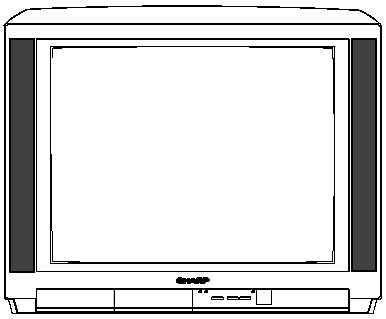
SHARP®

# SERVICE MANUAL

SE0028JS74S00
Issued :30th July 2002

## GA-200 CHASSIS

PAL / SECAM BG SYSTEM COLOUR TELEVISION



# MODEL 28JS-74Ss

In the interests of user safety (required by safety regulations in some countries) the set should restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

## SERVICE MANUAL UPDATE LOG SHEET

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Use this page to keep any special servicing information as Technical Report (Bulletin), Technical Information, etc.
If only part number changes are required, just change part number directly the part number in the Parts Listing Section.
If you need more information, please refer to the Technical Report (Bulletin).

# ELECTRICAL SPECIFICATIONS

•Power Input ..... 220V-240 Volts AC 50Hz

•Power Consumption
Normal Operation (Method IEC60107) ..... 84W
Stand-by Operation .....1.5W

•Audio Power Output Rating (MPO) / Impedance
Internal Left Speaker ..... 10W, 7Ω
Internal Right Speaker ..... 10W, 7Ω

•Speakers
Left / Right ..... 12 x 6cm

•Convergence (Maximum Misconvergence)
Static (Centre) between any two colours ... 0.08 cm
Dynamic after static equals zero
Within 10cm (4") circle ..... 0.12 cm
10-25cm (4-10" ) circle ..... 0.20 cm
Everywhere else ..... 0.28 cm

•Focus ..... High Bi-Potential Electrostatic

•Sweep Deflection ..... Magnetic

•Picture Intermediate Frequency..... 38.9MHz

•Sound Carrier Trap..... 33.4MHz

•Adjacent Sound Carrier Trap ..... 40.4MHz

•Adjacent Picture Carrier Trap..... 31.9MHz
.

•Aerial Input Impedance
VHF/UHF ..... 75 ohm Unbalanced

•Tuning Ranges..... 48.25 MHz thru 855.25 MHz
VHF: E2-E12 CH / S1 - S41 CH (Hiperband)
UHF: E21 - E69 CH
CATV Special Channels

•White Level
Set brightness control to get total picture tube cathode current of 600 μA under no signal condition. Maximum necessary correction of each picture tube cathode current to get 8550 degrees K+1 MPCD screen temperature should not exceed 15% of its original value.

**X=0.290 ± 0.015 Y=0.300 ± 0.015**

Specifications are subject to change without prior notice.

## MODEL DIFFERENCES:

**28JS-74S:** Base model.
**28JS-74SS:** Silver Cabinet.

**WARNING**

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis.
To prevent electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

# IMPORTANT SERVICING NOTES

Only qualified service personnel are allowed to carry out maintenance and repair of this receiver.

## Servicing of High Voltage System and CRT

It is important that the static charge is removed from the high voltage system when carrying out work on the receiver. This can be achieved by connecting a 10K resistor (with a suitably insulated lead) from the CRT cavity connector to the CRT ground tag. This must be carried out with the AC supply disconnected from the receiver.

Note the following:

- The CRT in this receiver employs Integral Implosion Protection.
- If the CRT has to be changed it MUST be replaced with the correct type for continued safe working.
- DO NOT lift the CRT by its neck.
- When handing the CRT, ensure that shatterproof goggles are worn.
- Ensure that the CRT is discharge before handling.

## X-Ray

This receiver is designed to keep any x-ray emission to an absolute minimum. Some fault conditions and servicing procedures may produce potentially hazardous x-ray radiation levels. This is a problem when in close proximity to the receiver for long periods of time. To reduce any risks associated with this, please observe the following precautions:

1. When undertaking any servicing on this chassis, DO NOT increase the EHT to more than 30 KV, (at a instantaneous beam current of 1500μA).

2. Ensure that during normal operation the EHT does not exceed 30KV (at a beam current of 1000μA). This level has been preset in the factory. Always check that this level has not been exceeded after carrying out any repair on the receiver.

3. DO NOT replace the CRT with any other type than that specified in the parts listing as this may cause excessive x-ray radiation.

## Before returning the receiver to the customer

In addition to the above checks, the following should also be carried out before returning the receiver to the customer.

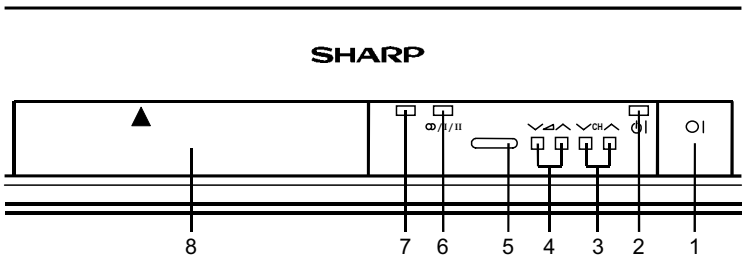
1. Inspect all the leads to ensure that they are dressed correctly and that they are not obstructed or pinched by any other parts.

2. Ensure that all protective devices are in good condition. These will include nonmetallic control knobs, insulating fish papers, cabinets backs, compartment covers or shields, mechanical insulators, etc.

# CONTROLS & TERMINALS

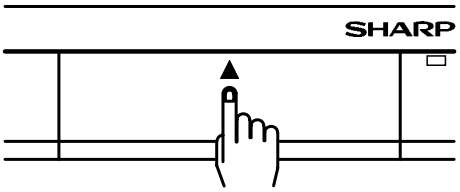
## FRONT TV

1. Main Power On/Off Switch
2. Power Indicator
3. Program Selector (UP/DOWN)
4. Volume Buttons (UP/DOWN)
5. Remote Control Sensor
6. Sound Indicator
7. Remote Control Indicator
8. DOOR



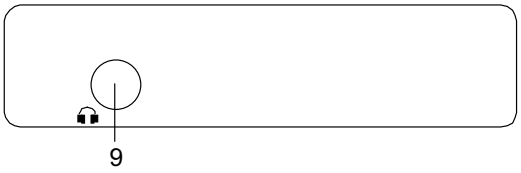

**HOW TO OPEN THE DOOR**

Press the top of the door, opening it slightly.
Hook your finger inside and pull open.




**Behind the door**

9. Headphone Socket (3.5 mm Ø / 16~600 Ω)



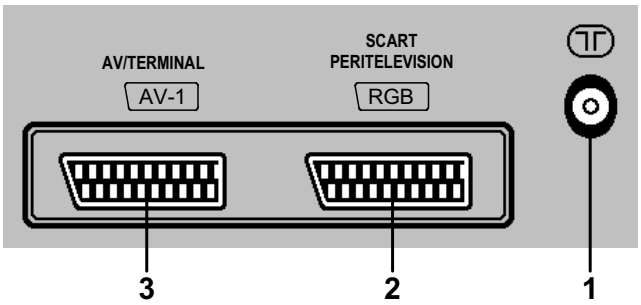

## REAR TV

**RF Input**

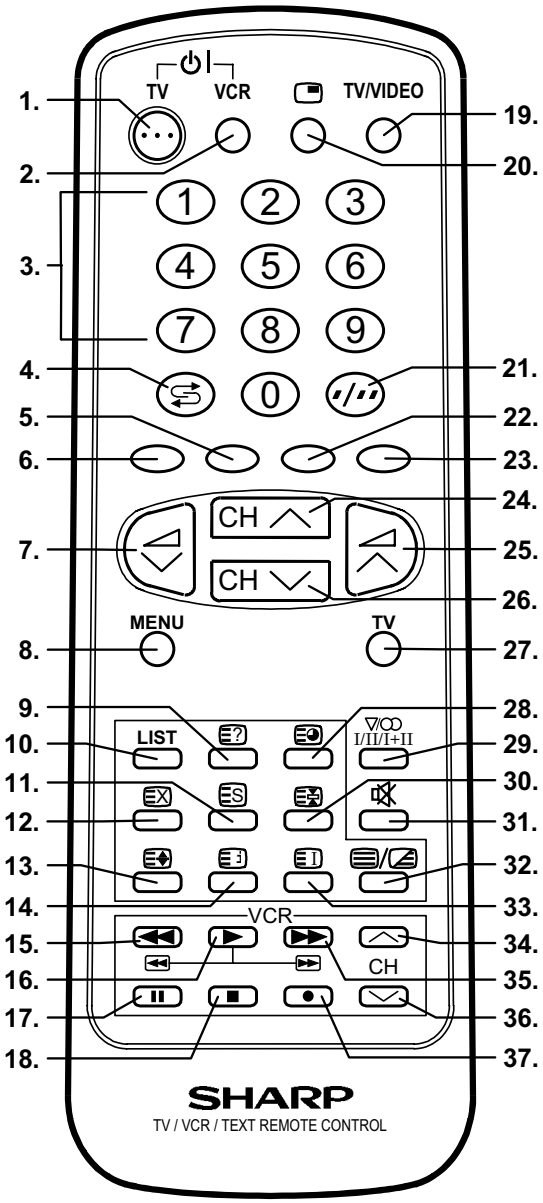
1. Antenna terminal

**21-pin In/Out**

2. 21-pin Euro SCART (RGB)
3. 21-pin Audio/Video (AV-1) With S-Video Input



# REMOTE CONTROL




| | | |
|---|---|---|
| **TV** | **1.** | Stand-by ON/OFF switch (TV) |
| **Video** | **2.** | Power ON / OFF switch (VCR) |
| **TV** | **3.** | Digit buttons 0 ~ 9 |
| | **4.** | Flashback button |
| **Teletext** | **5.** | Colour button (green) |
| | **6.** | Colour button (red) |
| **TV** | **7.** | Volume Down/Cursor control Left |
| | **8.** | Menu button |
| **Teletext** | **9.** | Reveal button |
| | **10.** | List selector |
| | **11.** | Store button |
| | **12.** | Cancel button |
| | **13.** | Top/ Bottom/Full button |
| | **14.** | Reset button |
| **Video** | **15.** | Rewind/picture search/reverse |
| | **16.** | Play button |
| | **17.** | Pause / Still button |
| | **18.** | Stop button |
| **TV** | **19.** | TV / VIDEO selector |
| | **20.** | 100Hz Fast Menu button |
| | **21.** | Single/Double entry |
| **Teletext** | **22.** | Colour button (yellow) |
| | **23.** | Colour button (blue) |
| **TV** | **24.** | Channel Up/Cursor control Up |
| | **25.** | Volume Up/Cursor control Right |
| | **26.** | Channel Down/Cursor control Down |
| | **27.** | TV button |
| **TV/Teletext** | **28.** | Time button |
| **TV** | **29.** | Sound mode selector |
| **Teletext** | **30.** | Hold button |
| **TV** | **31.** | Sound Mute button |
| **Teletext** | **32.** | Text/Mix button |
| | **33.** | Index button |
| **Video** | **34.** | Channel Up selector |
| | **35.** | Fast forward/picture search/forward |
| | **36.** | Channel Down selector |
| | **37.** | Record button |

# ADJUSTMENT PROCEDURES

All adjustments to this chassis, except for focus, are carried out in the Service Mode.

## • SERVICE MODE

The Service Mode is provided to enable the engineer to correctly set up the receiver to the CRT fitted in the set. Note that these adjustments may vary from one receiver to another.

To enter the Service Mode, carry out the following procedure.
1. Connect a test pattern to the antenna terminal.
2. Tune the receiver to this signal.
3. Turn the receiver off using the mains switch.
4. Press volume down and channel up buttons on the front of the receiver at the same time.
5. Keeping these buttons pressed, turn the mains on.
6. When the set starts up it will be in Service Mode.
7. Release the two buttons.

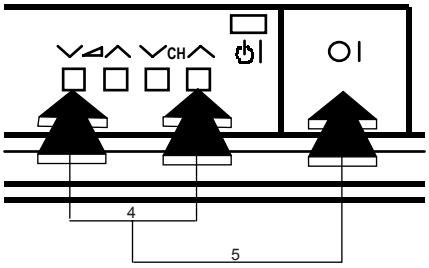



**Figure 1**

- Use the channel up and down buttons to move between the options.
- Use the volume control buttons to change the data.
- To store the data, use the stand-by button on the remote control.
- To exit the Service Mode, turn the receiver off using the mains switch.

When the Service Mode is entered the following On Screen Display appears:

SERVICE SOFTWARE version **.**
SW on: XXXX SW off: XXXX Hours ON: XXXX

The figures displayed in the “XXXX” locations are hexadecimal representations of the number of times that particular function has been executed. For example if the hexadecimal number displayed after “SW ON” was “0E4A”, this would correspond to the receiver being turned on 3658 times.

**Adjustment menu:**

The following adjustments can be carried out in the Service Mode.

- Horizontal Shift
- East West Width
- Pin Phase
- Pin Amp
- Upper corner correction
- Lower corner correction
- Extreme Corner Correction
- Vertical Linearity
- Vertical angle
- Vertical bow
- Vertical Amplitude
- S Correction
- Vertical Shift
- Red Cut Off
- Green Cut Off
- Blue Cut Off
- Alter NVM Pag *(Page)*
- Alter NVM Pos *(Position)*
- Alter NVM Val *(Value)*
- Teletext Mix Mode Contrast
- Teletext Contrast
- OSD Contrast
- DVCO Adjustment (Only PAL)
- DVCO Adjustment (Only NTSC)
- AGC Adjustment
- Auto Installation On/Off

The following geometry adjustments can be carried out. Detailed instructions on how to execute these are given on the following pages:

**Horizontal**

- Horizontal Shift
- East West Width
- Pin Phase
- Pin Amp
- Vertical angle
- Vertical bow
- Upper Corner Amplitude
- Lower Corner Symmetry
- Extreme Corner Symmetry

**Vertical**

- Vertical Amplitude
- S Correction
- Vertical Shift
- Vertical Linearity

Just in case the TV set requires a full geometry adjustment, please proceed first with Vertical according to the above order, and after that, adjust Horizontal according to the above order.

**Horizontal Shift**

Adjust the horizontal shift so that the picture is centred.
The effect of this adjustment is shown in figure 2.

- When the volume up button is pressed, the picture moves to the left.
- When the volume down button is pressed, the picture moves to the right.
- Press the stand-by button on the remote control to store.

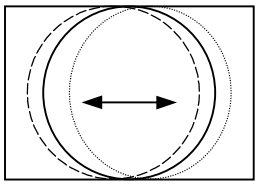


Figure 2

**East West Width**

Adjust the East West Width so that 8% over-scan is achieved.
The effect of this adjustment is shown in figure 3.

- When the volume up button is pressed, horizontal scanning increases.
- When the volume down button is pressed, horizontal scanning decreases.
- Press the stand-by button on the remote control to store.

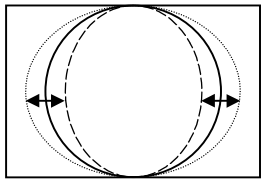


Figure 3

**Pin Phase**

Adjust the Pin Phase so that the picture is symmetrical top and bottom.
The effect of this adjustment is shown in figure 4.

- When the volume up button is pressed, side pincushion changes.
- When the volume down button is pressed, side pincushion changes.
- Press the stand-by button on the remote control to store.

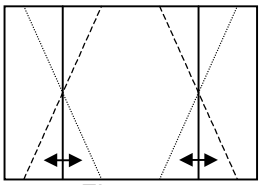


Figure 4

**Pin Amp**

Adjust the Pin Amplitude so that the picture is centred.
The effect of this adjustment is shown in figure 5.

- When the volume up button is pressed, side pincushion changes from pincushion to barrel shape.
- When the volume down button is pressed, side pincushion changes from barrel shape to pincushion.
- Press the stand-by button on the remote control to store.

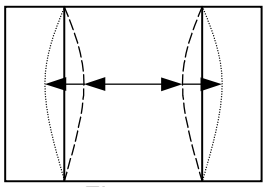


Figure 5

**Upper Corner Correction**

Adjust the Upper Corner Correction so that the picture is centred.
The effect of this adjustment is shown in figure 6.

- When the volume up button is pressed, side pincushion changes from pincushion to barrel shape.
- When the volume down button is pressed, side pincushion changes from barrel shape to pincushion.
- Press the stand-by button on the remote control to store.

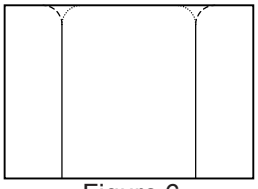


Figure 6

**Lower Corner Correction**

Adjust the Lower Corner Correction so that the picture is centred.
The effect of this adjustment is shown in figure 7.

- When the volume up button is pressed, side pincushion changes from pincushion to barrel shape.
- When the volume down button is pressed, side pincushion changes from barrel shape to pincushion.
- Press the stand-by button on the remote control to store.

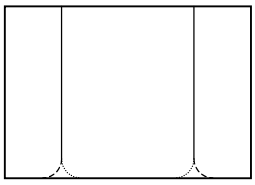


Figure 7

**Extreme Corner Correction**

Adjust the Extreme Corner Correction so that the picture is centred.
The effect of this adjustment is shown in figure 8.

- When the volume up button is pressed, side pincushion changes from pincushion to barrel shape.
- When the volume down button is pressed, side pincushion changes from barrel shape to pincushion.
- Press the stand-by button on the remote control to store.

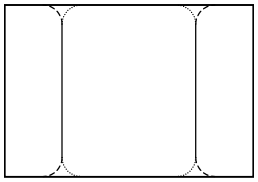


Figure 8

**Vertical Linearity**

Adjust the Vertical Linearity so that the upper and lower parts of the picture are symmetrical.
The effect of this adjustment is shown in figure 9.

- When the volume up button is pressed, the upper picture scanning decreases and the lower picture scanning increases.
- When the volume down button is pressed, the upper picture scanning increases and the lower picture scanning decreases.
- Press the stand-by button on the remote control to store.

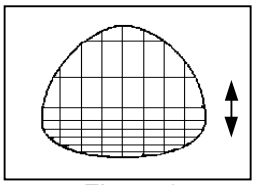


Figure 9

**Vertical Angle**

Adjust the Vertical Angle so that the picture is centred.
The effect of this adjustment is shown in figure 10.

- When the volume up button is pressed, the vertical angle changes to right.
- When the volume down button is pressed, the vertical angle changes to left.
- Press the stand-by button on the remote control to store.

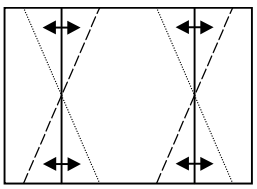


Figure 10

### Vertical Bow

Adjust the Vertical Bow so that the picture is centred.
The effect of this adjustment is shown in figure 11.

- When the volume up button is pressed, the vertical bow changes to left.
- When the volume down button is pressed, the vertical bow changes to right.
- Press the stand-by button on the remote control to store.

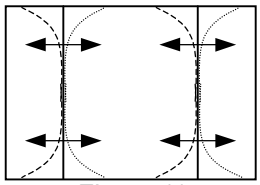


Figure 11

### Vertical Amplitude

Adjust the Vertical Amplitude so that 8% over-scan is achieved.
The effect of this adjustment is shown in figure 12.

- When the volume up button is pressed, the vertical size of the picture increases.
- When the volume down button is pressed, the vertical size of the picture decreases.
- Press the stand-by button on the remote control to store.

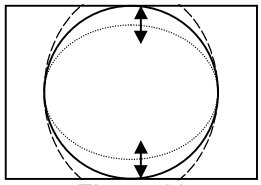


Figure 12

### S Correction

Adjust the S Correction so that the picture symmetrical between the top, centre and bottom.
The effect of this adjustment is shown in figure 13.

- When the volume up button is pressed, the top and bottom scanning decreases and the centre scanning increases.
- When the volume down button is pressed the top and bottom scanning increases and the centre scanning decreases.
- Press the stand-by button on the remote control to store.

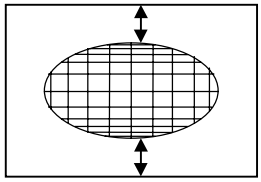


Figure 13

### Vertical Shift

Adjust the Vertical Shift so that the picture is centred.
The effect of this adjustment is shown in figure 14.

- When the volume up button is pressed, the picture moves up.
- When the volume down button is pressed, the picture moves down.
- Press the stand-by button on the remote control to store.

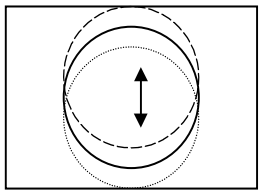


Figure 14

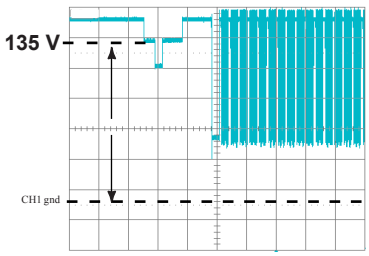
### Colour Adjustments

The following adjustments should only be carried out when the CRT or IC801 are replaced.

### G2, Cut Off and Gain Adjustments

**1. Follow the procedure below to set the G2**

1.1 Tune the set to the output of a signal generator (cross hatch pattern).
1.2 In the user menu, set contrast to 80/100 and brightness to 40/100.
1.3 Connect the oscilloscope to the TP1801 and adjust G2 to read 135V on the sensor pulse as in the drawing:



NOTE:
Oscilloscope should be adjusted for vertical TV field trigger and synchronized with video signal.

**2. Follow the procedure below to set the Cut Off.**

2.1 Adjust G2.
2.2 Tune a white pattern.
2.3 Adjust colour to minimum.
2.4 Position colorimeter in the centre of screen.
2.5 Adjust brightness and contrast to obtain a luminance of ≈20 NITS.
2.6 Operate in Service Mode and select location RED CUT OFF, GREEN CUT OFF and BLUE CUT OFF, to obtain colour coordinates:
X=0.290 ± 0.015 Y=0.300 ± 0.015

To increase press volume-up button and to decrease press volume down button.

| | |
|---|---|
| RED CUT OFF | alter «X» coordinate. |
| GREEN CUT OFF | alter «Y» coordinate. |
| BLUE CUT OFF | alter «X» and «Y» coordinate. |

They will be stored automatically.

**Changing NVM Data**

To change the data contained within the Non Volatile Memory, it is necessary to first select the page the data is stored in, then the position and finally to change the data itself. The procedure below outlines this process.

1. While on ALTER NVM PAGE, use the volume up/down buttons to change this data (data is shown in hexadecimal format).
2. Press the channel up button and ALTER NVM POSITION appears, use the volume up/down buttons to change this data (data is shown in hexadecimal format).
3. Press the channel up button and ALTER NVM VALUE appears, use the volume up/down buttons to change this data (data is shown in hexadecimal format).
4. Once this data has been set, press the stand-by button to store.
5. If another NVM value has to be changed, use the channel down button to select the page or position and repeat as necessary.

**Note:**
**DO NOT** change any NVM data, unless you have been advised to do so by a Sharp representative. If data is incorrectly changed, serious damage may occur to the receiver.

**Contrast Adjustments**
Three types of contrast levels can be varied as listed below:

- TELETEXT MIX MODE CONTRAST
- TELETEXT CONTRAST
- OSD CONTRAST

Use the volume up/down buttons to adjust to a suitable level, they will be stored automatically.

**DVCO Adjustment (PAL)**

Carry out the DVCO Adjustment (PAL) as shown below:

1. Receive a color pattern signal (PAL).
2. While in the DVCO ADJUSTMENT (PAL) menu, press the stand-by button.
3. The adjustment will be carried out automatically and stored.

**DVCO Adjustment (NTSC)**

Carry out the DVCO Adjustment (NTSC) as shown below:

1. Receive a color pattern signal (NTSC 3.58).
2. While in the DVCO ADJUSTMENT (NTSC) menu, press the stand-by button.
3. The adjustment will be carried out automatically and stored.

**AGC Adjustment**

To correctly align the Automatic Gain Control, follow the procedure outlined below:
1. Tune the set into a pattern generator on CH10.
2. Adjust the signal strength of the pattern generator to 57dB/μV
3. Enter the Service Mode.
4. Enter the AGC Adjustment menu.
5. Press the stand-by button on the remote control.
6. The adjustment will be carried out and stored automatically.

**Auto Installation On/Off**

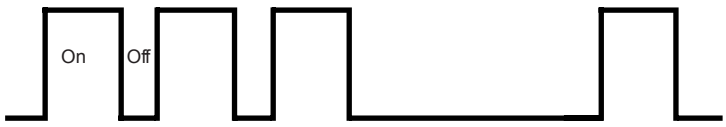
To return the receiver to the original Auto Installation mode, using the volume up or down button, set the Auto Installation On/Off to On. This setting is automatically stored and when the receiver is turned on the next time it will start up in Auto Installation mode.

## LED FLASHING CODES

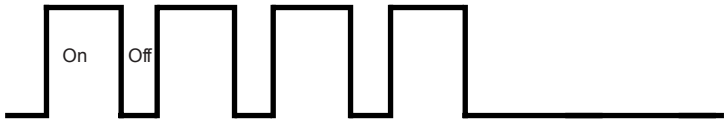
If the TV set does not work and the power indicator is flashing, follow the sequence according to the information below, as a guide to fault finding.

1. **Unable to read or write into NVM:** 66% ON, 33% OFF twice and OFF for a second.


2. **MSP failure:** 66% ON, 33% OFF for three times and OFF for a second.



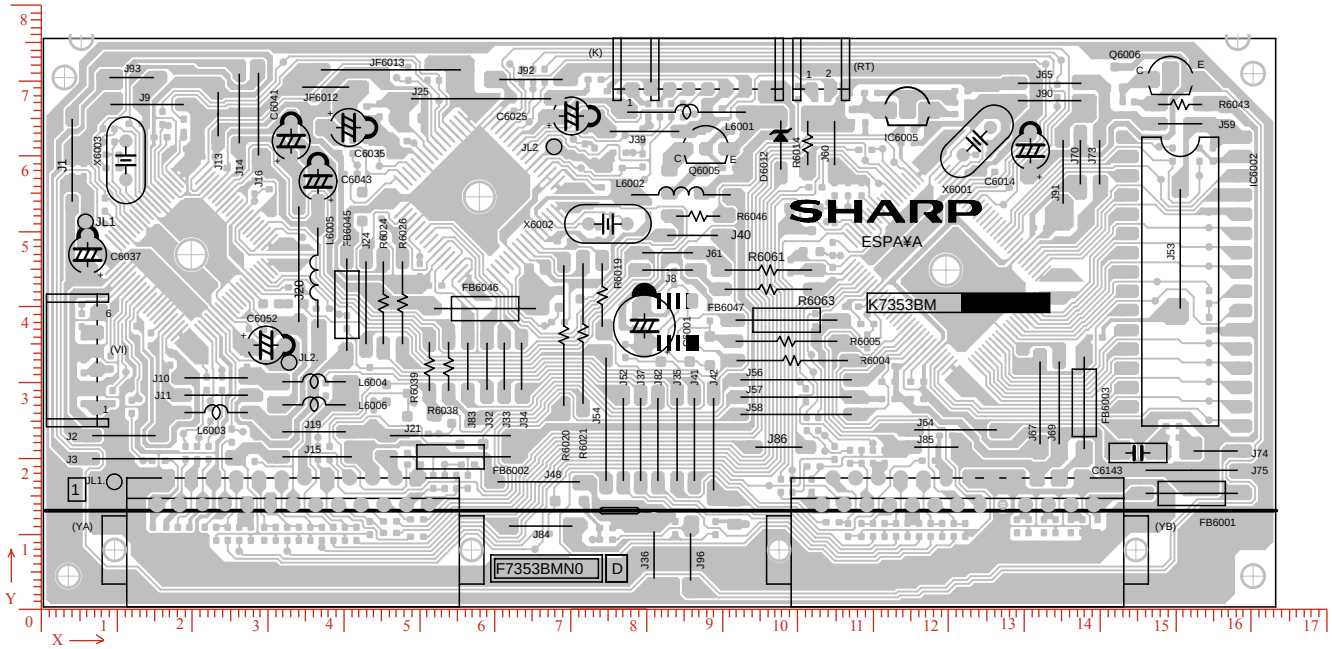

3. **SDA 9380 failure:** 66% ON, 33% OFF for four times and OFF for a second.



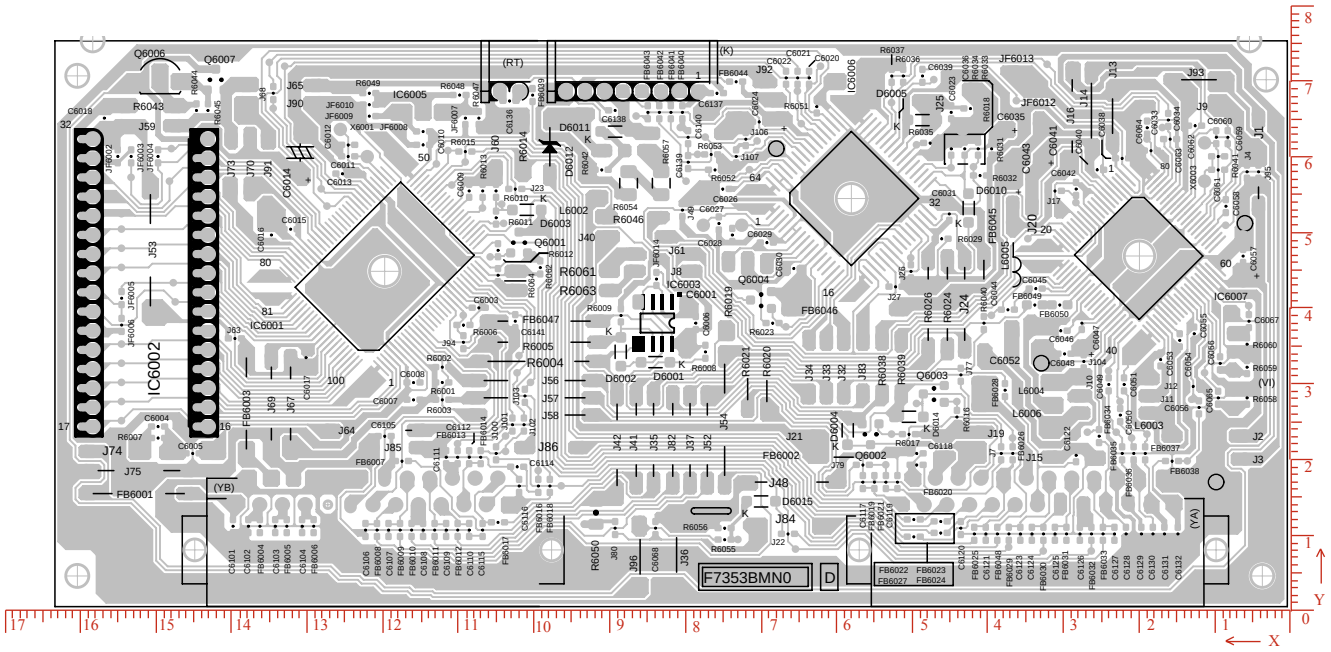

4. **SDA 9402 failure:** 66% ON, 33% OFF for five times and OFF for a second.

# PRINTED WIRING BOARDS

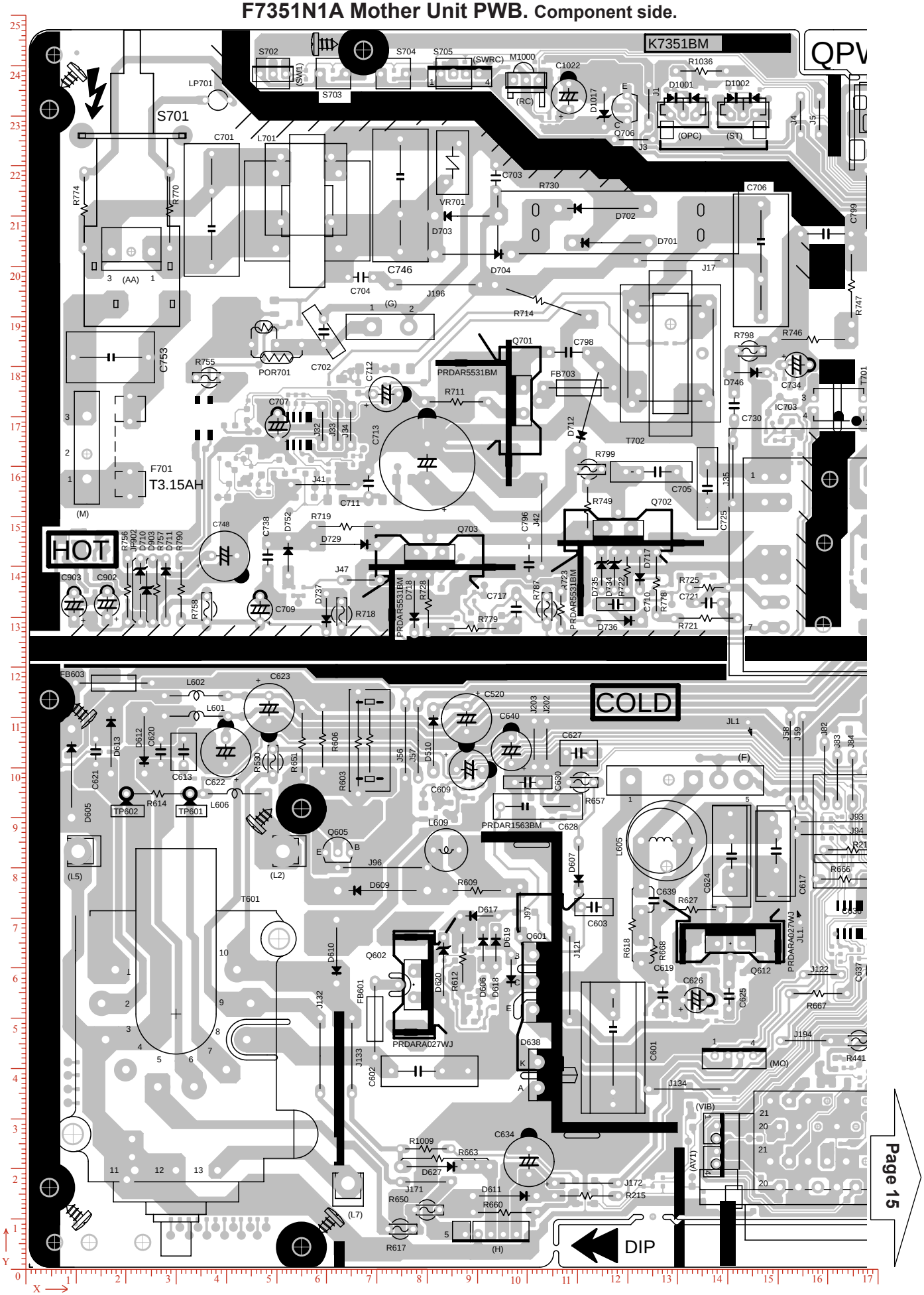
## F7353N0D Digital Module Unit PWB
### Component side



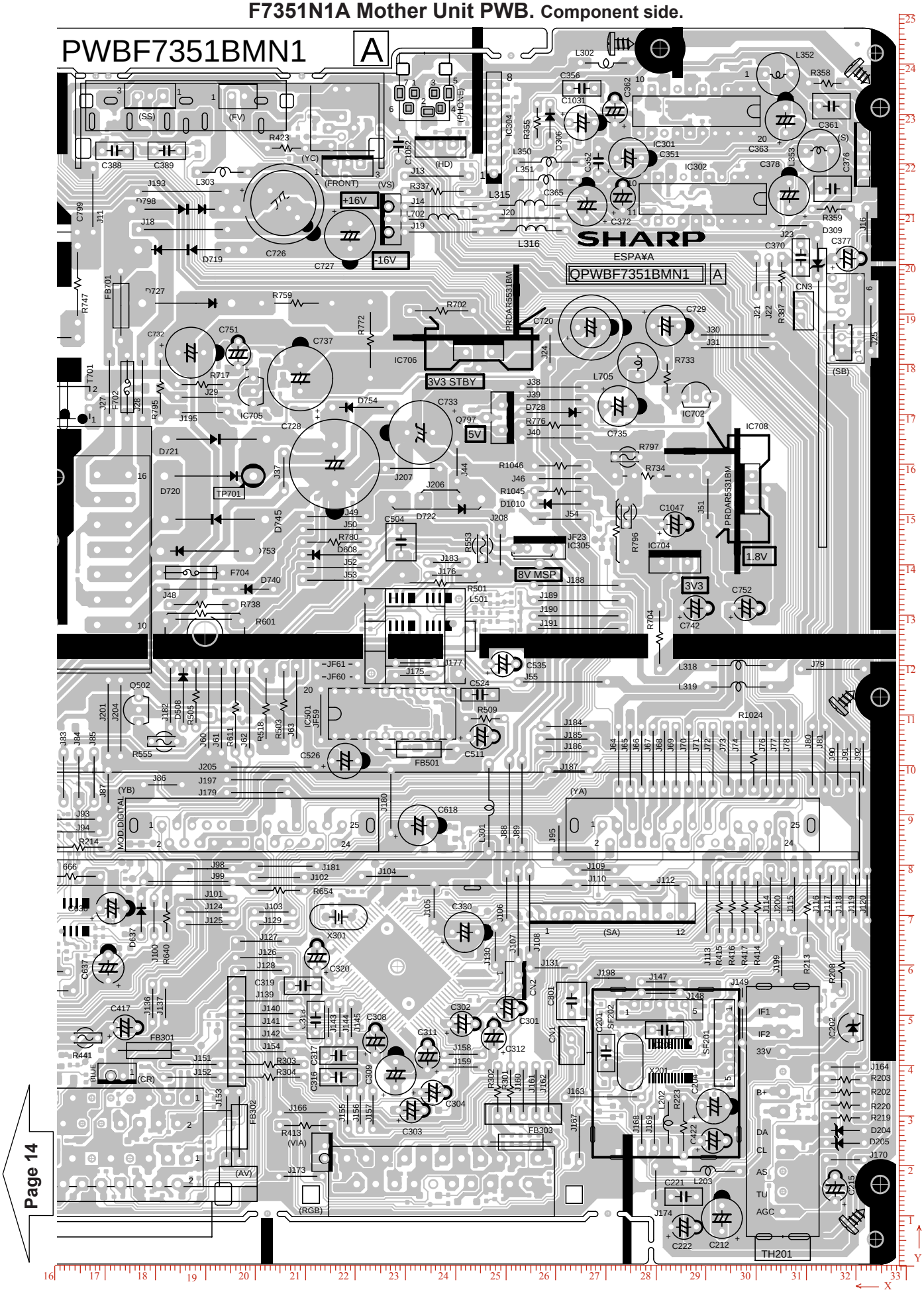

## F7353N0D Digital Module Unit PWB
### Copper side



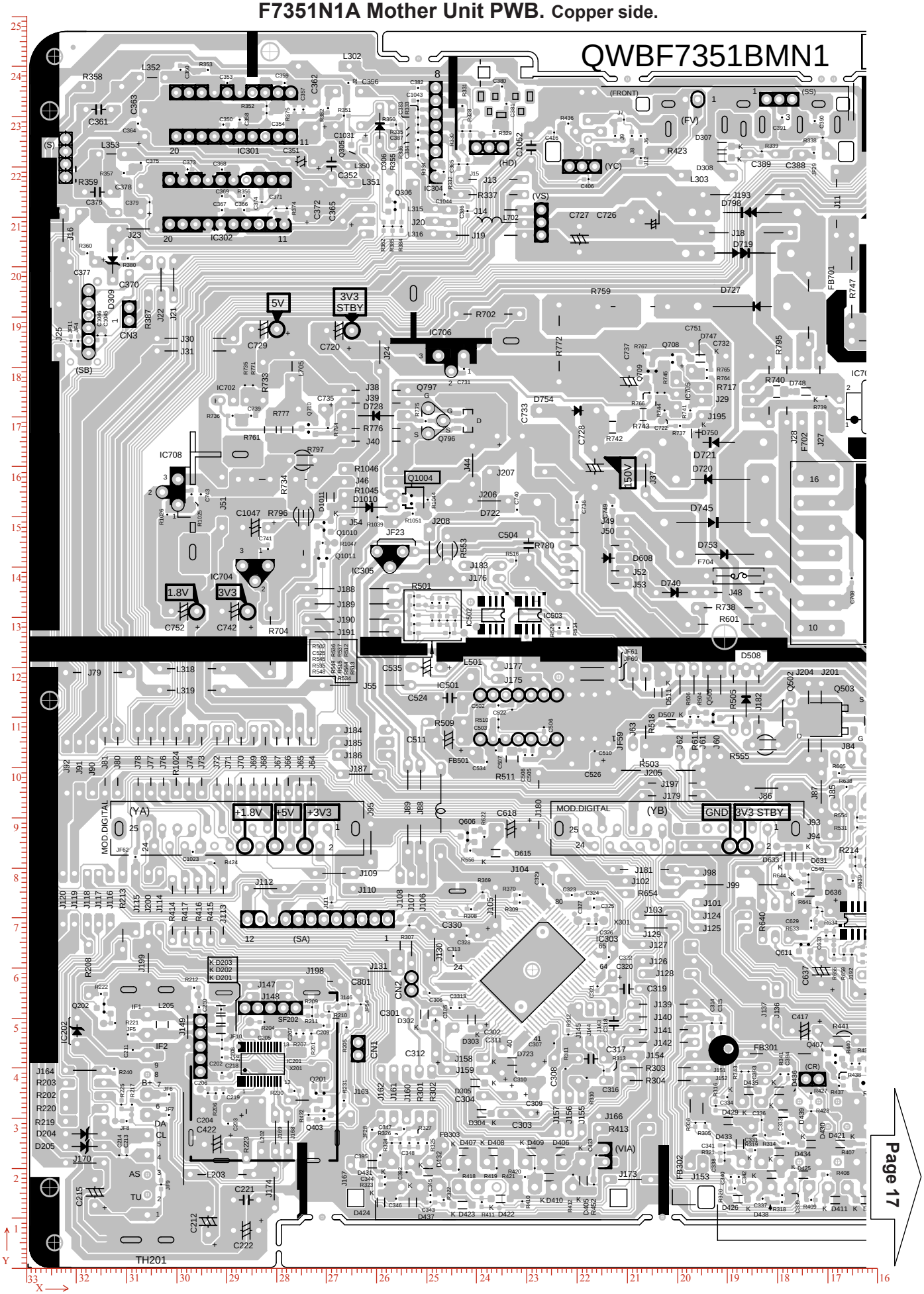
## F7351N1A Mother Unit PWB. Component side.



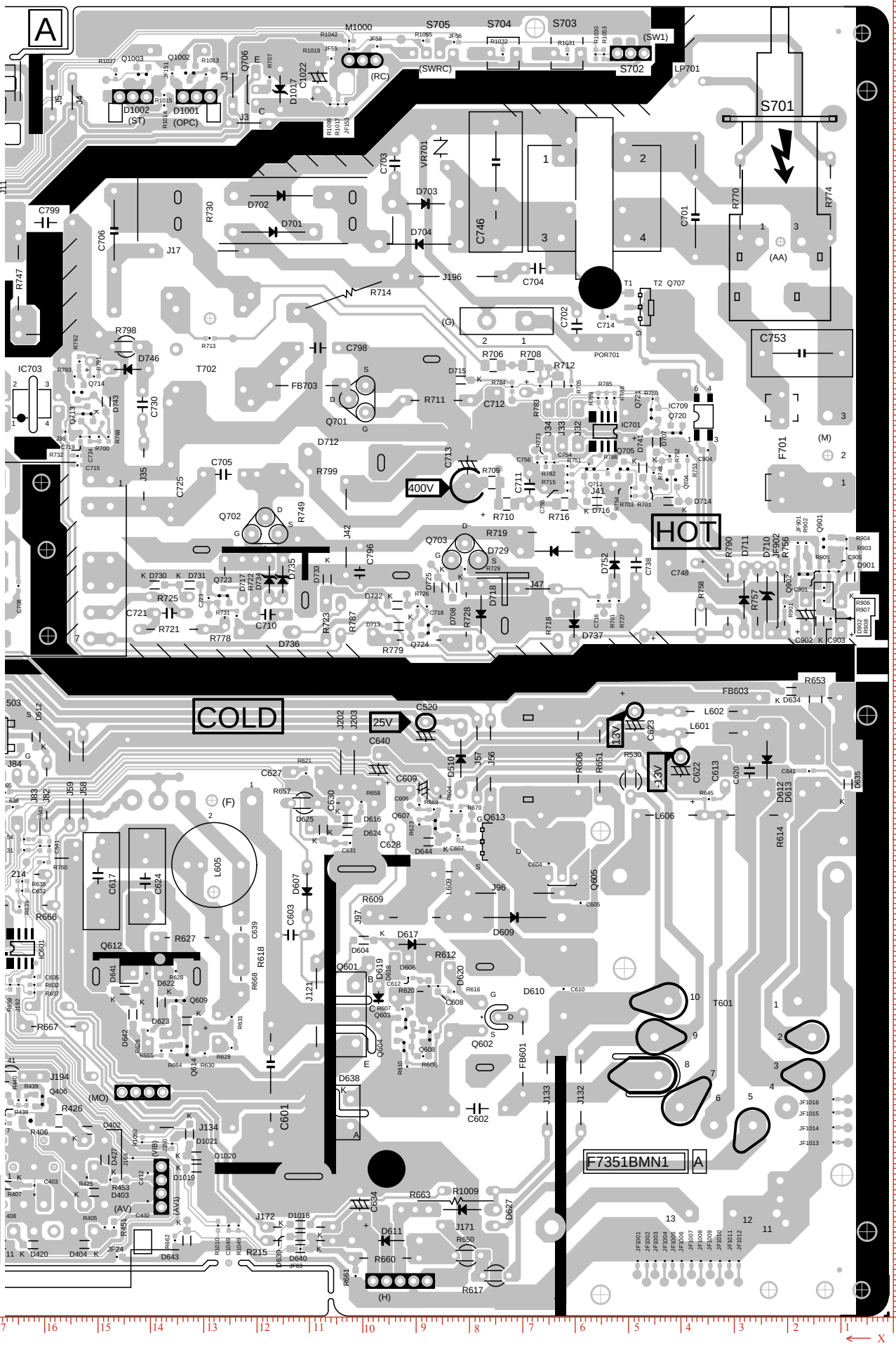
## F7351N1A Mother Unit PWB. Component side.



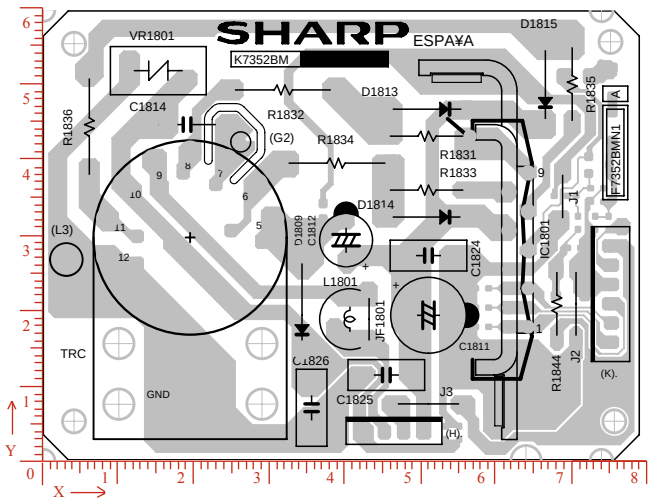
## F7351N1A Mother Unit PWB. Copper side.



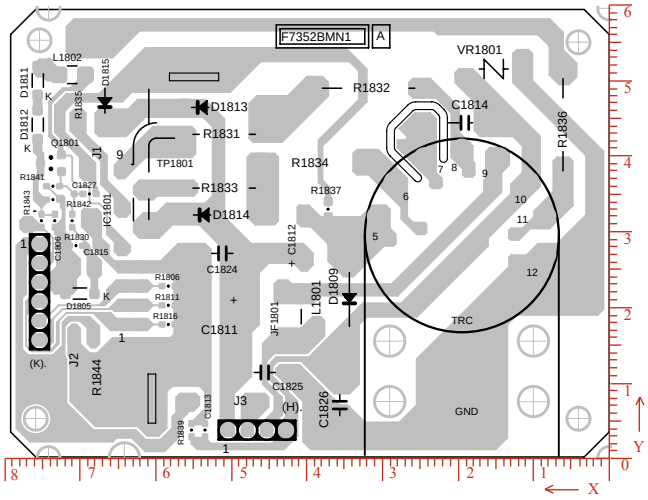
## F7351N1A Mother Unit PWB. Copper side.



## F7352N1A CRT Unit PWB
### Component side




## F7352N1A CRT Unit PWB
### Copper side



# COMPONENT LOCATION TABLES

## F7353N0D Digital Module Unit PWB

### Component side

| Ref No | Xum | Yum |
|---|---|---|
| (K) | 86614 | 68326 |
| (RT) | 102870 | 68326 |
| (VI) | 7112 | 32512 |
| (YA) | 33020 | 17018 |
| (YB) | 120904 | 17018 |
| C6001 | 79502 | 37084 |
| C6014 | 130555 | 60198 |
| C6025 | 69850 | 64770 |
| C6035 | 40386 | 63246 |
| C6037 | 5842 | 46482 |
| C6041 | 32765 | 61468 |
| C6043 | 36322 | 56134 |
| C6052 | 29464 | 34544 |
| C6143 | 144780 | 20320 |
| D6012 | 97536 | 60960 |
| FB6001 | 151892 | 14986 |
| FB6002 | 53848 | 19812 |
| FB6003 | 137668 | 26924 |
| FB6045 | 40132 | 39878 |
| FB6046 | 58420 | 39370 |
| FB6047 | 98298 | 37846 |
| IC6001 | 119380 | 44450 |
| IC6002 | 150368 | 42926 |
| IC6005 | 114300 | 65531 |
| J1 | 3810 | 58928 |
| J10 | 22860 | 30226 |
| J11 | 22860 | 27940 |
| J13 | 23114 | 65024 |
| J14 | 25908 | 65786 |
| J15 | 36195 | 19812 |
| J16 | 28448 | 65024 |
| J19 | 35814 | 23114 |
| J2 | 10668 | 22606 |
| J20 | 33782 | 45212 |
| J21 | 53848 | 22606 |
| J24 | 42672 | 40132 |
| J25 | 57912 | 67056 |
| J3 | 15748 | 19558 |
| J32 | 58674 | 31750 |
| J33 | 60960 | 31750 |
| J34 | 63246 | 31750 |
| J35 | 83820 | 22098 |
| J36 | 80772 | 6858 |
| J37 | 78994 | 22098 |
| J39 | 79502 | 62738 |
| J40 | 85852 | 49022 |
| J41 | 86106 | 22098 |
| J42 | 88646 | 21463 |
| J48 | 65531 | 16510 |
| J52 | 76708 | 22098 |

| Ref No | Xum | Yum |
|---|---|---|
| J53 | 150368 | 47244 |
| J54 | 74422 | 24765 |
| J56 | 99568 | 29972 |
| J57 | 99568 | 27686 |
| J58 | 99568 | 25400 |
| J59 | 150368 | 63754 |
| J60 | 104648 | 61214 |
| J61 | 82550 | 46736 |
| J64 | 120650 | 23368 |
| J65 | 133096 | 69088 |
| J67 | 131826 | 26924 |
| J69 | 134366 | 26924 |
| J70 | 137160 | 58674 |
| J73 | 139700 | 58674 |
| J74 | 155067 | 20574 |
| J75 | 151892 | 18034 |
| J8 | 82550 | 44450 |
| J82 | 81280 | 22098 |
| J83 | 56134 | 31750 |
| J84 | 65786 | 10668 |
| J85 | 118110 | 21082 |
| J86 | 97282 | 21082 |
| J9 | 13716 | 66294 |
| J90 | 133096 | 66802 |
| J91 | 134874 | 57404 |
| J92 | 64516 | 69596 |
| J93 | 11684 | 69850 |
| J96 | 85598 | 6604 |
| JF6012 | 37338 | 68580 |
| JF6013 | 45974 | 70866 |
| JL1 | 5588 | 50800 |
| JL1. | 9398 | 16510 |
| JL2 | 67564 | 60706 |
| JL2. | 32512 | 32258 |
| L6001 | 85090 | 65277 |
| L6002 | 84328 | 54356 |
| L6003 | 22860 | 25654 |
| L6004 | 35814 | 29718 |
| L6005 | 36322 | 43434 |
| L6006 | 35814 | 26670 |
| Q6005 | 87630 | 60452 |
| Q6006 | 149098 | 69596 |
| R6004 | 99060 | 32512 |
| R6005 | 98298 | 35052 |
| R6014 | 101092 | 61214 |
| R6019 | 73914 | 41148 |
| R6020 | 68834 | 35814 |
| R6021 | 71374 | 36068 |
| R6024 | 44958 | 40132 |
| R6026 | 47498 | 40132 |

| Ref No | Xum | Yum |
|---|---|---|
| R6038 | 53594 | 31750 |
| R6039 | 51054 | 31750 |
| R6043 | 150368 | 66294 |
| R6046 | 86614 | 51562 |
| R6061 | 95885 | 44450 |
| R6063 | 95885 | 41910 |
| REF1 | 5842 | -3023 |
| REF5 | 98552 | 50546 |
| X6001 | 123444 | 61468 |
| X6002 | 74676 | 50546 |
| X6003 | 10922 | 58928 |

### Copper side

| Ref No | Xum | Yum |
|---|---|---|
| C6003 | 1E+05 | 39624 |
| C6004 | 1E+05 | 23876 |
| C6005 | 1E+05 | 20320 |
| C6006 | 78232 | 37592 |
| C6007 | 1E+05 | 27432 |
| C6008 | 1E+05 | 29718 |
| C6009 | 1E+05 | 55118 |
| C6010 | 1E+05 | 61214 |
| C6011 | 1E+05 | 59690 |
| C6012 | 1E+05 | 61214 |
| C6013 | 1E+05 | 57404 |
| C6015 | 1E+05 | 50038 |
| C6016 | 1E+05 | 49276 |
| C6017 | 1E+05 | 33020 |
| C6018 | 2E+05 | 64770 |
| C6020 | 63246 | 70104 |
| C6021 | 64770 | 70104 |
| C6022 | 66294 | 70104 |
| C6023 | 44450 | 65531 |
| C6024 | 69850 | 64262 |
| C6026 | 74676 | 55372 |
| C6027 | 75184 | 50800 |
| C6028 | 73406 | 49276 |
| C6029 | 68834 | 48260 |
| C6030 | 65277 | 44831 |
| C6031 | 44704 | 52070 |
| C6033 | 18542 | 63500 |
| C6034 | 15748 | 64516 |
| C6036 | 44450 | 60706 |
| C6038 | 21844 | 59436 |
| C6039 | 48260 | 70358 |
| C6040 | 25146 | 57912 |
| C6042 | 27940 | 55372 |
| C6044 | 36957 | 39370 |
| C6045 | 33274 | 42164 |
| C6046 | 29972 | 36576 |
| C6047 | 27178 | 37592 |
| C6048 | 29464 | 33528 |
| C6049 | 23622 | 29464 |
| C6050 | 22098 | 25400 |
| C6051 | 21590 | 29464 |
| C6053 | 16764 | 32765 |
| C6054 | 14224 | 35306 |
| C6055 | 12319 | 36195 |
| C6056 | 11684 | 26416 |
| C6057 | 5842 | 46482 |
| C6058 | 8128 | 53086 |
| C6059 | 7874 | 62230 |
| C6060 | 9398 | 62230 |
| C6061 | 9144 | 57912 |

| Ref No | Xum | Yum |
|---|---|---|
| C6062 | 12192 | 63754 |
| C6063 | 15494 | 61976 |
| C6064 | 18034 | 60452 |
| C6065 | 9144 | 27686 |
| C6066 | 8890 | 32258 |
| C6067 | 5080 | 37846 |
| C6068 | 83566 | 10414 |
| C6101 | 1E+05 | 10668 |
| C6102 | 1E+05 | 10668 |
| C6103 | 1E+05 | 10668 |
| C6104 | 1E+05 | 10668 |
| C6105 | 1E+05 | 22606 |
| C6106 | 1E+05 | 10160 |
| C6107 | 1E+05 | 10160 |
| C6108 | 1E+05 | 10160 |
| C6109 | 1E+05 | 10160 |
| C6110 | 1E+05 | 10160 |
| C6111 | 1E+05 | 19812 |
| C6112 | 1E+05 | 19812 |
| C6114 | 1E+05 | 18542 |
| C6115 | 1E+05 | 10160 |
| C6116 | 1E+05 | 16002 |
| C6117 | 56134 | 16510 |
| C6118 | 49022 | 20320 |
| C6119 | 51562 | 16510 |
| C6120 | 43180 | 10414 |
| C6121 | 39878 | 9652 |
| C6122 | 27940 | 20066 |
| C6123 | 35306 | 9652 |
| C6124 | 33782 | 9652 |
| C6125 | 30734 | 9652 |
| C6126 | 27432 | 9652 |
| C6127 | 22860 | 9652 |
| C6128 | 21336 | 9652 |
| C6129 | 19304 | 9652 |
| C6130 | 17780 | 9652 |
| C6131 | 16256 | 9652 |
| C6132 | 14478 | 9652 |
| C6136 | 1E+05 | 67056 |
| C6137 | 75438 | 68072 |
| C6138 | 88900 | 65786 |
| C6139 | 79248 | 58928 |
| C6140 | 79248 | 62230 |
| C6141 | 1E+05 | 37846 |
| D6001 | 83566 | 32385 |
| D6002 | 88138 | 33782 |
| D6003 | 1E+05 | 52578 |
| D6004 | 58166 | 23368 |
| D6005 | 48260 | 64516 |
| D6010 | 42164 | 52832 |

| Ref No | Xum | Yum |
|---|---|---|
| D6011 | 88900 | 62992 |
| D6014 | 50038 | 25146 |
| D6015 | 69596 | 13970 |
| FB6004 | 1E+05 | 10668 |
| FB6005 | 1E+05 | 10668 |
| FB6006 | 1E+05 | 10668 |
| FB6007 | 1E+05 | 19304 |
| FB6008 | 1E+05 | 10160 |
| FB6009 | 1E+05 | 10160 |
| FB6010 | 1E+05 | 10160 |
| FB6011 | 1E+05 | 10160 |
| FB6012 | 1E+05 | 10160 |
| FB6013 | 1E+05 | 19812 |
| FB6014 | 1E+05 | 19812 |
| FB6016 | 99060 | 16002 |
| FB6017 | 1E+05 | 11176 |
| FB6018 | 97536 | 16002 |
| FB6019 | 54610 | 16510 |
| FB6020 | 49022 | 18796 |
| FB6021 | 53086 | 16510 |
| FB6022 | 49403 | 11557 |
| FB6023 | 45847 | 11303 |
| FB6024 | 45847 | 9779 |
| FB6025 | 41402 | 9652 |
| FB6026 | 36322 | 20320 |
| FB6027 | 49403 | 9271 |
| FB6028 | 37338 | 28702 |
| FB6029 | 36830 | 9652 |
| FB6030 | 32258 | 9652 |
| FB6031 | 29210 | 9652 |
| FB6032 | 25908 | 9652 |
| FB6033 | 24384 | 9652 |
| FB6034 | 24892 | 22606 |
| FB6035 | 21844 | 20320 |
| FB6036 | 20320 | 20320 |
| FB6037 | 18796 | 20320 |
| FB6038 | 15240 | 19304 |
| FB6039 | 99822 | 67818 |
| FB6040 | 80010 | 65531 |
| FB6041 | 81534 | 65531 |
| FB6042 | 83058 | 65531 |
| FB6043 | 84582 | 65531 |
| FB6044 | 72898 | 69596 |
| FB6048 | 38354 | 9652 |
| FB6049 | 33401 | 40005 |
| FB6050 | 30099 | 40005 |
| IC6003 | 83312 | 37592 |
| IC6006 | 57658 | 54102 |
| IC6007 | 19558 | 46482 |
| J100 | 1E+05 | 20320 |

# F7351N1A Mother Unit PWB

## Component side

| Ref No | Xum | Yum | Ref No | Xum | Yum | Ref No | Xum | Yum | Ref No | Xum | Yum | Ref No | Xum | Yum | Ref No | Xum | Yum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (AA) | 20320 | 202692 | C317 | 215900 | 41656 | C701 | 36322 | 207264 | D510 | 80518 | 105156 | FB302 | 196088 | 27432 | J131 | 258318 | 59182 |
| (AV) | 166649 | 12496 | C318 | 211328 | 48768 | C702 | 58674 | 186690 | D605 | 8382 | 98552 | FB303 | 252222 | 24384 | J132 | 57912 | 42164 |
| (CR) | 171704 | 37592 | C319 | 208788 | 55626 | C703 | 92964 | 217424 | D606 | 90424 | 63754 | FB501 | 231902 | 102870 | J133 | 64262 | 42164 |
| (F) | 119888 | 97282 | C320 | 211582 | 61214 | C704 | 66040 | 197612 | D607 | 109474 | 80010 | FB601 | 68834 | 49530 | J134 | 131063 | 35560 |
| (FRONT) | 216458 | 237998 | C330 | 241046 | 66294 | C705 | 125222 | 158750 | D608 | 215138 | 141732 | FB603 | 16764 | 116586 | J136 | 178816 | 52070 |
| (FV) | 195834 | 233426 | C351 | 273812 | 220980 | C706 | 145796 | 204724 | D609 | 70358 | 75184 | FB701 | 172466 | 191516 | J137 | 181356 | 52070 |
| (G) | 71882 | 187706 | C352 | 267716 | 220472 | C707 | 49530 | 167894 | D610 | 61214 | 62992 | FB703 | 109474 | 175514 | J139 | 201422 | 52578 |
| (H) | 91948 | 6604 | C356 | 264414 | 234950 | C709 | 45974 | 131318 | D611 | 94742 | 14224 | IC202 | 318516 | 47244 | J14 | 236728 | 211328 |
| (HD) | 236220 | 223774 | C361 | 314198 | 231394 | C710 | 116840 | 132334 | D612 | 22860 | 104902 | IC301 | 287274 | 230378 | J140 | 201422 | 50038 |
| (L2) | 50546 | 83058 | C362 | 271018 | 230378 | C711 | 67564 | 156464 | D613 | 16256 | 104902 | IC302 | 288544 | 212852 | J141 | 201422 | 47498 |
| (L5) | 9652 | 83058 | C363 | 305054 | 228600 | C712 | 71120 | 174244 | D617 | 89662 | 70104 | IC304 | 246888 | 226822 | J142 | 201422 | 44958 |
| (L7) | 63500 | 16764 | C365 | 265430 | 211582 | C713 | 79248 | 160528 | D618 | 92964 | 63754 | IC305 | 256032 | 143002 | J143 | 213868 | 48260 |
| (M) | 11430 | 162306 | C370 | 308102 | 201168 | C717 | 97028 | 131318 | D619 | 96012 | 58674 | IC501 | 226568 | 109982 | J144 | 216154 | 48260 |
| (MO) | 140462 | 42164 | C372 | 272542 | 213106 | C720 | 266192 | 187198 | D620 | 82550 | 59436 | IC702 | 287274 | 173228 | J145 | 218440 | 48260 |
| (OPC) | 130301 | 229997 | C376 | 314452 | 214884 | C721 | 135382 | 132588 | D627 | 80264 | 20066 | IC703 | 161290 | 172212 | J147 | 280162 | 56388 |
| (PHONE) | 232994 | 241985 | C377 | 317500 | 200914 | C725 | 135128 | 155448 | D637 | 176530 | 69342 | IC704 | 282956 | 140208 | J148 | 280162 | 54102 |
| (RC) | 99009 | 236855 | C378 | 305816 | 213614 | C726 | 204978 | 211836 | D701 | 115824 | 204470 | IC705 | 198882 | 174498 | J149 | 296418 | 48006 |
| (RGB). | 236474 | 18542 | C388 | 171196 | 222504 | C727 | 218186 | 205486 | D702 | 114300 | 211328 | IC706 | 243840 | 184658 | J151 | 186690 | 39878 |
| (S) | 320802 | 221742 | C389 | 181610 | 222504 | C728 | 215138 | 159766 | D703 | 87122 | 209804 | IC708 | 295910 | 154940 | J152 | 186690 | 37338 |
| (SA) | 270510 | 69596 | C417 | 173228 | 47244 | C729 | 281178 | 187452 | D704 | 88392 | 202184 | J1 | 123444 | 232156 | J153 | 193548 | 27432 |
| (SB) | 316230 | 188976 | C422 | 290576 | 24638 | C730 | 140462 | 171958 | D710 | 22098 | 135128 | J100 | 179070 | 69342 | J154 | 201066 | 42418 |
| (SS) | 178308 | 233426 | C504 | 228346 | 144272 | C732 | 186436 | 182118 | D711 | 27178 | 135128 | J101 | 189611 | 72898 | J155 | 217678 | 30734 |
| (ST) | 142290 | 229997 | C511 | 244348 | 105410 | C733 | 232156 | 166116 | D712 | 109220 | 171958 | J102 | 203962 | 77216 | J156 | 220218 | 30734 |
| (SW1) | 48539 | 238201 | C520 | 87122 | 109474 | C734 | 152908 | 180086 | D717 | 121666 | 138938 | J103 | 202946 | 70358 | J157 | 222758 | 30734 |
| (SWRC) | 85775 | 238201 | C524 | 244094 | 113792 | C735 | 271780 | 171450 | D718 | 76708 | 132334 | J104 | 225552 | 77470 | J158 | 240792 | 41910 |
| (VIA) | 213106 | 22352 | C526 | 217170 | 100584 | C737 | 208280 | 177038 | D719 | 184912 | 202692 | J105 | 234950 | 72136 | J159 | 240792 | 39370 |
| (VIB) | 136906 | 24384 | C535 | 248666 | 119888 | C738 | 47498 | 141732 | D719A | 186436 | 202692 | J106 | 249428 | 73152 | J16 | 321310 | 207264 |
| (VS) | 225806 | 208788 | C601 | 116332 | 47498 | C742 | 287020 | 131063 | D720 | 189992 | 157480 | J107 | 251714 | 69596 | J160 | 252730 | 34544 |
| (YC) | 217678 | 219964 | C602 | 77470 | 39116 | C746 | 73914 | 217678 | D721 | 191516 | 164846 | J108 | 254000 | 70104 | J161 | 255270 | 34544 |
| BLIN1 | 281178 | 38100 | C603 | 112522 | 71882 | C748 | 38862 | 141986 | D722 | 235458 | 152908 | J109 | 267208 | 78740 | J162 | 257810 | 34544 |
| BLIN2 | 281178 | 38100 | C609 | 87630 | 99314 | C751 | 195834 | 181864 | D727 | 185674 | 192024 | J11 | 166878 | 212598 | J163 | 268732 | 33401 |
| C1022 | 107442 | 233680 | C613 | 30734 | 102870 | C752 | 297180 | 131063 | D728 | 258826 | 170180 | J110 | 267208 | 75692 | J164 | 316992 | 39370 |
| C1031 | 264414 | 228092 | C617 | 148082 | 82042 | C753 | 16256 | 181610 | D729 | 62992 | 144272 | J112 | 280924 | 75692 | J166 | 209296 | 30226 |
| C1047 | 282956 | 147828 | C617A | 148844 | 83058 | C796 | 99568 | 140208 | D734 | 116586 | 138938 | J113 | 289306 | 71374 | J167 | 263906 | 25400 |
| C1052 | 227838 | 223774 | C618 | 231902 | 87630 | C798 | 107442 | 182626 | D735 | 114046 | 138938 | J114 | 302006 | 72898 | J168 | 276352 | 26924 |
| C201 | 269240 | 42164 | C619 | 126238 | 54356 | C799 | 158750 | 206248 | D736 | 116840 | 129032 | J115 | 306832 | 72898 | J169 | 278892 | 26924 |
| C204 | 290830 | 31496 | C620 | 26162 | 102870 | C801 | 262382 | 52578 | D737 | 59182 | 130555 | J116 | 311912 | 73660 | J17 | 129794 | 200914 |
| C205 | 280924 | 46736 | C621 | 13208 | 102870 | C902 | 15494 | 132334 | D740 | 199136 | 134874 | J117 | 314198 | 73660 | J170 | 316992 | 20828 |
| C212 | 292354 | 9144 | C622 | 39116 | 102870 | C903 | 8890 | 132080 | D745 | 191262 | 148844 | J118 | 316484 | 73660 | J171 | 78994 | 17018 |
| C215 | 314960 | 14986 | C623 | 47752 | 111506 | CN1 | 262382 | 43688 | D746 | 143256 | 178562 | J119 | 319024 | 73660 | J172 | 110998 | 16764 |
| C221 | 284734 | 13462 | C624 | 139700 | 83058 | CN2 | 251714 | 56642 | D752 | 51562 | 141732 | J120 | 321310 | 73660 | J173 | 208280 | 17526 |
| C222 | 284734 | 7366 | C624A | 139954 | 82042 | CN3 | 308102 | 190500 | D753 | 189230 | 142494 | J121 | 107696 | 58166 | J174 | 279146 | 15748 |
| C301 | 249682 | 51054 | C625 | 139446 | 54102 | D1001 | 130301 | 229997 | D754 | 220472 | 171196 | J122 | 157988 | 58420 | J175 | 231140 | 117602 |
| C302 | 240538 | 48006 | C626 | 132842 | 53340 | D1002 | 142290 | 229997 | D798 | 183642 | 210820 | J124 | 189738 | 70358 | J176 | 237490 | 137668 |
| C303 | 230378 | 30734 | C627 | 109474 | 102616 | D1010 | 260096 | 151892 | D798A | 185166 | 210820 | J125 | 189738 | 67818 | J177 | 231140 | 120142 |
| C304 | 234696 | 34290 | C628 | 101346 | 91948 | D1017 | 114554 | 231394 | DOBLE_ | 29210 | 50546 | J126 | 200406 | 61214 | J179 | 199644 | 94234 |
| C308 | 223266 | 44450 | C630 | 99314 | 96774 | D204 | 316992 | 26670 | F1 | 55372 | 210820 | J127 | 200406 | 64516 | J18 | 184912 | 206756 |
| C309 | 227330 | 37846 | C634 | 99568 | 21082 | D205 | 316992 | 24130 | F701 | 20066 | 163830 | J128 | 200406 | 58674 | J180 | 226314 | 92456 |
| C311 | 233680 | 41402 | C636 | 170688 | 71120 | D306 | 258064 | 228092 | F702 | 173736 | 175260 | J129 | 202946 | 67818 | J181 | 205232 | 79502 |
| C312 | 246888 | 45212 | C637 | 169926 | 59182 | D309 | 311404 | 201168 | F704 | 186436 | 138176 | J13 | 235458 | 217424 | J182 | 182372 | 113538 |
| C316 | 215900 | 37338 | C640 | 96012 | 103124 | D508 | 184912 | 113538 | FB301 | 178054 | 42672 | J130 | 247142 | 63500 | J183 | 237490 | 140208 |

# F7351N1A Mother Unit PWB

## Component side

| Ref No | Xum | Yum |
|---|---|---|
| J184 | 261365 | 107442 |
| J185 | 261365 | 104902 |
| J186 | 261365 | 102362 |
| J187 | 261873 | 98552 |
| J188 | 263652 | 135636 |
| J189 | 263652 | 132588 |
| J19 | 236728 | 206248 |
| J190 | 263652 | 129540 |
| J191 | 263652 | 127000 |
| J193 | 184658 | 214376 |
| J194 | 154686 | 45212 |
| J195 | 188722 | 170180 |
| J196 | 81026 | 196088 |
| J197 | 199644 | 96774 |
| J198 | 269748 | 57150 |
| J199 | 304292 | 60452 |
| J20 | 254000 | 209042 |
| J200 | 304292 | 72898 |
| J201 | 169926 | 109093 |
| J202 | 103124 | 104394 |
| J203 | 100584 | 104394 |
| J204 | 172466 | 109093 |
| J205 | 202438 | 99314 |
| J206 | 236220 | 153162 |
| J207 | 230632 | 159004 |
| J208 | 248158 | 142748 |
| J21 | 299212 | 197358 |
| J22 | 301752 | 197358 |
| J23 | 306324 | 207518 |
| J24 | 258064 | 182880 |
| J25 | 322072 | 187452 |
| J27 | 170180 | 175260 |
| J28 | 176784 | 175260 |
| J29 | 188722 | 173228 |
| J3 | 120396 | 225044 |
| J30 | 294894 | 185674 |
| J31 | 294894 | 183134 |
| J32 | 58420 | 167894 |
| J33 | 61468 | 167894 |
| J34 | 64008 | 167894 |
| J35 | 140208 | 158750 |
| J37 | 204978 | 158242 |
| J38 | 258826 | 175260 |
| J39 | 258826 | 172720 |
| J4 | 153670 | 229870 |
| J40 | 258826 | 165100 |
| J41 | 58420 | 156210 |
| J42 | 102108 | 148590 |
| J44 | 239522 | 160274 |
| J46 | 260096 | 156972 |
| J47 | 66040 | 137160 |
| J48 | 186436 | 134874 |
| J49 | 215138 | 149352 |
| J5 | 157480 | 229870 |
| J50 | 215138 | 146812 |
| J51 | 289560 | 152908 |
| J52 | 215138 | 139192 |
| J53 | 215138 | 136652 |
| J54 | 260096 | 148844 |
| J55 | 260603 | 116332 |
| J56 | 74930 | 105156 |
| J57 | 77470 | 105156 |
| J58 | 151638 | 101092 |
| J59 | 154178 | 101092 |
| J60 | 189992 | 110998 |
| J61 | 192532 | 110998 |
| J62 | 198120 | 110998 |
| J63 | 207518 | 111760 |
| J64 | 271780 | 101092 |
| J65 | 274066 | 101092 |
| J66 | 276352 | 101092 |
| J67 | 278638 | 101092 |
| J68 | 280924 | 101092 |
| J69 | 283210 | 101092 |
| J70 | 285750 | 101092 |
| J71 | 288290 | 101092 |
| J72 | 290576 | 101092 |
| J73 | 293624 | 101092 |
| J74 | 296164 | 101092 |
| J76 | 301244 | 101092 |
| J77 | 303784 | 101092 |
| J78 | 306324 | 101092 |
| J79 | 314452 | 118872 |
| J80 | 310388 | 101092 |
| J81 | 312928 | 101092 |
| J82 | 158496 | 98552 |
| J83 | 161036 | 97282 |
| J84 | 164084 | 97282 |
| J85 | 167132 | 97282 |
| J86 | 180848 | 95758 |
| J87 | 169926 | 94996 |
| J88 | 249936 | 91948 |
| J89 | 252476 | 91948 |
| J90 | 315468 | 99822 |
| J91 | 318008 | 99822 |
| J92 | 320548 | 99822 |
| J93 | 160528 | 88900 |
| J94 | 160528 | 86360 |
| J95 | 259842 | 84836 |
| J96 | 70358 | 79756 |
| J97 | 97790 | 70866 |
| J98 | 189738 | 78994 |
| J99 | 185928 | 76454 |
| JF23 | 254762 | 143002 |
| JF59 | 212344 | 109728 |
| JF60 | 215646 | 117348 |
| JF61 | 215646 | 119888 |
| JF902 | 22098 | 133858 |
| JL1 | 143256 | 108712 |
| JL1. | 153670 | 68834 |
| L202 | 281686 | 28194 |
| L203 | 289560 | 18542 |
| L301 | 245872 | 91186 |
| L302 | 269240 | 240030 |
| L303 | 192786 | 218186 |
| L315 | 254000 | 211582 |
| L316 | 254254 | 206502 |
| L318 | 295656 | 119634 |
| L319 | 295656 | 115316 |
| L350 | 257810 | 220218 |
| L351 | 257302 | 216662 |
| L352 | 303530 | 237744 |
| L353 | 311658 | 222504 |
| L501 | 231140 | 125476 |
| L601 | 33274 | 109982 |
| L602 | 33274 | 114046 |
| L605 | 127000 | 85090 |
| L605A | 125730 | 85090 |
| L606 | 40894 | 94488 |
| L609 | 83058 | 83312 |
| L701 | 55118 | 215138 |
| L702 | 236728 | 208788 |
| L705 | 275590 | 180086 |
| LP701 | 37490 | 232943 |
| M1000 | 98501 | 240461 |
| MOD.DI | 319786 | 75692 |
| P1 | 74422 | 56388 |
| P2 | 79756 | 144272 |
| P3 | 98298 | 56896 |
| P4 | 100076 | 172974 |
| P5 | 117348 | 149352 |
| P6 | 243840 | 180594 |
| P7 | 139700 | 62738 |
| P8 | 299974 | 154940 |
| POR701 | 49276 | 184150 |
| Q502 | 176022 | 110744 |
| Q601 | 100330 | 56896 |
| Q602 | 79502 | 56388 |
| Q605 | 61468 | 82804 |
| Q612 | 139700 | 67564 |
| Q701 | 96012 | 172974 |
| Q702 | 117348 | 145034 |
| Q703 | 79756 | 140208 |
| Q706 | 119126 | 231394 |
| Q797 | 248412 | 169164 |
| R1 | 67818 | 105156 |
| R1009 | 78994 | 23622 |
| R1024 | 298704 | 101092 |
| R1036 | 133858 | 238760 |
| R1045 | 260096 | 154432 |
| R1046 | 260096 | 159512 |
| R202 | 316992 | 34290 |
| R203 | 316992 | 36830 |
| R208 | 316230 | 59436 |
| R213 | 309372 | 71120 |
| R214 | 164084 | 83312 |
| R215 | 110998 | 14224 |
| R219 | 316992 | 29210 |
| R220 | 316992 | 31750 |
| R223 | 284734 | 27432 |
| R301 | 250190 | 34544 |
| R302 | 247650 | 34544 |
| R303 | 202057 | 39878 |
| R304 | 202057 | 37338 |
| R337 | 235458 | 214376 |
| R355 | 255524 | 228092 |
| R358 | 313436 | 235966 |
| R359 | 314198 | 210820 |
| R387 | 304292 | 197358 |
| R413 | 209296 | 27686 |
| R414 | 299466 | 71374 |
| R415 | 291846 | 71374 |
| R416 | 294386 | 71374 |
| R417 | 296926 | 71374 |
| R423 | 205486 | 223012 |
| R441 | 165354 | 45212 |
| R501 | 236220 | 137668 |
| R503 | 204978 | 111760 |
| R505 | 187452 | 113538 |
| R509 | 245110 | 108966 |
| R518 | 201422 | 110998 |
| R530 | 48514 | 100838 |
| R553 | 244602 | 143510 |
| R555 | 181102 | 104394 |
| R601 | 188976 | 128524 |
| R603 | 65531 | 104648 |
| R606 | 58420 | 105410 |
| R609 | 89154 | 75184 |
| R611 | 195326 | 110998 |
| R612 | 86360 | 61722 |
| R614 | 25654 | 94488 |
| R617 | 73914 | 7620 |
| R618 | 121920 | 68326 |
| R627 | 132080 | 71374 |
| R640 | 181610 | 69342 |
| R650 | 79248 | 11430 |
| R651 | 54356 | 104648 |
| R654 | 203962 | 74676 |
| R657 | 109982 | 96774 |
| R660 | 94742 | 10922 |
| R666 | 162560 | 77470 |
| R667 | 157226 | 54610 |
| R7 | 273304 | 146558 |
| R702 | 236474 | 190500 |
| R704 | 279908 | 125222 |
| R711 | 85090 | 172720 |
| R714 | 92710 | 185928 |
| R717 | 188722 | 175768 |
| R718 | 62230 | 130301 |
| R719 | 62992 | 147828 |
| R721 | 134874 | 129540 |
| R722 | 119126 | 138938 |
| R723 | 105918 | 131063 |
| R725 | 135382 | 135636 |
| R728 | 79502 | 132334 |
| R730 | 117348 | 208534 |
| R733 | 281432 | 177038 |
| R734 | 277368 | 157480 |
| R738 | 188468 | 131826 |
| R746 | 156210 | 185166 |
| R747 | 163830 | 195834 |
| R749 | 111252 | 151638 |
| R755 | 35814 | 177546 |
| R756 | 19558 | 135128 |
| R757 | 24638 | 135128 |
| R758 | 35306 | 131318 |
| R759 | 207518 | 192024 |
| R770 | 27940 | 211074 |
| R772 | 222250 | 184658 |
| R774 | 10922 | 211074 |
| R776 | 258826 | 167640 |
| R778 | 124968 | 136398 |
| R779 | 88392 | 127508 |
| R780 | 215138 | 144272 |
| R787 | 103124 | 131318 |
| R790 | 30226 | 135128 |
| R795 | 180340 | 175260 |
| R796 | 273304 | 150368 |
| R797 | 273558 | 161290 |
| R798 | 143510 | 182880 |
| R799 | 111506 | 159258 |
| REF10 | 53695 | -4166 |
| REF5 | 263398 | 203200 |
| S701 | 20497 | 246888 |
| S702 | 48514 | 238201 |
| S703 | 60502 | 238201 |
| S704 | 72517 | 238201 |
| S705 | 84505 | 238201 |
| SF201 | 293878 | 44196 |
| SF202 | 279908 | 51816 |
| T601 | 29210 | 50546 |
| T701 | 159004 | 142748 |
| T701A1 | 160274 | 140208 |
| T702 | 127762 | 182372 |
| T702B | 127762 | 182372 |
| TETON | 189230 | 125984 |
| TH201 | 304495 | 5486 |
| VR701 | 84328 | 220472 |
| X201 | 274066 | 40386 |
| X301 | 215900 | 69342 |

# F7351N1A Mother Unit PWB

## Copper side

| Ref No | Xum | Yum | Ref No | Xum | Yum | Ref No | Xum | Yum | Ref No | Xum | Yum | Ref No | Xum | Yum | Ref No | Xum | Yum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C1023 | 295402 | 83058 | C350 | 289306 | 228346 | C606 | 88392 | 96520 | D406 | 221996 | 23114 | D716 | 54864 | 153670 | JF11 | 319786 | 185166 |
| C1043 | 250444 | 233172 | C353 | 288544 | 236728 | C607 | 81026 | 90678 | D407 | 241300 | 23114 | D723 | 231648 | 41148 | JF151 | 134874 | 234442 |
| C1044 | 245110 | 214376 | C354 | 280670 | 230632 | C608 | 84836 | 62230 | D408 | 235458 | 23114 | D725 | 84836 | 137414 | JF153 | 102108 | 228600 |
| C1045 | 312928 | 186182 | C357 | 273304 | 231394 | C610 | 61214 | 61722 | D409 | 227838 | 23114 | D730 | 138176 | 137922 | JF22 | 289814 | 51562 |
| C1046 | 314452 | 186182 | C358 | 286004 | 229362 | C612 | 90424 | 63754 | D410 | 224282 | 18034 | D731 | 131572 | 137922 | JF24 | 145288 | 11176 |
| C1049 | 124206 | 17018 | C359 | 277114 | 236728 | C629 | 171958 | 69342 | D411 | 167132 | 13462 | D732 | 92456 | 134112 | JF28 | 259588 | 27432 |
| C202 | 289560 | 41910 | C360 | 297942 | 239268 | C631 | 101346 | 89154 | D420 | 161036 | 13462 | D733 | 105664 | 138938 | JF29 | 171450 | 222758 |
| C203 | 288290 | 28702 | C364 | 306324 | 228600 | C632 | 163068 | 80264 | D421 | 166116 | 24638 | D741 | 46228 | 160020 | JF4 | 318262 | 185166 |
| C206 | 292354 | 34798 | C366 | 285242 | 211328 | C633 | 168910 | 66294 | D422 | 233934 | 13716 | D743 | 147320 | 172466 | JF5 | 308356 | 46482 |
| C207 | 274828 | 46736 | C367 | 289560 | 211328 | C635 | 160782 | 64008 | D423 | 241554 | 12446 | D747 | 194056 | 181610 | JF54 | 261873 | 52578 |
| C208 | 289560 | 43688 | C368 | 289560 | 219456 | C641 | 14986 | 102870 | D424 | 257810 | 12954 | D748 | 172974 | 175006 | JF55 | 101600 | 239014 |
| C209 | 269240 | 48260 | C369 | 289560 | 214122 | C708 | 163830 | 137668 | D425 | 173482 | 18542 | D750 | 195072 | 166624 | JF56 | 81788 | 240284 |
| C210 | 294132 | 52070 | C371 | 278892 | 211582 | C714 | 52832 | 188468 | D426 | 186563 | 13589 | D901 | 7112 | 139446 | JF58 | 96266 | 239522 |
| C211 | 307340 | 43434 | C373 | 296418 | 219456 | C715 | 152654 | 160528 | D427 | 147574 | 29464 | D902 | 12954 | 131063 | JF6 | 300228 | 34544 |
| C213 | 308610 | 22352 | C374 | 281686 | 212852 | C716 | 54610 | 134874 | D429 | 188468 | 29210 | IC201 | 281432 | 40640 | JF62 | 306832 | 82042 |
| C214 | 310134 | 22352 | C375 | 305816 | 220726 | C718 | 86868 | 133858 | D430 | 171958 | 24638 | IC303 | 227584 | 59436 | JF63 | 110744 | 12700 |
| C218 | 289560 | 38862 | C379 | 304038 | 212852 | C719 | 152146 | 165862 | D431 | 259588 | 20574 | IC502 | 235458 | 130301 | JF7 | 300228 | 30480 |
| C219 | 289306 | 34798 | C380 | 233680 | 235966 | C722 | 201168 | 171196 | D432 | 248412 | 19050 | IC503 | 228092 | 130301 | JF8 | 308610 | 29210 |
| C305 | 243840 | 51816 | C381 | 232791 | 232537 | C723 | 128016 | 135382 | D433 | 186182 | 24638 | IC601 | 163068 | 69342 | JF9 | 301752 | 16510 |
| C306 | 248158 | 54864 | C382 | 250444 | 235712 | C724 | 150368 | 165862 | D434 | 178308 | 23114 | IC701 | 53340 | 166878 | JF901 | 17018 | 145796 |
| C307 | 223266 | 44704 | C383 | 250444 | 229870 | C731 | 241300 | 179578 | D435 | 184404 | 35306 | IC709 | 34798 | 169672 | L205 | 301498 | 48514 |
| C310 | 230886 | 39116 | C384 | 250444 | 223774 | C736 | 218694 | 152908 | D436 | 178308 | 35306 | J111 | 267716 | 72898 | Q1002 | 131597 | 234442 |
| C313 | 243332 | 62230 | C385 | 242316 | 220472 | C739 | 283718 | 170180 | D437 | 251460 | 12954 | J12 | 205994 | 221742 | Q1003 | 140462 | 234188 |
| C314 | 191770 | 48768 | C386 | 240538 | 211074 | C740 | 230632 | 151384 | D438 | 179832 | 18542 | J146 | 264414 | 52578 | Q1004 | 251714 | 153416 |
| C315 | 189992 | 48768 | C387 | 250444 | 226822 | C741 | 280416 | 143510 | D439 | 177546 | 30734 | J15 | 240538 | 220472 | Q1010 | 269240 | 148082 |
| C321 | 214630 | 56134 | C390 | 171196 | 229108 | C743 | 293878 | 154432 | D507 | 199898 | 108712 | J150 | 134874 | 32512 | Q1011 | 269494 | 141732 |
| C322 | 212344 | 61976 | C391 | 177800 | 229870 | C749 | 211582 | 152146 | D511 | 202438 | 114808 | J165 | 142240 | 29718 | Q201 | 270002 | 34798 |
| C323 | 219710 | 74422 | C392 | 252730 | 19050 | C754 | 62992 | 161036 | D512 | 160528 | 109220 | J192 | 163830 | 62484 | Q202 | 313182 | 51816 |
| C324 | 215392 | 73660 | C393 | 184404 | 39116 | C755 | 60452 | 155702 | D604 | 98806 | 70866 | J2 | 264414 | 236728 | Q305 | 262382 | 224282 |
| C325 | 215392 | 71882 | C394 | 176530 | 38608 | C756 | 66040 | 161036 | D615 | 234950 | 82804 | J36 | 154940 | 166878 | Q306 | 255016 | 212090 |
| C326 | 214884 | 68580 | C395 | 258064 | 22352 | C901 | 12954 | 140462 | D616 | 101854 | 93726 | J6 | 205994 | 226060 | Q403 | 269240 | 30480 |
| C327 | 216408 | 68580 | C403 | 160782 | 24638 | C904 | 34036 | 163322 | D622 | 136906 | 59182 | J7 | 209296 | 229362 | Q406 | 159258 | 40640 |
| C328 | 240792 | 66294 | C406 | 216408 | 217424 | C905 | 9398 | 140462 | D623 | 132080 | 55626 | J8 | 207772 | 226060 | Q407 | 167132 | 41656 |
| C329 | 225552 | 76454 | C412 | 139446 | 26924 | D1011 | 267970 | 153924 | D624 | 101854 | 91440 | J9 | 211074 | 226060 | Q503 | 168148 | 109474 |
| C331 | 181102 | 26416 | C416 | 223266 | 226822 | D1018 | 110744 | 17272 | D625 | 106426 | 91694 | JF10 | 289560 | 45466 | Q505 | 191516 | 109728 |
| C3313 | 242062 | 51816 | C432 | 139446 | 21590 | D1019 | 130301 | 27940 | D631 | 174244 | 82042 | JF1001 | 47244 | 10414 | Q603 | 90932 | 55118 |
| C333 | 177546 | 26670 | C433 | 214884 | 22352 | D1020 | 130301 | 30226 | D633 | 176530 | 82042 | JF1002 | 45466 | 10414 | Q604 | 91186 | 50800 |
| C334 | 188722 | 34036 | C502 | 234442 | 112268 | D1021 | 131572 | 34290 | D634 | 18288 | 117856 | JF1003 | 43942 | 10414 | Q606 | 240538 | 86106 |
| C336 | 181864 | 29464 | C503 | 234442 | 107950 | D201 | 289814 | 47498 | D635 | 7620 | 100330 | JF1004 | 42164 | 10414 | Q607 | 85344 | 92710 |
| C337 | 181610 | 13716 | C505 | 227584 | 102362 | D202 | 289814 | 49530 | D636 | 172212 | 74930 | JF1005 | 40640 | 10414 | Q608 | 86360 | 52832 |
| C338 | 189230 | 21336 | C506 | 225298 | 107950 | D203 | 289814 | 51562 | D639 | 110744 | 14986 | JF1006 | 38862 | 10414 | Q609 | 133350 | 59436 |
| C339 | 177800 | 14478 | C507 | 234950 | 103378 | D302 | 249174 | 50546 | D640 | 110744 | 12700 | JF1007 | 37084 | 10414 | Q611 | 173228 | 64516 |
| C340 | 187960 | 18034 | C508 | 229108 | 102362 | D303 | 239776 | 49530 | D641 | 143764 | 61468 | JF1008 | 35306 | 10414 | Q613 | 75438 | 89408 |
| C341 | 189230 | 24384 | C510 | 215138 | 103124 | D304 | 237744 | 30734 | D642 | 142240 | 56896 | JF1009 | 33528 | 10414 | Q614 | 132080 | 50038 |
| C342 | 186436 | 18034 | C522 | 231648 | 111506 | D305 | 239014 | 36830 | D643 | 132080 | 14224 | JF1010 | 31750 | 10414 | Q704 | 40894 | 157734 |
| C343 | 247904 | 12954 | C525 | 251206 | 132334 | D307 | 189738 | 224028 | D644 | 86614 | 89408 | JF1011 | 29972 | 10414 | Q705 | 49784 | 159766 |
| C344 | 257048 | 18034 | C534 | 236728 | 101092 | D308 | 189738 | 221742 | D707 | 43688 | 164846 | JF1012 | 28194 | 10414 | Q707 | 45720 | 190246 |
| C345 | 247904 | 14478 | C540 | 172466 | 78486 | D402 | 150876 | 35052 | D708 | 82042 | 137414 | JF1013 | 10414 | 32765 | Q708 | 199644 | 181610 |
| C346 | 254762 | 13716 | C541 | 157988 | 88646 | D403 | 149606 | 23368 | D713 | 92202 | 130048 | JF1014 | 10414 | 35560 | Q709 | 203708 | 179070 |
| C347 | 253238 | 27686 | C604 | 64008 | 85344 | D404 | 151384 | 13462 | D714 | 41402 | 153670 | JF1015 | 10414 | 38354 | Q710 | 272288 | 167640 |
| C348 | 252222 | 24892 | C605 | 57912 | 77978 | D405 | 217424 | 17272 | D715 | 80518 | 176530 | JF1016 | 10414 | 40894 | Q712 | 56134 | 159766 |

## F7351N1A Mother Unit PWB

### Copper side

| Ref No | Xum | Yum |
|---|---|---|
| Q713 | 150876 | 170180 |
| Q714 | 152654 | 174244 |
| Q720 | 39878 | 166624 |
| Q721 | 44704 | 170180 |
| Q723 | 125222 | 135890 |
| Q724 | 86614 | 129540 |
| Q796 | 240792 | 169164 |
| Q901 | 12192 | 145796 |
| Q902 | 16002 | 139954 |
| R1010 | 126238 | 17018 |
| R1013 | 128524 | 234188 |
| R1014 | 136398 | 228346 |
| R1015 | 136398 | 230378 |
| R1017 | 103632 | 228600 |
| R1019 | 104902 | 237236 |
| R1025 | 295656 | 154432 |
| R1026 | 300482 | 150368 |
| R1030 | 55118 | 237998 |
| R1031 | 60452 | 237998 |
| R1032 | 72644 | 237998 |
| R1037 | 145542 | 234188 |
| R1039 | 258572 | 149860 |
| R1042 | 101600 | 240538 |
| R1044 | 248412 | 153416 |
| R1047 | 269494 | 144780 |
| R1049 | 122428 | 17018 |
| R1050 | 140462 | 32765 |
| R1051 | 251460 | 150622 |
| R1053 | 53594 | 237998 |
| R1055 | 87630 | 240538 |
| R1099 | 105156 | 228600 |
| R201 | 271780 | 46736 |
| R204 | 281178 | 49022 |
| R205 | 264668 | 48006 |
| R206 | 290830 | 34798 |
| R207 | 273304 | 46736 |
| R209 | 271526 | 52070 |
| R210 | 268224 | 51054 |
| R211 | 271526 | 50292 |
| R212 | 295148 | 55880 |
| R217 | 307594 | 32512 |
| R221 | 310896 | 48768 |
| R222 | 313690 | 54610 |
| R225 | 309626 | 32512 |
| R230 | 275082 | 35306 |
| R231 | 265176 | 33274 |
| R240 | 311150 | 39624 |
| R305 | 193040 | 28956 |
| R306 | 195072 | 28956 |
| R307 | 252222 | 68326 |
| R308 | 239776 | 71628 |
| R309 | 230124 | 72898 |
| R310 | 216662 | 37846 |
| R311 | 220980 | 39624 |
| R312 | 220472 | 46482 |
| R313 | 213360 | 39370 |
| R314 | 176530 | 24892 |
| R316 | 191008 | 32258 |
| R318 | 177800 | 12954 |
| R319 | 183134 | 23368 |
| R320 | 187198 | 15748 |
| R321 | 189230 | 22860 |
| R322 | 245364 | 13462 |
| R323 | 257048 | 16510 |
| R324 | 255778 | 24892 |
| R325 | 248666 | 24892 |
| R326 | 254000 | 24892 |
| R327 | 250444 | 24892 |
| R328 | 240030 | 227076 |
| R329 | 235204 | 227076 |
| R330 | 241554 | 227076 |
| R331 | 241554 | 232156 |
| R332 | 245364 | 218948 |
| R333 | 250444 | 231394 |
| R334 | 250444 | 222250 |
| R335 | 250444 | 228346 |
| R336 | 250444 | 225298 |
| R338 | 169672 | 225806 |
| R339 | 181864 | 223012 |
| R341 | 178054 | 38608 |
| R343 | 185928 | 39116 |
| R350 | 254762 | 228346 |
| R351 | 265176 | 230124 |
| R352 | 280670 | 232156 |
| R353 | 292354 | 239268 |
| R356 | 285242 | 214122 |
| R357 | 309118 | 218694 |
| R360 | 316484 | 202692 |
| R362 | 257302 | 208026 |
| R369 | 237490 | 74930 |
| R370 | 230124 | 74422 |
| R374 | 276606 | 211582 |
| R375 | 275082 | 231394 |
| R380 | 308356 | 201676 |
| R382 | 268478 | 231648 |
| R384 | 253746 | 208026 |
| R385 | 255524 | 208026 |
| R405 | 147574 | 16764 |
| R406 | 161544 | 36830 |
| R407 | 160782 | 22860 |
| R408 | 168656 | 18542 |
| R409 | 171958 | 13462 |
| R410 | 229616 | 13208 |
| R411 | 237744 | 12954 |
| R412 | 219456 | 18542 |
| R418 | 242316 | 19558 |
| R419 | 234696 | 19812 |
| R420 | 227126 | 19812 |
| R421 | 229108 | 18034 |
| R422 | 272288 | 30480 |
| R424 | 291084 | 80772 |
| R425 | 150876 | 26162 |
| R426 | 156210 | 36830 |
| R427 | 171958 | 34798 |
| R428 | 171958 | 31242 |
| R436 | 220472 | 228600 |
| R437 | 166370 | 37846 |
| R438 | 166370 | 36322 |
| R439 | 162306 | 40640 |
| R440 | 163830 | 40640 |
| R451 | 145796 | 16764 |
| R452 | 215392 | 16510 |
| R453 | 146558 | 25654 |
| R502 | 251206 | 134112 |
| R504 | 194564 | 109982 |
| R506 | 196088 | 109982 |
| R510 | 234442 | 109474 |
| R511 | 231648 | 101600 |
| R512 | 244602 | 132842 |
| R513 | 243078 | 129286 |
| R514 | 220472 | 127762 |
| R515 | 246126 | 129286 |
| R516 | 230886 | 141224 |
| R526 | 222250 | 127762 |
| R531 | 162814 | 87884 |
| R534 | 244094 | 126746 |
| R535 | 251206 | 128524 |
| R536 | 247650 | 132842 |
| R537 | 246126 | 132842 |
| R544 | 244602 | 129286 |
| R545 | 251206 | 130301 |
| R548 | 251206 | 126746 |
| R549 | 247650 | 129286 |
| R554 | 162814 | 89916 |
| R604 | 82296 | 95250 |
| R605 | 166370 | 98806 |
| R607 | 91440 | 57912 |
| R608 | 87630 | 49022 |
| R610 | 90678 | 46990 |
| R616 | 81788 | 61214 |
| R620 | 86614 | 62230 |
| R621 | 109728 | 102362 |
| R622 | 237236 | 86106 |
| R623 | 88392 | 92710 |
| R626 | 139446 | 53848 |
| R628 | 134112 | 65024 |
| R629 | 123698 | 50546 |
| R630 | 128778 | 49530 |
| R631 | 123698 | 56388 |
| R632 | 160782 | 62484 |
| R633 | 171958 | 67818 |
| R634 | 167386 | 66294 |
| R635 | 163068 | 82042 |
| R637 | 160782 | 60960 |
| R638 | 164846 | 96012 |
| R639 | 163576 | 77216 |
| R641 | 170688 | 71882 |
| R643 | 159766 | 88646 |
| R644 | 172466 | 76962 |
| R645 | 33782 | 97536 |
| R653 | 13716 | 116332 |
| R655 | 167386 | 62484 |
| R656 | 240030 | 83312 |
| R658 | 99314 | 97028 |
| R659 | 165354 | 62484 |
| R661 | 100330 | 7620 |
| R662 | 134366 | 14224 |
| R664 | 135128 | 50038 |
| R665 | 136906 | 50038 |
| R669 | 85598 | 95504 |
| R670 | 80518 | 95250 |
| R700 | 148590 | 165862 |
| R701 | 44704 | 156210 |
| R703 | 48514 | 154686 |
| R705 | 59690 | 175514 |
| R706 | 74422 | 179324 |
| R707 | 116586 | 233680 |
| R708 | 67310 | 179324 |
| R709 | 74676 | 157226 |
| R710 | 71882 | 153162 |
| R712 | 62230 | 175768 |
| R713 | 127762 | 184404 |
| R715 | 60452 | 157226 |
| R716 | 60960 | 153162 |
| R726 | 88646 | 133858 |
| R727 | 50800 | 134874 |
| R729 | 79756 | 140970 |
| R731 | 122682 | 132080 |
| R732 | 152654 | 162306 |
| R735 | 284988 | 176276 |
| R736 | 287528 | 170180 |
| R737 | 198120 | 168148 |
| R739 | 168910 | 173990 |
| R740 | 178816 | 175006 |
| R741 | 196088 | 171196 |
| R742 | 211582 | 167894 |
| R743 | 205486 | 170434 |
| R744 | 202692 | 174752 |
| R745 | 201168 | 174752 |
| R748 | 44196 | 159004 |
| R750 | 44450 | 172974 |
| R751 | 60452 | 160274 |
| R752 | 41148 | 162306 |
| R753 | 37846 | 162306 |
| R754 | 48514 | 156210 |
| R760 | 159004 | 85598 |
| R761 | 279908 | 167386 |
| R764 | 192786 | 177800 |
| R765 | 192786 | 179324 |
| R766 | 204216 | 174752 |
| R767 | 205486 | 182626 |
| R768 | 146812 | 165862 |
| R771 | 283464 | 176276 |
| R773 | 64516 | 161036 |
| R775 | 248920 | 169164 |
| R777 | 276606 | 167386 |
| R781 | 52578 | 134874 |
| R782 | 60452 | 158750 |
| R783 | 65531 | 175514 |
| R784 | 70866 | 175260 |
| R785 | 53086 | 173228 |
| R786 | 52832 | 159766 |
| R788 | 51562 | 173228 |
| R789 | 54610 | 173228 |
| R791 | 149606 | 177292 |
| R792 | 152400 | 180086 |
| R793 | 153162 | 177292 |
| R794 | 268478 | 167640 |
| R901 | 19558 | 133858 |
| R902 | 15494 | 145796 |
| R903 | 7874 | 144780 |
| R904 | 7874 | 146558 |
| R905 | 11176 | 140462 |
| R906 | 12192 | 137414 |
| R907 | 12192 | 134874 |
| R908 | 10922 | 131572 |

## F7352N1A CRT Unit PWB

### Component side

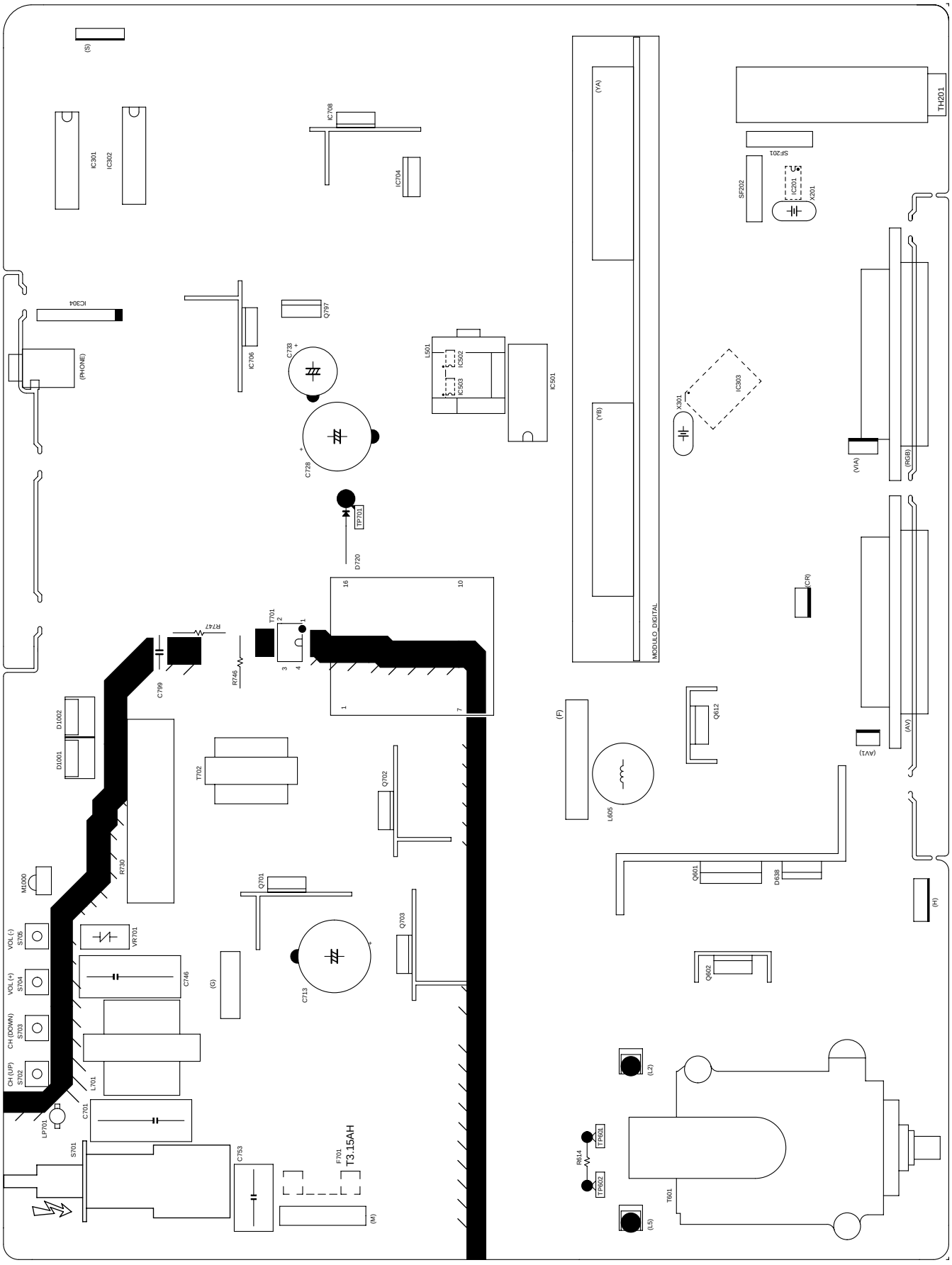
| Ref No | Xum | Yum |
|---|---|---|
| C1806 | 73152 | 31242 |
| C1813 | 53340 | 3556 |
| C1815 | 70358 | 27940 |
| C1827 | 68580 | 34798 |
| D1805 | 69850 | 21590 |
| D1811 | 75438 | 49784 |
| D1812 | 75438 | 43942 |
| L1802 | 70866 | 50546 |
| Q1801 | 73660 | 38862 |
| R1806 | 58166 | 22606 |
| R1811 | 58166 | 20066 |
| R1816 | 58166 | 17526 |
| R1830 | 70866 | 31242 |
| R1837 | 37084 | 32765 |
| R1839 | 55118 | 3556 |
| R1841 | 73406 | 35814 |
| R1842 | 73406 | 34036 |
| R1843 | 74930 | 31242 |

### Copper side

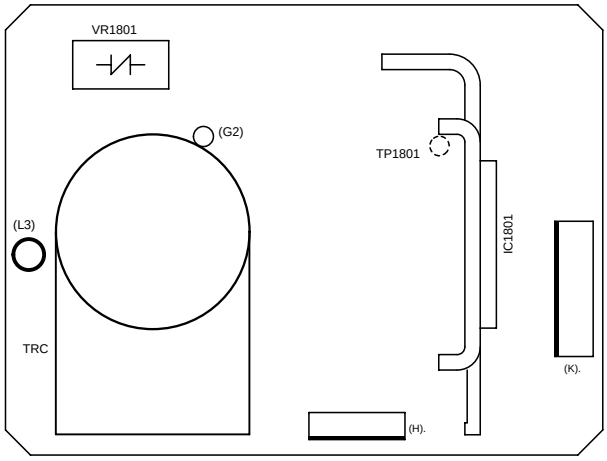
| Ref No | Xum | Yum |
|---|---|---|
| (G2) | 26162 | 41910 |
| (H). | 46482 | 3556 |
| (K). | 75184 | 21844 |
| (L3) | 3048 | 26416 |
| C1811 | 51054 | 19050 |
| C1812 | 40132 | 28956 |
| C1814 | 19050 | 44196 |
| C1824 | 51054 | 26924 |
| C1825 | 45466 | 11176 |
| C1826 | 35560 | 6858 |
| D1809 | 34290 | 20828 |
| D1813 | 50800 | 46228 |
| D1814 | 50800 | 32004 |
| D1815 | 66548 | 49530 |
| IC1801 | 62992 | 27686 |
| J1 | 68834 | 34798 |
| J2 | 70612 | 20574 |
| J3 | 51054 | 7366 |
| JF1801 | 43180 | 18542 |
| KK2 | 31750 | 48768 |
| KK3 | 38862 | 39370 |
| KK4 | 6096 | 43942 |
| L1801 | 40640 | 18542 |
| PINZA1 | 63500 | 27686 |
| R1831 | 50800 | 42672 |
| R1832 | 31750 | 48768 |
| R1833 | 50800 | 35560 |
| R1834 | 38862 | 39116 |
| R1835 | 70104 | 49530 |
| R1836 | 6096 | 43942 |
| R1844 | 68072 | 20574 |
| REF2 | 22860 | 54610 |
| REF8 | 0 | -127 |
| REF9 | 73990 | -127 |
| TRC | 19456 | 29311 |
| VR1801 | 15240 | 51308 |

# CHASSIS LAYOUT

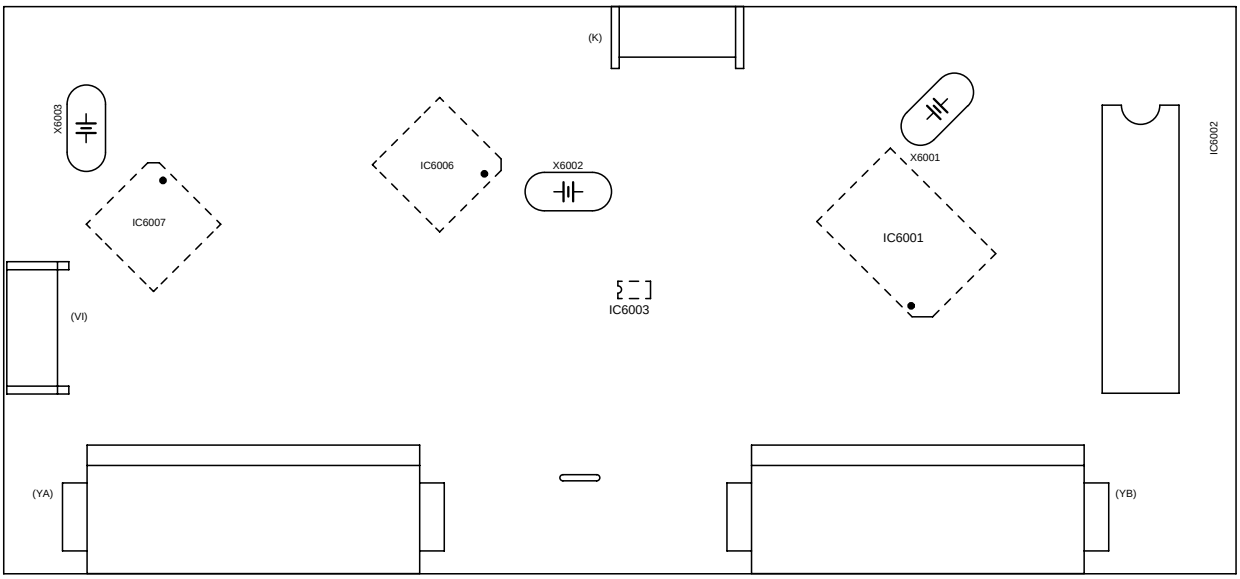
## PWB A- Mother Unit, F7351N1



## PWB B- CRT Socker Unit, F7352N1A




## PWB C- Digital Module Unit, F7353N0D



# SCHEMATIC DIAGRAMS

## Description:

**SAFETY NOTE:**
1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.

2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

**NOTE:**
1. The unit of resistance « ohm »is omitted (K=1000 ohms. M= Megaohm).
2. All resistors are 1/8 watt. unless otherwise noted.
3. All capacitors are μF, unless otherwise noted (P= μμF).

**IMPORTANT SAFETY NOTE:**

PARTS MARKED WITH « ⚠ » ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

**SERVICE PRECAUTION:**

THE AREA ENCLOSED BY THIS LINE (–•–•– ) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE. WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

**CAUTION**
**This circuit diagram is original one, therefore there may be slight difference from yours.**

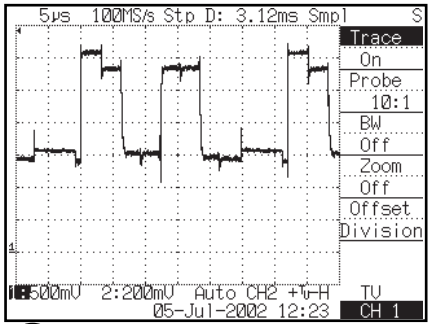
## Waveform Measurement Condition:

**1.** Test Equipment: Digital Oscilloscope; Colour TV Pattern Generator

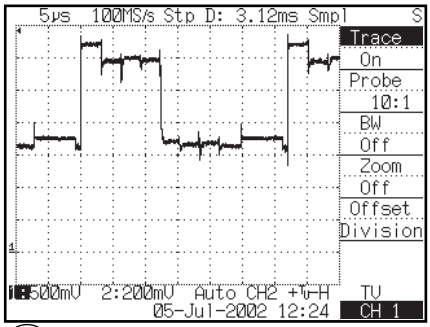
**2.** Test Conditions: CH-12; Colour Bars; 70dB From RF Input

**3.** TV Condition: Picture and Audio : Settings → Factory Presets ( Only in Audio Measures: Max. Volume With Unplugged Speakers)

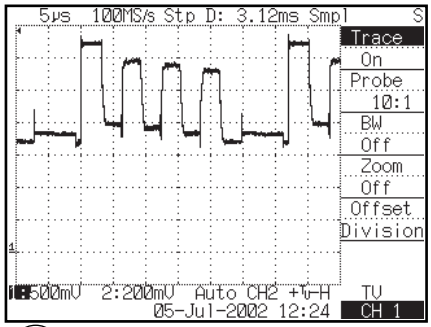
## Waveforms:



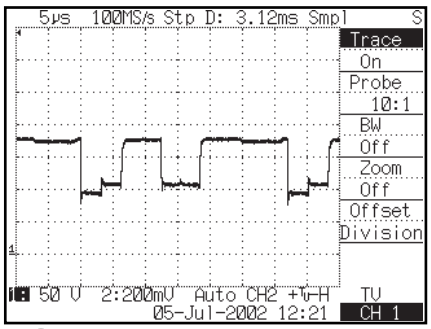

(1) Red In



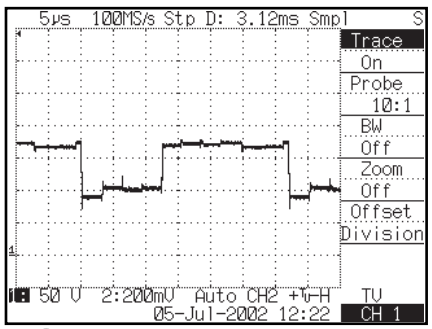

(2) Green In



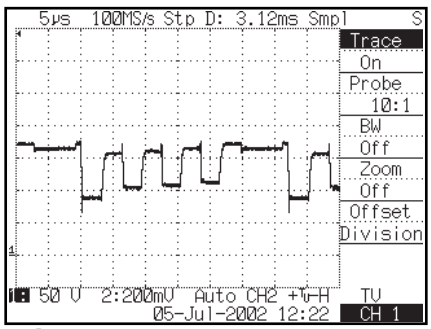

(3) Blue In



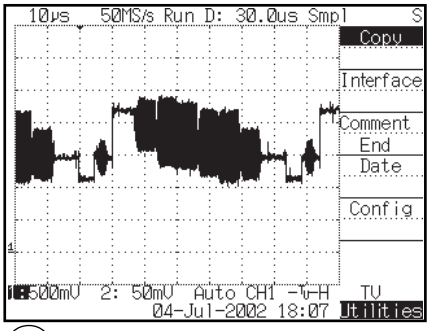

4 Red Output



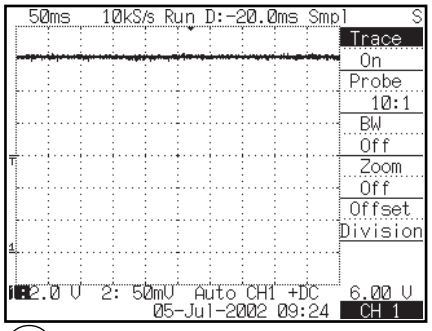

5 Green Output



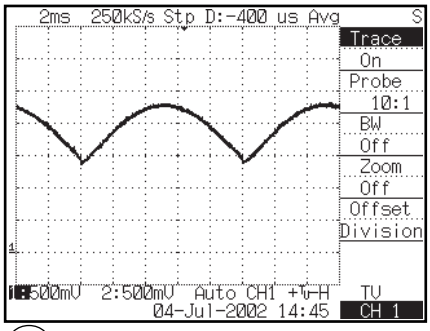

6 Blue Output



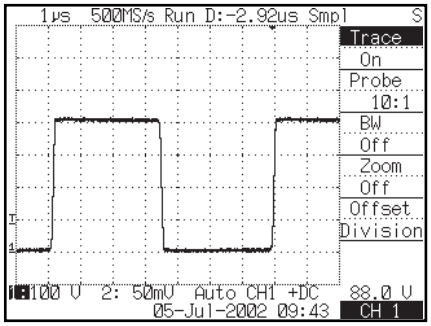

7 Video Output



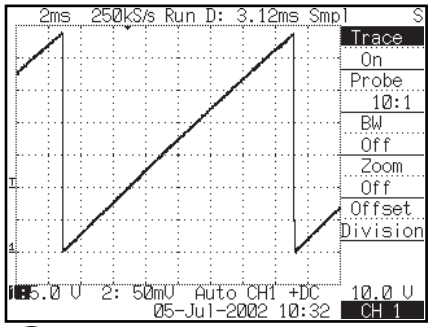

8 +12V



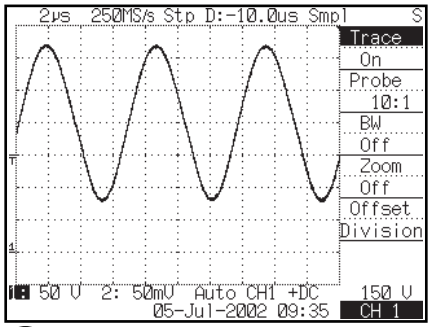

9 E-W Output



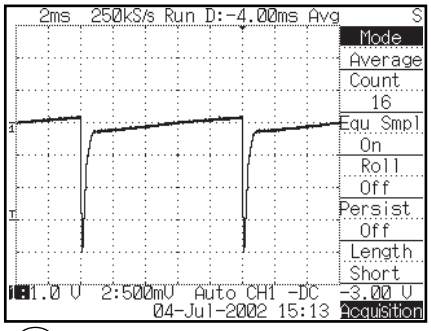

10 V Switch



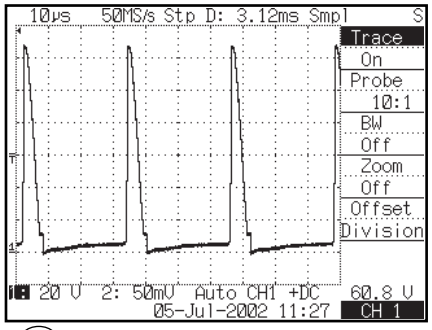

11 V Control St-By



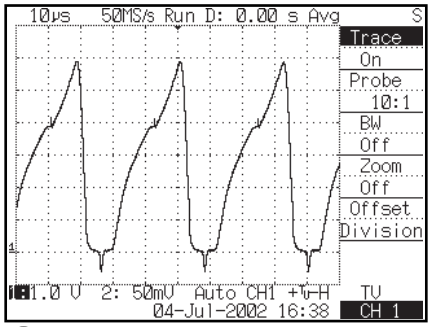

12 Vp (Primary)



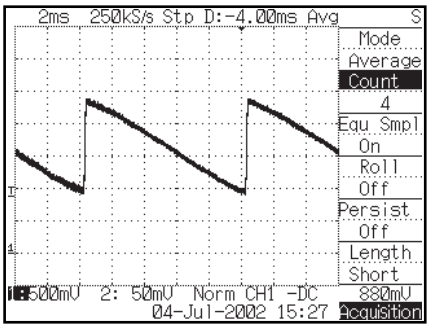

13 Vertical Input



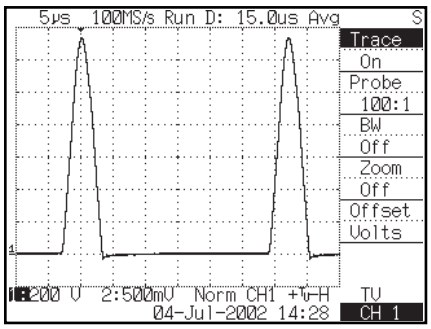

14 E-W Control 2



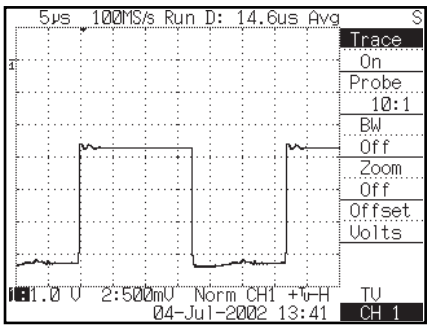

15 Inner Correction



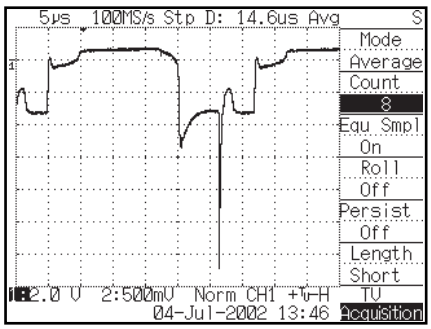

16 Vertical+Input



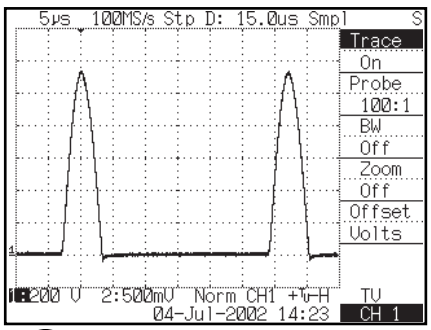

17 VH



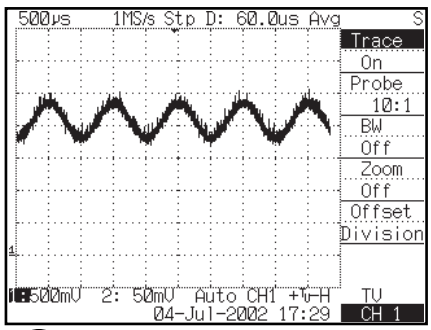

18 H Control



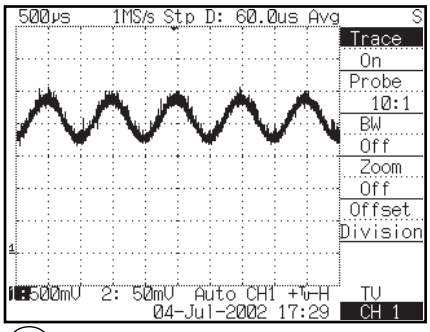

(19) Vb (Horizontal)



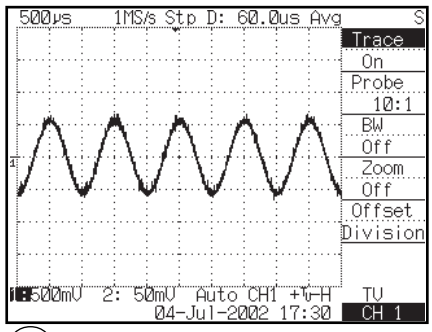

(20) Vc (Horizontal)



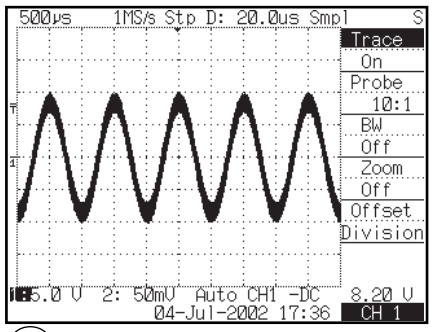

(21) Headphone L Input



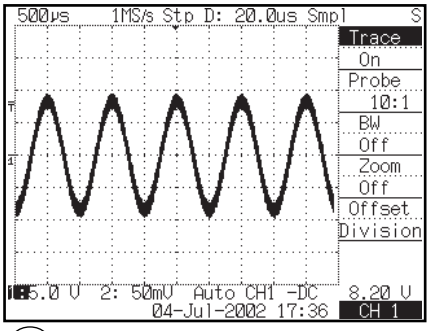

(22) Headphone R Input



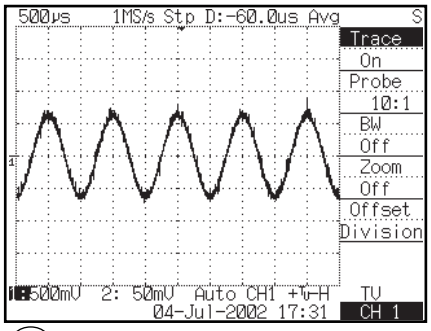

(23) Speaker L Input



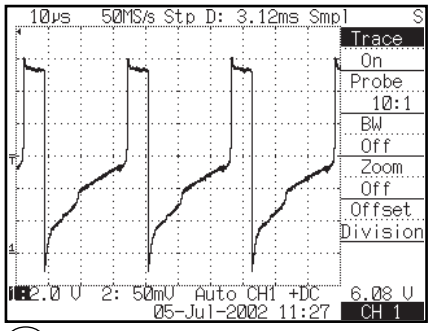

(24) Speaker L Output



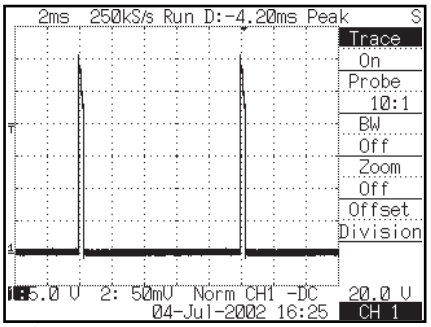

(25) Speaker R Output



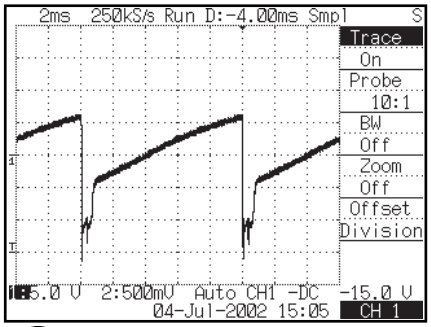

(26) Speaker R Input



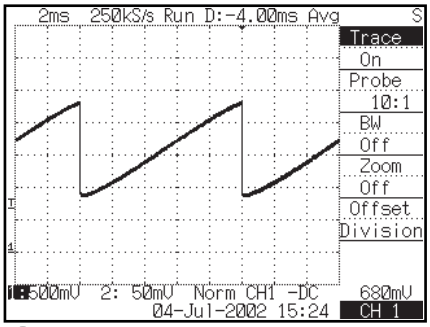

(27) E-W Control 1



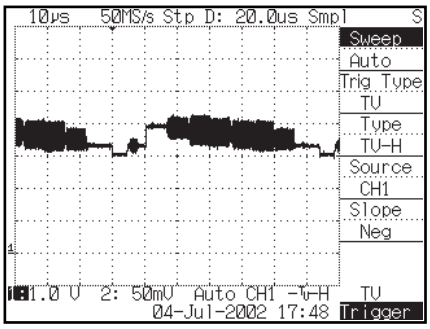

(28) V Flyback Vertical



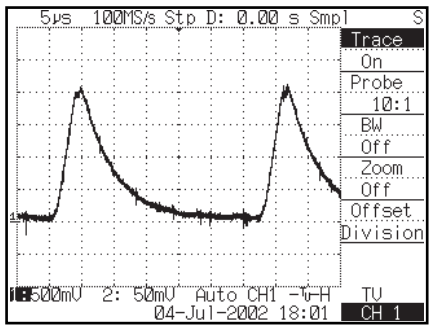

(29) Vertical Output



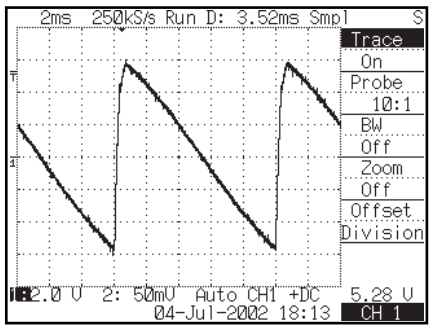

(30) Vertical - Input



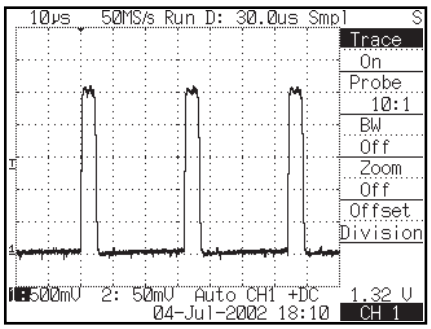

(31) IF Video Output



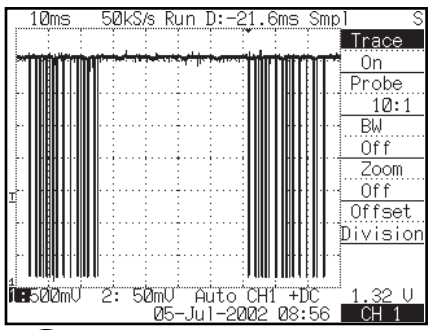

(32) H Protection



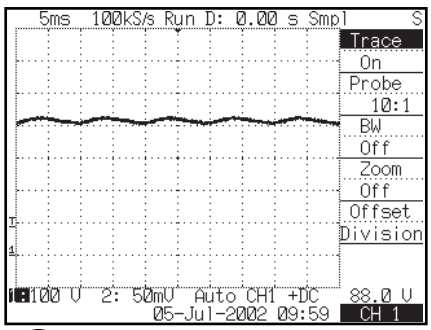

(33) V Protection



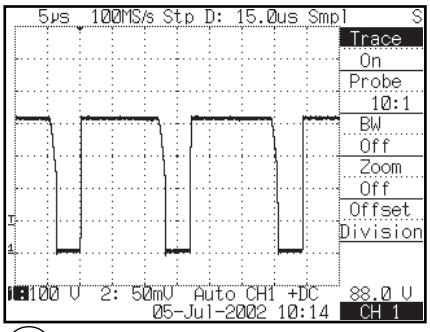

34 H Flyback Pulse



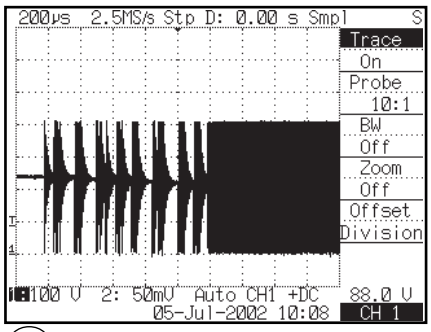

35 R/C Pulses



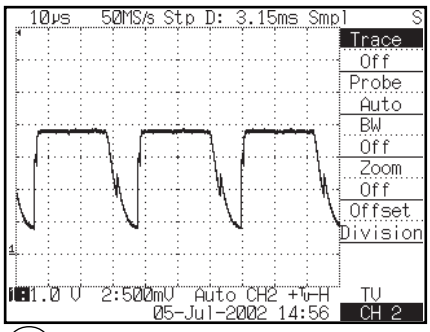

36 +400V (Power Supply Voltage)



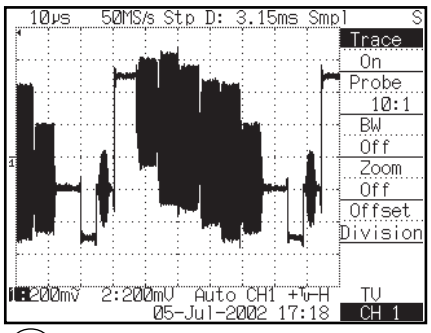

37 Power Supply Switch Voltage 1



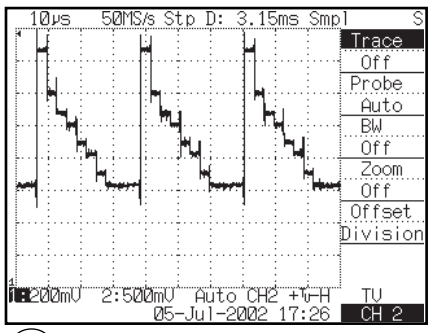

38 Power Supply Switch Voltage 2



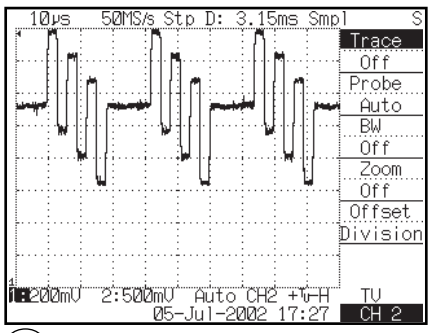

39 I Sense CRT



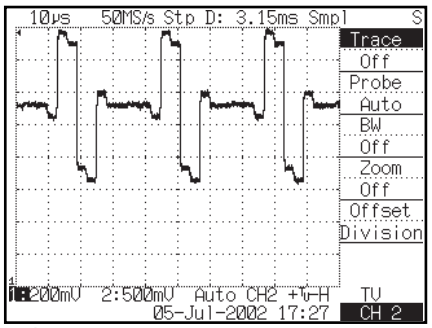

40 IF Video In



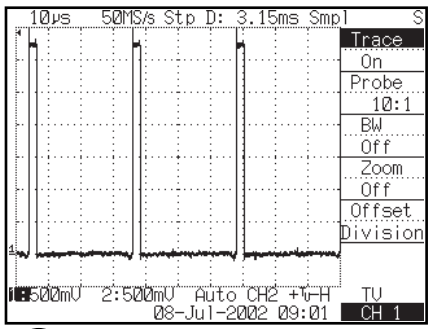

41 Analog Y Out



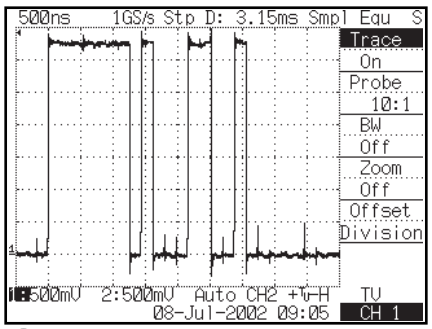

42 Analog U Out



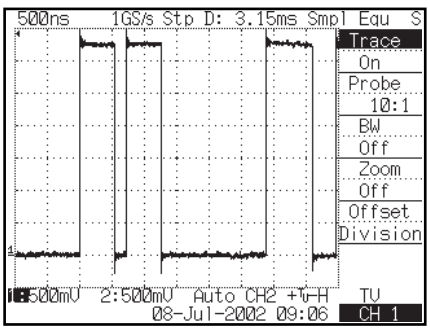

43 Analog V Out



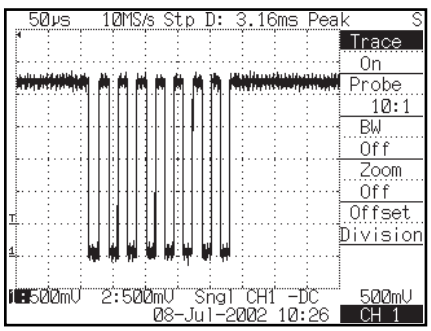

44 OSD Blanking



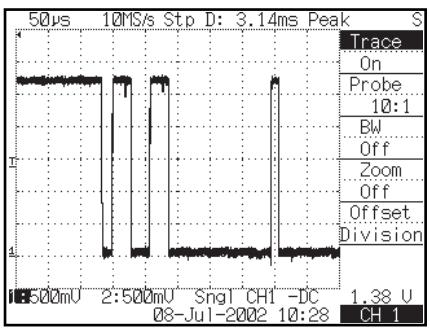

45 EPROM Data D3



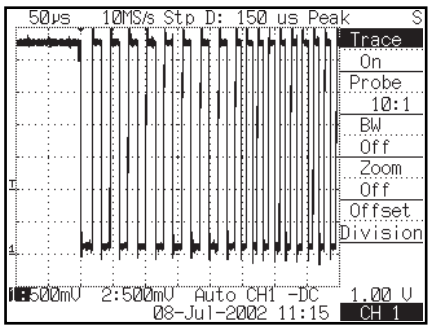

46 EPROM Address A3



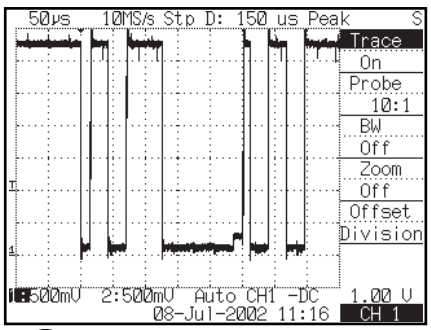

47 SCL0



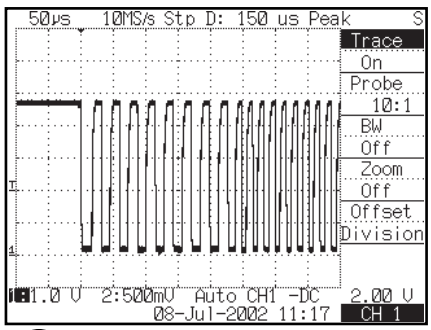

48 SDA0



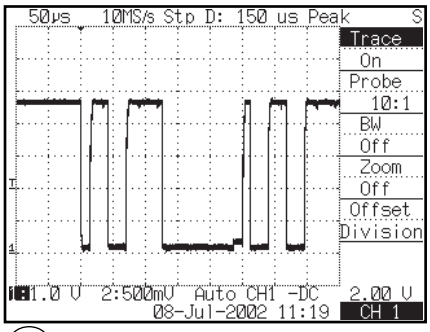

**49** SCL 33



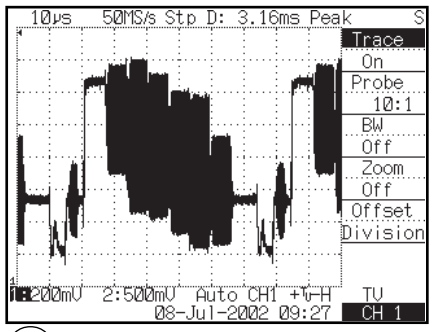

**50** SDA33



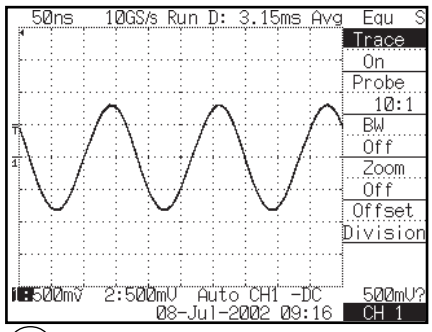

**51** SCL



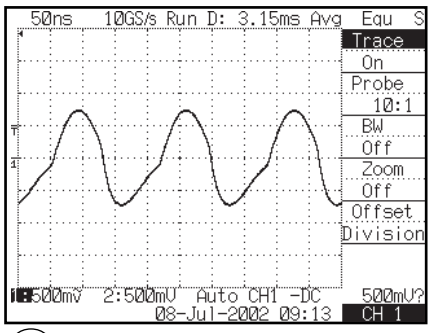

**52** SDA



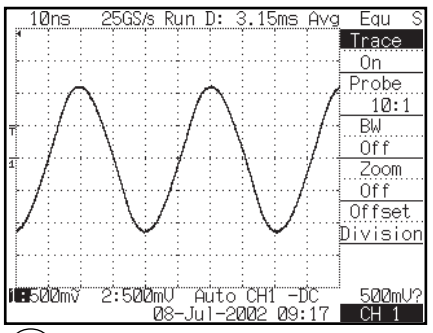

**53** Video Out Processor



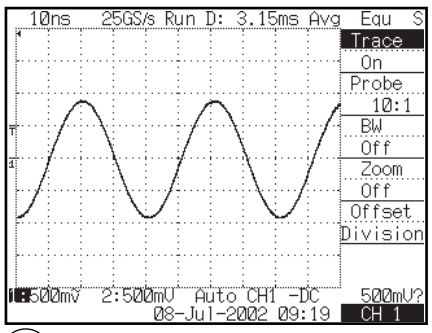

**54** Xtal In 6 MHz



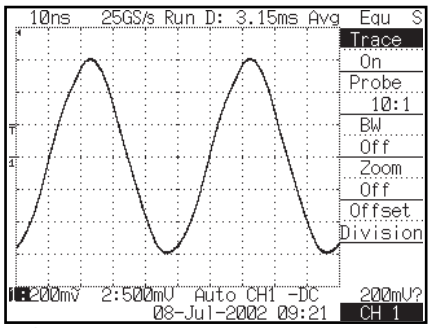

**55** Xtal Out 6 MHz



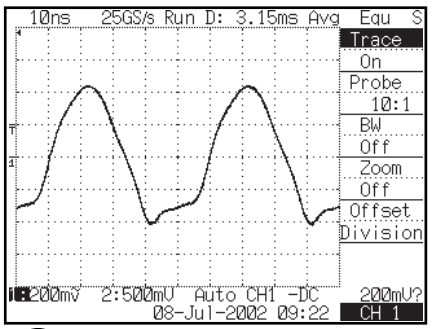

**56** Xtal In 24.576 MHz




**57** Xtal Out 24.576 MHz

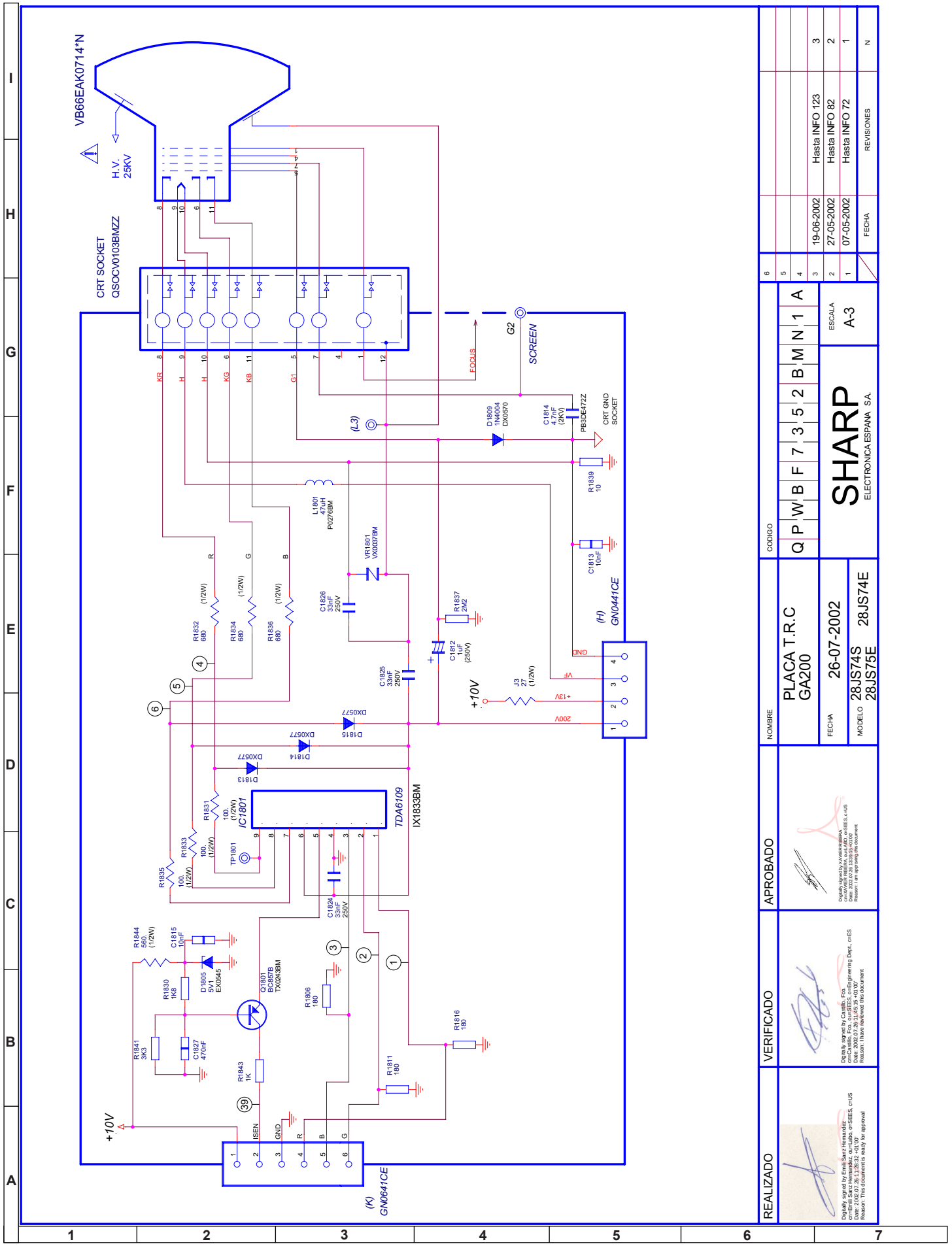



**58** Xtal In 20.25 MHz



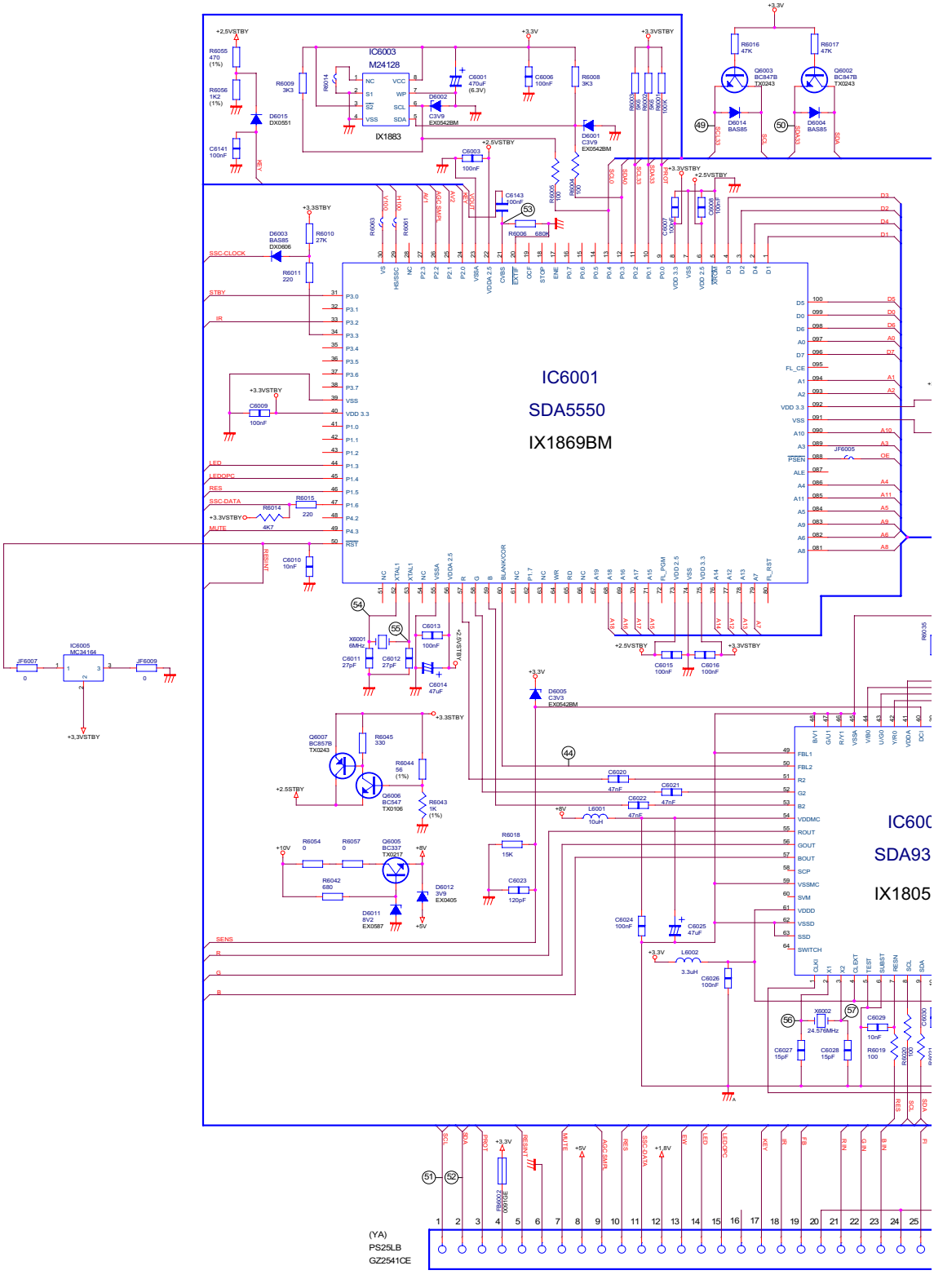

**59** Xtal Out 20.25 MHz

# Schematic Diagram of CRT Unit (F7352N1A)




| | | | |
|---|---|---|---|
| REALIZADO | Digitally signed by Emili Sanz Hernandez | | |
| VERIFICADO | Digitally signed by Castillo, Fco. | | |
| APROBADO | Digitally signed by XAVIER RIBERA | | |
| NOMBRE | PLACA T.R.C GA200 | | |
| FECHA | 26-07-2002 | | |
| MODELO | 28JS74S 28JS74E 28JS75E | | |
| CODIGO | Q P W B F 7 3 5 2 B M N 1 A | | |
| ESCALA | A-3 | | |
| SHARP | ELECTRONICA ESPAÑA S.A. | | |
| 3 | 19-06-2002 | Hasta INFO 123 | |
| 2 | 27-05-2002 | Hasta INFO 82 | |
| 1 | 07-05-2002 | Hasta INFO 72 | |
| FECHA | REVISIONES | N | |

# Schematic Diagram of Digital Module Unit (F7353N0D)

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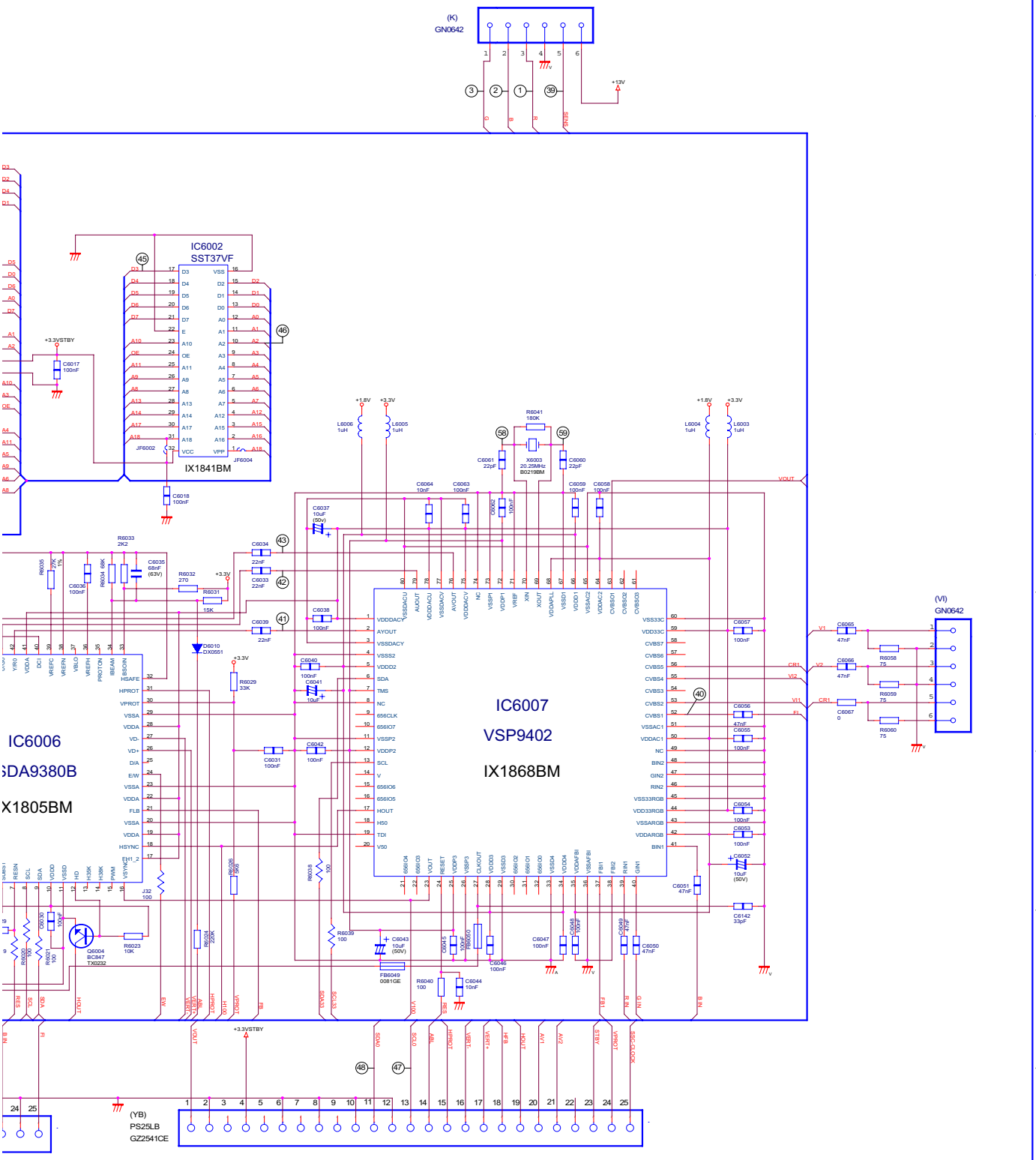
# Schematic Diagram of Digital Module Unit (F7353N0D)




| REALIZADO | VERIFICADO | APROBADO | NOMBRE | CODIGO |
|---|---|---|---|---|
| | | | Digital Module | QKITP7353BMN0D |
| | | | FECHA 26-07-2002 | SHARP ELECTRONICA ESPANA S.A. |
| | | | MODELO 28JS74S 28JS74E | ESCALA A-1 |

| REVISIONES | | |
|---|---|---|
| 17-07-2002 | Hasta INFO 167 | 15 |
| 12-07-2002 | Hasta INFO 160 | 14 |
| 19-06-2002 | Hasta INFO 123 | 13 |
| 18-06-2002 | Hasta INFO 122 | 12 |
| 12-06-2002 | Hasta INFO 113 | 11 |
| 11-06-2002 | Hasta INFO 111 | 10 |

# Schematic Diagram of Mother Board Unit (F7351N1A)

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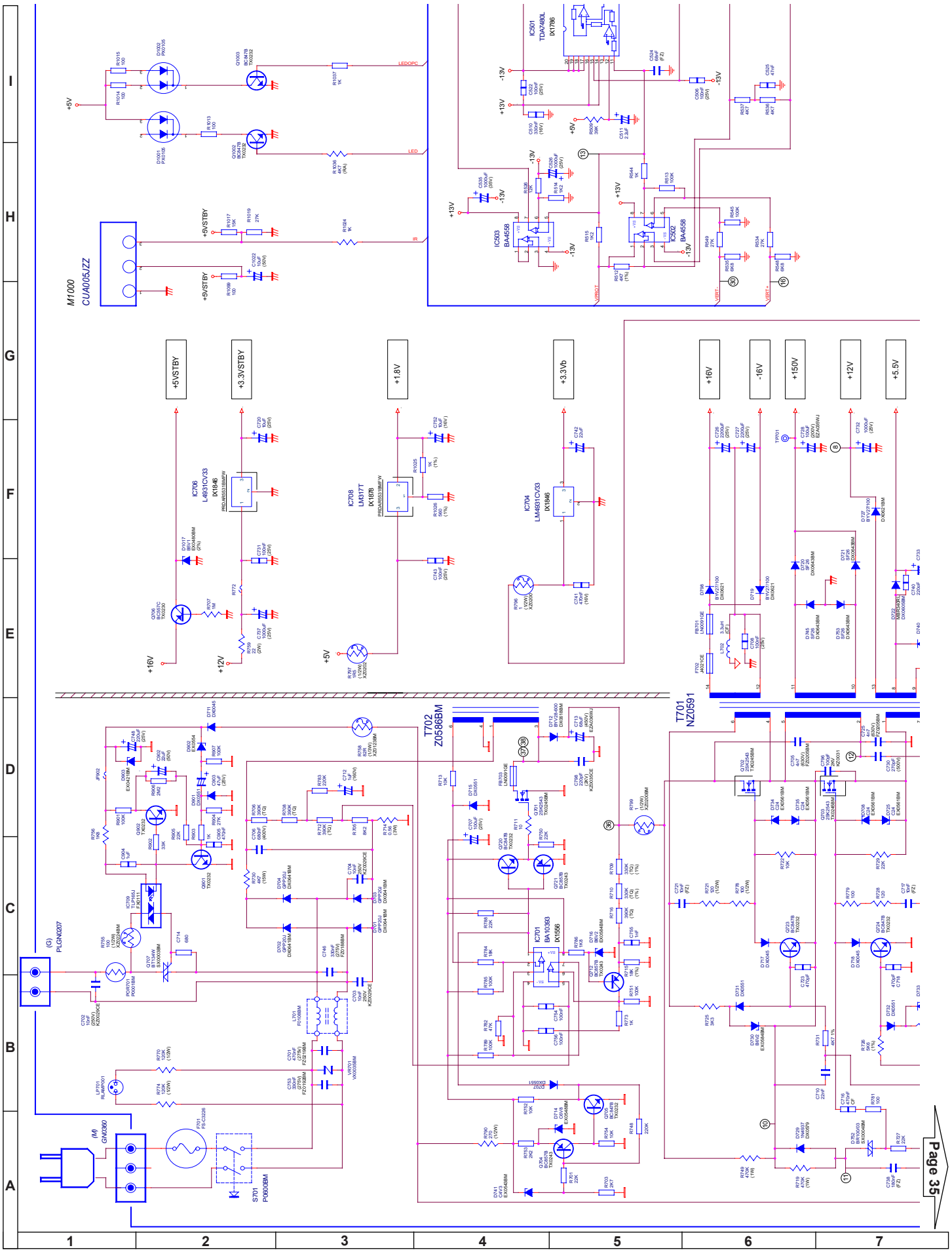

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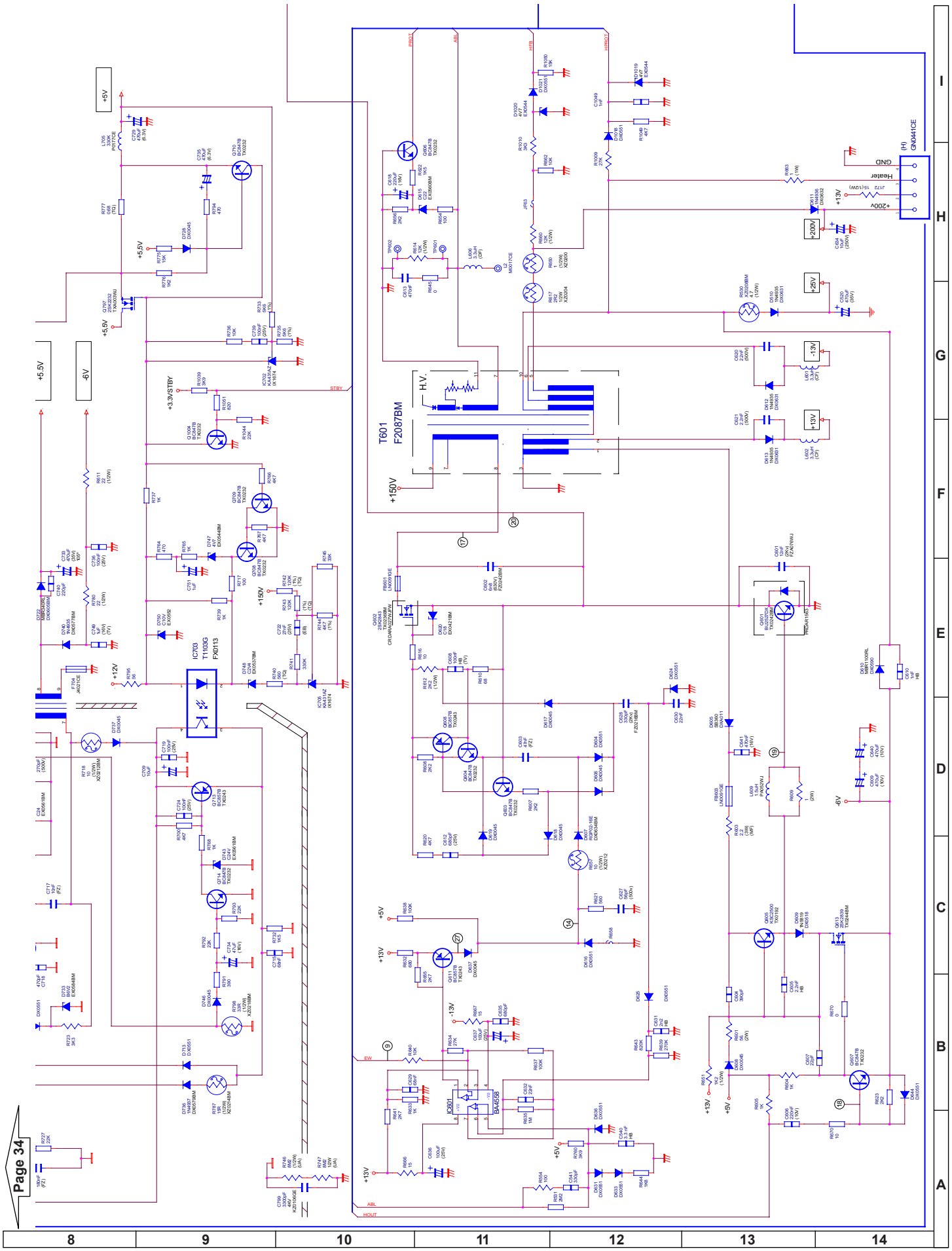
# Schematic Diagram of Mother Board Unit (F7351N1A)

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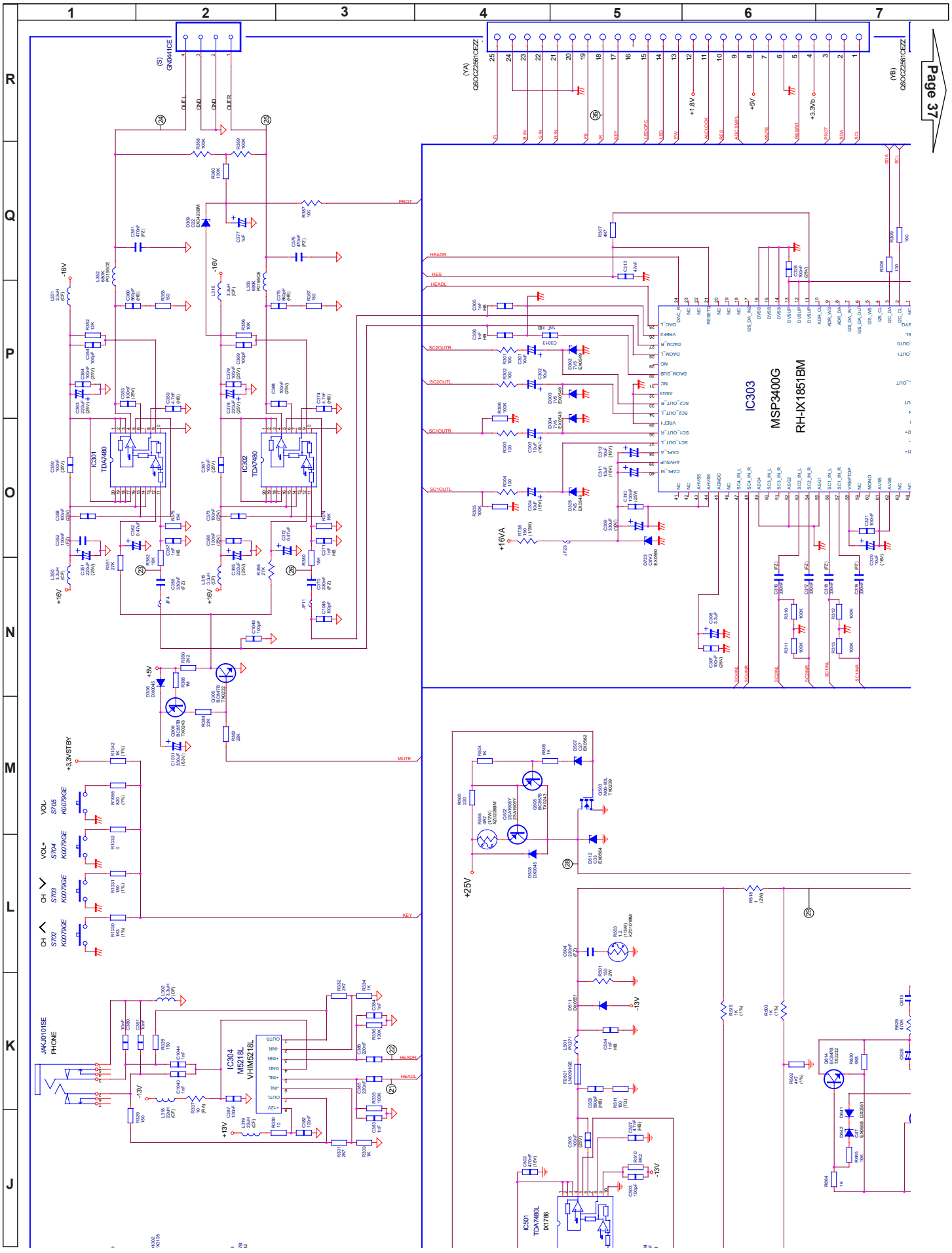
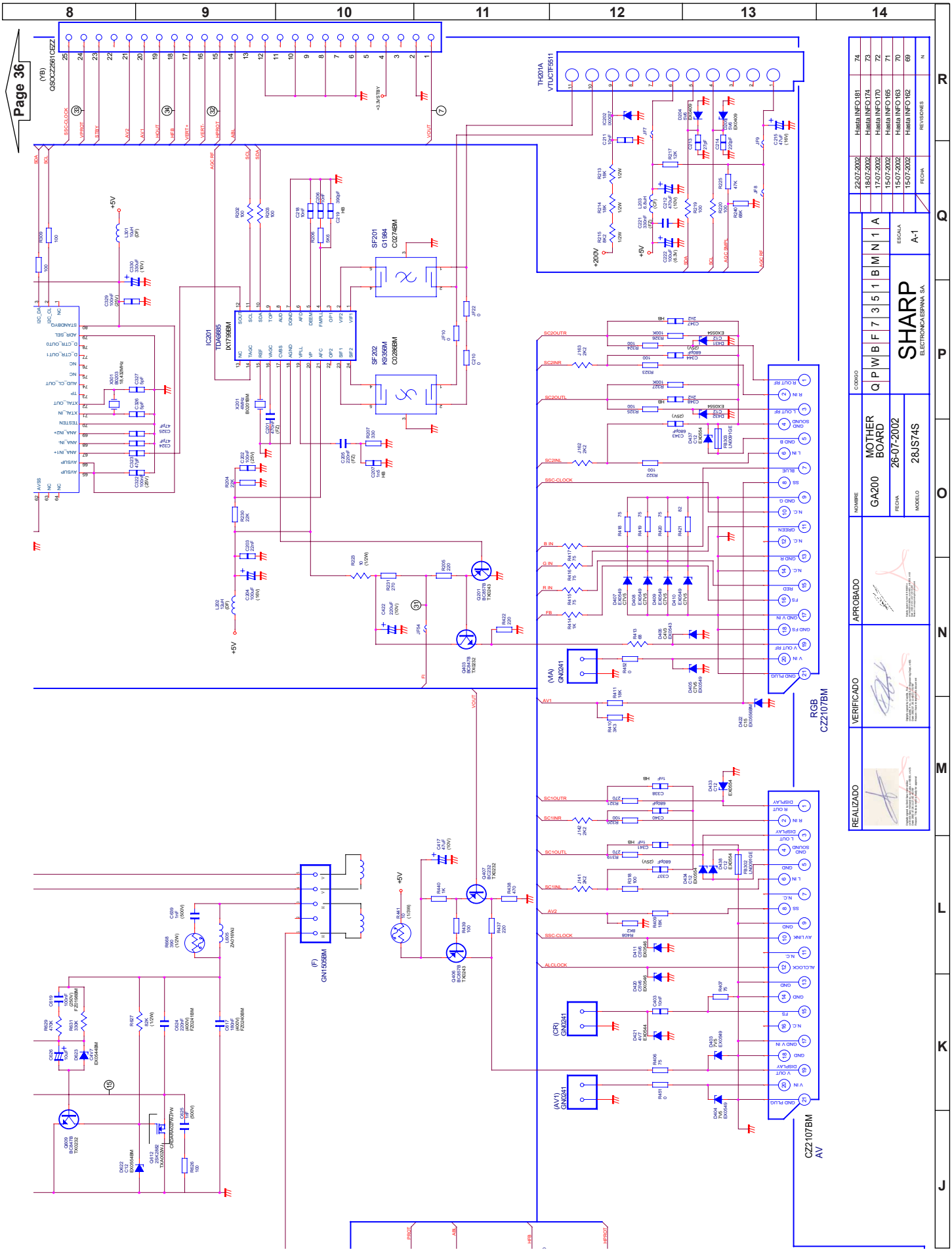
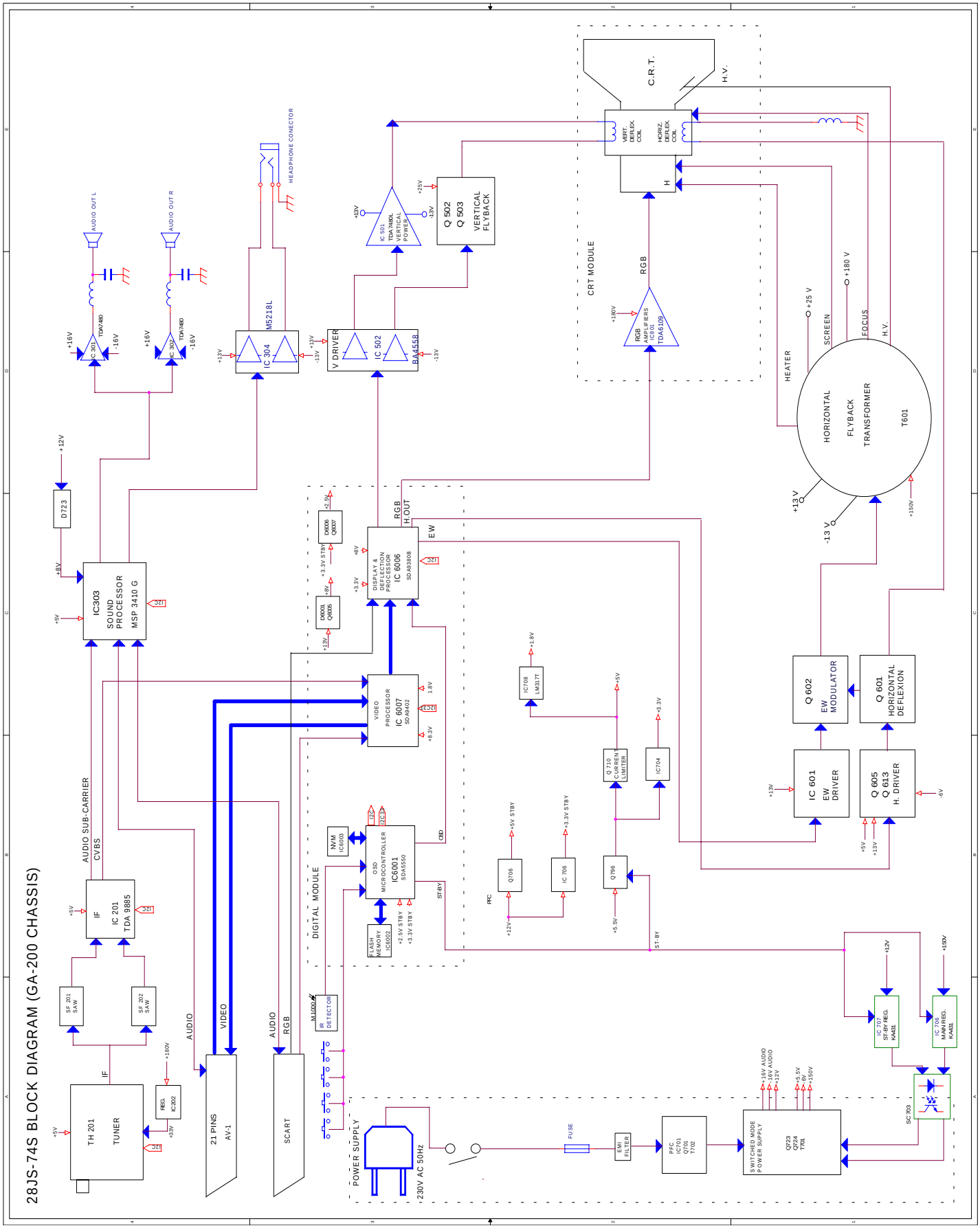
# SCHEMATIC DIAGRAM OF MOTHER BOARD UNIT (F7351N1A)



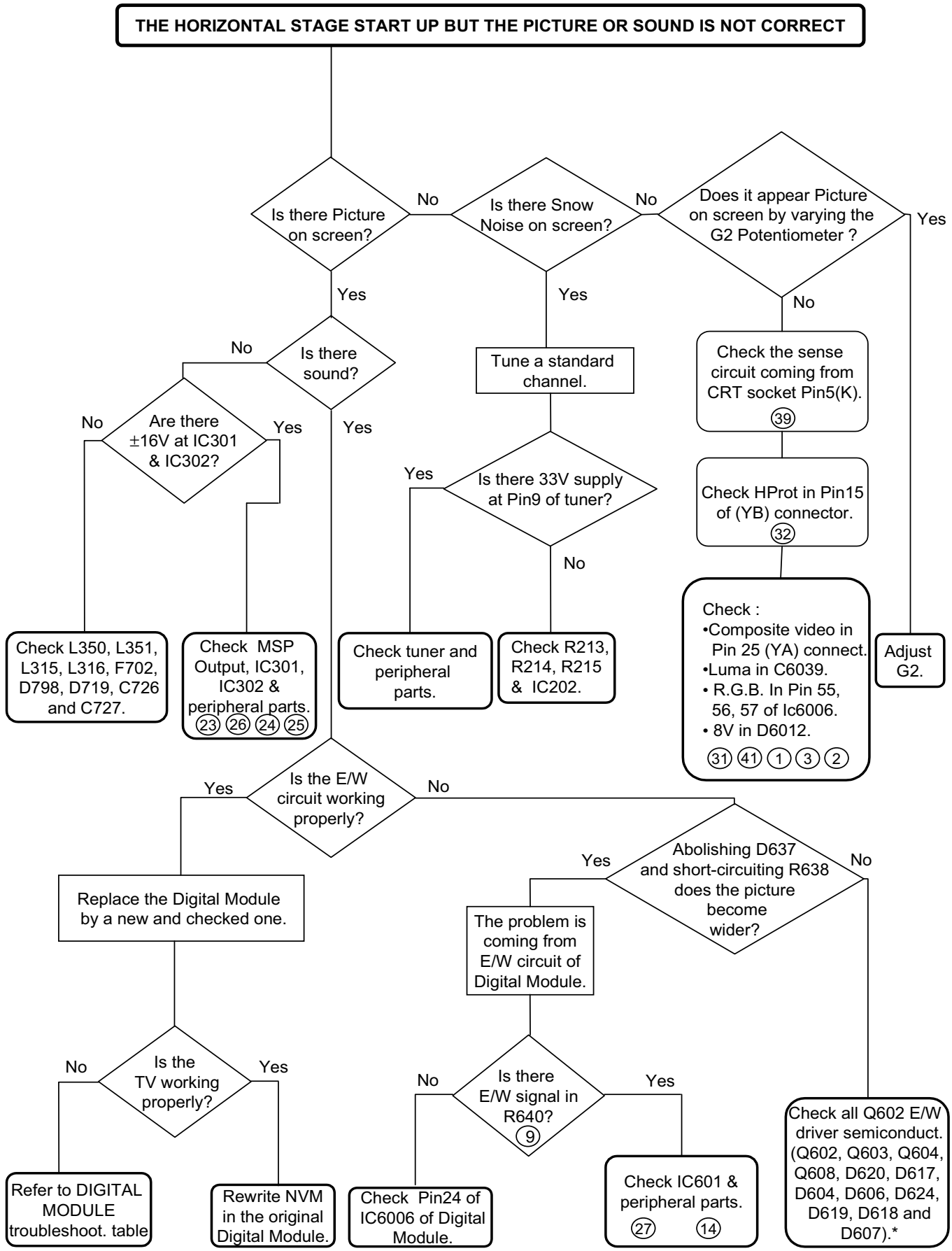
# SCHEMATIC DIAGRAM OF MOTHER BOARD UNIT (F7351N1A)



# BLOCK DIAGRAM

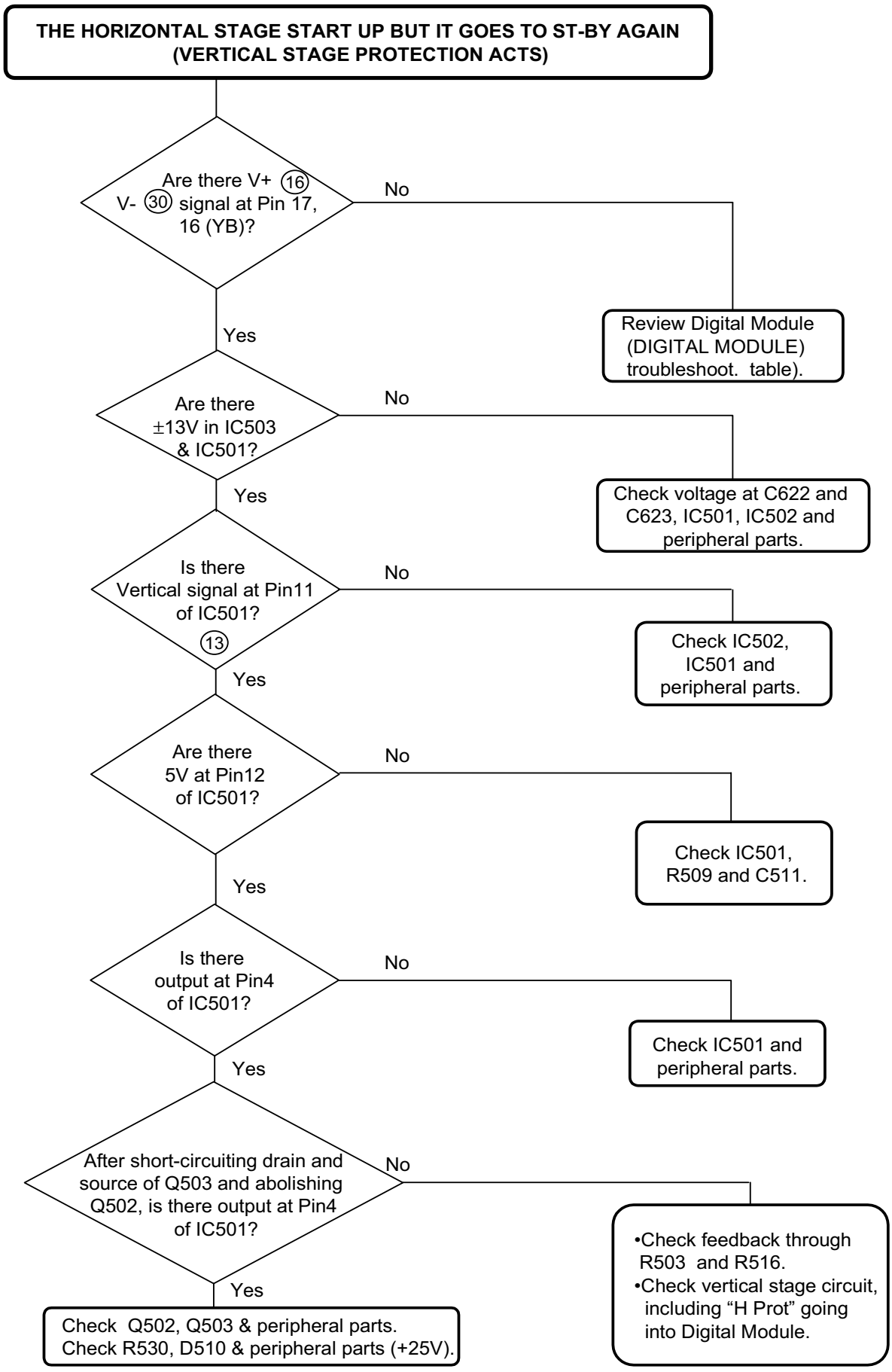


# TROUBLESHOOTING TABLES



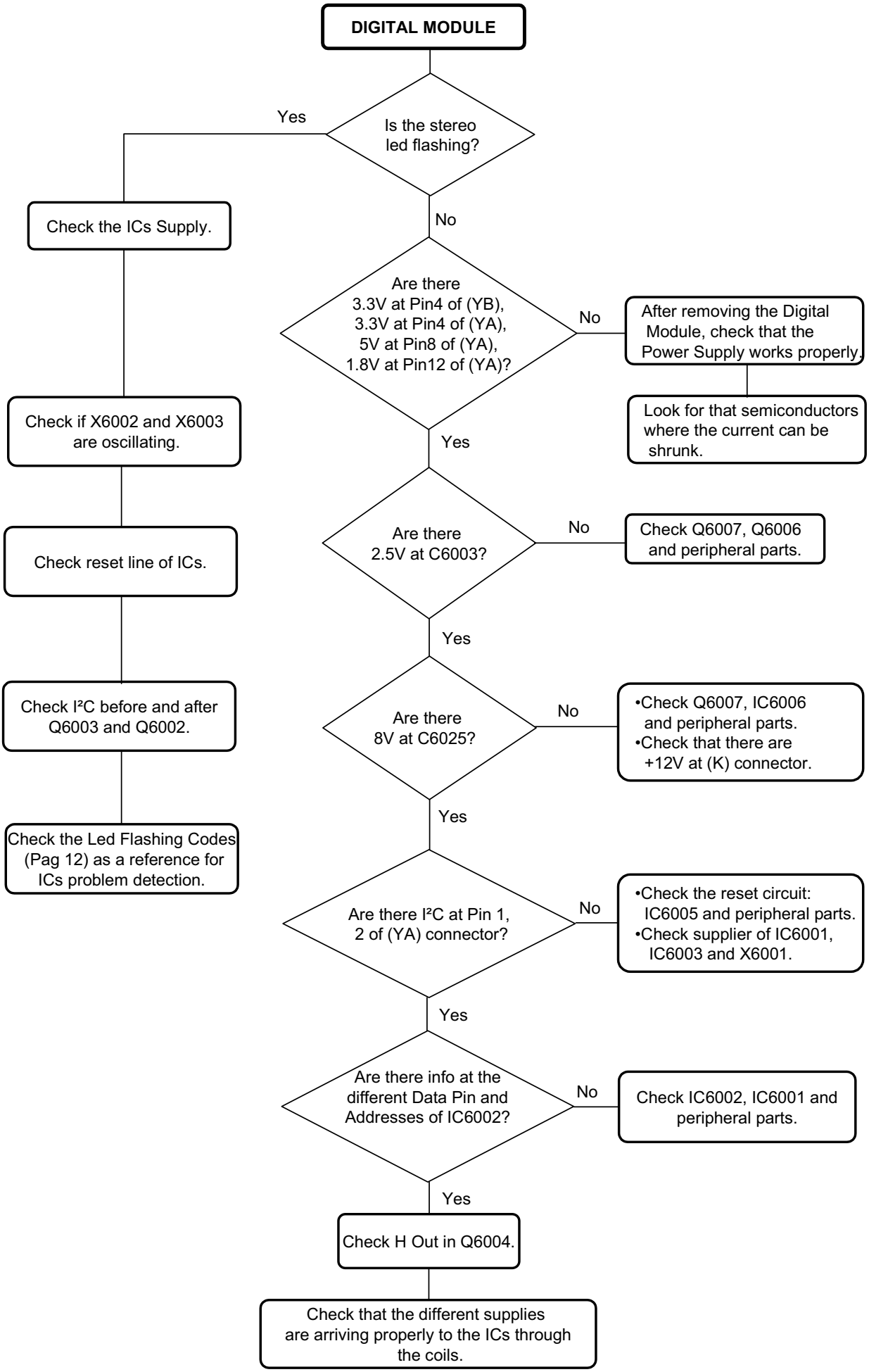

*Although the checking of these parts could be right, they may be partially damaged. So if the problem remains proceed to replace all parts.

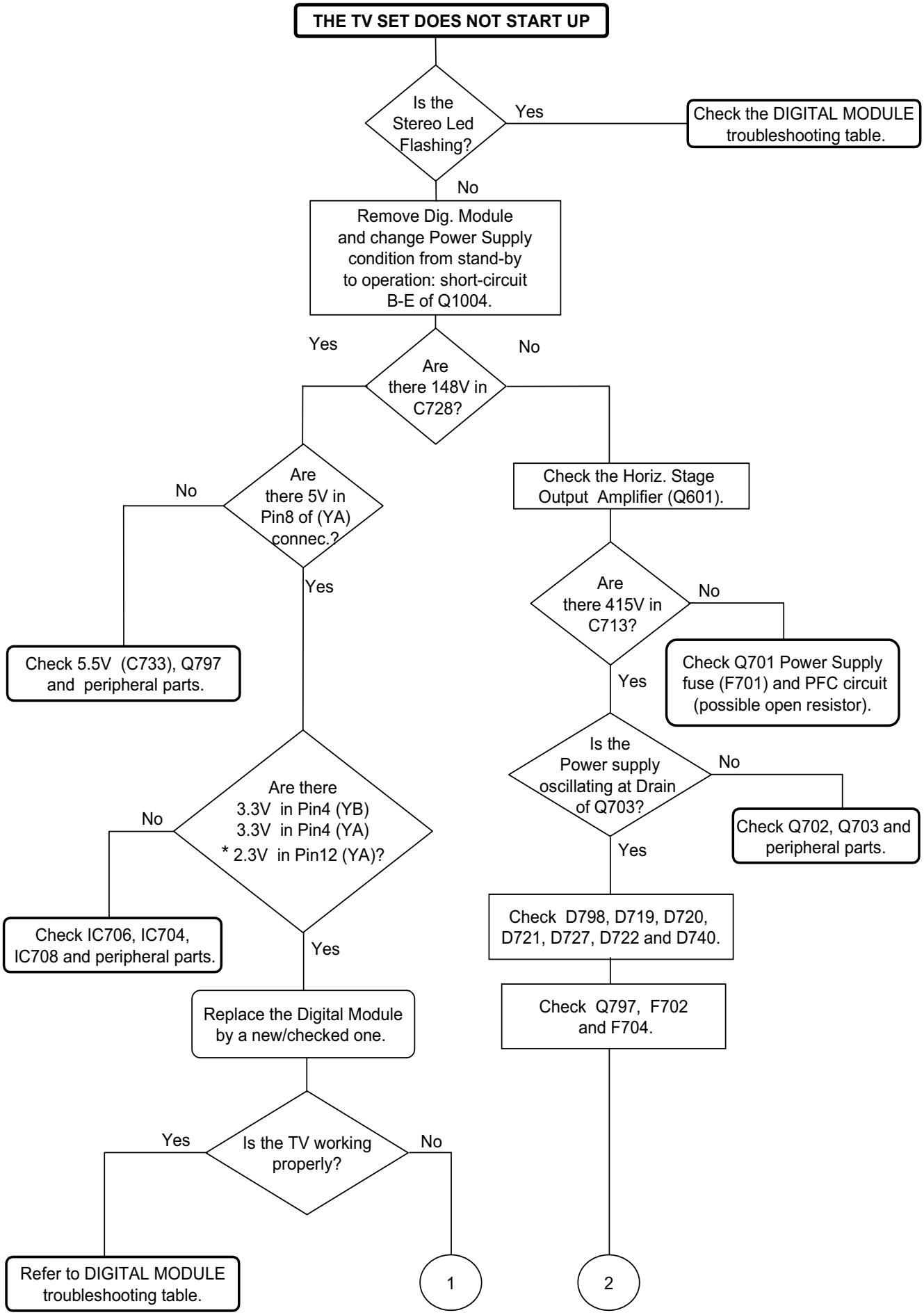
(xx) Test Point



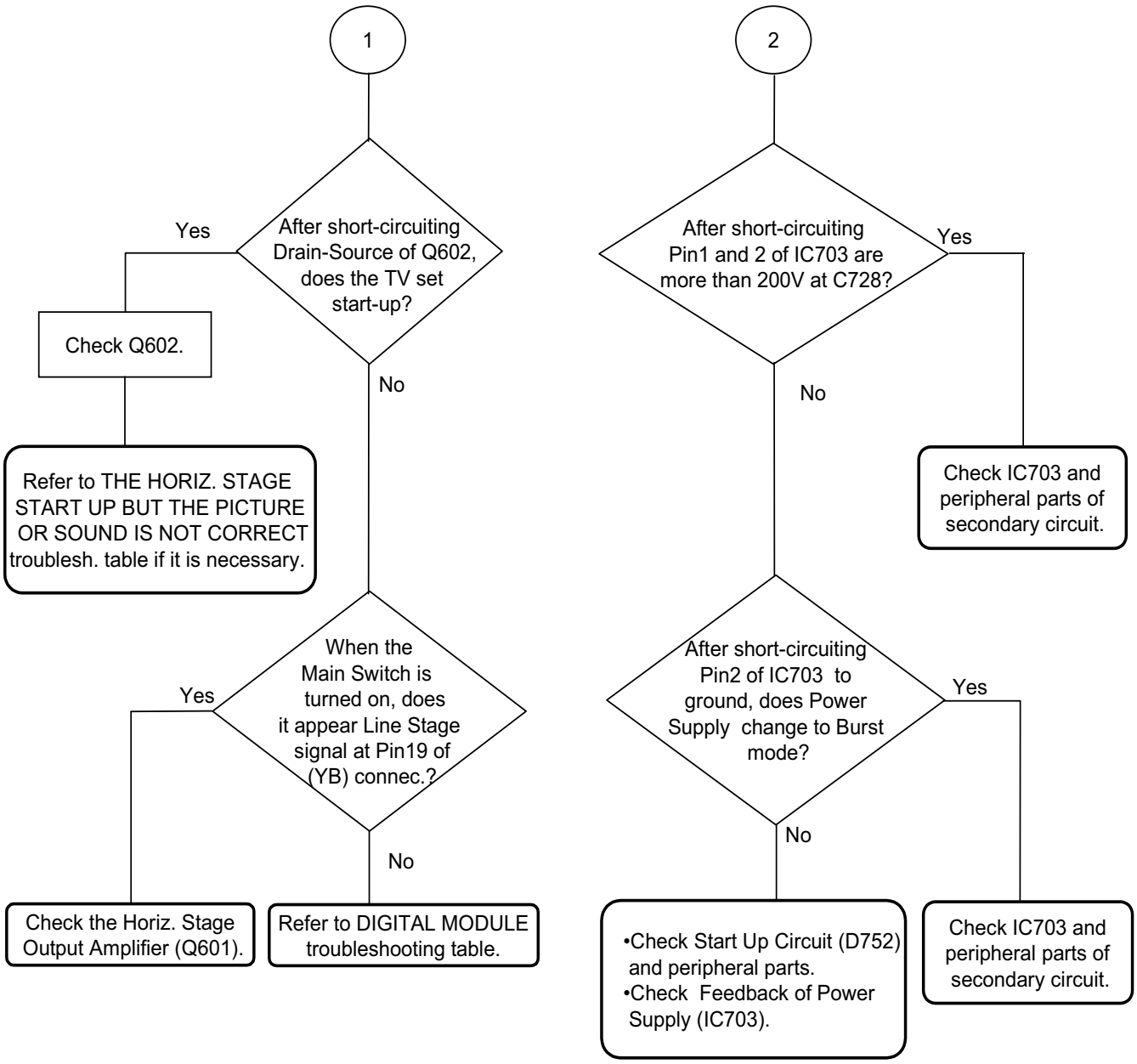

Note: The different supplies of Vertical Stage are coming from the flyback transformer through Vertical Stage ICs, so only is fed when the Horizontal Stage is working.

(xx) Test Point


DIGITAL MODULE
Is the stereo led flashing?
Yes
No
Check the ICs Supply.
Are there 3.3V at Pin4 of (YB), 3.3V at Pin4 of (YA), 5V at Pin8 of (YA), 1.8V at Pin12 of (YA)?
No
After removing the Digital Module, check that the Power Supply works properly.
Look for that semiconductors where the current can be shrunk.
Yes
Check if X6002 and X6003 are oscillating.
Are there 2.5V at C6003?
No
Check Q6007, Q6006 and peripheral parts.
Yes
Check reset line of ICs.
Are there 8V at C6025?
No
•Check Q6007, IC6006 and peripheral parts.
•Check that there are +12V at (K) connector.
Yes
Check I²C before and after Q6003 and Q6002.
Are there I²C at Pin 1, 2 of (YA) connector?
No
•Check the reset circuit: IC6005 and peripheral parts.
•Check supplier of IC6001, IC6003 and X6001.
Yes
Check the Led Flashing Codes (Pag 12) as a reference for ICs problem detection.
Are there info at the different Data Pin and Addresses of IC6002?
No
Check IC6002, IC6001 and peripheral parts.
Yes
Check H Out in Q6004.
Check that the different supplies are arriving properly to the ICs through the coils.




*In the original situation (with the Digital Module assembled) this value is 1.8V.




Note: Once the TV set has been repaired, have in mind to put the TV set in the default situation (undo short-circuits, **specially the applied in Q1004**).

# ICs ADDITIONAL INFORMATION

## TDA9885/V3 (IC201)

### Features

- 5 V supply voltage
- Gain controlled wide-band Vision Intermediate Frequency (VIF) amplifier (AC-coupled)
- Multistandard true synchronous demodulation with active carrier regeneration (very linear demodulation, good intermodulation figures, reduced harmonics, excellent pulse response)
- Gated phase detector for L/L accent standard
- Fully integrated VIF Voltage Controlled Oscillator (VCO), alignment-free; frequencies switchable for all negative and positive modulated standards via I²C-bus
- Digital acquisition help, VIF frequencies of 33.4, 33.9, 38.0, 38.9, 45.75 and 58.75 MHz
- 4 MHz reference frequency input [signal from Phase-Locked Loop (PLL) tuning system] or operating as crystal oscillator
- VIF Automatic Gain Control (AGC) detector for gain control, operating as peak sync detector for negative modulated signals and as a peak white detector for positive modulated signals
- External AGC setting via pin 3
- Precise fully digital Automatic Frequency Control (AFC) detector with 4-bit digital-to-analog converter; AFC bits via I²C-bus readable
- TakeOver Point (TOP) adjustable via I²C-bus or alternatively with potentiometer
- Fully integrated sound carrier trap for 4.5, 5.5, 6.0 and 6.5 MHz, controlled by FM-PLL oscillator
- Sound IF (SIF) input for single reference Quasi Split Sound (QSS) mode (PLL controlled)
- SIF AGC for gain controlled SIF amplifier; single reference QSS mixer able to operate in high performance single reference QSS mode and in intercarrier mode, switchable via I²C-bus
- AM demodulator without extra reference circuit
- Alignment-free selective FM-PLL demodulator with high linearity and low noise
- Four I²C-bus addresses via MAD
- I²C-bus control for all functions
- I²C-bus transceiver with pin programmable Module Address (MAD).

### GENERAL DESCRIPTION

The TDA9885 is an alignment-free single standard (without positive modulation) vision and sound IF signal PLL.

The TDA9886 is an alignment-free multistandard (PAL, SECAM and NTSC) vision and sound IF signal PLL demodulator for positive and negative modulation including sound AM and FM processing.

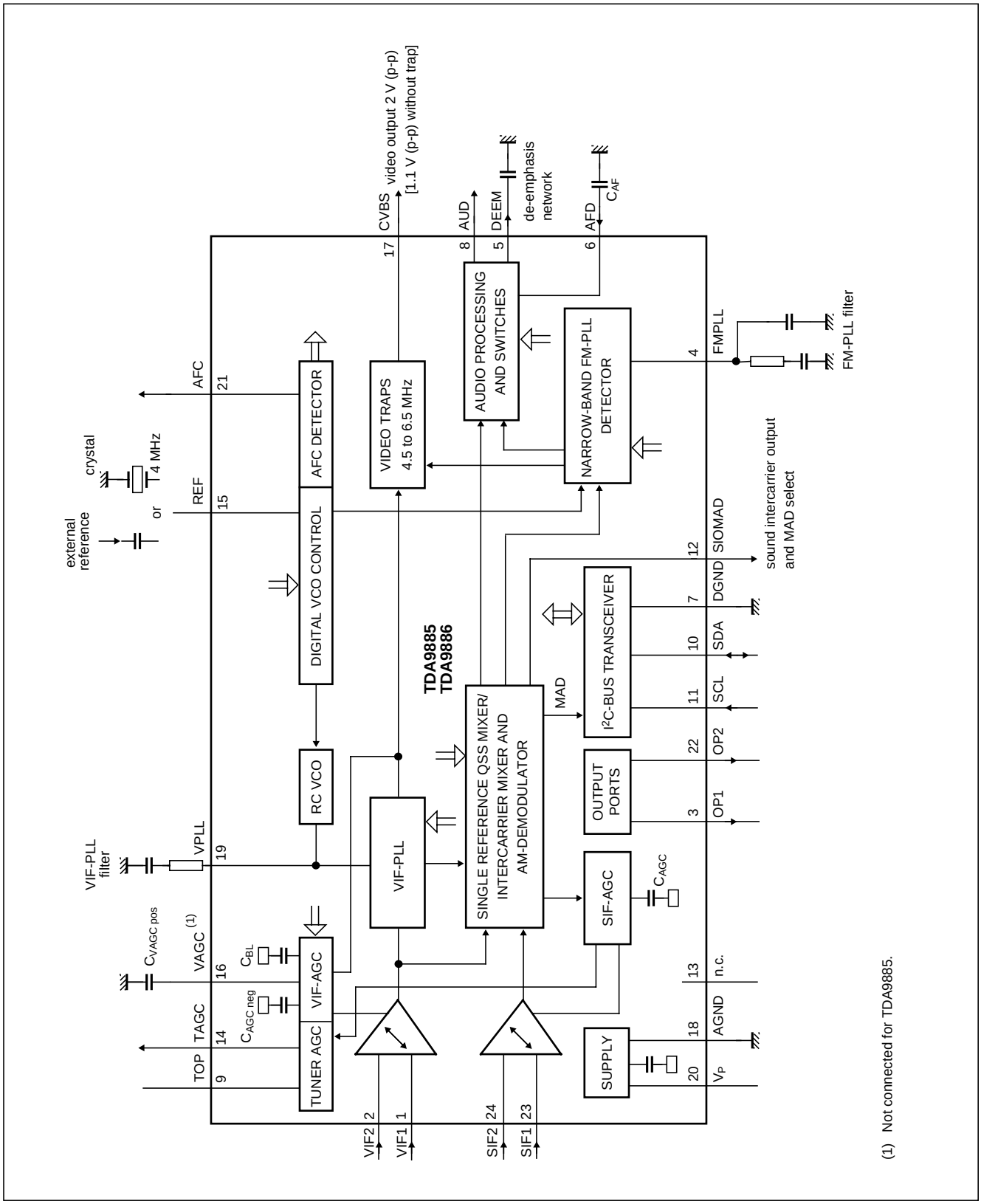
Both devices can be used for TV, VTR, PC and set-top box applications.

### ORDERING INFORMATION

| TYPE NUMBER | PACKAGE | | |
|---|---|---|---|
| | NAME | DESCRIPTION | VERSION |
| TDA9885T | SO24 | plastic small outline package; 24 leads; body width 7.5 mm | SOT137-1 |
| TDA9885TS | SSOP24 | plastic shrink small outline package; 24 leads; body width 5.3 mm | SOT340-1 |
| TDA9886T | SO24 | plastic small outline package; 24 leads; body width 7.5 mm | SOT137-1 |
| TDA9886TS | SSOP24 | plastic shrink small outline package; 24 leads; body width 5.3 mm | SOT340-1 |

## TDA9885/V3 (IC201)

### Block Diagram




(1) Not connected for TDA9885.

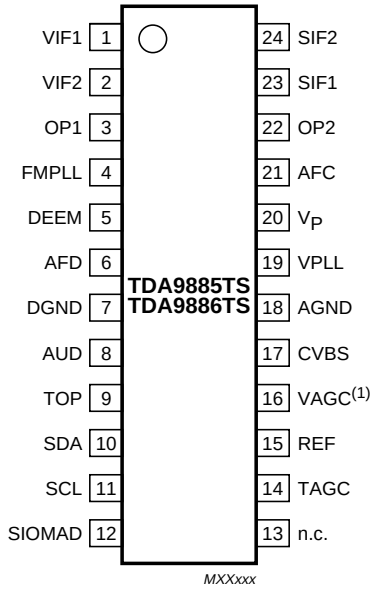
## TDA9885/V3 (IC201)

### Features

| SYMBOL | PIN | DESCRIPTION |
|---|---|---|
| TAGC | 14 | tuner AGC output |
| REF | 15 | 4 MHz crystal or reference input |
| VAGC | 16 | VIF-AGC for capacitor; note 1 |
| CVBS | 17 | video output |
| AGND | 18 | analog ground |
| VPLL | 19 | VIF-PLL for loop filter |
| $V_P$ | 20 | supply voltage (+5 V) |
| AFC | 21 | AFC output |
| OP2 | 22 | output 2 (open-collector) |
| SIF1 | 23 | SIF differential input 1 |
| SIF2 | 24 | SIF differential input 2 |

**Note**

1. Not connected for TDA9885.

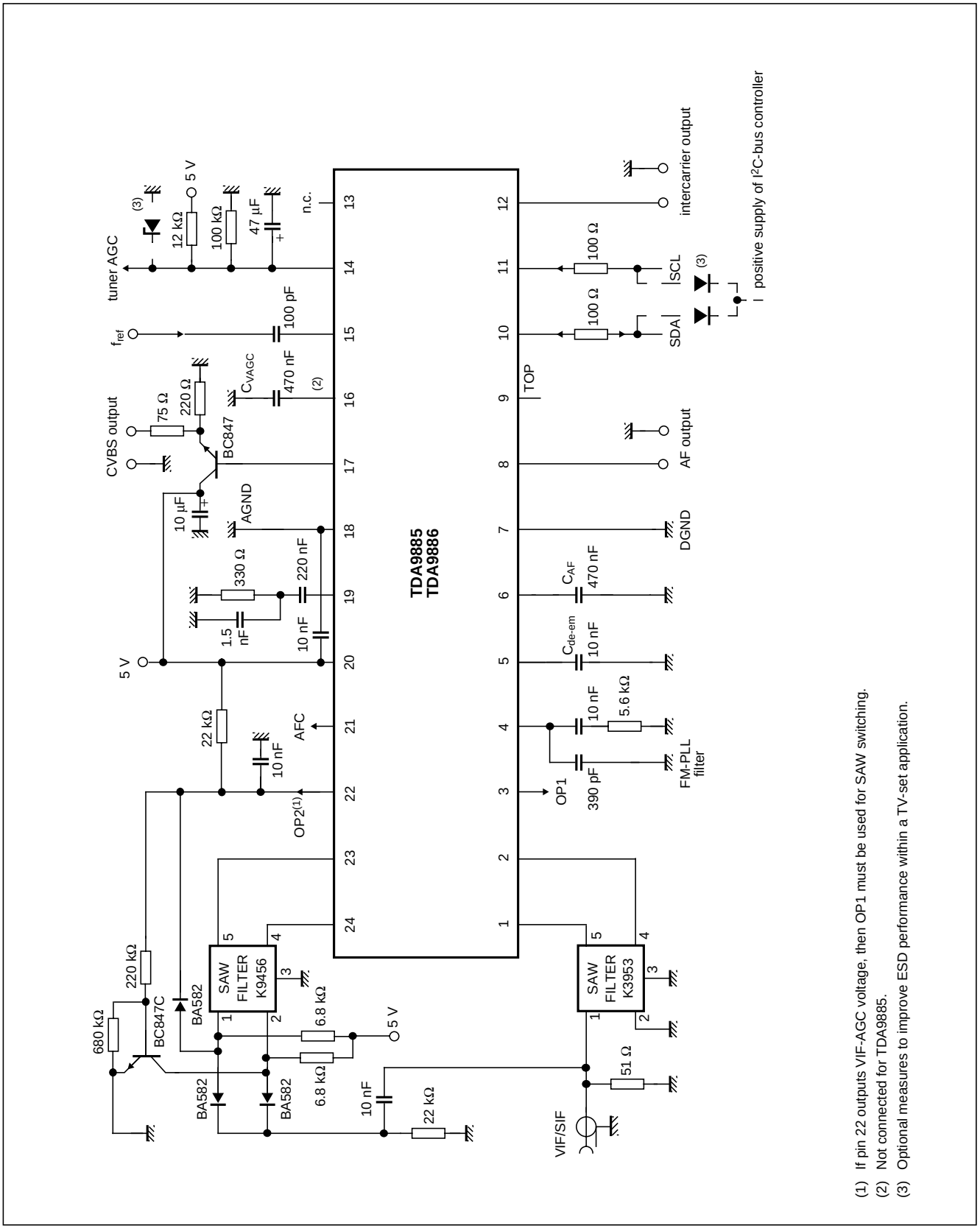



(1) Not connected for TDA9885TS.

Pin configuration for SSOP24.

## TDA9885/V3 (IC201)

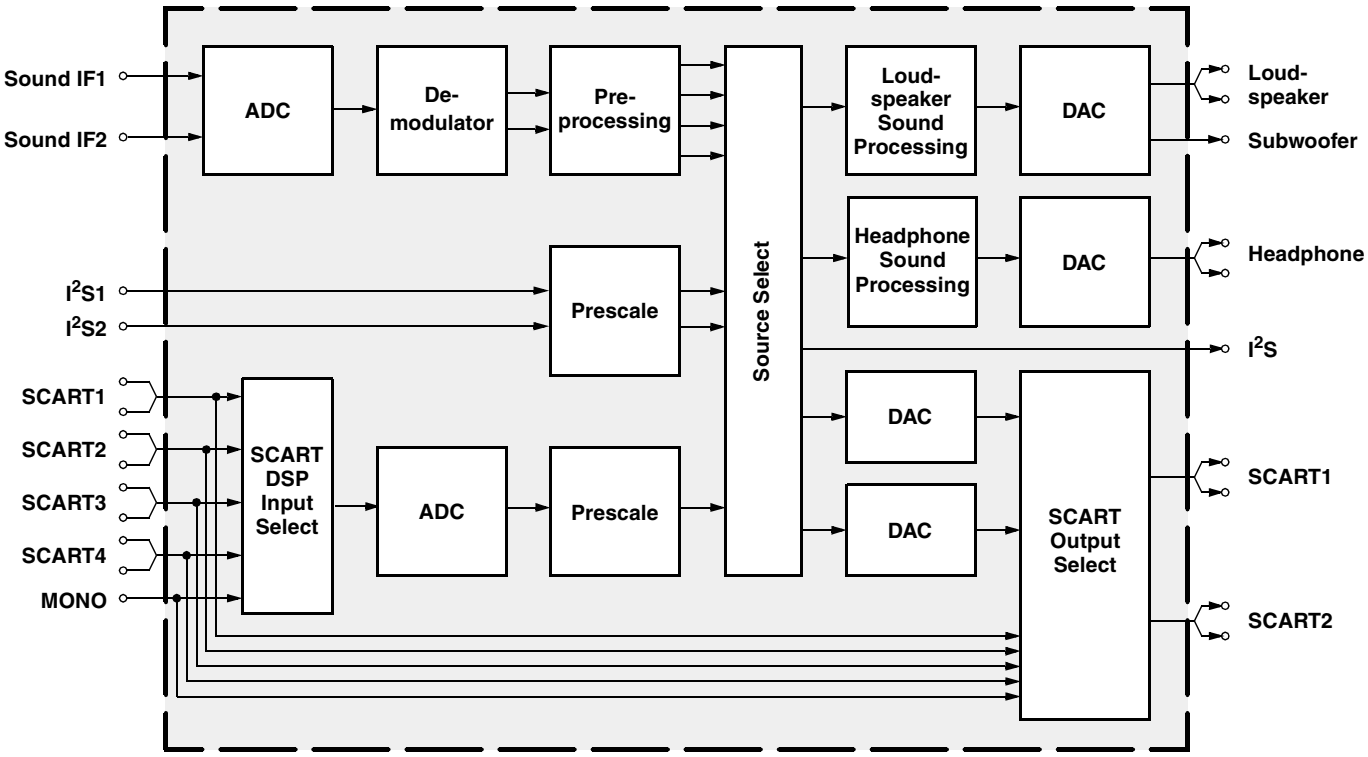
### Application Circuit



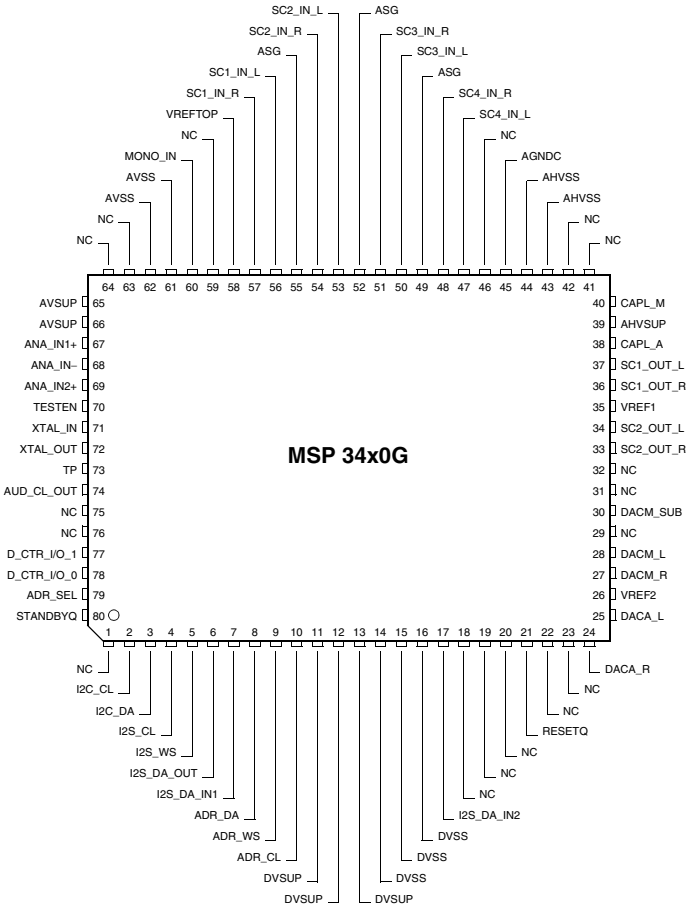

(1) If pin 22 outputs VIF-AGC voltage, then OP1 must be used for SAW switching.
(2) Not connected for TDA9885.
(3) Optional measures to improve ESD performance within a TV-set application.

## MSP3400G (IC303)

### Block Diagram

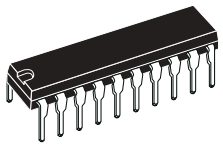



### Pinning



## TDA7480L (IC501)

- 10W OUTPUT POWER: $R_L$ = 8Ω/4Ω; THD = 10%
- HIGH EFFICIENCY
- NO HEATSINK
- SPLIT SUPPLY
- OVERVOLTAGE PROTECTION
- ST-BY AND MUTE FEATURES
- SHORT CIRCUIT PROTECTION
- THERMAL OVERLOAD PROTECTION



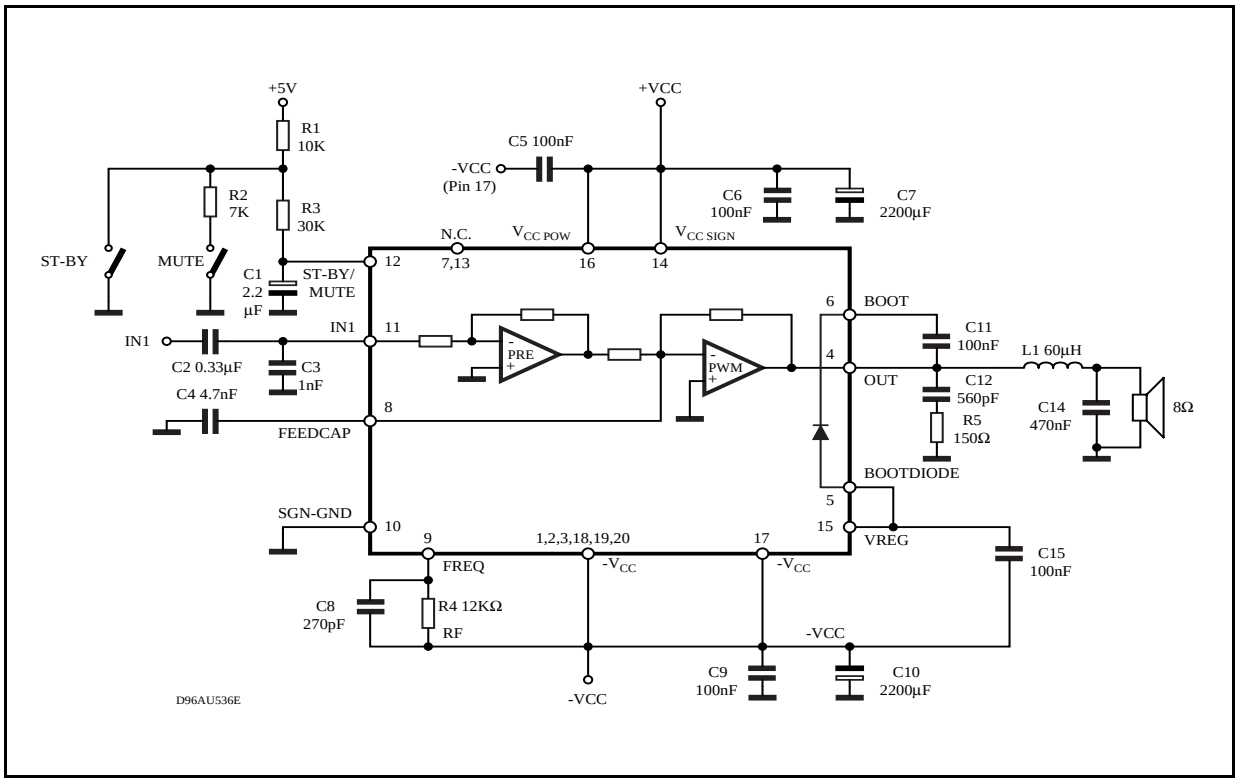
**PDIP20** (14+3+3)

**ORDERING NUMBER:** TDA7480L

### DESCRIPTION

The TDA7480L is an audio class-D amplifier assembled in Power DIP package specially designed for high efficiency applications mainly for TV and Home Stereo sets.

Test and Application Circuit.



## TDA7480L (IC501)

### Electrical Characteristics

(Refer to the test circuit, $V_{CC}$ = ±14V; $R_L$ = 8Ω; $R_S$ = 50Ω;
$R_f$ = 12KΩ; Demod.. filter L = 60µH, C = 470nF; f = 1KHz; $T_{amb}$ = 25°C unless otherwise specified.)

| Symbol | Parameter | Test Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| $V_S$ | Supply Range | | ±10 | | ±16 | V |
| $I_q$ | Total Quiescent Current | $R_L$ = ∞; NO LC Filter | | 25 | 40 | mA |
| $V_{OS}$ | Output Offset Voltage | Play Condition | –50 | | +50 | mV |
| $P_O$ | Output Power | THD = 10%<br>THD = 1% | 8.5<br>6 | 10<br>7 | | W<br>W |
| | | $R_L$ = 4Ω $V_{CC}$ = ±10.5V<br>THD = 10%<br>THD = 1% | | <br>10<br>7 | | <br>W<br>W |
| $P_d$ (*) | Dissipated Power at 1W Output Power | $R_f$ = 12KΩ $P_O$ = 1W | | 1 | | W |
| $P_{DMAX}$ | Maximum Dissipated Power | $P_O$ = 10W THD 10%<br>$R_{th\text{-}j\text{-}amb}$ = 38°C/W (Area 12cm$^2$) | | 1.9 | | W |
| η | Efficiency ≡ $\frac{P_O}{P_O + P_D} \equiv \frac{P_O}{P_I}$ (**) | THD 10%<br>$R_{th\text{-}j\text{-}amb}$ = 38°C/W (Area 12cm$^2$) | 80 | 85 | | % |
| THD | Total Harmonic Distortion | $R_L$ = 8Ω; $P_O$ = 0.5W | | 0.1 | | % |
| $I_{max}$ | Overcurrent Protection Threshold | $R_L$ = 0 | 2.5 | 3.5 | | A |
| $T_j$ | Thermal Shut-down Junction Temperature | | | 150 | | °C |
| $G_V$ | Closed Loop Gain | | 29 | 30 | 31 | dB |
| $e_N$ | Total Input Noise | A Curve<br>f = 20Hz to 22KHz | | 7<br>12 | | µV<br>µV |
| $R_i$ | Input Resistance | | 20 | 30 | | KΩ |
| SVR | Supply Voltage Rejection | f = 100Hz; $V_r$ = 0.5 | 46 | 60 | | dB |
| $T_r$, $T_f$ | Rising and Falling Time | | | 50 | | ns |
| $R_{DSON}$ | Power Transistor on Resistance | | 0.3 | 0.45 | 0.65 | Ω |
| $F_{SW}$ | Switching Frequency | | 110 | 130 | 150 | KHz |
| $F_{SW\_OP}$ | Switching Frequency Operative Range | | 100 | | 200 | KHz |
| $B_F$ | Zero Signal Frequency Constant (***) | | | 1.6 x 10$^6$ | | HzΩ |
| $R_F$ | Frequency Controller Resistor Range (****) | | 8 | 12 | 16 | KΩ |
| $V_{CC\text{-}max}$ | Overvoltage Protection Threshold | | 38 | 42 | 45 | V |
| **MUTE & STAND-BY FUNCTIONS** | | | | | | |
| $V_{ST\text{-}BY}$ | Stand-by range | | | | 0.8 | V |
| $V_{MUTE}$ | Mute Range | | 1.8 | | 2.5 | V |
| $V_{PLAY}$ | Play Range (1) | | 4 | | | V |
| $A_{MUTE}$ | Mute Attenuation | | 60 | 80 | | dB |
| $I_{qST\text{-}BY}$ | Quiescent Current @ Stand-by | | | 3 | 5 | mA |

*: The output average power when the amplifier is playing music can be considered roughly 1/10 of the maximum output power. So it is useful to consider the dissipated power in this condition for thermal dimensioning.

**: $P_O$ = measured across the load using the following inductor:
COIL 58120 MPPA2 (magnetics) TURNS: 28 ∅ 1mm
COIL77120 KOOL Mµ (magnetics) TURNS: 28 ∅ 1mm

***: The zero-signal switching frequency can be obtained using the following expression: $F_{SW\_OP} = B_F/R_F$

****: The maximum value of $R_F$ is related to the maximum possible value for the voltage drop on $R_F$ itself.

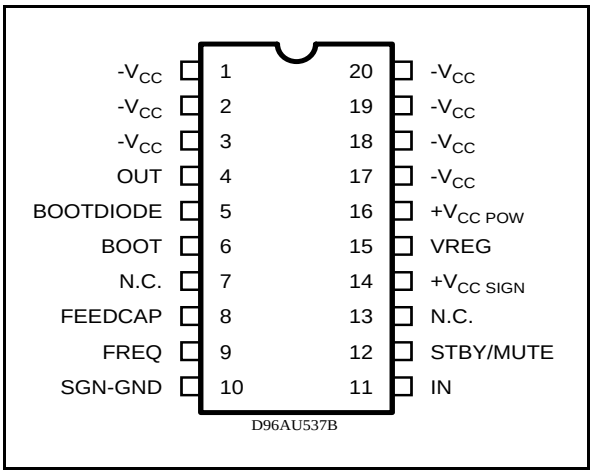
(1): For $V_{12}$ >5.2V, an input impedance of 10KΩ is to be considered.

## TDA7480L (IC501)

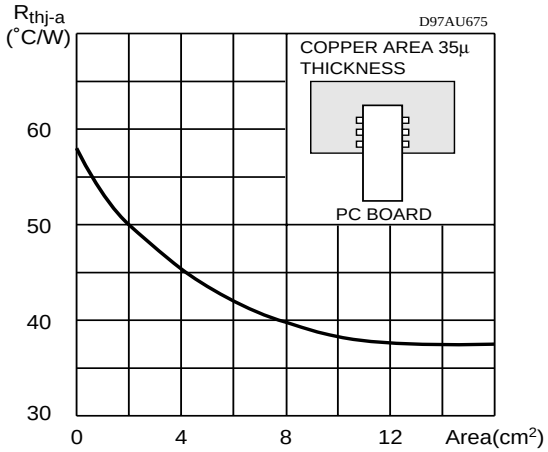
### ABSOLUTE MAXIMUM RATINGS

| Symbol | Parameter | Value | Unit |
|---|---|---|---|
| $V_{CC}$ | DC Supply Voltage | ±20 | V |
| $T_{stg}$, $T_j$ | Storage and Junction Temperature | –40 to 150 | ℃ |
| $V_{FREQ}$ | Maximum Voltage Across VFREQ (Pin 9) | 8 | V |
| $T_{op}$ | Operating Temperature Range | -20 to 70 | ℃ |
| ESD | Maximum ESD on Pins | ±1.8 | kV |

**PIN CONNECTION** (Top view)




**Rth with "on board" Square Heatsink vs. copper area.**




### THERMAL DATA

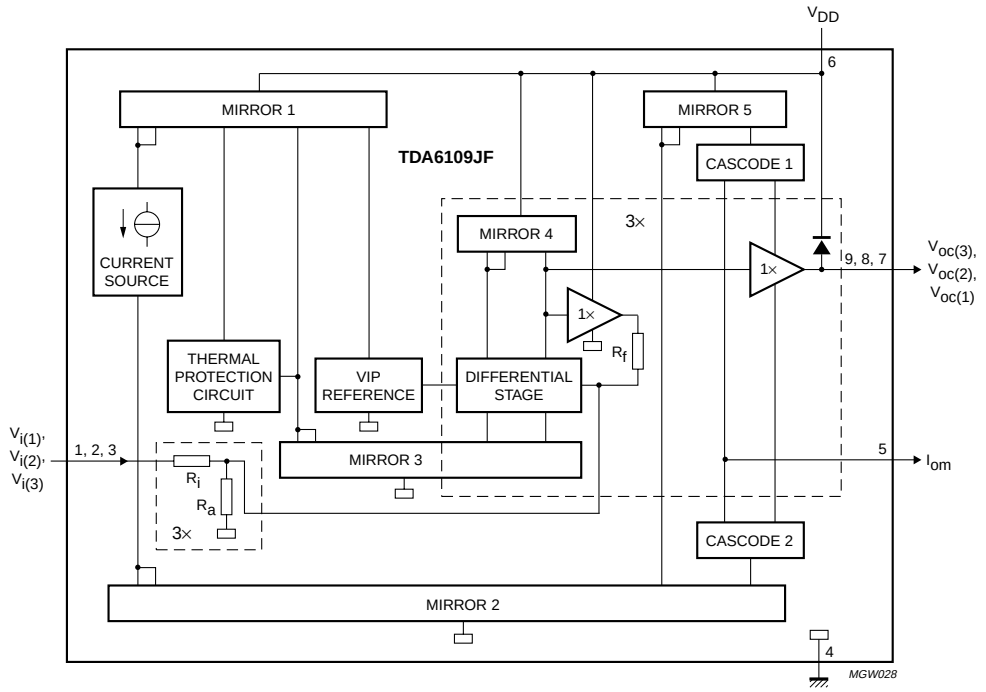
| Symbol | Parameter | | Value | Unit |
|---|---|---|---|---|
| $R_{th\ j\text{-}amb}$ | Thermal Resistance Junction to ambient | | 80 | °C/W |
| $R_{th\ j\text{-}pin}$ | Thermal Resistance Junction to Pin | Max. | 12 | °C/W |

### PIN FUNCTIONS

| N. | Name | Function |
|---|---|---|
| 1 | -$V_{CC}$ | NEGATIVE SUPPLY. |
| 2 | -$V_{CC}$ | NEGATIVE SUPPLY. |
| 3 | -$V_{CC}$ | NEGATIVE SUPPLY. |
| 4 | OUT | PWM OUTPUT |
| 5 | BOOTDIODE | BOOTSTRAP DIODE ANODE |
| 6 | BOOT | BOOTSTRAP CAPACITOR |
| 7 | NC | NOT CONNECTED |
| 8 | FEEDCAP | FEEDBACK INTEGRATING CAPACITANCE |
| 9 | FREQUENCY | SETTING FREQUENCY RESISTOR |
| 10 | SGN-GND | SIGNAL GROUND |
| 11 | IN | INPUT |
| 12 | ST-BY-MUTE | ST-BY/ MUTE CONTROL PIN |
| 13 | NC | NOT CONNECTED |
| 14 | +$V_{CC}$ SIGN | POSITIVE SIGNAL SUPPLY |
| 15 | VREG | 10V INTERNAL REGULATOR |
| 16 | +$V_{CC}$ POW | POSITIVE POWER SUPPLY |
| 17 | -$V_{CC}$ | NEGATIVE SUPPLY (TO BE CONNECTED TO PIN 16 VIA C5) |
| 18 | -$V_{CC}$ | NEGATIVE SUPPLY |
| 19 | -$V_{CC}$ | NEGATIVE SUPPLY |
| 20 | -$V_{CC}$ | NEGATIVE SUPPLY |

# TDA6109JF (IC1801)

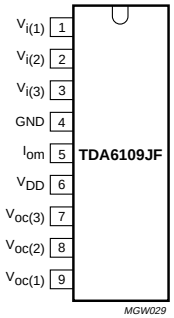
## Block Diagram




Block diagram (one amplifier shown).

## Pinning

| SYMBOL | PIN | DESCRIPTION |
|---|---|---|
| $V_{i(1)}$ | 1 | inverting input 1 |
| $V_{i(2)}$ | 2 | inverting input 2 |
| $V_{i(3)}$ | 3 | inverting input 3 |
| GND | 4 | ground (fin) |
| $I_{om}$ | 5 | black current measurement output |
| $V_{DD}$ | 6 | supply voltage |
| $V_{oc(3)}$ | 7 | cathode output 3 |
| $V_{oc(2)}$ | 8 | cathode output 2 |
| $V_{oc(1)}$ | 9 | cathode output 1 |




Pin configuration.

## Limiting Values

In accordance with the Absolute Maximum Rating System (IEC 60134); voltages measured with respect to pin 4 (ground); currents as specified in Fig.1; unless otherwise specified.

| SYMBOL | PARAMETER | CONDITIONS | MIN. | MAX. | UNIT |
|---|---|---|---|---|---|
| $V_{DD}$ | supply voltage | | 0 | 250 | V |
| $V_i$ | input voltage | | 0 | 12 | V |
| $V_{om}$ | measurement output voltage | | 0 | 6 | V |
| $V_{oc}$ | cathode output voltage | | 0 | $V_{DD}$ | V |
| $\lvert I_{om(mean)} \rvert$ | absolute value of mean current of measurement output (for three channels) | 1.5 V < $V_i$ < 5.5 V; 3 V < $V_{om}$ < 6 V | – | 5 | mA |
| $T_{stg}$ | storage temperature | | –55 | +150 | °C |
| $T_j$ | junction temperature | | –20 | +150 | °C |
| $V_{es}$ | electrostatic handling | | | | |
| | human body model (HBM) | | – | 2000 | V |
| | machine model (MM) | | – | 300 | V |

## TDA6109JF (IC1801)

### Characteristics

Operating range: $T_j$ = –20 to +150 °C; $V_{DD}$ = 180 to 210 V. Test conditions: $T_{amb}$ = 25 °C; $V_{DD}$ = 200 V; $V_{oc(1)} = V_{oc(2)} = V_{oc(3)} = \frac{1}{2}V_{DD}$; $C_L$ = 10 pF ($C_L$ consists of parasitic and cathode capacitance); $R_{th(h-a)}$ = 18 K/W (measured in test circuit of Fig.8); unless otherwise specified.

| SYMBOL | PARAMETER | CONDITIONS | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|---|
| $I_q$ | quiescent supply current | | 8.8 | 10.3 | 11.7 | mA |
| $V_{ref(int)}$ | internal reference voltage (input stage) | | – | 2.5 | – | V |
| $R_i$ | input resistance | | – | 3.2 | – | kΩ |
| G | gain of amplifier | | 47.5 | 51.0 | 55.0 | |
| ΔG | gain difference | | –2.5 | 0 | +2.5 | |
| $V_{oc}$ | nominal output voltage at pins 7, 8 and 9 (DC value) | $I_i$ = 0 μA | 116 | 129 | 142 | V |
| $\Delta V_{oc(offset)}$ | differential nominal output offset voltage between pins 7 and 8, 8 and 9 and 9 and 7 (DC value) | $I_i$ = 0 μA | – | 0 | 5 | V |
| $\Delta V_{oc(T)}$ | output voltage temperature drift at pins 7, 8 and 9 | | – | –10 | – | mV/K |
| $\Delta V_{oc(offset)(T)}$ | differential output offset voltage temperature drift between pins 7 and 8, 8 and 9 and 7 and 9 | | – | 0 | – | mV/K |
| $I_{om(offset)}$ | offset current of measurement output (for three channels) | $I_{oc}$ = 0 μA; 1.5 V < $V_i$ < 5.5 V; 3 V < $V_{om}$ < 6 V | –50 | – | +50 | μA |
| $\Delta I_{om}/\Delta I_{oc}$ | linearity of current transfer (for three channels) | –100 μA < $I_{oc}$ < 100 μA; 1.5 V < $V_i$ < 5.5 V; 3 V < $V_{om}$ < 6 V | 0.9 | 1.0 | 1.1 | |
| | | –100 μA < $I_{oc}$ < 18 mA; 1.5 V < $V_i$ < 5.5 V; 3 V < $V_{om}$ < 4 V | 0.9 | 1.0 | 1.1 | |
| $I_{oc(max)}$ | maximum peak output current (pins 7, 8 and 9) | 50 V < $V_{oc}$ < $V_{DD}$ – 50 V | – | 28 | – | mA |
| $V_{oc(min)}$ | minimum output voltage (pins 7, 8 and 9) | $V_i$ = 7.0 V; note 1 | – | – | 10 | V |
| $V_{oc(max)}$ | maximum output voltage (pins 7, 8 and 9) | $V_i$ = 1.0 V; note 1 | $V_{DD}$ – 15 | – | – | V |
| $B_S$ | small signal bandwidth (pins 7, 8 and 9) | $V_{oc}$ = 60 V (p-p) | – | 9.0 | – | MHz |
| $B_L$ | large signal bandwidth (pins 7, 8 and 9) | $V_{oc}$ = 100 V (p-p) | – | 8.0 | – | MHz |
| $t_{P(oc)}$ | cathode output propagation time 50% input to 50% output (pins 7, 8 and 9) | $V_{oc}$ = 100 V (p-p) square wave; f <1 MHz; $t_r = t_f$ = 40 ns (pins 1, 2 and 3); see Figs 6 and 7 | – | 32 | – | ns |
| $\Delta t_{P(oc)}$ | difference in cathode output propagation time 50% input to 50% output (pins 7 and 8, 7 and 9 and 8 and 9) | $V_{oc}$ = 100 V (p-p) square wave; f < 1 MHz; $t_r = t_f$ = 40 ns (pins 1, 2 and 3) | –10 | 0 | +10 | ns |

## TDA6109JF (IC1801)

### Characteristics

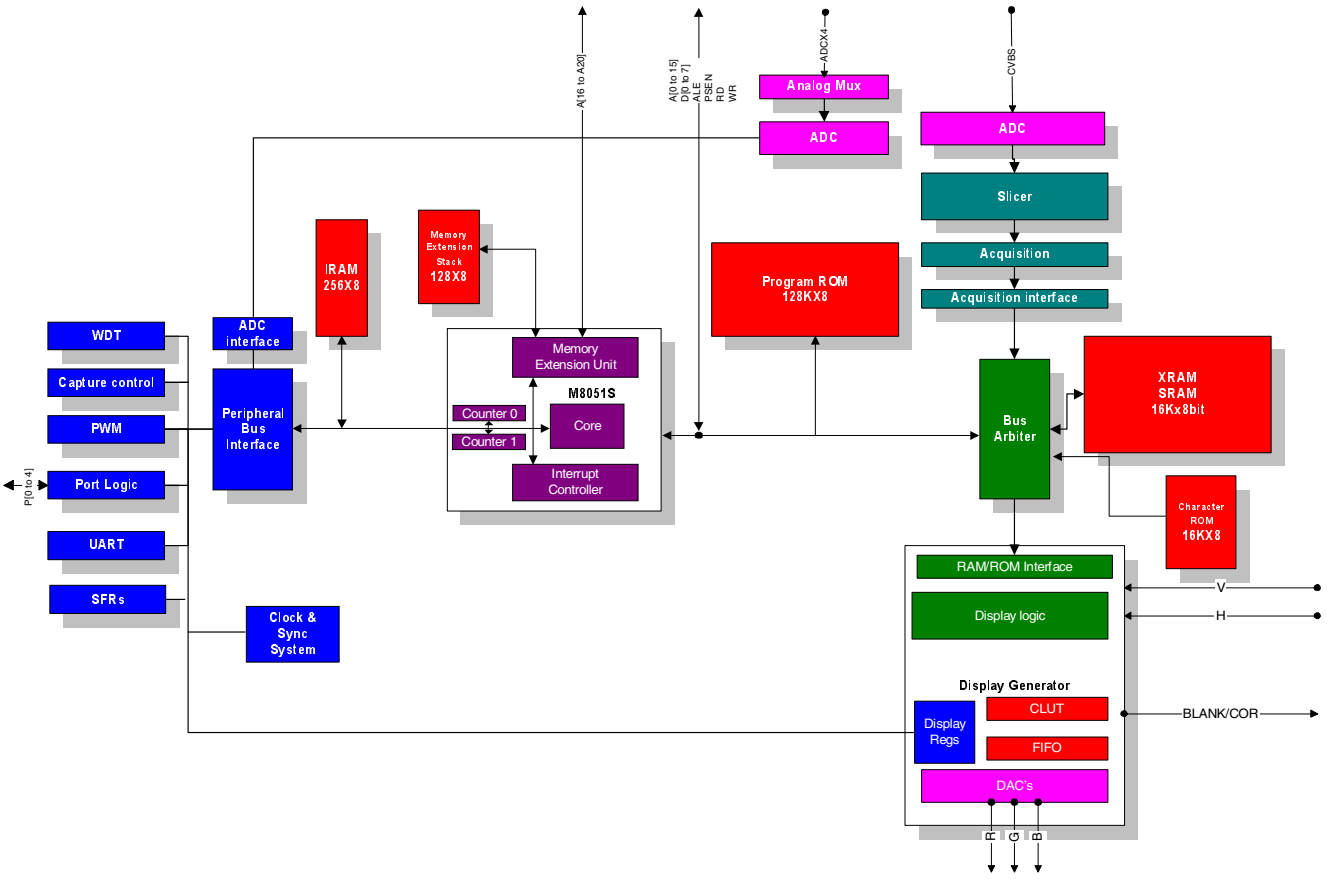
| SYMBOL | PARAMETER | CONDITIONS | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|---|
| $t_{r(oc)}$ | cathode output rise time 10% output to 90% output (pins 7, 8 and 9) | $V_{oc}$ = 50 to 150 V square wave; f < 1 MHz; $t_f$ = 40 ns (pins 1, 2 and 3); see Fig.6 | 35 | 50 | 65 | ns |
| $t_{f(oc)}$ | cathode output fall time 90% output to 10% output (pins 7, 8 and 9) | $V_{oc}$ = 150 to 50 V square wave; f < 1 MHz; $t_r$ = 40 ns (pins 1, 2 and 3); see Fig.7 | 35 | 50 | 65 | ns |
| $t_{st}$ | settling time 50% input to 99% < output < 101% (pins 7, 8 and 9) | $V_{oc}$ = 100 V (p-p) square wave; f < 1 MHz; $t_r = t_f$ = 40 ns (pins 1, 2 and 3); see Figs 6 and 7 | – | – | 350 | ns |
| SR | slew rate between 50 V to ($V_{DD}$ – 50 V) (pins 7, 8 and 9) | $V_i$ = 4 V (p-p) square wave; f < 1 MHz; $t_r = t_f$ = 40 ns (pins 1, 2 and 3) | – | 1850 | – | V/µs |
| $V_{oc(overshoot)}$ | cathode output voltage overshoot (pins 7, 8 and 9) | $V_{oc}$ = 100 V (p-p) square wave; f < 1 MHz; $t_r = t_f$ = 40 ns (pins 1, 2 and 3); see Figs 6 and 7 | – | 10 | – | % |
| PSRR | power supply rejection ratio | f < 50 kHz; note 2 | – | 65 | – | dB |
| $\alpha_{ct(DC)}$ | DC crosstalk between channels | | – | –50 | – | dB |

**Notes**

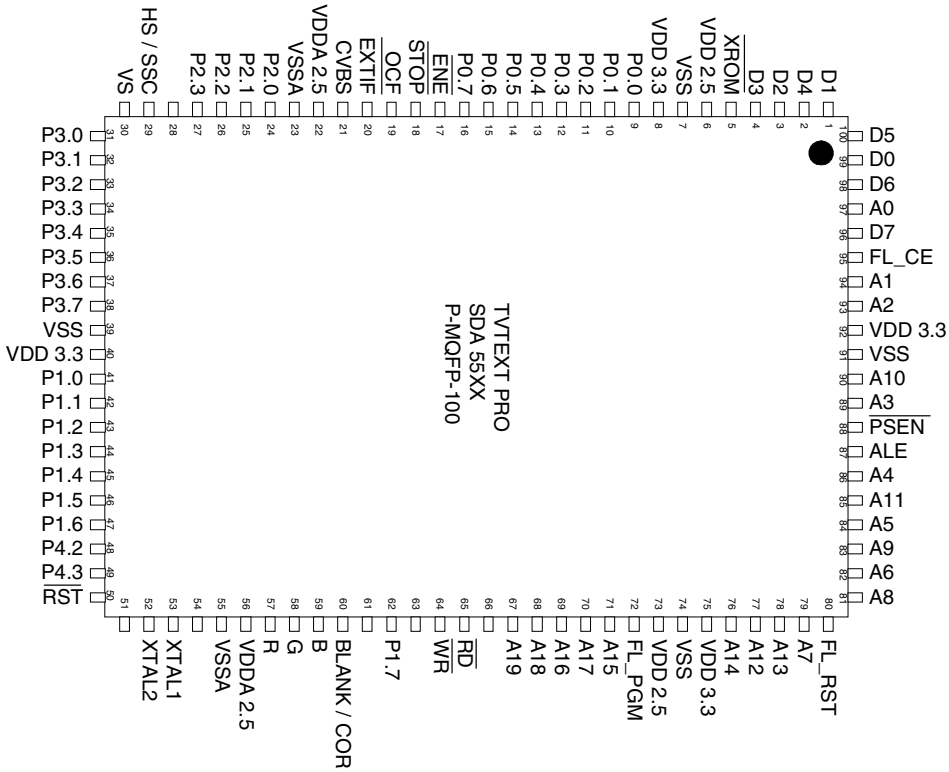
1. See also Fig.5 for the typical DC-to-DC transfer of $V_i$ to $V_{oc}$.
2. The ratio of the change in supply voltage to the change in input voltage when there is no change in output voltage.

# SDA5550 (IC6001)

## Block Diagram

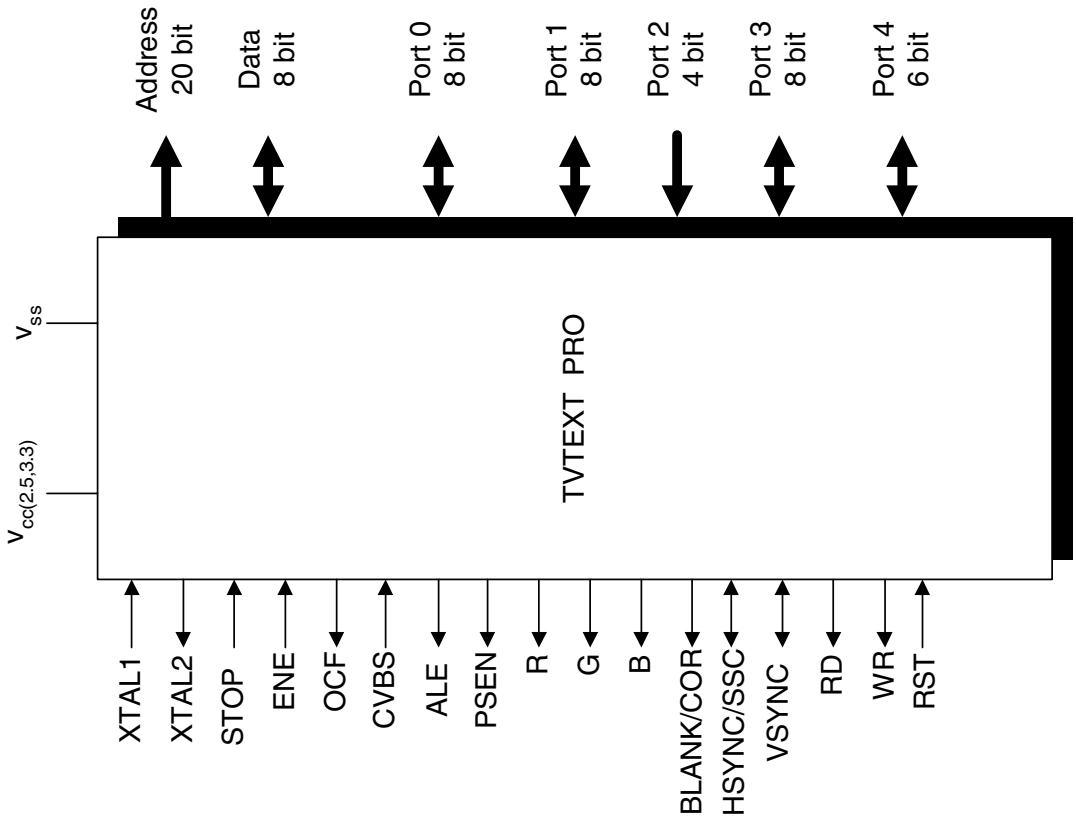



## Pinning

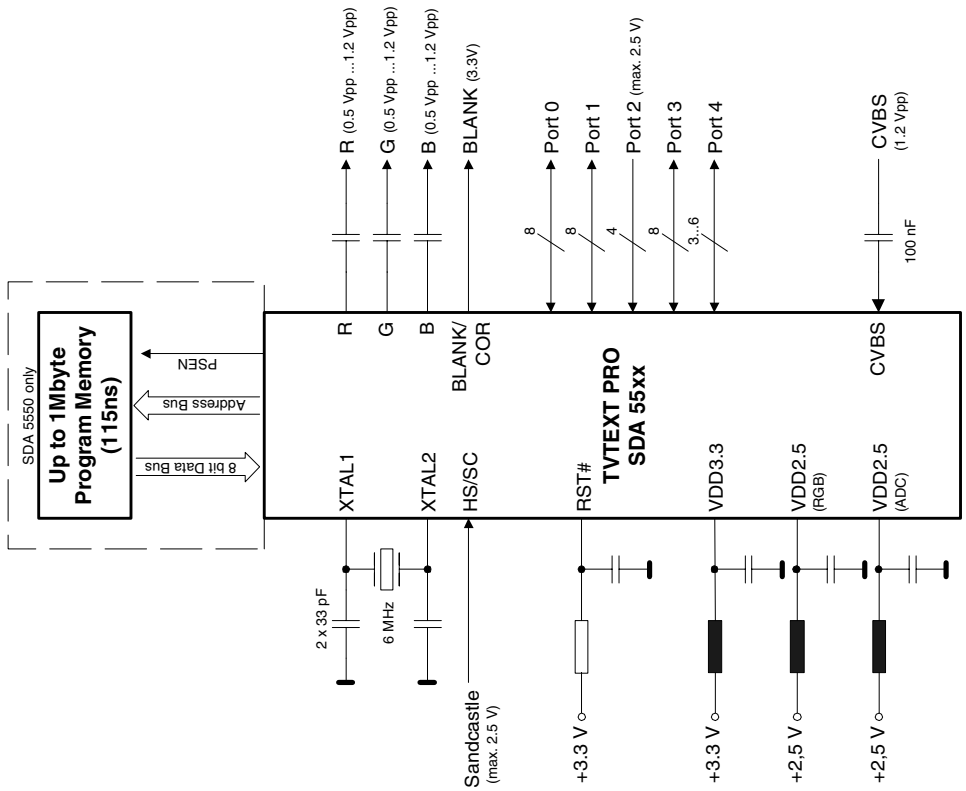


## SDA5550 (IC6001)

### Logic Symbol

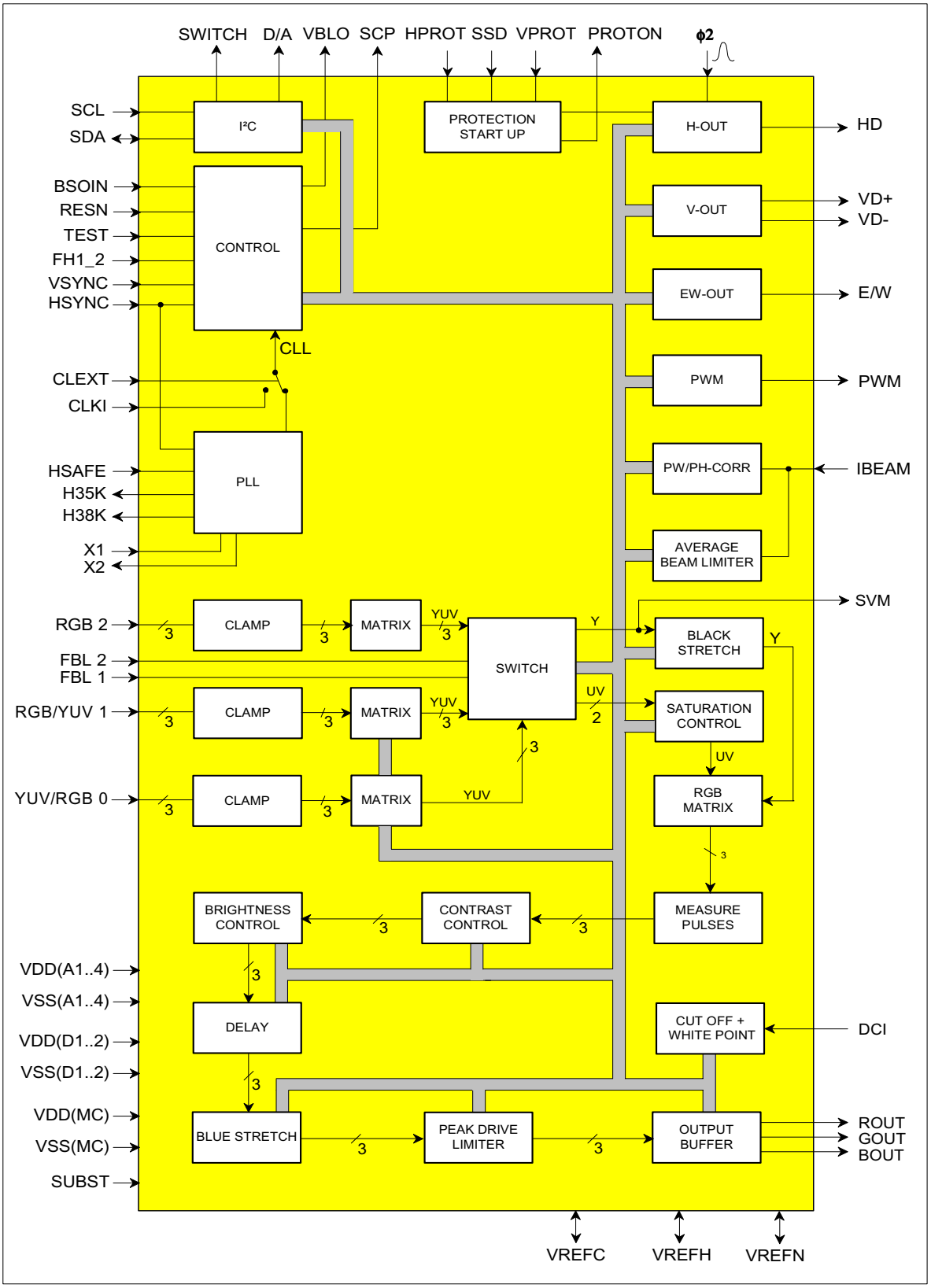



### Application Diagram



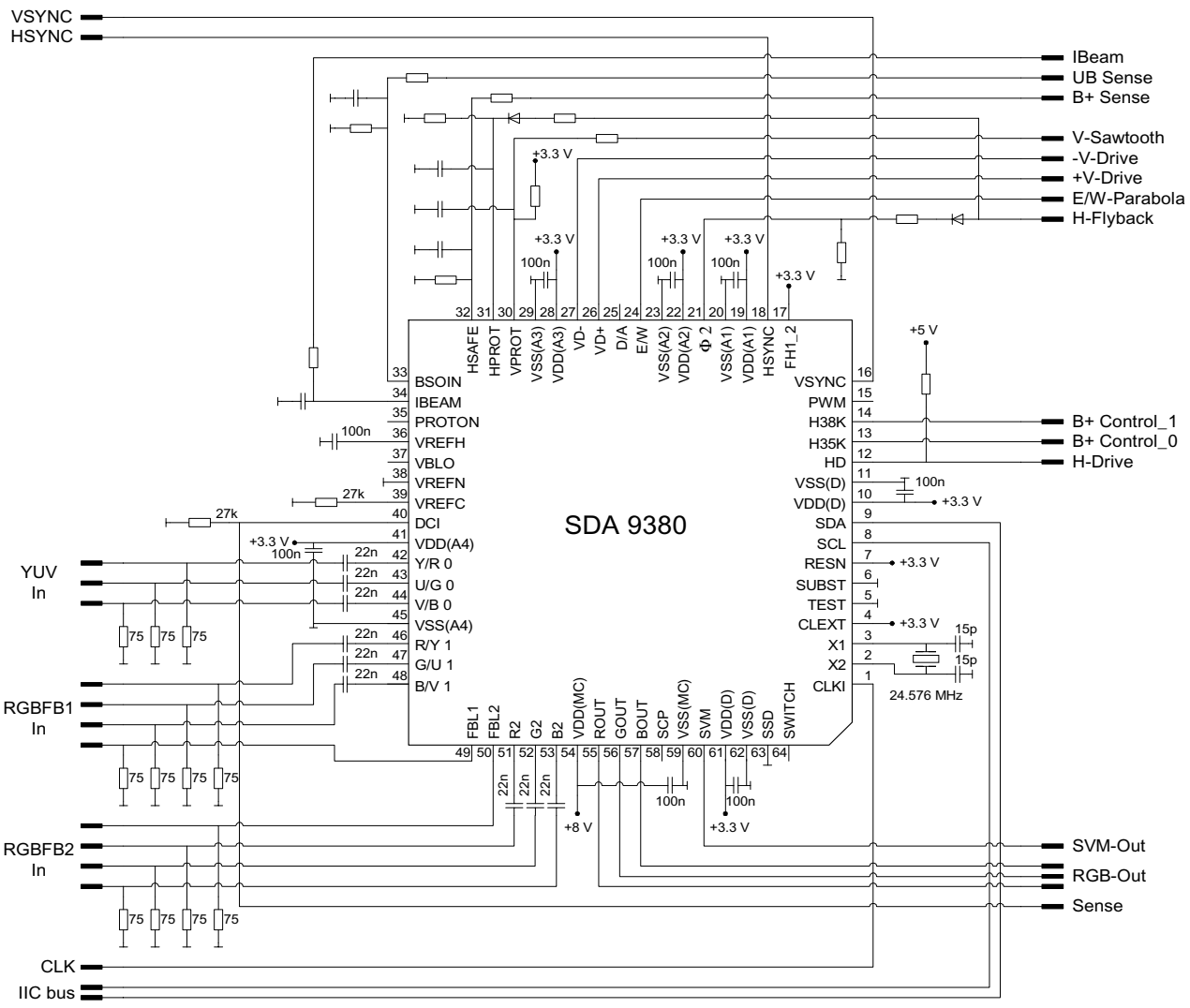
## SDA9380 (IC6006)

### Block Diagram

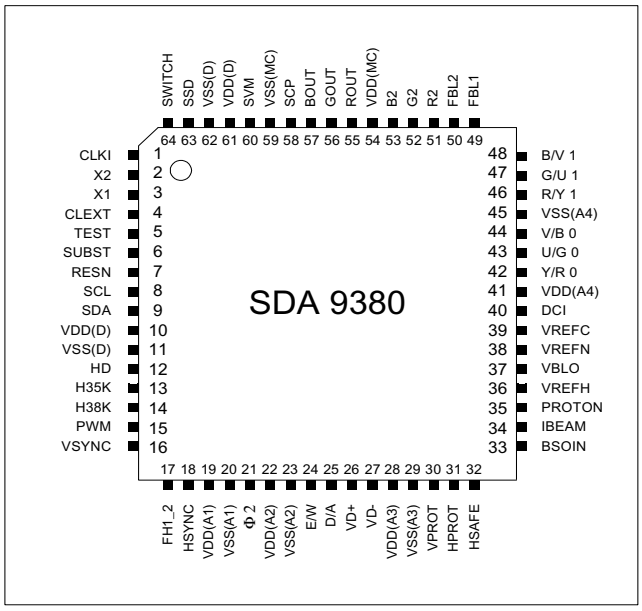


## SDA9380 (IC6006)

### Application Circuit Diagram




### Pin Configuration



## SDA9380 (IC6006)

### Pin Description

| Pin No. | Name | Type | Description |
|---|---|---|---|
| 1 | CLKI | I/TTL | Input for external line locked clock *) |
| 2 | X2 | Q | Reference oscillator output, Crystal |
| 3 | X1 | I | Reference oscillator input, Crystal |
| 4 | CLEXT | I/TTL | Switching between internal (L) and external clock (H) *) |
| 5 | TEST | I/TTL | Switching between normal operation (TEST=L) and test mode (TEST=H: pins 4, 12, 13, 14, 15, 17, 49, 50, 63, 64 are additional test pins) |
| 6 | SUBST | S | Substrate pin, has to be connected to ground whenever a power supply or signal is applied |
| 7 | RESN | I/TTL | Reset input, active Low |
| 8 | SCL | I | I²C Bus clock |
| 9 | SDA | IQ | I²C Bus data |
| 10 | VDD(D) | S | Digital supply |
| 11 | VSS(D) | S | Digital ground |
| 12 | HD | Q | Control signal output for H driver stage (open drain) |
| 13 | H35K | Q/TTL | Goes High when frequency of HSYNC is about 35kHz or more |
| 14 | H38K | Q/TTL | Goes High when frequency of HSYNC is about 38kHz |
| 15 | PWM | Q/TTL | Pulse width modulated control signal output |
| 16 | VSYNC | I/TTL | V-sync input |
| 17 | FH1_2 | I/TTL | Switching between $1f_H$ mode (L) and $2f_H$ mode (H) |
| 18 | HSYNC | I | HSYNC input (CLEXT=H: TTL; CLEXT=L: analog) *) |
| 19 | VDD(A1) | S | Analog supply |
| 20 | VSS(A1) | S | Analog ground |
| 21 | Φ2 | I | Line flyback for H-delay compensation |
| 22 | VDD(A2) | S | Analog supply |
| 23 | VSS(A2) | S | Analog ground |
| 24 | E/W | Q | Control signal output for East-West raster correction |
| 25 | D/A | Q | Output of an I²C Bus controlled DC voltage |
| 26 | VD+ | Q | Control signal output for DC coupled V-output stage |
| 27 | VD- | Q | Like VD+ |
| 28 | VDD(A3) | S | Analog supply |
| 29 | VSS(A3) | S | Analog ground |
| 30 | VPROT | I | Watching external V-output stage (input is the V-saw-tooth from feedback resistor) |
| 31 | HPROT | I | Watching EHT (input is e.g. H-flyback) |
| 32 | HSAFE | I | Watching B+ when frequency of HD has to be decreased |
| 33 | BSOIN | I | Input for starting Black Switch-Off |
| 34 | IBEAM | I | Input for a beam current dependent signal for stabilization of width, height and H-phase |
| 35 | PROTON | Q/TTL | Protection on (goes High after response of H- or V-protection) |

## SDA9380 (IC6006)

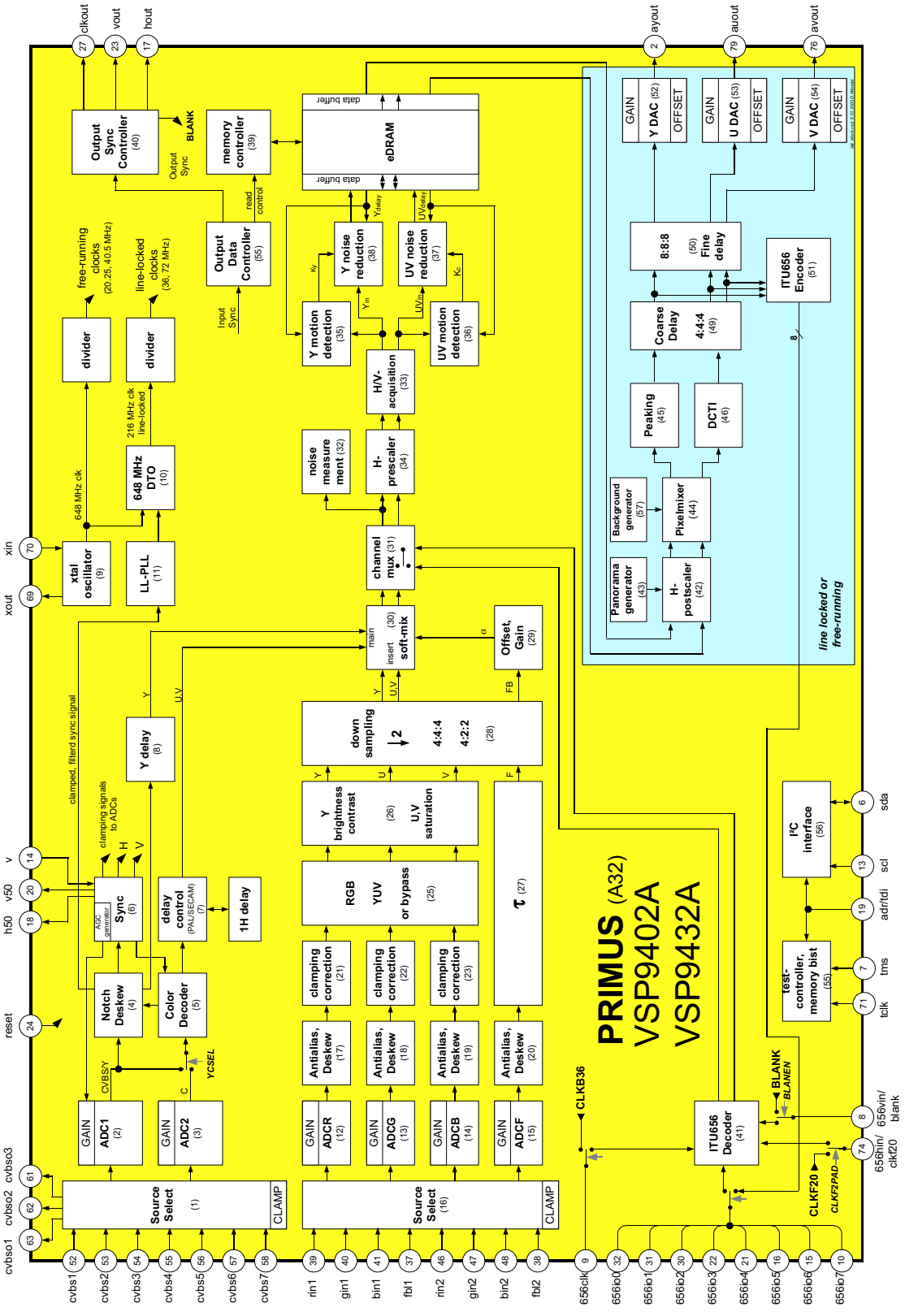
### Pin Description

| Pin No. | Name | Type | Description |
|---|---|---|---|
| 36 | VREFH | IQ | Reference voltage |
| 37 | VBLO | Q/TTL | Vertical blanking output |
| 38 | VREFN | IQ | Ground for VREFH |
| 39 | VREFC | I | Reference current input |
| 40 | DCI | I | Dark current input for cut off and white level control |
| 41 | VDD(A4) | S | Analog supply |
| 42 | Y/R 0 | I | Luminance or R input |
| 43 | U/G 0 | I | U signal or G input |
| 44 | V/B 0 | I | V signal or B input |
| 45 | VSS(A4) | S | Analog ground |
| 46 | R/Y 1 | I | First R or Y input for insertion |
| 47 | G/U 1 | I | First G or U input for insertion |
| 48 | B/V 1 | I | First B or V input for insertion |
| 49 | FBL1 | I | Fast blanking input for RGB1 |
| 50 | FBL2 | I | Fast blanking input for RGB2 |
| 51 | R2 | I | Second R input for insertion |
| 52 | G2 | I | Second G input for insertion |
| 53 | B2 | I | Second B input for insertion |
| 54 | VDD(MC) | S | Analog supply for RGB output stage |
| 55 | ROUT | Q | R output |
| 56 | GOUT | Q | G output |
| 57 | BOUT | Q | B output |
| 58 | SCP | Q | Blanking signal with H- and color burst component (V-component selectable by I²C Bus) |
| 59 | VSS(MC) | S | Analog ground for RGB output stage |
| 60 | SVM | Q | Luminance output for scan velocity modulation circuit |
| 61 | VDD(D) | S | Digital supply |
| 62 | VSS(D) | S | Digital ground |
| 63 | SSD | I/TTL | Disables softstart |
| 64 | SWITCH | Q/TTL | Output of an I²C Bus controlled switch (register 00, bit SW) |

*) The external clock mode can not be used with 18.75, 33.75kHz, 35kHz and 38kHz line frequency.

# VSP94x2A (IC6007)

## Block Diagram



## VSP9402A (IC6007)

### Pin List

| pin | 9402/32 | 9412/42 | I/O | 9402/32 | 9412/42 | remark |
|---|---|---|---|---|---|---|
| 52 | cvbs1 | | I | CVBS input | | analog input |
| 53 | cvbs2 | | I | CVBS input | | analog input |
| 54 | cvbs3 | | I | CVBS input | | analog input |
| 55 | cvbs4 | | I | CVBS input or Y1 | | analog input |
| 56 | cvbs5 | | I | CVBS input or C1 | | analog input |
| 57 | cvbs6 | | I | CVBS input or Y2 | | analog input |
| 58 | cvbs7 | | I | CVBS input or C2 | | analog input |
| 63 | cvbso1 | | O | CVBS output 1<br>CVBS output 2 | | analog output |
| 62 | cvbso2 | | O | | | analog output |
| 61 | cvbso3 | | O | CVBS output 3 | | analog output |
| 70 | xin | | I | Crystal connection 1 | | |
| 69 | xout | | O | Crystal connection 2 | | |
| 23 | vout | | O | vertical output | | single or double scan, dependent on version |
| 17 | hout | | O | horizontal output | | |
| 3 | vssdacy | i656i7 | S/I | DAC (Y) | 656 input (MSB) | |
| 2 | ayout | i656i6 | O/I | Y output | 656 input | |
| 1 | vdddacy | i656i5 | S/I | DAC (Y) | 656 input | |
| 80 | vssdacu | i656i4 | S/I | DAC (U) | 656 input | |
| 79 | auout | i656i3 | O/I | U output | 656 input | |
| 78 | vdddacu | i656i2 | S/I | DAC (U) | 656 input | |
| 77 | vssdacv | i656i1 | S/I | DAC (V) | 656 input | |
| 76 | avout | i656i0 | O/I | V output | 656 input (LSB) | |
| 75 | vdddacv | i656iclk | S/I | DAC (V) | 656 input clock | 27 MHz nom. |
| 39 | rin1 | | I | R or V in1 | | analog input |
| 40 | gin1 | | I | G or Y in1 | | analog input |
| 41 | bin1 | | I | B of U in1 | | analog input |
| 37 | fbl1 | | I | Fast Blank input 1 (H1) | | analog input |
| 46 | rin2 | | I | R or V in2 | | analog input |
| 47 | gin2 | | I | G or Y in2 | | analog input |

## VSP9402A (IC6007)

### Pin List

| pin | 9402/32 | 9412/42 | I/O | 9402/32 | 9412/42 | remark |
|---|---|---|---|---|---|---|
| 48 | bin2 | | I | B of U in2 | | analog input |
| 38 | fbl2 | | I | Fast Blank input 2 (H2) | | analog input |
| 14 | v[1)] | | I | vertical pulse for RGB input | | |
| 6 | sda | | I/O | I²C-Bus data | | |
| 13 | scl | | I | I²C-Bus clk | | |
| 7 | tms | | I | testmode select | | connect to vdd33 |
| 19 | adr / tdi | | I | I²C address / test data in | | |
| 24 | reset | | I | Reset input | | reset, when low |
| 27 | clkout | | O | Output clock | | 27 MHz |
| 59 | vdd33c | | S | supply voltage CVBS | | 3.3 V |
| 60 | vss33c | | S | supply voltage CVBS | | 0 V |
| 50 | vddac1 | | S | supply voltage CVBS1 | | 1.8 V |
| 51 | vssac1 | | S | supply voltage CVBS1 | | 0 V |
| 64 | vddac2 | | S | supply voltage CVBS2 | | 1.8 V |
| 65 | vssac2 | | S | supply voltage CVBS2 | | 0 V |
| 44 | vdd33rgb | | S | supply voltage RGB | | 3.3 V |
| 45 | vss33rgb | | S | supply voltage RGB | | 0 V |
| 42 | vddargb | | S | supply voltage for RGB | | 1.8 V |
| 43 | vssargb | | S | supply voltage for RGB | | 0 V |
| 35 | vddafbl | | S | supply voltage for FBL | | 1.8 V |
| 36 | vssafbl | | S | supply voltage for FBL | | 0 V |
| 68 | vddapll | | S | supply voltage for PLL | | 1.8 V |
| 66 | vddd1 | | S | supply voltage for digital | | 1.8 V digital |
| 67 | vssd1 | | S | supply voltage for digital | | 0 V digital |
| 5 | vddd2 | | S | supply voltage for digital | | 1.8 V digital |
| 4 | vssd2 | | S | supply voltage for digital | | 0 V digital |
| 28 | vddd3 | | S | supply voltage for DRAM | | 1.8 V digital |
| 29 | vssd3 | | S | supply voltage for digital | | 0 V digital |
| 34 | vddd4 | | S | supply voltage for digital | | 1.8 V digital |
| 33 | vssd4 | | S | supply voltage for digital | | 0 V digital |
| 72 | vddp1 | | S | supply voltage for digital | | 3.3 V pad |
| 73 | vssp1 | | S | supply voltage for digital | | 0 V pad |

## VSP9402A (IC6007)

### Pin List

| pin | 9402/32 | 9412/42 | I/O | 9402/32 | 9412/42 | remark |
|---|---|---|---|---|---|---|
| 12 | vddp2 | | S | supply voltage for digital | | 3.3 V pad |
| 11 | vssp2 | | S | supply voltage for digital | | 0 V pad |
| 25 | vddp3 | | S | supply voltage for digital | | 3.3 V pad |
| 26 | vssp3 | | S | supply voltage for digital | | 0 V pad |
| 71 | tclk | | I | testclock | | connect to vss |
| 18 | h50 ***2)*** | | O | Hout 50 Hz | | (with skew) |
| 20 | v50 ***3)*** | | O | Vout 50 Hz | | |
| 32 | 656io0 | | I/O | Digital input / output | | LSB |
| 31 | 656io1 | | I/O | Digital input / output | | |
| 30 | 656io2 | | I/O | Digital input / output | | |
| 22 | 656io3 | | I/O | Digital input / output | | |
| 21 | 656io4 | | I/O | Digital input / output | | |
| 16 | 656io5 | | I/O | Digital input / output | | |
| 15 | 656io6 | | I/O | Digital input / output | | |
| 10 | 656io7 | | I/O | Digital input / output | | MSB |
| 9 | 656clk | | I/O | Digital input / output clock | | |
| 74 | 656hin/clkf20 | | I/O | separate H input for 656 / 20.25 clock output | | |
| 8 | 656vin/blank[4)] | | I/O | separate V input for 656 / BLANK output | | |
| 49 | vssd5 ***5)*** | | S | supply voltage for digital | | 0V |

1) In VSP94xxB and VSP94xxC this pin is shared by v and intr (C800 controller output)

2) In VSP94xxB and VSP94xxC this pin is shared by h50 and irq (Data-slicer-interrupt)

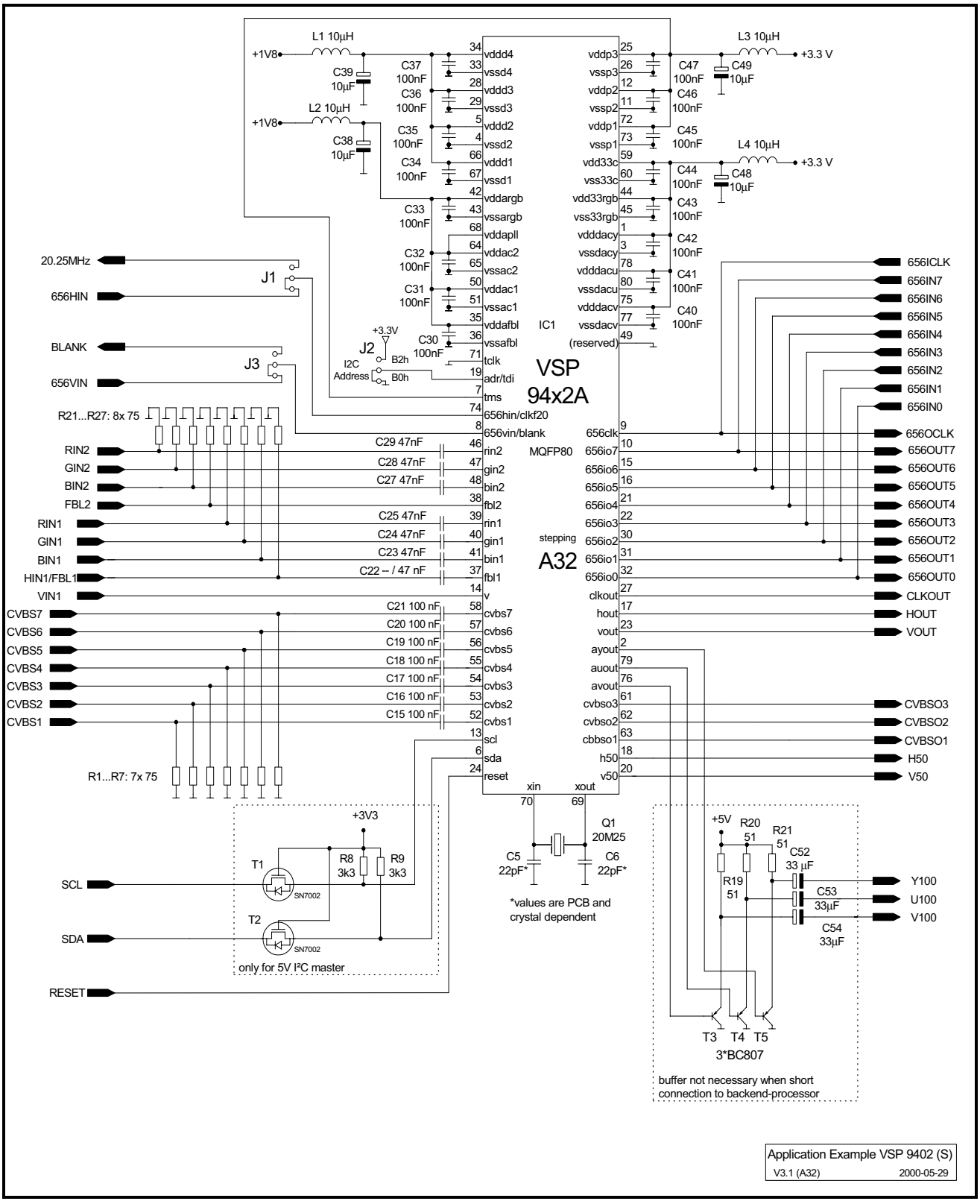
3) In VSP94xxB and VSP94xxC this pin is shared by v50 and blank

**4) In 9402 A31 (and higher) and in VSP94xxA/B/C, this pin is shared by 656vin and blank**

5) This pin is not used and not bonded in VSP94xxA. The use of this pin in VSP94xxB/C will be $V_{SS}$. For upgradability it is recommended to not leave this pin open.

## VSP9402A (IC6007)

### Application Circuit (Example)



# PARTS LISTING

## REPLACEMENT PARTS

Replacement parts which have special safety characteristics are identified in this manual. Electrical components having such features are identified by ⚠ in the Replacement Parts Listing.
The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended is not permitted.
Replacement parts not shown in this service manual may create shock fire, or other hazards.

## HOW TO ORDER REPLACEMENT PARTS

To have your order completed promptly and correctly please supply the following information.

1. MODEL NUMBER 2. REF. NO.
3. PART NO. 4. DESCRIPTION
5. CODE 6. QUANTITY

MARK *: SPARE PARTS DELIVERY SECTION

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | | | **PICTURE TUBE** | | | |
| ⚠ | | VB66EAK0714*N | 28" A66EAK071X44 100HZ PHIL.BLACK 44% GT | S | CQ | CU |
| ⚠ | | CCILG0404BMV0 | DEG COIL SET NUCTOR 28" | S | AM | AV |
| | | | **PRINTED WIRING BOARDS (Not replacement item)** | | | |
| | PWB-A | DUNTK7351CJV1 | ADJUST CHASSIS 28JS74S | S | -- | -- |
| | PWB-B | DUNTK7352BMV1 | UNIT CRT INS HAND 28JS74S | S | -- | -- |
| | PWB-C | DUNTK7353BMV1 | MOD.100Hz FLICKER FREE TVTEXT PRO28JS74S | S | -- | -- |
| | **PWB-A** | | **MOTHER UNIT** | | | |
| | | | **TUNER** | | | |
| | TH 0201 | VTUCTF5511+++ | TUNER THOMSON | S | AN | AZ |
| | | | **INTEGRATED CIRCUITS** | | | |
| | IC 0201 | RH-IX1799BMZZ | IC TDA9885 PHILIPS | S | AE | AP |
| | IC 0202 | RH-IX0037CEZZ | IC UPC574J 33V NEC | S | AF | AD |
| | IC 0301 | VHITDA7480/-1 | IC TDA7480 THOMSON | S | AF | AK |
| | IC 0302 | VHITDA7480/-1 | IC TDA7480 THOMSON | S | AF | AK |
| | IC 0303 | RH-IX1851BMZZ | IC MSP3400G-QA-B8 MICRONAS | S | AN | AZ |
| | IC 0304 | VHIM5218L//-1 | IC M5218L | S | AA | AD |
| | IC 0501 | RH-IX1786BMZZ | C.I. TDA 7480L THOMSON | S | AD | AL |
| | IC 0502 | VHIBA4558//-1 | IC BA4558 SMD | S | AD | AC |
| | IC 0503 | VHIBA4558//-1 | IC BA4558 SMD | S | AD | AC |
| | IC 0601 | VHIBA4558//-1 | IC BA4558 SMD | S | AD | AC |
| | IC 0701 | RH-IX1556BMZZ | IC BA10393 S0P8 SMD ROHM | S | AC | AD |
| | IC 0702 | RH-IX1674BMZZ | IC KA431AZ SAMSUNG | S | AA | AD |
| ⚠ | IC 0703 | RH-FX0113BMZZ | OPTOCOUPLER TCET1103G VISHAY | S | AA | AC |
| | IC 0704 | RH-IX1846BMZZ | IC L4931CV33 ST | S | AB | AF |
| | IC 0705 | RH-IX1674BMZZ | IC KA431AZ SAMSUNG | S | AA | AD |
| | IC 0706 | RH-IX1846BMZZ | IC L4931CV33 ST | S | AB | AF |
| | IC 0708 | RH-IX1878BMZZ | IC LM317T ONSEMI | S | AB | AE |
| | IC 0709 | RH-FX0111BMZZ | OPTOCOUPLER TLP165J TOSHIBA | S | AB | AE |
| | | | **TRANSISTORS** | | | |
| | Q 0201 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0305 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0306 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0403 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0406 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0407 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0502 | VS2SA1905Y+-1 | TRT 2SA1905Y TOSHIBA VERTICAL FLYBACK | S | AB | AF |
| | Q 0503 | RH-TX0239BMZZ | TRT SUD15N06-90L SILICONIX | S | AA | AE |
| | Q 0505 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0601 | RH-TX0242BMZZ | TRT BU2527DX PHILIPS | S | AE | AN |
| | Q 0602 | RH-TX0236BMZZ | TRT 2SK2843 TOSHIBA | S | AE | AN |
| | Q 0603 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0604 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0605 | RH-TX0192BMZZ | TRT KSC2500 SAMSUNG | S | AB | AC |
| | Q 0606 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0607 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0608 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0609 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0611 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0612 | RH-TXA002WJZZ | TRT 2SK2882 MOS TOSHIBA | S | AD | AK |
| | Q 0613 | RH-TX0244BMZZ | TRT 2SK2839 THOSIBA | S | AC | AF |
| | Q 0614 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0701 | RH-TX0245BMZZ | TRT 2SK2543 TOSHIBA | S | AC | AG |
| | Q 0702 | RH-TX0245BMZZ | TRT 2SK2543 TOSHIBA | S | AC | AG |
| | Q 0703 | RH-TX0245BMZZ | TRT 2SK2543 TOSHIBA | S | AC | AG |
| | Q 0704 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0705 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0706 | RH-TX0230BMZZ | TRT BC557C PHILIPS | S | AA | AA |
| | Q 0707 | RH-SX0003BMZZ | TRIAC BT134W-600 PHILIPS | S | AA | AE |
| | Q 0708 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0709 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0710 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0712 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0713 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0714 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0720 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0721 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | Q 0723 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0724 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0797 | RH-TXA003WJZZ | TRT 2SK2232 MOS TOSHIBA | S | AC | AH |
| | Q 0901 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 0902 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 1002 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 1003 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 1004 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | | | **DIODES** | | | |
| | D 0204 | RH-EX0409BMZZ | ZENER DIODE BZX79C5V6 | S | AA | AA |
| | D 0205 | RH-EX0409BMZZ | ZENER DIODE BZX79C5V6 | S | AA | AA |
| | D 0302 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0303 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0304 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0305 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0306 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0309 | RH-EX0423BMZZ | ZENER DIODE BZX79C22V | S | AA | AB |
| | D 0403 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0404 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0405 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0406 | RH-EX0543BMZZ | ZENER DIODE TZMC4V3 TFK SMD | S | AA | AA |
| | D 0407 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0408 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0409 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0410 | RH-EX0549BMZZ | ZENER DIODE TZMC7V5 TFK SMD | S | AA | AA |
| | D 0411 | RH-EX0546BMZZ | ZENER DIODE TZMC5V6 TFK SMD | S | AA | AA |
| | D 0420 | RH-EX0546BMZZ | ZENER DIODE TZMC5V6 TFK SMD | S | AA | AA |
| | D 0421 | RH-EX0544BMZZ | ZENER DIODE TZMC4V7 TFK SMD | S | AA | AA |
| | D 0422 | RH-EX0556BMZZ | ZENER DIODO TZMC15 TFK SMD | S | AA | AA |
| | D 0431 | RH-EX0554BMZZ | ZENER DIODE TZMC12 TFK SMD | S | AA | AA |
| | D 0432 | RH-EX0554BMZZ | ZENER DIODE TZMC12 TFK SMD | S | AA | AA |
| | D 0433 | RH-EX0554BMZZ | ZENER DIODE TZMC12 TFK SMD | S | AA | AA |
| | D 0434 | RH-EX0554BMZZ | ZENER DIODE TZMC12 TFK SMD | S | AA | AA |
| | D 0437 | RH-EX0554BMZZ | ZENER DIODE TZMC12 TFK SMD | S | AA | AA |
| | D 0438 | RH-EX0554BMZZ | ZENER DIODE TZMC12 TFK SMD | S | AA | AA |
| | D 0507 | RH-EX0562BMZZ | ZENER DIODE TZMC27 TFK SMD | S | AA | AA |
| | D 0508 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0510 | RH-DX0631BMZZ | DIODE 1N4935 G.SEMICONDUCTOR | S | AA | AA |
| | D 0511 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0512 | RH-EX0564BMZZ | ZENER DIODE TZMC33 TFK SMD | S | AA | AA |
| | D 0604 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0605 | RH-DXA011WJZZ | DIODE SB360 GENERAL | S | AA | AC |
| | D 0606 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0607 | RH-DX0634BMZZ | DIODE RGP02-16E G.SEMICONDUCTOR | S | AA | AB |
| | D 0608 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0609 | RH-DX0518BMZZ | DIODE 1N5819 G.INSTRUMENTS | S | AA | AB |
| | D 0610 | RH-DX0590BMZZ | DIODE MBR1100RL MOTOROLA | S | AD | AE |
| | D 0611 | RH-DX0632BMZZ | DIODE 1N4936 G.SEMICONDUCTOR | S | AA | AA |
| | D 0612 | RH-DX0631BMZZ | DIODE 1N4935 G.SEMICONDUCTOR | S | AA | AA |
| | D 0613 | RH-DX0631BMZZ | DIODE 1N4935 G.SEMICONDUCTOR | S | AA | AA |
| | D 0615 | RH-EX0560BMZZ | ZENER DIODE TZMC22 TFK SMD | S | AA | AA |
| | D 0616 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0617 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0618 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0619 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0620 | RH-EX0421BMZZ | ZENER DIODE BZX79C18V | S | AA | AA |
| | D 0622 | RH-EX0554BMZZ | ZENER DIODE TZMC12 TFK SMD | S | AA | AA |
| | D 0623 | RH-EX0544BMZZ | ZENER DIODE TZMC4V7 TFK SMD | S | AA | AA |
| | D 0624 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0625 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0631 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | D 0633 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0636 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0637 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0641 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0642 | RH-EX0568BMZZ | ZENER DIODE TZMC47 TFK SMD | S | AA | AA |
| | D 0644 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0701 | RH-DX0641BMZZ | DIODE GPP20J GS | S | AA | AA |
| | D 0702 | RH-DX0641BMZZ | DIODE GPP20J GS | S | AA | AA |
| | D 0703 | RH-DX0641BMZZ | DIODE GPP20J GS | S | AA | AA |
| | D 0704 | RH-DX0641BMZZ | DIODE GPP20J GS | S | AA | AA |
| | D 0707 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0708 | RH-EX0561BMZZ | ZENER DIODE TZMC24 TFK SMD | S | AA | AA |
| | D 0711 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0712 | RH-DX0618BMZZ | DIODE BYV28-600 VISHAY PREFOR 17.5MM | S | AA | AE |
| | D 0713 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0714 | RH-EX0548BMZZ | ZENER DIODE TZMC6V8 TFK SMD | S | AA | AA |
| | D 0715 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0716 | RH-EX0584BMZZ | ZENER DIODE TZMB6V2 TFK SMD 2% | S | AA | AA |
| | D 0717 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0718 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0719 | RH-DX0621BMZZ | DIODE BYV27/100 VISHAY | S | AA | AC |
| | D 0720 | RH-DX0643BMZZ | DIODE SF26 ACPA | S | AA | AC |
| | D 0721 | RH-DX0643BMZZ | DIODE SF26 ACPA | S | AA | AC |
| | D 0722 | RH-DX0605BMZZ | DIODE MBR340RL MOTOROLA | S | AA | AE |
| | D 0723 | RH-EX0550BMZZ | ZENER DIODE TZMC8V2 TFK SMD | S | AA | AA |
| | D 0725 | RH-EX0561BMZZ | ZENER DIODE TZMC24 TFK SMD | S | AA | AA |
| | D 0727 | RH-DX0621BMZZ | DIODE BYV27/100 VISHAY | S | AA | AC |
| | D 0728 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0729 | RH-DX0579BMZZ | DIODE 1N4937 ACPA | S | AA | AB |
| | D 0730 | RH-EX0584BMZZ | ZENER DIODE TZMB6V2 TFK SMD 2% | S | AA | AA |
| | D 0731 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0732 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0733 | RH-EX0584BMZZ | ZENER DIODE TZMB6V2 TFK SMD 2% | S | AA | AA |
| | D 0734 | RH-EX0424BMZZ | ZENER DIODE BZX79C24V | S | AA | AA |
| | D 0735 | RH-EX0424BMZZ | ZENER DIODE BZX79C24V | S | AA | AA |
| | D 0736 | RH-DX0579BMZZ | DIODE 1N4937 ACPA | S | AA | AB |
| | D 0737 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0740 | RH-DX0577BMZZ | DIODE 1N4935 ACPA | S | AB | AE |
| | D 0741 | RH-EX0543BMZZ | ZENER DIODE TZMC4V3 TFK SMD | S | AA | AA |
| | D 0743 | RH-EX0561BMZZ | ZENER DIODE TZMC24 TFK SMD | S | AA | AA |
| | D 0745 | RH-DX0643BMZZ | DIODE SF26 ACPA | S | AA | AC |
| | D 0746 | RH-DX0045BMZZ | DIODE 1N4148 | S | AA | AA |
| | D 0747 | RH-EX0544BMZZ | ZENER DIODE TZMC4V7 TFK SMD | S | AA | AA |
| | D 0748 | RH-EX0537BMZZ | ZENER DIODE TZMC2V4 TFK SMD | S | AA | AA |
| | D 0750 | RH-EX0552BMZZ | ZENER DIODE TZMC10 TFK SMD | S | AA | AA |
| | D 0752 | RH-SX0004BMZZ | DIAC BR100/03 PHILIPS | S | AA | AC |
| | D 0753 | RH-DX0643BMZZ | DIODE SF26 ACPA | S | AA | AC |
| | D 0798 | RH-DX0621BMZZ | DIODE BYV27/100 VISHAY | S | AA | AC |
| | D 0901 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 0902 | RH-EX0554BMZZ | ZENER DIODE TZMC12 TFK SMD | S | AA | AA |
| | D 0903 | RH-EX0421BMZZ | ZENER DIODE BZX79C18V | S | AA | AA |
| | D 1001 | RH-PX0105BMZZ | LED SPB-25MVW ROHM | S | AC | AC |
| | D 1002 | RH-PX0105BMZZ | LED SPB-25MVW ROHM | S | AC | AC |
| | D 1017 | RH-EX0480BMZZ | ZENER DIODE BZX79 B5V1 2% | S | AA | AA |
| | D 1018 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 1019 | RH-EX0544BMZZ | ZENER DIODE TZMC4V7 TFK SMD | S | AA | AA |
| | D 1020 | RH-EX0544BMZZ | ZENER DIODE TZMC4V7 TFK SMD | S | AA | AA |
| | D 1021 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | | | **PACKAGED CIRCUITS** | | | |
| | X 0201 | RCRSB0201BMZZ | CRYSTAL 4 MHZ | S | AK | AM |
| | X 0301 | RCRSB0203BMZZ | CRYSTAL 18,432 MHZ | S | AD | AG |
| | POR701 | RMPTP0001BMZZ | PTC B59250-C1080-B70 | S | AA | AD |
| | | | **COILS** | | | |
| | L 0202 | VP-DF120K0000 | PEAK COIL 12UH 10% | S | AA | AA |
| | L 0203 | VP-CF6R8K0000 | PEAK COIL 6.8UH 10% | S | AA | AA |
| | L 0301 | VP-DF100K0000 | PEAK COIL 10UH 10% | S | AA | AA |
| | L 0302 | VP-DF3R3K0000 | PEAK COIL 3,3UH 10% | S | AB | AB |
| | L 0315 | VP-CF3R3K0000 | PEAK COIL 3.3UH 10% | S | AB | AB |
| | L 0316 | VP-CF3R3K0000 | PEAK COIL 3.3UH 10% | S | AB | AB |
| | L 0318 | VP-CF220K0000 | PEAK COIL 22UH 10% | S | AA | AA |
| | L 0319 | VP-CF220K0000 | PEAK COIL 22UH 10% | S | AA | AA |
| | L 0350 | VP-CF3R3K0000 | PEAK COIL 3.3UH 10% | S | AB | AB |
| | L 0351 | VP-CF3R3K0000 | PEAK COIL 3.3UH 10% | S | AB | AB |
| | L 0352 | RCILP0195CEZZ | COIL LHL08TB680K TAIYO YUDEN | S | AA | AB |
| | L 0353 | RCILP0195CEZZ | COIL LHL08TB680K TAIYO YUDEN | S | AA | AB |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | L 0501 | RCILP0271BMZZ | COIL BC-400/K DIEMEN | S | AD | AG |
| | L 0601 | VP-CF3R3K0000 | PEAK COIL 3.3UH 10% | S | AB | AB |
| | L 0602 | VP-CF3R3K0000 | PEAK COIL 3.3UH 10% | S | AB | AB |
| | L 0605 | RCILZA016WJZZ | LIN. COIL 3128 138 5615.2 PHILIPS GA200 | S | AC | AG |
| | L 0606 | VP-DF3R3K0000 | PEAK COIL 3,3UH 10% | S | AB | AB |
| | L 0609 | RCILPA052WJZZ | COIL LHL08TB1R5M TAIYO YUDEN | S | AA | AB |
| ⚠ | L 0701 | RCILF0108BMZZ | COIL 472839.00 THOMSON | S | AF | AL |
| | L 0702 | VP-CF3R3K0000 | PEAK COIL 3.3UH 10% | S | AB | AB |
| | L 0705 | RCILP0177CEZZ | COIL LHL08TB330K TAIYO YUDEN | S | AA | AB |
| | | | **CERAMIC FILTERS** | | | |
| | SF 0201 | RFILC0274BMZZ | SAW FILTER G1984 SIEMENS | S | AF | AK |
| | SF 0202 | RFILC0286BMZZ | FILTER K9356M SIEMENS | S | AC | AG |
| | | | **TRANSFORMERS** | | | |
| ⚠ | T 0601 | RTRNF2087BMZZ | FBT DIEMEN CHASSIS GA-200 | S | AQ | BB |
| ⚠ | T 0701 | RTRNZ0591BMZZ | CHOPPER CHASSIS GA-100 DIEMEN | S | AE | AP |
| | T 0702 | RTRNZ0586BMZZ | BOOST INDUCTOR PFC HR 6R4 15020-00 | S | AD | AM |
| | | | **CAPACITORS** | | | |
| | C 0201 | RC-FZ9474BMNJ | POL FILM C 470NF 5% 63V | S | AB | AD |
| | C 0202 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0203 | VCKYCY1HF223Z | SC CAPACITOR 0.022UF 50V TAPED | S | AA | AA |
| | C 0204 | VCEA0A1CW107M | ELEC C 100UF 20% 16V | S | AA | AA |
| | C 0205 | RC-FZ9224BMNJ | POL FILM C 220NF 5% 63V | S | AA | AC |
| | C 0206 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| | C 0207 | VCKYCY1HB152K | GRM39B 152K 50 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0210 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | C 0211 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| | C 0212 | VCEA0A1AW477M | E.CAPACITOR 470UF 10V 6.3x11 | S | AA | AA |
| | C 0213 | VCCCCY1HH270J | S. CHIP CAP 27PF/50V (TAPED) | S | AA | AA |
| | C 0214 | VCCCCY1HH221J | S. CHIP CAP 220PF/50V TAPED | S | AA | AA |
| | C 0215 | VCEA0A1HW105M | ELEC C 1UF 20% 50V | S | AA | AA |
| | C 0218 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| | C 0219 | VCKYCY1HB391K | S. CHIP CAP 390PF/50V TAPED | S | AA | AA |
| | C 0221 | RC-FZ9334BMNJ | POL FILM C 330NF 5% 63V | S | AA | AC |
| | C 0222 | VCEAGA0JW107M | ELEC C 100UF 20% 6,3V | S | AA | AA |
| | C 0301 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| | C 0302 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| | C 0303 | VCEA0A1CW106M | ELEC C 10UF 20% 16V | S | AA | AA |
| | C 0304 | VCEA0A1CW106M | ELEC C 10UF 20% 16V | S | AA | AA |
| | C 0305 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0306 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0307 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0308 | VCEA0A1HW335M | ELEC C 3,3UF 20% 50V | S | AA | AA |
| | C 0309 | VCEA0A1AW337M | ELEC C 330UF 20% 10V | S | AA | AA |
| | C 0310 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0311 | VCEA0A1CW106M | ELEC C 10UF 20% 16V | S | AA | AA |
| | C 0312 | VCEA0A1CW106M | ELEC C 10UF 20% 16V | S | AA | AA |
| | C 0313 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| | C 0316 | RC-FZ9334BMNJ | POL FILM C 330NF 5% 63V | S | AA | AC |
| | C 0317 | RC-FZ9334BMNJ | POL FILM C 330NF 5% 63V | S | AA | AC |
| | C 0318 | RC-FZ9334BMNJ | POL FILM C 330NF 5% 63V | S | AA | AC |
| | C 0319 | RC-FZ9334BMNJ | POL FILM C 330NF 5% 63V | S | AA | AC |
| | C 0320 | VCEA0A1CW106M | ELEC C 10UF 20% 16V | S | AA | AA |
| | C 0321 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0322 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0323 | VCCCCY1HH470J | S. CHIP CAP 47PF/50V (TAPED) | S | AA | AA |
| | C 0324 | VCCCCY1HH470J | S. CHIP CAP 47PF/50V (TAPED) | S | AA | AA |
| | C 0325 | VCCCCY1HH470J | S. CHIP CAP 47PF/50V (TAPED) | S | AA | AA |
| | C 0326 | VCCCCY1HH5R0C | S. CAPACITOR TAPED | S | AA | AA |
| | C 0327 | VCCCCY1HH5R0C | S. CAPACITOR TAPED | S | AA | AA |
| | C 0328 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0329 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0330 | VCEA0A1AW337M | ELEC C 330UF 20% 10V | S | AA | AA |
| | C 0337 | VCCCCY1EH681J | GRM39CK 681J 25 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0338 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0340 | VCCCCY1EH681J | GRM39CK 681J 25 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0341 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0343 | VCCCCY1EH681J | GRM39CK 681J 25 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0344 | VCCCCY1EH681J | GRM39CK 681J 25 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0347 | VCKYCY1HB222K | S CHIP CAPACITOR 0.0022UF/50V TAPED | S | AA | AA |
| | C 0348 | VCKYCY1HB222K | S CHIP CAPACITOR 0.0022UF/50V TAPED | S | AA | AA |
| | C 0350 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0351 | VCEA0A1EW227M | ELEC C 220UF 20% 25V | S | AA | AA |
| | C 0352 | RC-FZ9104BMNJ | POL FILM C 100NF 5% 63V | S | AA | AB |
| | C 0353 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | C 0354 | VCCCCY1HH101J | S. CHIP CAP 100PF/50V TAPED | S | AA | AA |
| | C 0356 | RC-FZ9334BMNJ | POL FILM C 330NF 5% 63V | S | AA | AC |
| | C 0357 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0358 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0359 | VCKYCY1HB472K | S.CHIP CAP 4700PF/50V T | S | AA | AA |
| | C 0360 | VCKYCY1HB561K | S. CAPACITOR 560PF/50V | S | AA | AA |
| | C 0361 | RC-FZ9474BMNJ | POL FILM C 470NF 5% 63V | S | AB | AD |
| | C 0362 | VCEA0A1HW474M | ELEC C 0,47UF 20% 50V | S | AA | AA |
| | C 0363 | VCEA0A1EW227M | ELEC C 220UF 20% 25V | S | AA | AA |
| | C 0364 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0365 | VCEA0A1EW227M | ELEC C 220UF 20% 25V | S | AA | AA |
| | C 0366 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0367 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0368 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0369 | VCCCCY1HH101J | S. CHIP CAP 100PF/50V TAPED | S | AA | AA |
| | C 0370 | RC-FZ9334BMNJ | POL FILM C 330NF 5% 63V | S | AA | AC |
| | C 0371 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0372 | VCEA0A1HW474M | ELEC C 0,47UF 20% 50V | S | AA | AA |
| | C 0373 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0374 | VCKYCY1HB472K | S.CHIP CAP 4700PF/50V T | S | AA | AA |
| | C 0375 | VCKYCY1HB561K | S. CAPACITOR 560PF/50V | S | AA | AA |
| | C 0376 | RC-FZ9474BMNJ | POL FILM C 470NF 5% 63V | S | AB | AD |
| | C 0377 | VCEA0A1HW105M | ELEC C 1UF 20% 50V | S | AA | AA |
| | C 0378 | VCEA0A1EW227M | ELEC C 220UF 20% 25V | S | AA | AA |
| | C 0379 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0380 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| | C 0381 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| | C 0382 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0383 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0384 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0385 | VCKYCY1CF224Z | S.C.CAP 0.22UF 16V TAPED | S | AA | AA |
| | C 0386 | VCKYCY1CF224Z | S.C.CAP 0.22UF 16V TAPED | S | AA | AA |
| | C 0387 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0403 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| | C 0417 | VCEA0A1CW476M | ELEC C 47UF 20% 16V | S | AA | AA |
| | C 0422 | VCEA0A1AW227M | ELEC C 220UF 20% 10V | S | AA | AA |
| | C 0502 | VCKYCY1CF474Z | GRM39F 474Z 16 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0503 | VCCCCY1HH101J | S. CHIP CAP 100PF/50V TAPED | S | AA | AA |
| | C 0504 | RC-FZ9224BMNJ | POL FILM C 220NF 5% 63V | S | AA | AC |
| | C 0505 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0506 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0507 | VCKYCY1HB472K | S.CHIP CAP 4700PF/50V T | S | AA | AA |
| | C 0508 | VCKYCY1HB561K | S. CAPACITOR 560PF/50V | S | AA | AA |
| | C 0510 | VCKYCY1CF334Z | S. CHIP CAP. 0.33UF/16V TAPED | S | AA | AA |
| | C 0511 | VCEA0A1HW225M | ELEC C 2,2UF 20% 50V | S | AA | AA |
| | C 0520 | VCEA0A1VW477M | ELEC C 470uF 35V | S | AA | AB |
| | C 0522 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0524 | RC-FZ9683BMNJ | POL FILM C 68NF 5% 63V | S | AA | AB |
| | C 0525 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| | C 0526 | VCEA0A1EW108M | ELEC C 1000UF 20% 25V | S | AA | AC |
| | C 0534 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0535 | VCEA0A1VW108M | ELEC C 1000UF 20% 35V | S | -- | -- |
| | C 0540 | VCKYCY1HB332K | s.chip cap 3300pf /50v | S | AA | AA |
| | C 0541 | VCCCCY1HH331J | GRM39CK 331J 50 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0601 | RC-FZA076WJZZ | CPP 12NF 2KV B32683-A2123J EPCOS | S | AB | AE |
| | C 0602 | RC-FZ0242BMZZ | PP C 6N8 630V 15mm 2222 375 14682 BC | S | AA | AC |
| | C 0603 | RC-FZ9473BMNJ | POL FILM C 47NF 5% 63V | S | AA | AC |
| | C 0604 | VCCCCY1HH391J | GRM39CK 391J 50 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0605 | VCKYCY1HB222K | S CHIP CAPACITOR 0.0022UF/50V TAPED | S | AA | AA |
| | C 0606 | VCKYCY1AB224K | GRM39B 224K 10 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0607 | VCCCCY1HH220J | S. CHIP CAP 22PF/50V TAPED | S | AA | AA |
| | C 0608 | VCKYTV1HB104K | CERAM C 100NF 50V 2125SMD | S | AA | AA |
| | C 0609 | RC-EZ0729CEZZ | ELEC C 470NF 10V RUBYCON 10YXG470MKC | S | AA | AC |
| | C 0610 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0612 | VCCCCY1EH681J | GRM39CK 681J 25 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0613 | RC-FZ9474BMNJ | POL FILM C 470NF 5% 63V | S | AB | AD |
| | C 0617 | RC-FZ0240BMZZ | CPP 180NF 400V 15mm B32652-A4184-J EPCOS | S | AA | AC |
| | C 0618 | VCEA0A1CW227M | E CAPACITOR 220UF 16V 6.3x11 | S | AA | AB |
| | C 0619 | RC-FZ0198BMZZ | POL C 100NF 10% 250V 222236545104 BC | S | AA | AB |
| | C 0620 | VCKYPA2HB222K | CERAM C 2,2NF 10% 500V | S | AA | AA |
| | C 0621 | VCKYPA2HB222K | CERAM C 2,2NF 10% 500V | S | AA | AA |
| | C 0624 | RC-FZ0241BMZZ | CPP 220NF 400V 15mm B32652-A4224-J EPCOS | S | AA | AC |
| | C 0625 | VCKYPA2HB102K | CERAM C 1NF 10% 500V | S | AA | AA |
| | C 0626 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| | C 0627 | VCCSPA2HL560K | CERAM C 56PF 10% 500V | S | AA | AA |
| | C 0628 | RC-FZ0216BMZZ | POL C 330PF 2KV 222237544331 BC | S | AA | AC |
| | C 0629 | VCKYCY1HF683Z | GRM39F 683Z 50 (1608)SMD CAPACITOR | S | AA | AA |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | C 0630 | RC-FZ9223BMNJ | POL FILM C 22NF 5% 63V | S | AA | AB |
| | C 0631 | VCKYCY1HB222K | S CHIP CAPACITOR 0.0022UF/50V TAPED | S | AA | AA |
| | C 0632 | VCCCCY1HH220J | S. CHIP CAP 22PF/50V TAPED | S | AA | AA |
| | C 0634 | VCEA0A2EW106M | ELEC C 10UF 20% 250V | S | AA | AB |
| | C 0635 | VCCCCY1HH680J | S. CHIP CAP 68PF/50V TAPED | S | AA | AA |
| | C 0636 | VCEA0A1EW107M | E. CAPACITOR 100UF 25V 6.3x11 | S | AA | AA |
| | C 0637 | VCEA0A1EW107M | E. CAPACITOR 100UF 25V 6.3x11 | S | AA | AA |
| | C 0639 | VCKYPA2HB102K | CERAM C 1NF 10% 500V | S | AA | AA |
| | C 0640 | RC-EZ0729CEZZ | ELEC C 470NF 10V RUBYCON 10YXG470MKC | S | AA | AC |
| | C 0641 | VCKYCY1CF474Z | GRM39F 474Z 16 (1608)SMD CAPACITOR | S | AA | AA |
| ⚠ | C 0701 | RC-FZ0219BMZZ | C 470NF 275V X2 B81130-C1474-M SIEMENS | S | AA | AD |
| | C 0702 | RC-KZ0029CEZZ | CERAM C 10NF 80,20% 250V | S | AC | AC |
| | C 0703 | RC-KZ0029CEZZ | CERAM C 10NF 80,20% 250V | S | AC | AC |
| | C 0704 | RC-KZ0029CEZZ | CERAM C 10NF 80,20% 250V | S | AC | AC |
| | C 0705 | RC-FZ0205BMZZ | PP FILM C 4N7 630V 2222 375 16472 BC | S | AA | AC |
| | C 0706 | RC-FZ7684BMNJ | PP FILM C 680NF 5% 400V | S | AE | AH |
| | C 0707 | VCEA0A1EW107M | E. CAPACITOR 100UF 25V 6.3x11 | S | AA | AA |
| | C 0708 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0709 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| | C 0710 | RC-FZ9223BMNJ | POL FILM C 22NF 5% 63V | S | AA | AB |
| | C 0712 | VCEAGA2CW105M | ELEC C 1UF 20% 160V | S | AA | AB |
| | C 0713 | RC-EZA036WJZZ | ELEC C 68uF 450V CHEMI-CON KMK 18x35,5 | S | AD | AL |
| | C 0714 | VRS-CY1JF681J | S. CHIP RES. 680-OHM TAPED | S | AA | AA |
| | C 0715 | VCKYCY1HF683Z | GRM39F 683Z 50 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0716 | VCKYCY1CF474Z | GRM39F 474Z 16 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0717 | RC-FZ9103BMNJ | POL FILM C 10NF 5% 63V | S | AA | AB |
| | C 0718 | VCCCCY1HH471J | GRM39CK 471J 50 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0719 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0720 | VCEA0A1EW106M | ELEC C 10UF 20% 25V | S | AA | AA |
| | C 0721 | RC-FZ9103BMNJ | POL FILM C 10NF 5% 63V | S | AA | AB |
| | C 0722 | VCKYCY1EB273K | GRM39B 273K 25 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0723 | VCCCCY1HH471J | GRM39CK 471J 50 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0724 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0725 | RC-FZ0205BMZZ | PP FILM C 4N7 630V 2222 375 16472 BC | S | AA | AC |
| | C 0726 | VCEA0A1EW228M | ELEC C 2200UF 20% 25V | S | AA | AD |
| | C 0727 | VCEA0A1EW228M | ELEC C 2200UF 20% 25V | S | AA | AD |
| | C 0728 | RC-EZA035WJZZ | ELEC C 100UF 200V LOW INPEDANCE | S | AB | AF |
| | C 0729 | VCEAGA0JW477M | ELEC C 470UF 20% 6,3V | S | AA | AA |
| | C 0730 | VCKYPA2HB271K | CERAM C 270PF 10% 500V | S | AA | AA |
| | C 0731 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0732 | VCEA0A1EW108M | ELEC C 1000UF 20% 25V | S | AA | AC |
| | C 0733 | RC-EZ0753CEZZ | ELEC C 470NF 35V RUBYCON 35YXG470MKC | S | AA | AC |
| | C 0734 | VCEA0A1CW476M | ELEC C 47UF 20% 16V | S | AA | AA |
| | C 0735 | VCEAGA0JW477M | ELEC C 470UF 20% 6,3V | S | AA | AA |
| | C 0736 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0737 | VCEA0A1EW108M | ELEC C 1000UF 20% 25V | S | AA | AC |
| | C 0738 | RC-FZ9184BMNJ | POL FILM C 180NF 5% 63V | S | AA | AB |
| | C 0739 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0740 | VCCCCY1HH221J | S. CHIP CAP 220PF/50V TAPED | S | AA | AA |
| | C 0741 | VCKYCY1CF474Z | GRM39F 474Z 16 (1608)SMD CAPACITOR | S | AA | AA |
| | C 0742 | VCEA0A1HW226M | ELEC C 22UF 20% 50V | S | AA | AA |
| | C 0743 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| ⚠ | C 0746 | RC-FZ0188BMZZ | C B81130-C1334-M 330NF 275V X2 SIEMENS | S | AA | AD |
| | C 0748 | VCEA0A1VW227M | ELEC C 220UF 20% 35V | S | AA | AA |
| | C 0749 | VCKYTV1CF105Z | CERAM C 1UF 16V 2125SMD | S | AA | AA |
| | C 0751 | VCEA0A1HW105M | ELEC C 1UF 20% 50V | S | AA | AA |
| | C 0752 | VCEA0A1CW106M | ELEC C 10UF 20% 16V | S | AA | AA |
| ⚠ | C 0753 | RC-FZ0192BMZZ | C 330NF 275V X2 222233820334 PHILIPS | S | AA | AD |
| | C 0754 | VCCCCY1HH101J | S. CHIP CAP 100PF/50V TAPED | S | AA | AA |
| | C 0755 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 0756 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 0796 | RC-KZ0031CEZZ | CERAM C 100PF 2KV | S | AA | AB |
| | C 0798 | RC-KZ0035CEZZ | CERAM C 220PF 2KV | S | AA | AC |
| ⚠ | C 0799 | RC-KZ0106GEZZ | CERAM C DE1410 E332M-KX | S | AB | AC |
| | C 0902 | VCEA0A1HW226M | ELEC C 22UF 20% 50V | S | AA | AA |
| | C 0903 | VCEA0A1EW476M | ELEC C 47UF 20% 25V | S | AA | AA |
| | C 0904 | VCKYTV1CF105Z | CERAM C 1UF 16V 2125SMD | S | AA | AA |
| | C 0905 | VCKYCY1CF474Z | GRM39F 474Z 16 (1608)SMD CAPACITOR | S | AA | AA |
| | C 1022 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| | C 1031 | VCEAGA0JW337M | ELEC C 330UF 20% 6,3V | S | AA | AA |
| | C 1043 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 1044 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 1045 | VCCCCY1HH101J | S. CHIP CAP 100PF/50V TAPED | S | AA | AA |
| | C 1046 | VCCCCY1HH101J | S. CHIP CAP 100PF/50V TAPED | S | AA | AA |
| | C 1049 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |
| | C 3313 | VCKYCY1HB102K | S. CHIP CAP 0.001UF/50V | S | AA | AA |

| REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|
| | | **RESISTORS** | | | |
| R 0202 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0203 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0204 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| R 0205 | VRS-CY1JF221J | S. CHIP RES. 220-OHM TAPED | S | AA | AA |
| R 0206 | VRS-CY1JF562J | S. CHIP RES. 5.6K-OHM TAPED | S | AA | AA |
| R 0207 | VRS-CY1JF331J | S CHIP RES TAPE 330 OHM | S | AA | AA |
| R 0213 | VRD-RA2HD183J | RES 18KOHM 5% 1/2W | S | AA | AA |
| R 0214 | VRD-RA2HD183J | RES 18KOHM 5% 1/2W | S | AA | AA |
| R 0215 | VRD-RA2HD822J | RES 8,2KOHM 5% 1/2W | S | AA | AA |
| R 0217 | VRS-CY1JF123J | S CHIP RES. 12K-OHM TAPED | S | AA | AA |
| R 0219 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0220 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0223 | VRD-RA2HD100J | RES 10 OHM 5% 1/2W | S | AA | AA |
| R 0225 | VRS-CY1JF473J | S. CHIP RES 47K-OHM TAPED | S | AA | AA |
| R 0230 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| R 0231 | VRS-CY1JF271J | S.CHIP RESIS. 270OHM TAPED | S | AA | AA |
| R 0240 | VRS-CY1JF683J | RES 0603 68KOHM 5% 1/10W SMD | S | AA | AA |
| R 0301 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0302 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0303 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0304 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0305 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0306 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0307 | VRS-CY1JF472J | S. RES. 4.7K OHM TAPED | S | AA | AA |
| R 0308 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0309 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0310 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0311 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0312 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0313 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0318 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0319 | VRS-CY1JF271J | S.CHIP RESIS. 270OHM TAPED | S | AA | AA |
| R 0320 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0321 | VRS-CY1JF271J | S.CHIP RESIS. 270OHM TAPED | S | AA | AA |
| R 0322 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0323 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0324 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0325 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0326 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0327 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0328 | VRS-CY1JF151J | S CHIP RES. 150-OHM TAPED | S | AA | AA |
| R 0329 | VRS-CY1JF151J | S CHIP RES. 150-OHM TAPED | S | AA | AA |
| R 0330 | VRS-CY1JF100J | S CHIP RESISTOR 10 OHM | S | AA | AA |
| R 0331 | VRS-CY1JF272J | S. CHIP RES. 2.7K-OHM TAPED | S | AA | AA |
| R 0332 | VRS-CY1JF272J | S. CHIP RES. 2.7K-OHM TAPED | S | AA | AA |
| R 0333 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0334 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0335 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0336 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0337 | VRD-RA2BE100J | RES 10 OHM 5% 1/8W | S | AA | AA |
| R 0350 | VRS-CY1JF222J | S. CHIP RES. 2.2K-OHM TAPED | S | AA | AA |
| R 0351 | VRS-CY1JF273J | S. CHIP RES. 27-OHM TAPED | S | AA | AA |
| R 0352 | VRS-CY1JF123J | S CHIP RES. 12K-OHM TAPED | S | AA | AA |
| R 0353 | VRS-CY1JF151J | S CHIP RES. 150-OHM TAPED | S | AA | AA |
| R 0355 | VRD-RA2BE273J | RES 27KOHM 5% 1/8W | S | AA | AA |
| R 0356 | VRS-CY1JF103J | S.C. RESISTOR 10K OHM | S | AA | AA |
| R 0357 | VRS-CY1JF151J | S CHIP RES. 150-OHM TAPED | S | AA | AA |
| R 0358 | VRD-RA2BE104J | RES 100KOHM 5% 1/8W | S | AA | AA |
| R 0359 | VRD-RA2BE104J | RES 100KOHM 5% 1/8W | S | AA | AA |
| R 0360 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0362 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| R 0369 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |
| R 0370 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |
| R 0374 | VRS-CY1JF153J | S CHIP RES. 15K-OHM TAPED | S | AA | AA |
| R 0375 | VRS-CY1JF153J | S CHIP RES. 15K-OHM TAPED | S | AA | AA |
| R 0380 | VRS-CY1JF183J | S. CHIP RES. 18K-OHM TAPED | S | AA | AA |
| R 0382 | VRS-CY1JF183J | S. CHIP RES. 18K-OHM TAPED | S | AA | AA |
| R 0384 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| R 0385 | VRS-CY1JF105J | S.CHIP TAPE RES 1M OHM | S | AA | AA |
| R 0387 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 0406 | VRS-TQ2BD750J | OX RE 75 OHM 5% 1/8W SMD | S | AA | AA |
| R 0407 | VRS-CY1JF750J | S CHIP RESISTOR 75 OHM | S | AA | AA |
| R 0408 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |
| R 0409 | VRS-CY1JF183J | S. CHIP RES. 18K-OHM TAPED | S | AA | AA |
| R 0410 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |

| REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|
| R 0411 | VRS-CY1JF183J | S. CHIP RES. 18K-OHM TAPED | S | AA | AA |
| R 0413 | VRD-RA2BE680J | RES 68 OHM 5% 1/8W | S | AA | AA |
| R 0414 | VRD-RA2BE102J | RES 1KOHM 5% 1/8W | S | AA | AA |
| R 0415 | VRD-RA2BE750J | RES 75 OHM 5% 1/8W | S | AA | AA |
| R 0416 | VRD-RA2BE750J | RES 75 OHM 5% 1/8W | S | AA | AA |
| R 0417 | VRD-RA2BE750J | RES 75 OHM 5% 1/8W | S | AA | AA |
| R 0418 | VRS-CY1JF750J | S CHIP RESISTOR 75 OHM | S | AA | AA |
| R 0419 | VRS-CY1JF750J | S CHIP RESISTOR 75 OHM | S | AA | AA |
| R 0420 | VRS-CY1JF750J | S CHIP RESISTOR 75 OHM | S | AA | AA |
| R 0421 | VRS-CY1JF820J | RES 0603 82 OHM 5% 1/10W SMD | S | AA | AA |
| R 0422 | VRS-CY1JF221J | S. CHIP RES. 220-OHM TAPED | S | AA | AA |
| R 0437 | VRS-CY1JF221J | S. CHIP RES. 220-OHM TAPED | S | AA | AA |
| R 0438 | VRS-CY1JF471J | S. CHIP RES. 470-OHM TAPED | S | AA | AA |
| R 0439 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0440 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0441 | RR-XZ0112BMZZ | FUS RES 10R TAP 5% 1/3W | S | AA | AB |
| R 0451 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| R 0452 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| R 0501 | VRS-VV3DB151J | MET OX RES 150 OHM 5% 2W | S | AA | AA |
| R 0502 | VRS-CY1JF472F | S.CHIP RESISTOR 4.7K OHM 1% | S | AA | AA |
| R 0503 | VRD-RA2BE102F | RES 1KOHM 1% 1/8W | S | AA | AA |
| R 0504 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0505 | VRD-RA2BE221J | RES 220 OHM 5% 1/8W | S | AA | AA |
| R 0506 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0509 | VRD-RA2BE393J | RES 39KOHM 5% 1/8W | S | AA | AA |
| R 0510 | VRS-CY1JF822J | S. CHIP RES. 8.2K-OHM TAPED | S | AA | AA |
| R 0511 | VRS-TQ2BD151J | OX RE 150 OHM 5% 1/8W SMD | S | AA | AA |
| R 0512 | VRS-CY1JF472F | S.CHIP RESISTOR 4.7K OHM 1% | S | AA | AA |
| R 0513 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0514 | VRS-CY1JF122J | S. RESISTOR 1.2K OHM | S | AA | AA |
| R 0515 | VRS-CY1JF122J | S. RESISTOR 1.2K OHM | S | AA | AA |
| R 0516 | VRS-CY1JF102F | CHIP RESISTOR 1% 1K | S | AA | AA |
| R 0518 | VRN-VV3DB1R0J | MET FILM R 1 OHM 5% 2W | S | AA | AA |
| R 0526 | VRS-CY1JF123J | S CHIP RES. 12K-OHM TAPED | S | AA | AA |
| R 0530 | RR-XZ0208BMZZ | FUS RES 4R7 TAP 5% 1/2W | S | AA | AA |
| R 0531 | VRS-CY1JF225J | S. CHIP RES. 2.2M OHM TAPED | S | AA | AA |
| R 0534 | VRS-CY1JF273J | S. CHIP RES. 27-OHM TAPED | S | AA | AA |
| R 0535 | VRS-CY1JF682J | S. CHIP RES. 6.8 K OHM TAPED | S | AA | AA |
| R 0536 | VRS-CY1JF472J | S. RES. 4.7K OHM TAPED | S | AA | AA |
| R 0537 | VRS-CY1JF472J | S. RES. 4.7K OHM TAPED | S | AA | AA |
| R 0544 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0545 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0548 | VRS-CY1JF682J | S. CHIP RES. 6.8 K OHM TAPED | S | AA | AA |
| R 0549 | VRS-CY1JF273J | S. CHIP RES. 27-OHM TAPED | S | AA | AA |
| R 0553 | RR-XZ0101BMZZ | FUS RES 1R2 TAP 5% 1/3W | S | AA | AB |
| R 0554 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0555 | RR-XZ0208BMZZ | FUS RES 4R7 TAP 5% 1/2W | S | AA | AA |
| R 0601 | VRS-VV3DB560J | MET OX RES 56 OHM 5% 2W | S | AA | AA |
| R 0603 | VRN-KT3LB2R2J | RES MF 2,2 OHM 3W RNS3FB NOBLE | S | AA | AD |
| R 0604 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0605 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0607 | VRS-CY1JF222J | S. CHIP RES. 2.2K-OHM TAPED | S | AA | AA |
| R 0608 | VRS-TV1JD222J | 2125 2,2KOHM 5% 1/10W SMD | S | AA | AA |
| R 0609 | VRN-LU3DB1R0J | SET MET FILM 1 OHM 5% 2W LW | S | AA | AB |
| R 0610 | VRS-CY1JF680J | S. RES. 68 OHM TAPED | S | AA | AA |
| R 0611 | VRD-RA2HD220J | RES 22 OHM 5% 1/2W | S | AA | AA |
| R 0612 | VRD-RA2HD222J | RES 2,2KOHM 5% 1/2W | S | AA | AA |
| R 0614 | VRD-RA2HD123J | RES 12KOHM 5% 1/2W | S | AA | AA |
| R 0616 | VRS-CY1JF100J | S CHIP RESISTOR 10 OHM | S | AA | AA |
| R 0617 | RR-XZ0204BMZZ | FUS RES 2R2 TAP 5% 1/2W | S | AA | AB |
| R 0620 | VRS-TV1JD472J | 2125 4.7KOHM 5% 1/10W SMD | S | AA | AA |
| R 0621 | VRS-CY1JF561J | S. CHIP RES 560-OHM TAPED | S | AA | AA |
| R 0622 | VRS-CY1JF152J | S. CHIP RES. 1.5K-OHM | S | AA | AA |
| R 0623 | VRS-CY1JF222J | S. CHIP RES. 2.2K-OHM TAPED | S | AA | AA |
| R 0626 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 0627 | VRD-RA2HD823J | RES 82KOHM 5% 1/2W | S | AA | AA |
| R 0629 | VRS-CY1JF474J | S. CHIP RES. 4.7K-OHM | S | AA | AA |
| R 0630 | VRS-CY1JF682J | S. CHIP RES. 6.8 K OHM TAPED | S | AA | AA |
| R 0631 | VRS-CY1JF334J | S. CHIP RES. 330K-OHM TAPED | S | AA | AA |
| R 0632 | VRS-CY1JF681J | S. CHIP RES. 680-OHM TAPED | S | AA | AA |
| R 0633 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| R 0634 | VRS-CY1JF273J | S. CHIP RES. 27-OHM TAPED | S | AA | AA |
| R 0635 | VRS-CY1JF105J | S.CHIP TAPE RES 1M OHM | S | AA | AA |
| R 0637 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0638 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 0639 | VRS-CY1JF274J | SC RESISTOR 270K 63V TAPED | S | AA | AA |
| R 0640 | VRD-RA2BE103J | RES 10KOHM 5% 1/8W | S | AA | AA |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | R 0641 | VRS-CY1JF272J | S. CHIP RES. 2.7K-OHM TAPED | S | AA | AA |
| | R 0643 | VRS-CY1JF824J | RES 0603 820KOHM 5% 1/10W SMD | S | AA | AA |
| | R 0644 | VRS-CY1JF182J | S CHIP RES 1.8K-OHM TAPED | S | AA | AA |
| | R 0645 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | R 0650 | RR-XZ0200BMZZ | FUS RES 1R0 TAP 5% 1/2W | S | AA | AB |
| | R 0651 | VRD-RA2HD122J | RES 1.2KOHM 5% 1/2W | S | AA | AA |
| | R 0654 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| | R 0655 | VRS-CY1JF272J | S. CHIP RES. 2.7K-OHM TAPED | S | AA | AA |
| | R 0656 | VRS-CY1JF222J | S. CHIP RES. 2.2K-OHM TAPED | S | AA | AA |
| | R 0657 | RR-XZ0212BMZZ | FUS RES 10R TAP 5% 1/2W | S | AA | AB |
| | R 0658 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | R 0660 | VRD-RA2HD123J | RES 12KOHM 5% 1/2W | S | AA | AA |
| | R 0663 | VRN-VV3AB1R0J | MET FILM R 1 OHM 5% 1W | S | AA | AA |
| | R 0664 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| | R 0665 | VRS-CY1JF103J | S.C. RESISTOR 10K OHM | S | AA | AA |
| | R 0666 | VRD-RA2EE150J | RES 15 OHM 5% 1/4W | S | AA | AA |
| | R 0667 | VRD-RA2EE150J | RES 15 OHM 5% 1/4W | S | AA | AA |
| | R 0668 | RR-XZ0231BMZZ | FUS RES 390R TAP 5% 1/2W | S | AA | AB |
| | R 0669 | VRS-CY1JF100J | S CHIP RESISTOR 10 OHM | S | AA | AA |
| | R 0670 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | R 0700 | VRS-CY1JF472J | S. RES. 4.7K OHM TAPED | S | AA | AA |
| | R 0701 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 0703 | VRS-CY1JF272J | S. CHIP RES. 2.7K-OHM TAPED | S | AA | AA |
| | R 0705 | VRS-CY1JF822J | S. CHIP RES. 8.2K-OHM TAPED | S | AA | AA |
| | R 0706 | VRS-TQ2BD394J | OX RE 390KOHM 5% 1/8W SMD | S | AA | AA |
| | R 0707 | VRS-CY1JF105J | S.CHIP TAPE RES 1M OHM | S | AA | AA |
| | R 0708 | VRS-TQ2BD394J | OX RE 390KOHM 5% 1/8W SMD | S | AA | AA |
| | R 0709 | VRS-TQ2BD334F | OX RE 330KOHM 1% 1/8W SMD | S | AA | AA |
| | R 0710 | VRS-TQ2BD334F | OX RE 330KOHM 1% 1/8W SMD | S | AA | AA |
| | R 0711 | VRD-RA2BE100J | RES 10 OHM 5% 1/8W | S | AA | AA |
| | R 0712 | VRS-TQ2BD394J | OX RE 390KOHM 5% 1/8W SMD | S | AA | AA |
| | R 0713 | VRS-CY1JF103J | S.C. RESISTOR 10K OHM | S | AA | AA |
| | R 0714 | VRN-VV3LBR56J | MET FILM R 0,56 OHM 5% 3W | S | AA | AB |
| | R 0715 | VRS-CY1JF183F | RES 0603 18KOHM 1% 1/10W SMD | S | AA | AA |
| | R 0716 | VRS-TQ2BD394J | OX RE 390KOHM 5% 1/8W SMD | S | AA | AA |
| | R 0717 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| | R 0718 | RR-XZ0212BMZZ | FUS RES 10R TAP 5% 1/2W | S | AA | AB |
| | R 0719 | VRS-VV3AB474J | MET OX RES 470KOHM 5% 1W | S | AA | AA |
| | R 0721 | VRD-RA2HD121J | RES 120 OHM 5% 1/2W | S | AA | AA |
| | R 0722 | VRD-RA2BE103J | RES 10KOHM 5% 1/8W | S | AA | AA |
| | R 0723 | VRD-RA2BE332J | RES 3,3KOHM 5% 1/8W | S | AA | AA |
| | R 0725 | VRD-RA2BE332J | RES 3,3KOHM 5% 1/8W | S | AA | AA |
| | R 0726 | VRS-CY1JF562F | RES 0603 5,6KOHM 1% 1/10W SMD | S | AA | AA |
| | R 0727 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 0728 | VRD-RA2HD121J | RES 120 OHM 5% 1/2W | S | AA | AA |
| | R 0729 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 0730 | VRW-KQ41C4R7K | WOUND RES 4.7 OHM 10% 15W | S | AC | AE |
| | R 0731 | VRS-CY1JF472F | S.CHIP RESISTOR 4.7K OHM 1% | S | AA | AA |
| | R 0732 | VRS-CY1JF152J | S. CHIP RES. 1.5K-OHM | S | AA | AA |
| | R 0733 | VRD-RA2BE562F | RES 5,6KOHM 1% 1/8W | S | AA | AA |
| | R 0735 | VRS-CY1JF562F | RES 0603 5,6KOHM 1% 1/10W SMD | S | AA | AA |
| | R 0736 | VRS-CY1JF103J | S.C. RESISTOR 10K OHM | S | AA | AA |
| | R 0737 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| | R 0738 | VRD-RA2HD151J | RES 150 OHM 5% 1/2W | S | AA | AA |
| | R 0739 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| | R 0740 | VRS-TQ2BD561J | OX RE 560 OHM 5% 1/8W SMD | S | AA | AA |
| | R 0741 | VRS-CY1JF334J | S. CHIP RES. 330K-OHM TAPED | S | AA | AA |
| | R 0742 | VRS-TQ2BD124F | RE OX 120KOHM 1% 1/8W SMD | S | AA | AA |
| | R 0743 | VRS-TQ2BD124F | RE OX 120KOHM 1% 1/8W SMD | S | AA | AA |
| | R 0744 | VRS-CY1JF472F | S.CHIP RESISTOR 4.7K OHM 1% | S | AA | AA |
| | R 0745 | VRS-CY1JF333J | S. CHIP RES. 33K-OHM TAPED | S | AA | AA |
| ⚠ | R 0746 | RR-HZA001WJZZ | R HIGH VOL 8M2 0,5W BC VR37 232224223825 | S | AA | AB |
| ⚠ | R 0747 | RR-HZA001WJZZ | R HIGH VOL 8M2 0,5W BC VR37 232224223825 | S | AA | AB |
| | R 0748 | VRS-CY1JF224J | S. CHIP RES. 220K-OHM TAPED | S | AA | AA |
| | R 0749 | VRS-VV3AB474J | MET OX RES 470KOHM 5% 1W | S | AA | AA |
| | R 0750 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 0751 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| | R 0752 | VRS-CY1JF103J | S.C. RESISTOR 10K OHM | S | AA | AA |
| | R 0753 | VRS-CY1JF222J | S. CHIP RES. 2.2K-OHM TAPED | S | AA | AA |
| | R 0754 | VRS-CY1JF103J | S.C. RESISTOR 10K OHM | S | AA | AA |
| | R 0755 | RR-XZ0224BMZZ | FUS RES 100R TAP 5% 1/2W | S | AA | AB |
| | R 0756 | VRD-RA2BE182J | RES 1,8KOHM 5% 1/8W | S | AA | AA |
| | R 0758 | RR-XZ0123BMZZ | FUS RES 82R TAP 5% 1/3W | S | AA | AA |
| | R 0759 | VRS-VV3DB220J | MET OX RES 22 OHM 5% 2W | S | AA | AA |
| | R 0760 | VRS-CY1JF392J | S. CHIP RES. 3.9K-OHM TAPED | S | AA | AA |
| | R 0764 | VRS-CY1JF471J | S. CHIP RES. 470-OHM TAPED | S | AA | AA |
| | R 0765 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | R 0766 | VRS-CY1JF473J | S. CHIP RES 47K-OHM TAPED | S | AA | AA |
| | R 0767 | VRS-CY1JF472J | S. RES. 4.7K OHM TAPED | S | AA | AA |
| | R 0768 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| | R 0770 | VRD-RA2HD124J | RES 120KOHM 5% 1/2W | S | AA | AA |
| | R 0773 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| | R 0774 | VRD-RA2HD124J | RES 120KOHM 5% 1/2W | S | AA | AA |
| | R 0775 | VRS-CY1JF153J | S CHIP RES. 15K-OHM TAPED | S | AA | AA |
| | R 0776 | VRD-RA2BE122J | RES 1,2KOHM 5% 1/8W | S | AA | AA |
| | R 0777 | VRS-TQ2BDR68J | OX RE 0,68 OHM 5% 1/8W SMD LRC01 | S | AA | AA |
| | R 0778 | VRD-RA2HD101J | RES 100 OHM 5% 1/2W | S | AA | AA |
| | R 0779 | VRD-RA2HD101J | RES 100 OHM 5% 1/2W | S | AA | AA |
| | R 0780 | VRD-RA2HD220J | RES 22 OHM 5% 1/2W | S | AA | AA |
| | R 0781 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| | R 0782 | VRS-CY1JF473J | S. CHIP RES 47K-OHM TAPED | S | AA | AA |
| | R 0783 | VRS-CY1JF224J | S. CHIP RES. 220K-OHM TAPED | S | AA | AA |
| | R 0784 | VRS-CY1JF183J | S. CHIP RES. 18K-OHM TAPED | S | AA | AA |
| | R 0785 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| | R 0786 | VRS-CY1JF182J | S CHIP RES 1.8K-OHM TAPED | S | AA | AA |
| | R 0787 | RR-XZ0214BMZZ | FUS RES 15R TAP 5% 1/2W | S | AA | AB |
| | R 0788 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 0789 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| | R 0790 | VRD-RA2HD271J | RES 270 OHM 5% 1/2W | S | AA | AA |
| | R 0791 | VRS-CY1JF391J | SURFACE MOUNT CHIP RESISTOR 390 OHM | S | AA | AA |
| | R 0792 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 0793 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 0794 | VRS-CY1JF471J | S. CHIP RES. 470-OHM TAPED | S | AA | AA |
| | R 0795 | VRD-RA2BE560J | RES 56 OHM 5% 1/8W | S | AA | AA |
| | R 0796 | RR-XZ0200BMZZ | FUS RES 1R0 TAP 5% 1/2W | S | AA | AB |
| | R 0797 | RR-XZ0202BMZZ | FUS RES 1R5 TAP 5% 1/2W | S | ** | AA |
| | R 0798 | RR-XZ0218BMZZ | FUS RES 33R TAP 5% 1/2W | S | AA | AB |
| | R 0799 | RR-XZ0200BMZZ | FUS RES 1R0 TAP 5% 1/2W | S | AA | AB |
| | R 0901 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| | R 0902 | VRS-CY1JF333J | S. CHIP RES. 33K-OHM TAPED | S | AA | AA |
| | R 0903 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| | R 0904 | VRS-CY1JF273J | S. CHIP RES. 27-OHM TAPED | S | AA | AA |
| | R 0905 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 0906 | VRS-CY1JF225J | S. CHIP RES. 2.2M OHM TAPED | S | AA | AA |
| | R 0907 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| | R 1009 | VRD-RA2BE273J | RES 27KOHM 5% 1/8W | S | AA | AA |
| | R 1010 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |
| | R 1013 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| | R 1014 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| | R 1015 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| | R 1017 | VRS-CY1JF153J | S CHIP RES. 15K-OHM TAPED | S | AA | AA |
| | R 1019 | VRS-CY1JF273J | S. CHIP RES. 27-OHM TAPED | S | AA | AA |
| | R 1024 | VRD-RA2BE102J | RES 1KOHM 5% 1/8W | S | AA | AA |
| | R 1025 | VRS-CY1JF102F | CHIP RESISTOR 1% 1K | S | AA | AA |
| | R 1026 | VRS-CY1JF561F | RES 0603 560 OHM 1% 1/10W SMD | S | AA | AA |
| | R 1030 | VRS-CY1JF132F | S.CHIP RES TAPE 1,3KOHM 1/10W SMD | S | AA | AA |
| | R 1031 | VRS-CY1JF181F | S.CHIP RES TAPE 180 OHM 1% 1/10W SMD | S | AA | AA |
| | R 1032 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | R 1036 | VRD-RA2BE472J | RES 4,7KOHM 5% 1/8W | S | AA | AA |
| | R 1037 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| | R 1039 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |
| | R 1042 | VRS-CY1JF102F | CHIP RESISTOR 1% 1K | S | AA | AA |
| | R 1044 | VRS-CY1JF223J | S.CHOP REG 22K-OHM T | S | AA | AA |
| | R 1049 | VRS-CY1JF472J | S. RES. 4.7K OHM TAPED | S | AA | AA |
| | R 1050 | VRS-CY1JF153J | S CHIP RES. 15K-OHM TAPED | S | AA | AA |
| | R 1051 | VRS-CY1JF821J | S. CHIP RES. 820-OHM | S | AA | AA |
| | R 1055 | VRS-CY1JF821F | RES 0603 820 OHM 1% 1/10W SMD | S | AA | AA |
| | R 1099 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| | | | **MISCELLANEOUS PARTS** | | | |
| | (AV) | QSOCZ2107BMZZ | SOCKET | S | AF | AE |
| | (AV1) | QPLGN0241CEZZ | PLUG | S | AA | AA |
| | (CR) | QPLGN0241CEZZ | PLUG | S | AA | AA |
| | (F) | QPLGN1505BMZZ | HEADER 4+1 JST B05B-DVS-L | S | AA | AC |
| | (G) | QPLGN0207CEZZ | PLUG | S | AA | AA |
| | (H) | QPLGN0441CEZZ | PLUG 4PIN | S | AA | AA |
| | (L2) | QTIPM0017CEFM | TIP | S | AA | AA |
| | (M) | QPLGN0360CEZZ | CONNECTOR 3 PIN TV-50P-03-V2 A TAIKO | S | AA | AA |
| | (RGB) | QSOCZ2107BMZZ | SOCKET | S | AF | AE |
| | (S) | QPLGN0441CEZZ | PLUG 4PIN | S | AA | AA |
| | (VIA) | QPLGN0241CEZZ | PLUG | S | AA | AA |
| | (YA) | QSOCZ2561CEZZ | CONECTOR 25P JDV R25LB-10A | S | AB | AF |
| | (YB) | QSOCZ2561CEZZ | CONECTOR 25P JDV R25LB-10A | S | AB | AF |
| ⚠ | F 0701 | QFS-C3226CEZZ | FUSE T3.15AH 250V | S | AC | AE |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| ⚠ | F 0702 | QFS-J4021CEZZ | FUS. 4,0A/125V LITTELFUSE | S | AC | AE |
| ⚠ | F 0704 | QFS-J4021CEZZ | FUS. 4,0A/125V LITTELFUSE | S | AC | AE |
| | FB 0302 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| | FB 0303 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| | FB 0501 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| | FB 0601 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| | FB 0603 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| | FB 0701 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| | FB 0703 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| | J 0002 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0006 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0007 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0008 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0009 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0012 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0015 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0027 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| | J 0036 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0103 | VRD-RA2HD122J | RES 1.2KOHM 5% 1/2W | S | AA | AA |
| | J 0111 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0141 | VRD-RA2EE222J | RES 2,2KOHM 5% 1/4W | S | AA | AA |
| | J 0142 | VRD-RA2EE222J | RES 2,2KOHM 5% 1/4W | S | AA | AA |
| | J 0146 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0150 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0161 | VRD-RA2EE222J | RES 2,2KOHM 5% 1/4W | S | AA | AA |
| | J 0162 | VRD-RA2EE222J | RES 2,2KOHM 5% 1/4W | S | AA | AA |
| | J 0165 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0192 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0004 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0007 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0008 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0009 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0010 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0011 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0022 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0054 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 0063 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 1002 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 1009 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | LP 0701 | RLAMP0001BMZZ | NEON TYPE 4/30HB NEOTRONIC | S | AB | AC |
| | M 1000 | RRMCU0205BMZZ | R/C RECEIVER TS0P2838 TFK | S | AB | AF |
| | PHONE | QJAKJ0101SEZZ | MINIATURE PHONE JACK MORNING STAR | S | AA | AD |
| | RA 0609 | VT-SI04009020 | SILICON TUBE | S | AA | AA |
| | RB 0609 | VT-SI04009020 | SILICON TUBE | S | AA | AA |
| ⚠ | S 0701 | QSW-P0600BMZZ | SWITCH S40 3110432713 GDE | S | AF | AL |
| | S 0702 | QSW-K0079GEZZ | TACTILE SWITCH | S | AA | AA |
| | S 0703 | QSW-K0079GEZZ | TACTILE SWITCH | S | AA | AA |
| | S 0704 | QSW-K0079GEZZ | TACTILE SWITCH | S | AA | AA |
| | S 0705 | QSW-K0079GEZZ | TACTILE SWITCH | S | AA | AA |
| | VR 0701 | RH-VX0035BMZZ | VARISTOR 510V/25A PHILIPS | S | AA | AD |
| | | QFSHD1001BMZZ | FUSE HOLD.EYF52BC=PANASON | S | AA | AA |
| | | QFSHD1002BMZZ | FUSE HOLD.EYF52BC=PANASON | S | AA | AA |
| | | LHLDW1006CEZZ | HOLDER CRDAR1563BMV4 | S | AA | AC |
| | | GCOVA1512BMSA | DECORATION | S | AA | AB |
| | **PWB-B** | | **CRT UNIT** | | | |
| | | | **INTEGRATED CIRCUITS** | | | |
| | IC 1801 | RH-IX1833BMZZ | IC TDA6109 VIDEO AMPLIFIER 100Hz | S | AF | AR |
| | | | **TRANSISTORS** | | | |
| | Q 1801 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | | | **DIODES** | | | |
| | D 1805 | RH-EX0545BMZZ | ZENER DIODE TZMC5V1 TFK SMD | S | AA | AA |
| | D 1809 | RH-DX0570BMZZ | DIODE 1N4004 ACPA | S | AA | AA |
| | D 1813 | RH-DX0577BMZZ | DIODE 1N4935 ACPA | S | AB | AE |
| | D 1814 | RH-DX0577BMZZ | DIODE 1N4935 ACPA | S | AB | AE |
| | D 1815 | RH-DX0577BMZZ | DIODE 1N4935 ACPA | S | AB | AE |
| | | | **COILS** | | | |
| | L 1801 | RCILP0179CEZZ | COIL LHL08TB470K TAIYO YUDEN | S | AA | AB |
| | | | **CAPACITORS** | | | |
| | C 1812 | VCEAGA2EW105M | ELEC C 1UF 20% 250V | S | AA | AA |
| | C 1813 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| | C 1814 | VCKYPB3DE472Z | C DE1110-1E472Z2K MURATA | S | AA | AC |

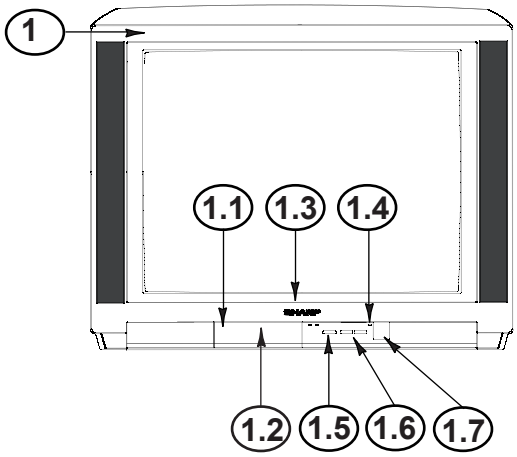
| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | C 1815 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| | C 1824 | VCFYAA2EA333K | POL FILM C 33NF 10% 250V | S | AC | AE |
| | C 1825 | VCFYAA2EA333K | POL FILM C 33NF 10% 250V | S | AC | AE |
| | C 1826 | VCFYAA2EA333K | POL FILM C 33NF 10% 250V | S | AC | AE |
| | C 1827 | VCKYCY1CF474Z | GRM39F 474Z 16 (1608)SMD CAPACITOR | S | AA | AA |
| | | | **RESISTORS** | | | |
| | R 1806 | VRS-CY1JF181J | S CHIP RES. 180-OHM TAPED | S | AA | AA |
| | R 1811 | VRS-CY1JF181J | S CHIP RES. 180-OHM TAPED | S | AA | AA |
| | R 1816 | VRS-CY1JF181J | S CHIP RES. 180-OHM TAPED | S | AA | AA |
| | R 1830 | VRS-CY1JF182J | S CHIP RES 1.8K-OHM TAPED | S | AA | AA |
| | R 1831 | VRD-RA2HD101J | RES 100 OHM 5% 1/2W | S | AA | AA |
| | R 1832 | VRC-MA2HG681J | SOLID R 680 OHM 5% 1/2W | S | AA | AB |
| | R 1833 | VRD-RA2HD101J | RES 100 OHM 5% 1/2W | S | AA | AA |
| | R 1834 | VRC-MA2HG681J | SOLID R 680 OHM 5% 1/2W | S | AA | AB |
| | R 1835 | VRD-RA2HD101J | RES 100 OHM 5% 1/2W | S | AA | AA |
| | R 1836 | VRC-MA2HG681J | SOLID R 680 OHM 5% 1/2W | S | AA | AB |
| | R 1837 | VRS-CY1JF225J | S. CHIP RES. 2.2M OHM TAPED | S | AA | AA |
| | R 1839 | VRS-CY1JF100J | S CHIP RESISTOR 10 OHM | S | AA | AA |
| | R 1841 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |
| | R 1843 | VRS-CY1JF102J | S.CHIP RES TAPE 1K OHM | S | AA | AA |
| | R 1844 | VRD-RA2HD561J | RES 560 OHM 5% 1/2W | S | AA | AA |
| | | | **MISCELLANEOUS PARTS** | | | |
| ⚠ | | QSOCV0103BMZZ | SOCK HPS1521-014408 HOSHI | S | AD | AG |
| | (H) | QPLGN0441CEZZ | PLUG 4PIN | S | AA | AA |
| | (K)0000 | QPLGN0641CEZZ | PLUG | S | AA | AA |
| | (L3) | QTIPM0017CEFM | TIP | S | AA | AA |
| | VR 1801 | RH-VX0037BMZZ | VARISTOR 2322 593 02506 BC 25V | S | AA | AC |
| | | LHLDW1121BMZZ | HOLDER | S | AA | AB |
| | | LHLDW1514BM00 | HOLDER UNEX 2233 | S | AA | AA |
| | | QEARC0032BMZZ | EARTH WIRE 28" GA-10 | S | AC | AH |
| | **PWB-C** | | **DIGITAL MODULE** | | | |
| | | | **INTEGRATED CIRCUITS** | | | |
| | IC 6001 | RH-IX1869BMZZ | IC SDA5550M-A12 MICRONAS | S | AM | AY |
| | IC 6002 | CH-IX1841CJS5 | EPROM SET 4M 3V FLASH 28JS74S | S | -- | -- |
| | IC 6003 | RH-IX1883BMZZ | IC M24128-WHN5 ST | S | AE | AM |
| | IC 6005 | RH-IX1873BMZZ | IC RESET MC33164P-3RA ONSEMICONDUCTOR | S | AB | AE |
| | IC 6006 | RH-IX1805BMZZ | IC SDA9380 INFINEON | S | AN | AZ |
| | IC 6007 | RH-IX1868BMZZ | IC VSP9402A (A32) MICRONAS | S | AW | BH |
| | | | **TRANSISTORS** | | | |
| | Q 6002 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 6003 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 6004 | RH-TX0232BMZZ | TRT BC847B SMD PHILIPS | S | AA | AA |
| | Q 6005 | RH-TX0217BMZZ | TRT BC337 PHILIPS | S | AA | AB |
| | Q 6006 | RH-TX0106BMZZ | TRT BC547 | S | AA | AB |
| | Q 6007 | RH-TX0243BMZZ | TRT BC857B PHILIPS | S | AA | AA |
| | | | **DIODES** | | | |
| | D 6001 | RH-EX0542BMZZ | ZENER DIODE TZMC3V9 TFK SMD | S | AA | AA |
| | D 6002 | RH-EX0542BMZZ | ZENER DIODE TZMC3V9 TFK SMD | S | AA | AA |
| | D 6003 | RH-DX0606BMZZ | DIODE BAS85 PHILIPS SMD | S | AA | AB |
| | D 6004 | RH-DX0606BMZZ | DIODE BAS85 PHILIPS SMD | S | AA | AB |
| | D 6005 | RH-EX0542BMZZ | ZENER DIODE TZMC3V9 TFK SMD | S | AA | AA |
| | D 6010 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | D 6011 | RH-EX0587BMZZ | ZENER DIODE TZMB8V2 TFK SMD 2% | S | AA | AA |
| | D 6012 | RH-EX0405BMZZ | ZENER DIODE BZX79C3V9 | S | AB | AB |
| | D 6014 | RH-DX0606BMZZ | DIODE BAS85 PHILIPS SMD | S | AA | AB |
| | D 6015 | RH-DX0551BMZZ | DIODE LL4148 TFK SMD | S | AA | AA |
| | | | **PACKAGED CIRCUITS** | | | |
| | X 6001 | RCRSB0100BMZZ | CRYSTAL 6,00 MHZ | S | AD | AG |
| | X 6002 | RCRSB0244BMZZ | CRYSTAL 24.576MHz ACAL | S | AC | AG |
| | X 6003 | RCRSB0219BMZZ | CRYSTAL 20.25 HMZ | S | AG | AH |
| | | | **COILS** | | | |
| | L 6001 | VP-DF100K0000 | PEAK COIL 10UH 10% | S | AA | AA |
| | L 6002 | VP-DF3R3K0000 | PEAK COIL 3,3UH 10% | S | AB | AB |
| | L 6003 | VP-DF1R0M0000 | PEAK COIL 1UH 20% | S | AA | AA |
| | L 6004 | VP-DF1R0M0000 | PEAK COIL 1UH 20% | S | AA | AA |
| | L 6005 | VP-DF1R0M0000 | PEAK COIL 1UH 20% | S | AA | AA |
| | L 6006 | VP-DF1R0M0000 | PEAK COIL 1UH 20% | S | AA | AA |
| | | | **CAPACITORS** | | | |

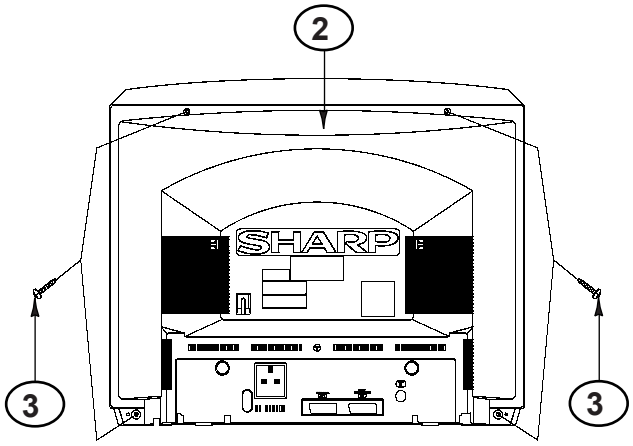
| REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|
| C 6001 | VCEA0A0JW477M | E CAPACITOR 470UF/6.3V 6.3X11 | S | AA | AA |
| C 6003 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6006 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6007 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6008 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6009 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6010 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| C 6011 | VCCCCY1HH270J | S. CHIP CAP 27PF/50V (TAPED) | S | AA | AA |
| C 6012 | VCCCCY1HH270J | S. CHIP CAP 27PF/50V (TAPED) | S | AA | AA |
| C 6013 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6014 | VCEA0A1HW476M | E CAPACITOR 47-UF 50V 6.3x11 | S | AA | AA |
| C 6015 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6016 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6017 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6018 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6020 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| C 6021 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| C 6022 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| C 6023 | VCCCCY1HH121J | S. CAPACITOR 120PF/50V TAPED | S | AA | AA |
| C 6024 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6025 | VCEA0A1HW476M | E CAPACITOR 47-UF 50V 6.3x11 | S | AA | AA |
| C 6026 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6027 | VCCCCY1HH150J | S. CHIP CAP 15PF/50V TAPED | S | AA | AA |
| C 6028 | VCCCCY1HH150J | S. CHIP CAP 15PF/50V TAPED | S | AA | AA |
| C 6029 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| C 6030 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6031 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6033 | VCKYCY1HF223Z | SC CAPACITOR 0.022UF 50V TAPED | S | AA | AA |
| C 6034 | VCKYCY1HF223Z | SC CAPACITOR 0.022UF 50V TAPED | S | AA | AA |
| C 6035 | RC-FZ9683BMNJ | POL FILM C 68NF 5% 63V | S | AA | AB |
| C 6036 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6037 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| C 6038 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6039 | VCKYCY1HF223Z | SC CAPACITOR 0.022UF 50V TAPED | S | AA | AA |
| C 6040 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6041 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| C 6042 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6043 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| C 6044 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| C 6045 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6046 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6047 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6048 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6049 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| C 6050 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| C 6051 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| C 6052 | VCEA0A1HW106M | ELEC C 10UF 20% 50V | S | AA | AA |
| C 6053 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6054 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6055 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6056 | VCKYCY1HF473Z | S. CHIP CAP 0.047UF/50V | S | AA | AA |
| C 6057 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6058 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6059 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6060 | VCCCCY1HH220J | S. CHIP CAP 22PF/50V TAPED | S | AA | AA |
| C 6061 | VCCCCY1HH220J | S. CHIP CAP 22PF/50V TAPED | S | AA | AA |
| C 6062 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6063 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6064 | VCKYCY1HF103Z | CHIP CAP 0.01UF/50V | S | AA | AA |
| C 6065 | VCKYCY1EB473K | GRM39B 473K 25 (1608)SMD CAPACITOR | S | AA | AA |
| C 6066 | VCKYCY1EB473K | GRM39B 473K 25 (1608)SMD CAPACITOR | S | AA | AA |
| C 6067 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| C 6141 | VCKYCY1EF104Z | S CHIP TAPE CAP 0.1UF/25V | S | AA | AA |
| C 6143 | VCFYFA1HA104J | POL FILM C 100NF 5% 50V | S | AA | AA |
| | | **RESISTORS** | | | |
| R 6001 | VRS-CY1JF104J | S. CHIP RES. 100K-OHM TAPED | S | AA | AA |
| R 6002 | VRS-CY1JF562J | S. CHIP RES. 5.6K-OHM TAPED | S | AA | AA |
| R 6003 | VRS-CY1JF562J | S. CHIP RES. 5.6K-OHM TAPED | S | AA | AA |
| R 6004 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 6005 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 6006 | VRS-CY1JF684J | S. CHIP RES. 680K-OHM TAPED | S | AA | AA |
| R 6007 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| R 6008 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |
| R 6009 | VRS-CY1JF332J | S. CHIP RES. 3.3K-OHM TAPED | S | AA | AA |
| R 6010 | VRS-CY1JF273J | S. CHIP RES. 27-OHM TAPED | S | AA | AA |
| R 6011 | VRS-CY1JF221J | S. CHIP RES. 220-OHM TAPED | S | AA | AA |

| REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|
| R 6014 | VRD-RA2BE472J | RES 4,7KOHM 5% 1/8W | S | AA | AA |
| R 6015 | VRS-CY1JF221J | S. CHIP RES. 220-OHM TAPED | S | AA | AA |
| R 6016 | VRS-CY1JF473J | S. CHIP RES 47K-OHM TAPED | S | AA | AA |
| R 6017 | VRS-CY1JF473J | S. CHIP RES 47K-OHM TAPED | S | AA | AA |
| R 6018 | VRS-CY1JF153J | S CHIP RES. 15K-OHM TAPED | S | AA | AA |
| R 6019 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 6020 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 6021 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 6023 | VRS-CY1JF103J | S.C. RESISTOR 10K OHM | S | AA | AA |
| R 6024 | VRD-RA2BE224J | RES 220KOHM 5% 1/8W | S | AA | AA |
| R 6026 | VRD-RA2BE562J | RES 5,6KOHM 5% 1/8W | S | AA | AA |
| R 6029 | VRS-CY1JF333J | S. CHIP RES. 33K-OHM TAPED | S | AA | AA |
| R 6031 | VRS-CY1JF153J | S CHIP RES. 15K-OHM TAPED | S | AA | AA |
| R 6032 | VRS-CY1JF271J | S.CHIP RESIS. 270OHM TAPED | S | AA | AA |
| R 6033 | VRS-CY1JF222J | S. CHIP RES. 2.2K-OHM TAPED | S | AA | AA |
| R 6034 | VRS-CY1JF683J | RES 0603 68KOHM 5% 1/10W SMD | S | AA | AA |
| R 6035 | VRS-CY1JF273F | RES 0603 27KOHM 1% 1/10W SMD | S | AA | AA |
| R 6038 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 6039 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| R 6040 | VRS-CY1JF101J | S. CHIP RES. 100-OHM TAPED | S | AA | AA |
| R 6041 | VRS-CY1JF184J | CHIP RESISTOR 180K | S | AA | AA |
| R 6042 | VRS-CY1JF681J | S. CHIP RES. 680-OHM TAPED | S | AA | AA |
| R 6043 | VRD-RA2BE102F | RES 1KOHM 1% 1/8W | S | AA | AA |
| R 6044 | VRS-CY1JF560F | S.CHIP RES TAPE 56 OHM 1% 1/10W SMD | S | AA | AA |
| R 6045 | VRS-CY1JF331J | S CHIP RES TAPE 330 OHM | S | AA | AA |
| R 6046 | VRD-RA2BE103J | RES 10KOHM 5% 1/8W | S | AA | AA |
| R 6049 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| R 6054 | VRS-TQ2BD150J | OX RE 15 OHM 5% 1/8W SMD | S | AA | AA |
| R 6055 | VRS-CY1JF471F | CHIP RESISTOR 1% 470 OHM | S | AA | AA |
| R 6056 | VRS-CY1JF122F | S.CHIP RES TAPE 1,2 OHM 1% 1/10W SMD | S | AA | AA |
| R 6057 | VRS-TQ2BD150J | OX RE 15 OHM 5% 1/8W SMD | S | AA | AA |
| R 6058 | VRS-CY1JF750J | S CHIP RESISTOR 75 OHM | S | AA | AA |
| R 6059 | VRS-CY1JF750J | S CHIP RESISTOR 75 OHM | S | AA | AA |
| | | **MISCELLANEOUS PARTS** | | | |
| (K) | QPLGN0642CEZZ | PLUG | S | AA | AB |
| (VI) | QPLGN0642CEZZ | PLUG | S | AA | AB |
| (YA) | QPLGZ2541CEZZ | CONECTOR 25P JDV PS25LB-10-1 | S | AB | AF |
| (YB) | QPLGZ2541CEZZ | CONECTOR 25P JDV PS25LB-10-1 | S | AB | AF |
| FB 6001 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| FB 6002 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| FB 6003 | RBLN-0091GEZZ | FERRITE BEAD | S | AA | AA |
| FB 6004 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6005 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6006 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6007 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6008 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6009 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6010 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6011 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6012 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6013 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6014 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6016 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6017 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6018 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6019 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6020 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6021 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6022 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6023 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6024 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6025 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6026 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6027 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6028 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6029 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6030 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6031 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6032 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6033 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6034 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6035 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6036 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6037 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6038 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| FB 6039 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | FB 6041 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | FB 6042 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | FB 6043 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | FB 6044 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | FB 6048 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | FB 6049 | RBLN-0081GEZZ | FERRITE BLM18BD601SN1D MURATA | S | AA | AA |
| | FB 6050 | RBLN-0058TAZZ | FERRITE BLM21BD222SN1L MURATA | S | AA | AB |
| | IC6002A | QSOCZ0115SC32 | SOCKET IC 32 PIN | S | AA | AB |
| | J 0004 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0007 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0012 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0017 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0022 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0023 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0026 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0027 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0032 | VRD-RA2BE101J | RES 100 OHM 5% 1/8W | S | AA | AA |
| | J 0049 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0063 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0068 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0077 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0079 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0094 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0095 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0100 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0101 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0102 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0103 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0104 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0106 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | J 0107 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 6002 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 6004 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 6005 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 6007 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 6009 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | JF 6014 | VRS-CY1JF000J | S. CHIP RES. 0-OHM TAPED | S | AA | AA |
| | | | **MISCELLANEOUS PARTS** | | | |
| ⚠ | | QCNW-2745BMZZ | MAT WIRE OREGA 100463.20 | S | AC | AH |
| | (H) | QCNW-2743BMZZ | CABLE (H) 4 VIAS | S | AB | AE |
| | (K) | QCNW-A925WJZZ | CABLE (K) 400 mm | S | AC | AH |
| | (VI) | LHLDW1033CE00 | HOLDER | S | AA | AA |
| | (VI) | QCNW-2900BMZZ | VIDEO WIRE (VI) | S | AC | AH |
| | FB 0001 | RCORF0002BMZZ | FERRITE CORE TFC-16816EX | S | AF | AK |
| | | TINS-7234BMN0 | OWNERS MANUAL 28JS74S | S | AB | AF |
| | | SPAKC5482BMN2 | PACKING CASE 28" | S | AN | AZ |
| | | SPAKX4055BMZZ | PACKING AD(70ES-03S) | S | AH | AV |
| | | VSP1206PB617A | SPAEAKER 7 OHM 12x6CM SEA TRADE ELECTRON | S | AE | AN |
| | (F) | QCNW-2841BMZZ | WIRE 4 WAYS FH DA100 4:3 | S | AC | AG |
| | (SPK) | RCORF0002BMZZ | FERRITE CORE TFC-16816EX | S | AF | AK |
| | | RRMCG1071BMSA | R/C CA-10 HOSIDEN | S | AS | AW |
| | | SPAKP2006BMZZ | CEL-AIR WRAPPER | S | AC | AG |
| | | UBATU0013TAZZ | BATTERY R6(X2) TOSHIBA | S | AA | AD |
| ⚠ | | QACCZ2100BMSA | AC CORD | S | AH | AR |
| | (S) | QCNW-2661BMZZ | CON W (4)WAYS | S | AC | AG |
| | | LHLDW1009CEZZ | HOLDER | S | AA | AA |
| | | LHLDW1060CEZZ | HOLDER | S | AA | AA |
| | | LHLDZ1714BMZZ | HOLDER ANODE CAP | S | AA | AA |
| | | LHLDZ1708BMZZ | HOLDER | S | AA | AA |
| | | LHLDK1501BM00 | HOLCER CCABA1394BMV1 | S | AA | AB |
| | | LHLDW1009CEZZ | HOLCER CCABA1394BMV1 | S | AA | AA |
| | | LHLDW1060CEZZ | HOLCER CCABA1394BMV1 | S | AA | AA |
| | | XTASD30P12000 | SCREW | S | AA | AA |
| | | XTASD40P12000 | SCREW | S | AA | AA |
| | | | **CABINET PARTS** | | | |
| ⚠ | 1 | CCABA1310BMV2 | CABINET SET 28JS64S | S | AX | BM |
| | 1.1 | GDORF1053BMSC | DOOR | S | AA | AD |
| | 1.2 | PKAI-1083BM00 | DOOR RATCH | S | AC | AF |
| | 1.3 | HBDGB3013MESB | BADGE | S | AC | AH |
| | 1.4 | HDECQ0041BMSA | LED DECORATION(70ES-03S) | S | AA | AB |
| | 1.5 | HDECQ0042BMSA | R/C DECORATION(70ES-03S) | S | AA | AC |
| | 1.6 | JBTN-1053BMSC | UP/DOWN BUTTON | S | AA | AD |
| | 1.7 | JBTN-1052BMSC | POWER BUTTON | S | AA | AD |
| ⚠ | 2 | GCABB1083BMKA | CAB-B(70ES-04S) | S | AN | AZ |
| | 3 | XTASB40P20000 | SCREW | S | AA | AA |

| | REF No. | PARTS | DESCRIPTION | * | SN CODE | EX CODE |
|---|---|---|---|---|---|---|
| | | | **CABINET PARTS 28JS74SS (SILVER CABINET)** | | | |
| ⚠ | 1 | CCABA1395BMV2 | CABINET SET 28" (28JS74SS) LM154 | S | -- | -- |
| | 1.1 | GDORF1053BMSD | DOOR 28" (28JS74SS) (LM154) | S | AA | AD |
| | 1.2 | PKAI-1083BM00 | DOOR RATCH | S | AC | AF |
| | 1.3 | HBDGB3013MESB | BADGE | S | AC | AH |
| | 1.4 | HDECQ0041BMSA | LED DECORATION(70ES-03S) | S | AA | AB |
| | 1.5 | HDECQ0042BMSA | R/C DECORATION(70ES-03S) | S | AA | AC |
| | 1.6 | JBTN-1053BMSD | UP/DOWN BUTTON 28" (28JS74SS) (LM154) | S | -- | -- |
| | 1.7 | JBTN-1052BMSD | POWER BUTTON 28" (28JS74SS) (LM154) | S | AA | AD |
| ⚠ | 2 | GCABB1083BMKA | CAB-B(70ES-04S) | S | AN | AZ |
| | 3 | XTASB40P20000 | SCREW | S | AA | AA |



# SERVICING NOTES

## 1. How to retrieve the IC6002 (Flash Memory).

1.1.- Desoldering the Shield Case Cover.

1.2.- Introduce the screwdriver through the hole.

1.3.- Insert the screwdriver between the IC6002 and its socket. Push up the IC6002 with the screwdriver as in Figure 16.

1.4.- Retrieve the IC6002.

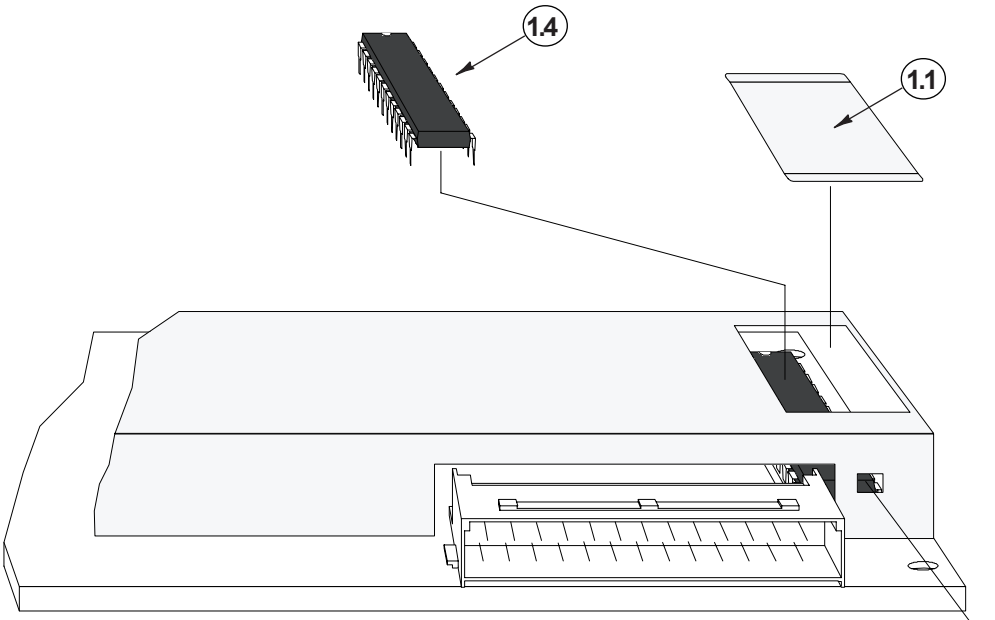



**Figure 15: K7353BM Unit**

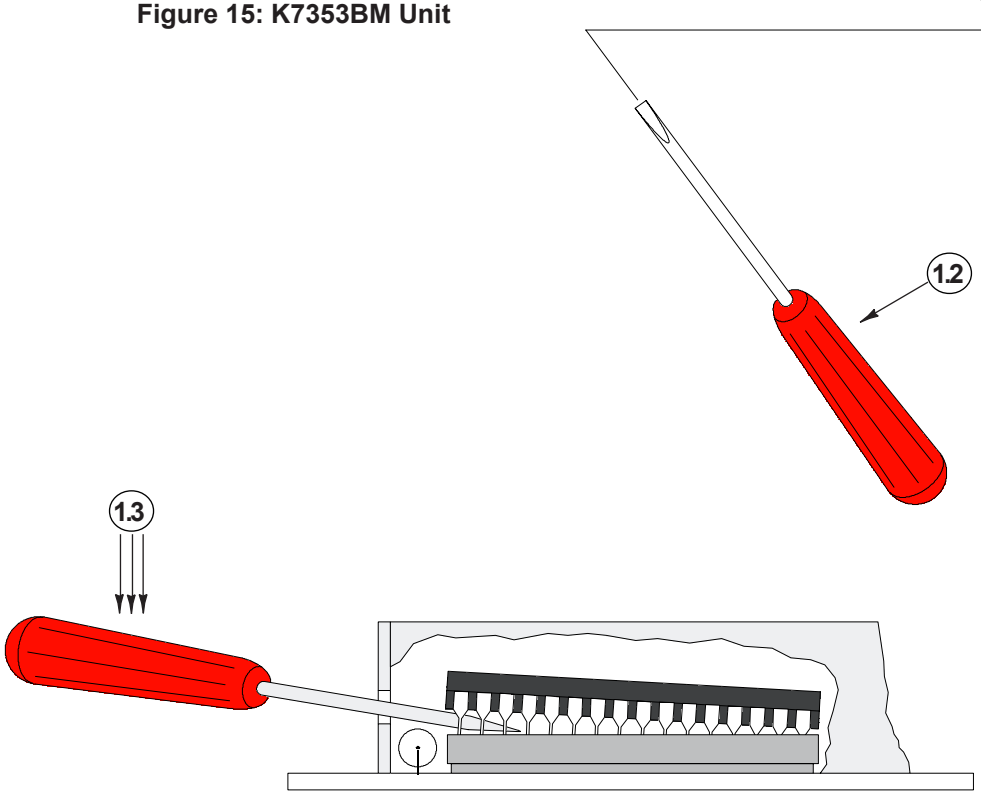



**Figure 16: IC6002 Retrival Detail**

## 2. How to retrieve the IC6002 with pincers (Flash Memory).

2.1.- Desoldering the Shield Case Cover.

2.2.- Introduce the pincers into the hole.

2.3.- Insert the pincers and take hold the IC6002. Pick up the IC6002 with the pincers as in Figure 18.

2.4.- Retrieve the IC6002.

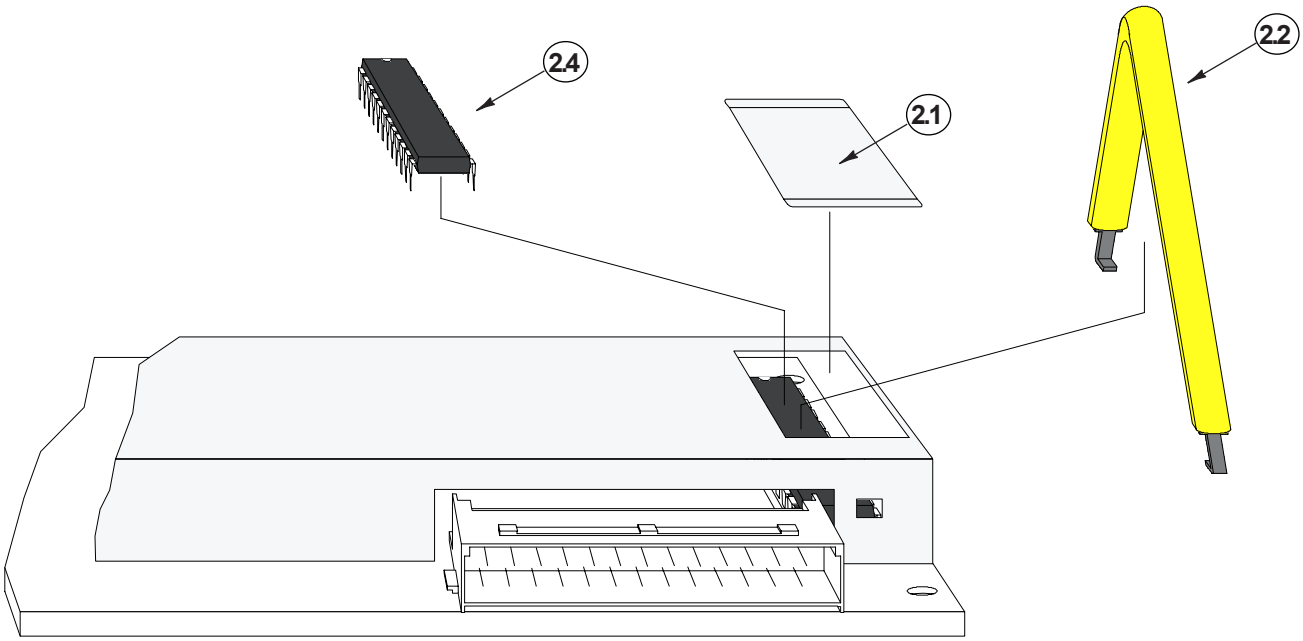



**Figure 17: K7353BM Unit**

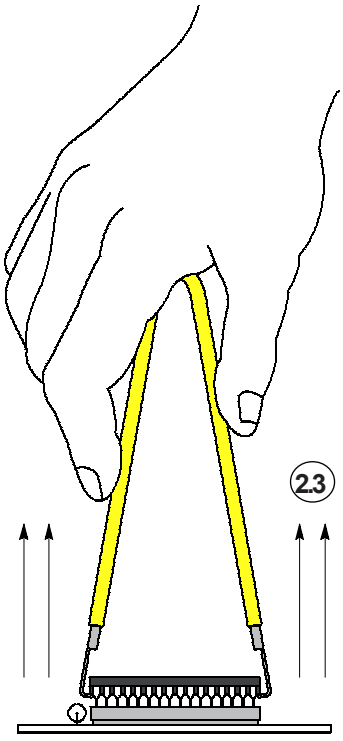



**Figure 18: IC6002 Retrival Detail**

## 3. How to rewrite data in NVM.

The NVM (Non Volatile Memory) is a read/write device which function is to keep data even in the case of TV set is switched off.

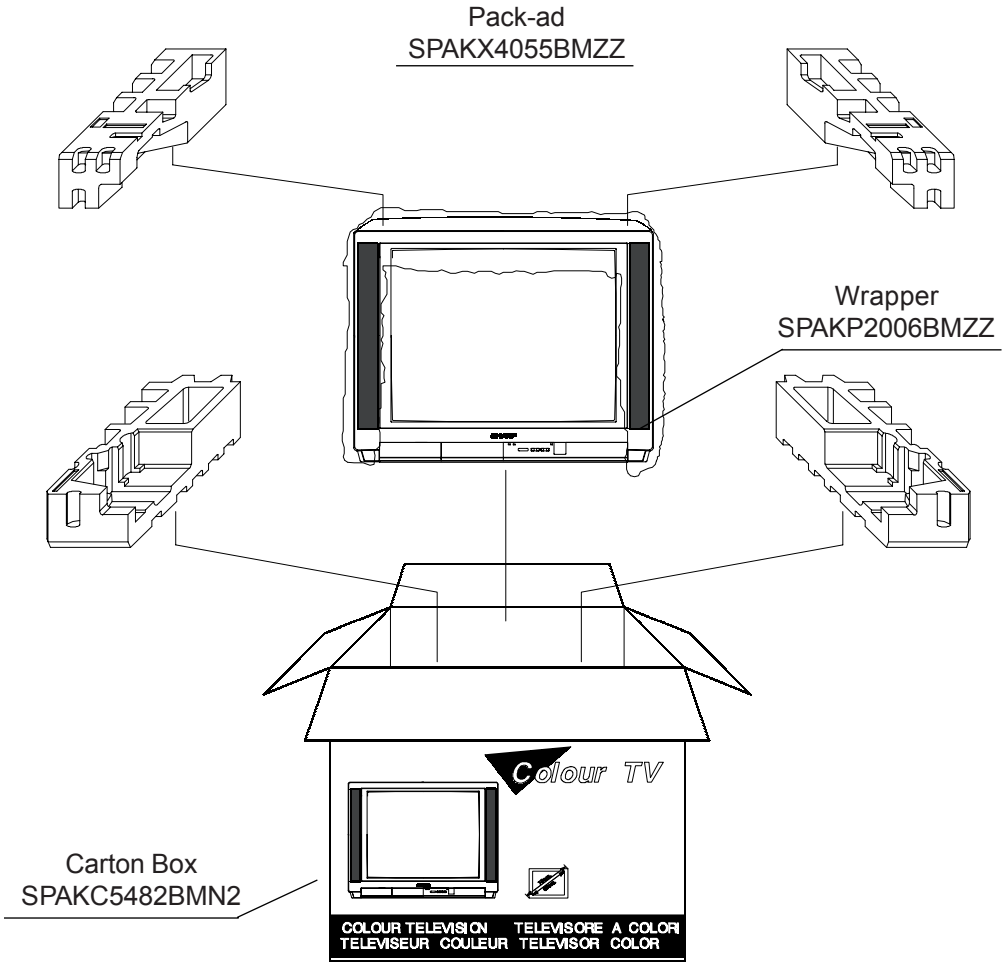
Part of these data is recovered every time the TV is switched on, and, of course, if user makes any change in the user settings (i.e brightness, contrast, etc..).

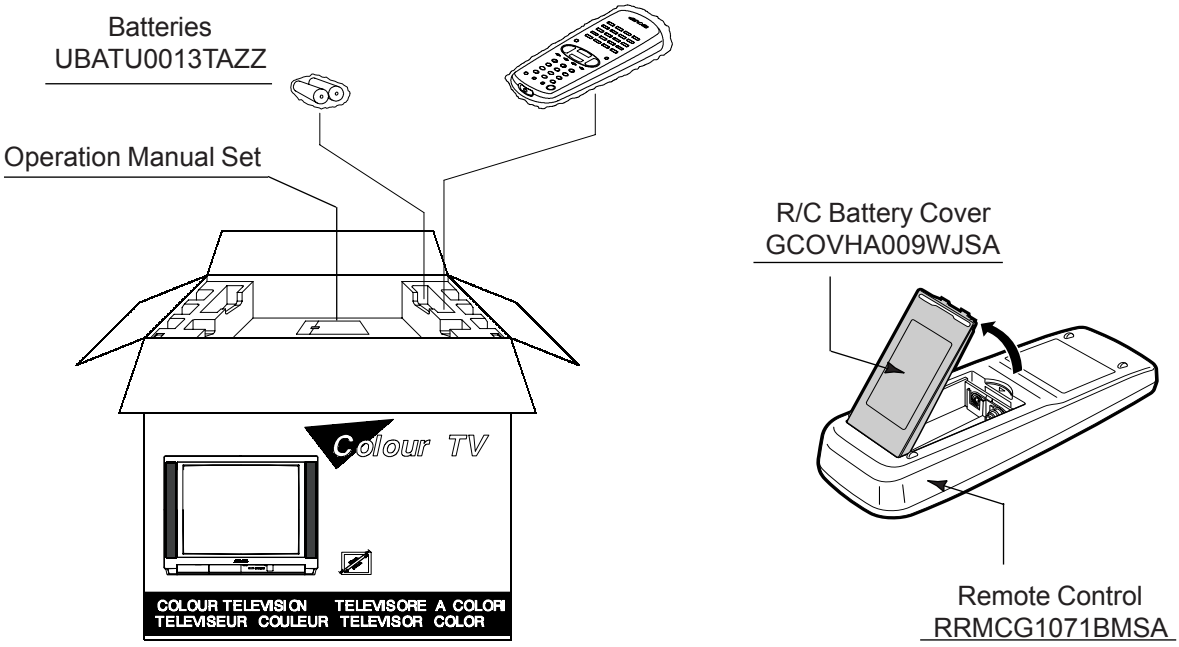
The NVM data could be corrupted if any external destructive action is carried out (Sparks of high voltage) or if a problem happens to the IC itself (defective IC or damaged IC). In order to keep the data uncorrupted, several protection countermeasures are implemented; one of them is to have a copy of all the NVM relevant parameters in the FLASH (which keeps the software for the microcontroller). So, the procedure to follow if the NVM IC is damaged or the data is lost is the following:

a) If the NVM IC is substituted for a new (BLANK) one, it is possible to write the NVM asking for the file which corresponds to the model or let the microcontroller write the default data which is written inside. This process is automatically carried out when the blank device (NVM) is soldered and TV is switched on for first time after the modification. The TV starting time is longer than normally due to the rewriting procedure. In both cases a new geometry adjustment should be done because of CRT and chassis tolerances.

b) If the NVM is corrupted and some data is lost, there are internal software protection to recover the data related with configuration of ICs but user data can be lost (some channel data or user settings for video, audio etc..). It is possible to recover this data forcing an auto installation and setting the user settings again.

## 4. Packing of the Set & Accessories



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**Notes:**

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