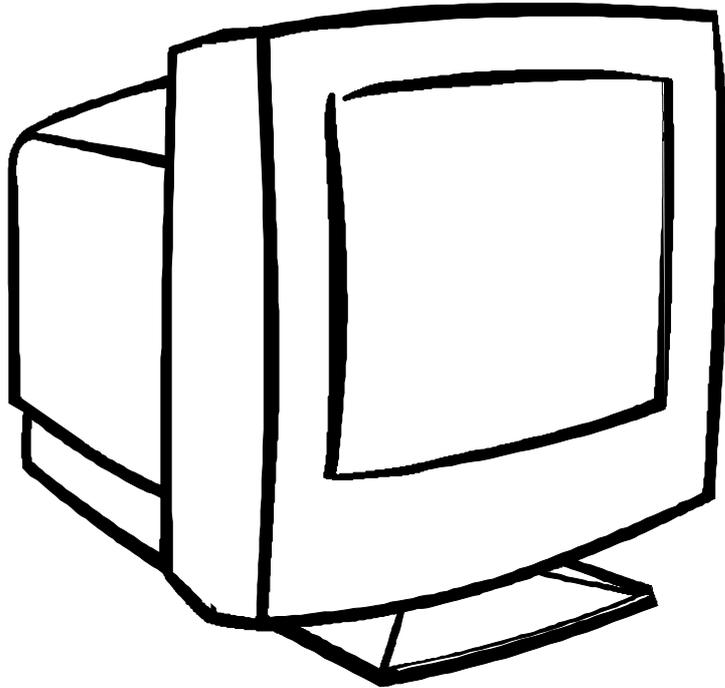


# Service Manual



**Model: Belinea 103052**  
**Art. No. 121721**

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## Table of Contents

CONTENTS	PAGE
<i>Sections</i>	
1. Safety Precaution _____	1
2. X-Ray Radiation Precaution _____	2
3. General Information _____	3
4. Control Description _____	4
5. Video Input Signal _____	4
6. Timing Table _____	5
7. Video Input Terminal _____	6
8. Connecting with External Equipment _____	7
9. Theory of Operation _____	8
10. Trouble Shooting _____	10
11. Adjustment Method _____	12
12. Specification _____	15
13. Critical Parts Specification _____	16
14. Block Diagram _____	37
15. Part List _____	38
16. Circuit Diagram _____	57
17. Wave Form _____	61
18. Exploded View _____	70

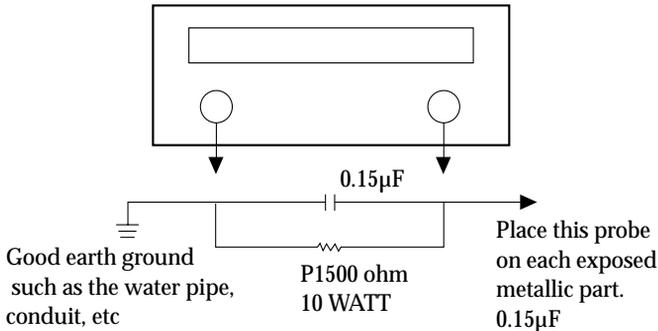
## Safety Precaution

### 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 transformer 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  $\mu\text{F}$  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.

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## 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  $26.0KV \pm 0.5KV$  at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not (under any circumstances) exceed 29KV. 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.

### PRODUCT 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 do 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 critical components of safety & CDRH.

Therefore, for continued protection, replacement parts must be used which is used in original PCB ASS'Y.

## General Information

### 1. Description

This Belinea 103052, 17" (15.8" viewable) color display monitor is operated in R, G, B, drive mode input.

### 2. Operating instructions

#### 2-1. External instructions

#### 2-2. Front

Power Switch, Menu, Select, Down(▼), Up(▲), Power LED.

#### 2-3. Rear

Input connection, (AC & SIGNAL CABLE)

#### 2-4. Service Instruction(internal controls)

High-Voltage, Focus

#### 2-5. OSD Controls

Contrast, Brightness, H/V Position, H/V Size, Pincushion, Trapezoid, Parallelogram, Pin Balance, Corner Top/BTM, H/V Moire, Degauss, Color Control, Recall, OSD H/V Position, H/V Linearty, Language, Information, Rotation

### 3. Electrical Characteristics

#### 3-1. 100-240 Volt 60Hz/50Hz for use all over the world.

This power supply is a 90Watt multi output SMPS for monitor.

#### 3-2. Video

Input : 0.7V p-p analog signal (at 75 ohm terminated)

Bandwidth : 205MHz (Max. Dot Rate)

Polarity : Positive

#### 3-3. Horizontal Drive

Level : TTL High : 2.4V min

Low : 0.4V max

Polarity : Negative or Positive

Frequency : 30KHz~97KHz

Timing Limits : Pulse width ( $0.5\mu s \leq T_{hp} \leq 5.5\mu s$ )

#### 3-4. Vertical Drive

Level : TTL High : 2.4V min

Low : 0.4V max

Polarity : Negative or Positive

Frequency : 50Hz~150Hz

Timing Limits : Pulse width ( $0.02ms \leq T_{vp} \leq 0.2ms$ )

### 4. Model Description

Tco'03

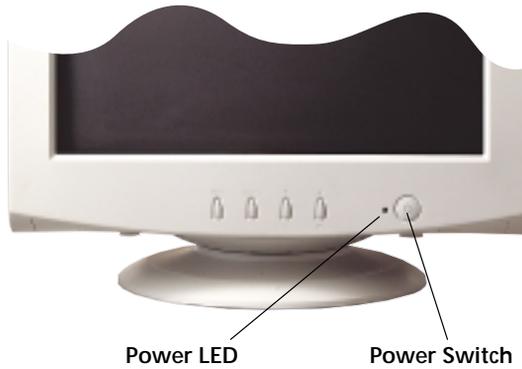
CRT Type : - SAMSUNG SDI

M41QAQ261X132(T4)

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# Control Description

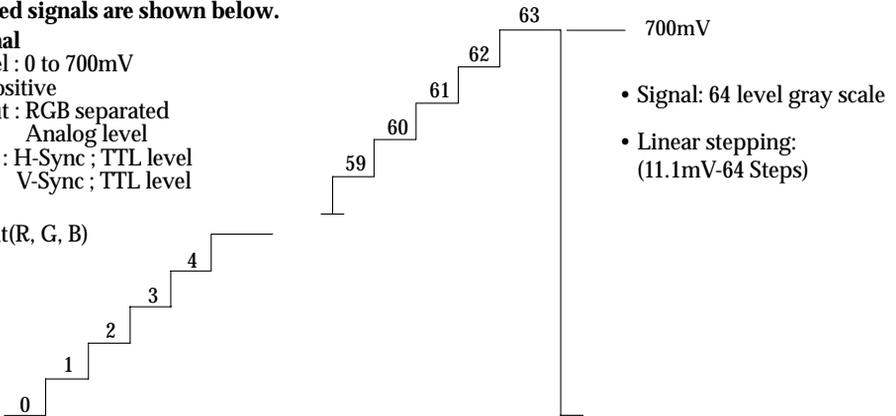
Front View



## Video Input Signal

Recommended signals are shown below.

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

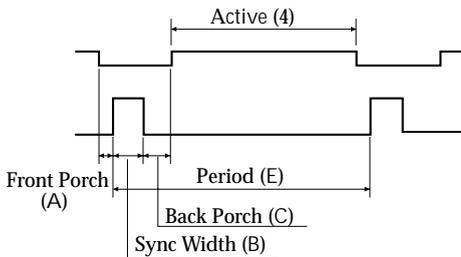


### Timing table

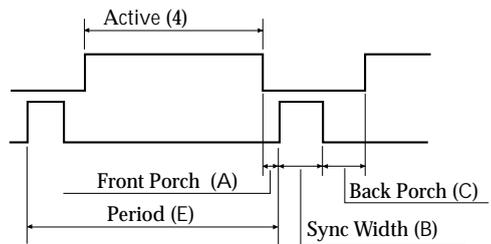
Timing	1	2	3	4	5	6	7	8	9	10	11	12
Standard	Industry	VESA	VESA	VESA	MAC							
Data Pixel	640	640	720	800	800	1024	1024	1024	1280	1280	1600	1152
Data Line	480	480	400	600	600	768	768	768	1024	1024	1200	864
H-Freq KHz	31.469	37.500	31.467	46.875	53.674	60.023	68.667	80.741	79.976	91.146	93.750	68.681
F-Freq Hz	59.942	75.000	70.082	75.000	85.061	75.029	84.997	99.803	75.025	85.024	75.000	75.062
Pix Rate	25.175	31.500	28.320	49.500	56.250	78.750	94.500	109.00	135.000	157.500	202.500	100
Hor.A(us)	0.636*	0.508	0.616	0.323	0.569	0.203	0.508	0.449	0.119	0.406	0.316	0.320
Hor.B(us)	3.813	2.032	3.813	1.616	1.138	1.219	1.016	1.057	1.067	1.016	0.948	1.280
Hor.C(us)	1.907*	3.810	1.907	3.232	2.702	2.235	2.201	1.491	1.837	1.422	1.501	1.440
Hor.D(us)	25.422	20.317	25.442	16.162	14.222	13.003	10.836	9.39	9.481	8.127	7.901	11.520
Hor.E(us)	31.778	26.667	31.778	21.333	18.631	16.660	14.561	12.387	12.504	10.971	10.667	14.560
Vert.A(us)	0.381	0.027	0.382	0.021	0.019	0.017	0.015	0	0.013	0.011	0.011	0.044
Vert.B(us)	0.064	0.080	0.064	0.064	0.056	0.050	0.044	0.037	0.038	0.033	0.032	0.044
Vert.C(us)	1.048#	0.427	1.111	0.448	0.503	0.466	0.524	0.471	0.475	0.483	0.491	0.568
Vert.D(us)	15.253	12.800	12.711	12.800	11.179	12.795	11.183	9.513	12.804	11.215	12.800	12.667
Vert.E(us)	16.683	13.333	14.268	13.333	11.756	13.328	11.765	10.021	13.329	11.761	13.333	13.322
Sync Pol	- / -	- / -	- / +	+ / +	+ / +	+ / +	+ / +	+ / +	+ / +	+ / +	+ / +	- / -

Note : \* Indicates horizontal front / back porch includes borders  
 # Indicates vertical front / back porch includes borders

▪ H-Sync



▪ V-Sync



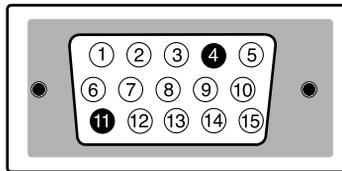
# Video Input Terminal

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

**Pin Description**

PIN NO.	SIGNAL	SEPERATE SYNC
1		RED
2		GREEN
3		BLUE
4		NC
5		DDC RETURN
6		RED GROUND
7		GREEN GROUND
8		BLUE GROUND
9		+5V (NOT USED)
10		LOGIC GROUND
11		NC
12		SDA
13		H-SYNC
14		V-SYNC(VCLK)
15		SCL

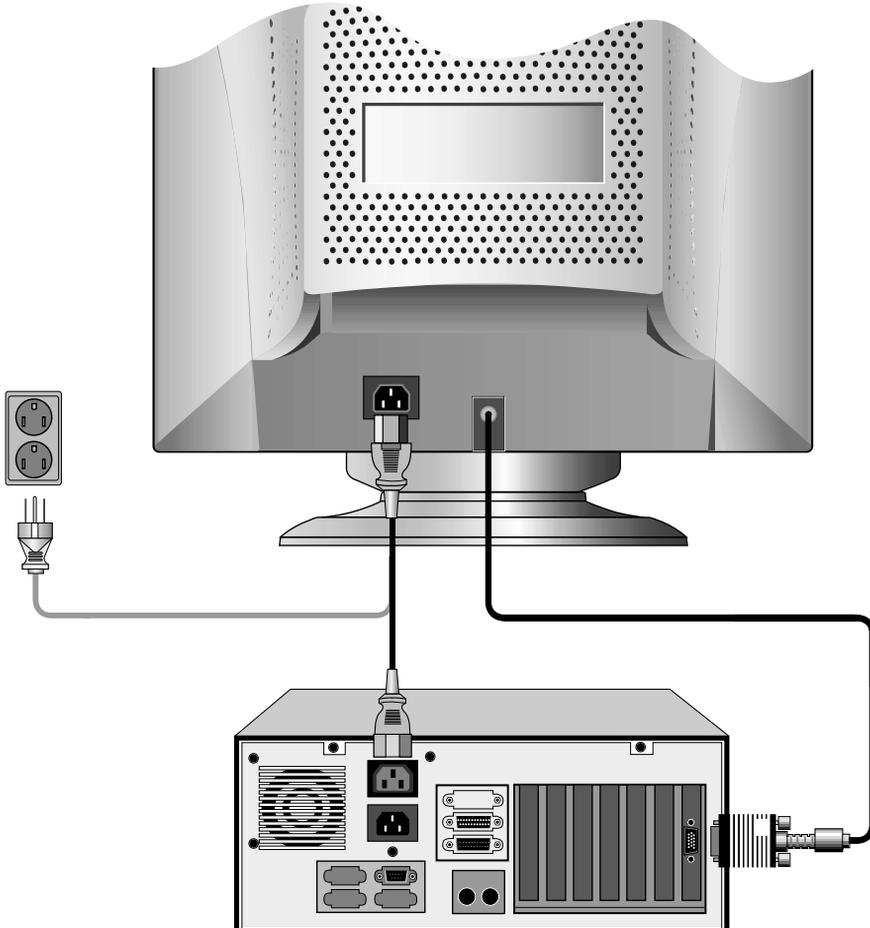
**D-Sub miniature connector**



## Connecting with External Equipment

### Cautions

Be sure to turn off the power of your computer before connecting the monitor.



# Theory of Operation

## 1. Power Supply

The AC voltage range is from 100 - 240V AC.

The conducted noise is filtered by Line filter (LP01), X and Y Capacitor (CP01,CP02,CP03,CP04,CP11) NTC01 reduces the inrush AC to DC and this DC Voltage is charged CP05.

The ICF01 (MC33260)IC is a PFC Circuit. QF01 Drive Signal is generated from ICF01 Pin 7.

The STR-F6654 is a hybrid IC (ICP01) with a built in control IC and MosFET.

The start-up circuit starts and stops the operation of the control IC by detecting the voltage appearing at the VIN (PIN4).

At start-up of the power supply, CP12 is charged though the start-up resistor RP02.

When the VIN (PIN4) voltage reaches 16V, the control circuit starts operation by the function of the start-up circuit.

In normal state, VIN of ICP01 is supplied by CP12 dc voltage. In Off Mode, Vin of ICP01 is supplied by CP10 dc voltage.

The switching frequency is locked to Horizontal scan frequency by horizontal flyback pulse from sync trans transformer (LP03).

The output pulse width is controlled by current of OCP/F.B(PIN1).

The SMPS output has +185V,+80V,+15V,+13V,-13V,+7V.

## 2. DPMS

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

MODE	H-Sync	V-Sync	MCU PIN 9	QP07
NORMAL	O	O	H	ON
STAND-BY	X	O	L	OFF
SUSPEND	O	X	L	OFF
OFF	X	X	L	OFF

## 3. Signal Processing and MCU Control

When the H and V sync are input to MCU, MCU can measure the H and V frequency to detect the video mode. MCU has digital to analog converter (DACs) control function like Brightness, Rotation, H/V-Lin, Degaussing and MCU can control H/V Size, H/V Position Pincushion, Trapezoide, Parallel, Corner TOP/BTM, Pin balance, H/V Moire, OSD H/V-Position, R/G/B Cut off, R/G/B drive by I<sup>2</sup>C Bus line.

The operation of MCU is shown in the table below.

H-Freq. [kHz]	CS 1 PIN 30	CS 2 PIN 29	CS 3 PIN 28	CS4 PIN 27
H < 36	L	L	L	L
36 ≤ H < 40	L	H	L	L
40 ≤ H < 46	L	H	H	L
46 ≤ H < 51	H	L	L	L
51 ≤ H < 62	H	L	H	L
62 ≤ H < 66	H	H	L	L
66 ≤ H < 71	H	H	L	H
71 ≤ H < 85	H	H	H	L
85 ≤ H < 95	H	H	H	H

#### 4. Horizontal Deflection

TDA4841(ICH01) is an I<sup>2</sup>C auto sync deflection controller for H/V sync and drive processing.

All function are controlled by I<sup>2</sup>C bus.

When H-sync applied, the internal oscillator is automatically locked. The duty cycle of H-output pulse (ICH01 pin 8) is 45% (at 31.5 KHz).

Horizontal B+ Drive Signal is generated from ICH01 pin 6.

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,CH64), which have a charge equal to the effective supply voltage.

When the QH09 is opened up, the damper diode DH11 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 the horizontal scan.

QH11, QH12, QH13, QH22 select the value of S capacitors.

B+ Drive signal is amplified by push pull (QH24, QH25) amplifier, this amplified signal the switching.

B+ Voltage is supplied horizontal deflection coil through coil TH03.

#### 5. High Voltage and Focus

High Voltage Control circuit is working basically by using switching theory with the main component ICH03 (KA3843).

When power ON and the VCC DC level of pin 7 of ICH03 exceeding 8.4V, ICH03 starts to work and the oscillate frequency is decided by RH24, CH11.

ICH03 is working normally the output square wave of pin6 will turn on QH04. The ON/OFF cycle of QH04 will make the primary of FBT acted like a switching power transformer

AFC signal is differential by CH10, RH04 and connected with CH11 in order to force ICH03 in

synchronization. This high voltage will be always synchronized with horizontal deflection.

Usually loading change will cause unstable condition, so a high voltage feed back system is designed to maintain the stability of the high voltage circuit.

This feed back system is started from voltage sensor on the pin12 of the FBT. This sensor voltage compares with voltage of the OP1 via the butter (OP2) of ICH02 (LM358) and returns to ICH03.

A feed back reference high voltage circuit that consists of RH50, VRH01 and RH52 to adjust the high voltage.

During the period the horizontal frequency is changed, for example, H-Unlock will be from low to high (the time frequency changes).

H-Unlock is controlled by pin 17 of ICH01(TDA4841). After differential circuit that consists of RH43 and RH44, the signal will turn QH03 on When frequency changed and reduce the high voltage by paralleling with RH50, VRH01, RH52.

Dynamic Focus is user to get perfect focusing of each dot on the screen.

ICH01, pin 32 outputs a parabolic waveform (H+V Focus)

QH06, QH17 and QH18 amplify this focus signal.

## 6. Vertical Deflection

Vertical deflection saw-tooth waveform is provided by ICH01 pin 12, 13 (VOUT1,2) and amplified by ICV01 (KA2142).

## 7. X-ray Protection

X-Ray High Voltage Protection circuit is to get a DC level voltage by utilizing the output waveform of FBT pin 4 to pin 7(GND) via a rectifier consists of DH07,CH36 This DC level voltage inputs to the pin2(X-Rey) of ICH01 TDA4841.

The preset X-Rey protection voltage is 5.2V. if the high voltage is higher than the preset voltage, the DC level voltage input into the pin 2 will also be higher than 6.4V. It also means the HDRV signal is off, then horizontal deflection is off and the high voltage is also off.

## 8. Video Amplifier and OSD Interface

KA2506-01(ICC01) is a wide band video amplifier with three matched video amplifiers, contrast control, OSD interface, OSD contrast control, drive controls, blanking gate and clamp gate ICC01 is controlled by I<sup>2</sup>C bus. H blank signal is applied to Pin 19.

During blanking all three outputs are thrown to the pedestal level.

A insert H-Sync is used to a clamp signal. The signal is applied to 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 the amplification.

OSD contrast controlled by I<sup>2</sup>C bus.

MTV021(ICC02) is a high performance HCMOS device designed to interface with a micro controller unit (ICM01) to allow colored symbols or characters to be displayed on the monitor screen.

The output stage is made of 3-channel power amplifier (ICC03, LM2435T).

The output capable of 40 volt swing in less than 7 n 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.

# Trouble Shooting

## 1. Introduction

This trouble shooting guide is arranged by fault conditions. Following each fault condition 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 Trouble shooting this monitor, some precaution should be observed.

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 probe 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. Trouble shooting procedure

Symptom	Check(YES)	Action(NO)
a) Image is scrolling	1) Check for V-sync at Pin 32 of ICM01 2) Check for positive going V-sync at Pin 14 of ICH01 3) Will V-oscillator is locked with input signal Pin 24 of ICH01 4) Check V-ramp at Pin 13 , 14 of ICH01	Check 15 Pin connector ZDM02 Check ICM01, ICH01 Check CH02 Replace ICH01.

Symptom	Check(YES)	Action(NO)
b) Image is unstable.	<ol style="list-style-type: none"> <li>1) Check for H-sync at Pin 33 at ICM01</li> <li>2) Check for positive going V-sync at Pin 15 at ICH01.</li> <li>3) Will H-oscillator is locked with input signal Pin 29 of ICH01.</li> <li>4) Check H-out at Pin 8 of ICH01.</li> <li>5) Check for flyback pulse at Pin 1 of ICH01</li> </ol>	<p>Check 15pin connector ZDM01,QM04. Check ICM01,ICH01</p> <p>Check CH03, RH06, CH04,RH07,RH08 CH05, CH06 Replace ICH01 Check RH10, TH05</p>
c) Screen is black but high voltage is present	<ol style="list-style-type: none"> <li>1) Check for G2, Pin 4 of CRT. Around 550 volt</li> <li>2) Check for heater voltage at Pin 6 of CRT. (6.3V)</li> <li>3) Can screen be lit with brightness control at MAX</li> <li>4) Check for video at Pin 5,8,10 of ICC01</li> <li>5) Check for positive pulse for clamp at Pin 18 of ICC01.</li> <li>6) Check for video pin 21,24,26 of ICC01</li> <li>7) Check for video at Pin 6,7,9 of ICC03.</li> <li>8) Check for video at Pin 1,2,3 of ICC03.</li> <li>9) Check if R,G,B cut-off control the video DC level at Pin 4,6,9 of CRT.</li> <li>10) Check CRT.</li> </ol>	<p>Check RC06,SGC05,CC36,CC38 Socket Check CNC01,RC66,DP13</p> <p>Check RC35,CC32,QC13,QC14,RC59</p> <p>Check connector CNC02,DC15~DC20, RC46~48 Check pin 33 of ICM01 Check ICC01, ICM01</p> <p>Check ICC03, RC26, RC27, RC28 Check ICC03, 80V(dc pin4), 12V(dc pin10) Check QC03~QC08, CRT socket</p>
d) Screen is black with no high voltage.	<ol style="list-style-type: none"> <li>1) Check for 80V at anode of DP12</li> <li>2) Check for 12V at pin7 of ICH03</li> <li>3) Check Switching pulse of pin6 of ICH03</li> <li>4) Check Switching pulse at Drain of QH04</li> <li>5) Check TH04(FBT)</li> </ol>	<p>Check 80V with no load if no 80V Check SMPS If 80V OK, Check TH04 QH04,DH05</p> <p>Check 12V with no load If no 12V, Check QP10,DP15,QP07, SMPS If 12V OK, Check ICH01,ICH03,ICC01 Check ICH03, RH24, CH11</p> <p>Check QH04</p>
e) Focus Bad	<ol style="list-style-type: none"> <li>1) Check for focus waveform at pin32 ICH01</li> <li>2) Check for 700V at anode of DH24</li> <li>3) Check Emitter pules of QH18</li> <li>4) Adjust Focus VR of FBT</li> </ol>	<p>Check ICH01</p> <p>Check DH24, TH04 Check QH05,QH06,QH17,QH18</p>
f) No Power	<ol style="list-style-type: none"> <li>1) Check for AC input voit of AI01</li> <li>2) Check ICP01 pin 3,4</li> <li>3) Check switch pulse at Drain of QF01</li> <li>4) Check voltage for, 180V at anode of DP11 and 5V at pin3 of ICH01</li> </ol>	<p>Check Power cord,AI01 Check ICP01,NTC01,DP01 Check ,ICP01,TP01,ICF01,ICP03,DP11 Recheck above Item d</p>

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## Adjustment Method

### 1. Caution

Extremely high voltage are present in the area around the TH04 and the anode high voltage lead. Do not touch ICP01 or its heatsink as high voltage is present on these components.

### 2. Equipment Required

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

### 3. Before Adjustment

Verify that the video output level is 0.7 Vpp at 75 ohm termination and the video timings are same as standard timing given in specification. Place the AC power switch to the ON position.

Allow the monitor to stabilize thermally for 15 minutes at least before any adjustment about the image parameters. The CRT tube and components of system require time of stabilizing.

### 4. Adjustment Procedure

#### 4-1 Voltage setting

- 1) High Voltage Setting
  - Video Signal: Black pattern in 80kHz, 1280\*1024@75Hz mode
  - Measuring Point : HI-POT (With CRT B'd)
  - Adjustment: VRH01, main board
  - Limits : -158  $\pm$ 1V

#### 4-2 Factory mode setting

- Turn off the power
- Keep pressing the menu key and turn on the power
- After turn on the power, press the menu select key one more time, and you can see the message on the bottom of the OSD main menu.
- This is the factory mode
- Select the "Recall" menu before you exiting the factory mode.
- Turn off the power to save the adjusted state.

#### 4-3 Rotation setting

- Video signal: Cross Hatch pattern in 94kHz, 1600 mode
- Adjust the tilt of screen by using the MENU ▲, ▼ and select keys.

#### 4-4 Color setting

- Adhere color Analyzer sensor closely to CRT center.
- Video mode: 94kHz, 1600 mode

##### 1) Color Temperature 9300°K setting

- Video Signal: Back Raster pattern
- Select "RGB" by using the MENU ▲, ▼ and select keys.

##### ① Cut-off Setting

- Select "CUT OFF" by using the ▲, ▼ and select keys.
- Press the select key to get the desired R, G or B Cut-off.
- Press the ▲ or ▼ keys to limit the X and Y color coordinate.
- Limits:  $x=0.283 \pm 0.02$ ,  $y=0.297 \pm 0.02$ ,  $Y=0.5 \pm 0.08F1$

##### ② Drive Setting

- Video signal: 2" square white box
- Select the "9300" by the using ▼, ▲ and select keys.
- Adjust the brightness go to  $31 \pm 3F1$  cd/m<sup>2</sup> by pressing the rotating the ▲ and ▼ keys of contrast.
- Press the SELECT key to get the desired R/G/B drive.
- Press the ▲ or ▼ keys to limit the X and Y color coordinate.
- Limits:  $X=0.283 \pm 0.02$ ,  $Y=0.297 \pm 0.02$

##### ③ Contrast Setting

- Adjust the brightness of 2" square white box by pressing the rotating the ▲ and ▼ keys of contrast.
- Limits:  $44.6 \pm 0.5F1$

##### 2) Color Temperature 6500°K Setting

- Video Signal: Back Raster pattern
- Select "COLOR CONTROL" by using the MENU ▲, ▼ and select keys.

##### ① Drive, contrast Setting

- The method of Adjust is same to 9300°K.
- The color coordinate is  $X=0.313 \pm 0.15$ ,  $Y=0.329 \pm 0.020$

##### 3) ABL Setting

- Video Signal: Full White Pattern
- Select "AB" by using the manu ▲, ▼ and select keys
- Adjust the brightness to  $23 \pm 0.5F1$  by pressing the ▲ and ▼ keys of ABL

#### 4-5 Focus

- Video Signal: Full "H" character Pattern in 94KHZ
- Adjust H/V Focus VR on the top or center of the FBT so that image of whole screen look clear

#### 5. X-Ray Protection Test

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

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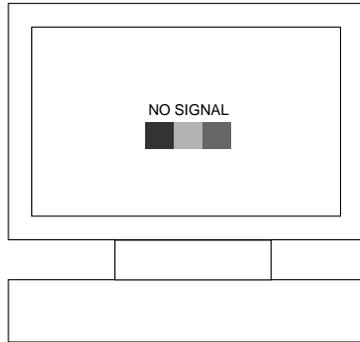
## AGING and Self Test Mode

The monitor has an enhanced level of self-diagnostics.

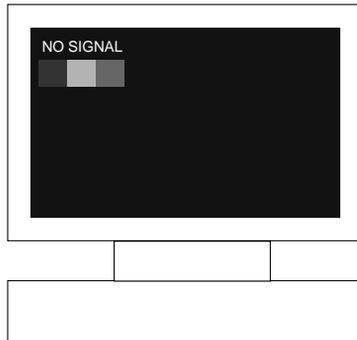
When the signal cable is removed or signal isn't detected, the monitor is operated to OFF-Mode. If Function Button is pushed on OFF-Mode, the system has the ability to generate an R.G.B test pattern and the following OSD image is displayed on screen.

☞ Note

1) Until press information Icon in main menu, the monitor is operated burn-in mode (full white pattern) display.



2) After press information Icon in main menu, the monitor display random BOX pattern.



## Specification

CRT	SIZE	(15.8" viewable) Diagonal FST
	Dot Pitch	0.26 mm
	Type	Non-glare
Input	Signal	R.G.B Analog
	Connector	15 pin D-Type
SYNC	H-Freq	30.0 kHz~97 kHz
	V-Freq	50Hz ~150 Hz
Display	Area(HXV)	320 x 240 mm
max. Resolution		1600X1200 @ 75Hz (94kHz)
User Control & OSD Control		Power Switch, Menu, Select, Up, Down H/V Position, H/V Size, Pincushion, Trapezoid, Parallelogram, Pin balance, Rotation, H/V Moire, Degauss, Color Control, Information, Brightness, Contrast, OSD H/V position, Corner Top/BTM Language Select (10 Language), Recall
Power Management		As per VESA Standard, Lower than EPA's recommendation
VESA DDC 1/2B, 2B+		Basic
Compatibility		VESA, 8514/A, XGA, EVGA, MAC II
Power Source		100-240 VAC (Universal Power) 2.5A/90W
Safety & Regulation	EMC	FCC CLASS B , CE
	Safety	cULus, CE, TUV-GS, FIMKO, GOST-R, PCBC
	Ergonomi	TCO'03
Temperature	Operating	5 to 35 °C
	Storage	-20 to 60 degree celsius
Humidity	Operating	35% to 80% (Non-condensing)
	Storage	5% to 85%
Weight	unpacked	13.7Kg
	packed	16.7Kg
Dimension(WXHXD mm)		404 X 408 X 414mm (W/O Packaging)

\* Specification is subject to change without notice for performance improvement.

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# Critical Parts Specification

**TDA4841**

## FEATURES

### Concept features

- Full horizontal plus vertical autosync capability
- Extended horizontal frequency range from 15 to 130kHz
- Comprehensive set of I<sup>2</sup>C-bus driven geometry adjustments and functions, 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
- Power dip recognition
- Flexible switched mode B+ supply function block for feedback and feed forward converter
- Internally stabilized voltage reference
- Drive signal for focus amplifiers with combined horizontal and vertical parabola waveforms
- DC controllable inputs for Extremely High Tension (EHT) compensation
- SDIP 32 package.

### Synchronization

- Can handle all sync signals (horizontal, vertical, composite and sync-on-video)
- Output for video clamping (leading/trailing edge selectable by I<sup>2</sup>C-bus), vertical blanking and protection blanking
- Output for fast unlock status of horizontal synchronization and blanking on grid1 of picture tube.

### Horizontal section

- I<sup>2</sup>C-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 external resistors
- Low jitter
- Soft start for horizontal and B+ control drive signals.

### Vertical section

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

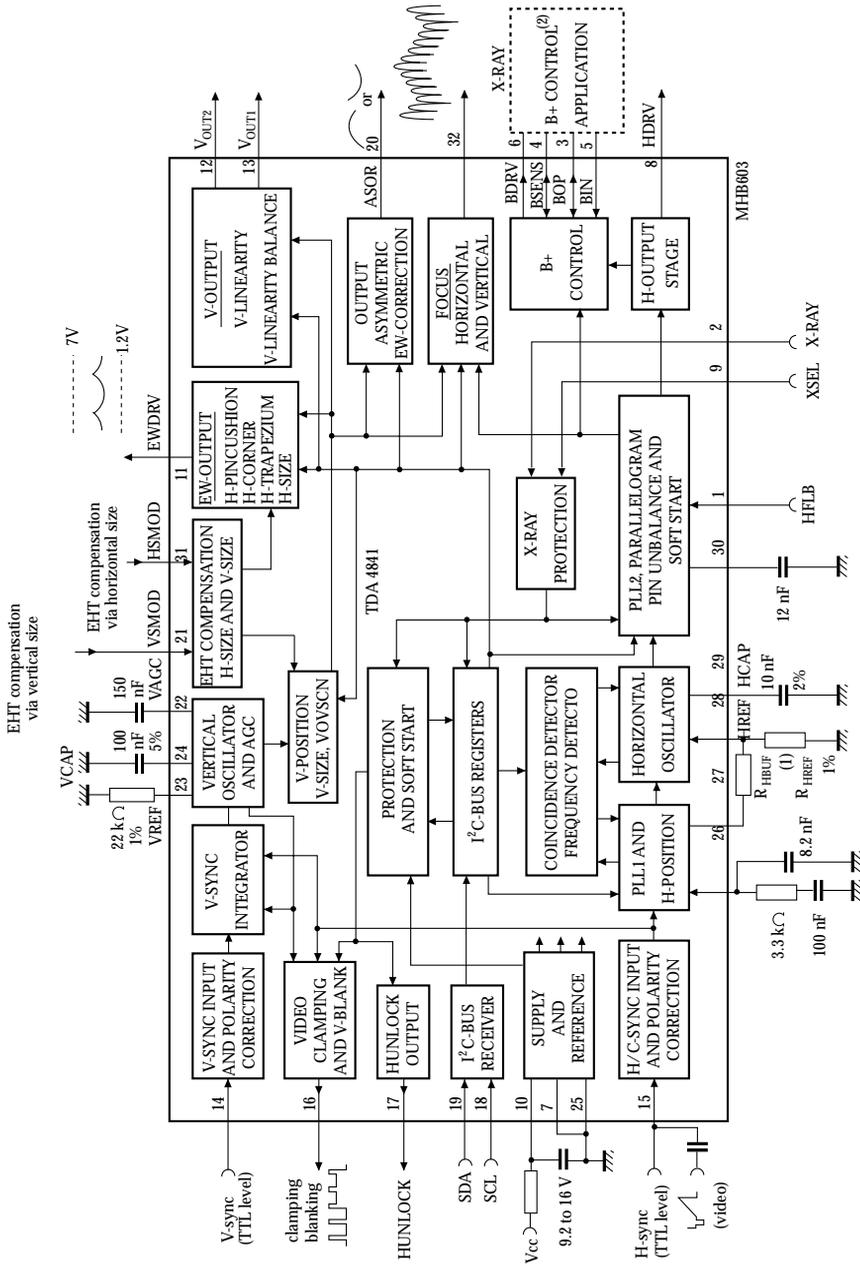
### East-West (EW) section

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

### Focus section

- I<sup>2</sup>C-bus controllable output for horizontal and vertical parabolas
- Vertical parabola is independent of frequency and tracks with vertical adjustments
- Horizontal parabola independent of frequency
- Adjustable pre-correction of delay in focus output stage.

**BLOCK DIAGRAM**



## PIN CONFIGURATION

HFLB	□ 1		32	□ FOCUS
XRAY	□ 2		31	□ HSMOD
BOP	□ 3		30	□ HPLL2
BSENS	□ 4		29	□ HCAP
BIN	□ 5		28	□ HREF
BDRV	□ 6		27	□ HBUF
PGND	□ 7		26	□ HPLL1
HDRV	□ 8	TDA4841	25	□ SGND
XSEL	□ 9		24	□ VCAP
Vcc	□ 10		23	□ VREF
EWDV	□ 11		22	□ VAGC
VOUT2	□ 12		21	□ VSMOD
VOUT1	□ 13		20	□ ASCOR
VSYNC	□ 14		19	□ SDA
HSYNC	□ 15		18	□ SCL
CLBL	□ 16		17	□ HUNLOCK

## FUNCTIONAL DESCRIPTION

### Horizontal sync separator and polarity correction

HSYNC (pin 15) is the input for horizontal synchronization signals, which can be DC-coupled TTL signals (horizontal or composite sync) and AC-coupled negative-going video sync signals. Video syncs are clamped to 1.28V and sliced at 1.4V. This results in a fixed absolute slicing level of 120mV related to sync top.

For DC-coupled TTL signals the input clamping current is limited. The slicing level for TTL signals is 1.4V.

The separated sync signal (either video or TTL) 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. Via I<sup>2</sup>C-bus Control either the leading or trailing edge can be selected by setting control bit CLAMP. 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. Via I<sup>2</sup>C-bus Control two different vertical blanking times are accessible by control bit VBLK.

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 externally or by I<sup>2</sup>C-bus)

PLL1 is unlocked while frequency-locked loop is in search mode

No horizontal flyback pulses at HFLB (pin 1)

X-Ray protection is activated

Supply voltage at Vcc (pin 10) is low see Fig.22

Via I<sup>2</sup>C-bus Control horizontal unlock blanking can be switched off by control bit BLKDIS while vertical blanking is maintained.

### Frequency-locked loop

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

resistors and the recommended maximum

$$\text{ratio is } \frac{f_{\max}}{f_{\min}} = 6.5$$

This can, for instance, be a range from 15.625 to 90kHz with all tolerances included. Without a horizontal sync signal the oscillator will be free-running at  $f_{mix}$ . Any change of sync conditions is detected by the internal coincidence detector. A deviation of more than 4% between horizontal sync and oscillator frequency will switch the horizontal section into search mode. This means that PLL1 control currents are switched off immediately. The internal frequency detector then starts tuning the oscillator. Very small DC currents at HPLL1 (pin26) are used to perform this tuning with a well defined change rate. When coincidence between horizontal sync and oscillator frequency is detected, the search mode is first replaced by a soft-lock mode which lasts for the first part of the next vertical period.

The soft-lock mode is then replaced by a normal PLL operation. This operation ensures a smooth tuning and avoids fast changes of horizontal frequency during catching.

In this concept it is not allowed to load HPLL1. The frequency dependent voltage at this pin is fed internally to HBUF (pin27) via a sample-and-hold and buffer stage. The sample-and-hold stage removes all disturbances caused by horizontal sync or composite vertical sync from the buffered voltage. An external resistor connected between pins HBUF and HREF defines the frequency range.

#### **Out-of-lock indication (pin HUNLOCK)**

Pin hunlock is floating during search mode or if a protection condition is true. All this can be detected by the microcontroller if a pull-up resistor is connected to its own supply voltage.

For an additional fast vertical blanking at grid 1 of the picture tube, a signal referenced to ground is available at this output. Also the continuous protection blanking (see Section "Video clamping/vertical blanking generator") is available at this pin. Via I2c-bus control, the control bit Blkdis Can switch off horizontal unlock blanking while vertical blanking is maintained.

#### **Horizontal oscillator**

The horizontal oscillator is of the relaxation type and requires a capacitor of 10 nF at HCAP (pin29). For optimum jitter performance the value of 10nF must not be changed.

The minimum oscillator frequency is determined by a resistor connected between pin HREF and ground. A resistor connected between pins HREF and HBUF defines the frequency range.

The reference current at pin HREF also defines the integration time constant the vertical sync integration.

## WT62PI

### PIN CONNECTIONS

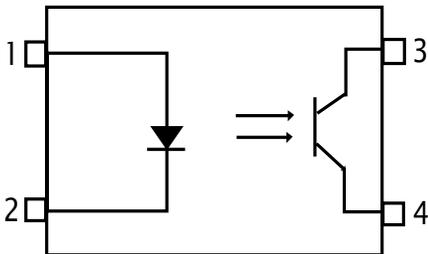
PWM2	1	40	VIN
PWM1	2	39	HIN
PWM0	3	38	PWM3
RESET/3V3	4	37	PD5/PWM4
VDD	5	36	PD4/PWM5
GND	6	35	PD3/PWM6
OSCO	7	34	PD2/PWM7
OSCI	8	33	PD1/HOUT
PB5/SDA2	9	32	PD0/VOUT
PB4/SCL2	10	31	PD7/PWM13/CLAMP
PB3/PAT	11	30	PA6/PWM12
PB2	12	29	PA5/PWM11
PB1/HF1	13	28	PA4/PWM10
PB0/HFO	14	27	PA3/PWM9
IRQ	15	26	PA2/PWM8
PC7/SOGIN	16	25	PA1/SCL1
PC6	17	24	PA0/SDA1
PC5	18	23	PC0/AD0
PC4	19	22	PC1/AD1
PC3/AD3	20	21	PC2/AD2

WT62P1-N40

### PIN DESCRIPTION

1	NC	21	UNLOCK
2	NC	22	ABL
3	NC	23	Key-in
4	Reset	24	SDA1
5	+5V	25	SCL1
6	GND	26	NC
7	OSC0	27	CS4
8	OSC1	28	CS3
9	SUS/Stand-by	29	CS2
10	off (not used)	30	CS1
11	H-mute	31	NC
12	Direction	32	V-Sync out
13	Degauss	33	H-Sync out
14	NC	34	NC
15	ENCODER	35	BrT
16	LED0	36	H-Lin
17	LED1	37	TILT
18	EEPROM_VCC	38	ABL
19	SCL	39	H-Sync in
20	SDA	40	V-Sync in

## TLP621DS



- 1: ANODE
- 2: CATHODE
- 3: EMITTER
- 4: COLLECTOR



## MC33260

# GreenLine Compact Power Factor Controller: Innovative Circuit for Cost Effective Solutions

The MC33260 is a controller for Power Factor Correction preconverters meeting international standard requirements in electronic ballast and of line power conversion applications. Designed to drive a free frequency discontinuous mode, it can also be synchronized and in any case, it features very effective protections that ensure a safe and reliable operation.

This circuit is also optimized to offer extremely compact and cost effective PFC solutions. While it requires a minimum number of external components, the MC33260 can control the follower boost operation that is an innovative mode allowing a drastic size reduction of both the inductor and the power switch. Ultimately system cost is significantly lowered.

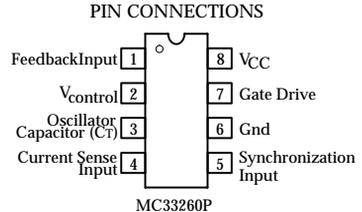
Also able to function in a traditional way (constant output voltage regulation level), any intermediary solutions can be easily implemented. This flexibility makes it ideal to optimally cope with a wide range of applications.

### General Features

- Standard Constant Output Voltage or <sup>TM</sup>Follower Boost Mode
- Switch Mode Operation: Voltage Mode
- Latching PWM for Cycle-by-Cycle On-Time Control
- Constant On-Time Operation That Saves the Use of an Extra Multiplier
- Totem Pole Output Gate Drive
- Undervoltage Lockout with Hysteresis
- Low Start-Up and Operating Current
- Improved Regulation Block Dynamic Behavior
- Synchronization Capability
- Internally Trimmed Reference Current Source

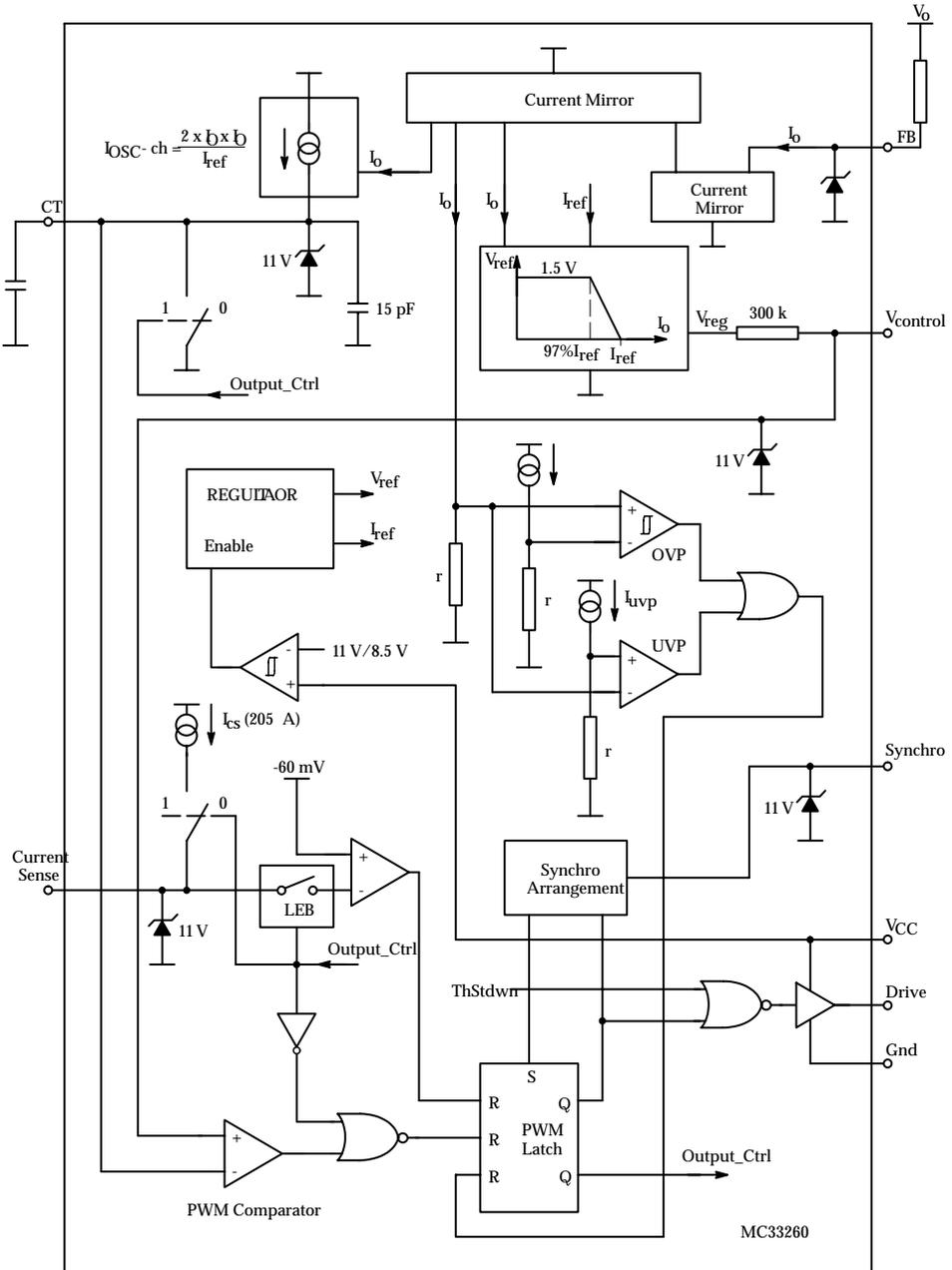
### Safety Features

- Overvoltage Protection: Output Overvoltage Detection
- Undervoltage Protection: Protection Against Open Loop
- Effective Zero Current Detection
- Accurate and Adjustable Maximum On-Time Limitation
- Overcurrent Protection
- ESD Protection on Each Pin

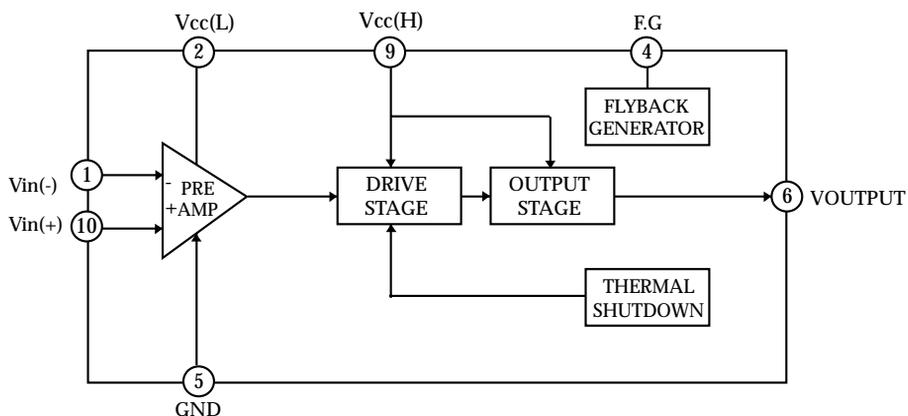


MC33260

BLOCK DIAGRAM



## KA2142



**Table1. Pin Configurations**

Pin No	Symbol	I / O	Configurations
1	Vin ( - )	I	Inverting Input
2	Vcc ( L )	I	Supply Voltage
3	-	-	N.C
4	F . G	O	Flyback Generator
5	GND	-	Ground
6	VD	O	Output
7	-	-	N.C
8	-	-	N.C
9	Vcc ( H )	I	Output Stage Voltage
10	Vin ( + )	I	Non-Inverting Input

**KA2506-01**

**PIN CONNECTION**

**I<sup>2</sup>C BUS CONTROLLED R/G/B VIDEO AMPLIFIER**

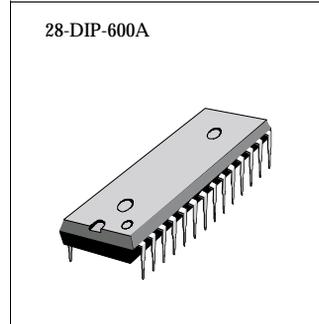
The KA2506-01 is a very high frequency video amplifier system with I<sup>2</sup>C Bus controlled used in Monitor with high resolution up to 1280 X 1024. It contains 3 matched R/G/B video Amplifiers with OSD interface and provides a flexible interfacing to I<sup>2</sup>C Bus controlled adjustment system.

**FUNCTIONS**

- R/G/B Video Amplifier
- OSD Interface
- I<sup>2</sup>C BUS Control
- Contrast/OSD Contrast
- Brightness Control
- Cut-Off Brightness Control
- R/G/B SUB Contrast/Cut-Off Control
- Blank/Clamp Gate
- Half tone (2 OSD Raster/8 Colors)
- Brightness Uniformity

**FEATURES**

- 3-Channel R/G/B Video Amplifier, 175MHz @f-3dB
- I<sup>2</sup>C 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 and BPS (Blank Gate Polarity Selection)
- SUB Contrast Control Range: -11dB
- Capable of 7.0Vpp Output Swing Range
- Video/OSD High Speed Switch

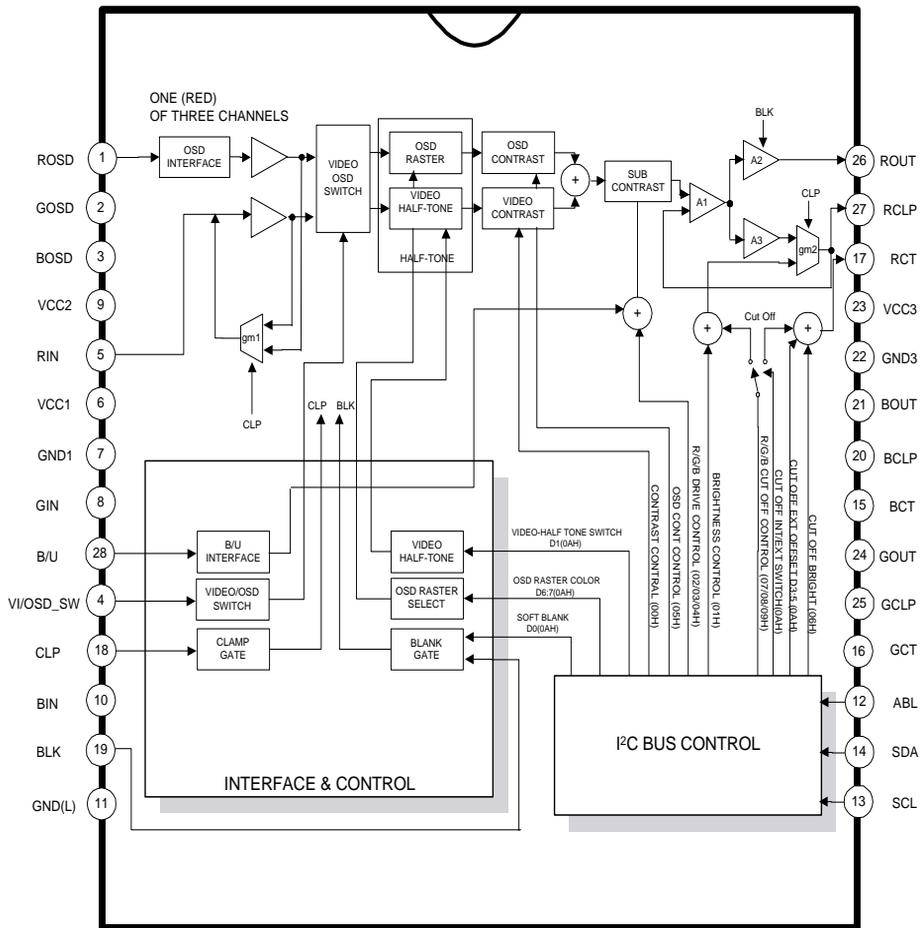


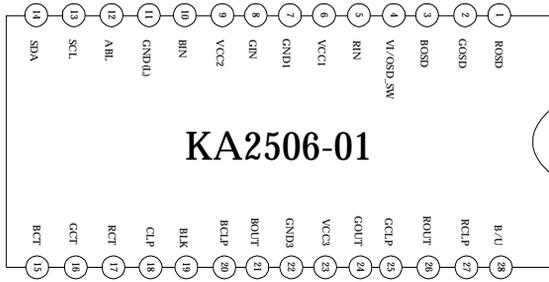
**ORDERING INFORMATION**

Device	Package	Operating Temperature
KA2506-01	28-DIP-600A	-20 °C ~ +70 °C

- Clamp Gate With Anti OSD Sagging
- B/U (Brightness Uniformity) Interface
- Video Input Clamp, BRT Clamp
- Video & OSD Half Tone Function on OSD Picture (2 OSD Raster Selection by HR1, HG1, HB1, HR2, HG2, HB2: 8 colors)
- OSD Interface, OSD BLK
- ABL
- TTL R/G/B OSD Inputs, 80MHz bandwidth
- Contrast Control Range: -38dB
- OSD Contrast Control Range: -38dB

# BLOCK DIAGRAM





Pin Configurations

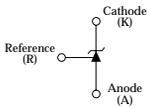
Pin No	Symbol	I/O	Configurations
1	ROSD	I	Red OSD Input
2	GOSD	I	Green OSD Input
3	BOSD	I	Blue OSD Input
4	VI/OSD_SW	I	Video or OSD Switch
5	RIN	I	Red Video Input
6	VCC1	-	V <sub>CC</sub> (normal)
7	GND1	-	Ground1(normal)
8	GIN	I	Green Video(Input)
9	VCC2	-	V <sub>CC</sub> (normal)
10	BIN	I	Blue Video Input
11	GND(L)	-	Ground2(logic)
12	ABL	-	Automatic Beam Limit
13	SCL	I/O	Serial Clock
14	SDA	I/O	Serial Data
15	BCT	I	Blue Cut Off Control
16	GCT	I	Green Cut Off Control
17	RCT	I	Red Cut Off Control
18	CLP	I	Clamp Gate Signal Input
19	BLK	I	Blank Gate Signal Input
20	BCLP	-	Blue Clamp Cap
21	BOUT	O	Blue Video Output
22	GND3	-	Ground3(drive part)
23	VCC3	-	V <sub>CC</sub> (drive part)
24	GOUT	O	Green Video Output
25	GCLP	-	Green Clamp Cap
26	ROUT	O	Red Video Output
27	RCLP	-	Red Clamp Cap
28	B/U	I	Brightness Uniformity

## LM431

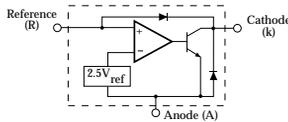
### PROGRAMMABLE PRECISION REFERENCES SILICON MONOLITHIC INTEGRATED CIRCUIT

- Programmable Output Voltage to 36V
- Voltage Reference Tolerance:  $\pm 0.4\%$ , Typ@ 25°C (TL431B)
- Low Dynamic Output Impedance, 0.22Ω Typical
- Sink Current Capability of 1.0mA to 100mA
- Equivalent Full-Range Temperature coefficient of 50 ppm/°C Typical
- Temperature Compensated for Operation over full Rated Operating Temperature Range.
- Low Output Noise Voltage

#### SYMBOL



#### FUNCTIONAL BLOCK DIAGRAM



- Pin 1. Reference
- 2. Anode
- 3. Cathode

#### INTERNAL SCHEMATIC

Component values are nominal

LP SUFFIX CASE 92  
(TO-92)

## LM2435

### Monolithic Triple 5.5 ns CRT Driver

#### General Description

The LM2435 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 45% less power than the LM2405

- Well matched with LM1279 and LM1282/83 video preamps
- 0V to 5V input range
- Stable with 0 pF±20 pF capacitive loads and peaking networks
- Convenient TO-220 staggered lead package style
- Standard LM243X Family Pinout which is designed easy PCB layout

#### Applications

- 1280 x 1024 Displays up to 75 Hz Refresh
- Pixel clock frequencies up to 135 MHz
- Monitors using video blanking

#### Schematic and Connection Diagrams

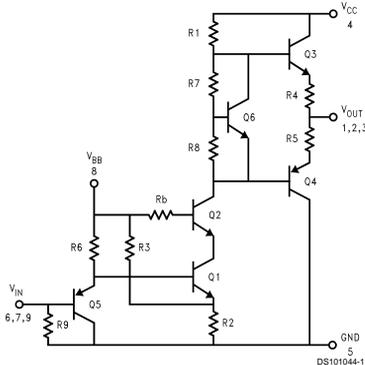
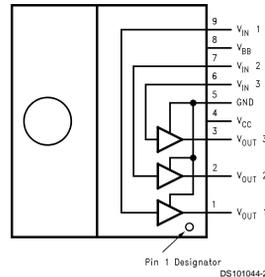


FIGURE 1. Simplified Schematic Diagram  
(One Channel)



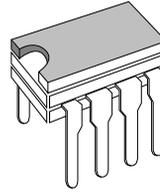
Note: Tab is at GND

Top View  
Order Number LM2435T

**KA3843B**

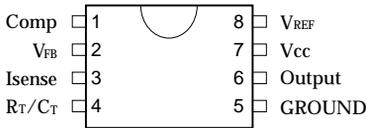
**CURRENT MODE PWM CONTROLLER**

- 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  $R_o$  ERROR AMP

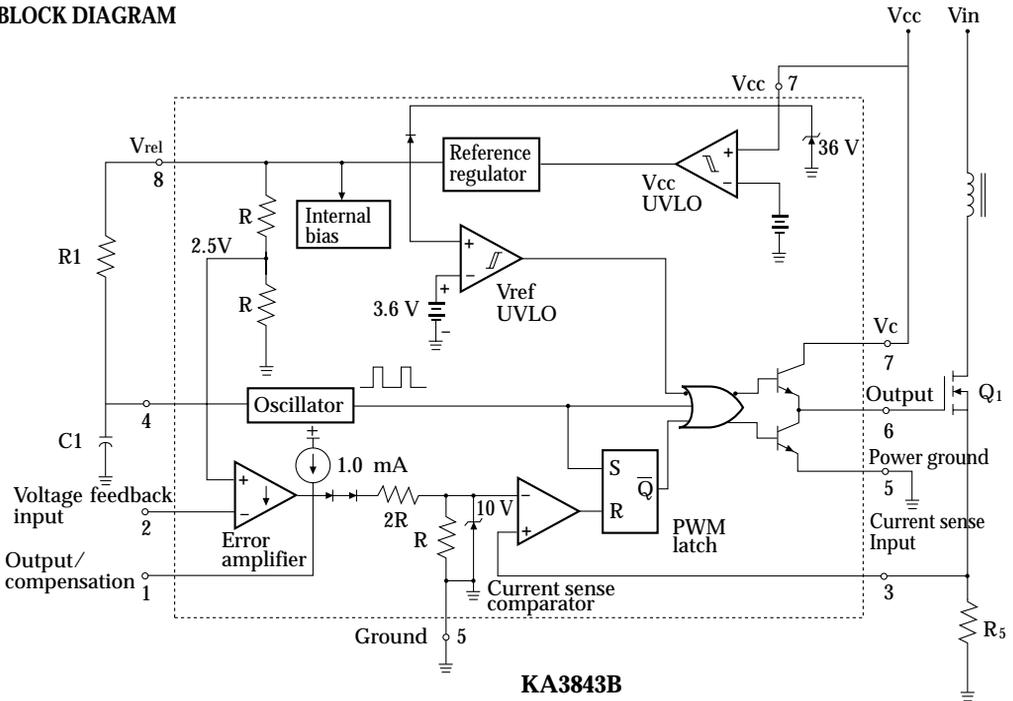


Minidip

**PIN CONNECTION**



**BLOCK DIAGRAM**



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## 24C08

### 8K 2.5V CMOS Serial EEPROMs

#### FEATURES

- Single supply with operation down to 2.5V
- Low power CMOS technology
  - 1 mA active current typical
  - 10 $\mu$ A standby current typical at 5.5V
  - 5 $\mu$ A standby current typical at 3.0V
- Organized as two or fore block of 256 bytes (2 X256X8) and (4X256X8)
- Two wire serial interface bus I<sup>2</sup>C™
- Schmitt trigger, 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 wirte cycle time for page-write
- Hardware write cycle time for page-write
- Can be operated as a serial ROM
- Factory programmong (OPT) 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

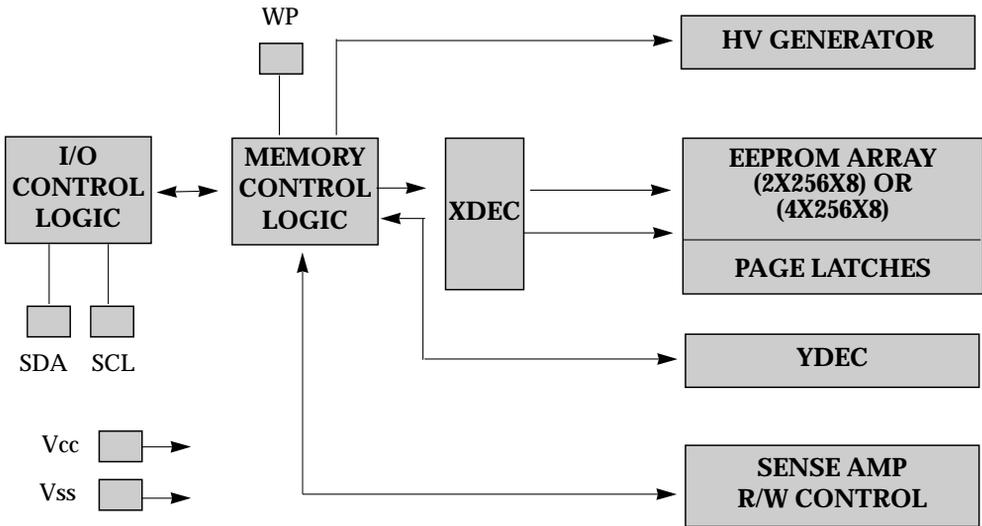
The Microchip Technology Inc. 24LC04B/08B is a 4K-or 8K-bit Electrically Erasable PROM.

The device is organized as two or four blocks of 256 X 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 5uA and 1mA respectively.

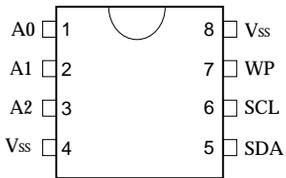
The 24LC048 / 08B also has a page-write capability for up to 16 bytes of data. The 24LC04B / 08B is available in the standard 8-pin DIP and both 8-lead and 14-lead surface mount SOIC packages.

**BLOCK DIAGRAM**



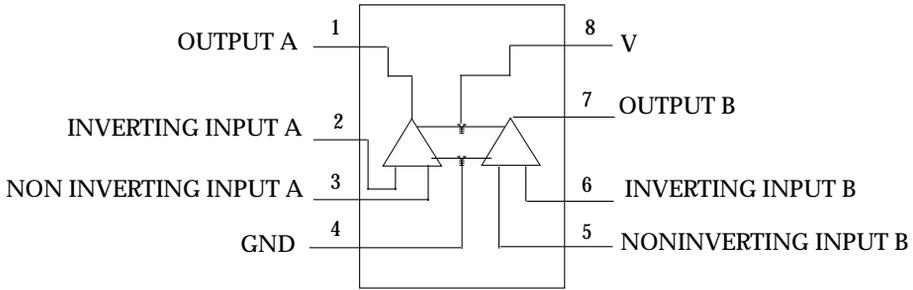
**PIN CONFIGURATION**

DIP Package



PC is a trademark of philips Corporation

## LM358



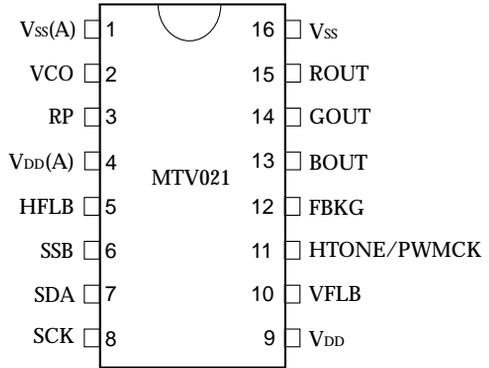
## Voltage Regulator ICs

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				
KIA7820P/PI		20				
KIA7824P/PI		24				
					40	

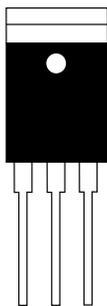
**MTV021**

**FEATURES**

- Horizontal SYNC input up to 130KHz.
- On-chip PLL circuitry up to 96 MHz.
- 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, inclding 256 standard and 16 multi-color mask ROM Fonts.
- 8 color-selectable maximum per display chardcter.
- 7 colcr-selectable maximum for character background.
- Double character height and/or width control.
- Programmable positioning for display screen center.
- 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 I2C interface with slave address 7AH(slave address is mask option).
- 16-pin. 20-pin or 24-pin PDIP package.



## Power Transistor



2SC5411

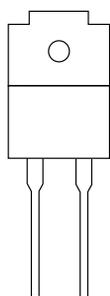
RATING	SYMBOL	2SC5411	UNIT
Base Breakdown Voltage	VCBO	1500	Vdc
Emitter Sustaining Voltage	VCEO(SUS)	600	Vdc
Current-Continuous -Pulsed(1)	IC	14	Adc
	ICP	28	
Current-Continuous	IB	7	Adc

## FMQ

### QUICK REFERENCE DATA

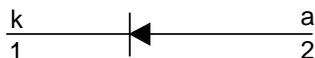
SYMBOL	PARAMETER	MAX.	UNIT
VRRM	Repetitive peak reverse voltage	1500	V
VF	Forward voltage	1.35	V
IF(AV)	Average forward current	10	A
IFSM	Non-repetitive peak forward current	75	A
trr	Reverse recovery time	0.25	μs

### PIN CONFIGURATION



Case

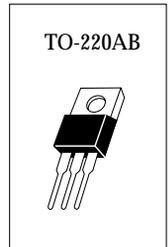
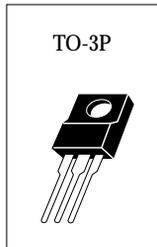
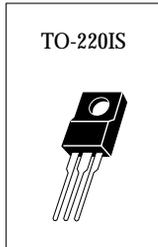
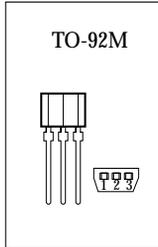
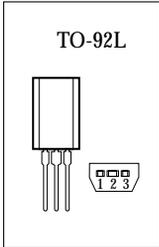
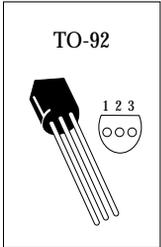
### SYMBOL

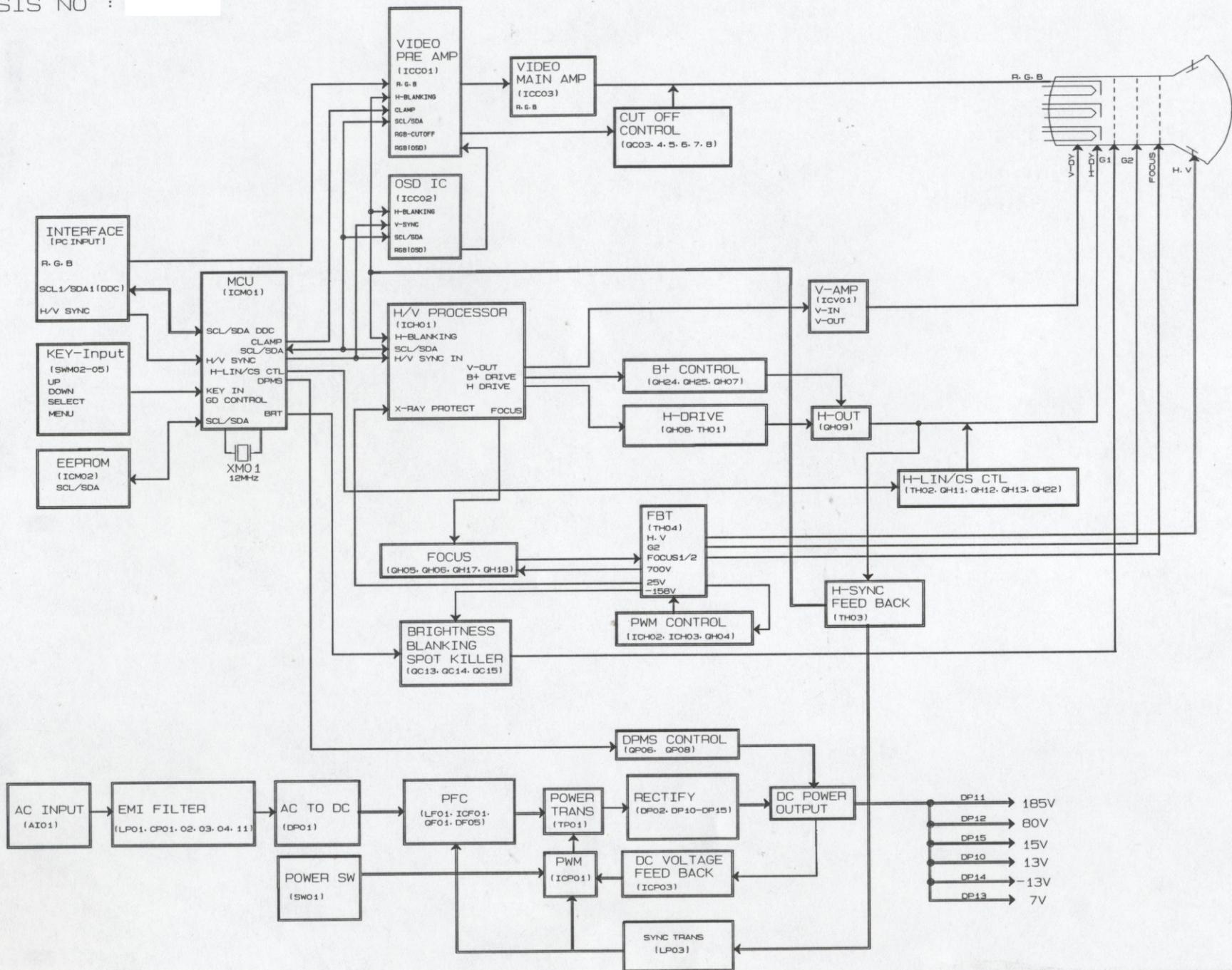


**TRANSISTORS**

Type No.	MAX. RATINGS			$V_{CE(SET)}$		Max	No			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
KSA928AY	-30	-2A	1W	-2.0	-1.5A	-30	E	C	B	<b>TO-92</b>
KTA200Y	-50	-500	625	-0.25	-100	-10-30	E	C	B	TO-92
KSA1013AY	-160	-1A	900	-1.5	-500	-50	E	C	B	TO-92
KSA2328AY	30	2A	1W	2.0	1.5A	3.0	E	C	B	TO-92
KRC102M	50	100	400	-0.3	-100	-0.88	E	C	B	TO-92
KTA1266	-50	-150	625	-0.3	-100	-10	E	C	B	TO-92
KTC3200	120	100	625	0.3	10	1	E	C	B	TO-92
KTC3228Y	160	1A	1W	1.5	500	50	E	B	C	TO-92
KSC5042F	900	100	6W	5	20	4	E	C	B	TO-220
BD135	45	2A	8W	0.5	500	50	E	C	B	TO-92
2N5770	15	50	350	0.4	10	1.0	E	B	C	TO-126
KSP92	-300	-500	625	-0.5		-0.25	E	B	C	TO-92
KSP42	300	500	625	-0.5	20	2	E	B	C	(5011)
R1002	-50	100	400	-0.3	-100	-0.88	E	C	B	TO-92M
KSC945CY	50	150	250	0.15	100	10	E	B	C	TO-92
KTA1275Y	-160	-1.0A	1W	-1.5	-500	-50	E	C	B	TO-92L
KTA1268BL	-120	-100	400	-0.3	-10	-1	E	C	B	TO-92
KSA733	-50	-150	250	-0.18	-100	-10	E	B	C	TO-92
KTC3198Y	50	150	625	0.25	100	10	E	C	B	TO-92

FET	V <sub>DSS</sub> (V)	IDSS	PD	R <sub>DSS</sub> (ohm)	V <sub>GS</sub>	1	2	3	PACKAGE
2N7000	60	200mA	400mW	5	±40V	S	G	D	TO-92
FQPF9N50	500	5.3A	50W	0.58	5.0	G	D	S	TO-220
IRF630B	200	9A	72W	0.4	4.0	G	D	S	TO-220
IRFS630B	200	6.5A	38W	0.4	4.0	G	D	S	TO-220
2SK2761	900V (V <sub>DSS</sub> )	10A (I <sub>D</sub> )	40W (P <sub>T</sub> )	2.1 Ω R <sub>DS</sub> (On)	± 30V (V <sub>GSS</sub> )	G	D	S	TO-220IS
IRF630	200V (V <sub>DSS</sub> )	9A (I <sub>D</sub> )	75W (P <sub>T</sub> )	0.4 Ω (MAX) R <sub>DS</sub> (On)	±20V (V <sub>GSS</sub> )	G	D	S	TO-220AB
IRF640	200V (V <sub>DSS</sub> )	18A (I <sub>D</sub> )	139W (P <sub>T</sub> )	0.18 Ω R <sub>DS</sub> (On)	±30V (V <sub>GSS</sub> )	G	D	S	TO-220AB
2SK2847	900 (V <sub>DS</sub> )	24A (I <sub>DP</sub> )	85W	1.1 Ω R <sub>DS</sub> (On)	± 30 (V <sub>GS</sub> )	G	D	S	TO-3P
IRF9630	-200V (V <sub>DSS</sub> )	-6.5A (I <sub>D</sub> )	75W (P <sub>D</sub> )	0.8 Ω R <sub>DS</sub> (ON)	±20V (V <sub>GS</sub> )	G	D	S	TO-220





DWG. NO.	REV.	DESCRIPTION	SIGNATURE	DATE	INSP	APPROVAL
E42095357	A					
			Y. D. LEE	02/12/03		1 / 1
			B. H. KIM	02/12/03		
			Y. K. BYUN	02/12/03		

**PART LIST**

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
1	AI01	372010121702	CONN-M,AC INNET DSC-14S2	
2	AR01	2504701056	RES-NET,4.7K 0.125W J SIP 5EA	
3	BC01	3540200058	BD-FER,BFS3550	
4	BC02	3540200058	BD-FER,BFS3550	
5	BC03	3540200058	BD-FER,BFS3550	
6	BC04	3540200058	BD-FER,BFS3550	
7	BC05	3540200058	BD-FER,BFS3550	
8	BH01	3540200058	BD-FER,BFS3550	
9	BP01	3540200058	BD-FER,BFS3550	
10	BP02	3540200058	BD-FER,BFS3550	
11	CC01	2131040020	CAP-MULT,0.1UF 50V Z AXI	
12	CC02	2131040020	CAP-MULT,0.1UF 50V Z AXI	
13	CC03	2131040020	CAP-MULT,0.1UF 50V Z AXI	
14	CC04	CE04BT1C331M	CAP-EL,SMS 16V 330UF M	
15	CC05	2131040020	CAP-MULT,0.1UF 50V Z AXI	
16	CC06	2131040020	CAP-MULT,0.1UF 50V Z AXI	
17	CC07	CE04BT1C221M	CAP-EL,SMS 16V 220UF M	
18	CC08	2131040020	CAP-MULT,0.1UF 50V Z AXI	
19	CC09	2131040020	CAP-MULT,0.1UF 50V Z AXI	
20	CC10	2131040020	CAP-MULT,0.1UF 50V Z AXI	
21	CC11	CQ92PT2A471J	CAP-PP,100V 470PF J	
22	CC12	CE04BT1HR47M	CAP-EL,SMS 50V 0.47UF M	
23	CC13	CE04BT1C221M	CAP-EL,SMS 16V 220UF M	
24	CC14	2131040020	CAP-MULT,0.1UF 50V Z AXI	
25	CC15	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
26	CC16	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
27	CC17	2131040020	CAP-MULT,0.1UF 50V Z AXI	
28	CC18	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
29	CC19	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
30	CC20	CE04BT1C221M	CAP-EL,SMS 16V 220UF M	
31	CC21	2131040020	CAP-MULT,0.1UF 50V Z AXI	
32	CC22	CE04BT2A101M	CAP-EL,SMS 100V 100UF M	
33	CC23	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
34	CC24	2001090053	CAP-AL,1UF 100V M 5*11 NP	
35	CC25	2001090053	CAP-AL,1UF 100V M 5*11 NP	
36	CC26	2001090053	CAP-AL,1UF 100V M 5*11 NP	
37	CC27	2002280013	CAP-AL,0.22UF 200V M 5*11 P	
38	CC28	2002280013	CAP-AL,0.22UF 200V M 5*11 P	
39	CC29	2002280013	CAP-AL,0.22UF 200V M 5*11 P	
40	CC30	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
41	CC31	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
42	CC32	CK45BN2H472K	CAP-CD,500V 4700PF K	
43	CC33	2004790058	CAP-AL,4.7UF 400V M 10*20 P	
44	CC34	CE04BT2D100M	CAP-EL,SMS 200V 10UF M	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
45	CC35	CQ92BT2A562J	CAP-PE,100V 0.0056UF J	
46	CC36	2102230017	CAP-CER,0.022UF 1KV J Z4U	
47	CC38	2102230017	CAP-CER,0.022UF 1KV J Z4U	
48	CC39	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
49	CC41	CC45CT1H221J	CAP-CD,50V 220PF J NPO	
50	CC42	2131040020	CAP-MULT,0.1UF 50V Z AXI	
51	CF01	CE04IT1H470M	CAP-EL,KME 50V 47UF M	
52	CF02	CE04IT1H220M	CAP-EL,KME 50V 22UF M	
53	CF03	CQ92BT2A102J	CAP-PE,100V 0.001UF J	
54	CF04	CF93BT1J224J	CAP-MPE,63V 0.22UF J	
55	CF05	CC45CT1H221J	CAP-CD,50V 220PF J NPO	
56	CF06	2141250004	CAP-MPE,1.2UF 400V J	
57	CF07	CK45BT3A101K	CAP-CD,1KV 100PF 10%	
58	CH01	CQ92BT2A154J	CAP-PE,100V 0.15UF J	
59	CH02	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
60	CH03	CQ92BT2A822J	CAP-PE,100V 0.0082UF J	
61	CH04	CF93BT1J104J	CAP-MPE,63V 0.1UF J	
62	CH05	E42007019070	CAP-PP/PE,100V 0.01UF J	
63	CH06	E42007019050	CAP-PP/PE,100V 0.0047UF J	
64	CH07	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
65	CH08	CE04IT1H2R2M	CAP-EL,KME 50V 2.2UF M	
66	CH09	CQ93PT2A152J	CAP-PP,100V 1500PF J TAP	
67	CH10	CQ92BT2A102J	CAP-PE,100V 0.001UF J	
68	CH11	CQ92BT2A272J	CAP-PE,100V 0.0027UF J	
69	CH12	2001010122	CAP-AL,100UF 100V M 10*20 P	
70	CH13	CK45BT1H101K	CAP-CD,50V 100PF K	
71	CH14	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
72	CH15	2141040020	CAP-MPE,0.1UF 250V J RAD	
73	CH16	CQ92BT2A472J	CAP-PE,100V 0.0047UF J	
74	CH17	CK45BT1H101K	CAP-CD,50V 100PF K	
75	CH18	2171520014	CAP-P-F,1500PF 630V J RAD	
76	CH19	CE04IT1H100M	CAP-EL,KME 50V 10UF M	
77	CH20	CQ92BT2A102J	CAP-PE,100V 0.001UF J	
78	CH21	CF93BT1J474J	CAP-MPE,63V 0.47UF J	
79	CH22	2002200066	CAP-AL,22UF 250V M 13*25 P	
80	CH23	217402000302	CAP-P-F,402J/2.5KV HIGH TEMP	
81	CH24	CE04IT1E470M	CAP-EL,KME 25V 47UF M	
82	CH25	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
83	CH26	2102230017	CAP-CER,0.022UF 1KV J Z4U	
84	CH27	217154000901	CAP-PP,0.15UF 250V J TAP	
85	CH28	CE04IT1H010M	CAP-EL,KME 50V 1UF M	
86	CH29	2141050007	CAP-MPP,1UF 250V J	
87	CH30	CE04IT1H010M	CAP-EL,KME 50V 1UF M	
88	CH31	CK45BT3A221K	CAP-CD,1KV 220PF K TAP	
89	CH32	214304000201	CAP-M-P,0.3UF 250V J MPP	
90	CH33	CE04IT1H010M	CAP-EL,KME 50V 1UF M	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
91	CH34	2141840003	CAP-MPP,0.18UF 250V J	
92	CH35	2176810012	CAP-P-F,680PF 630V J RAD	
93	CH36	CE04IT1H470M	CAP-EL,KME 50V 47UF M	
94	CH37	CQ92BT2A473J	CAP-PE,100V 0.047UF J	
95	CH38	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
96	CH39	CE04BT1E100M	CAP-EL,SMS 25V 10UF M	
97	CH40	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
98	CH41	2003390026	CAP-AL,3.3UF 50V M 5*11 NP	
99	CH42	CF93BT1J104J	CAP-MPE,63V 0.1UF J	
100	CH43	CE04BT1H2R2M	CAP-EL,SMS 50V 2.2UF M	
101	CH44	CF93BT1J104J	CAP-MPE,63V 0.1UF J	
102	CH45	2102230017	CAP-CER,0.022UF 1KV J Z4U	
103	CH46	2001010091	CAP-AL,100UF 25V M 6.3*11 P	
104	CH47	2002280014	CAP-AL,0.22UF 200V M 5*11 P	
105	CH48	CC45CT1H221J	CAP-CD,50V 220PF J NPO	
106	CH49	CQ92BT2A104J	CAP-PE,100V 0.1UF J	
107	CH50	2102200010	CAP-CER,22PF 500V J COG	
108	CH51	2141040020	CAP-MPE,0.1UF 250V J RAD	
109	CH52	2102200010	CAP-CER,22PF 500V J COG	
110	CH53	CG45FT1H104Z	CAP-CD,50V 0.1UF Z	
111	CH54	CE04IT1H2R2M	CAP-EL,KME 50V 2.2UF M	
112	CH55	CQ92BT2A182J	CAP-PE,100V 1800PF J	
113	CH56	2001010084	CAP-AL,100UF 16V M 6.3*11 P	
114	CH57	CE04BT1C221M	CAP-EL,SMS 16V 220UF M	
115	CH58	2004790055	CAP-AL,4.7UF 250V M 13*20 NP	
116	CH61	2141040020	CAP-MPE,0.1UF 250V J RAD	
117	CH63	CK45BT1H331K	CAP-CD,50V 330PF K	
118	CH64	2178230004	CAP-PP,0.082UF 250V J RAD	
119	CH65	CE04IT1H010M	CAP-EL,KME 50V 1UF M	
120	CH66	CK45BT1H681K	CAP-CD,50V 680PF K	
121	CH67	CQ92BT2A273J	CAP-PE,100V 0.027UF J	
122	CH69	CE04BT1C470M	CAP-EL,SMS 16V 47UF M	
123	CH70	CK45BT3A101K	CAP-CD,1KV 100PF 10%	
124	CH71	CK45BT3A101K	CAP-CD,1KV 100PF 10%	
125	CH72	CQ92BT2A102J	CAP-PE,100V 0.001UF J	
126	CM01	2131040020	CAP-MULT,0.1UF 50V Z AXI	
127	CM02	CE04BT1HR47M	CAP-EL,SMS 50V 0.47UF M	
128	CM03	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
129	CM04	2131040020	CAP-MULT,0.1UF 50V Z AXI	
130	CM05	CC45CT1H220J	CAP-CD,50V 22PF J	
131	CM06	CC45CT1H220J	CAP-CD,50V 22PF J	
132	CM07	CE04BT1HR22M	CAP-EL,SMS 50V 0.22UF M	
133	CM08	2131040020	CAP-MULT,0.1UF 50V Z AXI	
134	CM09	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
135	CM10	CC45CT1H330J	CAP-CD,50V 33PF J	
136	CM11	E42007019220	CAP-PP/PE,100V 680PF J	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
137	CM12	CE04BT1H4R7M	CAP-EL,SMS 50V 4.7UF M	
138	CM13	CE04BT1H470M	CAP-EL,SMS 50V 47UF M	
139	CM14	2131040020	CAP-MULT,0.1UF 50V Z AXI	
140	CM15	2131040020	CAP-MULT,0.1UF 50V Z AXI	
141	CM17	CK45BT1H101K	CAP-CD,50V 100PF K	
142	CM18	CE04BT1H2R2M	CAP-EL,SMS 50V 2.2UF M	
143	CNC01	372010191601	CONN-M,SMAW200-14	
144	CNC02	3720101388	CONN-M,SMW200-06P	
145	CNC03	3721101187	CONN-F,CRT SKT ISDW01S P910+	
146	CNC04	372010138601	CONN-M,SMAW200-04P	
147	CON01	3720101389	CONN-M,SMW200-07P	
148	CON01	372500490706	CONN-A,8P CBL+6P FLAT V791	
149	CON02	3720101227	CONN-M,5045-3A 3	
150	CON03	372010105301	CONN-M,POST 1P DEGT235 14.2MM	
151	CON04	3720101916	CONN-M,SMW200-14 14	
152	CON04	372500502301	CONN-A,4P FLAT W/CORE V791	
153	CON05	3720101386	CONN-M,SMW200-04P	
154	CON06	3725005182	CONN-A,3P 150MM V791/HMO	
155	COP01	E42043055050	CONN,POST 2P 7.5MM	
156	CP01	E42007009110	CAP-X,250VAC 0.47UF M	
157	CP02	E42007027070	CAP-CD,Y2 4700PF M TAP	
158	CP03	E42007027070	CAP-CD,Y2 4700PF M TAP	
159	CP04	E42007009110	CAP-X,250VAC 0.47UF M	
160	CP05	200680001201	CAP-AL,68UF 450V M 18*31.5	
161	CP06	CE04BT1E101M	CAP-EL,SMS 25V 100UF M	
162	CP07	CK45BF2H103K	CAP-CD,500V 0.01UF K	
163	CP09	CQ92BT2A222J	CAP-PE,100V 0.0022UF J	
164	CP10	CE04BT2C220M	CAP-EL,SMS 160V 22UF M	
165	CP11	210472001501	CAP-CER,Y1 4700PF M NO-CUT	
166	CP12	CE04BT1H470M	CAP-EL,SMS 50V 47UF M	
167	CP13	CE04BT1E100M	CAP-EL,SMS 25V 10UF M	
168	CP14	CK45BT1H471K	CAP-CD,470PF TAP&FORM	
169	CP17	CE04BT1E101M	CAP-EL,SMS 25V 100UF M	
170	CP19	2003310033	CAP-AL,330UF 25V M 10*13 P	
171	CP21	2004700098	CAP-AL,47UF 250V M 13*25 P	
172	CP23	2004700087	CAP-AL,47UF 100V M 10*16 P	
173	CP24	CE04BT1C331M	CAP-EL,SMS 16V 330UF M	
174	CP25	2003310033	CAP-AL,330UF 25V M 10*13 P	
175	CP27	2004710049	CAP-AL,470UF 25V M 10*16 P	
176	CP28	2001010084	CAP-AL,100UF 16V M 6.3*11 P	
177	CP29	CE04BT1C101M	CAP-EL,SMS 16V 100UF M	
178	CP32	2102230017	CAP-CER,0.022UF 1KV J Z4U	
179	CV01	CQ92BT2A472J	CAP-PE,100V 0.0047UF J	
180	CV02	2004710049	CAP-AL,470UF 25V M 10*16 P	
181	CV03	2002210091	CAP-AL,220UF 35V M 10*13 P	
182	CV04	CF93BT1J105J	CAP-MPE,63V 1UF J	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
183	CV05	CE04BT1E471M	CAP-EL,SMS 25V 470UF M	
184	CV06	CQ92BT2A103J	CAP-PE,100V 0.01UF J	
185	CV07	CF93BT1J224J	CAP-MPE,63V 0.22UF J	
186	DC01	DTISS81	DIODE,SWITCHING ISS81	
187	DC02	DTISS81	DIODE,SWITCHING ISS81	
188	DC03	DTISS81	DIODE,SWITCHING ISS81	
189	DC04	DTISS81	DIODE,SWITCHING ISS81	
190	DC05	DTISS81	DIODE,SWITCHING ISS81	
191	DC06	DTISS81	DIODE,SWITCHING ISS81	
192	DC07	DTISS81	DIODE,SWITCHING ISS81	
193	DC08	DTISS81	DIODE,SWITCHING ISS81	
194	DC09	DTISS81	DIODE,SWITCHING ISS81	
195	DC10	DT1N4148	DIODE,1N4148 TAPING	
196	DC11	DT1N4148	DIODE,1N4148 TAPING	
197	DC12	DT1N4148	DIODE,1N4148 TAPING	
198	DC13	DT1N4007	DIODE,1000V 1.0A TAP	
199	DC14	DT1N4007	DIODE,1000V 1.0A TAP	
200	DC15	DT1N4148	DIODE,1N4148 TAPING	
201	DC16	DT1N4148	DIODE,1N4148 TAPING	
202	DC17	DT1N4148	DIODE,1N4148 TAPING	
203	DC18	DT1N4148	DIODE,1N4148 TAPING	
204	DC19	DT1N4148	DIODE,1N4148 TAPING	
205	DC20	DT1N4148	DIODE,1N4148 TAPING	
206	DC21	DT1N4148	DIODE,1N4148 TAPING	
207	D-COIL	350010183703	INDUCT-FIX,D-COIL V791 K I	
208	DF01	DT1N4937	DIODE,1N4937 TAPING	
209	DF02	DTUZ-12BSB	DIODE,ZENER UZ-12BSB TAP	
210	DF05	3100500184	DI-SW,RG4A LF-L1 LEAD	
211	DH01	DT1N4148	DIODE,1N4148 TAPING	
212	DH02	DT1N4148	DIODE,1N4148 TAPING	
213	DH04	3100500184	DI-SW,RG4A LF-L1 LEAD	
214	DH05	DTUF4007	DIODE,UF4007	
215	DH06	3100500163	DI-SW,RG4 LF-L1 (015-206) LEAD	
216	DH07	DT1N4148	DIODE,1N4148 TAPING	
217	DH09	DT1N4937	DIODE,1N4937 TAPING	
218	DH11	3102000242	DI-REC,FMQ-G1FS LEAD	
219	DH11	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
220	DH12	DT1N4148	DIODE,1N4148 TAPING	
221	DH13	DT1N4148	DIODE,1N4148 TAPING	
222	DH14	DT1N4148	DIODE,1N4148 TAPING	
223	DH16	DT1N4148	DIODE,1N4148 TAPING	
224	DH17	DT1N4148	DIODE,1N4148 TAPING	
225	DH18	DT1N4148	DIODE,1N4148 TAPING	
226	DH19	DTRGP02-16	DIODE,RGP02-16	
227	DH20	DTRGP02-16	DIODE,RGP02-16	
228	DH21	DT1N4937	DIODE,1N4937 TAPING	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
229	DH22	DT1N4148	DIODE,1N4148 TAPING	
230	DH23	DT1N4148	DIODE,1N4148 TAPING	
231	DH24	3102000248	DI-REC,GUF10M LEAD	
232	DH28	DT1N4937	DIODE,1N4937 TAPING	
233	DH30	DT1N4148	DIODE,1N4148 TAPING	
234	DH32	3104100134	DI-SCHOT,SB350L-57 LEAD	
235	DH36	DT1N4148	DIODE,1N4148 TAPING	
236	DP01	3102000246	DI-BRI,GSIB460L LEAD	
237	DP02	3100500149	DI-SW,RG4C LF-K2(015-202) LEAD	
238	DP03	DT1N4148	DIODE,1N4148 TAPING	
239	DP04	DT1N4148	DIODE,1N4148 TAPING	
240	DP06	DT1N4148	DIODE,1N4148 TAPING	
241	DP08	DT1N4148	DIODE,1N4148 TAPING	
242	DP09	DT1N4148	DIODE,1N4148 TAPING	
243	DP10	3100500163	DI-SW,RG4 LF-L1(015-206) LEAD	
244	DP11	3100500149	DI-SW,RG4C LF-K2(015-202) LEAD	
245	DP12	3100500087	DI-SW,S2L60-4004P15 LEAD	
246	DP13	3100500178	DI-SW,UF1G-5705 LEAD	
247	DP14	DTUF4004	DIODE,UF4004	
248	DP15	3100500163	DI-SW,RG4 LF-L1(015-206) LEAD	
249	DP16	DTUF4007	DIODE,UF4007	
250	DP17	DT1N4937	DIODE,1N4937 TAPING	
251	DP18	DT1N4937	DIODE,1N4937 TAPING	
252	DP20	DTISS81	DIODE,SWITCHING ISS81	
253	DV01	DTUF4002	DIODE,UF4002	
254	EL01	6130014100	EYELET,2.7PAI BRASS T=0.4	
255	EL02	6130014100	EYELET,2.7PAI BRASS T=0.4	
256	EL03	6130014100	EYELET,2.7PAI BRASS T=0.4	
257	EL04	6130014200	EYELET,1.6PAI BRASS T=0.4	
258	EL05	6130014200	EYELET,1.6PAI BRASS T=0.4	
259	EL06	6130014200	EYELET,1.6PAI BRASS T=0.4	
260	EL07	6130014200	EYELET,1.6PAI BRASS T=0.4	
261	EL08	6130014200	EYELET,1.6PAI BRASS T=0.4	
262	EL09	6130014200	EYELET,1.6PAI BRASS T=0.4	
263	EL11	6130014200	EYELET,1.6PAI BRASS T=0.4	
264	EL12	6130014200	EYELET,1.6PAI BRASS T=0.4	
265	EL13	6130014200	EYELET,1.6PAI BRASS T=0.4	
266	EL14	6130014200	EYELET,1.6PAI BRASS T=0.4	
267	EL17	6130014200	EYELET,1.6PAI BRASS T=0.4	
268	EL18	6130014200	EYELET,1.6PAI BRASS T=0.4	
269	EL23	6130014100	EYELET,2.7PAI BRASS T=0.4	
270	EL24	6130014100	EYELET,2.7PAI BRASS T=0.4	
271	EL25	6130014100	EYELET,2.7PAI BRASS T=0.4	
272	EL26	6130014100	EYELET,2.7PAI BRASS T=0.4	
273	EL29	6130014200	EYELET,1.6PAI BRASS T=0.4	
274	EL30	6130014200	EYELET,1.6PAI BRASS T=0.4	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
275	EL31	6130014100	EYELET,2.7PAI BRASS T=0.4	
276	EL32	6130014100	EYELET,2.7PAI BRASS T=0.4	
277	EL33	6130014100	EYELET,2.7PAI BRASS T=0.4	
278	EL34	6130014100	EYELET,2.7PAI BRASS T=0.4	
279	EL35	6130014100	EYELET,2.7PAI BRASS T=0.4	
280	EL36	6130014200	EYELET,1.6PAI BRASS T=0.4	
281	EL37	6130014200	EYELET,1.6PAI BRASS T=0.4	
282	EL38	6130014200	EYELET,1.6PAI BRASS T=0.4	
283	EL39	6130014100	EYELET,2.7PAI BRASS T=0.4	
284	EL40	6130014100	EYELET,2.7PAI BRASS T=0.4	
285	EL41	6130014100	EYELET,2.7PAI BRASS T=0.4	
286	EL42	6130014200	EYELET,1.6PAI BRASS T=0.4	
287	EL43	6130014200	EYELET,1.6PAI BRASS T=0.4	
288	EL44	6130014200	EYELET,1.6PAI BRASS T=0.4	
289	EL45	6130014200	EYELET,1.6PAI BRASS T=0.4	
290	EL46	6130014200	EYELET,1.6PAI BRASS T=0.4	
291	EL47	6130014200	EYELET,1.6PAI BRASS T=0.4	
292	EL48	6130014100	EYELET,2.7PAI BRASS T=0.4	
293	EL49	6130014100	EYELET,2.7PAI BRASS T=0.4	
294	EL50	6130014100	EYELET,2.7PAI BRASS T=0.4	
295	EL60	6130014200	EYELET,1.6PAI BRASS T=0.4	
296	EL61	6130014200	EYELET,1.6PAI BRASS T=0.4	
297	EL62	6130014200	EYELET,1.6PAI BRASS T=0.4	
298	EL65	6130014200	EYELET,1.6PAI BRASS T=0.4	
299	FC01	E42029012020	NOISE FILTER,TH28123MA	
300	FC02	E42029012020	NOISE FILTER,TH28123MA	
301	FP01	E42025012060	FUSE,TIME LAG 19181 3.15A	
302	FP01	E42076013010	FUSE CLIP,TAPING	
303	FS02	3620200099	FUSE-ACT,SSNM-125V-3.5A 125V 3	
304	G2	372010105301	CONN-M,POST 1P DEGT235 14.2MM	
305	ICC01	3200001434	IC-LIN,S1D2506A01-D0B1	
306	ICC01	6124035301	H-SINK IC,G910	
307	ICC02	3204000577	IC-INT,MTV021 9LANGUAGE DIP	
308	ICC03	3200001257	IC-LIN,LM2435T TO2	
309	ICC03	6124035700	H-SINK VIDEO,G910	
310	ICF01	3200001502	IC-LIN,MC33260 DIP	
311	ICH01	3200001408	IC-LIN,TDA4841PS SDIP 32P	
312	ICH01	6124035301	H-SINK IC,G910	
313	ICH02	ULM358N	IC,OP-AMP LM358N	
314	ICH03	UKA3843	IC,KA3843 DIP CONTROLLER	
315	ICM01	3205001384	IC-U,6124-N400HD-68A DIP 3.9	
316	ICM01	6120048600	SHLD-PL,G910/P911 MCU COVER ET	
317	ICM02	3203000819	IC-MEMO,S524A60X81	
318	ICP01	3200001258	IC-LIN,STRF6654A(LF1352) SIP	
319	ICP01	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
320	ICP02	ULM7805CT	IC,VOL REGULATOR,LM7805CT	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
321	ICP03	3331100041	P-COUPLER,TLP621(D4,T)	
322	ICP04	ULM431ACZT	ADJ SHUNT REG LM431 TAP	
323	ICV01	3200001409	IC-LIN,KA2142A SIP	
324	ICV01	6124036700	H-SINK VERTICAL ASSY,V790	
325	ICV01	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
326	ICV01	M31100030012	NUT HEX,6N1-3 MSZPC	
327	JC01	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
328	JC02	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
329	JC03	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
330	JC04	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
331	JC05	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
332	JC06	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
333	JC07	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
334	JC08	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
335	JC09	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
336	JC10	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
337	JP01	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
338	JP02	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
339	JP03	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
340	JP04	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
341	JP06	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
342	JP07	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
343	JP08	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
344	JP09	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
345	JP10	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
346	JP11	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
347	JP12	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
348	JP13	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
349	JP14	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
350	JP15	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
351	JP16	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
352	JP17	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
353	JP18	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
354	JP19	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
355	JP20	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
356	JP21	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
357	JP22	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
358	JP23	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
359	JP24	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
360	JP25	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
361	JP26	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
362	JP27	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
363	JP28	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
364	JP29	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
365	JP30	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
366	JP31	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
367	JP32	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
368	JP33	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
369	JP34	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
370	JP35	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
371	JP36	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
372	JP37	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
373	JP39	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
374	JP40	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
375	JP41	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
376	JP42	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
377	JP43	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
378	JP44	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
379	JP45	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
380	JP46	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
381	JP47	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
382	JP48	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
383	JP49	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
384	JP50	RD-8P0T0472J	RES-CF,RD 1/8W 4.7K OHM J	
385	JP51	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
386	JP52	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
387	JP53	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
388	JP54	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
389	JP55	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
390	JP56	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
391	JP57	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
392	JP58	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
393	JP59	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
394	JP60	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
395	JP61	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
396	JP62	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
397	JP63	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
398	JP64	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
399	JP65	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
400	JP66	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
401	JP67	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
402	JP68	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
403	JP69	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
404	JP70	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
405	JP71	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
406	JP72	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
407	JP73	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
408	JP74	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
409	JP75	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
410	JP76	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
411	JP77	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
412	JP78	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
413	JP78	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
414	JP79	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
415	JP80	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
416	JP81	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
417	JP82	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
418	JP83	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
419	JP84	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
420	JP86	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
421	LC01	3500100959	INDUCT-FIX,AL03TBR33K K AX 0.3	
422	LC02	3500100959	INDUCT-FIX,AL03TBR33K K AX 0.3	
423	LC03	3500100959	INDUCT-FIX,AL03TBR33K K AX 0.3	
424	LED01	3330600441	LED,A1329B/GYC/R2	
425	LF01	3510300183	TRAN-SW,PFC EE2821	
426	LH01	3500101071	CHOKE COIL,DR0808 10UH TAP	
427	LH02	3500100493	INDUCT-FIX,AL04TB101K K AX 100	
428	LP01	352020019201	FLT-LC,SQE2828 0.6P83T 30MH	
429	LP03	E4203109004A	TRANS SYNC,UU1116 TUBE	
430	NTC01	E4207708409A	THERMISTOR 18OHM 13PAI TAPING	
431	PCGW	372010105301	CONN-M,POST 1P DEGT235 14.2MM	
432	PG2	3755000910	WIRE-ASS'Y, G2 270MM V780	
433	PTC01	3411300012	POSISTOR,J502972D070Q270 7 250	
434	QC01	TTKSC945CY	TR,KSC945C-Y	
435	QC03	TTKSP92	TR,KSP92	
436	QC04	TTKSP42	TR,KSP42	
437	QC05	TTKSP92	TR,KSP92	
438	QC06	TTKSP42	TR,KSP42	
439	QC07	TTKSP92	TR,KSP92	
440	QC08	TTKSP42	TR,KSP42	
441	QC12	TTKSC945CY	TR,KSC945C-Y	
442	QC13	TTKSC945CY	TR,KSC945C-Y	
443	QC14	3110100689	TR-GEN,KSA1013Y LEAD	
444	QC15	TTKSP45	TR,KSP45	
445	QF01	3114000158	FET,2SK2761-01MR-F130-S07PP LE	
446	QF01	6124029212	H-SINK PWR FET A,V791	
447	QF01	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
448	QH01	TTKSC945CY	TR,KSC945C-Y	
449	QH02	TTKTA200Y	TR,KTA200Y TAP	
450	QH03	TTKSC945CY	TR,KSC945C-Y	
451	QH04	3114000158	FET,2SK2761-01MR-F130-S07PP LE	
452	QH04	6124036900	H-SINK ASSY HORIZONTAL,B790+	
453	QH04	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
454	QH05	TTKSA733CY	TR,KSA733C-Y	
455	QH06	TTKSC945CY	TR,KSC945C-Y	
456	QH07	3114000152	FET,SFP9644 LEAD	
457	QH07	B4212501009B	HEAT SINK PWR,37MM NON-ANOD	
458	QH07	M11143008012	SCREW,BIN(+) M3*8 MSZPC	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
459	QH08	TT2N7000	TR,2N7000	
460	QH09	3110100704	TR-GEN,2SC5411(AS) LEAD	
461	QH09	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
462	QH10	TTKSC945CY	TR,KSC945C-Y	
463	QH11	6124036400	H-SINK CS,V790	
464	QH11	311400012401	FET,IRF630B	
465	QH11	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
466	QH12	311400017101	FET,IRFS630B LEAD	
467	QH12	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
468	QH13	311400017101	FET,IRFS630B LEAD	
469	QH13	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
470	QH14	TTKSC945CY	TR,KSC945C-Y	
471	QH15	TTKSC945CY	TR,KSC945C-Y	
472	QH16	TTKSC945CY	TR,KSC945C-Y	
473	QH17	3110100641	TR-GEN,KSC5042F LEAD	
474	QH17	6124035400	H-SINK F,G910	
475	QH17	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
476	QH17	M31100030012	NUT HEX,6N1-3 MSZPC	
477	QH18	3110100641	TR-GEN,KSC5042F LEAD	
478	QH18	6124035400	H-SINK F,G910	
479	QH18	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
480	QH18	M31100030012	NUT HEX,6N1-3 MSZPC	
481	QH19	TTKSC945CY	TR,KSC945C-Y	
482	QH20	TTKTA200Y	TR,KTA200Y TAP	
483	QH21	TTKSC945CY	TR,KSC945C-Y	
484	QH22	311400017101	FET,IRFS630B LEAD	
485	QH22	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
486	QH23	TTKTC200Y	TR,KTC200Y TAP	
487	QH24	TTKSC945CY	TR,KSC945C-Y	
488	QH25	TTKSA733CY	TR,KSA733C-Y	
489	QM01	TTKTC200Y	TR,KTC200Y TAP	
490	QM02	TTKTA200Y	TR,KTA200Y TAP	
491	QM03	TTKTC1815Y	TR,KTC3198Y	
492	QM04	TTKSC945CY	TR,KSC945C-Y	
493	QP01	3110100681	TR-GEN,KTC3228Y LEAD	
494	QP02	TTKTC3200BL	TR,LOW NOISE KTC3200BL	
495	QP03	TTKSC945CY	TR,KSC945C-Y	
496	QP04	3110100687	TR-GEN,KSA928AY LEAD	
497	QP06	TTKRC102M	TR,SWITCHING KRC102M	
498	QP07	3110100687	TR-GEN,KSA928AY LEAD	
499	QP08	TTKRC102M	TR,SWITCHING KRC102M	
500	QP10	6124020508	H-SINK POWER,B790 L=22MM	
501	QP10	M11143008012	SCREW,BIN(+) M3*8 MSZPC	
502	QP10	ULM7812CT	IC,VOL REGULATOR,LM7812CT	
503	RC01	RD-8P0T0103J	RES-CF,RD 1/8W 10KOHM J	
504	RC02	RD-8P0T0122J	RES-CF,RD 1/8W 1.2K OHM J	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
505	RC03	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
506	RC04	RD-8P0T0202J	RES-CF, RD 1/8W 2K OHM J	
507	RC05	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
508	RC06	2405103004	RES-CF, 510K 0.5W J M	
509	RC07	RD-8P0T0102J	RES-CF, RD 1/8W 1K OHM J	
510	RC08	RD-8P0T0391J	RES-CF, RD 1/8W 390 OHM J	
511	RC09	RD-8P0T0391J	RES-CF, RD 1/8W 390 OHM J	
512	RC10	RD-8P0T0391J	RES-CF, RD 1/8W 390 OHM J	
513	RC11	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
514	RC12	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
515	RC13	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
516	RC14	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
517	RC15	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
518	RC16	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
519	RC17	RD-8P0T0513J	RES-CF, RD 1/8W 51K OHM J	
520	RC18	RD-8P0T0102J	RES-CF, RD 1/8W 1K OHM J	
521	RC19	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
522	RC20	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
523	RC21	RD-8P0T0510J	RES-CF, RD 1/8W 51 OHM J	
524	RC22	RD-8P0T0105J	RES-CF, RD 1/8W 1M OHM J	
525	RC23	RD-8P0T0562J	RES-CF, RD 1/8W 5.6K OHM J	
526	RC24	RD-8P0T0622J	RES-CF, RD 1/8W 6.2K OHM J	
527	RC25	RD-8P0T0562J	RES-CF, RD 1/8W 5.6K OHM J	
528	RC26	RD-4P0T0330J	RES-CF, RD 1/4W 33 OHM J	
529	RC27	RD-4P0T0330J	RES-CF, RD 1/4W 33 OHM J	
530	RC28	RD-4P0T0330J	RES-CF, RD 1/4W 33 OHM J	
531	RC29	2401000008	RES-CF, 100 0.5W J M	
532	RC30	2401000008	RES-CF, 100 0.5W J M	
533	RC31	2401000008	RES-CF, 100 0.5W J M	
534	RC32	2405609006	RES-CF, 56 0.5W J M	
535	RC33	2405609006	RES-CF, 56 0.5W J M	
536	RC34	2405609006	RES-CF, 56 0.5W J M	
537	RC35	2401000008	RES-CF, 100 0.5W J M	
538	RC37	RD-4P0T0224J	RES-CF, RD 1/4W 220K OHM J	
539	RC38	RD-4P0T0224J	RES-CF, RD 1/4W 220K OHM J	
540	RC39	RD-4P0T0224J	RES-CF, RD 1/4W 220K OHM J	
541	RC40	RD-8P0T0184J	RES-CF, RD 1/8W 180K OHM J	
542	RC41	RD-8P0T0184J	RES-CF, RD 1/8W 180K OHM J	
543	RC42	RD-8P0T0184J	RES-CF, RD 1/8W 180K OHM J	
544	RC43	RD-4P0T0101J	RES-CF, RD 1/4W 100 OHM J	
545	RC44	RD-4P0T0101J	RES-CF, RD 1/4W 100 OHM J	
546	RC45	RD-4P0T0101J	RES-CF, RD 1/4W 100 OHM J	
547	RC46	RD-8P0T0750J	RES-CF, RD 1/8W 75 OHM J	
548	RC47	RD-8P0T0750J	RES-CF, RD 1/8W 75 OHM J	
549	RC48	RD-8P0T0750J	RES-CF, RD 1/8W 75 OHM J	
550	RC50	RD-4P0T02R2J	RES-CF, RD 1/4W 2.2 OHM J	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
551	RC53	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
552	RC54	RD-8P0T0822J	RES-CF, RD 1/8W 8.2K OHM J	
553	RC55	RD-8P0T0561J	RES-CF, RD 1/8W 560 OHM J	
554	RC56	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
555	RC57	RD-8P0T0242J	RES-CF, RD 1/8W 2.4K OHM J	
556	RC58	RD-8P0T0222J	RES-CF, RD 1/8W 2.2K OHM J	
557	RC59	RD-4P0T0434J	RES-CF, RD 1/4W 430K OHM J	
558	RC60	RD-4P0T0474J	RES-CF, RD 1/4W 470K OHM J	
559	RC61	2407503004	RES-CF, 750K 0.125W J A	
560	RC62	RD-8P0T0102J	RES-CF, RD 1/8W 1K OHM J	
561	RC63	RD-8P0T0274J	RES-CF, RD 1/8W 270K OHM J	
562	RC64	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
563	RC65	RD-8P0T0105J	RES-CF, RD 1/8W 1M OHM J	
564	RC66	2463008002	RES-MOF, 3.0 1W J M	
565	RC67	RD-8P0T0394J	RES-CF, RD 1/8W 390K OHM J	
566	RC68	RD-8P0T0394J	RES-CF, RD 1/8W 390K OHM J	
567	RC69	RD-8P0T0394J	RES-CF, RD 1/8W 390K OHM J	
568	RF01	RD-4P0T0271J	RES-CF, RD 1/4W 270 OHM J	
569	RF02	RD-8P0T0100J	RES-CF, RD 1/8W 10 OHM J	
570	RF03	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
571	RF04	2402004002	RES-CF, 2M 0.5W J M	
572	RF05	RD-4P0T0223J	RES-CF, RD 1/4W 22K OHM J	
573	RF06	RD-4P0T0153J	RES-CF, RD 1/4W 15K OHM J	
574	RF07	2460228005	RES-MOF, 0.22 3W J V	
575	RF08	RD-8P0T0223J	RES-CF, RD 1/8W 22K OHM J	
576	RF09	246200900401	RES-MOF, 20 2W J R-FORMING	
577	RH01	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
578	RH02	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
579	RH03	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
580	RH04	RD-8P0T0682J	RES-CF, RD 1/8W 6.8K OHM J	
581	RH05	RD-8P0T0223J	RES-CF, RD 1/8W 22K OHM J	
582	RH06	RD-8P0T0332J	RES-CF, RD 1/8W 3.3K OHM J	
583	RH07	2446800003	RES-MF, 680 0.125W F A	
584	RH08	RN-8P0T2701F	RES-MF, RN 1/8W 2.7KOHM F	
585	RH10	RD-8P0T0392J	RES-CF, RD 1/8W 3.9K OHM J	
586	RH100	246820200301	RES-MOF, 82K 2W J R-FORM	
587	RH101	246820200301	RES-MOF, 82K 2W J R-FORM	
588	RH102	2421000004	RES-CC, 100 0.5W K A	
589	RH103	2461201005	RES-MOF, 1.2K 1W J M	
590	RH104	2401804003	RES-CF, 1.8M 0.125W J A	
591	RH105	2401804003	RES-CF, 1.8M 0.125W J A	
592	RH106	2401804003	RES-CF, 1.8M 0.125W J A	
593	RH107	2401804003	RES-CF, 1.8M 0.125W J A	
594	RH108	2404701010	RES-CF, 4.7K 0.5W J M	
595	RH109	RD-4P0T0152J	RES-CF, RD 1/4W 1.5K OHM J	
596	RH11	RN-8P0T4302F	RES-MF, RN 1/8W 43KOHM F	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
597	RH110	RD-8P0T0222J	RES-CF, RD 1/8W 2.2K OHM J	
598	RH111	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
599	RH112	RD-8P0T0473J	RES-CF, RD 1/8W 47K OHM J	
600	RH113	RN-8P0T1603F	RES-MF, RN 1/8W 160KOHM F	⚠
601	RH114	246750300101	RES-MOF, 750K 1W J R-FOR	
602	RH115	246750300101	RES-MOF, 750K 1W J R-FOR	
603	RH116	246510300101	RES-MOF, 510K 1W J R-FORMING	
604	RH117	2421001002	RES-CC, 1K 0.5W K A	
605	RH12	RN-8P0T4302F	RES-MF, RN 1/8W 43KOHM F	⚠
606	RH13	RN-8P0T2402F	RES-MF, RN 1/8W 24K OHM F	⚠
607	RH14	RN-8P0T5601F	RES-MF, RN 1/8W 5.6KOHM F	
608	RH15	2441912002	RES-MF, 19.1K 0.125W F A	
609	RH16	RD-4P0T0102J	RES-CF, RD 1/4W 1K OHM J	
610	RH17	RD-4P0T0471J	RES-CF, RD 1/4W 470 OHM J	
611	RH18	RD-8P0T0104J	RES-CF, RD 1/8W 100K OHM J	
612	RH19	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
613	RH20	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
614	RH21	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
615	RH22	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
616	RH23	2464708004	RES-MOF, 4.7 1W J M	
617	RH24	RD-8P0T0273J	RES-CF, RD 1/8W 27K OHM J	
618	RH25	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
619	RH26	RD-8P0T0473J	RES-CF, RD 1/8W 47K OHM J	
620	RH27	RD-8P0T0333J	RES-CF, RD 1/8W 33K OHM J	
621	RH28	2406209002	RES-CF, 62 0.125W J A	
622	RH29	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
623	RH30	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
624	RH31	254100800301	RES-FUS, 1 1W J M	
625	RH32	2462208007	RES-MOF, 2.2 1W J M	
626	RH33	2461008006	RES-MOF, 1 1W J M	
627	RH34	2543309002	RES-FUS, 33 1W J M	
628	RH35	2561000007	RES-CEM, 100 7W J U	
629	RH36	RN-8P0T2702F	RES-MF, RN 1/8W 27K OHM F	
630	RH37	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
631	RH38	RD-8P0T0223J	RES-CF, RD 1/8W 22K OHM J	
632	RH39	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
633	RH40	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
634	RH41	RD-8P0T0220J	RES-CF, RD 1/8W 22 OHM J	
635	RH42	RD-8P0T0330J	RES-CF, RD 1/8W 33 OHM J	
636	RH43	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
637	RH44	RD-8P0T0222J	RES-CF, RD 1/8W 2.2K OHM J	
638	RH45	RD-8P0T0221J	RES-CF, RD 1/8W 220 OHM J	
639	RH46	RD-4P0T0103J	RES-CF, RD 1/4W 10K OHM J	
640	RH47	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
641	RH48	RD-4P0T0121J	RES-CF, RD 1/4W 120 OHM J	
642	RH49	2464309002	RES-MOF, 43 3W J M	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
643	RH50	RD-8P0T0752J	RES-CF, RD 1/8W 7.5K OHM J	
644	RH51	2404708006	RES-CF, 4.7 0.5W J M	
645	RH52	RD-8P0T0123J	RES-CF, RD 1/8W 12KOHM J	
646	RH53	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
647	RH54	2462209007	RES-MOF, 22 1W J M	
648	RH55	RN-4P0T1201F	RES-MF, RN 1/4W 1.2KOHM F	
649	RH56	2461500004	RES-MOF, 150 2W J M	
650	RH57	RD-8P0T0821J	RES-CF, RD 1/8W 820 OHM J	
651	RH58	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
652	RH59	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
653	RH60	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
654	RH61	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
655	RH62	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
656	RH63	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
657	RH64	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
658	RH65	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
659	RH66	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
660	RH67	RD-8P0T0104J	RES-CF, RD 1/8W 100K OHM J	
661	RH68	2407503004	RES-CF, 750K 0.125W J A	
662	RH69	RD-8P0T0153J	RES-CF, RD 1/8W 15K OHM J	
663	RH70	2543309003	RES-FUS, 33 0.5W J M	
664	RH71	RD-8P0T0102J	RES-CF, RD 1/8W 1K OHM J	
665	RH72	2401001010	RES-CF, 1K 0.5W J M	
666	RH73	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
667	RH74	RD-8P0T0133J	RES-CF, RD 1/8W 13K OHM J	
668	RH75	2464309002	RES-MOF, 43 3W J M	
669	RH76	RD-4P0T0473J	RES-CF, RD 1/4W 47K OHM J	
670	RH77	RD-4P0T0102J	RES-CF, RD 1/4W 1K OHM J	
671	RH78	2461000007	RES-MOF, 100 1W J M	
672	RH79	RD-4P0T0152J	RES-CF, RD 1/4W 1.5K OHM J	
673	RH86	RD-8P0T0270J	RES-CF, RD 1/8W 27 OHM J	
674	RH87	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
675	RH88	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
676	RH89	2540228001	RES-FUS, 0.22 0.5W J A	
677	RH90	RD-8P0T0203J	RES-CF, RD 1/8W 20K OHM J	
678	RH92	RD-4P0T0155J	RES-CF, RD 1/4W 1.5M OHM J	
679	RH93	RD-4P0T0155J	RES-CF, RD 1/4W 1.5M OHM J	
680	RH94	RD-8P0T0104J	RES-CF, RD 1/8W 100K OHM J	
681	RH95	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
682	RH96	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
683	RH97	RD-4P0T0681J	RES-CF, RD 1/4W 680 OHM J	
684	RH98	2461008010	RES-MOF, 1 3W J M	
685	RH99	RD-4P0T0153J	RES-CF, RD 1/4W 15K OHM J	
686	RLP01	3710100085	RELAY, DY3M-DC12V 5A 250V MINI	
687	RM01	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
688	RM02	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	

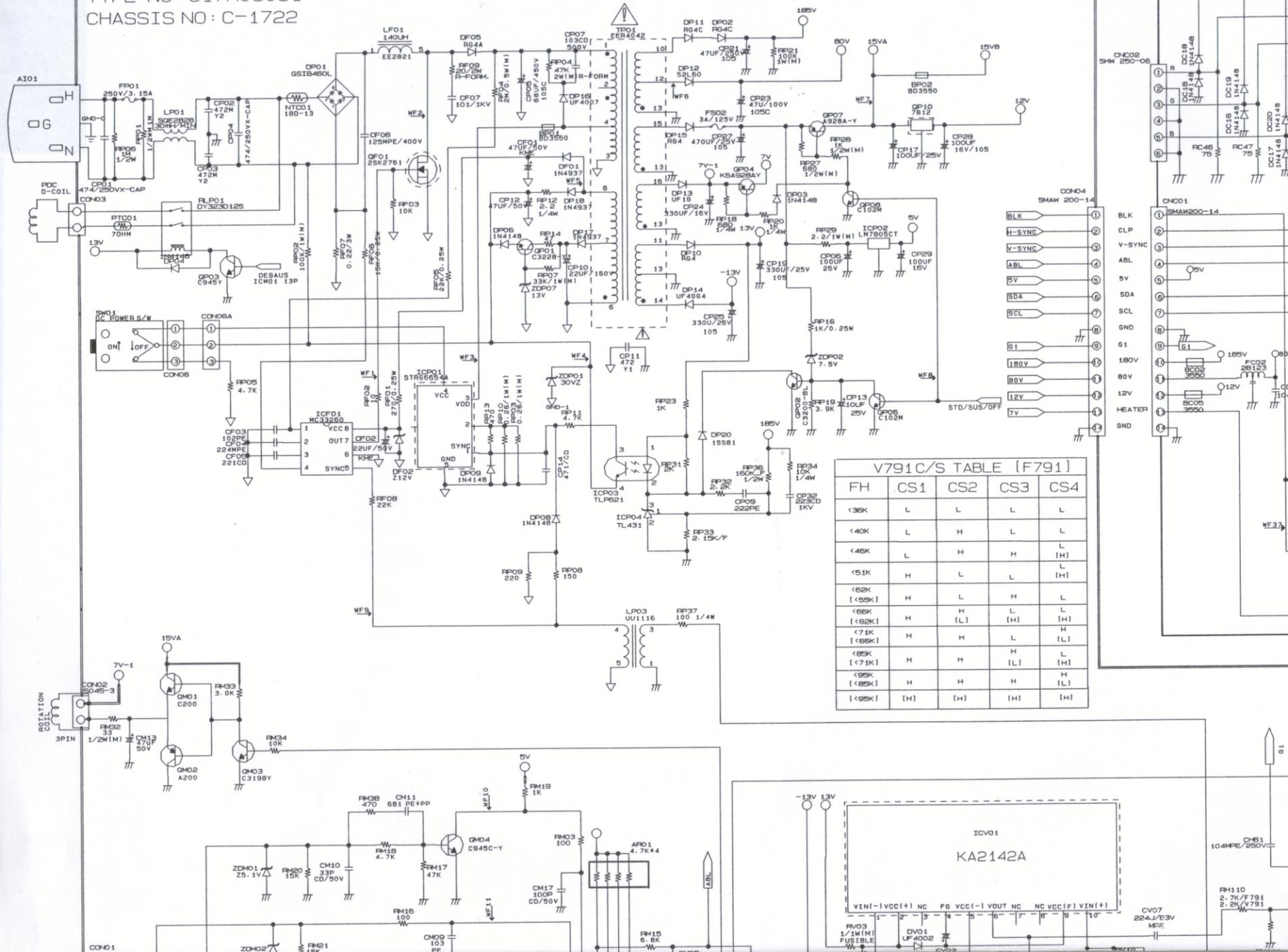
NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
689	RM03	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
690	RM04	RD-8P0T0105J	RES-CF, RD 1/8W 1M OHM J	
691	RM05	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
692	RM06	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
693	RM07	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
694	RM08	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
695	RM09	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
696	RM10	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
697	RM11	RD-8P0T0153J	RES-CF, RD 1/8W 15K OHM J	
698	RM12	RD-8P0T0153J	RES-CF, RD 1/8W 15K OHM J	
699	RM13	RD-8P0T0153J	RES-CF, RD 1/8W 15K OHM J	
700	RM14	RD-8P0T0913J	RES-CF, RD 1/8W 91K OHM J	
701	RM15	RD-8P0T0682J	RES-CF, RD 1/8W 6.8K OHM J	
702	RM16	RD-8P0T0101J	RES-CF, RD 1/8W 100 OHM J	
703	RM17	RD-8P0T0473J	RES-CF, RD 1/8W 47K OHM J	
704	RM18	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
705	RM19	RD-8P0T0102J	RES-CF, RD 1/8W 1K OHM J	
706	RM20	RD-8P0T0153J	RES-CF, RD 1/8W 15K OHM J	
707	RM21	RD-8P0T0153J	RES-CF, RD 1/8W 15K OHM J	
708	RM22	RD-8P0T0124J	RES-CF, RD 1/8W 120K OHM J	
709	RM23	RD-8P0T0752J	RES-CF, RD 1/8W 7.5K OHM J	
710	RM24	RN-4P0T1742F	RES-MF, RN 1/4W 17.4KOHM F	
711	RM25	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
712	RM26	RD-8P0T0332J	RES-CF, RD 1/8W 3.3K OHM J	
713	RM27	RD-8P0T0332J	RES-CF, RD 1/8W 3.3K OHM J	
714	RM28	RD-4P0T0103J	RES-CF, RD 1/4W 10K OHM J	
715	RM29	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
716	RM30	RD-8P0T0471J	RES-CF, RD 1/8W 470 OHM J	
717	RM31	RD-8P0T0331J	RES-CF, RD 1/8W 330 OHM J	
718	RM32	2403309005	RES-CF, 33 0.5W J M	
719	RM33	RD-8P0T0302J	RES-CF, RD 1/8W 3K OHM J	
720	RM34	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
721	RM35	RD-8P0T0562J	RES-CF, RD 1/8W 5.6K OHM J	
722	RM36	RD-8P0T0273J	RES-CF, RD 1/8W 27K OHM J	
723	RM37	RD-8P0T0103J	RES-CF, RD 1/8W 10KOHM J	
724	RM38	RD-8P0T0471J	RES-CF, RD 1/8W 470 OHM J	
725	RP01	2461004001	RES-MOF, 1M 1W J M	
726	RP02	2461003006	RES-MOF, 100K 1W J M	
727	RP03	2462607001	RES-MOF, 0.26 1W J M	
728	RP04	246470200501	RES-MOF, 47K 2W J R-FORMING	
729	RP05	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
730	RP06	2401004008	RES-CF, 1M 0.5W J M	
731	RP07	2463302005	RES-MOF, 33K 1W J M	
732	RP08	RD-8P0T0151J	RES-CF, RD 1/8W 150 OHM J	
733	RP09	RD-8P0T0221J	RES-CF, RD 1/8W 220 OHM J	
734	RP10	2462607001	RES-MOF, 0.26 1W J M	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
735	RP11	RD-8P0T0472J	RES-CF, RD 1/8W 4.7K OHM J	
736	RP12	RD-4P0T02R2J	RES-CF, RD 1/4W 2.2 OHM J	
737	RP13	RD-8P0T0471J	RES-CF, RD 1/8W 470 OHM J	
738	RP14	RD-8P0T0470J	RES-CF, RD 1/8W 47 OHM J	
739	RP16	RD-4P0T0102J	RES-CF, RD 1/4W 1K OHM J	
740	RP17	375300002401	WIRE-NS-S43MM TAP. SDA 1/0.	
741	RP18	RD-4P0T0681J	RES-CF, RD 1/4W 680 OHM J	
742	RP19	RD-8P0T0392J	RES-CF, RD 1/8W 3.9K OHM J	
743	RP20	RD-4P0T0102J	RES-CF, RD 1/4W 1K OHM J	
744	RP21	2461003006	RES-MOF, 100K 1W J M	
745	RP23	RD-8P0T0102J	RES-CF, RD 1/8W 1K OHM J	
746	RP27	2406800008	RES-CF, 680 0.5W J M	
747	RP28	2401001010	RES-CF, 1K 0.5W J M	
748	RP29	2462208007	RES-MOF, 2.2 1W J M	
749	RP31	RD-8P0T0202J	RES-CF, RD 1/8W 2K OHM J	
750	RP32	RD-8P0T0222J	RES-CF, RD 1/8W 2.2K OHM J	
751	RP33	2442151002	RES-MF, 2.15K 0.125W F A	
752	RP34	RD-4P0T0103J	RES-CF, RD 1/4W 10K OHM J	
753	RP36	2441603002	RES-MF, 160K 0.5W F A	
754	RP37	RD-4P0T0101J	RES-CF, RD 1/4W 100 OHM J	
755	RV01	RD-8P0T0682J	RES-CF, RD 1/8W 6.8K OHM J	
756	RV02	RD-8P0T0682J	RES-CF, RD 1/8W 6.8K OHM J	
757	RV03	254100800301	RES-FUS, 1 1W J M	
758	RV04	254100800301	RES-FUS, 1 1W J M	
759	RV05	2401208005	RES-CF, 1.2 0.5W J M	
760	RV06	RD-8P0T0562J	RES-CF, RD 1/8W 5.6K OHM J	
761	RV07	240270800101	RES-CF, 2.7 0.5W J M	
762	RV08	RD-8P0T0562J	RES-CF, RD 1/8W 5.6K OHM J	
763	RV09	RD-8P0T0682J	RES-CF, RD 1/8W 6.8K OHM J	
764	RV10	RN-4P0T6801F	RES-MF, RN 1/4W 6.8KOHM F	
765	RV11	RD-4P0T0102J	RES-CF, RD 1/4W 1K OHM J	
766	RV12	240270800101	RES-CF, 2.7 0.5W J M	
767	SGC01	3411100083	VARISTOR, SURGE ABSORBER R 200V	
768	SGC02	3411100083	VARISTOR, SURGE ABSORBER R 200V	
769	SGC03	3411100083	VARISTOR, SURGE ABSORBER R 200V	
770	SGC04	3411100084	VARISTOR, SURGE ABSORBER R 300V	
771	SGC05	3411100043	VARISTOR, S23 1500V 1500V 250MW	
772	SW01	3700800117	SW-PUSH, CPS-1202 30V 0.3A	
773	SW02	E42027039010	SWITCH TACT, 5MM 160GF VERTICAL	
774	SW03	E42027039010	SWITCH TACT, 5MM 160GF VERTICAL	
775	SW04	E42027039010	SWITCH TACT, 5MM 160GF VERTICAL	
776	SW05	E42027039010	SWITCH TACT, 5MM 160GF VERTICAL	
777	TH01	3510300170	TRAN-SW, HDT EI1916 B790+	
778	TH02	3500101865	INDUCT-FIX, Q790 LIN COIL M IH	
779	TH03	3510300189	TRAN-SW, AFC TRANS EE2821	
780	TH04	3510500093	FBT, F791/V791 SAMSUNG	

NO	LOCATION	PART NUMBER	DESCRIPTION	REMARK
781	TP01	351020013001	TRAN-PW,ER4042 V791	
782	VRH01	3410300281	VR-S-FIX,RH0633C100 10K 0.01MW	
783	WHV01	372010105301	CONN-M,POST 1P DEGT235 14.2MM	
784	XM01	3530200581	VIB-QUARTZ,12MHZ 22PF ATS49U 1	
785	ZDH08	DTUZ-12BSB	DIODE,ZENER UZ-12BSB TAP	
786	ZDH10	DTUZ-12BSB	DIODE,ZENER UZ-12BSB TAP	
787	ZDH15	DTUZ-5.6BSB	DIODE,ZENER UZ-5.6BSB TAP	
788	ZDM01	DTUZ-5.1BSB	DIODE,ZENER UZ-5.1BSB TAP	
789	ZDM02	DTUZ-5.1BSB	DIODE,ZENER UZ-5.1BSB TAP	
790	ZDM03	DTUZ-5.1BSB	DIODE,ZENER UZ-5.1BSB TAP	
791	ZDM04	DTUZ-5.1BSB	DIODE,ZENER UZ-5.1BSB TAP	
792	ZDP01	3101000386	DI-ZN,1N4751A LEAD	
793	ZDP02	DTUZ-7.5BSB	DIODE,ZENER UZ-7.5BSB	
794	ZDP07	DTUZ-13B	DIODE,ZENER UZ-13B	
795		3010100157	CRT,M41QAQ261X132 17 TCO	
796		3540400027	MAG-FER,RING23.5PAI NI-ZN	
797		3758000200	CBL-PWR,MW WALL 1.8MT EUROPEAN	
798		3758500476	CBL-SGN,1.8MT M.WHITE 6.2PAI A	
799		5004000204	SCR-TT,BIN + MC 3*8	
800		6101197303	CHASSIS MAIN,B791	
801		6101197402	CHASSIS MAIN ASSY,B790+	
802		6120039600	SHLD-CASE CRT,B720	
803		6120042600	CRT SPRING,V770	
804		6120042700	SHLD-CASE COVER,V770	
805		6120042800	SHIELD GROUND SPRING,V770	
806		6120043000	SOLDER GRIP,V770	
807		6120043300	SHLD-CASE COVER ASSY,V770	
808		6120043700	SHIELD GROUND SPRING B,V770	
809		6120044300	GND-PL,VIDEO SPRING G910	
810		6120045200	SHLD-CASE CRT ASSY,V790	
811		6124036300	H-SINK VERTICAL,V790	
812		6124036500	H-SINK HORIZONTAL,V790	
813		6128010171	GASKET EMI 12 X 6 X 35 V790 MA	
814		6129027600	SPECIAL,T.T/W(+) 3*8 MSZPC	
815		6129033900	SPECIAL SCREW FBT,B790+	
816		6129035200	SPECIAL SCREW TRS(+) 5X22	
817		6130020303	PEM,V560(H=12.0MM)	
818		6130023900	STUD H-SINK HORIZONTAL,B790+	
819		6201279120	COVER REAR,V791 MAXDATA	
820		6201279214	SWIVEL BASE MAXDATA	
821		6201279314	SWIVEL UPPER MAXDATA,V791	
822		6201279517	TLIT&SWIVEL ASSY,V791 MAXDATA	
823		6201288602	COVER FRONT,V791 MAXDATA	
824		6201292208	COVER F.ASSY,V791 MAXDATA	
825		6215227800	CAP SHIELD,V770	
826		6215234002	KNOB POWER,V791 MAXDATA	

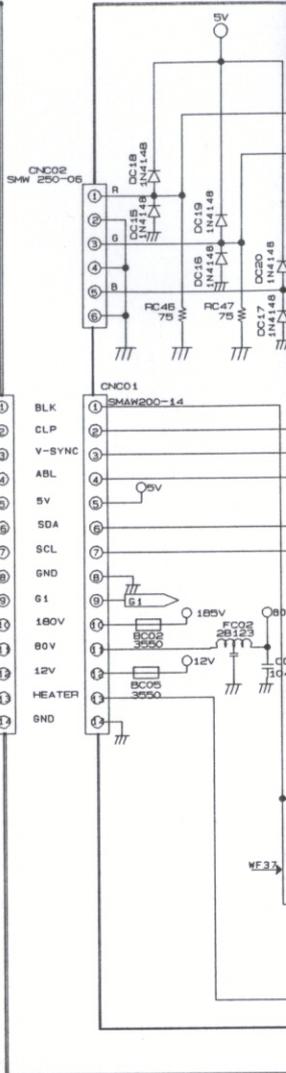
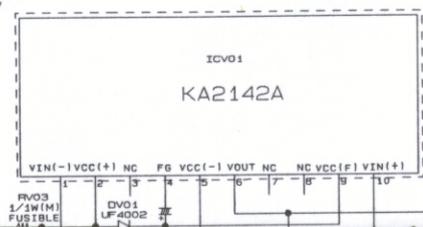
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827		6215234102	KNOB CONTROL,V791	
828		6243037500	BAG PE,BRKT SIDE	
829		6253114001	CUSHION LEFT,V770(N2)	
830		6253114101	CUSHION RIGHT,V770(N2)	
831		6261022102	RUBBER PCB(NEW),ALL MODEL	
832		6262004800	FOOTER RUBBER PEM BLACK	
833		6301191400	PALLET PAD,ALL MODEL,SW-3	
834		6316349287	EAN CODE STICKER,MAXDATA	
835		6316349297	TCO'03 SHEET	
836		6320233504	USER'S GUIDE,V791 MAXDATA	
837		304010087906	OCB-SINGLE,V791 MAIN F1 1	
838		304010088003	PCB-SINGLE,V791 CRT F1 1	
839		375400001602	WIRE-NS-M,1.0T<-TBC->1.0T	
840		630119043101	CTN BOX,SW-3(B) V791 MAXDATA	
841		631634708701	BACK LABEL,V791/TCO'03 MAXDATA	
842		631634928801	SERIALI NO STICKER,MAXDATA	
843		631634929001	HI-POT STICKER MAXDATA	
844		B4008500100A	CABLE TIE	
845		B4008500100A	CABLE TIE	
846		B4204505100C	LABEL,X-RAY WARNING	
847		B4204665765	KIT LAB & MAN V791/TCO'03 MAXD	
848		B4209501203A	BAG PE,SET(RECYCLE MARK'G)	
849		B4210325608	KIT COVER ASSY V770B MAXDATA	
850		B4210328007	PACKING ASSY,17(600) OTT	
851		B4214000701A	SPRING COM	
852		E4205016804	MAIN ASSY,V791 MAXDATA(1.8MT S	
853		E4208419043	PCBA MA(AM4),V791 MAXDATA	
854		E4208419044	PCBA CRT(AM4),V791 MAXDATA	
855		E4208419053	PCBA MA(AM5),V791 MAXDATA	
856		E4208419054	PCBA CRT(AM5),V791 MAXDATA	
857		E4208419063	PCBA MA(AM6),V791 MAXDATA	
858		E4208419064	PCBA CRT(AM6),V791 MAXDATA	
859		E4208519005	PCBA MA(MM1),V791 MAXDATA	
860		E4208519006	PCBA CRT(MM1),V791 MAXDATA	
861		E4208619006	PCBA CRT(TM1),V791 MAXDATA	
862		E4208719005	PCB ASSY,V791 MAXDATA(1.8MT SI	
863		E4208819005	PCBA MA(MM2),V791 MAXDATA	
864		E4208919005	PCBA MA(MM3),V791 MAXDATA	
865		E4208919006	PCBA CRT(MM3),V791 MAXDATA	
866		M11143008012	SCREW,BIN(+) M3*8 MSZPC	
867		M11183008012	SCREW,M/WAS(+) 3*8 MSZPC	

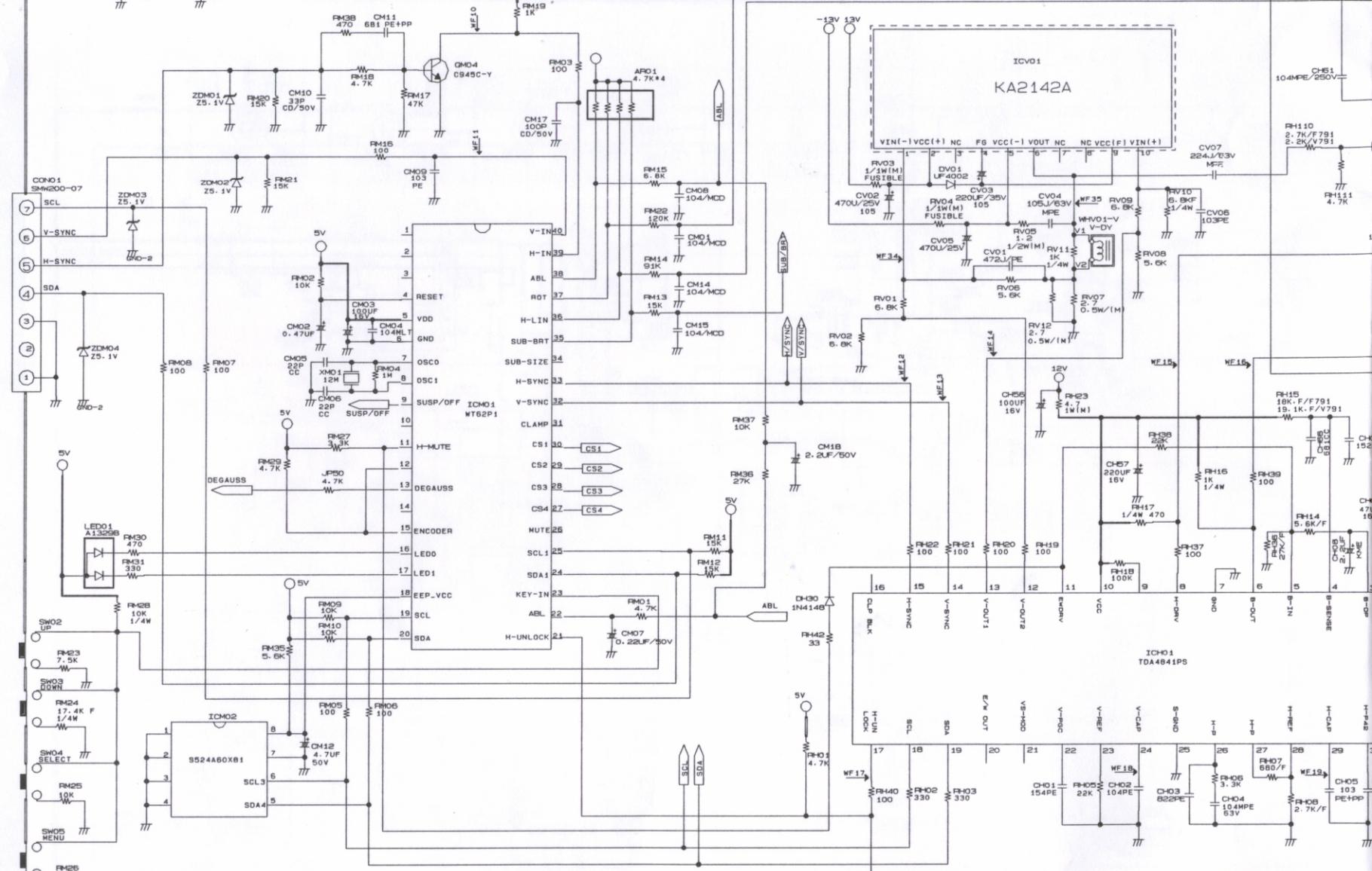
MODEL :  
 TYPE NO : C17R06091  
 CHASSIS NO : C-1722



V791C/S TABLE [F791]

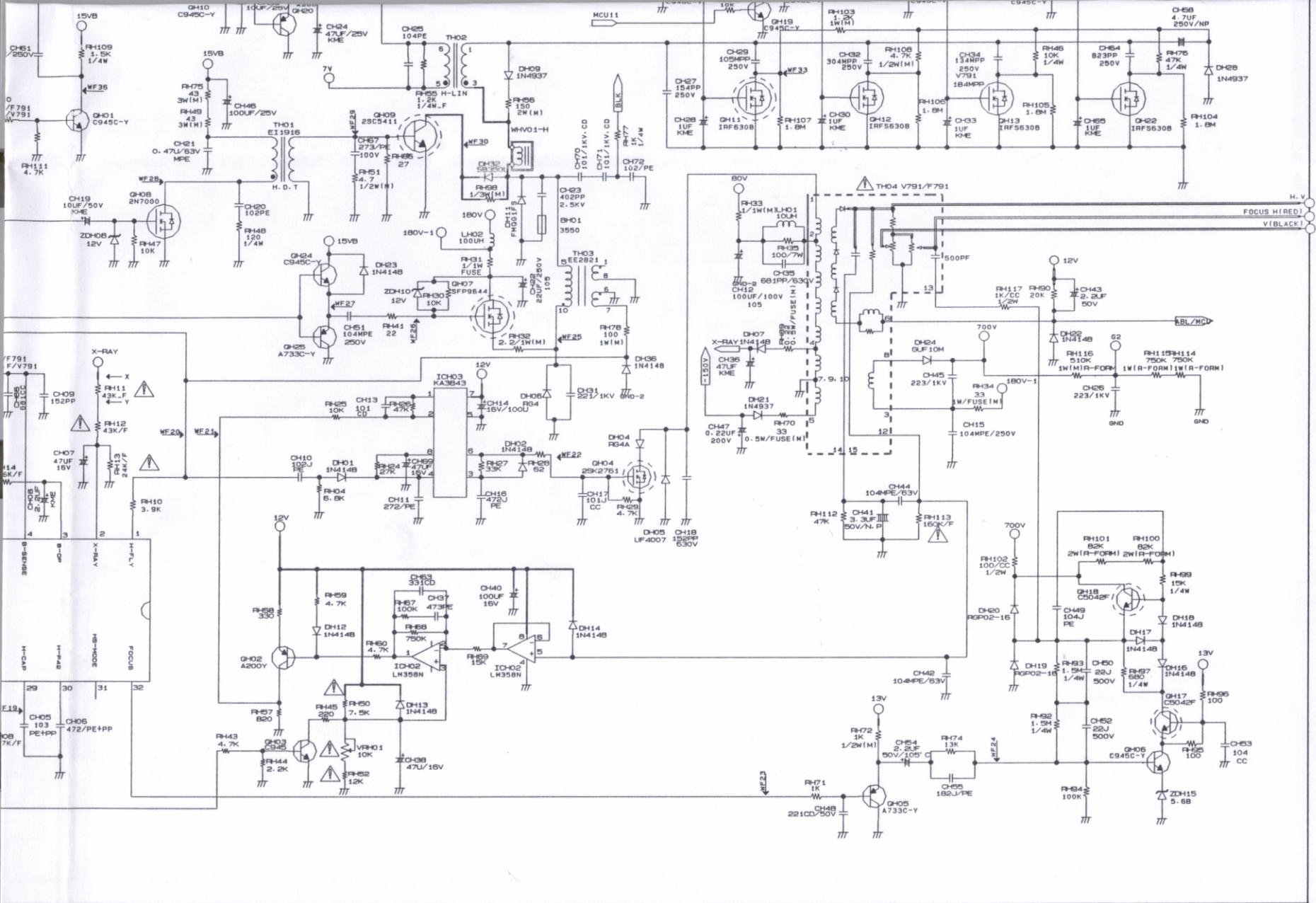
FH	CS1	CS2	CS3	CS4
<36K	L	L	L	L
<40K	L	H	L	L
<46K	L	H	H	[H]
<51K	H	L	L	[H]
<62K	[<55K]	L	H	L
<66K	[<62K]	H	[L]	[H]
<71K	[<66K]	H	H	[L]
<85K	[<71K]	H	H	[H]
<95K	[<85K]	H	H	[H]
[<95K]	[H]	[H]	[H]	[H]





WARNING: THIS EQUIPMENT CONTAINS SAFETY & CO  
 ALL PARTS SHOWN IN THE  $\Delta$  MARKS OF THE SCHEM  
 REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH  
 RECOMMENDED PARTS LIST FOR EXACT REPLACEMENTS





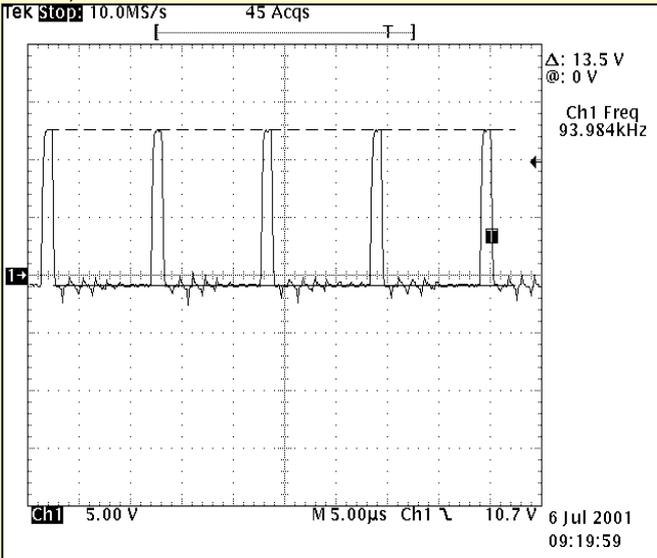
NOTE:  
 1. RESISTANCE IS SHOWN IN OHM K=1,000 M=1,000,000 RATED POWER OF RESISTOR NOT NOTED IN SCHEMATIC DIAGRAM IS 1/8W P-CARBON.  
 2. CAPACITANCE IS SHOWN PF AND NOTED CAPACITANCES IS SHOWN UF. UF=1,000,000PF RATED VOLTAGE OF CONDENSER NOT NOTED IN SCHEMATIC DIAGRAM IS 50V.  
 3. ABBREVIATION AND SYMBOL P: POLYESTER PP: POLYPROPYLENE  
 4. THIS SCHEMATIC DIAGRAM IS SUBJECTED TO CHANGE WITHOUT NOTICE FOR FURTHER IMPROVEMENT.  
 5. ALL MYLAR AND ELECTRIC CAPACITORS ARE 100V UNLESS NOTED.  
 6. ALL ELECTRIC CAPACITORS TEMPERATURE RATINGS ARE 85 DEGREES UNLESS NOTED.

DWG. REV.	A	DESCRIPTION	DOC. NO.	DATE	APPROVAL
DWG. NO.	E42095416				
TITLE		SIGNATURE	DATE	INSP	SHEET NO.
		DWN Y. D. LEE	2003.04.04.		1
		CHK B. H. KIM	2003.04.04.		
		APP Y. K. BYUN	2003.04.04.		1

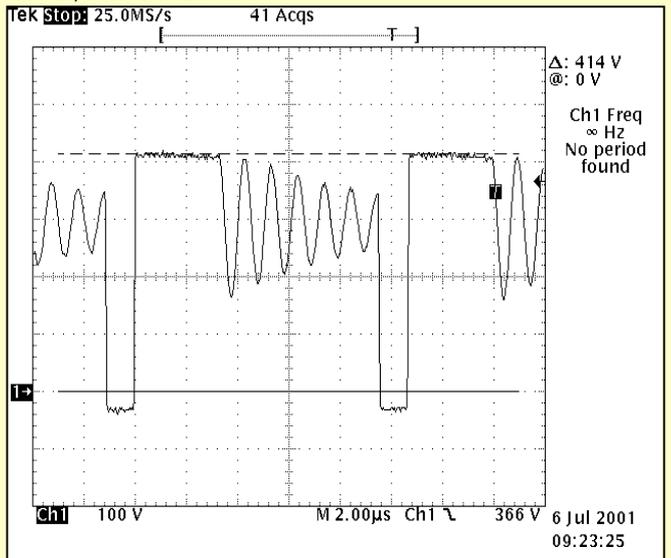
SAFETY & CDH CRITICAL COMPONENTS OF THE SCHEMATIC ARE SAFETY ONLY WITH MANUFACTURERS REPLACEMENTS.

WAVE FORM

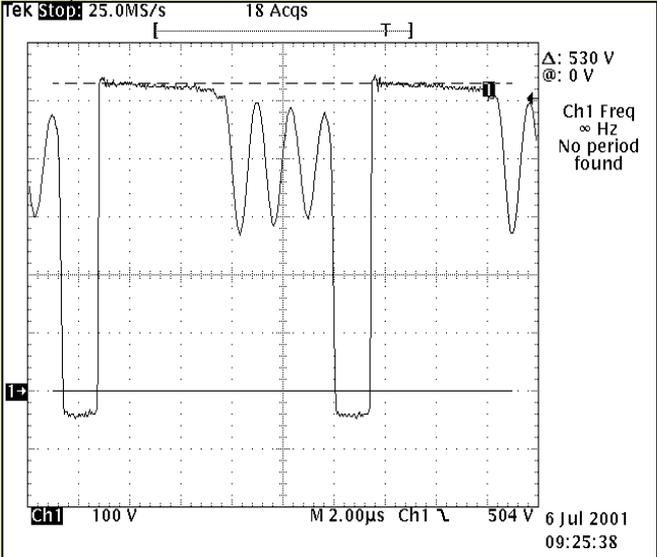
WF1).QF01 Gate



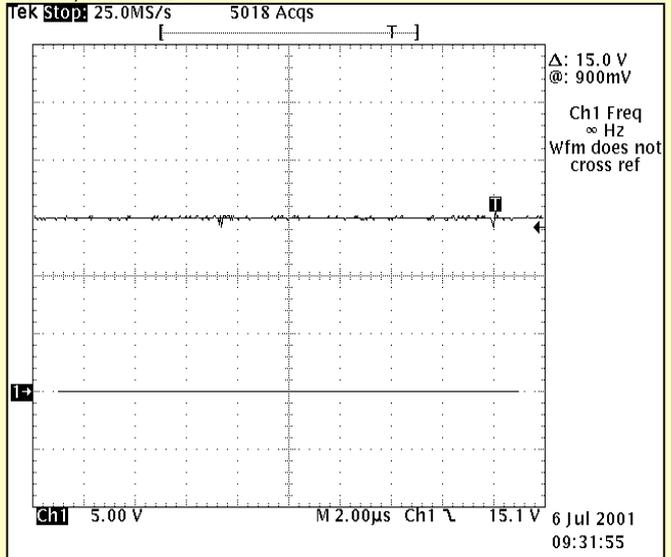
WF2).QF01 Drain



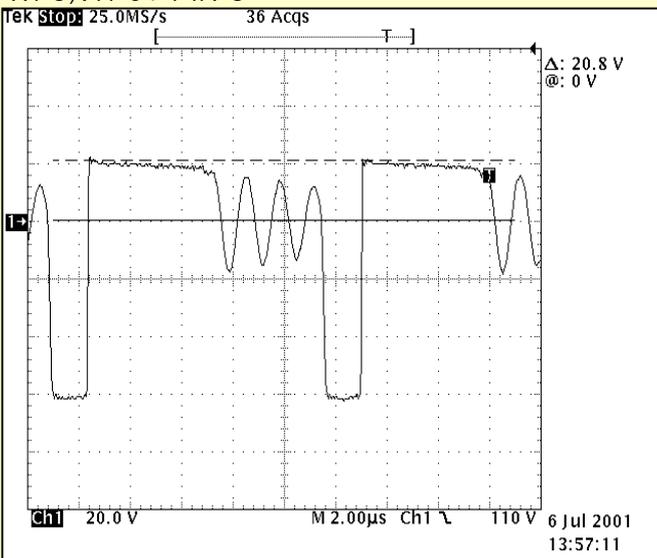
WF3).ICP01 PIN 3



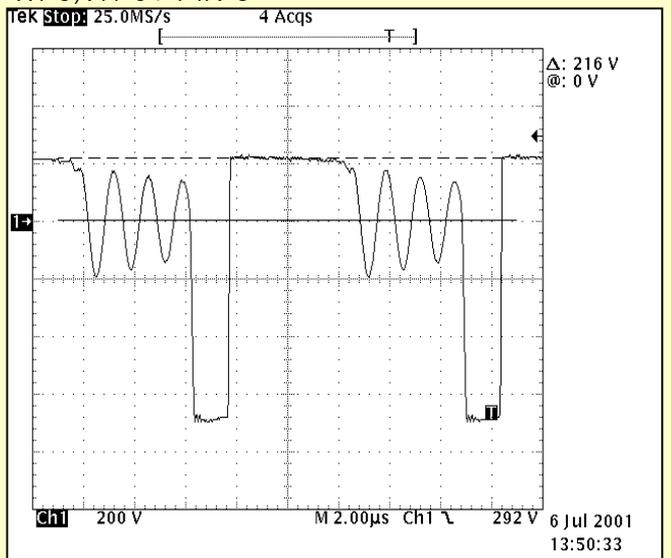
WF4).ICP03 PIN 4



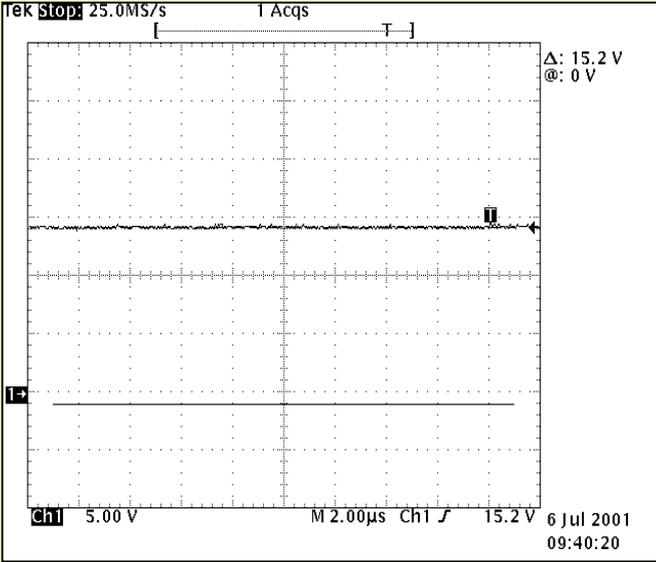
WF5).TP01 PIN 8



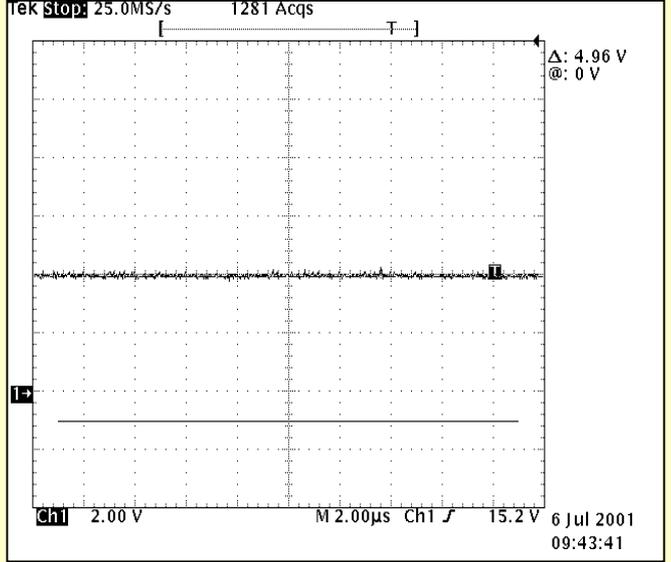
WF6).TP01 PIN 6



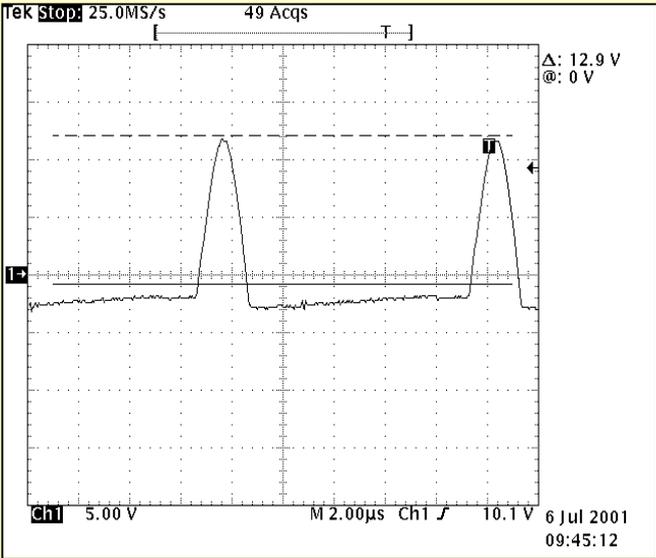
WF7)QP07 Collector



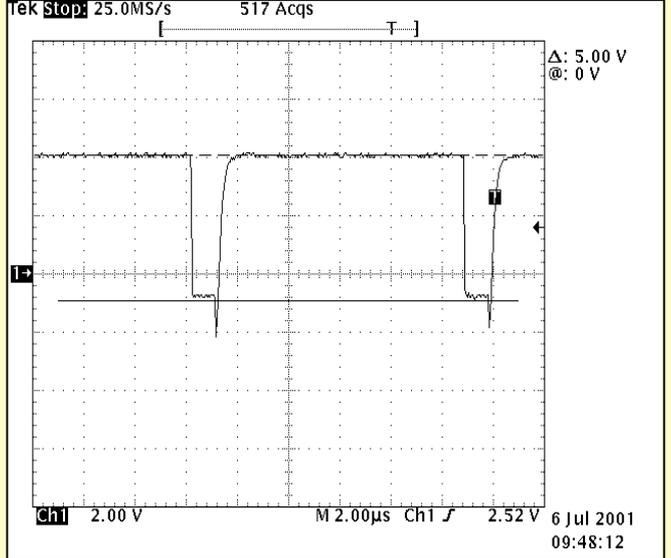
WF8) QP08 Base



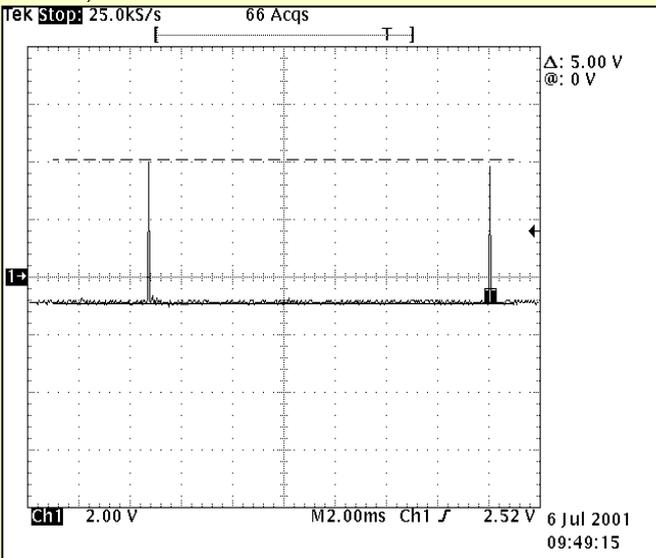
WF9).LP03 PIN 4



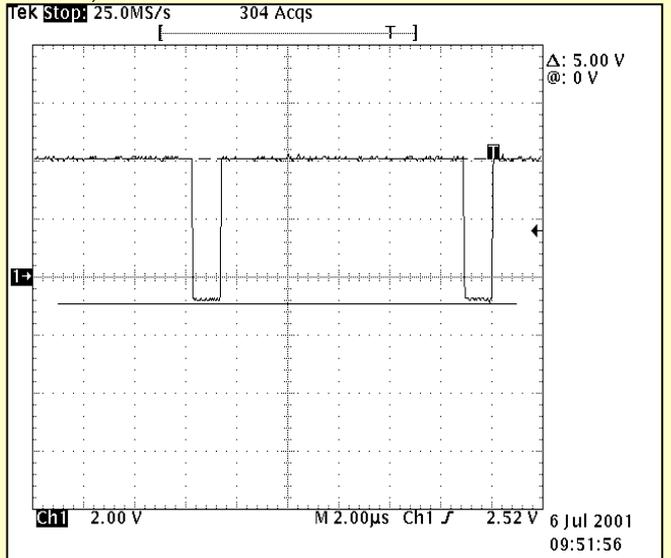
WF10).QM04 Collector



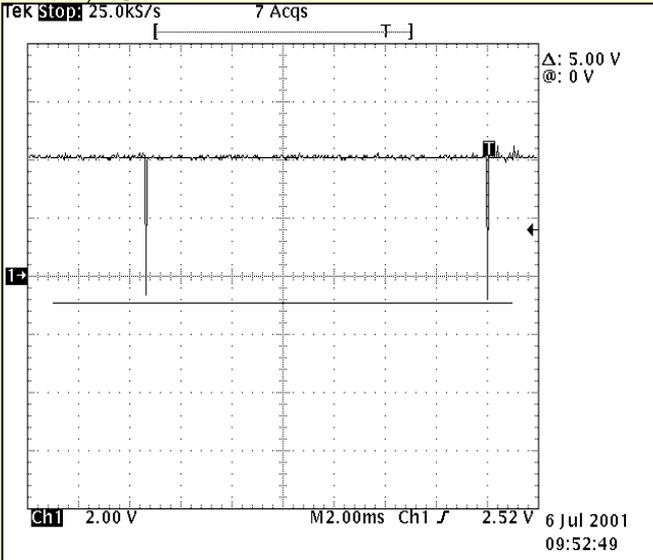
WF11).ICM01 PIN 40



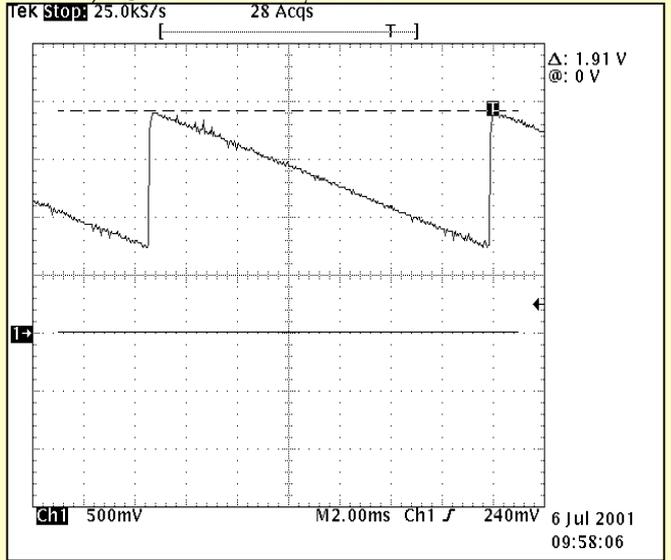
WF12).ICM01 PIN 33



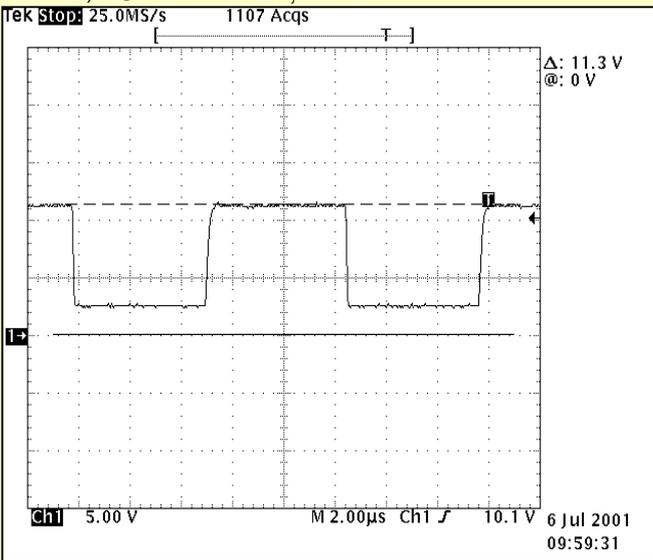
WF13).ICM01 PIN 32



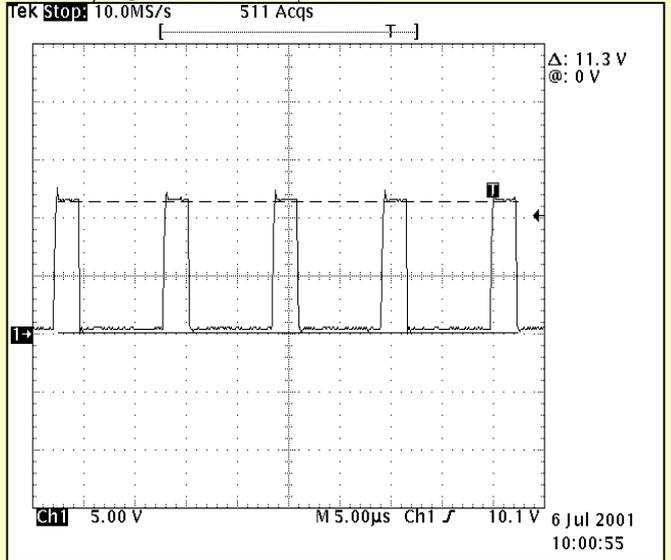
WF14).ICH01 PIN13 , RH20



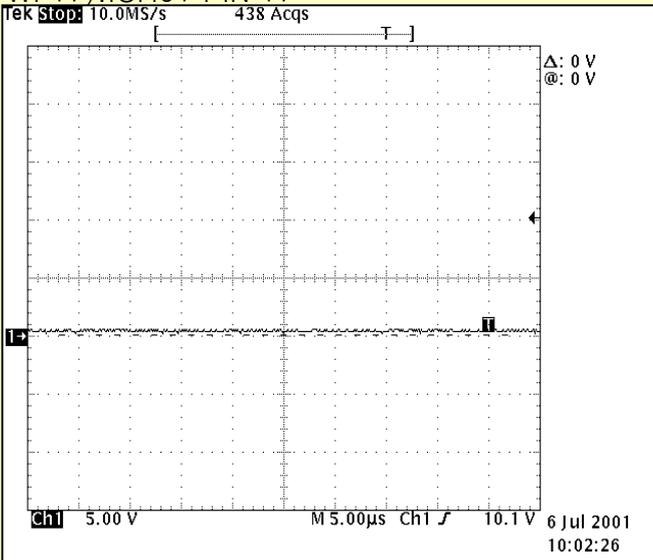
WF15).ICH01 PIN 8 , RH37



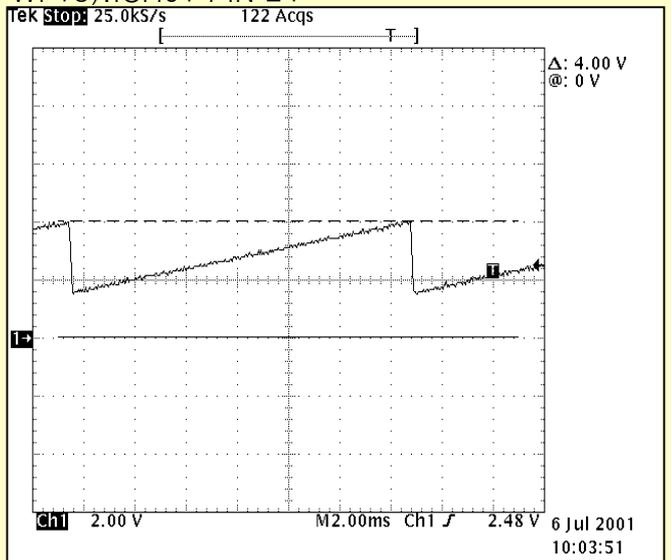
WF16).ICH01 PIN 6 , RH39



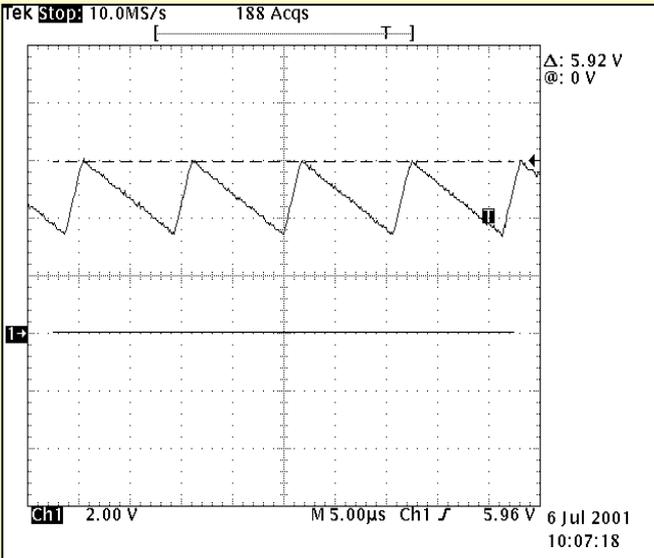
WF17).ICH01 PIN 17



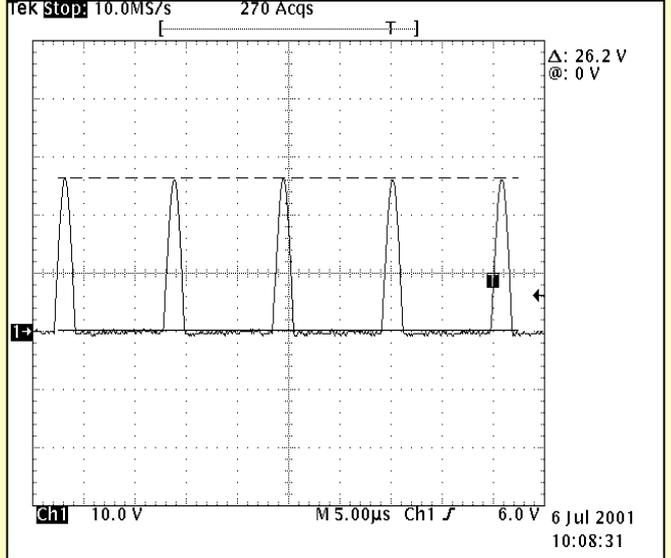
WF18).ICH01 PIN 24



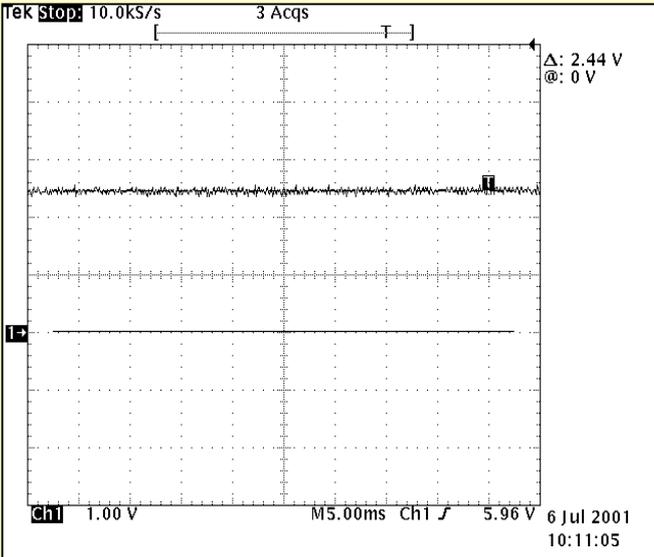
WF19).ICH01 PIN 29



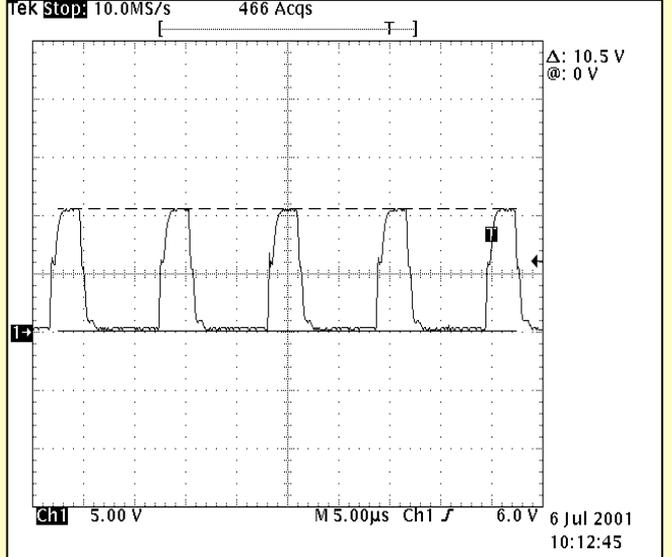
WF20).ICH01 PIN 1 , RH10



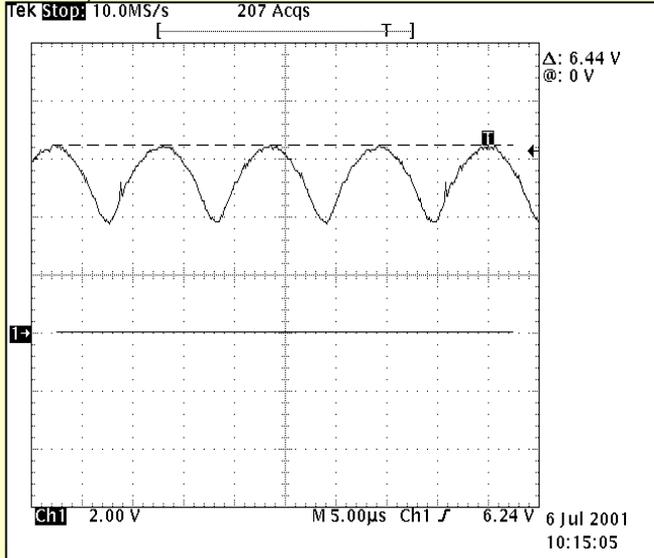
WF21).QH02 Collector



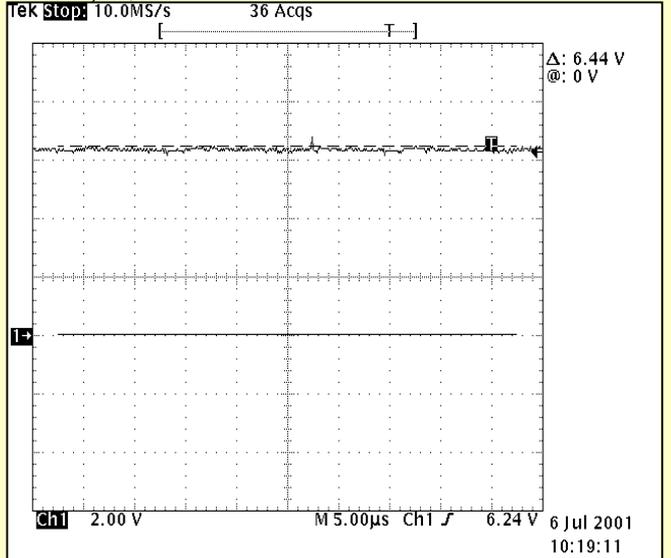
WF22).ICH03 PIN 6 , RH28



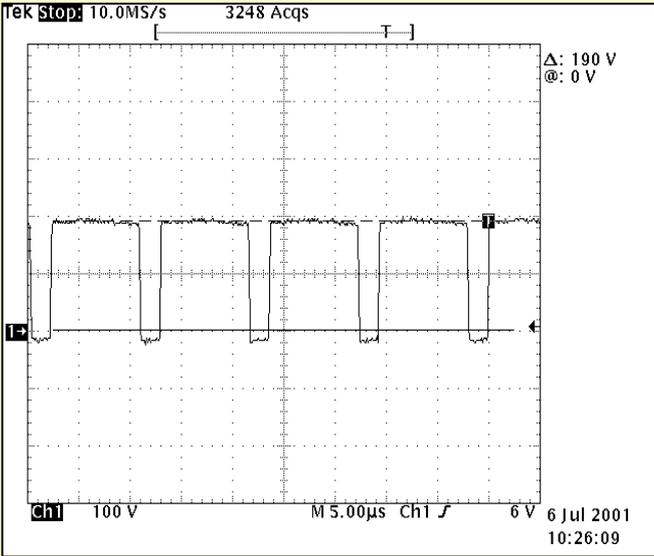
WF23).ICH01 PIN 32



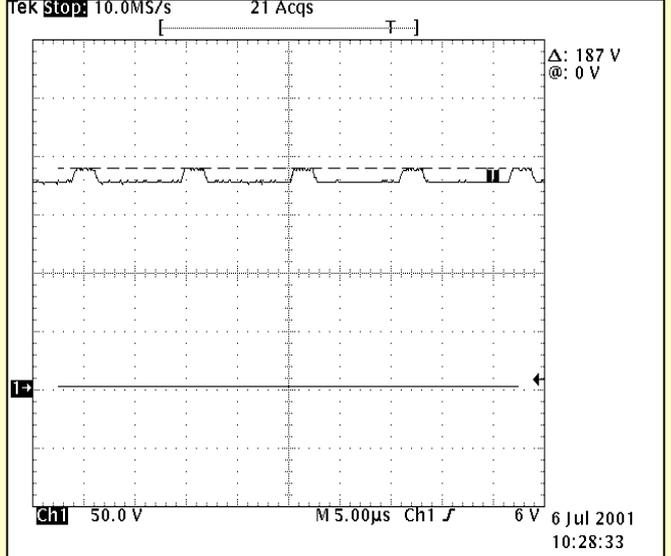
WF24).QH06 Base



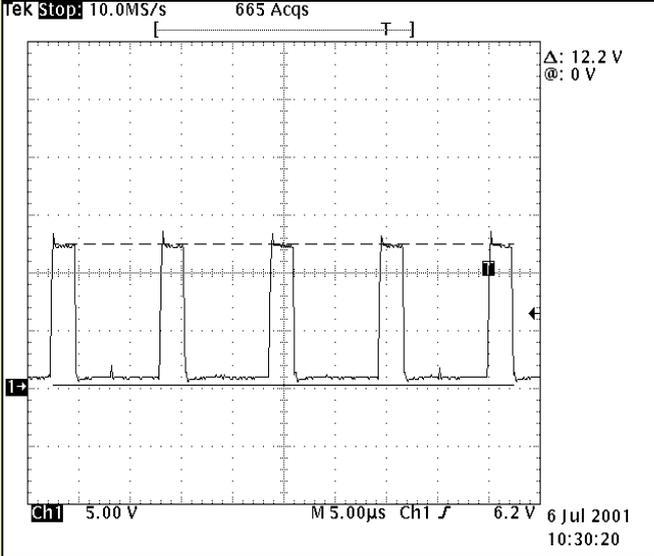
WF25).TH03 PIN 10



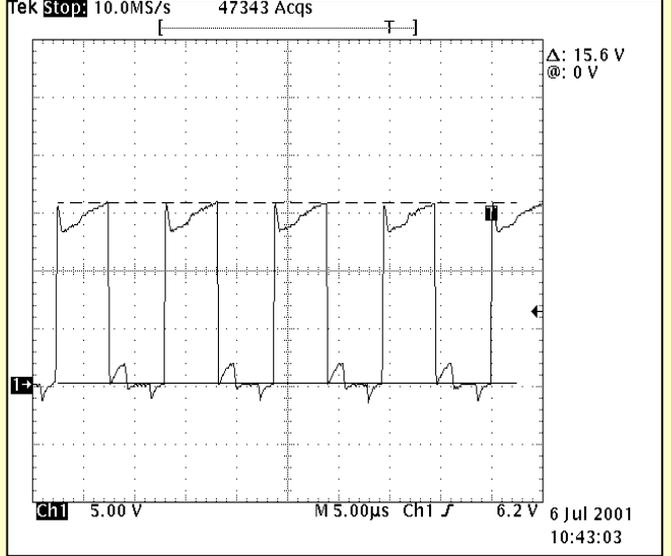
WF26).QH07 Gate



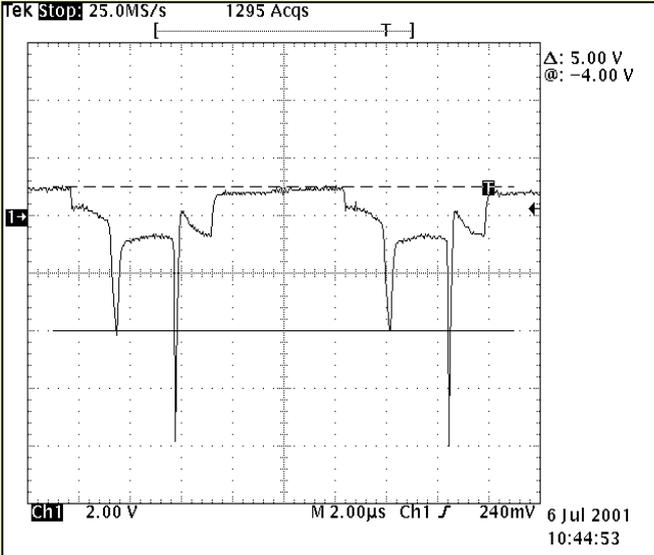
WF27).QH25 Emitter



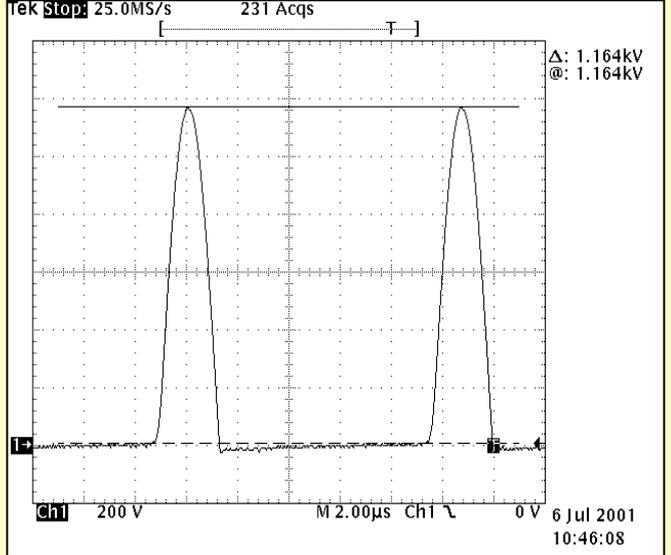
WF28).QH08 Drain



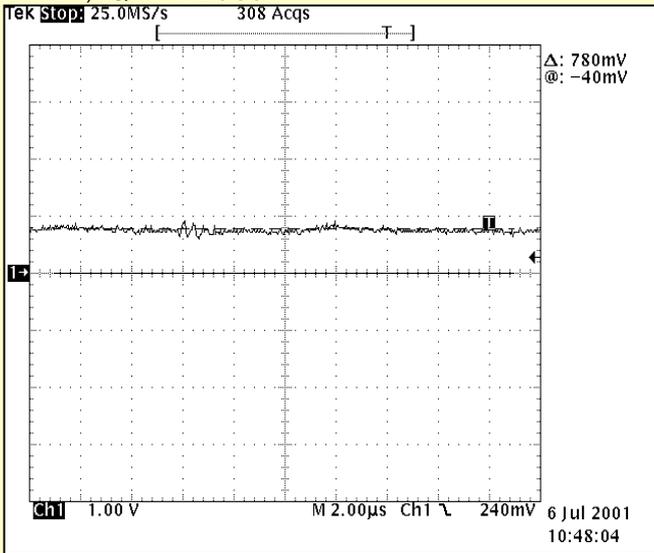
WF29).QH09 Base



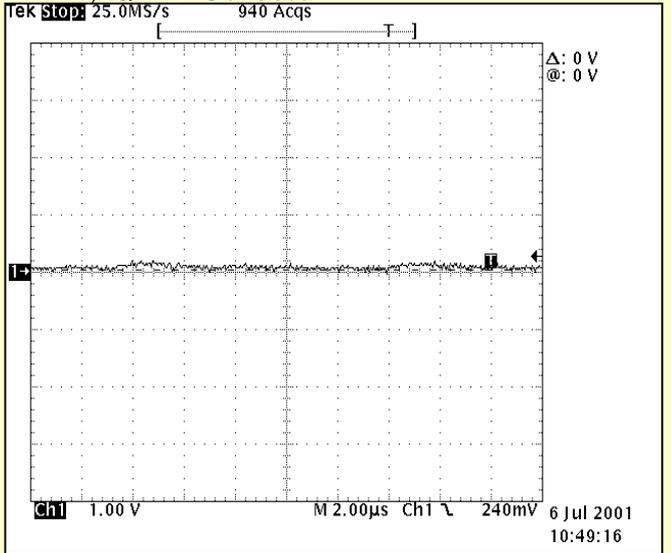
WF30).QH09 Collector



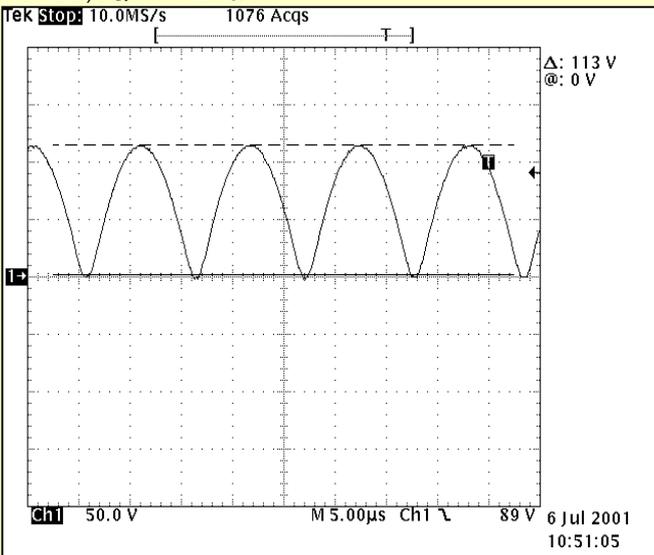
WF31).QH16 Base



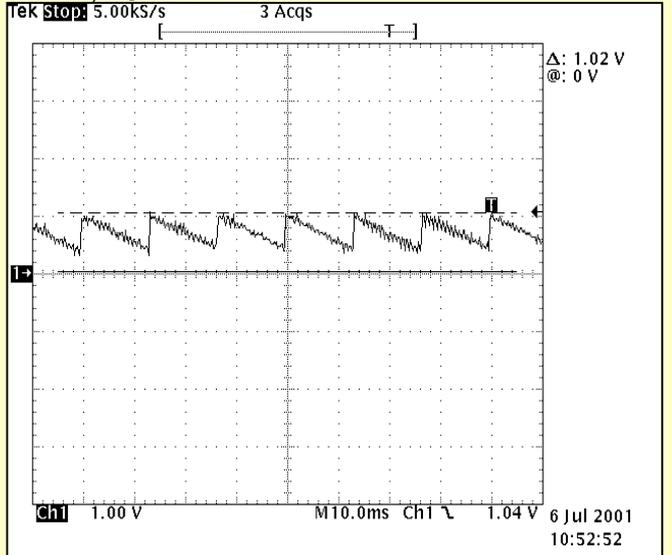
WF32).QH16 Collector



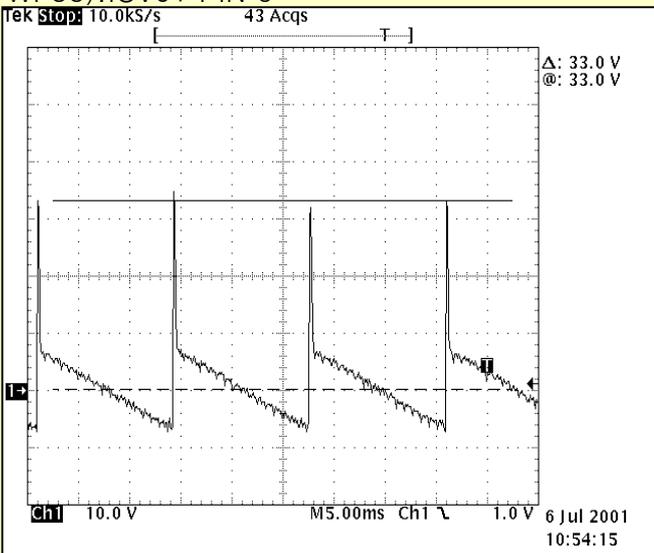
WF33).QH11 Drain



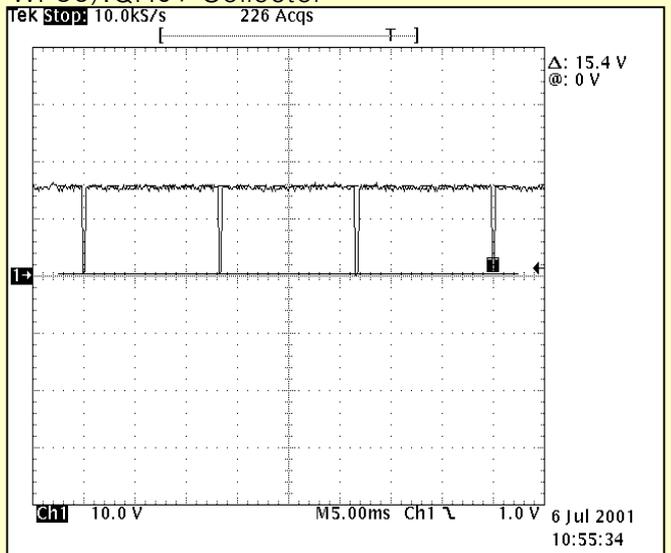
WF34).ICV01 PIN 1



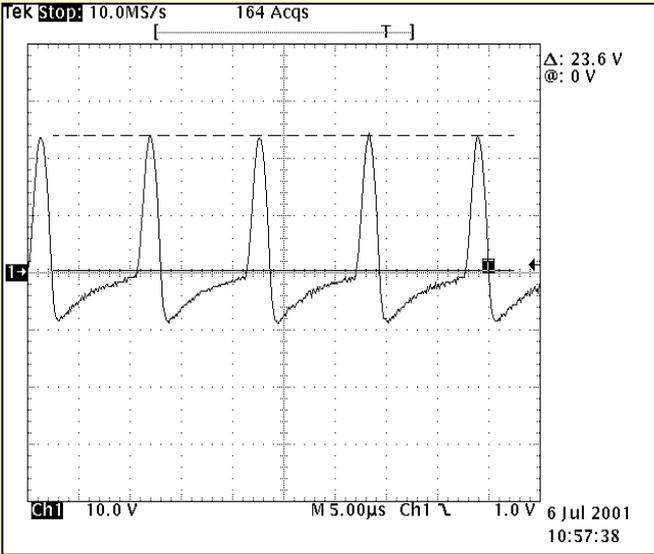
WF35).ICV01 PIN 6



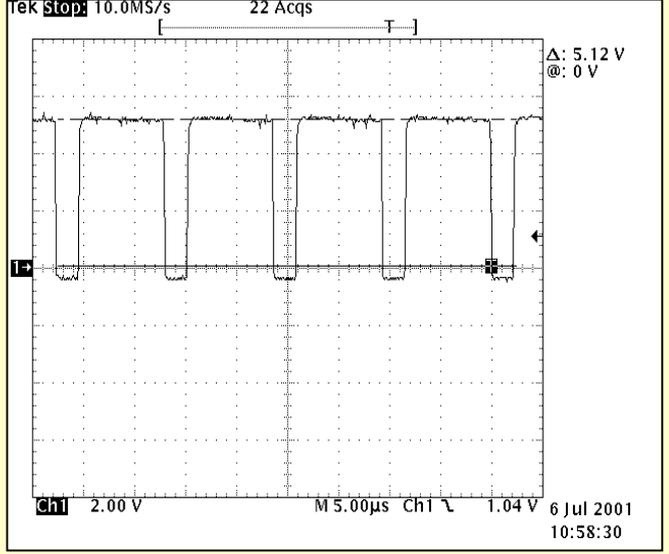
WF36).QH01 Collector



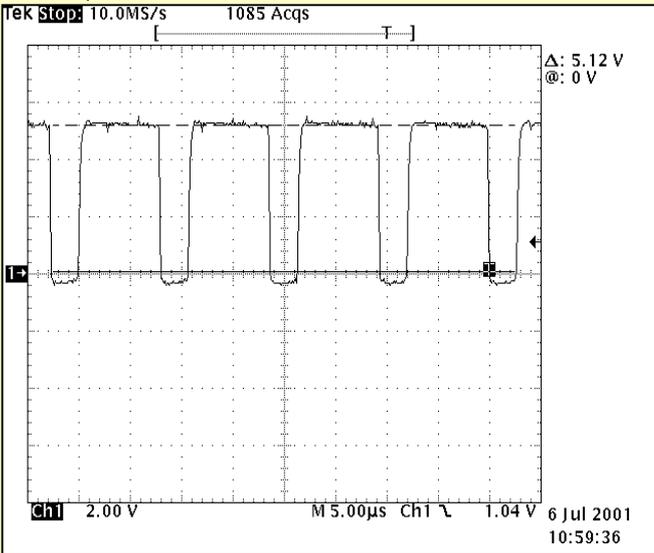
WF37).CNC01 PIN 1



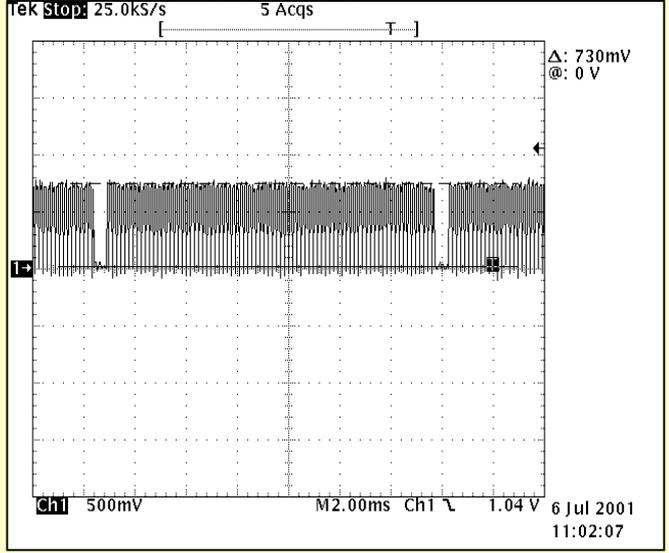
WF38).QC01 Collector



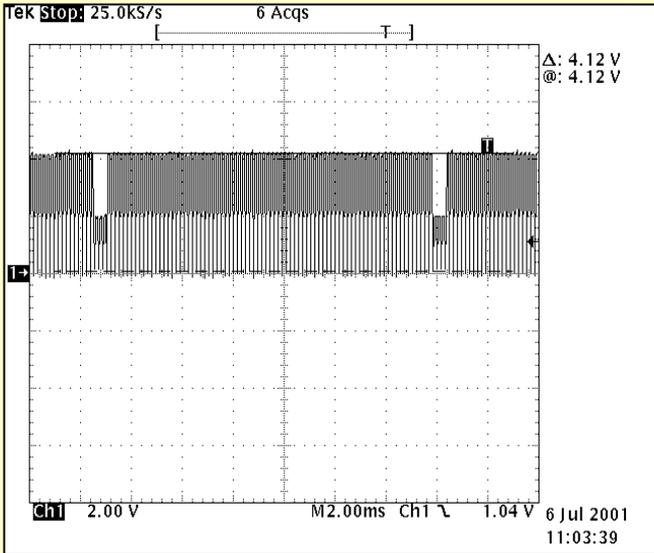
WF39).QC12 Collector



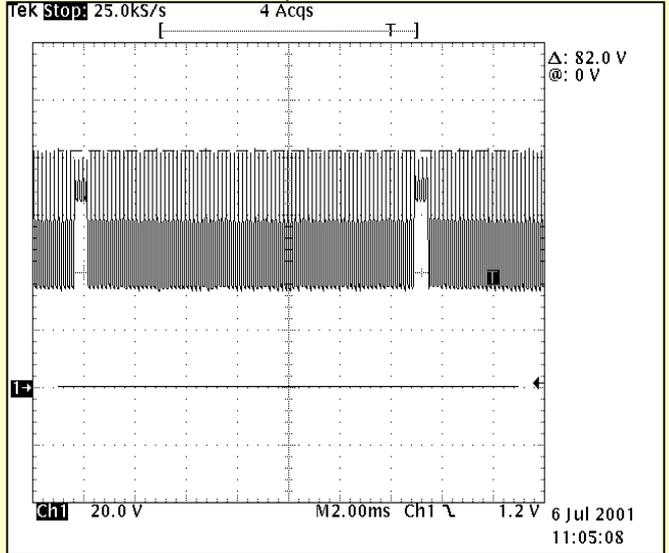
WF40).ICC01 PIN 5 .CC01



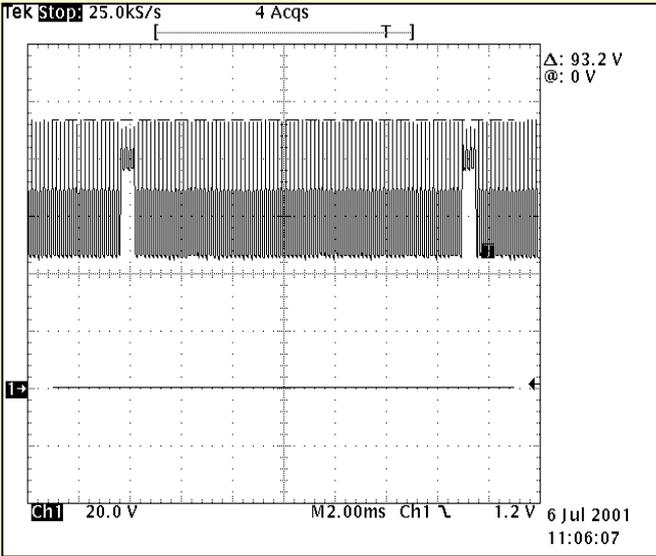
WF41).ICC01 PIN 26



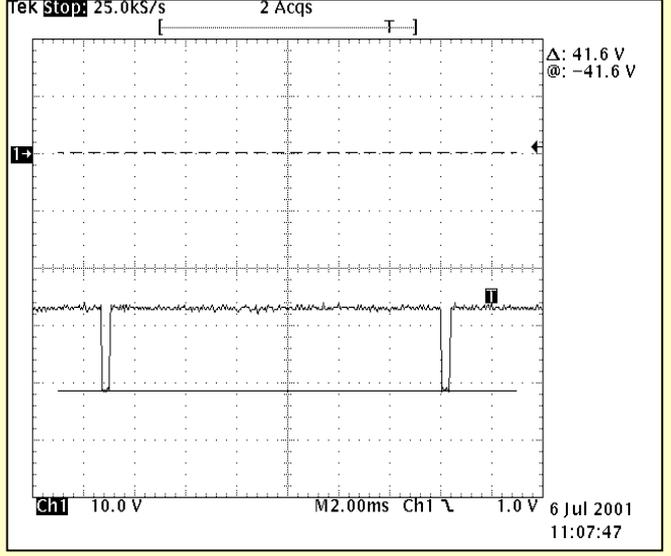
WF42).ICC03 PIN1 , RC29



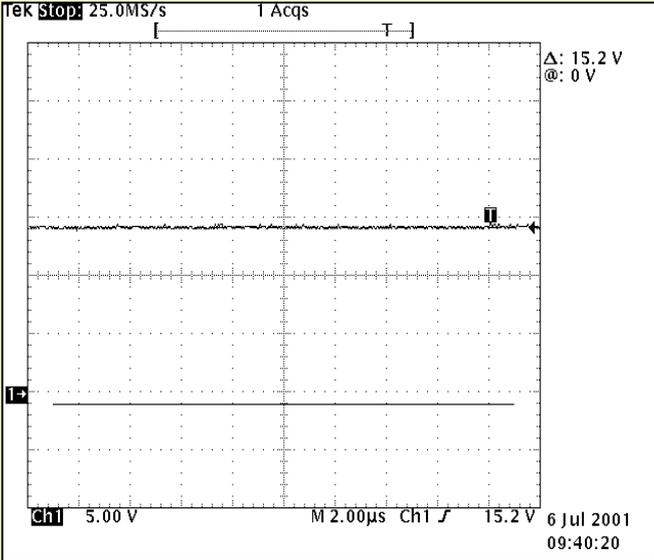
WF43).CNC03 R Cothde



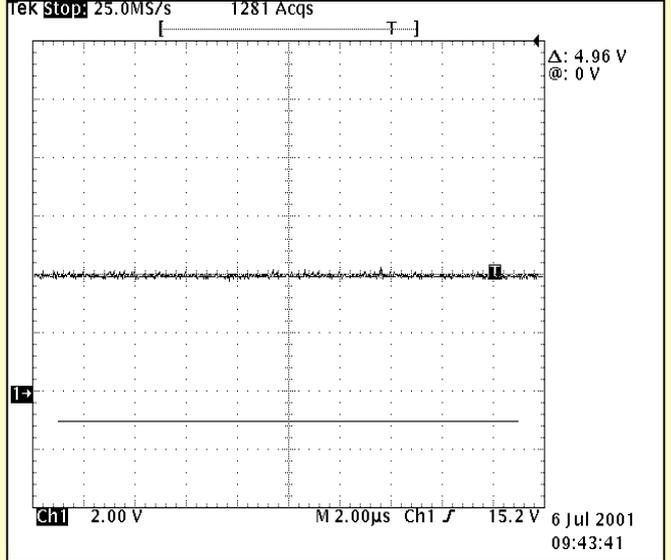
WF44).CNC03 G1 , RC35



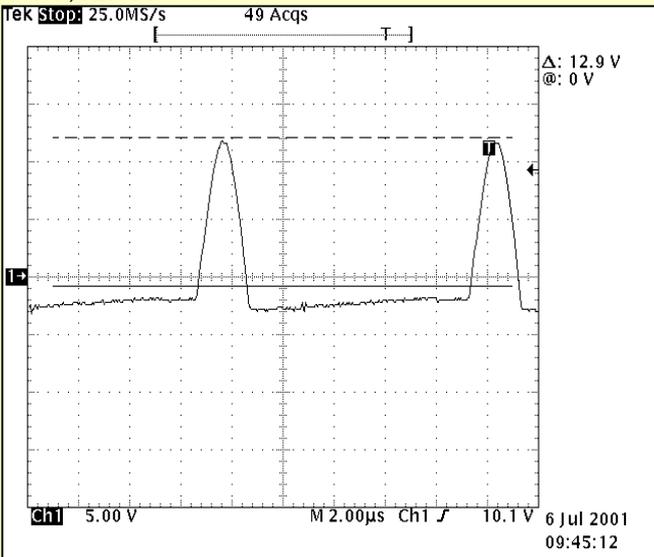
WF7)QP07 Collector



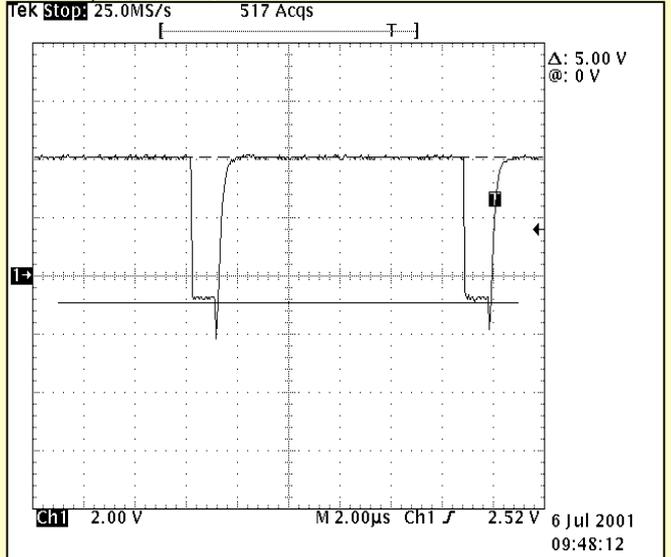
WF8) QP08 Base



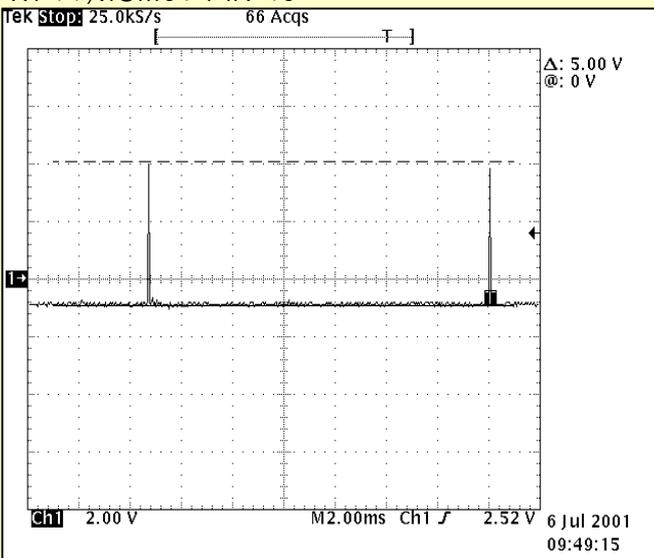
WF9).LP03 PIN 4



WF10).QM04 Collector



WF11).ICM01 PIN 40



WF12).ICM01 PIN 33

