DC12V 5A 250V	
385	RM02	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
386	RM04	RD-8P0T0105J	RES-CF,RD 1/8W 1M OHM J	
387	RM05	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
388	RM06	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
389	RM07	RD-8P0T0152J	RES-CF,RD 1/8W 1.5K OHM J	
390	RM08	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM J	
391	RM09	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
392	RM11	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
393	RM12	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
394	RM13	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
395	RM14	RD-8P0T0752J	RES-CF,RD 1/8W 7.5K OHM J	
396	RM16	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
397	RM17	RD-8P0T0473J	RES-CF,RD 1/8W 47K OHM J	
398	RM18	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
399	RM19	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
400	RM20	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
401	RM21	RD-8P0T0153J	RES-CF,RD 1/8W 15K OHM J	
402	RM22	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
403	RM23	RD-8P0T0752J	RES-CF,RD 1/8W 7.5K OHM J	
404	RM24	RN-4P0T1742F	RES-MF,RN 1/4W 17.4KOHM F	
405	RM25	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
406	RM26	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM J	
407	RM28	RD-4P0T0103J	RES-CF,RD 1/4W 10K OHM J	
408	RM29	RD-8P0T0432J	RES-CF,RD 1/8W 4.3KOHM J	
409	RM30	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
410	RM31	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
411	RM32	RD-8P0T0100J	RES-CF,RD 1/8W 10 OHM J	
412	RM33	RD-4P0T0272J	RES-CF,RD 1/4W 2.7K OHM J	
413	RM34	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
414	RM35	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
415	RM36	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
416	RM37	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
417	RP01	2401004008	RES-CF,1M 0.5W J M	
418	RP02	2465602004	RES-MOF,56K 1W J M	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
419	RP03	2401004008	RES-CF,1M 0.5W J M	
420	RP04	2464702005	RES-MOF,47K 2W J M	
421	RP05	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
422	RP06	RD-8P0T0154J	RES-CF,RD 1/8W 150K OHM J	
423	RP07	2442402005	RES-MF,24K 0.125W F A	
424	RP08	RD-4P0T0220J	RES-CF,RD 1/4W 22 OHM J	
425	RP09	RD-4P0T0102J	RES-CF,RD 1/4W 1K OHM J	
426	RP10	RD-4P0T0102J	RES-CF,RD 1/4W 1K OHM J	
427	RP11	2460228004	RES-MOF,0.22 2W J M	
428	RP12	RD-8P0T0204J	RES-CF,RD 1/8W 200K OHM J	
429	RP13	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
430	RP14	RD-8P0T0154J	RES-CF,RD 1/8W 150K OHM J	
431	RP15	RD-4P0T0151J	RES-CF,RD 1/4W 150 OHM J	
432	RP16	2442322002	RES-MF,23.2K 0.125W F A	
433	RP17	RD-4P0T04R7J	RES-CF,RD 1/4W 4.7 OHM J	
434	RP18	2401004008	RES-CF,1M 0.5W J M	
435	RP19	RD-4P0T0473J	RES-CF,RD 1/4W 47K OHM J	
436	RP21	RD-4P0T0154J	RES-CF,RD 1/4W 150K OHM J	
437	RP22	RD-4P0T0473J	RES-CF,RD 1/4W 47K OHM J	
438	RP24	RD-4P0T0102J	RES-CF,RD 1/4W 1K OHM J	
439	RP25	RD-4P0T0681J	RES-CF,RD 1/4W 680 OHM J	
440	RP27	2406800008	RES-CF,680 0.5W J M	
441	RP28	2461001005	RES-MOF,1K 1W J M	
442	RP29	2463309006	RES-MOF,33 1W J M	
443	RP30	RD-8P0T0271J	RES-CF,RD 1/8W 270 OHM J	
444	RV01	2541508003	RES-FUS,1.5 1W J M	
445	RV02	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
446	RV03	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
447	RV04	2461008006	RES-MOF,1 1W J M	
448	RV05	2442601001	RES-MF,2.6K 0.25W F A	
449	RV06	RD-4P0T0473J	RES-CF,RD 1/4W 47K OHM J	
450	RV07	2541001001	RES-FUS,1K 1W J M	
451	RV08	RD-4P0T0103J	RES-CF,RD 1/4W 10K OHM J	
452	RV09	2401800007	RES-CF,180 0.5W J M	
453	RV10	RD-8P0T0222J	RES-CF,RD 1/8W 2.2K OHM J	
454	RV11	RD-8P0T0123J	RES-CF,RD 1/8W 12KOHM J	
455	SW01	E42027039010	SWITCH TACT,5MM 160GF VER	
456	SW02	E42027039010	SWITCH TACT,5MM 160GF VER	
457	SW03	E42027039010	SWITCH TACT,5MM 160GF VER	
458	SW04	E42027039010	SWITCH TACT,5MM 160GF VER	
459	SW05	E42027039010	SWITCH TACT,5MM 160GF VER	
460	SWH01	E42027014010	LEVER SWITCH,30'C 3P	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
461	TH01	3510300159	TRAN-SW,HDT EI1916 V770	
462	TH02	3500101616	INDUCT-FIX,DR1428 24T V57	
463	TH02	6130014200	EYELET,1.6PAI BRASS T=0.4	
464	TH04	3510500076	FBT,V570	⚠
465	TH04	3540400005	MAG-FER,TR 19-12.5-11	
466	TH04	6120043400	SHLD-CASE,FBT ASSY V770	
467	TH04	6130014100	EYELET,2.7PAI BRASS T=0.4	
468	TP01	3510200118	TRAN-PW,EER3541 V770	
469	TP02	E4203109004A	TRANS SYNC,UU1116 TUBE	
470	WHV01	372010105301	CONN-M,POST 1P DEGT235 14	
471	XM01	3530200353	VIB-QUARTZ,HC-49/U 12MHZ	
472	ZDH01	DTUZ-12BSB	DIODE,ZENER UZ-12BSB TAP	
473	ZDH02	3101000347	DI-ZN,BZX55-C62 LEAD	
474	ZDM01	DTUZ-6.2BSB	DIODE,ZENER UZ-6.2BSB T	
475	ZDM02	DTUZ-6.2BSB	DIODE,ZENER UZ-6.2BSB T	
476	ZDM03	DTUZ-5.1BSB	DIODE,ZENER UZ-5.1BSB TAP	
477	ZDM04	DTUZ-5.1BSB	DIODE,ZENER UZ-5.1BSB TAP	
478		5004000199	SCR-TT,WAL + 3*8	
479		6120042900	SHLD-CASE FBT,V770	
480		6120043000	SOLDER GRIP,V770	
481		6120043000	SOLDER GRIP,V770	
482		6120043000	SOLDER GRIP,V770	
483		6124034700	H-SINK VERTICAL,V770	
484		6124034800	H-SINK POWER,V770	
485		6129027600	SPECIAL,T.T/W(+) 3*8 MSZP	
486		E4208417242	PCBA CRT(A4*),V570	
487		E4208417252	PCBA CRT(A5*),V570	
488		E4208417262	PCBA CRT(A6*),V570	
489		E4208517202	PCBA CRT(I1*),V570 EXP	
490		E4208617202	PCBA CRT(T1*),V570 EXP	
491		M11143012012	SCREW,BIN(+) M3*12 MSZPC	

V570 CRT BOARD

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
1	BC01	3540200058	BD-FER,BFS3550	
2	BC02	3540200058	BD-FER,BFS3550	
3	BC03	3540200058	BD-FER,BFS3550	
4	BC04	3540200058	BD-FER,BFS3550	
5	BC05	3540200059	BD-FER,BFS3580	
6	BC06	3540200059	BD-FER,BFS3580	
7	BC07	3540200058	BD-FER,BFS3550	
8	BC08	3540200058	BD-FER,BFS3550	
9	BC09	3540200058	BD-FER,BFS3550	
10	CC01	CE04BT1C100M	CAP-EL,SMS 16V 10UF M TAP	
11	CC02	CE04BT1C100M	CAP-EL,SMS 16V 10UF M TAP	
12	CC03	CE04BT1C100M	CAP-EL,SMS 16V 10UF M TAP	
13	CC04	CE04BT1C331M	CAP-EL,SMS 16V 330UF M	
14	CC05	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
15	CC06	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
16	CC07	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
17	CC08	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
18	CC09	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
19	CC10	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
20	CC11	2171020016	CAP-P-F,1000PF 100V J RAD	
21	CC12	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
22	CC13	CE04BT1C221M	CAP-EL,SMS 16V 220UF M	
23	CC14	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
24	CC15	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
25	CC16	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
26	CC17	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
27	CC18	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
28	CC19	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
29	CC20	CE04BT1C221M	CAP-EL,SMS 16V 220UF M	
30	CC21	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
31	CC22	CE04BT2A101M	CAP-EL,SMS 100V 100UF M	
32	CC23	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
33	CC24	2001090053	CAP-AL,1UF 100V M 5*11 NP	
34	CC25	2001090053	CAP-AL,1UF 100V M 5*11 NP	
35	CC26	2001090053	CAP-AL,1UF 100V M 5*11 NP	
36	CC27	2002280012	CAP-AL,0.22UF 160V M 5*11	
37	CC28	2002280012	CAP-AL,0.22UF 160V M 5*11	
38	CC29	2002280012	CAP-AL,0.22UF 160V M 5*11	
39	CC30	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
40	CC31	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
41	CC32	CK45BT2H102K	CAP-CD,500V 1000PF K	
42	CC33	2102230017	CAP-CER,0.022UF 1KV J Z4U	
43	CC34	CE04BT2C100M	CAP-EL,SMS 160V 10UF M	
44	CC35	CQ92BT2A562J	CAP-PE,100V 0.0056UF J	
45	CC36	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
46	CC37	CQ92BT2A122J	CAP-PE,100V 1200PF J	
47	CC38	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
48	CC39	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
49	CGND	372010105301	CONN-M,POST 1P DEGT235 14	
50	CNC01	3725004907	CONN-A,14P FLAT 200MM V77	
51	CNC02	3720101388	CONN-M,SMW200-06P	
52	DC01	DTISS81	DIODE,SWITCHING ISS81	
53	DC02	DTISS81	DIODE,SWITCHING ISS81	
54	DC03	DTISS81	DIODE,SWITCHING ISS81	
55	DC04	DTISS81	DIODE,SWITCHING ISS81	
56	DC05	DTISS81	DIODE,SWITCHING ISS81	
57	DC06	DTISS81	DIODE,SWITCHING ISS81	
58	DC07	DTISS81	DIODE,SWITCHING ISS81	
59	DC08	DTISS81	DIODE,SWITCHING ISS81	
60	DC09	DTISS81	DIODE,SWITCHING ISS81	
61	DC10	DT1N4148	DIODE,1N4148 TAPING	
62	DC11	DT1N4148	DIODE,1N4148 TAPING	
63	DC12	DT1N4148	DIODE,1N4148 TAPING	
64	DC13	DT1N4148	DIODE,1N4148 TAPING	
65	DC14	DT1N4148	DIODE,1N4148 TAPING	
66	DC15	DT1N4148	DIODE,1N4148 TAPING	
67	DC16	DT1N4004	DIODE,400V 1.0A TAP	
68	DC17	DT1N4148	DIODE,1N4148 TAPING	
69	FC01	E42029026410	FILTER,EMI 50V 0.1UF M	
70	G2	375500076901	WIRE-ASS'Y,G2 300MM 7687B	
71	ICC01	3200001232	IC-LIN,KA2500 DIP	
72	ICC02	3204000577	IC-INT,MTV021 9LANGUAGE D	
73	ICC03	3200001415	IC-LIN,LM2437T	
74	ICC03	6124035200	H-SINK VIDEO ASSY,V770	
75	ICC03	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
76	JC01	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
77	JC02	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
78	JC03	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
79	JC04	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
80	JC05	375300002401	WIRE-NS-S43MM TAP. SDA 1/	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
81	JC06	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
82	JC07	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
83	JC08	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
84	JC09	375300002401	WIRE-NS-S43MM TAP. SDA 1/	
85	LC01	3500101368	INDUCT-FIX,AL04TBR33M M A	
86	LC02	3500101368	INDUCT-FIX,AL04TBR33M M A	
87	LC03	3500101368	INDUCT-FIX,AL04TBR33M M A	
88	LC04	E42019097250	COIL,PEAKING 22 UH AXIAL	
89	QC01	3110100737	TR-GEN,KTA1266GR LEAD	
90	QC02	3110100737	TR-GEN,KTA1266GR LEAD	
91	QC03	TTKSP92	TR,KSP92	
92	QC04	TTKSP42	TR,KSP42	
93	QC05	TTKSP92	TR,KSP92	
94	QC06	TTKSP42	TR,KSP42	
95	QC07	TTKSP92	TR,KSP92	
96	QC08	TTKSP42	TR,KSP42	
97	RC01	RD-8P0T0223J	RES-CF,RD 1/8W 22K OHM J	
98	RC02	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
99	RC03	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
100	RC04	RD-8P0T0332J	RES-CF,RD 1/8W 3.3K OHM J	
101	RC05	RD-8P0T0683J	RES-CF,RD 1/8W 68K OHM J	
102	RC06	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
103	RC07	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
104	RC08	RD-4P0T0391J	RES-CF,RD 1/4W 390 OHM J	
105	RC09	RD-4P0T0391J	RES-CF,RD 1/4W 390 OHM J	
106	RC10	RD-4P0T0391J	RES-CF,RD 1/4W 390 OHM J	
107	RC11	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
108	RC12	RD-8P0T0101J	RES-CF,RD 1/8W 100 OHM J	
109	RC13	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
110	RC14	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
111	RC15	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
112	RC16	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
113	RC17	RD-8P0T0221J	RES-CF,RD 1/8W 220 OHM J	
114	RC18	RD-8P0T0102J	RES-CF,RD 1/8W 1K OHM J	
115	RC19	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
116	RC20	RD-8P0T0331J	RES-CF,RD 1/8W 330 OHM J	
117	RC21	RD-8P0T0151J	RES-CF,RD 1/8W 150 OHM J	
118	RC22	RD-8P0T0105J	RES-CF,RD 1/8W 1M OHM J	
119	RC23	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM J	
120	RC24	RD-8P0T0622J	RES-CF,RD 1/8W 6.2K OHM J	
121	RC25	RD-8P0T0562J	RES-CF,RD 1/8W 5.6K OHM J	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
122	RC26	RD-4P0T0100J	RES-CF,RD 1/4W 10 OHM J	
123	RC27	RD-4P0T0100J	RES-CF,RD 1/4W 10 OHM J	
124	RC28	RD-4P0T0100J	RES-CF,RD 1/4W 10 OHM J	
125	RC29	RD-4P0T0820J	RES-CF,RD 1/4W 82 OHM J	
126	RC30	RD-4P0T0820J	RES-CF,RD 1/4W 82 OHM J	
127	RC31	RD-4P0T0820J	RES-CF,RD 1/4W 82 OHM J	
128	RC32	2403309005	RES-CF,33 0.5W J M	
129	RC33	2403309005	RES-CF,33 0.5W J M	
130	RC34	2403309005	RES-CF,33 0.5W J M	
131	RC35	2401000008	RES-CF,100 0.5W J M	
132	RC36	2422205001	RES-CC,22M 0.5W K A	
133	RC37	RD-8P0T0824J	RES-CF,RD 1/8W 820K OHM J	
134	RC38	RD-8P0T0824J	RES-CF,RD 1/8W 820K OHM J	
135	RC39	RD-8P0T0824J	RES-CF,RD 1/8W 820K OHM J	
136	RC40	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
137	RC41	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
138	RC42	RD-8P0T0104J	RES-CF,RD 1/8W 100K OHM J	
139	RC43	RD-4P0T0101J	RES-CF,RD 1/4W 100 OHM J	
140	RC44	RD-4P0T0101J	RES-CF,RD 1/4W 100 OHM J	
141	RC45	RD-4P0T0101J	RES-CF,RD 1/4W 100 OHM J	
142	RC46	2542009002	RES-FUS,20 0.5W J M	
143	RC49	RD-8P0T0750J	RES-CF,RD 1/8W 75 OHM J	
144	RC50	RD-8P0T0750J	RES-CF,RD 1/8W 75 OHM J	
145	RC51	RD-8P0T0750J	RES-CF,RD 1/8W 75 OHM J	
146	RC52	RD-8P0T0330J	RES-CF,RD 1/8W 33 OHM J	
147	RC53	RD-8P0T0330J	RES-CF,RD 1/8W 33 OHM J	
148	RC54	RD-8P0T0330J	RES-CF,RD 1/8W 33 OHM J	
149	RC55	2401808002	RES-CF,1.8 0.5W J M	
150	SGC01	3411100083	VARISTOR,SURGE ABSORBER R	
151	SGC02	3411100083	VARISTOR,SURGE ABSORBER R	
152	SGC03	3411100083	VARISTOR,SURGE ABSORBER R	
153	SGC04	3411100084	VARISTOR,SURGE ABSORBER R	
154	SGC05	3411100043	VARISTOR,S23 1500V 1500V	
155	SK01	E42043096010	CRT SOCKET,033-0-5500-4	
156		6120043000	SOLDER GRIP,V770	
157		6124034900	H-SINK VIDEO,V770	
158		304010085101	PCB-SINGLE,V770 CRT	

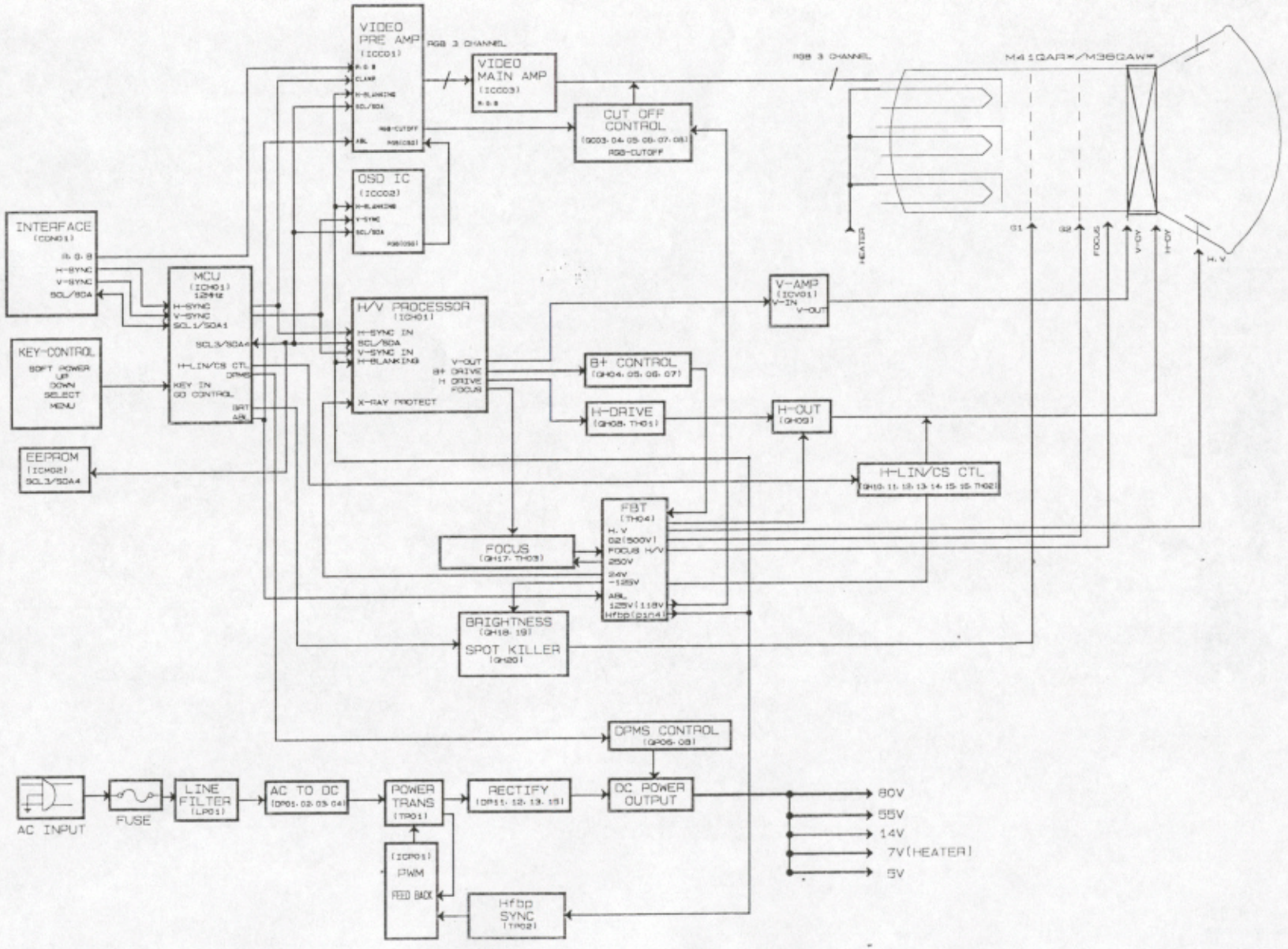
V570 Miscellaneous

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
1		3010100140	CRT,M36QAW351X121(T4/LP)	⚠
2		3758000167	CBL-PWR,WALL F.WHITE EURO	
3		3758500439	CBL-SGN,6PAI 1.5MT 1C V S	
4		6101197300	CHASSIS MAIN,V770	
5		6101197400	CHASSIS MAIN ASSY,V770	
6		6120042500	SHLD-CASE FENCE CRT,V770	
7		6120042600	CRT SPRING,V770	
8		6120042800	SHIELD GROUND SPRING,V770	
9		6120043500	SHLD-CASE COVER,V570	
10		6120043600	SHLD-CASE COVER ASSY,V570	
11		6120043700	SHIELD GROUND SPRING B,V7	
12		6120044300	GND-PL,VIDEO SPRING G910	
13		6120044600	SHLD-PL,FENCE CRT ASSY	
14		6129033500	SPECIAL SCREW TOOTH WASHE	
15		6130020301	PEM,HL-5854C (H=13MM) SUM	
16		6201278800	COVER FRONT,V570 HEI	
17		6201278900	COVER REAR,V570 HEI	
18		6201279200	SWIVEL BASE,V770	
19		6201279300	SWIVEL UPPER,V770	
20		6201279500	SWIVEL&TILT ASSY,V770	
21		6201279600	COVER F.ASSY,V570 HEI	
22		6215227900	KNOB POWER,V570 HEI	
23		6215228000	KNOB TACT,V570 HEI	
24		6215228600	CAP SHIELD,V570	
25		6220080800	LENS LED POWER,V570 HEI	
26		6243028300	BAG,PE(ST) CLEAR 14"/15"A	
27		6253102000	CUSHION LEFT,V570	
28		6253102100	CUSHION RIGHT,V570	
29		6262004800	FOOTER RUBBER PEM BLACK	
30		6301183300	BOX CTN,SW-3 V570 EXP	
31		304010085001	PCB-SINGLE,V770 MAIN	
32		350010137902	INDUCT-FIX,D-COIL V570	
33		375400001602	WIRE-NS-M,1.0T<-TBC->1.0T	
34		B4008500100A	CABLE TIE	
35		B4209501301C	BAG PE,MANUAL T0.03	
36		B4210321901	KIT COVER,V570 EXP	
37		B4210322001	PACKING ASSY,V570	
38		B4214000701A	SPRING COM	
39		E4205015201	MAIN ASSY,V570 EXP	

NUM.	LOCATION	PART NUMBER	DESCRIPTION	REMARK
40		E4208417241	PCBA MAIN(A4*),V570	
41		E4208417251	PCBA MAIN(A5*),V570	
42		E4208417261	PCBA MAIN(A6*),V570	
43		E4208517201	PCBA MAIN(I1*),V570 EXP	
44		E4208717201	PCB ASSY,V570 EXP	
45		E4208817201	PCBA MAIN(I2*),V570 EXP	
46		M17744006012	SCREW,BIN(+) M4*6 MSZPC	

MODEL : V770/V570

CHASSIS NO : C-1716/C-1511



WARNING: THIS EQUIPMENT CONTAINS SAFETY & EMI CRITICAL COMPONENTS ALL PARTS SHOWN IN THE ⚠ MARKS OF THE SCHEMATIC ARE SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER RECOMMENDED PARTS LIST FOR EXACT REPLACEMENTS.

NOTE:
1. RESISTANCE IS SHOWN IN OHM KΩ(1,000) MΩ(1,000,000) RATED POWER OF RESISTOR NOT NOTED IN SCHEMATIC DIAGRAM IS 1/6W (1/4W CARBON).
2. CAPACITANCE IS SHOWN μF AND NOTED CAPACITANCES IS SHOWN μF. (μF=1,000,000pF) RATED VOLTAGE OF CONDENSER NOT NOTED IN SCHEMATIC DIAGRAM IS 50V.
3. ABBREVIATION AND SYMBOL
   P: POLYESTER PP: POLYPROPYLENE
4. THIS SCHEMATIC DIAGRAM IS SUBJECTED TO CHANGE WITHOUT NOTICE FOR FURTHER IMPROVEMENT.

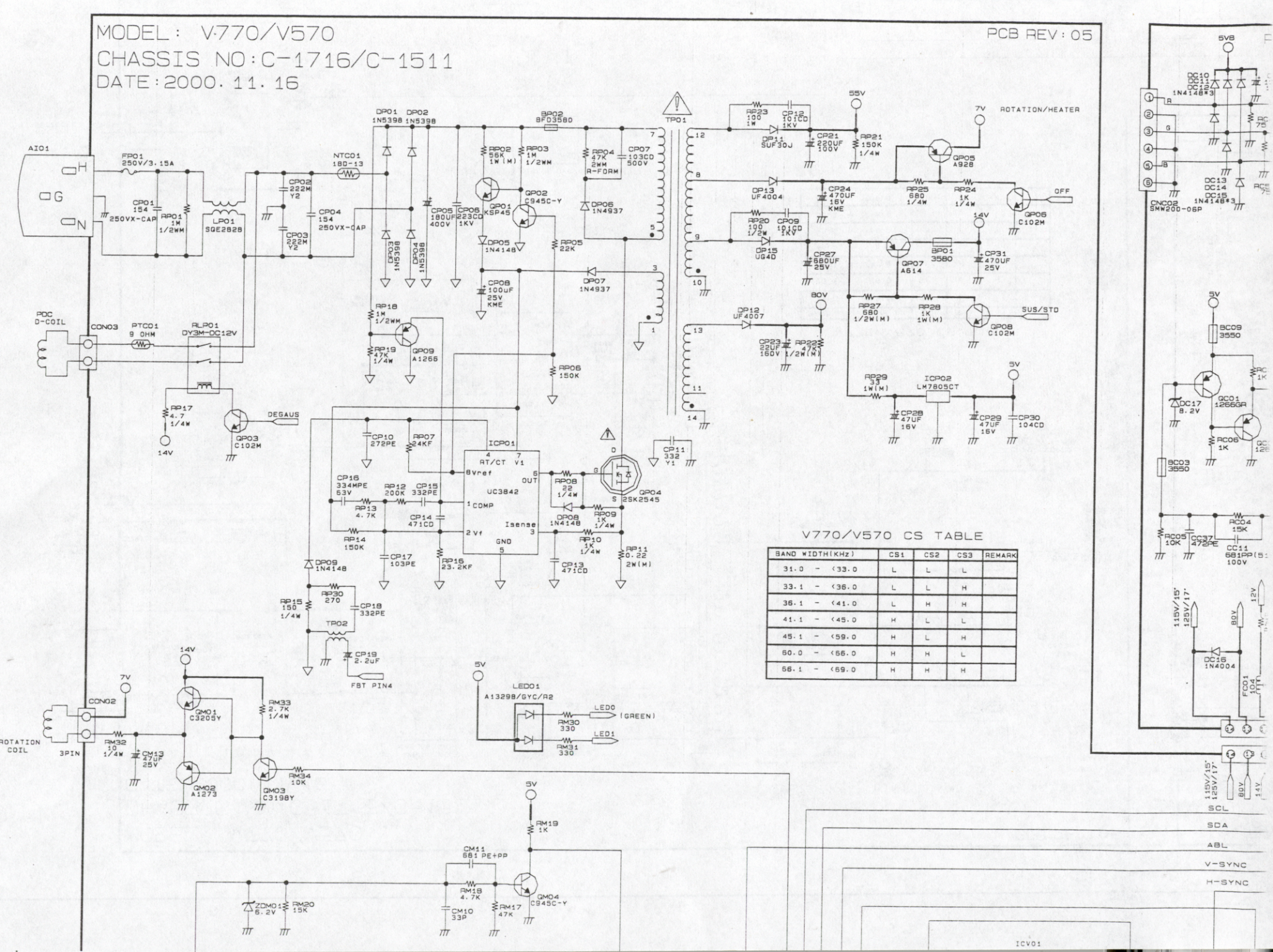
DWG. REV.	DESCRIPTION		DOC. NO.	DATE	APPROVAL
DWG. NO.	E42095317	SIGNATURE	DATE	DWN	SHEET NO.
TITLE	V770/V570	DWN S. K. DH	2000.02.23		1 / 1
		CHK C. YU	2000.02.23		
		APP Y. K. BYUN	2000.02.23		

MODEL : V770/V570

CHASSIS NO : C-1716/C-1511

DATE : 2000. 11. 16

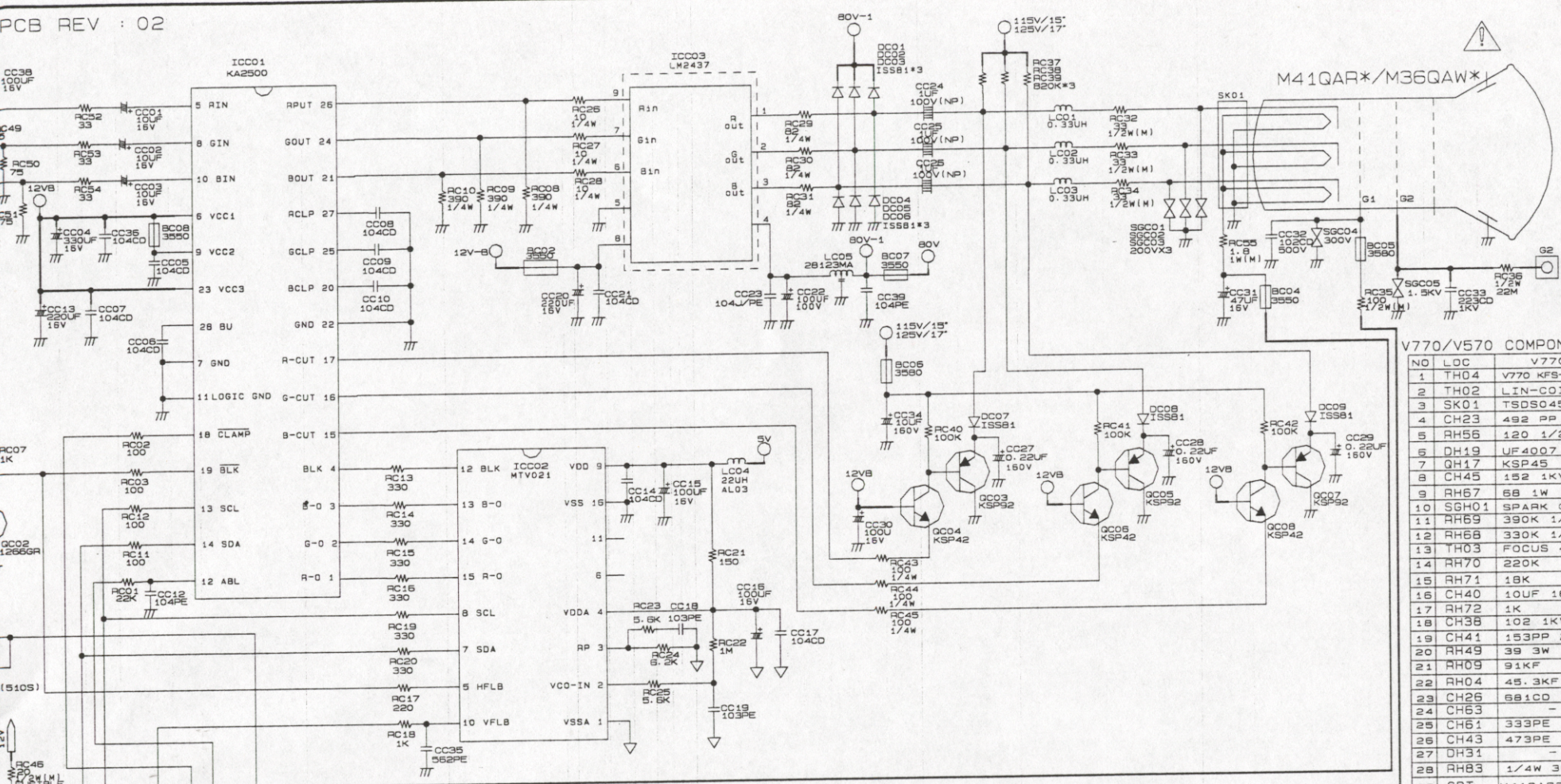
PCB REV : 05



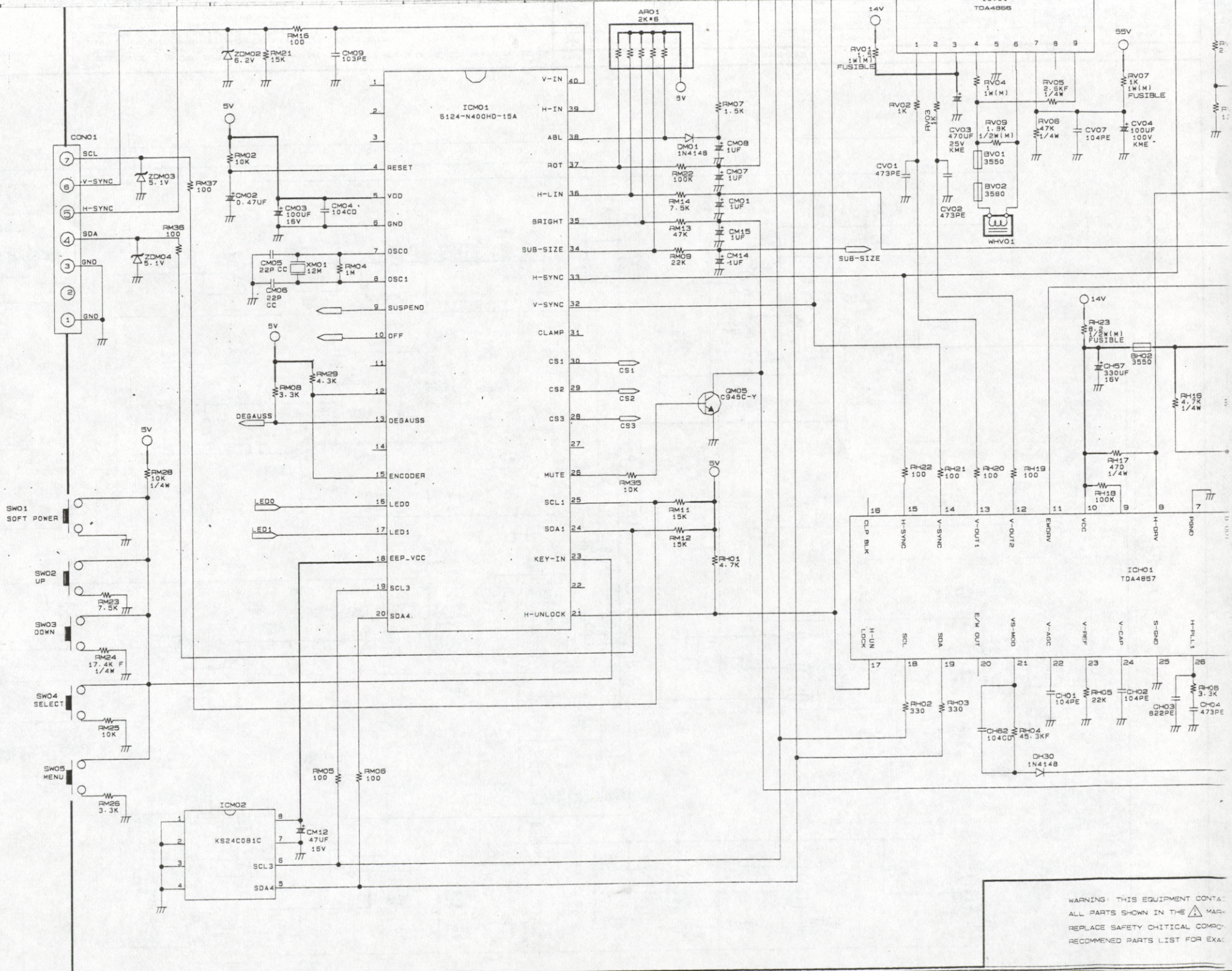
V770/V570 CS TABLE

BAND WIDTH(KHz)	CS1	CS2	CS3	REMARK
31.0 - <33.0	L	L	L	
33.1 - <36.0	L	L	H	
36.1 - <41.0	L	H	H	
41.1 - <45.0	H	L	L	
45.1 - <59.0	H	L	H	
60.0 - <66.0	H	H	L	
66.1 - <69.0	H	H	H	

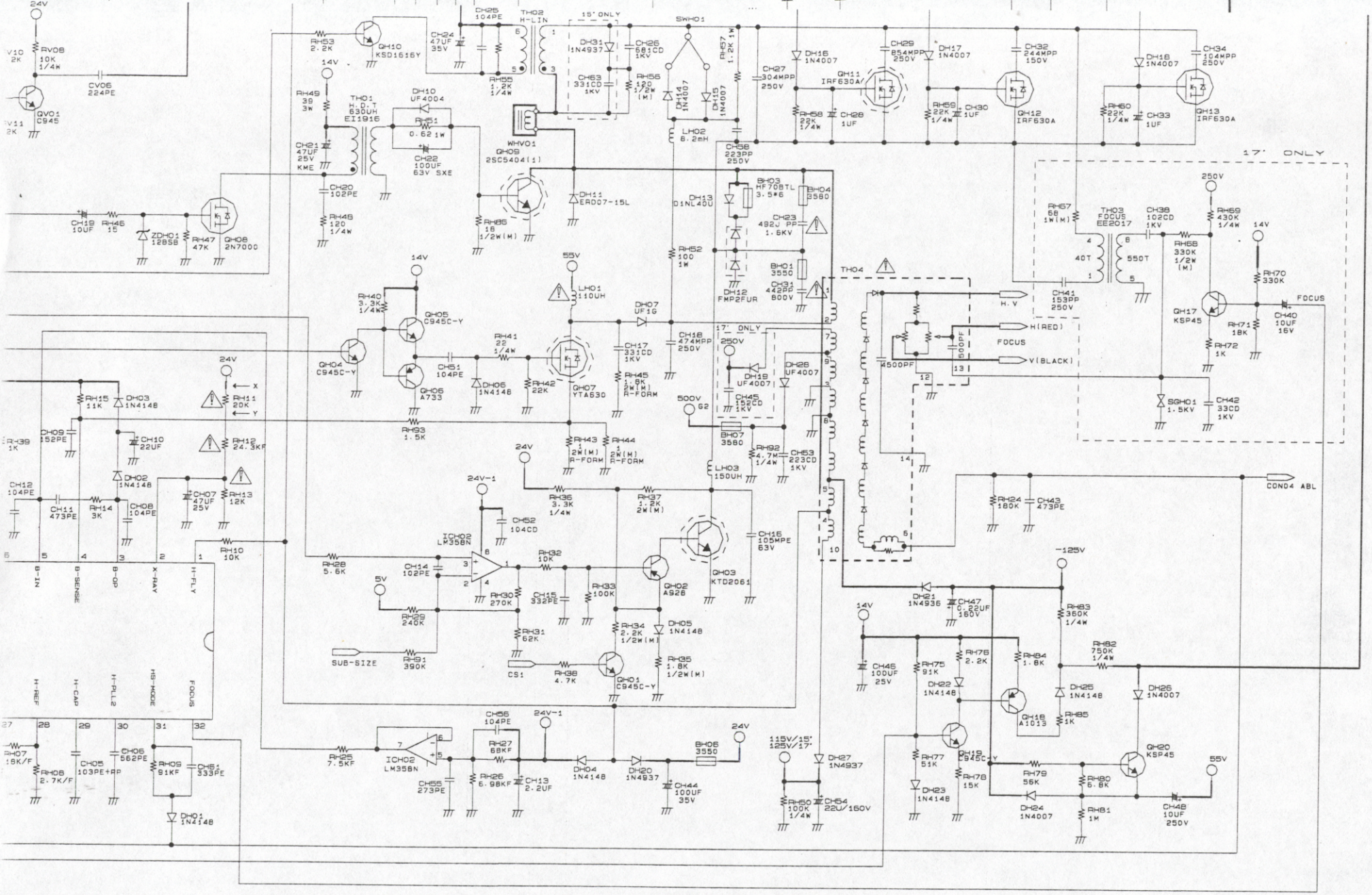
PCB REV : 02



NO	LOC	V770	V570
1	TH04	V770 KFS-61681	V570 KFS-61681A
2	TH02	LIN-COIL 22T	LIN-COIL 24T
3	SK01	TSDS045-P DBL	033-2-5500-4
4	CH23	492 PP 1.6KV	442 PP 1.6KV
5	RH56	120 1/2W	220 1/2W
6	DH19	UF4007	-
7	QH17	KSP45	-
8	CH45	152 1KV CD	-
9	RH67	68 1W	-
10	SGH01	SPARK GAP	-
11	RH69	390K 1/2W(M)	-
12	RH68	330K 1/2W(M)	-
13	TH03	FOCUS 40:550	-
14	RH70	220K	-
15	RH71	18K	-
16	CH40	10UF 16V EL	-
17	RH72	1K	-
18	CH38	102 1KV CD	-
19	CH41	153PP 250V	-
20	RH49	39 3W	47 3W
21	RH09	91KF	71.5KF
22	RH04	45.3KF	63.4KF
23	CH26	681CD 1KV	221CD 1KV
24	CH63	-	331CD 1KV
25	CH61	333PE	273PE
26	CH43	473PE	333PE
27	DH31	-	1N4937
28	RH83	1/4W 360K	1/4W 287KF
29	CDT	M41QAR351*114	M36QAW351*121
30	D-COIL	V770 D-COIL+GND WIRE	V570 D-COIL+GND WIRE
31	RH75	1/8W 91K	1/8W 110K



WARNING: THIS EQUIPMENT CONTA
ALL PARTS SHOWN IN THE ⚠ MAR
REPLACE SAFETY CHITICAL COMPO
RECOMMENED PARTS LIST FOR EXA



SAFETY & CORH CRITICAL COMPONENTS
OF THE SCHEMATIC ARE SAFETY
TS ONLY WITH MANUFACTURERS
REPLACEMENTS.

NOTE:
1. RESISTANCE IS SHOWN IN OHM K=1,000 M=1,000,000 RATED POWER OF RESISTOR NOT NOTED IN SCHEMATIC DIAGRAM IS 1/8W R-CARBON.
2. CAPACITANCE IS SHOWN pF AND NOTED CAPACITANCES IS SHOWN uF. uF=1,000,000pF RATED VOLTAGE OF CONDENCER NOT NOTED IN SCHEMATIC DIAGRAM IS 50V.
3. ABBREVIATION AND SYMBOL
   P: POLYESTER PP: POLYPROPYLENE
4. THIS SCHEMATIC DIAGRAM IS SUBJECTED TO CHANGE WITHOUT NOTICE FOR FURTHER IMPROVEMENT.

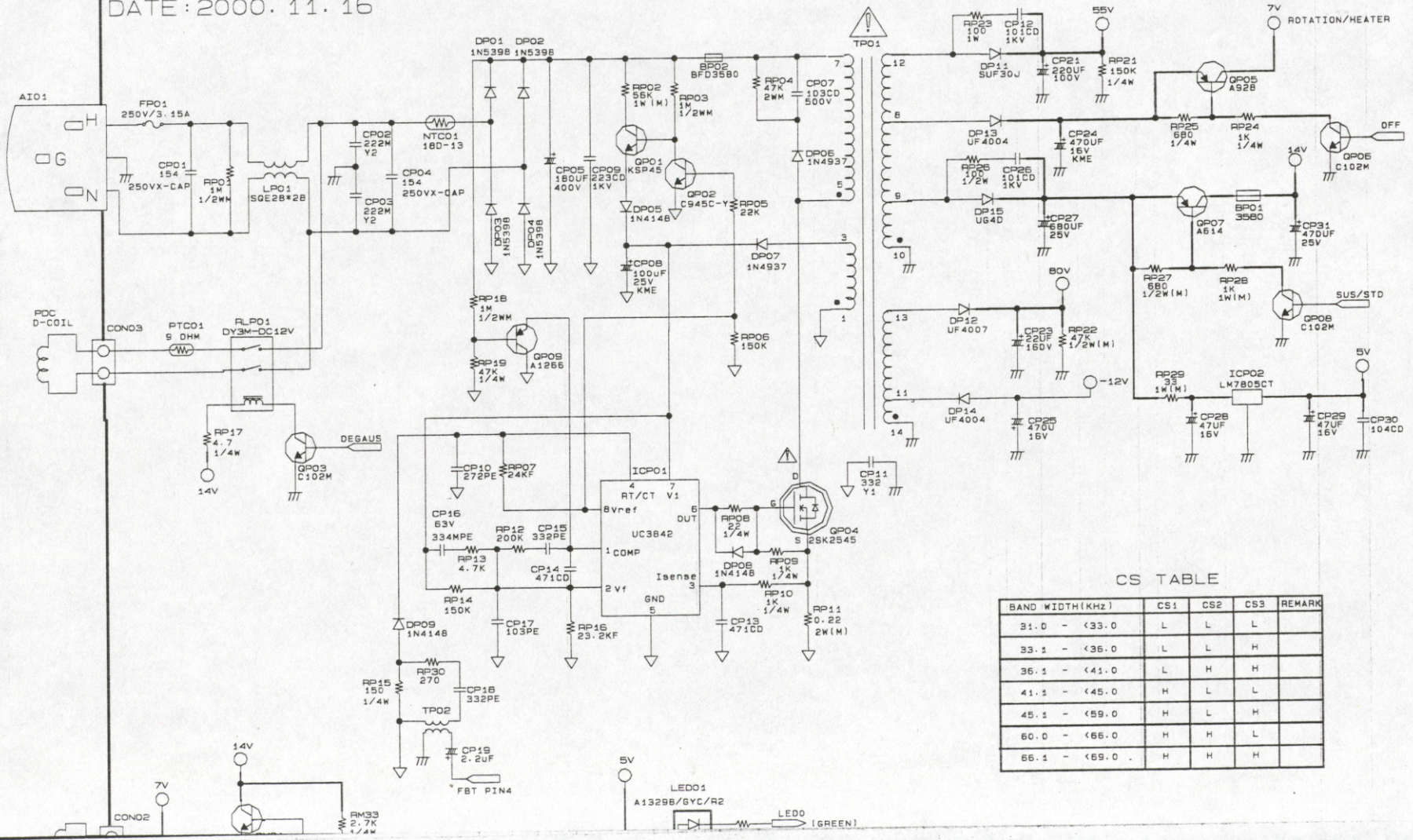
DWG. REV.	REV.E	DESCRIPTION		DOC. NO.	DATE	APPROVAL
DWG. NO.	E42095313	SIGNATURE		DATE	INSP	SHEET NO.
TITLE V770/V570	DWN	C. H. LEE	2000.11.16			1 / 1
HYUNDAI ELECTRONICS	CHK	C. YU	2000.11.16			
	APP	Y. K. BYUN	2000.11.16			

MODEL : V770A1

CHASSIS NO:C-1716

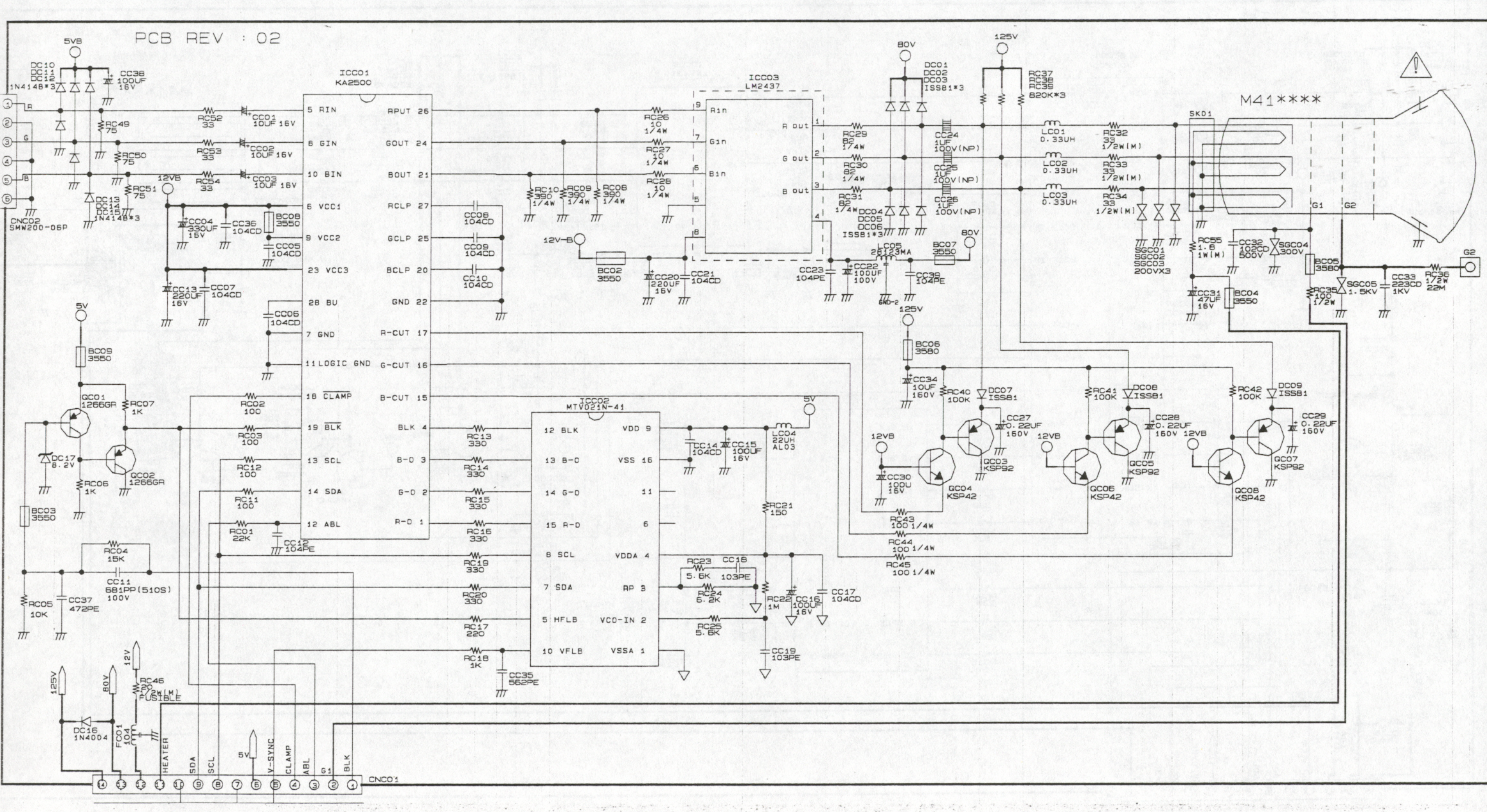
DATE:2000.11.16

PCB REV:03

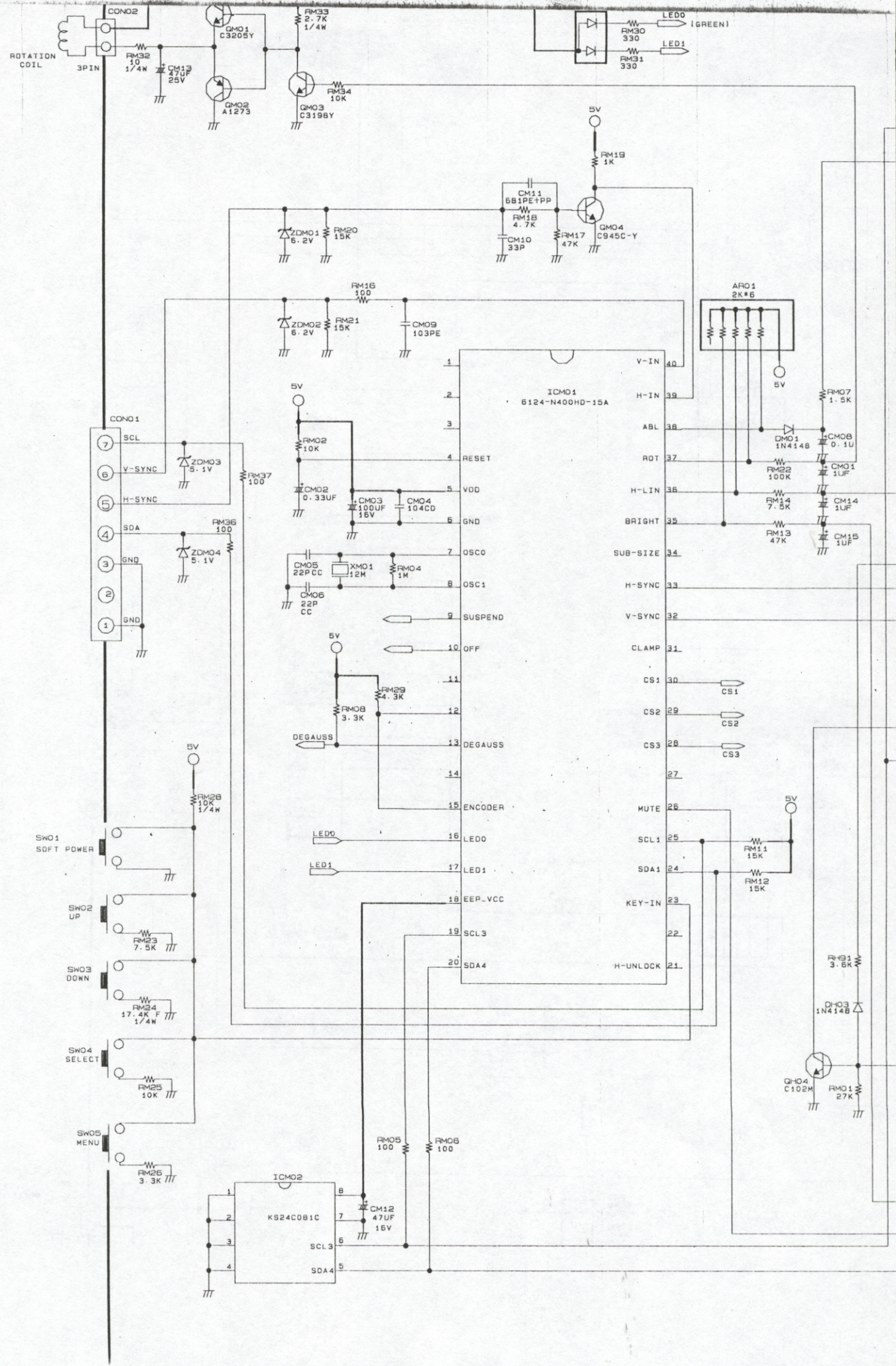


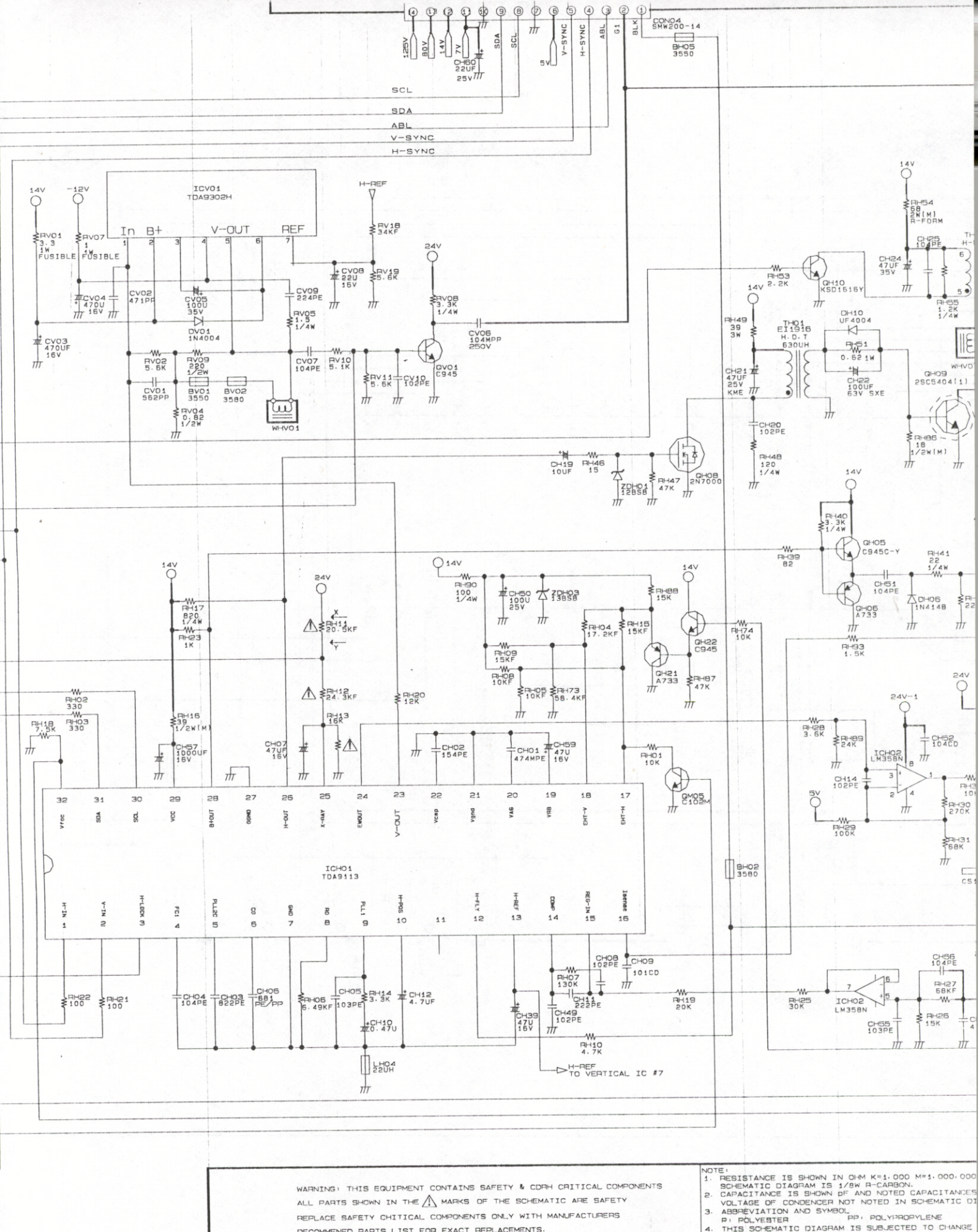
CS TABLE

BAND WIDTH(KHz)	CS1	CS2	CS3	REMARK
31.0 - <33.0	L	L	L	
33.1 - <36.0	L	L	H	
36.1 - <41.0	L	H	H	
41.1 - <45.0	H	L	L	
45.1 - <59.0	H	L	H	
60.0 - <66.0	H	H	L	
66.1 - <69.0	H	H	H	



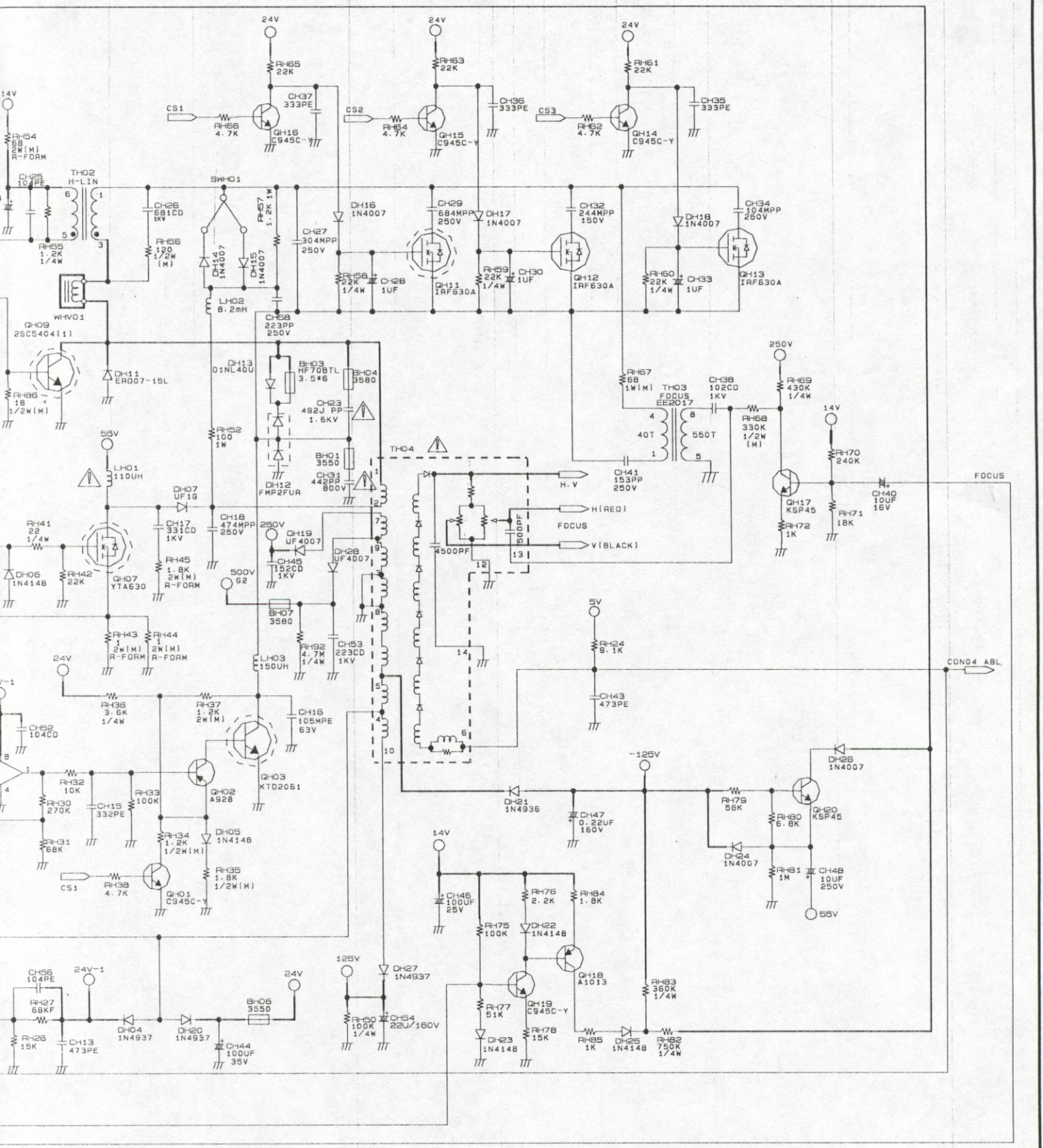
PCB REV : 02
5VB
DC10
DC11
DC12
1N4148*3
CC38
100UF
16V
RC49
75
RC50
75
RC51
75
DC13
DC14
DC15
1N4148*3
CNC02
SMW200-06P
RC52
33
RC53
33
RC54
33
CC01
10UF 16V
CC02
10UF 16V
CC03
10UF 16V
12VB
CC04
330UF
16V
CC36
104CD
BC08
3550
CC05
104CD
CC13
220UF
16V
CC07
104CD
CC06
104CD
ICC01
KA2500
5 RIN
6 GIN
10 BIN
6 VCC1
9 VCC2
23 VCC3
28 BU
7 GND
11 LOGIC GND
18 CLAMP
19 BLK
13 SCL
14 SDA
12 ABL
RPUT 26
GOUT 24
BOUT 21
RCLP 27
GCLP 25
BCLP 20
GND 22
R-CUT 17
G-CUT 16
B-CUT 15
BLK 4
B-D 3
G-D 2
R-D 1
CC08
104CD
CC09
104CD
CC10
104CD
RC26
10
1/4W
RC27
10
1/4W
RC28
10
1/4W
RC10
390
1/4W
RC09
390
1/4W
RC08
390
1/4W
12V-B
BC02
3550
CC20
220UF
16V
CC21
104CD
ICC03
LM2437
Rin
Gin
Bin
R out
G out
B out
RC29
82
1/4W
RC30
82
1/4W
RC31
82
1/4W
80V
DC01
DC02
DC03
ISS81*3
DC04
DC05
DC06
ISS81*3
CC24
1UF
100V(NP)
CC25
1UF
100V(NP)
CC26
1UF
100V(NP)
LC05
2S123MA
CC22
100UF
100V
CC23
104PE
BC07
3550
CC39
104PE
125V
RC37
RC38
RC39
820K*3
LC01
0.33UH
LC02
0.33UH
LC03
0.33UH
RC32
33
1/2W(M)
RC33
33
1/2W(M)
RC34
33
1/2W(M)
M41****
SK01
G1
G2
SGC01
SGC02
SGC03
200VX3
RC55
1.6
1W(M)
CC32
102CD
500V
SGC04
300V
BC05
3580
CC31
47UF
16V
BC04
3550
RC35
100
1/2W
SGC05
1.5KV
CC33
223CD
1KV
RC36
1/2W
22M
5V
BC09
3550
QC01
1266GR
RC07
1K
QC02
1266GR
DC17
8.2V
RC06
1K
BC03
3550
RC04
15K
CC11
681PP(510S)
100V
RC05
10K
CC37
472PE
RC02
100
RC03
100
RC12
100
RC11
100
RC01
22K
CC12
104PE
ICC02
MTV021N-41
12 BLK
13 B-C
14 G-D
15 R-D
8 SCL
7 SDA
5 HFLB
10 VFLB
VDD 9
VSS 16
11
6
VDDA 4
RP 3
VCO-IN 2
VSSA 1
RC13
330
RC14
330
RC15
330
RC16
330
RC19
330
RC20
330
RC17
220
RC18
1K
CC35
562PE
CC14
104CD
CC15
100UF
16V
LC04
22UH
AL03
RC21
150
RC23
5.6K
CC18
103PE
RC24
6.2K
RC22
1M
CC16
100UF
16V
CC17
104CD
RC25
5.6K
CC19
103PE
BC06
3580
CC34
10UF
160V
RC40
100K
DC07
ISS81
CC27
0.22UF
160V
QC03
KSP92
CC30
100U
16V
QC04
KSP42
RC41
100K
DC08
ISS81
CC28
0.22UF
160V
QC05
KSP92
QC06
KSP42
RC42
100K
DC09
ISS81
CC29
0.22UF
160V
QC07
KSP92
QC08
KSP42
RC43
100 1/4W
RC44
100 1/4W
RC45
100 1/4W
125V
80V
12V
RC46
R2 2W(M)
FUSIBLE
DC16
1N4004
FC01
104
HEATER
SDA
SCL
5V
V-SYNC
CLAMP
ABL
G1
BLK
CNC01


CON02
ROTATION COIL
3PIN
RM32 10 1/4W
CM13 47UF 25V
QM01 C3205Y
QM02 A1273
RM33 2.7K 1/4W
QM03 C3198Y
RM34 10K
LED0 (GREEN)
RM30 330
LED1
RM31 330
5V
RM19 1K
CM11 681PE+PP
RM18 4.7K
CM10 33P
RM17 47K
QM04 C945C-Y
ZDM01 6.2V
RM20 15K
RM16 100
ZDM02 6.2V
RM21 15K
CM09 103PE
AR01 2K*6
CON01
SCL
V-SYNC
H-SYNC
SDA
GND
GND
ZDM03 5.1V
ZDM04 5.1V
RM37 100
RM36 100
ICM01 6124-N400HD-15A
RM02 10K
CM02 0.33UF
CM03 100UF 16V
CM04 104CD
CM05 22PCC
XM01 12M
RM04 1M
CM06 22P CC
RM29 4.3K
RM08 3.3K
DEGAUSS
RM28 10K 1/4W
SW01 SOFT POWER
SW02 UP
RM23 7.5K
SW03 DOWN
RM24 17.4K F 1/4W
SW04 SELECT
RM25 10K
SW05 MENU
RM26 3.3K
ICM02 KS24C081C
CM12 47UF 16V
RM05 100
RM06 100
V-IN
H-IN
ABL
RST
H-LIN
BRIGHT
SUB-SIZE
H-SYNC
V-SYNC
CLAMP
CS1
CS2
CS3
MUTE
SCL1
SDA1
KEY-IN
H-UNLOCK
RESET
VDD
GND
OSCO
OSC1
SUSPEND
OFF
ENCODER
LED0
LED1
EEP_VCC
SCL3
SDA4
DM01 1N4148
CM08 0.1U
RM22 100K
CM01 1UF
RM14 7.5K
CM14 1UF
RM13 47K
CM15 1UF
RM07 1.5K
RM11 15K
RM12 15K
RM31 3.6K
DM03 1N4148
QM04 C102M
RM01 27K



WARNING: THIS EQUIPMENT CONTAINS SAFETY & CORH CRITICAL COMPONENTS
ALL PARTS SHOWN IN THE ⚠ MARKS OF THE SCHEMATIC ARE SAFETY
REPLACE SAFETY CHITICAL COMPONENTS ONLY WITH MANUFACTURERS
RECOMMENED PARTS LIST FOR EXACT REPLACEMENTS.

NOTE:
1. RESISTANCE IS SHOWN IN OHM K=1,000 M=1,000,000
   SCHEMATIC DIAGRAM IS 1/8W R-CARBON.
2. CAPACITANCE IS SHOWN pF AND NOTED CAPACITANCES
   VOLTAGE OF CONDENCER NOT NOTED IN SCHEMATIC DI
3. ABBREVIATION AND SYMBOL
   P: POLYESTER PP: POLYPROPYLENE
4. THIS SCHEMATIC DIAGRAM IS SUBJECTED TO CHANGE
   IMPROVEMENT.



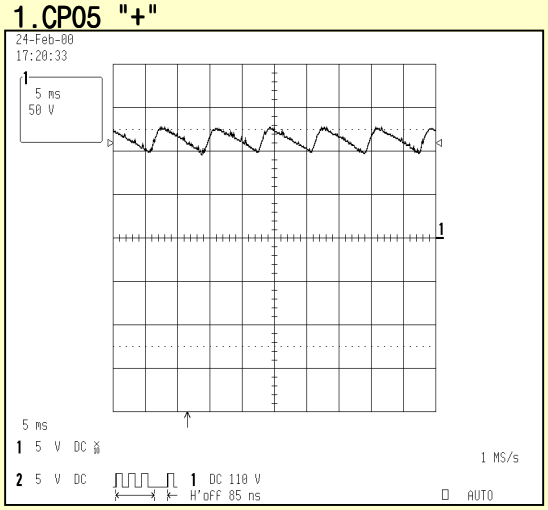
M=1.000.000 RATED POWER OF RESISTOR NOT NOTED IN
CAPACITANCES IS SHOWN uF. uF=1.000.000pF RATED
SCHEMATIC DIAGRAM IS 50V.
PYLENE
ED TO CHANGE WITHOUT NOTICE FOR FURTHER

DWG. REV.	REV. A	DESCRIPTION		DOC. NO.	DATE	APPROVAL
DWG. NO.	E42095348	SIGNATURE		DATE	INSP	SHEET NO.
TITLE	V770A1	DWN	C. H. LEE	2000.11.16		1 / 1
		CHK	C. YU	2000.11.16		
HYUNDAI ELECTRONICS		APP	Y. K BYUN	2000.11.16		

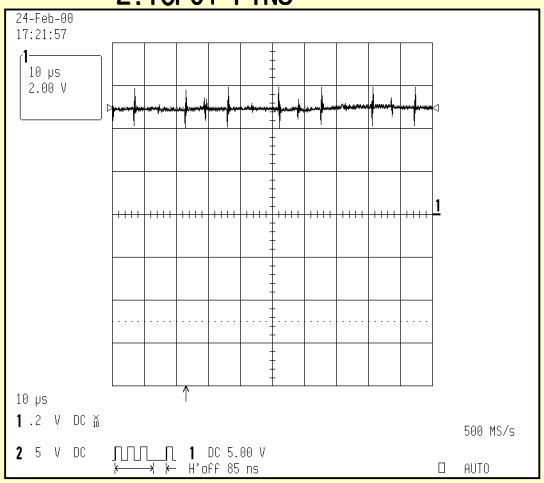
Wave Form

[1024X768@85Hz,Full White pattern]

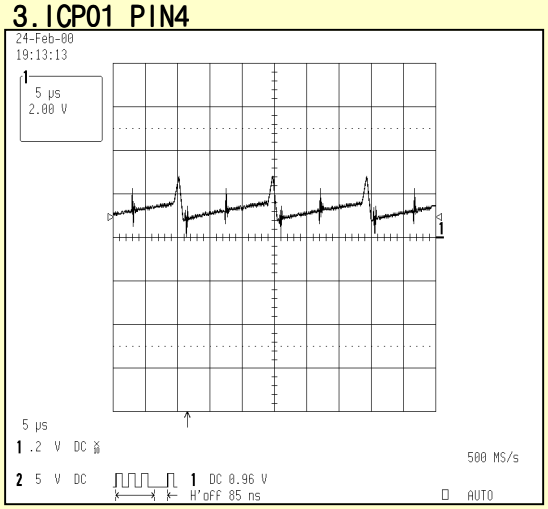
1.CP05 "+"



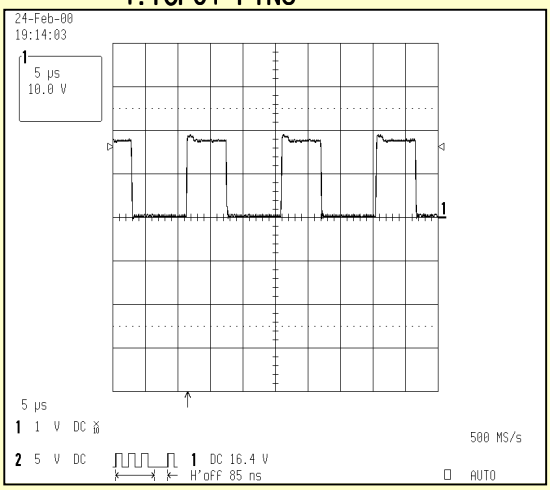
2.ICP01 PIN8



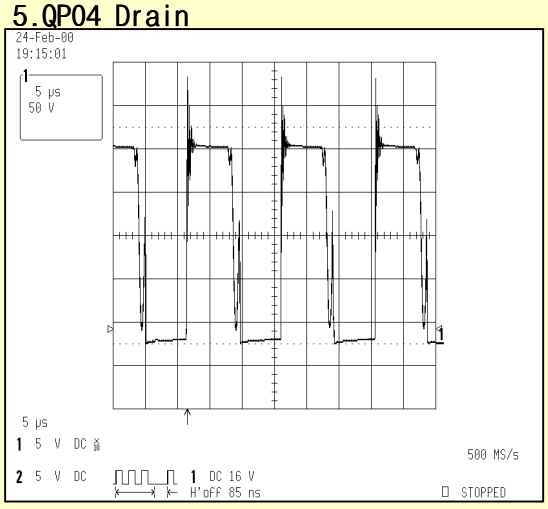
3.ICP01 PIN4



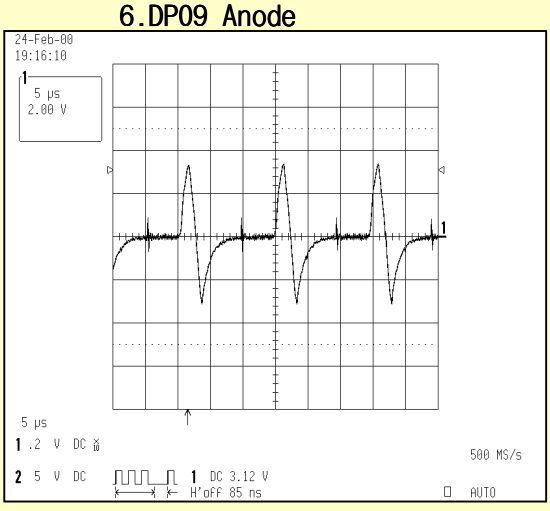
4.ICP01 PIN6



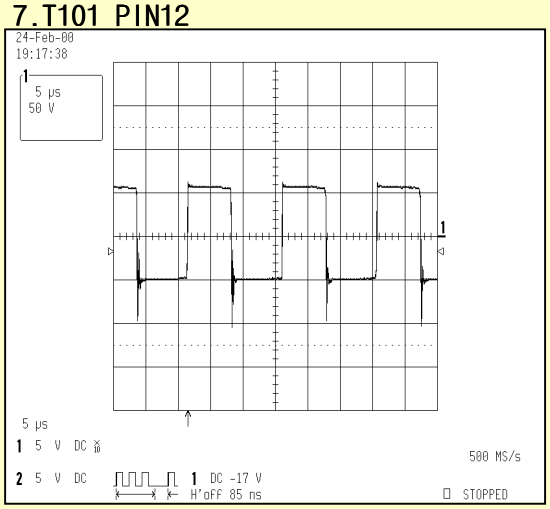
5.QP04 Drain



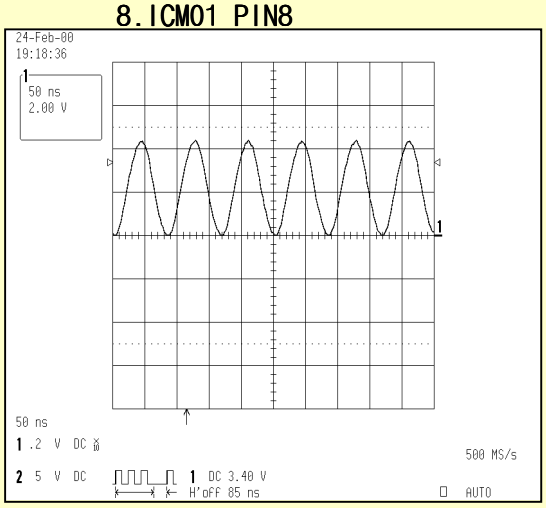
6.DP09 Anode



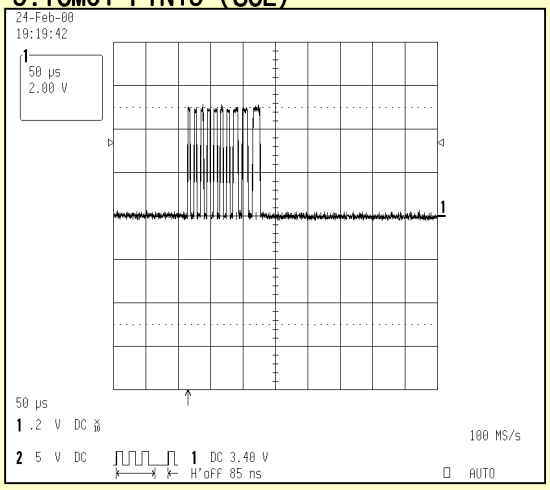
7.T101 PIN12



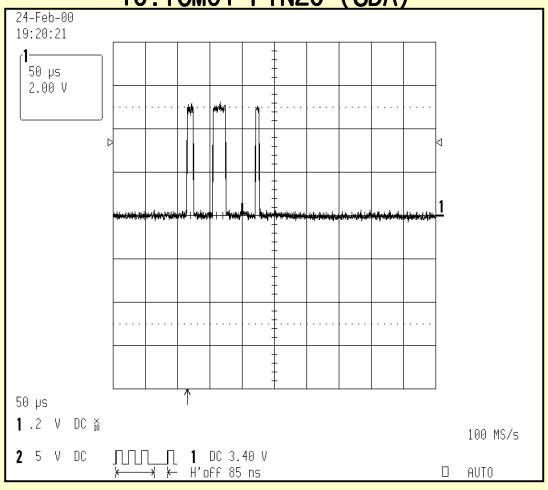
8.ICM01 PIN8



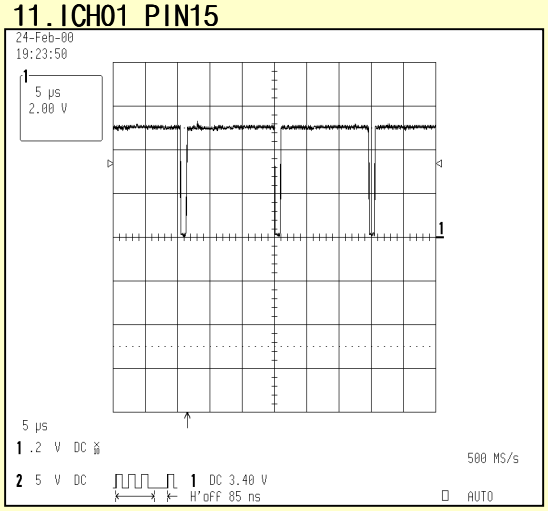
9.ICM01 PIN19 (SCL)



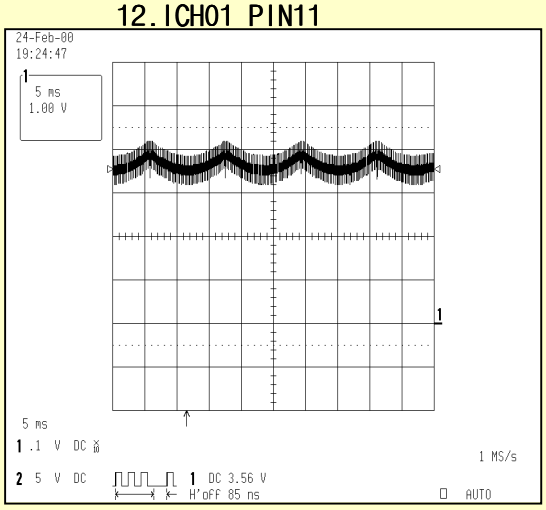
10.ICM01 PIN20 (SDA)



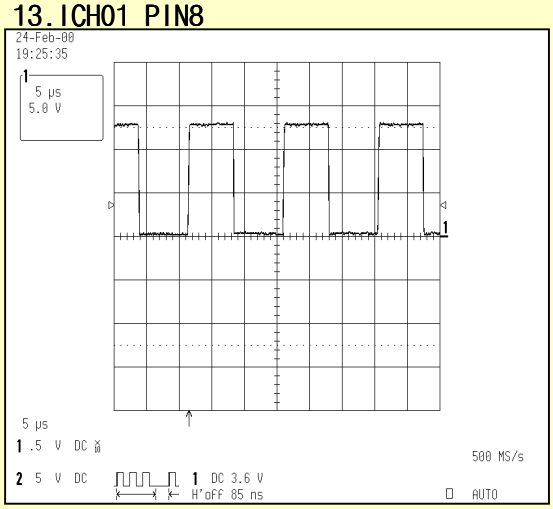
11.ICH01 PIN15



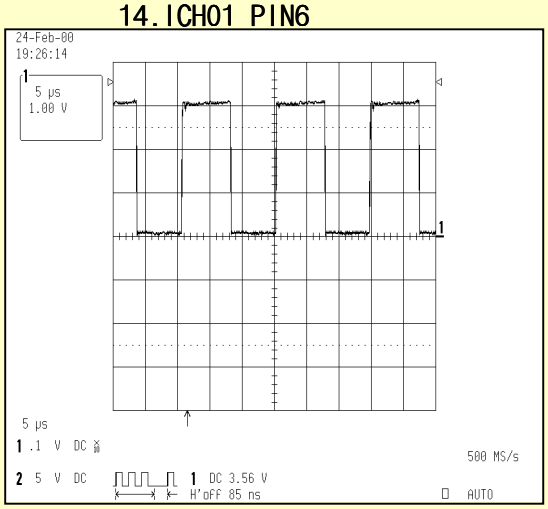
12.ICH01 PIN11



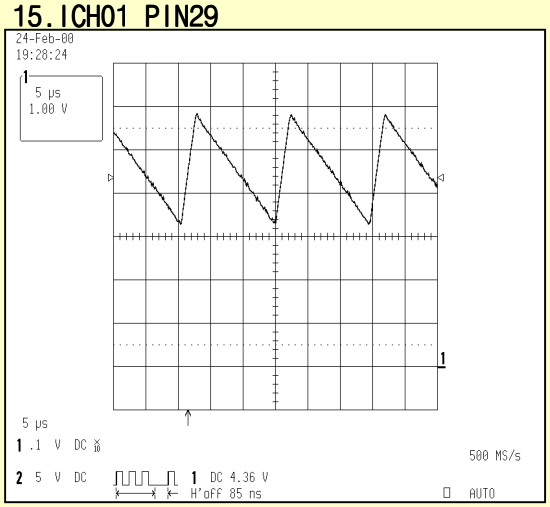
13.ICH01 PIN8



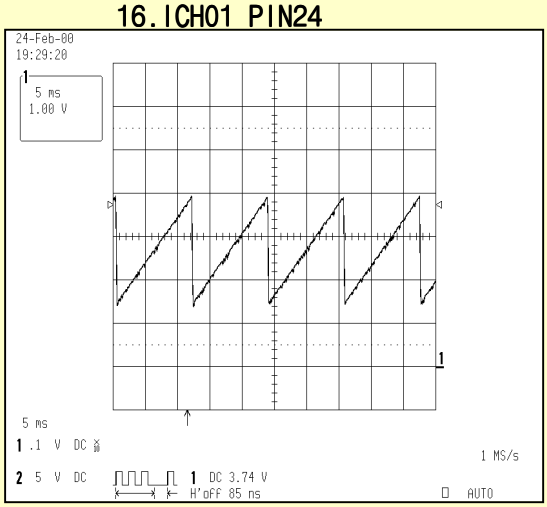
14.ICH01 PIN6



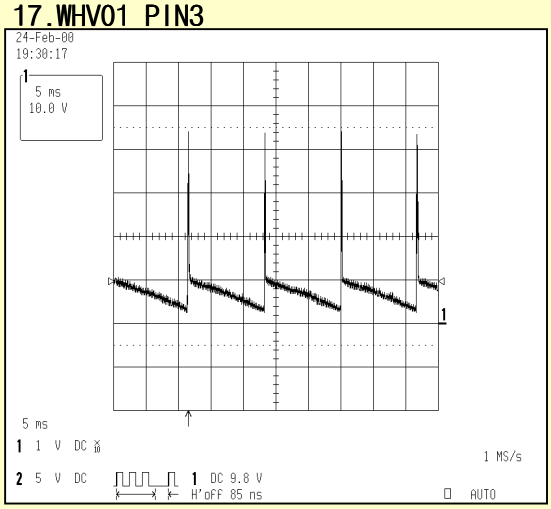
15.ICH01 PIN29



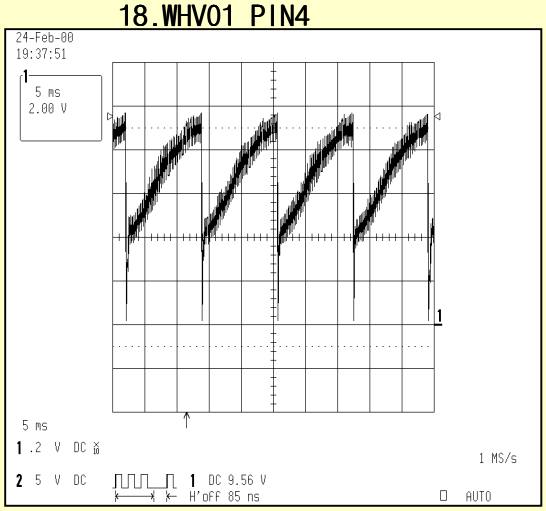
16.ICH01 PIN24



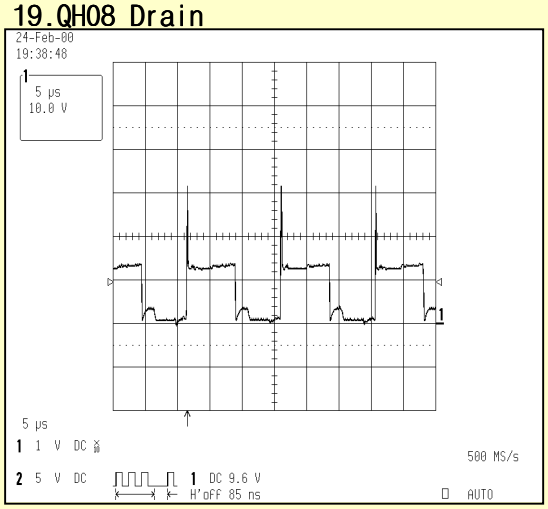
17.WHV01 PIN3



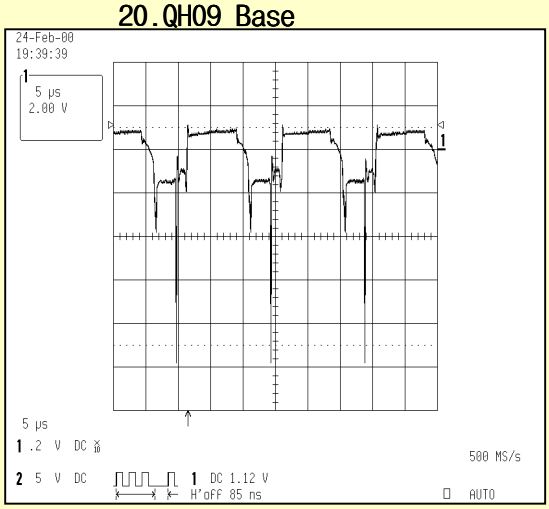
18.WHV01 PIN4



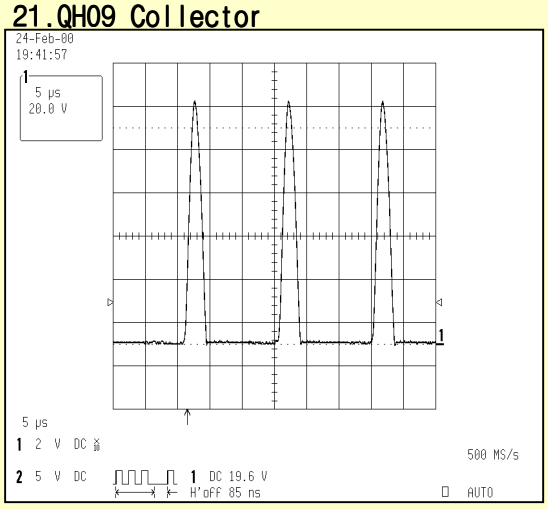
19.QH08 Drain



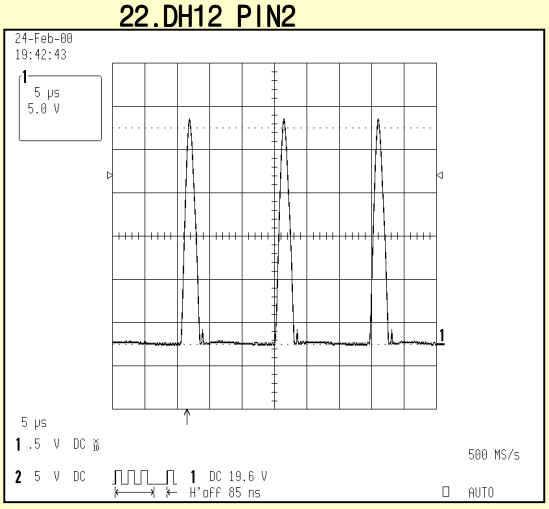
20.QH09 Base



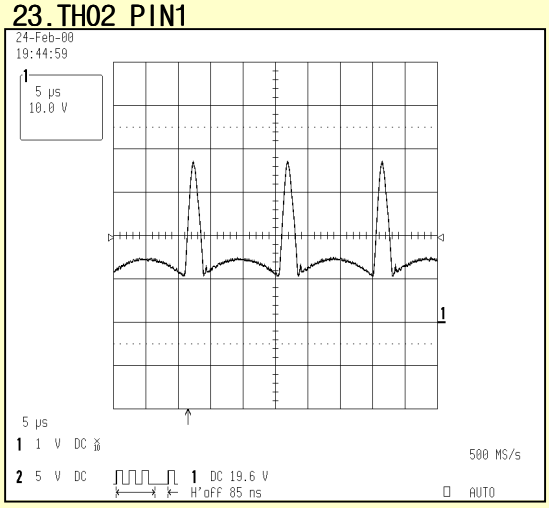
21.QH09 Collector



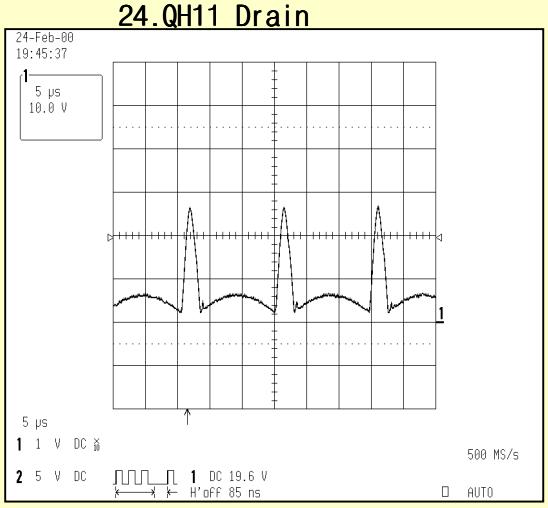
22.DH12 PIN2



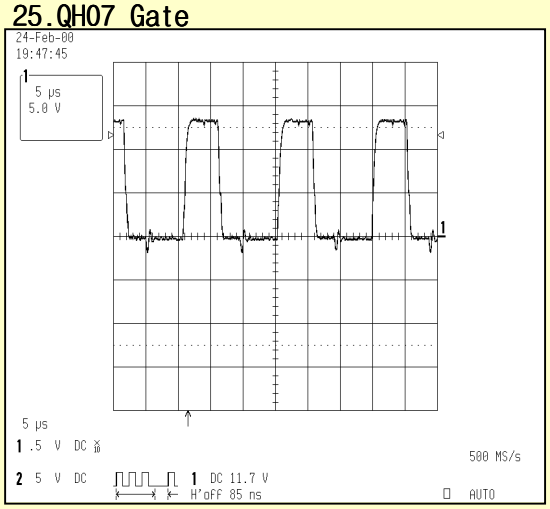
23.TH02 PIN1



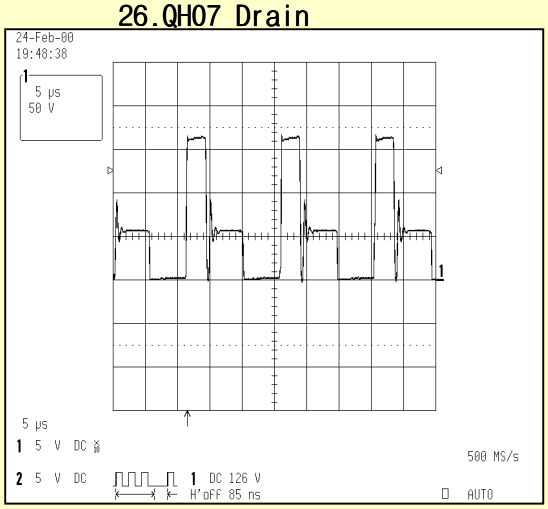
24.QH11 Drain



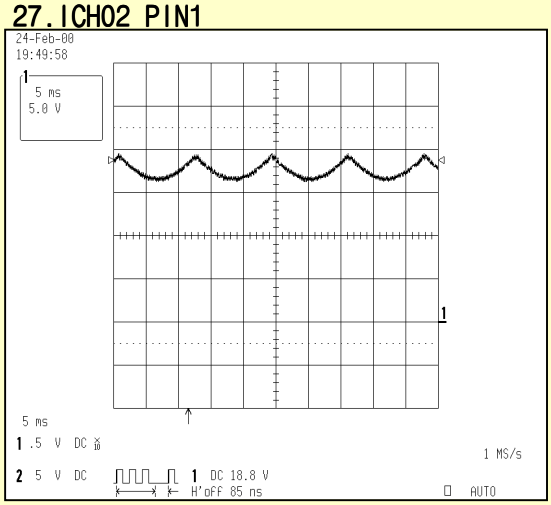
25.QH07 Gate



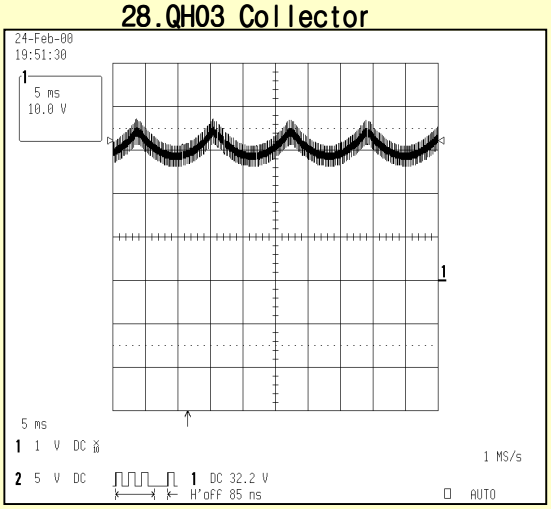
26.QH07 Drain



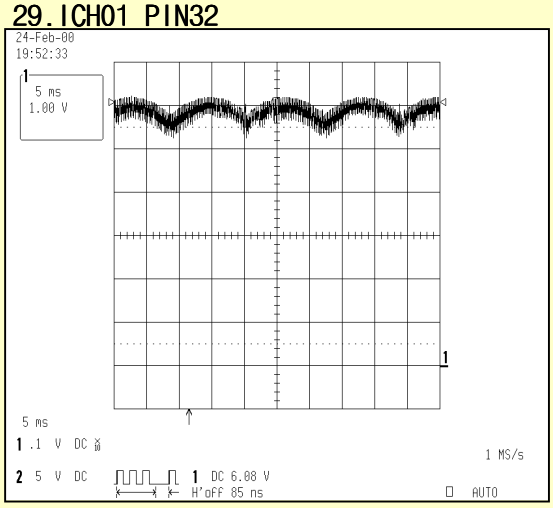
27.ICH02 PIN1



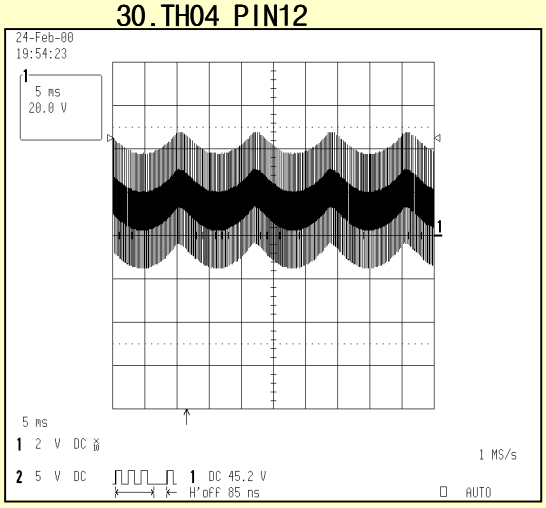
28.QH03 Collector



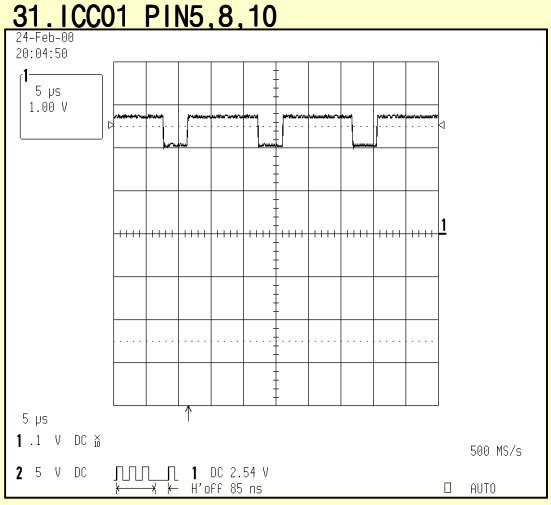
29.ICH01 PIN32



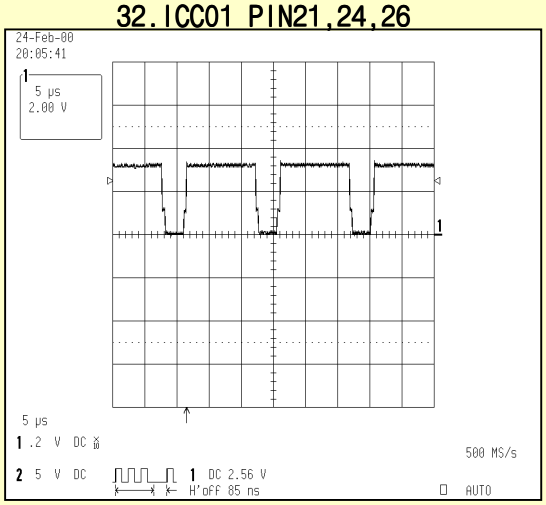
30.TH04 PIN12



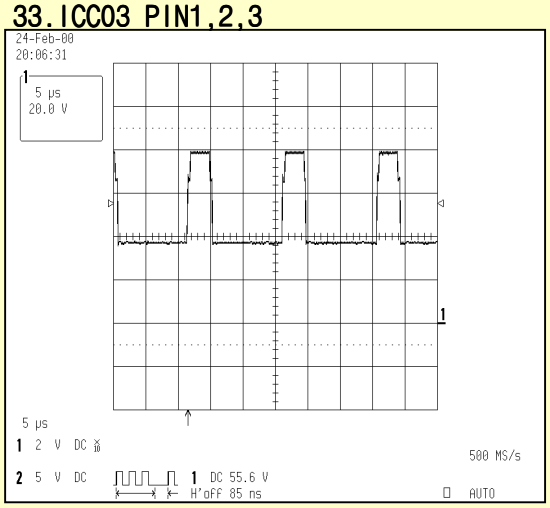
31.ICC01 PIN5,8,10



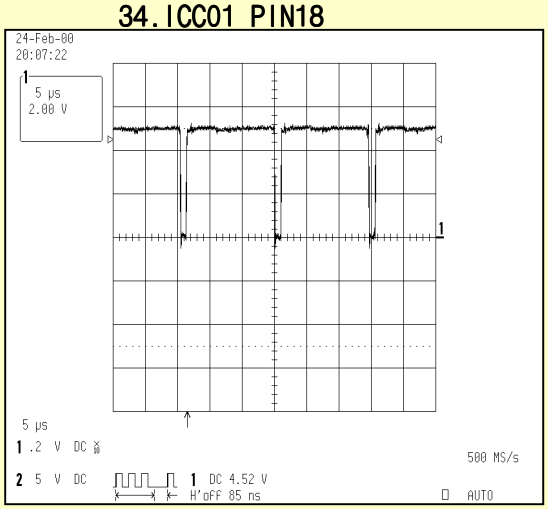
32.ICC01 PIN21,24,26



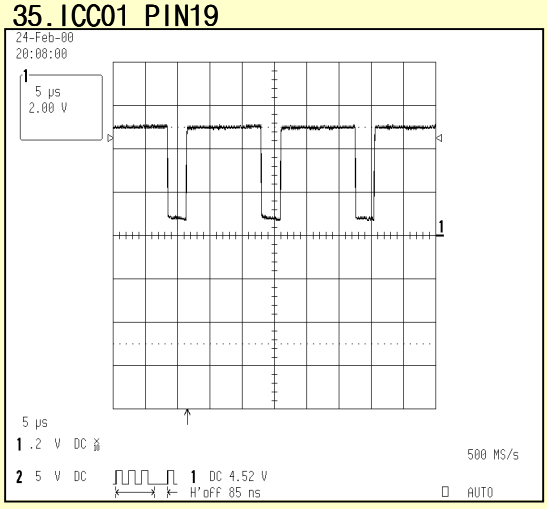
33.ICC03 PIN1,2,3



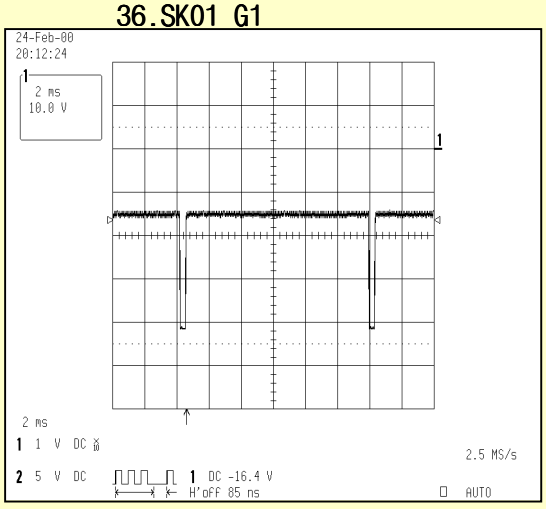
34.ICC01 PIN18

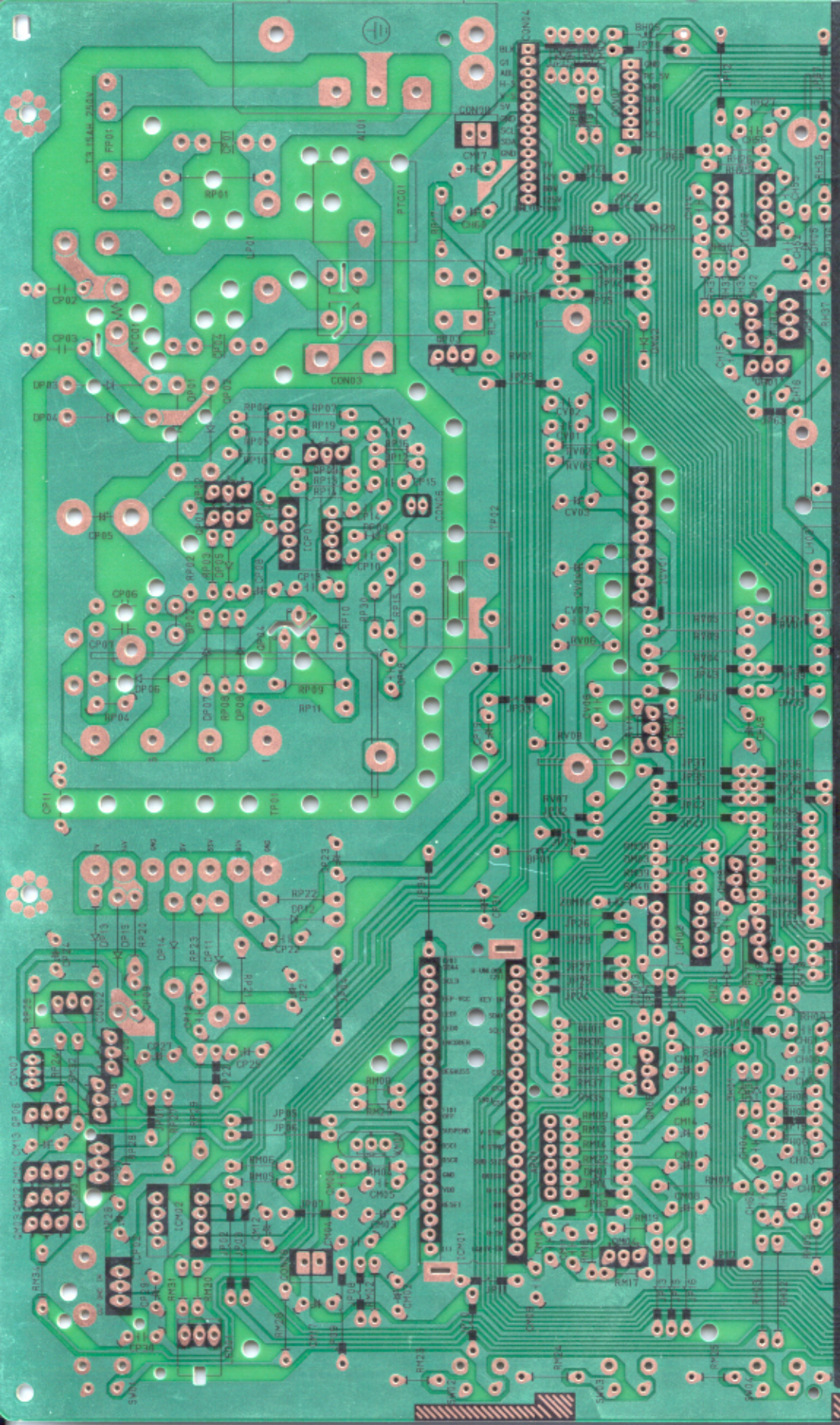


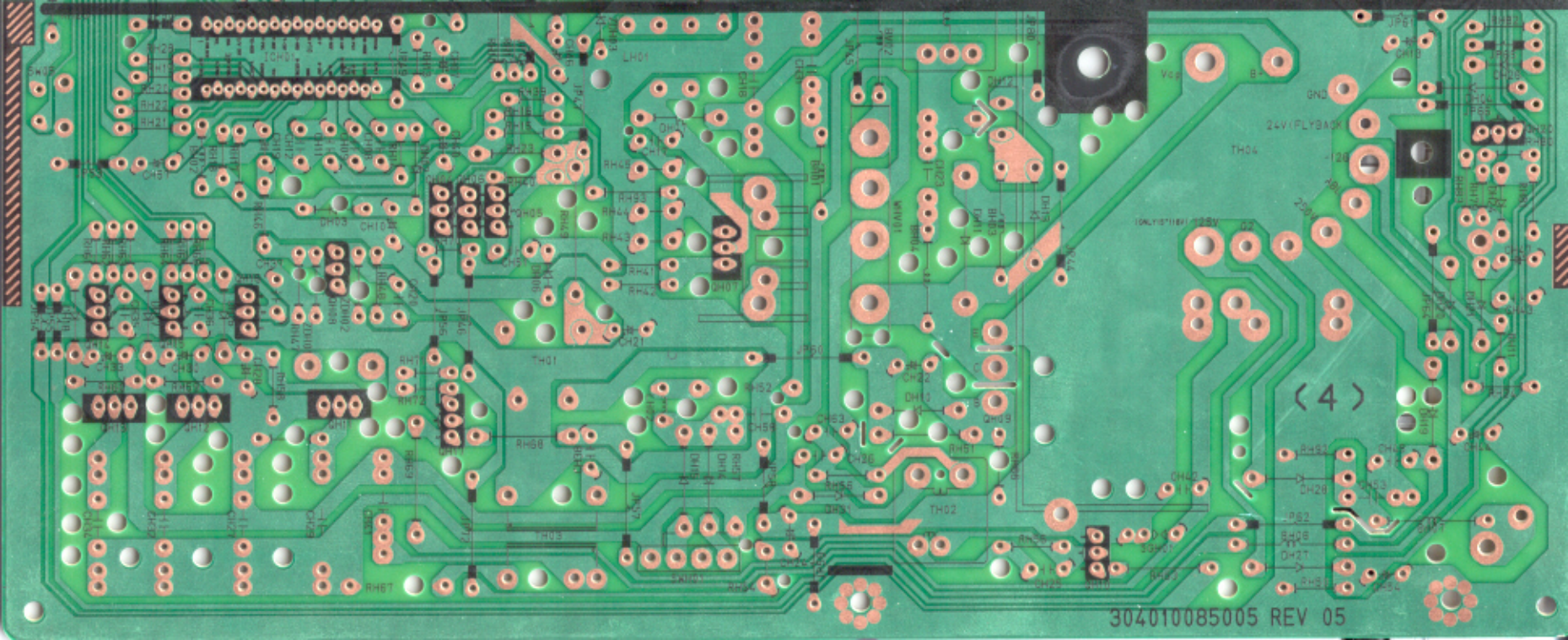
35.ICC01 PIN19

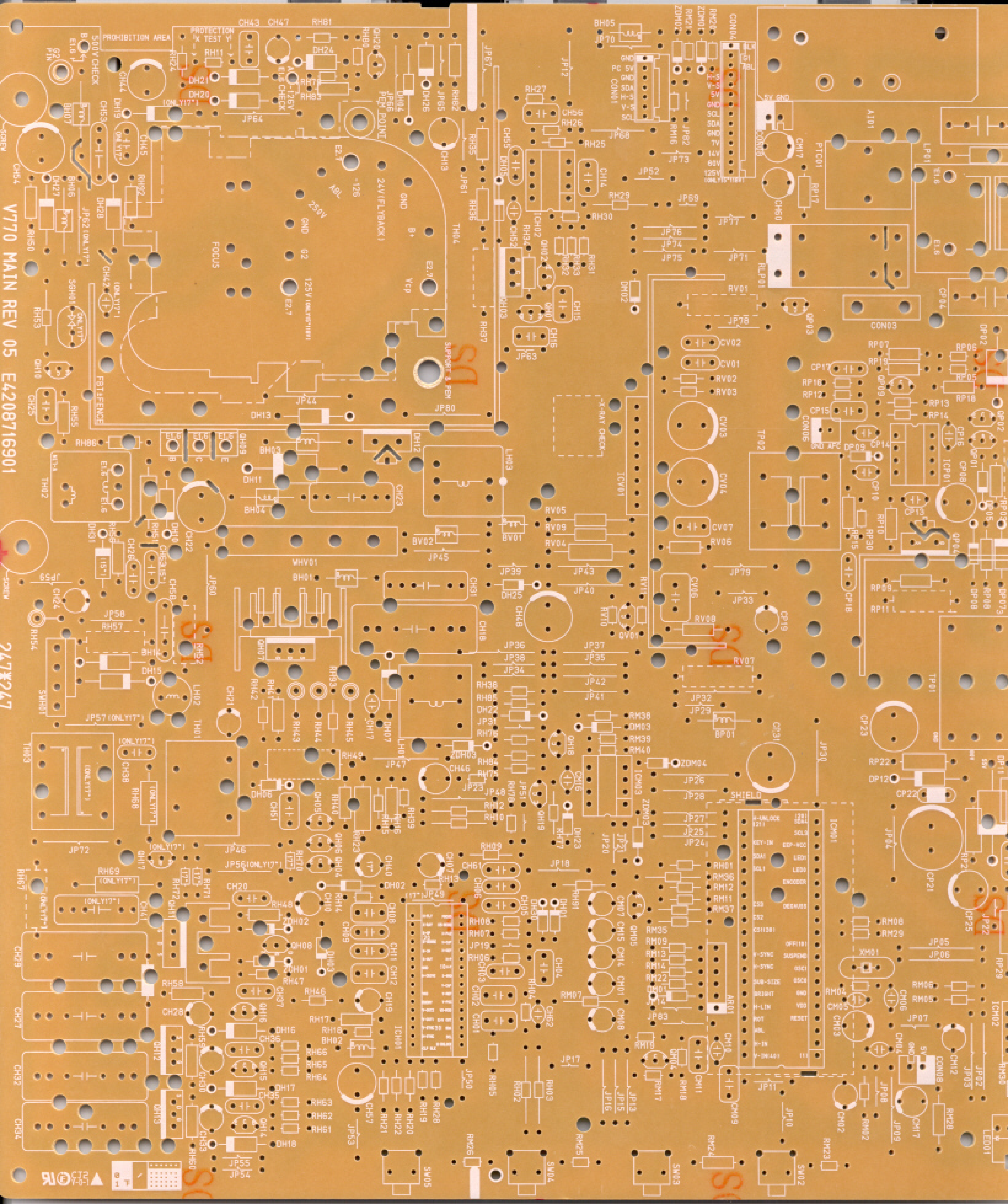


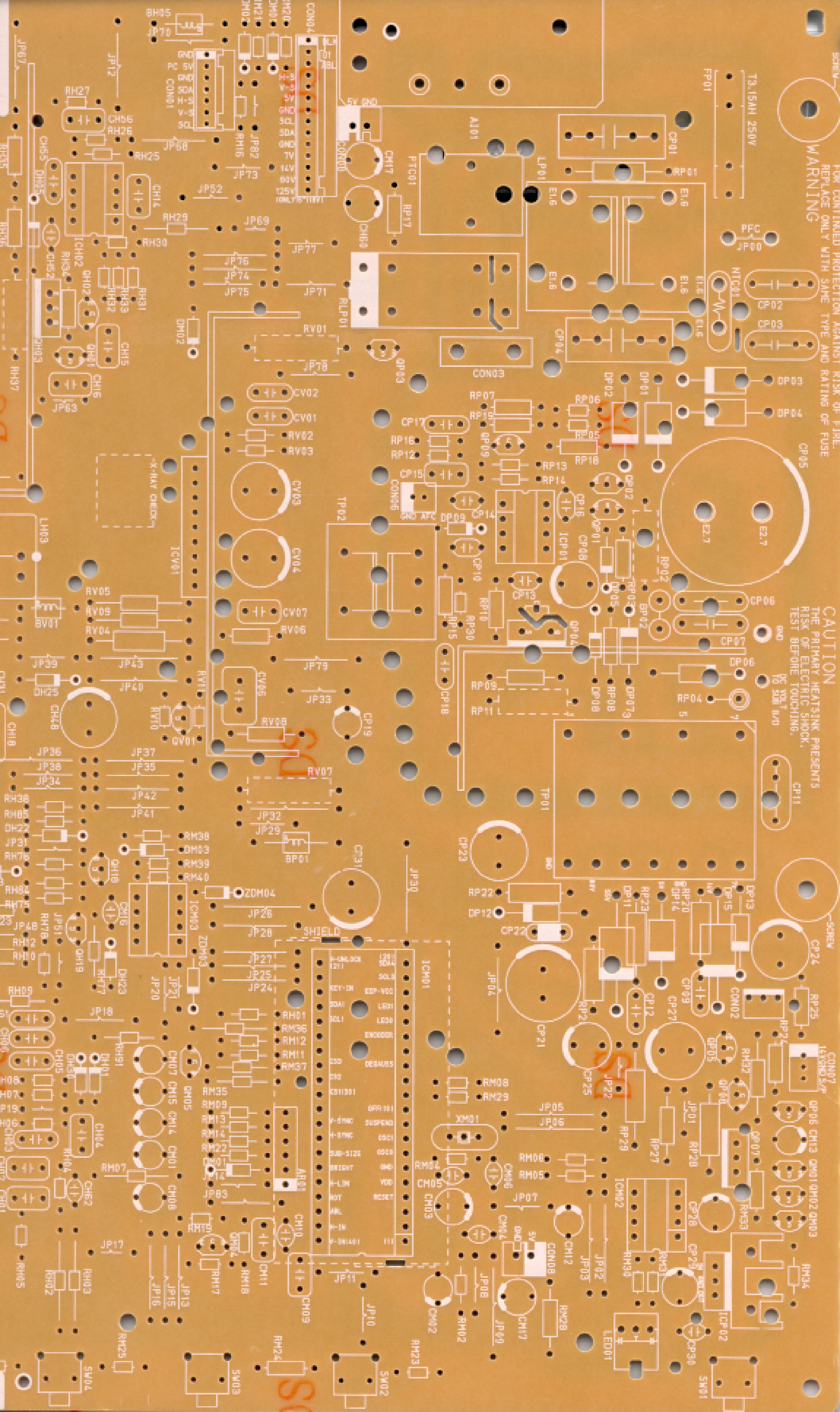
36.SK01 G1

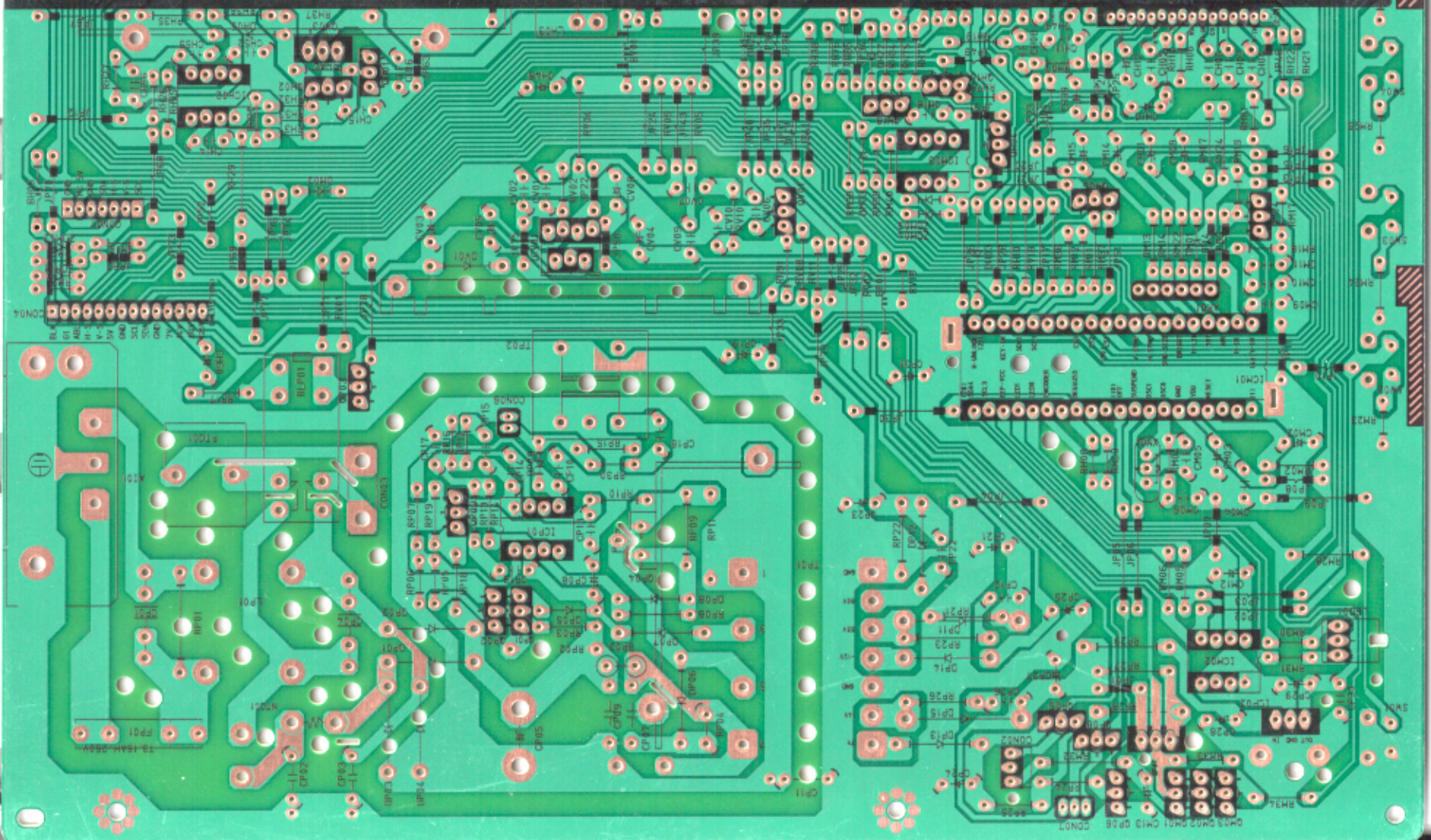


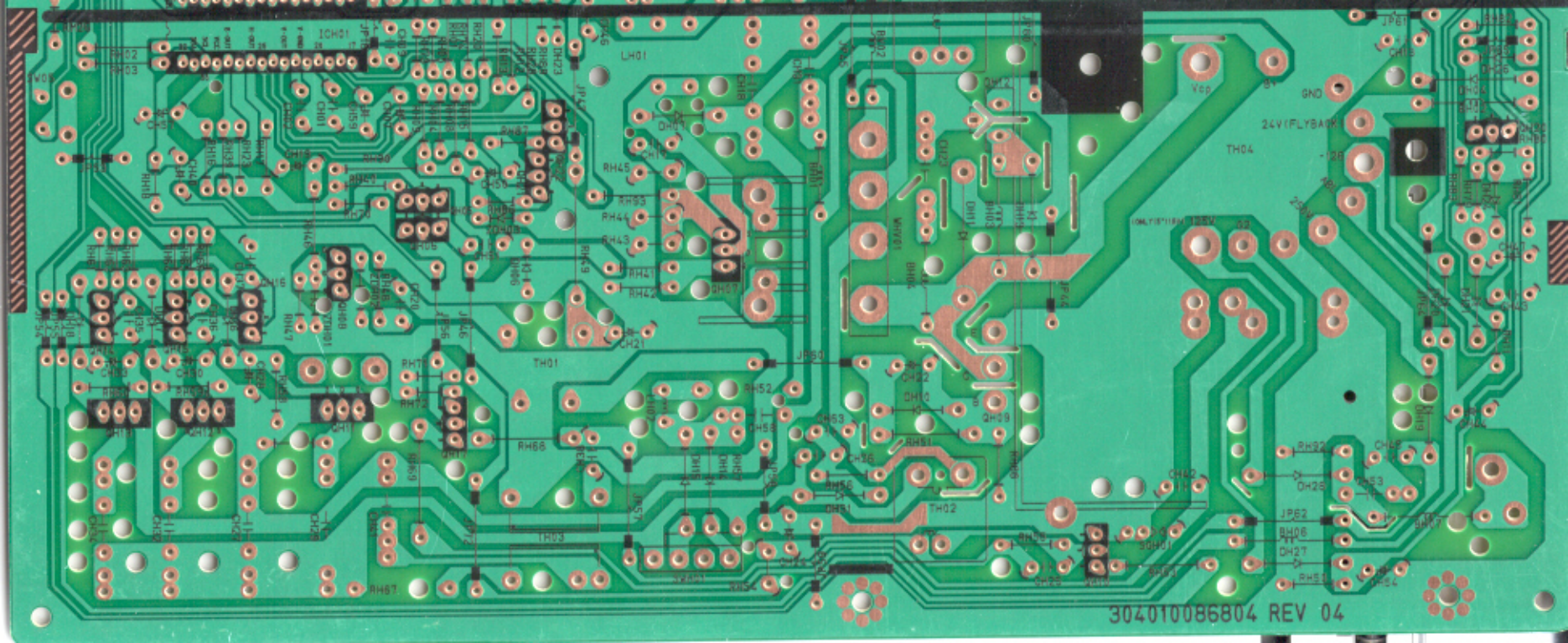


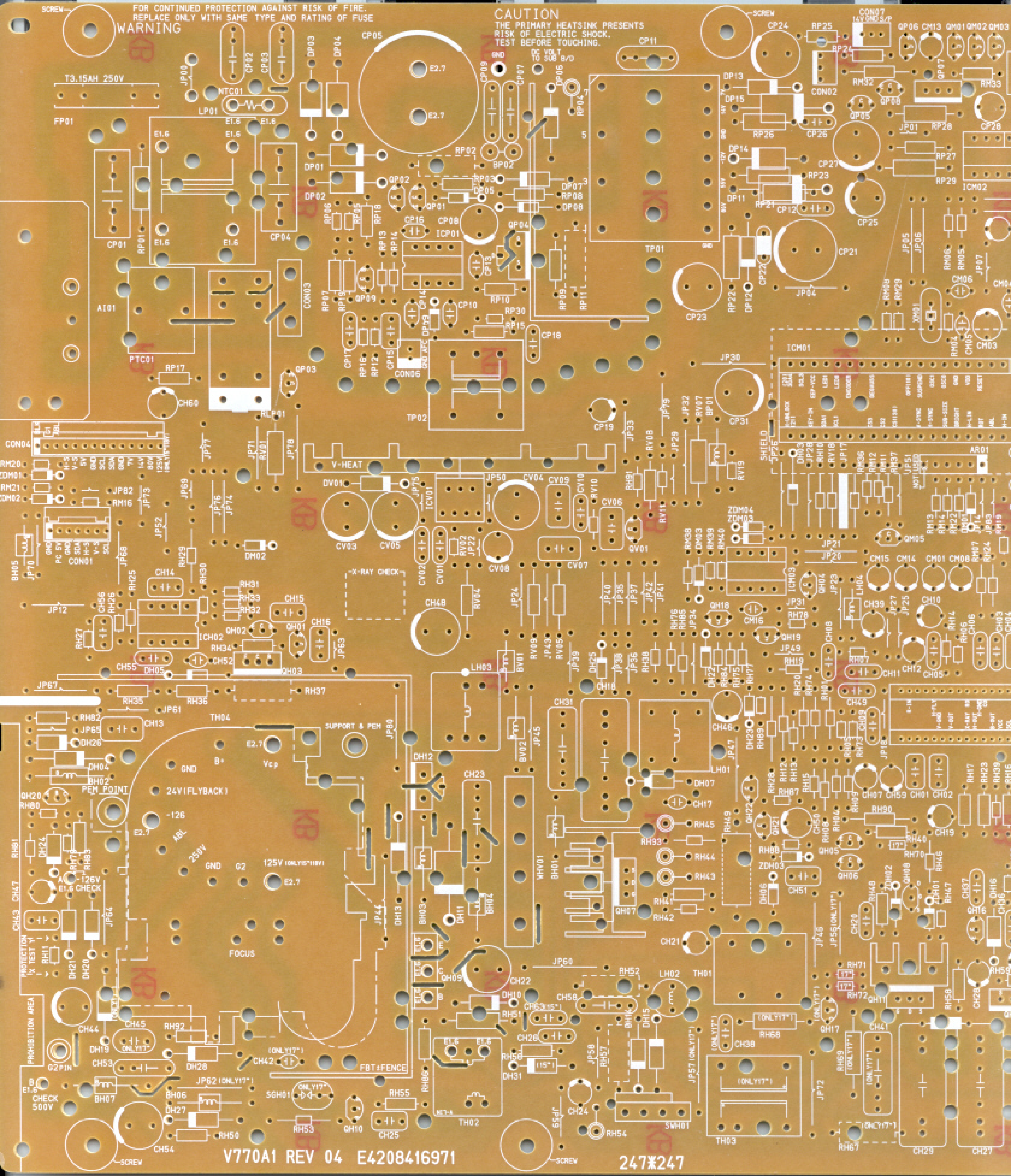

(4)
304010085005 REV 05

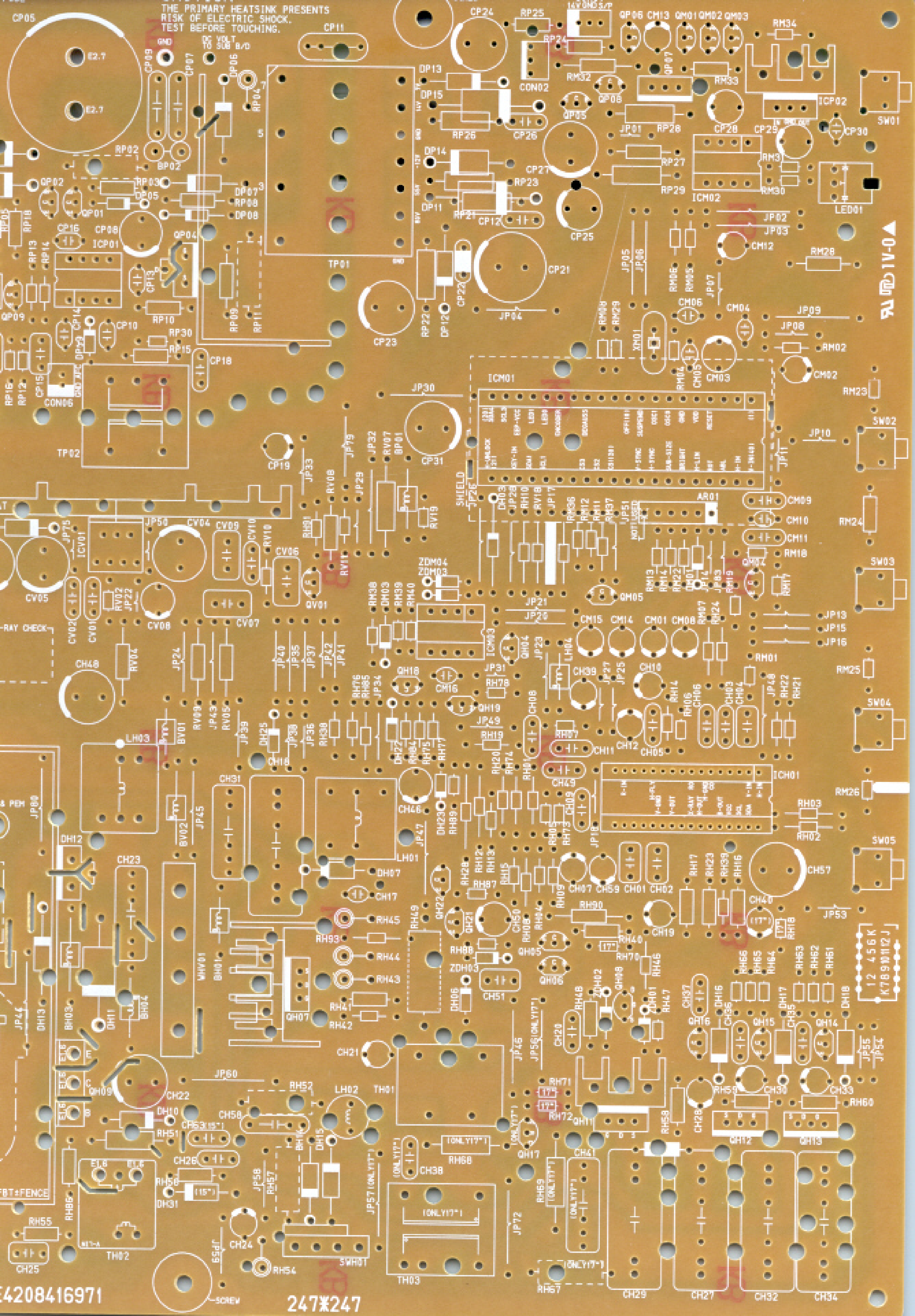

V770 MAIN REV 05 E4208716901
PROHIBITION AREA
500V CHECK
X-RAY CHECK
SHIELD

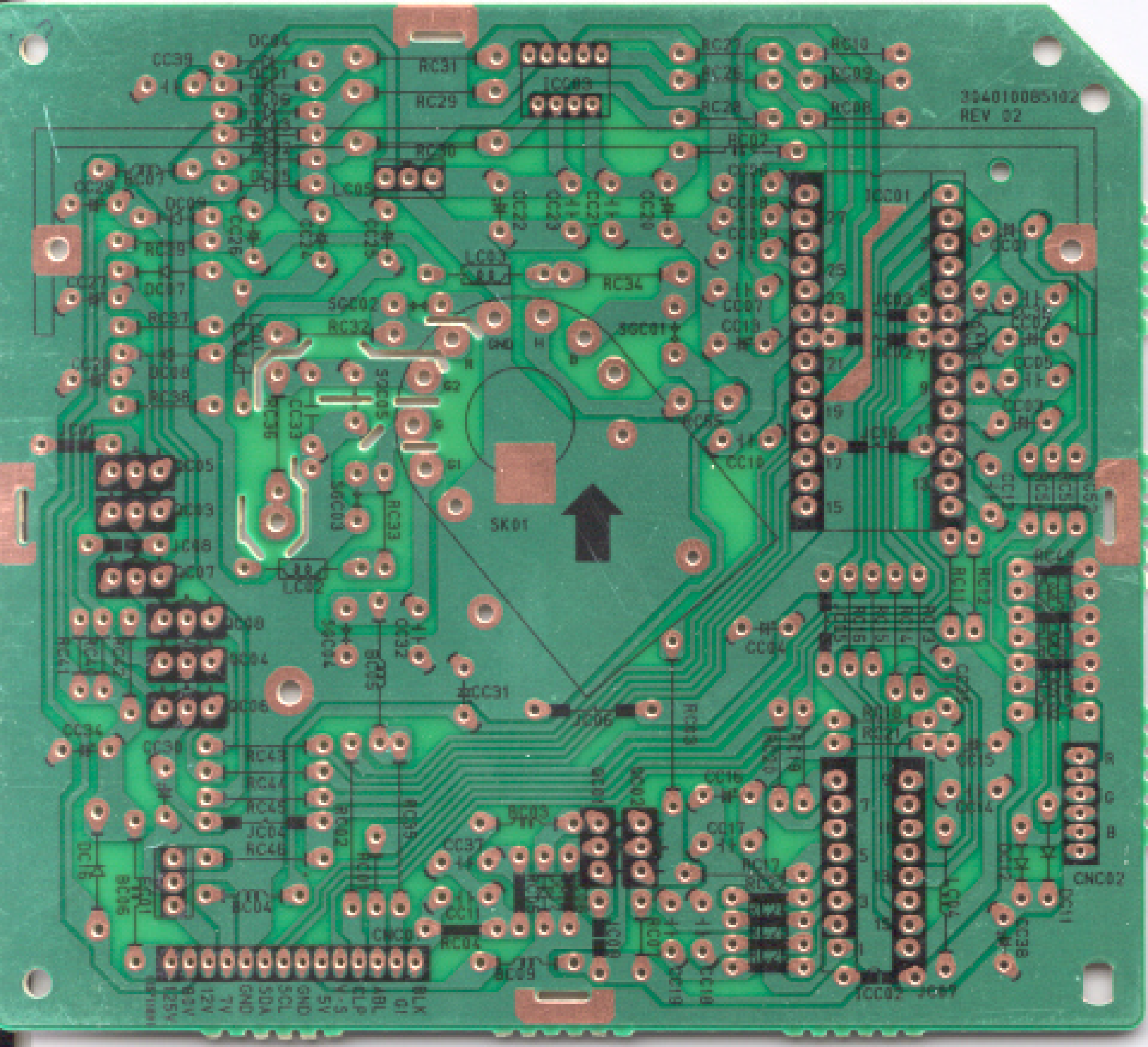

T3.15AH 250V
WARNING
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE
CAUTION
THE PRIMARY HEATSINK PRESENTS
RISK OF ELECTRIC SHOCK.
TEST BEFORE TOUCHING.

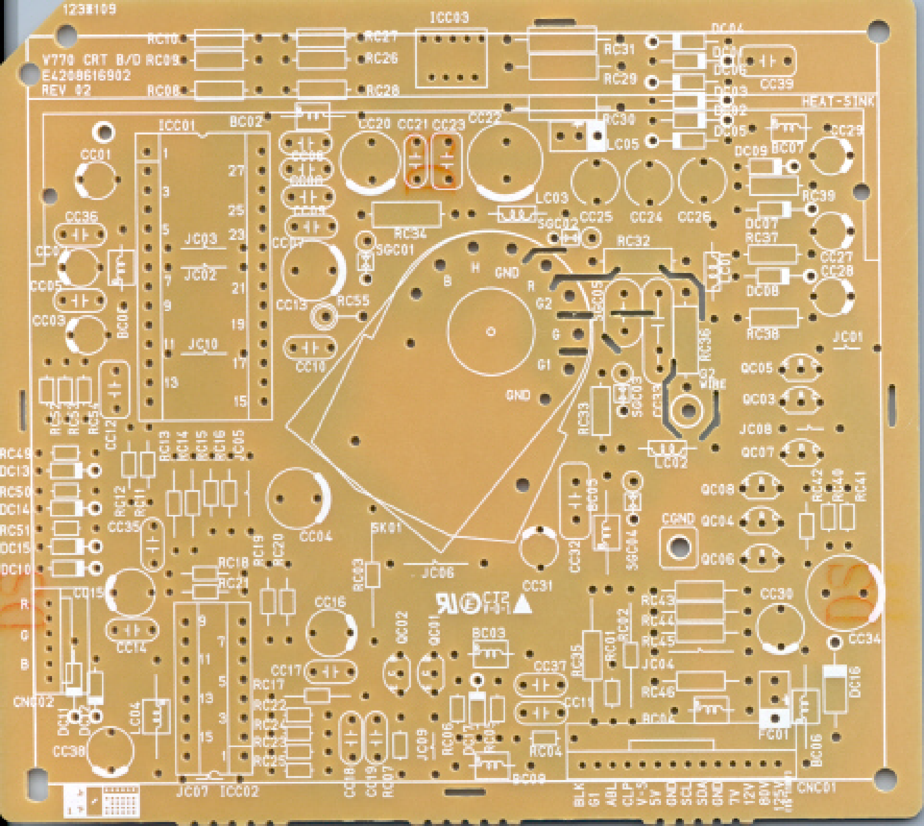


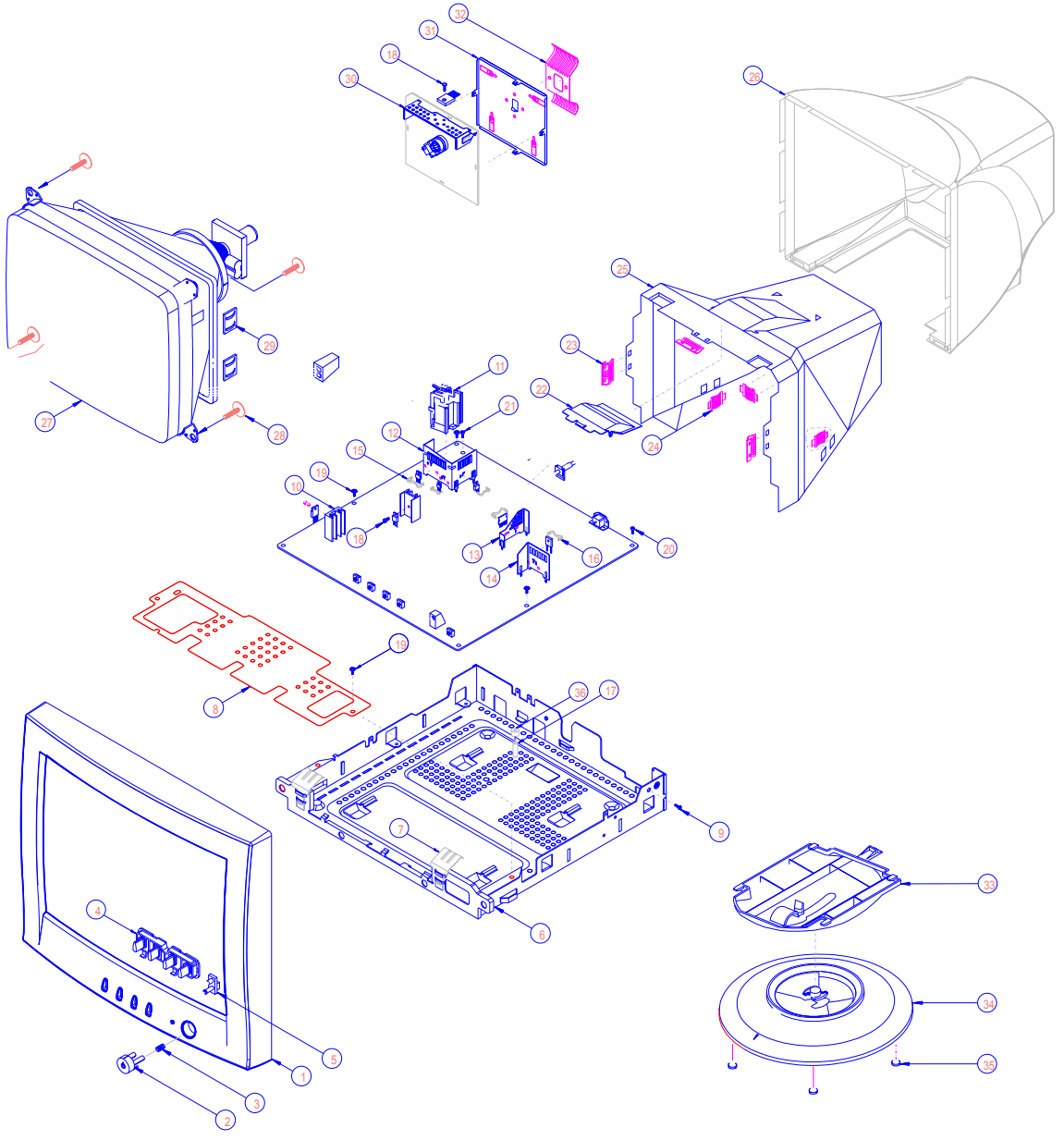

304010086804 REV 04


FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE
WARNING
T3.15AH 250V
CAUTION
THE PRIMARY HEATSINK PRESENTS
RISK OF ELECTRIC SHOCK.
TEST BEFORE TOUCHING.
DC VOLT TO SUB B/D
V-HEAT
X-RAY CHECK
SUPPORT & PEM
PEM POINT
24V(FLYBACK)
FOCUS
FBT+FENCE
PROHIBITION AREA
PROTECTION TEST
CHECK 500V
V770A1 REV 04 E4208416971
247*247


THE PRIMARY HEATSINK PRESENTS
RISK OF ELECTRIC SHOCK.
TEST BEFORE TOUCHING.
DC VOLT
TO SUB B/D
SHIELD
FBT±FENCE
E4208416971
247*247

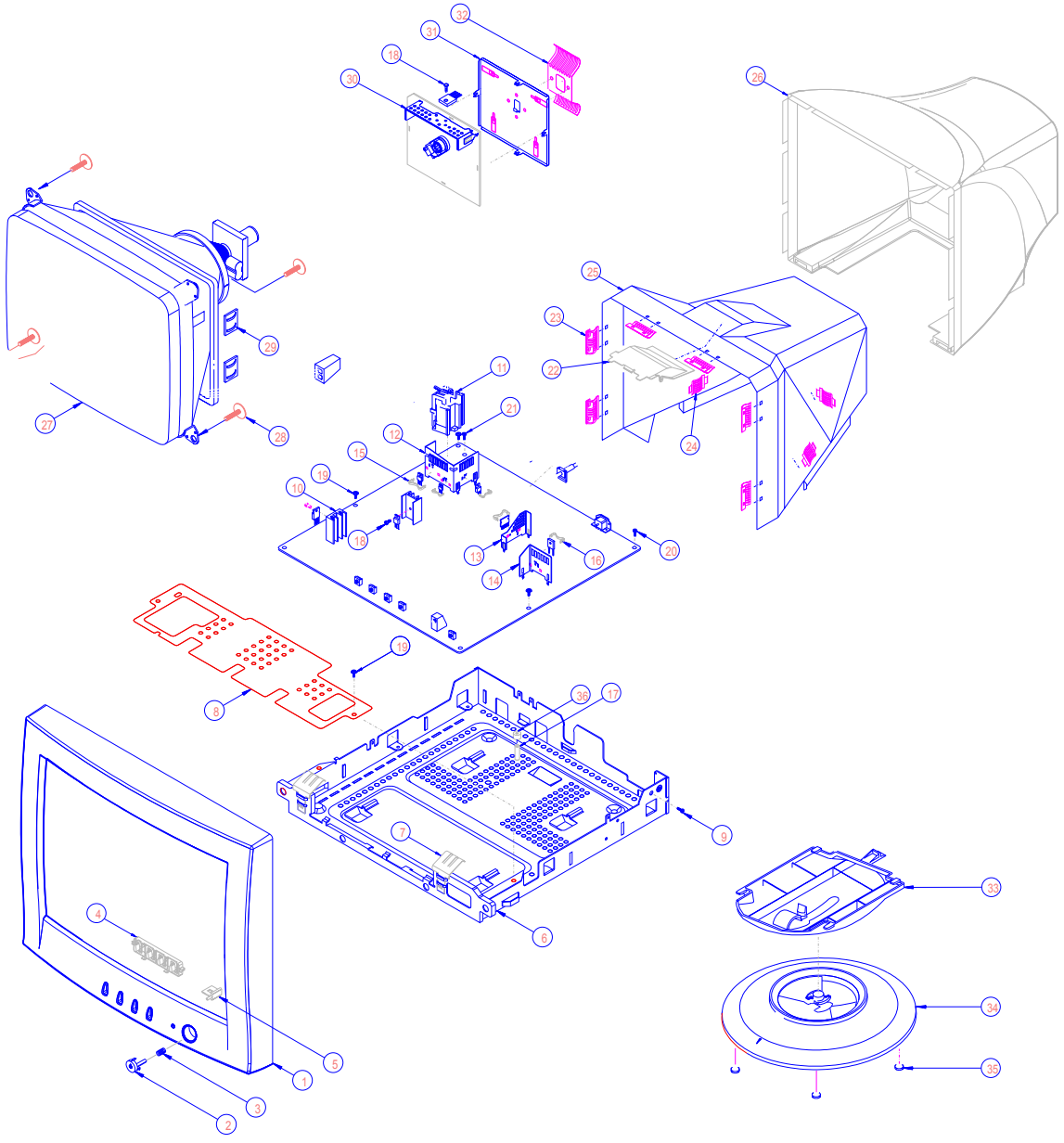

304010085102
REV 02
SK01
CNC02


1238109
V770 CRT B/D
E4208616902
REV 02
ICC01
ICC02
ICC03
BC02
BC03
BC07
BC09
RC08
RC09
RC10
RC26
RC27
RC28
RC29
RC30
RC31
RC32
RC34
RC36
RC37
RC38
RC39
RC55
CC01
CC03
CC04
CC05
CC07
CC10
CC13
CC14
CC15
CC16
CC17
CC20
CC21
CC22
CC23
CC24
CC25
CC26
CC27
CC28
CC29
CC30
CC31
CC32
CC34
CC35
CC36
CC37
CC38
CC39
DC02
DC03
DC04
DC05
DC07
DC08
DC09
DC13
DC14
DC15
DC16
LC02
LC03
LC05
SGC01
SGC02
SGC03
SGC04
QC01
QC02
QC03
QC04
QC05
QC06
QC07
QC08
JC01
JC02
JC03
JC04
JC05
JC06
JC07
JC08
JC09
JC10
SK01
CGND
CN002
CNC01
FC01
HEAT-SINK
G2 WIRE
GND
BLK
G1
ABL
CLP
V-S
5V
GND
SCL
SDA
GND
TV
12V
80V
125V



NO.	PART NO.	PART NAME	DESCRIPTION	QTY	REMARK
36	6262004800	RUBBER PEM	CR 60-70j	1	
35	6262004001	RUBBER FOOT	CR 60-70j	3	
34	6201279200	SWIVEL BASE	PS 94-HB	1	
33	6201279300	SWIVEL UPPER	PS 94-HB	1	
32	6120044300	VIDEO SPRING	SUS 304 T=0.3	1	
31	6120042500	F/SHIELD CRT	SPTE T=0.3	1	
30	6124032500	H/S VIDEO ASS'Y	A1050P T=2.0	1	
29	6200XXXXXX	SCR TOOTH WAS(+) 5*22	NYLON	4	
28	6129033500	SCR TOOTH WAS(+) 5*22	MSZPC	4	
27	3010100140	CRT	CRT	1	
26	6201278900	COVER REAR	ABS 94-HB	1	
25	612043500	SHIELD COVER	AL T=0.3	1	
24	612003700	SHIELD SPRING B	SUS 304 T=0.1	3	
23	6120042800	SHIELD SPRING A	SUS 304 T=0.1	3	
22	6215228600	SHIELD CAP	PC+ABS	1	
21	M11143012012	SCREW BIIN(+) 3*12	MSZPC	1	
20	5004000199	SCR TT/W(+)3*8	MSZPC	1	
19	6129027600	SPECIAL,T.T/W(+)3*8	MSZPC	4	
18	M11143008012	SCREW,BIN(+) M3*8	MSZPC	3	
17	6130020301	PEM	SUM	1	
16	6120043200	SPRING CLIP	SUS 304	3	
15	6120043100	SPRING CLIP	SUS 304	2	
14	6124035100	H/S POWER ASS'Y	A1050P T=1.2	1	
13	6124035000	H/S VERTICAL ASS'Y	A1050P T=1.2	1	
12	6120043400	F/S FBT ASS'Y	A1050P T=1.2	1	
11	3510500076	FBT	FBT	1	
10	6124020508	CHASSIS MAIN	SECC T=1.0	1	
9	M17744006012	SCREW,BIN(+) M4*6	MSZPC	1	
8	6225031400	INSULATOR MCU	PVC 0.5T	1	
7	6120042600	CRT SPRING	PBSH 0.3T	1	
6	6101197300	CHASSIS MAIN	SECC T=1.0	1	
5	6220080800	LED LENS POWER	LUCKY PMMA IF 850	1	
4	6215228000	KNOB TACT	ABS 94-HB	1	
3	B4214000701A	SPRING COM.	SUS 304 WPB	1	
2	6215227900	KNOB POWER	ABS 94-HB	1	
1	6201278800	COVER FRONT	ABS 94-HB	1	

DRAWN BY	PLANNED BY	CHECKED BY	APPROVED BY	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN mm (INCHES) TOLERANCES ARE: LINEAR ± ANGLES ± RADII UNLESS NOTED ±	ANGLE 3rd	TITLE	REV.
H.C.YANG 2000.02.24		M.H.RYU 2000.02.24	J.S.KIM 2000.02.24		SCALE 1/1	EXPLODED VIEW	A
HYUNDAI ELECTRONICS				MDL V570 REF NO.	SIZE A2	DWG NO. B4210010501A	SHEET 1/1



NO.	PART NO.	PART NAME	DESCRIPION	QT'Y	REMARK
36	6262004800	RUBBER PEM	CR 60-70¡	1	
35	6262004001	RUBBER FOOT	CR 60-70¡	3	
34	6201279200	SWIVEL BASE	PS 94-HB	1	
33	6201279300	SWIVEL UPPER	PS 94-HB	1	
32	6120044300	VIDEO SPRING	SUS 304 T=0.3	1	
31	6120042500	F/SHIELD CRT	SPTE T=0.3	1	
30	6124032500	H/S VIDEO ASS'Y	A1050P T=2.0	1	
29	6200XXXXXX	D-COIL HOLDER	NYLON	4	
28	6129033500	SCR TOOTH WAS(+) 5*22	MSZPC	4	
27	3010100140	CRT	CRT	1	
26	6201279100	COVER REAR	ABS 94-HB	1	
25	612042700	SHIELD COVER	AL T=0.3	1	
24	612003700	SHIELD SPRING B	SUS 304 T=0.1	3	
23	6120042800	SHIELD SPRING A	SUS 304 T=0.1	6	
22	6215227800	SHIELD CAP	PC+ABS	1	
21	M11143012012	SCREW BIIN(+) 3*12	MSZPC	1	
20	6129027600	SPECIAL,T.T/W(+)3*8	MSZPC	4	
19	5004000199	SCR TT/W(+)3*8	MSZPC	1	
18	M11143008012	SCREW,BIN(+) M3*8	MSZPC	3	
17	6130020301	PEM	SUM	1	
16	6120043200	SPRING CLIP	SUS 304	3	
15	6120043100	SPRING CLIP	SUS 304	2	
14	6124035100	H/S POWER ASS'Y	A1050P T=1.2	1	
13	6124035000	H/S VERTICAL ASS'Y	A1050P T=1.2	1	
12	6120043400	F/S FBT ASS'Y	A1050P T=1.2	1	
11	3510500076	FBT	FBT	1	
10	6124020508	CHASSIS MAIN	SECC T=1.0	1	
9	M17744006012	SCREW,BIN(+) M4*6	MSZPC	1	
8	6225031400	INSULATOR MCU	PVC 0.5T	1	
7	6120042600	CRT SPRING	PBSH 0.3T	1	
6	6101197300	CHASSIS MAIN	SECC T=1.0	1	
5	6220080700	LED LENS POWER	LUCKY PMMA IF 850	1	
4	6215227700	KNOB CONTROL	ABS 94-HB	1	
3	B4214000701A	SPRING COM.	SUS 304 WPB	1	
2	6215227600	KNOB POWER	ABS 94-HB	1	
1	6201279000	COVER FRONT	ABS 94-HB	1	

DRAWN BY	PLANNED BY	CHECKED BY	APPROVED BY
OH.SE.HOON		S.I.KIM	J.S.KIM
2000.03.17		2000.03.18	2000.03.18

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN mm (INCHES) TOLERANCES ARE, LINEAR ± ANGLES ± RADII UNLESS NOTED, ±

MDL V770

REF NO.

ANGLE 3rd

SCALE 1/1

SIZE A2

TITLE EXPLODED VIEW

REV A

DWG NO. B4210010601A

SHEET 1/1

HYUNDAI ELECTRONICS