

# **Service Manual**

## **ViewSonic VE710b/s-1**

**Model No. VLCDS27998-2W/-1W**

**17" Color TFT LCD Display**

(VE710b/s\_1\_SM\_736- Rev. 1a – Dec. 2003)

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# **Revision History**

| Revision | Date     | Description Of Changes    | Approval   |
|----------|----------|---------------------------|------------|
| 1a       | 25/12/03 | Initial Release DCN- 3742 | Angela Luh |
|          |          |                           |            |
|          |          |                           |            |
|          |          |                           |            |
|          |          |                           |            |
|          |          |                           |            |
|          |          |                           |            |
|          |          |                           |            |

## TABLE OF CONTENTS

|                                                    |           |
|----------------------------------------------------|-----------|
| <b>1. Precautions and Safety Notices</b>           | <b>1</b>  |
| <b>2. Specification</b>                            | <b>2</b>  |
| <b>3. Front Panel Function Control Description</b> | <b>3</b>  |
| <b>4. Circuit Description</b>                      | <b>5</b>  |
| <b>5. Adjusting Procedure</b>                      | <b>15</b> |
| <b>6. Trouble Shooting Flow Chart</b>              | <b>18</b> |
| <b>7. Recommended Spare Parts List</b>             | <b>20</b> |
| <b>8. Exploded Diagram And Spare Parts List</b>    | <b>28</b> |
| <b>9. Block Diagram</b>                            | <b>32</b> |
| <b>10. Schematic Diagrams</b>                      | <b>33</b> |
| <b>11. PCB Layout Diagrams</b>                     | <b>42</b> |

## 1. Precaution & Safety Notice

### **WARNING!**

This service information designed for experienced repair technicians only and is not designed for use by the general public.

It does not contain warnings or cautions to avoid non-technical individuals of potential dangers in attempting to service a product.

Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt within this service information by anyone else could result in serious injury or death.

1. Caution :

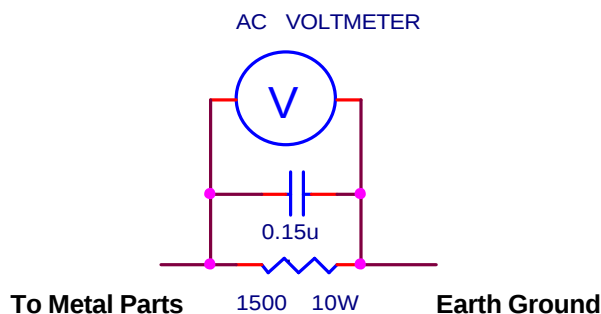
No modification of any circuit should be attempted . Service work should only be performed after you are thoroughly familiar with all of the following safety checks and servicing guide line.

2. Safety Check :

Care should be taken while servicing this LCD display. Because of the high voltage used in the inverter circuit. These voltage are exposed in such areas as the associated transformer circuits .

3. LEAKAGE CURRENT HOT CHECK

- 3-1 Plug the AC cord directly into the AC outlet. Do not use an isolation transformer during this check.
- 3-2 Connect a 1500 ohm , 10 watt resistor , paralleled by a 0.15uF capacitor between each metallic part and a good earth ground.
- 3-3 Use an AC voltmeter with 1000 ohm / volt or more sensitivity and measure the AC voltage across the combination 1500 ohm resistor and 0.15uF capacitor.
- 3-4 Move the resistor connection to each exposed metallic part and measure the voltage.
- 3-5 Reverse the polarity of the AC plug in the AC outlet and repeat the above measurement.
- 3-6 Voltage measured must not exceed 1.5 volt RMS, from any exposed metallic part to the ground. A leakage current tester may be used in the above hot check, in which case any circuit measured must not exceed 1.0 milliamp. In the case of a measurement exceeding the 1.0 milliamp value, a rework is required to eliminate the chance of a shock hazard .



## 2. Specification

### Mechanical :

Dimension ( W x H x D ) mm

Set : a. with stand: 377.6 x 374 x 195.6 mm

b. Without stand: 377.6 x 311.8 x 56.9 mm

Slim bezel: 19.0 / 19.0 / 19.0/21.0

Base (L X W): 195.6 x 201 mm

Packing : ( W x H x D ) mm: 450 x 522 x 135 mm

Weight : Net / Gross ( Kg ): 4.1 / 5.2

Wall Mount (VESA): 100 x 100 mm

LCD Panel type: CPT / CLAA170EA03

Max. resolution (HxV): 1280 x 1024

Nominal picture size (HxV): 338 mm x 270 mm

Display colors: 16.2 M ( 6 bit + dithering )

Dot pitch: 0.264 mm

Response time: 9 +16 / 25ms (Tr + Tf / typical)

Brightness (100% white): Typical : 300 cd/m<sup>2</sup> , Min. 240 cd/m<sup>2</sup>

Contrast: Typical : 450:1, Min. 360:1

Viewing angle: 70 / 70 /65 / 65 (L/R/T/B CR>=10)

Synchronization: Fh = 30~80 KHz / Fv=50~85Hz

Presets: 18 timing modes

OSD Language: 9 languages

Color Temperatures RGB: 6500°K (default) / 9300°K 5400°K / User R,G,B

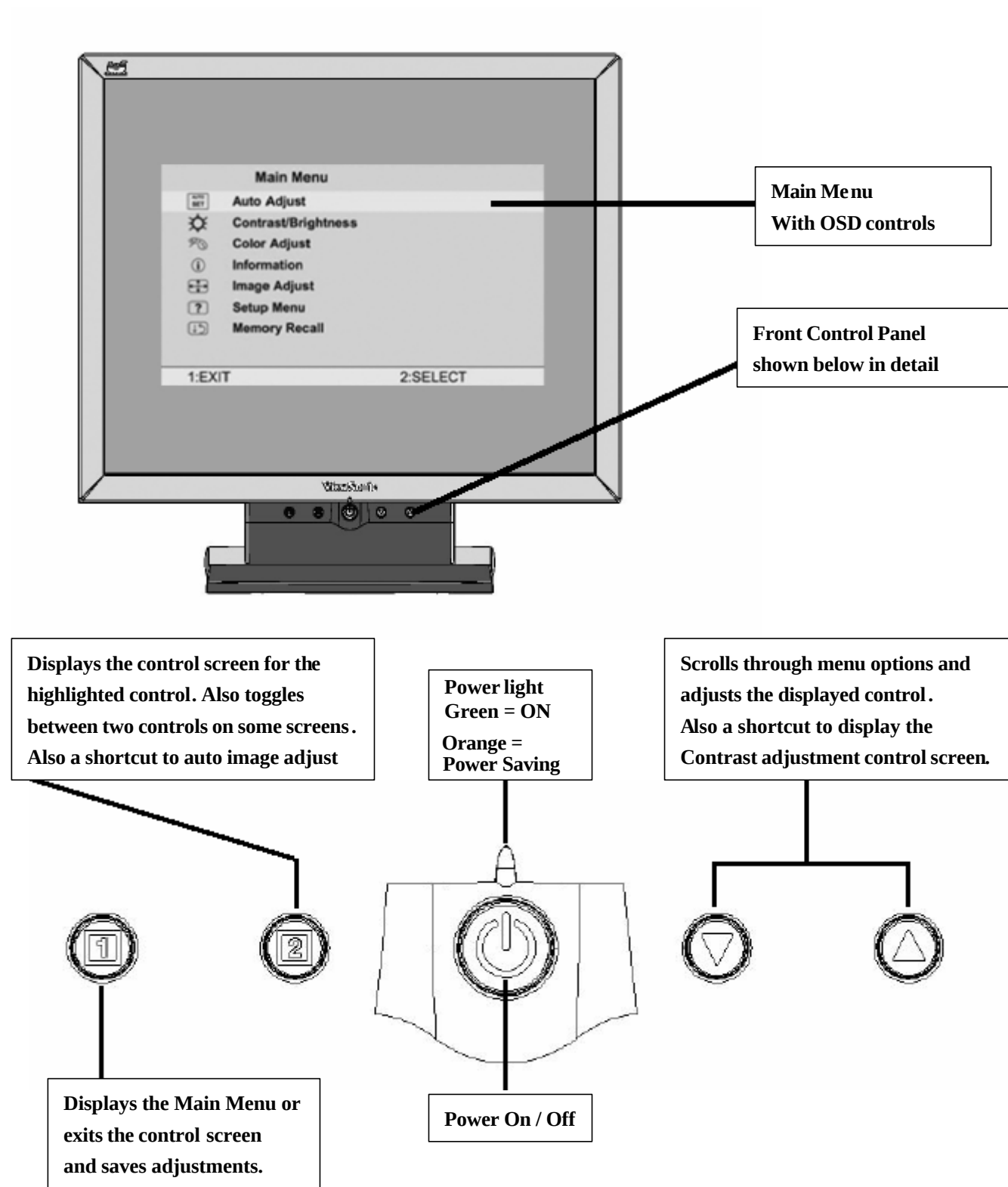
Plug & Play: DDC1/2B interface

Scaler chip: Mstar MST8116a

AC Power range: 90 V ~ 264 V, 50 Hz / 60 Hz

Power consumption: < 45W green / < 1W amber  
(On / Off mode)

3. Front Panel Function Control Description



## Main Menu Controls

Adjust the menu items shown below by using the up and down buttons.

- A. **Auto Image Adjust** automatically sizes, centers, and fine tunes the video signal to eliminate waviness and distortion. Press the [2] button to obtain a sharper image.

**NOTE: Auto Image Adjust works with most common video cards. If this function does not work on your LCD display, then lower the video refresh rate to 60 Hz and set the resolution to its pre-set value.**

- B. **Contrast adjusts** the difference between the image background (black level) and the foreground (white level).

- C. **Brightness adjusts** the lamps current to control the screen brightness.

- D. **Color Adjust** provides several color options: preset color temperatures and Custom User Color which allows you to adjust red (R), green (G), and blue (B). The factory setting for this product is 6500K (6500° Kelvin).

9300K — Adds blue to the screen image for cooler white (used in most office settings with fluorescent lighting).

5400K — Adds red to the screen image for warmer white and richer red.

Custom User Color — Individual adjustments for red, green, and blue.

1 To select color (R, G or B) press button [2].

2 To adjust selected color, press ▲ or ▼.

3 When you are finished making all color adjustments, press button [1] twice.

- E. **Information** displays the timing mode (video signal input) coming from the graphics card in your computer. See your graphic card's user guide for instructions on changing the resolution and refresh rate (vertical frequency). VESA 1280 x 1024 @ 60 Hz (recommended) means that the resolution is 1280 x 1024 and the refresh rate is 60 Hertz.

- F. **Manual Image Adjust** controls are explained below:

**H. Size (Horizontal Size)** adjusts the width of the screen image.

**NOTE: Vertical size is automatic with your LCD display.**

**H./V. Position** adjusts horizontal and vertical position of the screen image. You can toggle between Horizontal and Vertical by pressing button [2]. Horizontal moves the screen image to the left or to the right. Vertical moves the screen image up and down.

**Fine Tune** sharpens focus by aligning the illuminated text and/or graphic characters.

**Sharpness** adjusts the clarity and focus of the screen image.

**Setup Menu** controls are explained below:

**Language** allows you to choose the language used in the menus and control screens.

**Resolution Notice** displays the recommended resolution for this LCD display.

Enable allows the Resolution Notice to appear on-screen.

Disable will not allow the Resolution Notice to appear on-screen.

**OSD Timeout** sets the length of time an on-screen display screen is displayed. For example, with a "15 second" setting, if a control is not pushed within 15 seconds, the display OSD disappears.

- G. **OSD Position** allows you to move the on-screen display menus and control screens.

- H. **Memory Recall** returns adjustments to the original factory settings if the display is operating in a factory Preset Timing Mode listed in this user guide.

## 4. Circuit Description

### 4-1. Outline

POWER On/Off , LED, Button"2" , Up arrow- button , Down arrow button , Button"1" , button , Down arrow button , Button"1" , on the front panel.

Video signal connector, audio line-in receptacle and AC-IN are located on the back side of the cabinet.

- OSD menu includes the following function;

**AUTO IMAGE ADJUST**

**CONTRAST / BRIGHTNESS**

**COLOR ADJUST**

**INFORMATION**

**MANUAL IMAGE ADJUST**

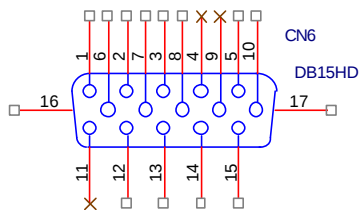
**SETUP MENU**

**MEMORY RECALL**

- CONTRAST and BRIGHTNESS can be directly controlled with UP / DN key.

### 4-2. CONNECTORS

- AC inlet : CEE22 typed connector
- Video signal connector 15P Mini D-Sub



| PIN | MNEMONI | SIGNAL             |
|-----|---------|--------------------|
| 1   | RV      | Red Video          |
| 2   | GV      | Green Video        |
| 3   | BV      | Blue Video         |
| 4   | NC      | None               |
| 5   | GND     | Ground(DDC return) |
| 6   | RG      | Red GND            |
| 7   | GG      | Green GND          |
| 8   | BG      | Blue GND           |
| 9   | +5V     | + 5V (for DDC)     |
| 10  | SG      | Sync GND           |
| 11  | NC      | None               |
| 12  | SDA     | DDC Data           |
| 13  | HS      | Horizontal Sync    |
| 14  | VS      | Vertical Sync      |
| 15  | SCL     | DDC Clock          |

#### 4-3. ELECTRICAL SPECIFICATIONS

- **Standard conditions**

|              |              |
|--------------|--------------|
| Display Area | 338 x 270 mm |
| Video Signal | 0.7 Vpp      |
| Contrast     | Max.         |
| Brightness   | Max.         |
| Ambient      | 20 +/- 5 °C  |
| Input        | AC           |
| Warming up   | > 30 min     |
| Display      | 1280 x 1024  |

- **POWER**

- Power supply

|                   |                                      |
|-------------------|--------------------------------------|
| Input Voltage     | 90 -240 ~Volts                       |
| Power Frequency   | 50/ 60 Hz +/-3Hz                     |
| Input current     | <1.5Arms @ 90Vac<br><0.75Arms@265Vac |
| Inrush current    | 90A(max.) at 230Vac                  |
| Power consumption | 50Watt                               |
| Output Voltage    | @0-4.8A load 12Vdc<br>+/-5%          |

- Power Management

| State   | Power  | Indicator |
|---------|--------|-----------|
| On      | 45Watt | Green     |
| Standby | <1Watt | Amber     |
| Off     | <1Watt |           |

- **Acceptable timing**

If your timing is within following specification, this LCD display can automatically function with a certain position.

Horizontal: Sync frequency : 30~80 kHz

Vertical: Sync frequency : 50~85Hz

- **Signal level and input impedance**

- Video Signal level This LCD display is adjusted at the factory using 0,7 Vp-p Video signal.

- Sync Signal level

H/V Separate : TTL level

- Input impedance

Video input : 75 ohms

Sync input : > 1 k ohms

**4-4. SIGNAL CABLE :** Non-detachable cable with Mini D-Sub 15P connector at one end. Length : 1.8 meter.

**4-5. EDID data**

Analog EDID

Time: 09:08:54

Date: Wed Sep 04, 2002

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VIEWSONIC CORPORATION  
EDID Version # 1, Revision # 3  
DDCTest For: VSC VE710s

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|     |  |    |    |    |    |    |    |    |    |    |    |
|-----|--|----|----|----|----|----|----|----|----|----|----|
| 0   |  | 00 | FF | FF | FF | FF | FF | FF | 00 | 5A | 63 |
| 10  |  | 18 | F5 | 01 | 01 | 01 | 01 | 01 | 0D | 01 | 03 |
| 20  |  | 08 | 22 | 1B | 78 | 2E | 04 | A5 | A3 | 58 | 4F |
| 30  |  | 95 | 24 | 19 | 50 | 54 | BF | EF | 80 | 81 | 80 |
| 40  |  | 81 | 40 | 71 | 4F | 01 | 01 | 01 | 01 | 01 | 01 |
| 50  |  | 01 | 01 | 01 | 01 | 30 | 2A | 00 | 98 | 51 | 00 |
| 60  |  | 2A | 40 | 30 | 70 | 13 | 00 | 52 | 0E | 11 | 00 |
| 70  |  | 00 | 1E | 00 | 00 | 00 | FF | 00 | 41 | 33 | 33 |
| 80  |  | 30 | 33 | 30 | 31 | 30 | 30 | 30 | 30 | 31 | 0A |
| 90  |  | 00 | 00 | 00 | FD | 00 | 32 | 4B | 1E | 50 | 0E |
| 100 |  | 00 | 0A | 20 | 20 | 20 | 20 | 20 | 20 | 00 | 00 |
| 110 |  | 00 | FC | 00 | 56 | 45 | 37 | 31 | 30 | 73 | 0A |
| 120 |  | 20 | 20 | 20 | 20 | 20 | 20 | 00 | 98 |    |    |

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(08-09) ID Manufacturer Name = VSC  
(10-11) Product ID Code (Non-Alphanumeric) = F518  
(12-15) Last 5 Digits of Serial Number = NOT SPECIFIED  
(16) Week of Manufacture = 01  
(17) Year of Manufacture = 2003  
(10-17) Complete Serial Number = NOT SPECIFIED  
(18) EDID Structure Version Number = 1  
(19) EDID Structure Revision Number = 3  
(20) VIDEO INPUT DEFINITION : =  
Separate Sync, Analog signal, 0.700V/0.300V (1.000 Vp-p)  
(21) Maximum Horizontal Image Size = 340mm  
(22) Maximum Vertical Image Size = 270mm  
(23) Display Gamma = 2.20  
(24) DPMS Supported Feature: = Active Off.  
Display type = RGB color display  
(25-34) CHROMA INFO:  
Red x = 0.633 Green x = 0.300 Blue x = 0.146 White x = 0.313  
Red y = 0.336 Green y = 0.586 Blue y = 0.103 White y = 0.329

(35) ESTABLISHED TIMING I:

720 x 400 @ 70Hz (VGA, IBM)  
640 x 480 @ 60Hz (MAC II, Apple)  
640 x 480 @ 67Hz (VESA)  
640 x 480 @ 72Hz (VESA)  
640 x 480 @ 75Hz (VESA)  
800 x 600 @ 56Hz (VESA)  
800 x 600 @ 60Hz (VESA)

(36) ESTABLISHED TIMING II:

800 x 600 @ 72Hz (VESA)  
800 x 600 @ 75Hz (VESA)  
832 x 624 @ 75Hz (MAC II, Apple)  
1024 x 768 @ 60Hz (VESA)  
1024 x 768 @ 70Hz (VESA)  
1024 x 768 @ 75Hz (VESA)  
1280 x 1024 @ 75Hz (VESA)

(37) Manufacturer's Reserved Timing:

1152 x 870 @ 75Hz (MAC II, Apple)

(38-53) Standard Timing Identification:

#1: 1280 x 1024 @60Hz  
#2: 1280 X 960 @60HZ  
#3: 1152 X 864 @75HZ  
#4: (44) not specified  
#5: (46) not specified  
#6: (48) not specified  
#7: (50) not specified  
#8: (52) not specified

(54-71) Detail Timing Description #1: 1280x1024 Pixel Clock=108.0MHz

Horizontal Image Size=338mm Vertical Image Size=270mm

Refresh Mode: Non-Interlaced Normal display, no stereo

HORIZONTAL:

|                           |                               |
|---------------------------|-------------------------------|
| Active Time = 1280 pixels | Blanking Time = 408 pixels    |
| Sync Offset = 48 pixels   | Sync Pulse Width = 112 pixels |
| Border = 1 pixels         | Frequency = 64.0 kHz          |

VERTICAL:

|                          |                            |
|--------------------------|----------------------------|
| Active Time = 1024 lines | Blanking Time = 42 lines   |
| Sync Offset = 1 lines    | Sync Pulse Width = 3 lines |
| Border = 0 lines         | Frequency = 60.0 Hz        |

Sync configuration: Digital separate, V(+), H(+)

(72-89) Monitor Description:  
 Monitor S/N: A33030100001

(90-107) Monitor Description:  
 Monitor Range Limits:  
 Vertical Frequency (min) = 50Hz  
 Vertical Frequency (max) = 75Hz  
 Horizontal Frequency (min) = 30Hz  
 Horizontal Frequency (max) = 82Hz  
 Maximum Supported Pixel Clock = 140MHz  
 SECONDARY GTF - NOT SUPPORTED

(108-125) Monitor Description:  
 Monitor Name: VE710s

(127) Checksum OK

Time: 14:35:05  
 Date: Thu Jul 03, 2003

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VIEWSONIC CORPORATION  
 EDID Version # 1, Revision # 3  
 DDCTest For: ViewSonic VE710b

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128 BYTES OF EDID CODE:

|     | 0  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  |
|-----|----|----|----|----|----|----|----|----|----|----|
| 0   | 00 | FF | FF | FF | FF | FF | FF | 00 | 5A | 63 |
| 10  | 18 | F6 | 01 | 01 | 01 | 01 | 01 | 0D | 01 | 03 |
| 20  | 08 | 22 | 1B | 78 | 2E | 04 | A5 | A3 | 58 | 4F |
| 30  | 95 | 24 | 19 | 50 | 54 | BF | EF | 80 | 81 | 80 |
| 40  | 81 | 40 | 71 | 4F | 01 | 01 | 01 | 01 | 01 | 01 |
| 50  | 01 | 01 | 01 | 01 | 30 | 2A | 00 | 98 | 51 | 00 |
| 60  | 2A | 40 | 30 | 70 | 13 | 00 | 52 | 0E | 11 | 00 |
| 70  | 00 | 1E | 00 | 00 | 00 | FF | 00 | 41 | 33 | 34 |
| 80  | 30 | 33 | 30 | 31 | 30 | 30 | 30 | 30 | 31 | 0A |
| 90  | 00 | 00 | 00 | FD | 00 | 32 | 4B | 1E | 50 | 0E |
| 100 | 00 | 0A | 20 | 20 | 20 | 20 | 20 | 20 | 00 | 00 |
| 110 | 00 | FC | 00 | 56 | 45 | 37 | 31 | 30 | 62 | 0A |
| 120 | 20 | 20 | 20 | 20 | 20 | 20 | 00 | A7 |    |    |

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- (08-09) ID Manufacturer Name = VSC
- (11-10) Product ID Code = F618
- (12-15) Last 5 Digits of Serial Number = Not Used
- (16) Week of Manufacture = 01
- (17) Year of Manufacture = 2003
- (10-17) Complete Serial Number = See Descriptor Block
- (18) EDID Version Number = 1
- (19) EDID Revision Number = 3
- (20) VIDEOINPUT DEFINITION:  
Separate Syncs, Analog signal, 0.700V/0.300V(1.000 Vp-p)
- (21) Maximum Horizontal Image Size = 340 mm
- (22) Maximum Vertical Image Size = 270 mm
- (23) Display Gamma = 2.20
- (24) Power Management and Supported Feature(s):  
Active Off/Very Low Power, Standard Default Color Space,  
Preferred Timing Mode  
Display Type = R/G/B Color
- (25-34) CHROMA INFO:  
Red X - 0.637 Green X - 0.310 Blue X - 0.143 White X - 0.313  
Red Y - 0.344 Green Y - 0.582 Blue Y - 0.100 White Y - 0.329
- (35) ESTABLISHED TIMING I:  
720 X 400 @ 70Hz (IBM,VGA)  
640 X 480 @ 60Hz (IBM,VGA)  
640 X 480 @ 67Hz (Apple,Mac II)  
640 X 480 @ 72Hz (VESA)  
640 X 480 @ 75Hz (VESA)  
800 X 600 @ 56Hz (VESA)  
800 X 600 @ 60Hz (VESA)
- (36) ESTABLISHED TIMING II:  
800 X 600 @ 72Hz (VESA)  
800 X 600 @ 75Hz (VESA)  
832 X 624 @ 75Hz (Apple,Mac II)  
1024 X 768 @ 60Hz (VESA)  
1024 X 768 @ 70Hz (VESA)  
1024 X 768 @ 75Hz (VESA)  
1280 X 1024 @ 75Hz (VESA)
- (37) Manufacturer's Reserved Timing:  
1152 X 870 @ 75Hz (Apple,Mac II)

(38-53) Standard Timing Identification:

1280 X 1024 @60Hz

1280 X 960 @60Hz

1152 X 864 @75Hz

Not Used

Not Used

Not Used

Not Used

Not Used

(54-71) Detailed Timing / Descriptor Block 1: 1280x1024 Pixel Clock: 108.00 MHz

Horizontal Image Size: 338 mm

Vertical Image Size: 270 mm

Refreshed Mode: Non-Interlaced

Normal Display - No Stereo

Horizontal:

Active Time: 1280 pixels

Blanking Time: 408 pixels

Sync Offset: 48 pixels

Sync Pulse Width: 112 pixels

Border: 0 pixels

Frequency: 63.98 KHz

Vertical:

Active Time: 1024 lines

Blanking Time: 42 lines

Sync Offset: 1 lines

Sync Pulse Width: 3 lines

Border: 0 lines

Frequency: 60.02 Hz

Digital Separate, Horizontal Polarity (+) Vertical Polarity (+)

(72-89) Detailed Timing / Descriptor Block 2:

Monitor Serial Number:

A34030100001

(90-107) Detailed Timing / Descriptor Block 3:

Monitor Range Limits:

Min Vertical Freq - 50 Hz

Max Vertical Freq - 75 Hz

Min Horiz. Freq - 30 KHz

Max Horiz. Freq - 80 KHz

Pixel Clock - 140 MHz

Secondary GTF - Not Supported

(108-125) Detailed Timing / Descriptor Block 4:

Monitor Name :

VE710b

(126) No Extension EDID Block(s)

(127) CheckSum OK

#### 4-6. THEORY OF OPERATION

This section describes the function of the LCD monitor per functional block.

This monitor includes MB board, inverter board, adapter and button board.

- **MB Board**

The MB board is a four-layer, single-landed design with ground and internal planes provided. DC power from the power adapter enter the board through DC jack. Other connectors on the board are for inverter, audio and button board .The VGA cable is a signal cable that contains video signal, sync signal and DDC signal from PC VGA adapter. This system board consists of 4 functional areas : flat panel controller, flash ROM , power regulator and Audio amplifier

- **Flat panel controller... MST8116A(U3)**

The heart of the system board is mstar MST8116A. The MST8116A is a graphics processing IC for LCD monitor. It provides all key IC functions required for LCD panel. On-chip functions include a high-speed triple-ADC , PLL, high scaling engine, OSD controller and on-chip micro controller.

a) Clock Generation :

Crystal Input Clock (TCLK and XTAL). This is the input pair to an internal crystal oscillator and corresponding logic. A 14.318 MHz crystal is recommended.

b) Analog to Digital Converter:

The MST8116A chip has three ADC's (analog-to-digital converters), one for each color (red, green and blue) .The analog RGB signals are connected to MST8116A as described below

| Pin Name | Pin Number |
|----------|------------|
| Red +    | 63         |
| Red -    | 62         |
| Green +  | 60         |
| Green -  | 59         |
| Blue +   | 58         |
| Blue -   | 57         |

c) OSD : The MST8116A has a fully programmable ,high-quality OSD controller. The on-chip static RAM(4096 words by 24 bits) stores the cell map and the cell definitions.

d) MTV312 Micro controller: The MTV312 micro controller(MCU) serves as the system micro controller. It programs the MST8116A and manages other devices in the system such as the keypad, the backlight, LED, audio and non-volatile RAM. using general purpose input/output (GPIO) pins.

| Pin number | Pin Name | Pin Number Usage                  |
|------------|----------|-----------------------------------|
| 21         | P1.3     | Key / Power on ,off               |
| 13         | P3.4     | NV_RAM (U4) SDA                   |
| 14         | P3.5     | NV_RAM (U4) SCL                   |
| 25         | P1.7     | Key_down                          |
| 9          | P6.3     | Key_right                         |
| 24         | P1.6     | Key_up                            |
| 16         | P6.2     | Key_left                          |
| 37         | P4.1     | Key_mute                          |
| 34         | P5.6     | VGA connector                     |
| 23         | P1.5     | Key_select                        |
| 42         | P5.3     | LED_red                           |
| 41         | P5.4     | LED_green                         |
| 32         | P6.6     | LCD panel power1 on / off control |
| 3          | P5.0     | LCD panel power2 on / off control |
| 36         | P4.0     | Backlight on / off control        |

- e) Panel Power Sequencing ( VDDCTRL1, 2 ) ( Pin 32, 3 ) : The MTV312 has two dedicated outputs VDDCTRL1 and 2 ( Pin32 and Pin3 ) to control LCD power sequencing once data and control signals are stable.
- f) Panel interface (Pin 1~25, Pin75~128) : The MTV312 driver interface is highly programmable. It supports dual bus / dual port for SXGA drivers.

• **Power Regulator MC34063A (U6),AIC1739 (Q4) :**

The MC34063A is a monolithic control IC containing the primary functions required for DC to DC internal temperature converters. The device consists of an compensated reference, comparator, controlled duty cycle. Oscillator with an active current sense circuit. Desired output voltage are determined by the equation,  $Volt = 1.25 ( 1 + R67 / R66 )$ , In this case, the output voltage are 3.3 Volts

The AIC1739 is a low dropout positive adjustable regulator with minimum of 300mA output current capability. So it is well suited for 3.3 V and 2.5 V Regulator.

#### 4-7 Power/Inverter Board

This is a specific power/inverter for L7VC monitor 50W 12V 4.16A output power and backlight which converts 12 Vdc to drive four cold cathode fluorescence tubes.

• **Inverter Electrical specification described as below**

|               |                                |                            |
|---------------|--------------------------------|----------------------------|
| <b>Input</b>  | Rated Input Voltage            | 12Vdc                      |
|               | Input Voltage Range            | 11.4 ~ 12.6 Vdc            |
|               | Input Current                  | <2A                        |
|               | Off state Input Power          | <0.1W                      |
|               | On / Off control Voltage       | 2~3.3 for on , 0~1 for off |
| <b>Output</b> | Rated Output Strike-on Voltage | 1500Vrms                   |
|               | Rated Output Voltage           | 710Vrms at 6mA             |
|               | Rate Output Frequency          | 40~50KHz                   |
|               | Rated Ourput Current           | 6~7 mA                     |

- **Power**

This is a general purpose AC / DC adapter which converter 90~240 Vac to a stabilized DC voltage 12 V with rated output current of 4.16A . Electrical specification described as below.

|  |                           |                        |
|--|---------------------------|------------------------|
|  | Rated Input Voltage       | 90~240 Vac , 50 / 60Hz |
|  | Operation Input Voltage   | 90~260 Vac , 47 ~ 63Hz |
|  | Input Current             | <1.5A                  |
|  | Inrush Current            | <100A@120Vac           |
|  | Standby Input Voltage     | 12Vdc                  |
|  | Output Voltage Regulation | +/-5%                  |
|  | Output Ripple & Noise     | 120mVp-p               |
|  | Rate Output Current       | <4.16A                 |
|  | Turn-on delay             | <3secs                 |

## 5. Adjusting Procedure

### OSD Function Menu

#### 1. Main Menu

Press “1” Button (Menu Button) to enter Main Menu:

Press Up Button to the previous page or Down Button to the next page .

Press “1” Button to exit Main Menu.

##### (1) Auto Image Adjust Page:

Press “2” Button to do auto image adjust function.

Press “1” Button to exit the page.

##### (2) Contrast/Brightness Page:

Press “2” Button to enter Contrast Item

Press “1” Button to exit the page.

###### 1) Contrast Item

Press Up Button to make contrast high.

Press Down Button to make contrast low.

Press “2” Button to enter Brightness Item.

Press “1” Button to exit the item.

###### 2) Brightness Item

Press Up Button to make brightness high.

Press Down Button to make brightness low.

Press “2” Button to enter Contrast Item.

Press “1” Button to exit the item.

##### (3) Color Adjust Page:

Press “2” Button to enter Color Adjust page.

Press “1” Button to exit the page.

Press Up Button to the previous item or Down Button to the next item.

###### 1) sRGB Item

###### 2) 9300K Item

###### 3) 6500K Item

###### 4) 5400K Item

Press “2” Button to select current Item.

Press “1” Button to exit current item.

###### 5) User Color Item

Press “2” Button to enter User Color item.

Press “1” Button to exit User Color item.

###### Red,Green,Blue Options:

Press “2” Button to switch among the options.

Press “1” Button to exit the options.

Press Up Button to make current option high.

Press Down Button to make current option low.

##### (4) Information Page:

Press “2” Button to show the information.

Press “1” Button to exit Information page.

##### (5) Manual Image Adjust Page:

Press “2” Button to enter Manual Image Adjust page.

Press “1” Button to exit Manual Image Adjust page.

Press Up Button to the previous item or Down Button to the next item.

**1) H./V. Position Item**

Press “2” Button to enter H./V. Position item.

Press “1” Button to exit H./V. Position item.

**a) Horizontal Position Option:**

Press “2” Button to enter the Vertical Position option.

Press “1” Button to exit Horizontal Position option.

Press Up Button to make current option high.

Press Down Button to make current option low

**b) Vertical Position Option:**

Press “2” Button to enter the Horizontal Position option.

Press “1” Button to exit Vertical Position option.

Press Up Button to make current option high.

Press Down Button to make current option low

**2) Horizontal Size Item**

Press “2” Button to enter Horizontal Size item.

Press “1” Button to exit Horizontal Size item.

Press Up Button to make current item high.

Press Down Button to make current item low.

**3) Fine tune Item**

Press “2” Button to enter Fine tune item.

Press “1” Button to exit Fine tune item.

Press Up Button to make current item high.

Press Down Button to make current item low.

**4) Sharpness Item**

Press “2” Button to enter Sharpness item.

Press “1” Button to exit Sharpness item.

Press Up Button to make current item high.

Press Down Button to make current item low.

**(6) Setup Menu Page:**

Press “2” Button to enter Setup Menu page.

Press “1” Button to exit Setup Menu page.

Press Up Button to the previous item or Down Button to the next item.

**1) Language Select Item**

Press “2” Button to enter Language Select item.

Press “1” Button to exit Language Select item.

Press Up Button to the previous option or Down Button to the next option.

**English, French Option**

Press “2” Button to select the language.

Press “1” Button to exit the option.

**2) Resolution Notice Item**

Press “2” Button to enter Resolution Notice item.

Press “1” Button to exit Resolution Notice item.

**Enable,Disable Option**

Press “2” Button to select the option.

Press “1” Button to exit the option

Press Up Button to the previous option or Down Button to the next option.

**3) OSD Position Item**

Press “2” Button to enter OSD Position item.

Press “1” Button to exit OSD Position item.

**a) Horizontal Position Option**

Press “2” Button to enter the Vertical Position option.

Press “1” Button to exit Horizontal Position option.

Press Up Button to make current option high.

Press Down Button to make current option low

**b) Vertical Position Option:**

Press “2” Button to enter the Horizontal Position option.

Press “1” Button to exit Vertical Position option.

Press Up Button to make current option high.

Press Down Button to make current option low

**4) OSD Time Out Item**

Press “2” Button to enter OSD Time Out item.

Press “1” Button to exit OSD Time Out item.

Press Up Button to make OSD time out long.

Press Down Button to make OSD time out short.

**5) OSD Background Item**

Press “2” Button to enter OSD Background item.

Press “1” Button to exit OSD Background item.

**Enable,Disable Option**

Press “2” Button to select the option.

Press “1” Button to exit the option.

Press Up Button to the previous option or Down Button to the next option.

**(7) Memory Recall Page**

Press “2” Button to do the memory recall function.

Press “1” Button to exit the page.

**2. Other Menu:****(1) Contrast Dialog**

Press Down Button to enter the Contrast Dialog.

Press “1” Button to exit the Contrast Dialog.

Press “2” Button to enter the Brightness Dialog.

Press Up Button to make contrast high.

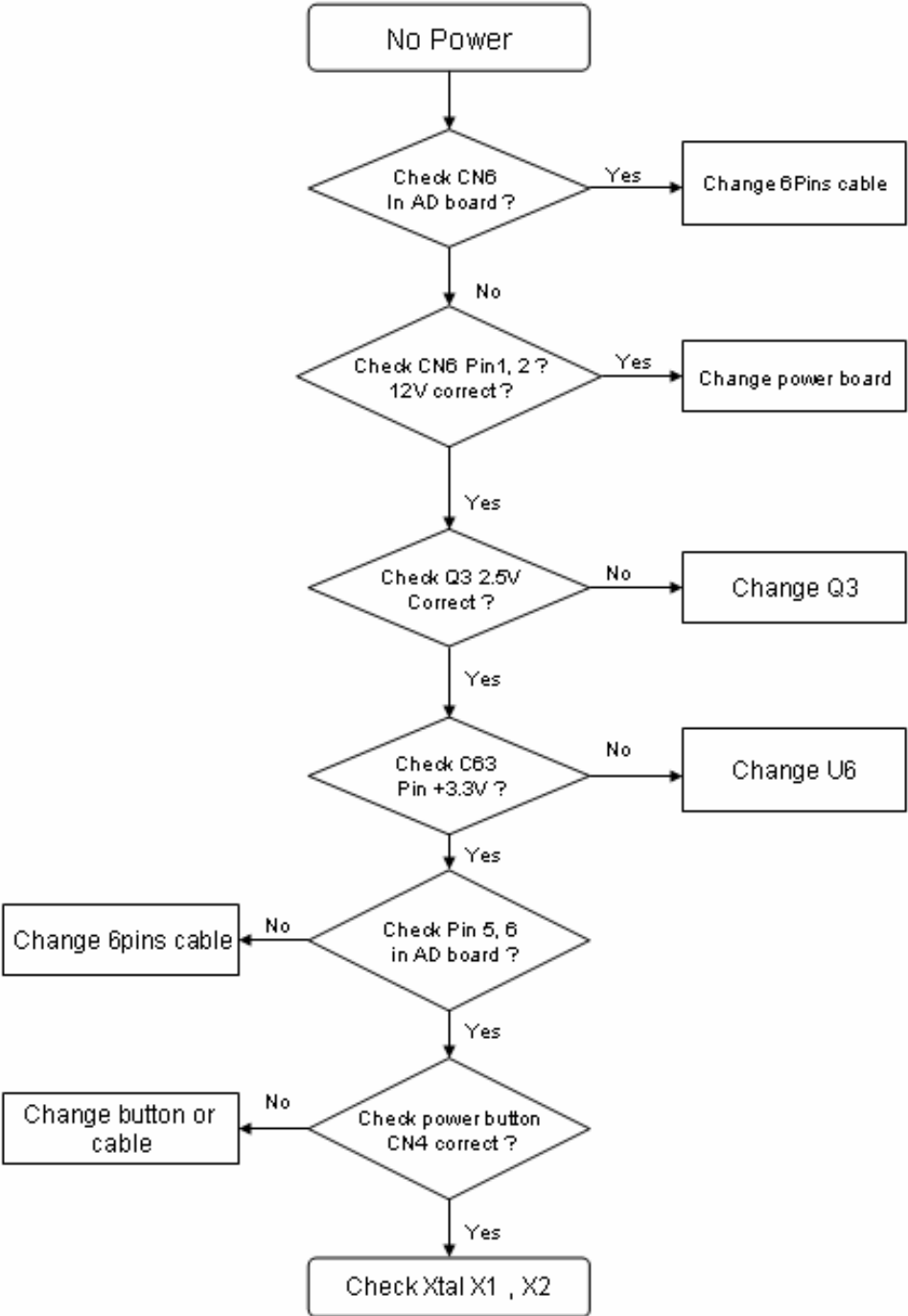
Press Down Button to make contrast low.

**(2) Auto Image Adjust Dialog**

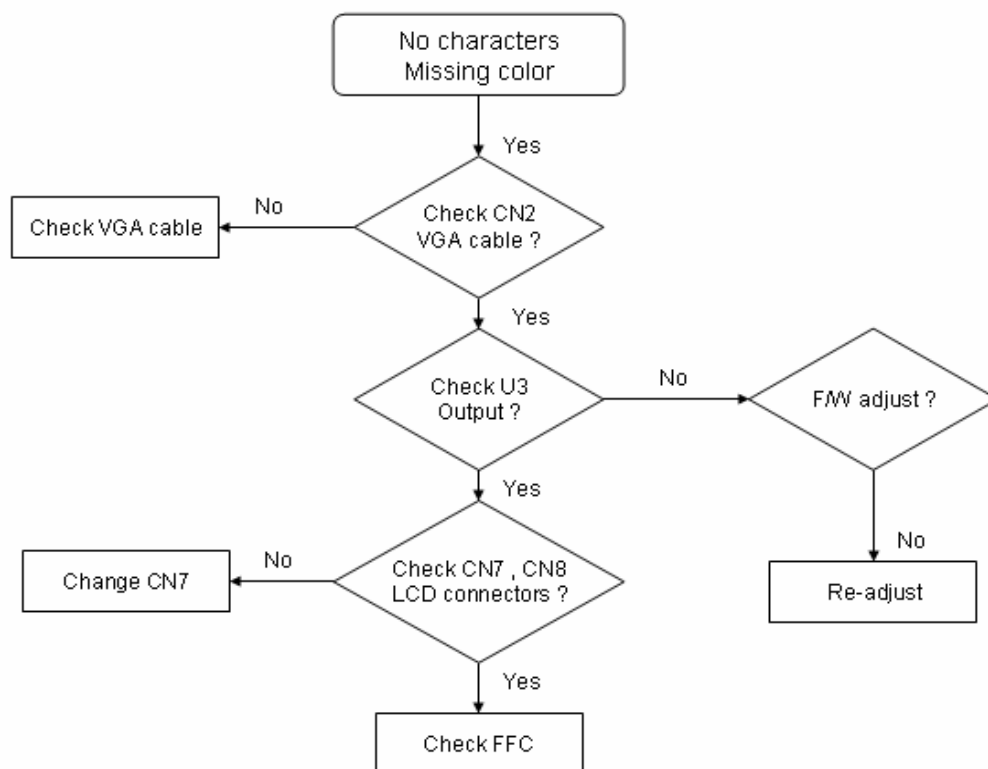
Press “2” Button to do the auto image adjust function.

6. Trouble Shooting Flow Charts

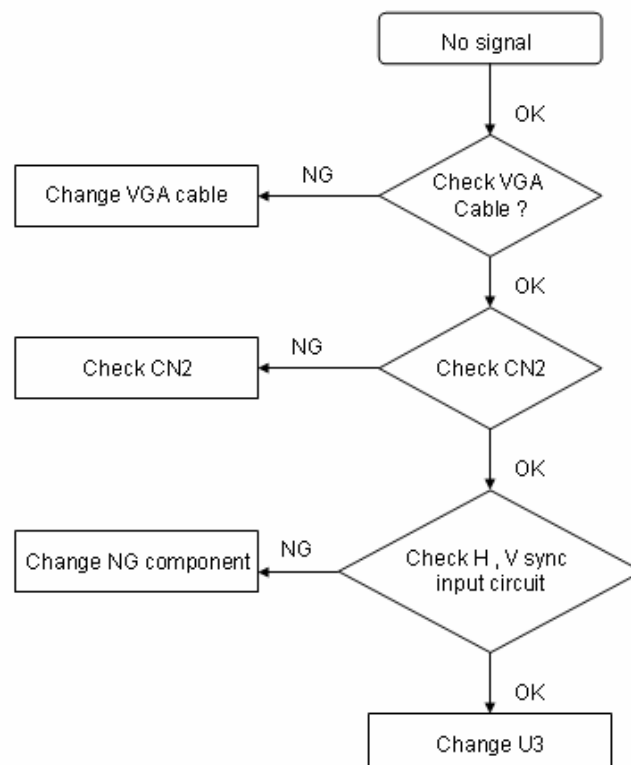
6-1. No Power



## 6-2. No Characters , Missing Color



## 6-3 Always show NO SIGNAL



## 7. Recommended Spare Parts List

### VE710b-1 Recommended Spare Parts List

| Item | ViewSonic P/N   | Ref. P/N    | Description                      | Location               | Q'ty |
|------|-----------------|-------------|----------------------------------|------------------------|------|
| 1    | B-MB-0201-2726  | 29L7VMB0000 | Main Board                       | Scaler board           | 1    |
| 2    | B-SB-0221-0595  | AS02B012009 | Power board                      | power board / inverter | 1    |
| 3    | P-BX-0601-0933  | HFL7V006019 | Carton                           | carton                 | 1    |
| 4    | P-FM-0602-0840  | HBL7V005019 | Polyform (L)                     | end cap( L)            | 1    |
| 5    | P-FM-0602-0841  | HBL7V006015 | Polyform ( R )                   | end cap( R)            | 1    |
| 6    | M-MS-0808-7710  | HAL7E002013 | PE bag                           | PE bag                 | 1    |
| 7    | M-LB-0813-0918  | HCL7V017018 | ID label                         | ID label on carton     | 1    |
| 8    | A-CD-VE710B     | HGL7V005013 | CD wizard                        | CD + user menu         | 1    |
| 9    | C-BC-0302-0570  | 37L7VFBVS38 | Rear enclosure                   | monitor back cover     | 1    |
| 10   | C-BC-0302-0570  | 33L7VFBVS29 | Front enclosure                  | Monitor front bezel    | 1    |
| 11   | C-BS-0303-0506  | 26L7VSAVS17 | Base                             | Base ass'y             | 1    |
| 12   | M-SCW-0824-6797 | MF40080BJ29 | Screw ( To assembly the cabinet) | Screw                  | 3    |
| 13   | M-SCW-0824-6798 | MM30080BBJ2 | Screw ( To assembly the cabinet) | Screw                  | 1    |
| 14   | M-SCW-0824-6799 | MM35080BBW2 | Screw ( To assembly the cabinet) | Screw                  | 1    |
| 15   | M-SCW-0824-6800 | MM30060IBJ8 | Screw ( To assembly the cabinet) | Screw                  | 11   |
| 16   | M-SCW-0824-6801 | MF40080PBJ6 | Screw ( To assembly the cabinet) | Screw                  | 2    |
| 17   | M-SCW-0824-6802 | MM30040IBJ9 | Screw ( To assembly the cabinet) | Screw                  | 10   |
| 18   | M-LCD-0826-0193 | AA0170EA101 | LCD panel                        | CPT LCD panel          | 1    |
| 19   | B-CB-0206-0170  | 23L7VBB0026 | Button board ass'y               | bbutton boatd          | 1    |

### VE710s-1 Recommended Spare Parts List

| Item | ViewSonic P/N   | Ref. P/N    | Description                      | Location               | Q'ty |
|------|-----------------|-------------|----------------------------------|------------------------|------|
| 1    | B-MB-0201-2726  | 29L7VMB0000 | Main Board                       | Scaler board           | 1    |
| 2    | B-SB-0221-0595  | AS02B012009 | Power board                      | power board / inverter | 1    |
| 3    | P-BX-0601-0934  | HFL7V008011 | Carton                           | carton                 | 1    |
| 4    | P-FM-0602-0840  | HBL7V005019 | Polyform (L)                     | end cap( L)            | 1    |
| 5    | P-FM-0602-0841  | HBL7V006015 | Pilyform ( R )                   | end cap( R)            | 1    |
| 6    | M-MS-0808-7710  | HALV7001012 | PE bag                           | PE bag                 | 1    |
| 7    | M-LB-0813-0919  | HCL7V018014 | ID label                         | ID label on carton     | 1    |
| 8    | A-CD-VE710S     | HGL7V007016 | CD wizard                        | CD + user menu         | 1    |
| 9    | C-BC-0302-0571  | 37L7VFBVS46 | Rear enclosure                   | monitor back cover     | 1    |
| 10   | C-BC-0302-0571  | 33L7VFBVS37 | Front enclosure                  | Monitor front bezel    | 1    |
| 11   | C-BS-0303-0507  | 26L7VBCVS25 | Base                             | Base ass'y             | 1    |
| 12   | M-SCW-0824-6797 | MF40080BJ29 | Screw ( To assembly the cabinet) | Screw                  | 3    |
| 13   | M-SCW-0824-6798 | MM30080BBJ2 | Screw ( To assembly the cabinet) | Screw                  | 1    |
| 14   | M-SCW-0824-6799 | MM35080BBW2 | Screw ( To assembly the cabinet) | Screw                  | 1    |
| 15   | M-SCW-0824-6800 | MM30060IBJ8 | Screw ( To assembly the cabinet) | Screw                  | 11   |
| 16   | M-SCW-0824-6801 | MF40080PBJ6 | Screw ( To assembly the cabinet) | Screw                  | 2    |
| 17   | M-SCW-0824-6802 | MM30040IBJ9 | Screw ( To assembly the cabinet) | Screw                  | 10   |
| 18   | M-LCD-0826-0193 | AA0170EA101 | LCD panel                        | CPT LCD panel          | 1    |
| 19   | B-CB-0206-0170  | 23L7VBB0026 | Button board ass'y               | bbutton boatd          | 1    |

## VE710b-1 BOM LIST

| Item | ViewSonic P/N  | Ref. P/N    | Description                              | Location                                                                                                                                                | Q'ty |
|------|----------------|-------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 1    | B-MB-0201-2726 | 1L7VZZZVS94 | L7VC LCD MONITOR (CPT)                   |                                                                                                                                                         |      |
| 2    | #N/A           | 29L7VMB0000 | L7VC M/B ASSY                            |                                                                                                                                                         | 1    |
| 3    | #N/A           | 3BL7VSS0009 | L7VC M/B S/S ASSY                        |                                                                                                                                                         | 1    |
| 4    | #N/A           | DAL7VCMB2D8 | PCB(M/B) L7VC MB(2L,12.5*11,REVD)        |                                                                                                                                                         | 1    |
| 5    | #N/A           | AJ08116CC04 | IC(128P) MST8116A(135MHZ,PQFP)           | U3                                                                                                                                                      | 1    |
| 6    | #N/A           | AKE3I8B0602 | IC EEPROM(8P)M24C08-WMN6T(1K*8,400K,SO8) | U4                                                                                                                                                      | 1    |
| 7    | #N/A           | AJ00312VP18 | IC(44P) MTV312MV64AJ(12MHZ,PLCC)         | U5                                                                                                                                                      | 1    |
| 8    | #N/A           | AL034063023 | IC(8P) MC34063A(SOP)                     | U6                                                                                                                                                      | 1    |
| 9    | #N/A           | BAM23010Z05 | TRANSISTOR MOSFET SI2301DS(-12V,-2.3A)   | Q6,Q7                                                                                                                                                   | 2    |
| 10   | #N/A           | BA001430Z22 | TRANSISTOR SMD DTC143EUA(50V,100MA)      | Q8,Q9                                                                                                                                                   | 2    |
| 11   | #N/A           | BA039060Z01 | TRANSISTOR,SMD MMBT3906(40V,200MA)       | Q1,Q2,Q3,Q10,Q11                                                                                                                                        | 5    |
| 12   | #N/A           | AL001739001 | IC(3P) AIC1739-25CX(SOT89)               | Q4                                                                                                                                                      | 1    |
| 13   | #N/A           | BAN70020Z13 | TRANSISTOR MOSFET 2N7002E(60V,250MA)     | Q5                                                                                                                                                      | 1    |
| 14   | #N/A           | BC000014Z01 | DIODE SMD SSM14(40V,1A)SCHOTTK           | D26                                                                                                                                                     | 1    |
| 15   | #N/A           | CH51004MA32 | CAPACITOR CHIP 1UF 25V(+20%,Y5V,0805)    | C65                                                                                                                                                     | 1    |
| 16   | #N/A           | CH02206J909 | CAPACITOR CHIP 22P 50V(+5%,NPO,0603)     | C41,C42,C50,C51,C52,C53                                                                                                                                 | 6    |
| 17   | #N/A           | CH14706K919 | CAPACITOR CHIP 470P 50V(+10%,X7R,0603)   | C60                                                                                                                                                     | 1    |
| 18   | #N/A           | CH22206K917 | CAP CHIP 2200P 50V(+10%,X7R,0603)        | C72,C73,C76,C77                                                                                                                                         | 4    |
| 19   | #N/A           | CH34703K916 | CAP CHIP 0.047UF 16V(+10%,X7R,0603)      | C1,C3,C4,C6,C8,C10                                                                                                                                      | 6    |
| 20   | #N/A           | CH31006K919 | CAP CHIP 0.01U 50V(+10%,X7R,0603)        | C7                                                                                                                                                      | 1    |
| 21   | #N/A           | CH41004Z931 | CAP CHIP 0.1U,25V(+80-20%,Y5V,0603)      | C18,C19,C20,C21,C22,C23,C24,C26,C27,C29,C31,C32,C34,C35,C37,C38,C39,C40,C43,C44,C45,C46,C47,C48,C55,C56,C59,C61,C68,C69,C74,C78,C80,C81,C82,C92,C93,C98 | 38   |
| 22   | #N/A           | CS00006J205 | RESISTOR CHIP 0 1/4W+-5%(3216)           | FUSE1,R108                                                                                                                                              | 2    |
| 23   | #N/A           | CS00004JA07 | RESISTOR CHIP 0 1/8W +-5%(0805)          | L13,L18,L26,L28,L29,L30,R103                                                                                                                            | 7    |
| 24   | #N/A           | CS00003J900 | RESISTOR CHIP 0 1/10W+-5%(0603)          | L23,R64                                                                                                                                                 | 2    |
| 25   | #N/A           | CS+3006J204 | RESISTOR CHIP 0.3 1/4W,+-5%(3216)        | R63                                                                                                                                                     | 1    |
| 26   | #N/A           | CS02203J902 | RES CHIP 22 1/10W +-5%(0603)             | R30,R31,R33,R34,R48,R49,R50,R51,R59                                                                                                                     | 9    |
| 27   | #N/A           | CS03303J909 | RES CHIP 33 1/10W +-5%(0603)             | R1,R4,R8,R98                                                                                                                                            | 4    |
| 28   | #N/A           | CS07503F905 | RESISTOR CHIP 75 1/10W +-1%(1608)        | R2,R5,R9                                                                                                                                                | 3    |
| 29   | #N/A           | CS11003J904 | RESISTOR CHIP 100 1/10W +-5%(0603)       | L1,L5,L7,L35,R7,R11,R13,R14,R18,R19,R28,R29,R46,R47,R60,R88,R89                                                                                         | 17   |
| 30   | #N/A           | CS13303F909 | RESISTOR CHIP 330 1/10W +-1%(0603)       | L16,L17                                                                                                                                                 | 2    |
| 31   | #N/A           | CS13903F901 | RESISTOR CHIP 390 1/10W+-1%(0603)        | R27                                                                                                                                                     | 1    |
| 32   | #N/A           | CS21003J906 | RES CHIP 1K 1/10W +-5%(0603)             | L14,L15,L37,L38,L39,R53,R54,R68,R70,R90,R93                                                                                                             | 11   |
| 33   | #N/A           | CS22003J909 | RES CHIP 2K 1/10W +-5%(0603)             | R12,R15,R35,R36,R92                                                                                                                                     | 5    |
| 34   | #N/A           | CS22203F904 | RES CHIP 2.2K 1/10W,+-1%(0603)           | R67,R112                                                                                                                                                | 2    |
| 35   | #N/A           | CS23603F901 | RESISTOR CHIP 3.6K, 1/10W,+-1%(0603)     | R66                                                                                                                                                     | 1    |
| 36   | #N/A           | CS24703F908 | RESISTOR CHIP 4.7K 1/10W+-1%(0603)       | R91,R96,R97                                                                                                                                             | 3    |

|    |                 |             |                                          |                                                              |    |
|----|-----------------|-------------|------------------------------------------|--------------------------------------------------------------|----|
| 37 | #N/A            | CS31003J908 | RES CHIP 10K 1/10W +-5%(0603)            | L22,R37,R38,R44,R52,R55,R56,R61,R65,R69,R71,R73,R75,R76,R110 | 15 |
| 38 | #N/A            | CS38203J904 | RES CHIP 82K 1/10W +-5%(0603)            | R41,R72,R74,R77                                              | 4  |
| 39 | #N/A            | CX0E601R009 | EMI FILTER CHIP HZ0805E601R(600,500MA)   | L8,L9,L10,L11,L12                                            | 5  |
| 40 | #N/A            | DFFC50FS023 | CONN SMD FFC 50P 1R FS(P0.5,H2.24)       | CN7                                                          | 1  |
| 41 | #N/A            | DFFC30FS140 | CONN SMD FFC 30P 1R FS(P0.5,H2.24)       | CN8                                                          | 1  |
| 42 | #N/A            | CS-3303J901 | RESISTOR CHIP 3.3 1/10W +-5%(1608)       | R114                                                         | 1  |
| 43 | #N/A            | CS04703J906 | RES CHIP 47 1/10W +-5%(0603)             | R111                                                         | 1  |
| 44 | #N/A            | BA039040Z01 | TRANSISTOR,SMD MMBT3904(40V,200MA)       | Q12                                                          | 1  |
| 45 | #N/A            | CS26803J909 | RESISTOR CHIP 6.8K 1/10W +-5%(1608)      | R94                                                          | 1  |
| 46 | #N/A            | CS33303J904 | RESISTOR CHIP 33K 1/10W +-5%(0603)       | R39,R40,R99,R100,R101                                        | 5  |
| 47 | #N/A            | CS06803J905 | RESISTOR CHIP 68 1/10W +-5%(1608)        | R3,R6,R10                                                    | 3  |
| 48 | #N/A            | BDGZ5226Z03 | DIODE ZENER SMD MMGZ5226B(3.3V)          | D30                                                          | 1  |
| 49 | #N/A            | CH03306J905 | CAPACITOR CHIP 33P 50V(+5%,NPO,0603)     | C11,C13                                                      | 2  |
| 50 | #N/A            | CX000300104 | EMI FILTER CHIP FCM1608C-300T06 30,600MA | L2,L3,L6                                                     | 3  |
| 51 | #N/A            | CC62204MD23 | CAP ELEC 22U 25V(+20%,105C,5*11,2000HR)  | C17,C25,C28,C30,C33,C36,C49,C70                              | 8  |
| 52 | E-L-0407-1563   | CC73303MD51 | CAP ELEC 330U 16V(+20%,105C,8*11,2000HR) | C58,C62,C75,C79                                              | 4  |
| 53 | E-X-0415-0128   | DC04725K002 | CHOKE COIL 47UH(2.5A,+10%,T07473)        | L21                                                          | 1  |
| 54 | #N/A            | BG614318D55 | XTAL DIP 14.318MHZ(+30PPM,07010-X-136-2  | X1                                                           | 1  |
| 55 | #N/A            | DFHD14MS264 | CONN DIP HEADER 14P 2R MS(P2.0,H6.0)     | CN2                                                          | 1  |
| 56 | #N/A            | DFHD10MR316 | CONN DIP HEADER 10P 1R MR(P2.0,H4.1)     | CN4                                                          | 1  |
| 57 | #N/A            | DFHD08MS439 | CONN DIP HEADER 8P 2R MS(P2.54,H6.0)     | CN6                                                          | 1  |
| 58 | B-SB-0221-0595  | BG611059319 | CRYSTAL DIP 11.0592MHZ(+30PPM,49/US)     | X2                                                           | 1  |
| 59 | B-CB-0206-0170  | AS02B012009 | ADP/INV,ADP- 40AFB,90-264VAC             |                                                              | 1  |
| 60 | #N/A            | 23L7VBB0026 | L7VC BUTTON/B ASSY                       |                                                              | 1  |
| 61 | #N/A            | DFHD08MR301 | CONN DIP HEADER 8P 1R MR(P2.0,H4.1)      | CN1                                                          | 1  |
| 62 | #N/A            | BEYG0013DA3 | LED(DIP) YELLOW/GREEN(L-3WYGW)           | LED1                                                         | 1  |
| 63 | #N/A            | DAL7VCTB1C5 | PCB(BUTTON) L7VC TL(1L,125*23,REVC)      |                                                              | 1  |
| 64 | #N/A            | DHP0002B205 | SWITCH PUCH BUTTON(PT-002-B2,50MA,12V)   | SW1,SW2,SW3,SW4,SW5                                          | 5  |
| 65 | C-BC-0302-0570  | 22L7VLAVS41 | L7VC LCD MODULE ASSY(CPT)                |                                                              | 1  |
| 66 | #N/A            | 33L7VFBVS29 | L7VC FRONT BEZEL ASSY                    |                                                              | 1  |
| 67 | #N/A            | EAL7V012014 | LCD BEZEL L7VC(EAL7V012,REV3B)           |                                                              | 1  |
| 69 | #N/A            | EBL7V021014 | LENS L7VC(EBL7V021,REV3A)                |                                                              | 1  |
| 69 | #N/A            | EBL7V022011 | CONTROL BUTTON L7VC(EBL7V022,REV3A)      |                                                              | 1  |
| 70 | #N/A            | FEL7V003019 | LOGO FRONT-VSC-38MM L7VC(FEL7V003,REV3A) |                                                              | 1  |
| 71 | #N/A            | FEL7V004015 | BIRD LOGO-10MM L7VC(FEL7V004,REV3A)      |                                                              | 1  |
| 72 | #N/A            | 37L7VBCVS38 | L7VC BACK COVER ASSY                     |                                                              | 1  |
| 73 | M-CV-0830-2484  | EAL7V013011 | LCD COVER L7VC(EAL7V013,REV3B)           |                                                              | 1  |
| 74 | #N/A            | FBL7V007011 | KENSINGTON CAP(FBL7V007,REV3A)           |                                                              | 1  |
| 75 | #N/A            | FBL7V034019 | HINGE ASSY L7VC(FBL7V034,REV3A)          |                                                              | 1  |
| 76 | #N/A            | FBL7V036011 | VESA BKT-LONG L7VC(FBL7V036,REV3A)       |                                                              | 1  |
| 77 | #N/A            | FEL7V005011 | LOGO PLATE ELLIPSE L7VC(FEL7V005,REV3A)  |                                                              | 1  |
| 78 | #N/A            | GAL7V006014 | RUBBER PLUG VESA L7VC(GAL7V006,REV3B)    |                                                              | 4  |
| 79 | M-SCW-0824-6797 | GBLM7003017 | GASKET-3 LM7S(GBLM7003,REV3A)            |                                                              | 1  |
| 80 | #N/A            | MF40080BJ29 | SCREW F4.0*8-B(BNI)                      |                                                              | 7  |
| 81 | #N/A            | 34L7VBAVS00 | L7VC PCB BKT ASSY                        |                                                              | 1  |
| 82 | #N/A            | FAL7V011018 | PCB BRACKET L7VC(FAL7V011,REV3A)         |                                                              | 1  |
| 83 | #N/A            | FCL7V011010 | P/B MYLAR-UP L7VC(FCL7V011,REV3A)        |                                                              | 1  |
| 84 | M-LB-0813-0894  | EBL70023013 | WIRE MOUNTS L70L-E(EBL70023,REV3A)       |                                                              | 1  |
| 85 | M-LCD-0826-0193 | HCL7V005010 | WARNING LABEL, INVERTOR(HCL7V005,3A)     |                                                              | 1  |
| 86 | #N/A            | AA0170EA101 | LCD(TFT) CLAA170EA03(17",1280*1024,SXGA) |                                                              | 1  |
| 87 | #N/A            | FAL7V012014 | LCD BKT-L L7VC(FAL7V012,REV,3A)          |                                                              | 1  |
| 88 | #N/A            | FAL7V013011 | LCD BKT-R L7VC(FAL7V013,REV3A)           |                                                              | 1  |

|     |                 |             |                                          |  |      |
|-----|-----------------|-------------|------------------------------------------|--|------|
| 89  | #N/A            | FCL7A001014 | AL FOIL L7A(FCL7A001,REV3A)              |  | 2    |
| 90  | #N/A            | FCL7V012016 | P/B MYLAR-DOWN L7VC(FCL7V012,REV3A)      |  | 1    |
| 91  | M-SCW-0824-6797 | JXLM7002011 | FOIL LM7S(JXLM7002,REV3B)                |  | 1    |
| 92  | M-SCW-0824-6798 | MF40080BJ29 | SCREW F4.0*8-B(BNI)                      |  | 3    |
| 93  | M-SCW-0824-6799 | MM30080BBJ2 | SCREW M3.0*8,B(NI)                       |  | 1    |
| 94  | M-SCW-0824-6800 | MM35080BBW2 | SCREW M3.5*8-B (NI,WASHER)               |  | 1    |
| 95  | M-SCW-0824-6801 | MM30060IBJ8 | SCREW M3.0*6.0-I(NI)                     |  | 11   |
| 96  | M-SCW-0824-6802 | MF40080PBJ6 | SCREW F4.0*8-P(NI)                       |  | 2    |
| 97  | #N/A            | MM30040IBJ9 | SCREW M3.0*4.0-I(NI)                     |  | 10   |
| 98  | C-BS-0303-0506  | GAL7V009013 | RUBBER PLUG COVER L7VC(GAL7V009,REV3A)   |  | 2    |
| 99  | #N/A            | 26L7VSAVS17 | L7VC STAND ASSY                          |  | 1    |
| 100 | #N/A            | EAL7V014017 | BASE L7VC(EAL7V014,REV3A)                |  | 1    |
| 101 | #N/A            | FBL7V035015 | BASE PLATE L7VC(FBL7V035,REV3A)          |  | 1    |
| 102 | #N/A            | GAL70001019 | RUBBER FOOT L70B(GAL70001,REV3A)         |  | 4    |
| 103 | M-SCW-0824-6797 | GAL7V007011 | RUBBER FOOT-FRONT L7VC(GAL7V007,R3A)     |  | 1    |
| 104 | #N/A            | MF40080BJ29 | SCREW F4.0*8-B(BNI)                      |  | 5    |
| 105 | #N/A            | HCL7V020019 | STAND LABEL L7VC(HCL7V020,REV3A)         |  | 1    |
| 106 | #N/A            | 23L7VCSVS36 | L7VC CHASSIS ASSY                        |  | 1    |
| 107 | #N/A            | DDL7VCPB101 | CABLE ASSY L7VC POWER-MB(8P/8P,REV1A)    |  | 1    |
| 108 | #N/A            | DDL7VCP001  | CABLE ASSY L7VC MB-VGA(14/15P,REV1A)     |  | 1    |
| 109 | #N/A            | DDL7VCTH004 | CABLE ASSY L7VC BUTTON-MB(8P/10P,REV1A)  |  | 1    |
| 110 | #N/A            | DEFC0709607 | CABLE FFC L5TI MB-LCD50P/50P 70MM REV3A  |  | 1    |
| 111 | #N/A            | DEFC0709704 | CABLE FFC L7VC MB-LCD(30P/30P,70MM REV1A |  | 1    |
| 112 | #N/A            | EBL7V023017 | HINGE CAP L7VC(EBL7V023,REV3A)           |  | 2    |
| 113 | #N/A            | MM40100BCI2 | SCREW M4*10.0-B(NI,NYLOK)                |  | 4    |
| 114 | A-PC-0106-0227  | 24L7VPKVS71 | L7VC PACKING ASSY                        |  | 1    |
| 115 | A-PC-0106-0224  | DM333181801 | POWER CORD SP-023+IS-14H05VV-F3P 1.8M EU |  | 1    |
| 116 | M-MS-0808-7710  | DM333181G97 | POWER CORD 3P 1.8M(USA)V04VS35001218000  |  | 1    |
| 117 | P-FM-0602-0840  | HAL7E002013 | PE BAG L7E(HAL7E002,REV3C)               |  | 1    |
| 118 | P-FM-0602-0841  | HBL7V005019 | END CAP(L) L7VC(HBL7V005,REV3A)          |  | 1    |
| 119 | M-LB-0813-0747  | HBL7V006015 | END CAP(R) L7VC(HBL7V006,REV3A)          |  | 1    |
| 120 | M-LB-0813-0918  | HCL7V004013 | CORE LABEL(HCL7V004,REV3A)               |  | 1    |
| 121 | M-LB-0813-0745  | HCL7V017018 | ID LABEL L7VC(HCL7V017,REV3A)            |  | 1    |
| 122 | #N/A            | HCL7V002011 | SERIAL LABEL(HCL7V002,REV3A)             |  | 1    |
| 123 | P-BX-0601-0933  | HCL7V019011 | CARTON LABEL L7VC(HCL7V019,REV3A)        |  | 1    |
| 124 | A-CD-VE710B     | HFL7V006019 | CARTON L7VC(HFL7V006,REV3A)              |  | 1    |
| 125 | #N/A            | HGL7V005013 | USER MANUAL & CD ROM L7VC(HGL7V005,R3A)  |  | 1    |
| 126 | #N/A            | JXLM5003011 | HANDLE LM5S(JXLM5003,REV 3B)             |  | 1    |
| 127 | #N/A            | HFL7V009018 | SPACE PLATE L7VC(HFL7V009,REV3A)         |  | 0.03 |
| 128 | #N/A            | JXL7V003017 | LCD FILM L7VC(JXL7V003,REV3A)            |  | 1    |
|     |                 |             |                                          |  |      |

## VE710s-1 BOM LIST

| Item | ViewSonic P/N  | Ref. P/N    | Description                              | Location                                                                                                                                                | Q'ty |
|------|----------------|-------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 1    | #N/A           | 1L7VZZZVSA9 | L7VC LCD MONITOR(CPT/ SILVER)            |                                                                                                                                                         |      |
| 2    | B-MB-0201-2726 | 29L7VMB0000 | L7VC M/B ASSY                            |                                                                                                                                                         | 1    |
| 3    | #N/A           | 3BL7VSS0009 | L7VC M/B S/S ASSY                        |                                                                                                                                                         | 1    |
| 4    | #N/A           | DAL7VCMB2D8 | PCB(M/B) L7VC MB(2L,12.5*11,REVD)        |                                                                                                                                                         | 1    |
| 5    | #N/A           | AJ08116CC04 | IC(128P) MST8116A(135MHZ,PQFP)           | U3                                                                                                                                                      | 1    |
| 6    | #N/A           | AKE3I8B0602 | IC EEPROM(8P)M24C08-WMN6T(1K*8,400K,SO8) | U4                                                                                                                                                      | 1    |
| 7    | #N/A           | AJ00312VP18 | IC(44P) MTV312MV64AJ(12MHZ,PLCC)         | U5                                                                                                                                                      | 1    |
| 8    | #N/A           | AL034063023 | IC(8P) MC34063A(SOP)                     | U6                                                                                                                                                      | 1    |
| 9    | #N/A           | BAM23010Z05 | TRANSISTOR MOSFET SI2301DS(-12V,-2.3A)   | Q6,Q7                                                                                                                                                   | 2    |
| 10   | #N/A           | BA001430Z22 | TRANSISTOR SMD DTC143EUA(50V,100MA)      | Q8,Q9                                                                                                                                                   | 2    |
| 11   | #N/A           | BA039060Z01 | TRANSISTOR,SMD MMBT3906(40V,200MA)       | Q1,Q2,Q3,Q10,Q11                                                                                                                                        | 5    |
| 12   | #N/A           | AL001739001 | IC(3P) AIC1739-25CX(SOT89)               | Q4                                                                                                                                                      | 1    |
| 13   | #N/A           | BAN70020Z13 | TRANSISTOR MOSFET 2N7002E(60V,250MA)     | Q5                                                                                                                                                      | 1    |
| 14   | #N/A           | BC000014Z01 | DIODE SMD SSM14(40V,1A)SCHOTTK           | D26                                                                                                                                                     | 1    |
| 15   | #N/A           | CH51004MA32 | CAPACITOR CHIP 1UF 25V(+/-20%,Y5V,0805)  | C65                                                                                                                                                     | 1    |
| 16   | #N/A           | CH02206J909 | CAPACITOR CHIP 22P 50V(+/-5%,NPO,0603)   | C41,C42,C50,C51,C52,C53                                                                                                                                 | 6    |
| 17   | #N/A           | CH14706K919 | CAPACITOR CHIP 470P 50V(+/-10%,X7R,0603) | C60                                                                                                                                                     | 1    |
| 18   | #N/A           | CH22206K917 | CAP CHIP 2200P 50V(+/-10%,X7R,0603)      | C72,C73,C76,C77                                                                                                                                         | 4    |
| 19   | #N/A           | CH34703K916 | CAP CHIP 0.047UF 16V(+/-10%,X7R,0603)    | C1,C3,C4,C6,C8,C10                                                                                                                                      | 6    |
| 20   | #N/A           | CH31006K919 | CAP CHIP 0.01U 50V(+/-10%,X7R,0603)      | C7                                                                                                                                                      | 1    |
| 21   | #N/A           | CH41004Z931 | CAP CHIP 0.1U,25V(+80-20%,Y5V,0603)      | C18,C19,C20,C21,C22,C23,C24,C26,C27,C29,C31,C32,C34,C35,C37,C38,C39,C40,C43,C44,C45,C46,C47,C48,C55,C56,C59,C61,C68,C69,C74,C78,C80,C81,C82,C92,C93,C98 | 38   |
| 22   | #N/A           | CS00006J205 | RESISTOR CHIP 0 1/4W+-5%(3216)           | FUSE1,R108                                                                                                                                              | 2    |
| 23   | #N/A           | CS00004JA07 | RESISTOR CHIP 0 1/8W +-5%(0805)          | L13,L18,L26,L28,L29,L30,R1                                                                                                                              | 7    |
| 24   | #N/A           | CS00003J900 | RESISTOR CHIP 0 1/10W+-5%(0603)          | L23,R64                                                                                                                                                 | 2    |
| 25   | #N/A           | CS+3006J204 | RESISTOR CHIP 0.3 1/4W,+-5%(3216)        | R63                                                                                                                                                     | 1    |
| 26   | #N/A           | CS02203J902 | RES CHIP 22 1/10W +-5%(0603)             | R30,R31,R33,R34,R48,R49,R50,R51,R59                                                                                                                     | 9    |
| 27   | #N/A           | CS03303J909 | RES CHIP 33 1/10W +-5%(0603)             | R1,R4,R8,R98                                                                                                                                            | 4    |
| 28   | #N/A           | CS07503F905 | RESISTOR CHIP 75 1/10W +-1%(1608)        | R2,R5,R9                                                                                                                                                | 3    |

|    |                |             |                                          |                                                                                     |    |
|----|----------------|-------------|------------------------------------------|-------------------------------------------------------------------------------------|----|
| 29 | #N/A           | CS11003J904 | RESISTOR CHIP 100 1/10W +-5%(0603)       | L1,L5,L7,L35,<br>R7,R11,R13,R<br>14,R18,R19,R<br>28,R29,R46,R<br>47,R60,R88,R<br>89 | 17 |
| 30 | #N/A           | CS13303F909 | RESISTOR CHIP 330 1/10W +-1%(0603)       | L16,L17                                                                             | 2  |
| 31 | #N/A           | CS13903F901 | RESISTOR CHIP 390 1/10W+-1%(0603)        | R27                                                                                 | 1  |
| 32 | #N/A           | CS21003J906 | RES CHIP 1K 1/10W +-5%(0603)             | L14,L15,L37,L<br>38,L39,R53,R5<br>4,R68,R70,R9<br>0,R93                             | 11 |
| 33 | #N/A           | CS22003J909 | RES CHIP 2K 1/10W +-5%(0603)             | R12,R15,R35,<br>R36,R92                                                             | 5  |
| 34 | #N/A           | CS22203F904 | RES CHIP 2.2K 1/10W,+-1%(0603)           | R67,R112                                                                            | 2  |
| 35 | #N/A           | CS23603F901 | RESISTOR CHIP 3.6K, 1/10W,+-1%(0603)     | R66                                                                                 | 1  |
| 36 | #N/A           | CS24703F908 | RESISTOR CHIP 4.7K 1/10W+-1%(0603)       | R91,R96,R97                                                                         | 3  |
| 37 | #N/A           | CS31003J908 | RES CHIP 10K 1/10W +-5%(0603)            | L22,R37,R38,<br>R44,R52,R55,<br>R56,R61,R65,<br>R69,R71,R73,<br>R75,R76,R110        | 15 |
| 38 | #N/A           | CS38203J904 | RES CHIP 82K 1/10W +-5%(0603)            | R41,R72,R74,<br>R77                                                                 | 4  |
| 39 | #N/A           | CX0E601R009 | EMI FILTER CHIP HZ0805E601R(600,500MA)   | L8,L9,L10,L11<br>,L12                                                               | 5  |
| 40 | #N/A           | DFFC50FS023 | CONN SMD FFC 50P 1R FS(P0.5,H2.24)       | CN7                                                                                 | 1  |
| 41 | #N/A           | DFFC30FS140 | CONN SMD FFC 30P 1R FS(P0.5,H2.24)       | CN8                                                                                 | 1  |
| 42 | #N/A           | CS-3303J901 | RESISTOR CHIP 3.3 1/10W +-5%(1608)       | R114                                                                                | 1  |
| 43 | #N/A           | CS04703J906 | RES CHIP 47 1/10W +-5%(0603)             | R111                                                                                | 1  |
| 44 | #N/A           | BA039040Z01 | TRANSISTOR,SMD MMBT3904(40V,200MA)       | Q12                                                                                 | 1  |
| 45 | #N/A           | CS26803J909 | RESISTOR CHIP 6.8K 1/10W +-5%(1608)      | R94                                                                                 | 1  |
| 46 | #N/A           | CS33303J904 | RESISTOR CHIP 33K 1/10W +-5%(0603)       | R39,R40,R99,<br>R100,R101                                                           | 5  |
| 47 | #N/A           | CS06803J905 | RESISTOR CHIP 68 1/10W +-5%(1608)        | R3,R6,R10                                                                           | 3  |
| 48 | #N/A           | BDGZ5226Z03 | DIODE ZENER SMD MMGZ5226B(3.3V)          | D30                                                                                 | 1  |
| 49 | #N/A           | CH03306J905 | CAPACITOR CHIP 33P 50V(+5%,NPO,0603)     | C11,C13                                                                             | 2  |
| 50 | #N/A           | CX000300104 | EMI FILTER CHIP FCM1608C-300T06 30,600MA | L2,L3,L6                                                                            | 3  |
| 51 | #N/A           | CC62204MD23 | CAP ELEC 22U 25V(+20%,105C,5*11,2000HR)  | C17,C25,C28,<br>C30,C33,C36,                                                        | 8  |
| 52 | #N/A           | CC73303MD51 | CAP ELEC 330U 16V(+20%,105C,8*11,2000HR) | C58,C62,C75,<br>C79                                                                 | 4  |
| 53 | E-L-0407-1563  | DC04725K002 | CHOKE COIL 47UH(2.5A,+-10%,T07473)       | L21                                                                                 | 1  |
| 54 | E-X-0415-0128  | BG614318D55 | XTAL DIP 14.318MHZ(+30PPM,07010-X-136-2  | X1                                                                                  | 1  |
| 55 | #N/A           | DFHD14MS264 | CONN DIP HEADER 14P 2R MS(P2.0,H6.0)     | CN2                                                                                 | 1  |
| 56 | #N/A           | DFHD10MR316 | CONN DIP HEADER 10P 1R MR(P2.0,H4.1)     | CN4                                                                                 | 1  |
| 57 | #N/A           | DFHD08MS439 | CONN DIP HEADER 8P 2R MS(P2.54,H6.0)     | CN6                                                                                 | 1  |
| 58 | #N/A           | BG611059319 | CRYSTAL DIP 11.0592MHZ(+30PPM,49/US)     | X2                                                                                  | 1  |
| 59 | B-SB-0221-0595 | AS02B012009 | ADP/INV,ADP- 40AFB,90-264VAC             |                                                                                     | 1  |
| 60 | B-CB-0206-0170 | 23L7VBB0026 | L7VC BUTTON/B ASSY                       |                                                                                     | 1  |
| 61 | #N/A           | DFHD08MR301 | CONN DIP HEADER 8P 1R MR(P2.0,H4.1)      | CN1                                                                                 | 1  |
| 62 | #N/A           | BEYG0013DA3 | LED(DIP) YELLOW/GREEN(L-3WYGW)           | LED1                                                                                | 1  |
| 63 | #N/A           | DAL7VCTB1C5 | PCB(BUTTON) L7VC TL(1L,125*23,REVC)      |                                                                                     | 1  |
| 64 | #N/A           | DHP0002B205 | SWITCH PUCH BUTTON(PT-002-B2,50MA,12V)   | SW1,SW2,SW3<br>,SW4,SW5                                                             | 5  |
| 65 | #N/A           | 22L7VLAVS59 | L7VC LCD MODULE ASSY(CPT/ SILVER)        |                                                                                     | 1  |

|     |                 |              |                                          |  |    |
|-----|-----------------|--------------|------------------------------------------|--|----|
| 66  | C-BC-0302-0571  | 33L7VFBVS37  | L7VC FRONT BEZEL ASSY(SILVER)            |  | 1  |
| 67  | #N/A            | EAL7V012022  | LCD BEZEL-SILVER L7VC(EAL7V012,REV3B)    |  | 1  |
| 68  | #N/A            | EBL7V021014  | LENS L7VC(EBL7V021,REV3A)                |  | 1  |
| 69  | #N/A            | EBL7V022011  | CONTROL BUTTON L7VC(EBL7V022,REV3A)      |  | 1  |
| 70  | #N/A            | FEL7V003019  | LOGO FRONT-VSC-38MM L7VC(FEL7V003,REV3A) |  | 1  |
| 71  | #N/A            | FEL7V004015  | BIRD LOGO-10MM L7VC(FEL7V004,REV3A)      |  | 1  |
| 72  | C-BS-0303-0507  | 37L7VBCVS46  | L7VC BACK COVER ASSY(BLACK)              |  | 1  |
| 73  | #N/A            | EAL7V013029  | LCD COVER(BLACK) L7VC(EAL7V013,REV3B)    |  | 1  |
| 74  | M-CV-0830-2484  | FBL7V007011  | KENSINGTON CAP(FBL7V007,REV3A)           |  | 1  |
| 75  | #N/A            | FBL7V034019  | HINGE ASSY L7VC(FBL7V034,REV3A)          |  | 1  |
| 76  | #N/A            | FBL7V036011  | VESA BKT-LONG L7VC(FBL7V036,REV3A)       |  | 4  |
| 77  | #N/A            | FEL7V005011  | LOGO PLATE ELLIPSE L7VC(FEL7V005,REV3A)  |  | 1  |
| 78  | #N/A            | GAL7V008017  | RUBBER PLUG VESA/BK L7VC(GAL7V008,R3A)   |  | 7  |
| 79  | #N/A            | GBLM7003017  | GASKET-3 LM7S(GBLM7003,REV3A)            |  | 1  |
| 80  | M-SCW-0824-6797 | MF40080BJ29  | SCREW F4.0*8-B(BNI)                      |  | 1  |
| 81  | #N/A            | 34L7VBASVS00 | L7VC PCB BKT ASSY                        |  | 1  |
| 82  | #N/A            | FAL7V011018  | PCB BRACKET L7VC(FAL7V011,REV3A)         |  | 1  |
| 83  | #N/A            | FCL7V011010  | P/B MYLAR-UP L7VC(FCL7V011,REV3A)        |  | 1  |
| 84  | #N/A            | EBL70023013  | WIRE MOUNTS L70L-E(EBL70023,REV3A)       |  | 1  |
| 85  | M-LB-0813-0894  | HCL7V005010  | WARNING LABEL, INVERTOR(HCL7V005,3A)     |  | 1  |
| 86  | M-LCD-0826-0193 | AA0170EA101  | LCD(TFT) CLAA170EA03(17",1280*1024,SXGA) |  | 2  |
| 87  | #N/A            | FAL7V012014  | LCD BKT-L L7VC(FAL7V012,REV,3A)          |  | 1  |
| 88  | #N/A            | FAL7V013011  | LCD BKT-R L7VC(FAL7V013,REV3A)           |  | 1  |
| 89  | #N/A            | FCL7A001014  | AL FOIL L7A(FCL7A001,REV3A)              |  | 3  |
| 90  | #N/A            | FCL7V012016  | P/B MYLAR-DOWN L7VC(FCL7V012,REV3A)      |  | 1  |
| 91  | #N/A            | JXLM7002011  | FOIL LM7S(JXLM7002,REV3B)                |  | 1  |
| 92  | M-SCW-0824-6797 | MF40080BJ29  | SCREW F4.0*8-B(BNI)                      |  | 11 |
| 93  | M-SCW-0824-6798 | MM30080BBJ2  | SCREW M3.0*8,B(NI)                       |  | 2  |
| 94  | M-SCW-0824-6799 | MM35080BBW2  | SCREW M3.5*8-B (NI,WASHER)               |  | 10 |
| 95  | M-SCW-0824-6800 | MM30060IBJ8  | SCREW M3.0*6.0-I(NI)                     |  | 2  |
| 96  | M-SCW-0824-6801 | MF40080PBJ6  | SCREW F4.0*8-P(NI)                       |  | 1  |
| 97  | M-SCW-0824-6802 | MM30040IBJ9  | SCREW M3.0*4.0-I(NI)                     |  | 1  |
| 98  | #N/A            | GAL7V010011  | RUBBER PLUG COVER /BK L7VC(GAL7V010,R3A) |  | 1  |
| 99  | #N/A            | 26L7VSAVS25  | L7VC STAND ASSY(BLACK)                   |  | 4  |
| 100 | #N/A            | EAL7V014025  | BASE(BLACK) L7VC(EAL7V014,REV3A)         |  | 5  |
| 101 | #N/A            | FBL7V035015  | BASE PLATE L7VC(FBL7V035,REV3A)          |  | 1  |
| 102 | #N/A            | GAL70001019  | RUBBER FOOT L70B(GAL70001,REV3A)         |  | 1  |
| 103 | #N/A            | GAL7V007011  | RUBBER FOOT-FRONT L7VC(GAL7V007,R3A)     |  | 1  |
| 104 | M-SCW-0824-6797 | MF40080BJ29  | SCREW F4.0*8-B(BNI)                      |  | 1  |
| 105 | #N/A            | HCL7V020019  | STAND LABEL L7VC(HCL7V020,REV3A)         |  | 1  |
| 106 | #N/A            | 23L7VCSVS36  | L7VC CHASSIS ASSY                        |  | 1  |
| 107 | #N/A            | DDL7VCPB101  | CABLE ASSY L7VC POWER-MB(8P/8P,REV1A)    |  | 1  |
| 108 | #N/A            | DDL7VCPB001  | CABLE ASSY L7VC MB-VGA(14/15P,REV1A)     |  | 2  |
| 109 | #N/A            | DDL7VCTH004  | CABLE ASSY L7VC BUTTON-MB(8P/10P,REV1A)  |  | 4  |
| 110 | #N/A            | DEFC0709607  | CABLE FFC L5TI MB-LCD50P/50P 70MM REV3A  |  | 1  |
| 111 | #N/A            | DEFC0709704  | CABLE FFC L7VC MB-LCD(30P/30P,70MM REV1A |  | 1  |
| 112 | #N/A            | EBL7V023017  | HINGE CAP L7VC(EBL7V023,REV3A)           |  | 1  |
| 113 | #N/A            | MM40100BCI2  | SCREW M4*10.0-B(NI,NYLOK)                |  | 1  |
| 114 | #N/A            | 24L7VPKVS89  | L7VC PACKING ASSY(FOR SILVER)            |  | 1  |
| 115 | A-PC-0106-0227  | DM333181801  | POWER CORD SP-023+IS-14H05VV-F3P 1.8M EU |  | 1  |
| 116 | A-PC-0106-0224  | DM333181G97  | POWER CORD 3P 1.8M(USA)V04VS35001218000  |  | 1  |
| 117 | M-MS-0808-8981  | HAL7V001012  | EPE BAG L7V(HAL7V001,REV3A)              |  | 1  |
| 118 | P-FM-0602-0840  | HBL7V005019  | END CAP(L) L7VC(HBL7V005,REV3A)          |  | 1  |
| 119 | P-FM-0602-0841  | HBL7V006015  | END CAP(R) L7VC(HBL7V006,REV3A)          |  | 1  |
| 120 | M-LB-0813-0747  | HCL7V004013  | CORE LABEL(HCL7V004,REV3A)               |  | 1  |
| 121 | M-LB-0813-0919  | HCL7V018014  | ID LABEL (SILVER) L7VC(HCL7V018,REV3A)   |  | 1  |

|     |                |             |                                          |  |      |
|-----|----------------|-------------|------------------------------------------|--|------|
| 122 | M-LB-0813-0745 | HCL7V002011 | SERIAL LEBAL(HCL7V002,REV3A)             |  | 1    |
| 123 | #N/A           | HCL7V019011 | CARTON LABEL L7VC(HCL7V019,REV3A)        |  | 0.03 |
| 124 | P-BX-0601-0934 | HFL7V008011 | CARTON (FOR SILVER) L7VC(HFL7V008,R3A)   |  | 1    |
| 125 | A-CD-VE710S    | HGL7V007016 | USER MANUAL &CD ROM-S L7VC(HGL7V007,R3A) |  |      |
| 126 | #N/A           | JXLM5003011 | HANDLE LM5S(JXLM5003,REV 3B)             |  |      |
| 127 | #N/A           | HFL7V009018 | SPACE PLATE L7VC(HFL7V009,REV3A)         |  |      |
| 128 | #N/A           | JXL7V003017 | LCD FILM L7VC(JXL7V003,REV3A)            |  |      |

FIGURE 2

| PART NUMBER | PART DESCRIPTION            |
|-------------|-----------------------------|
| 37L7BCV546  | L7VC BACK COVER ASSY(BLACK) |

8. Exploded Diagram And Spare Parts List

VE710 S Explode Diagram

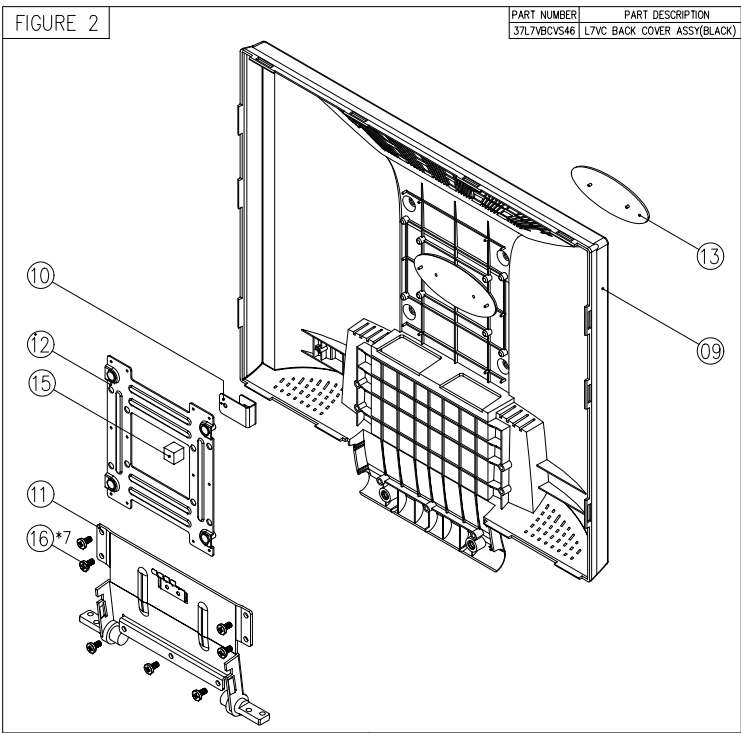


FIGURE 2

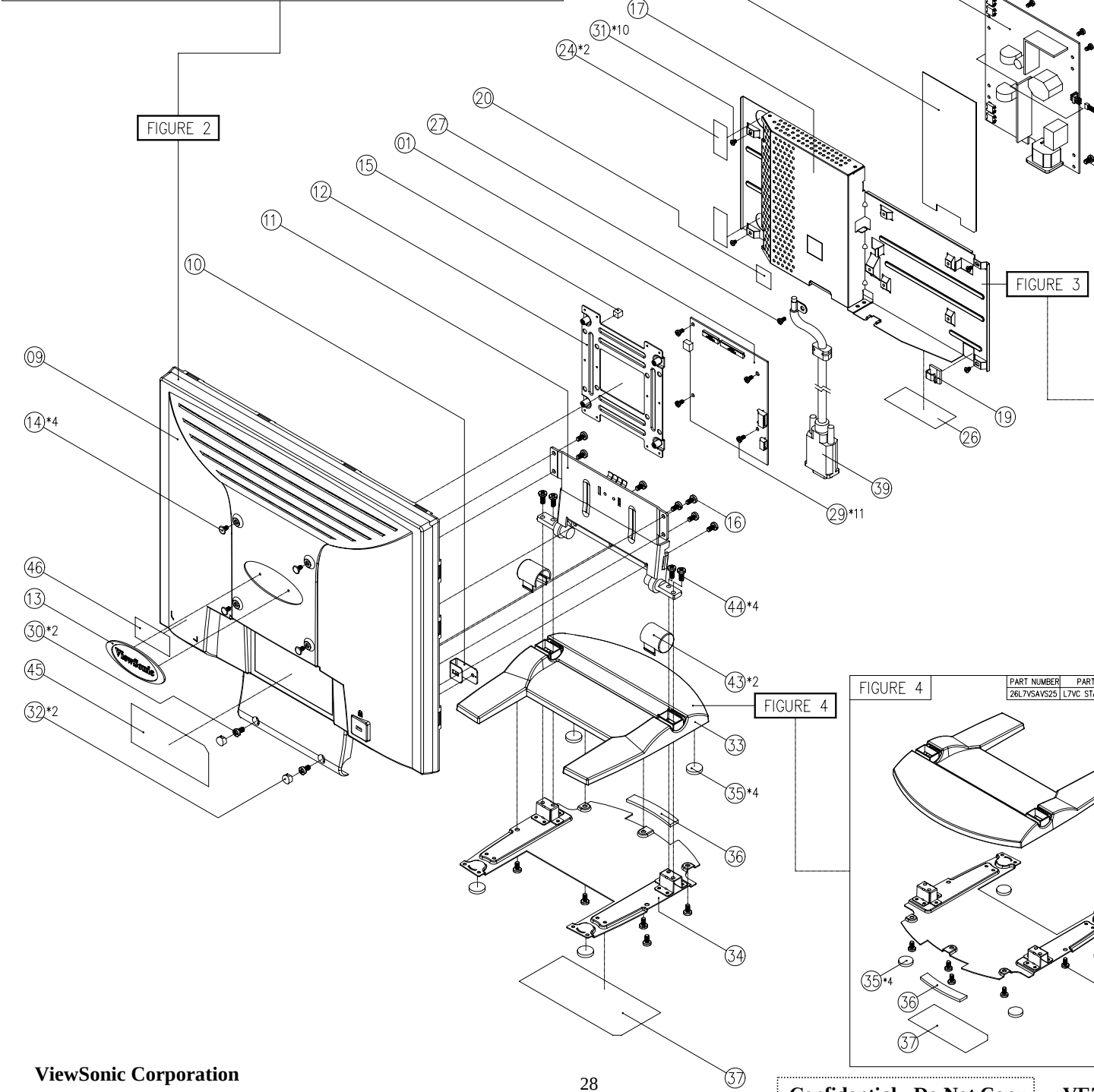


FIGURE 3

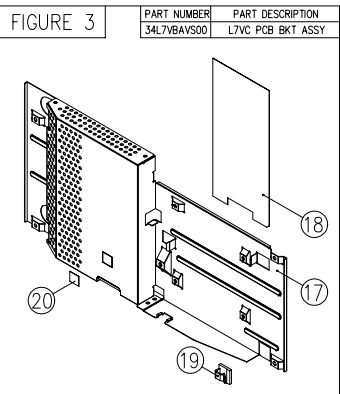


FIGURE 4

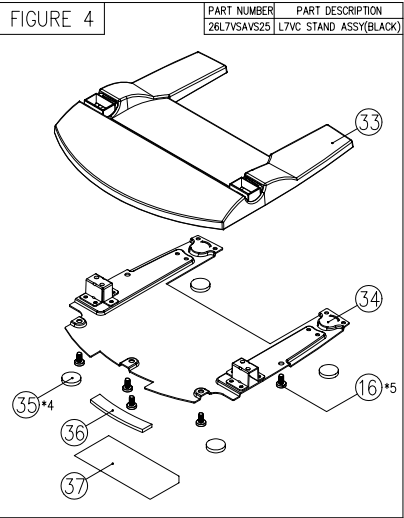


FIGURE 1

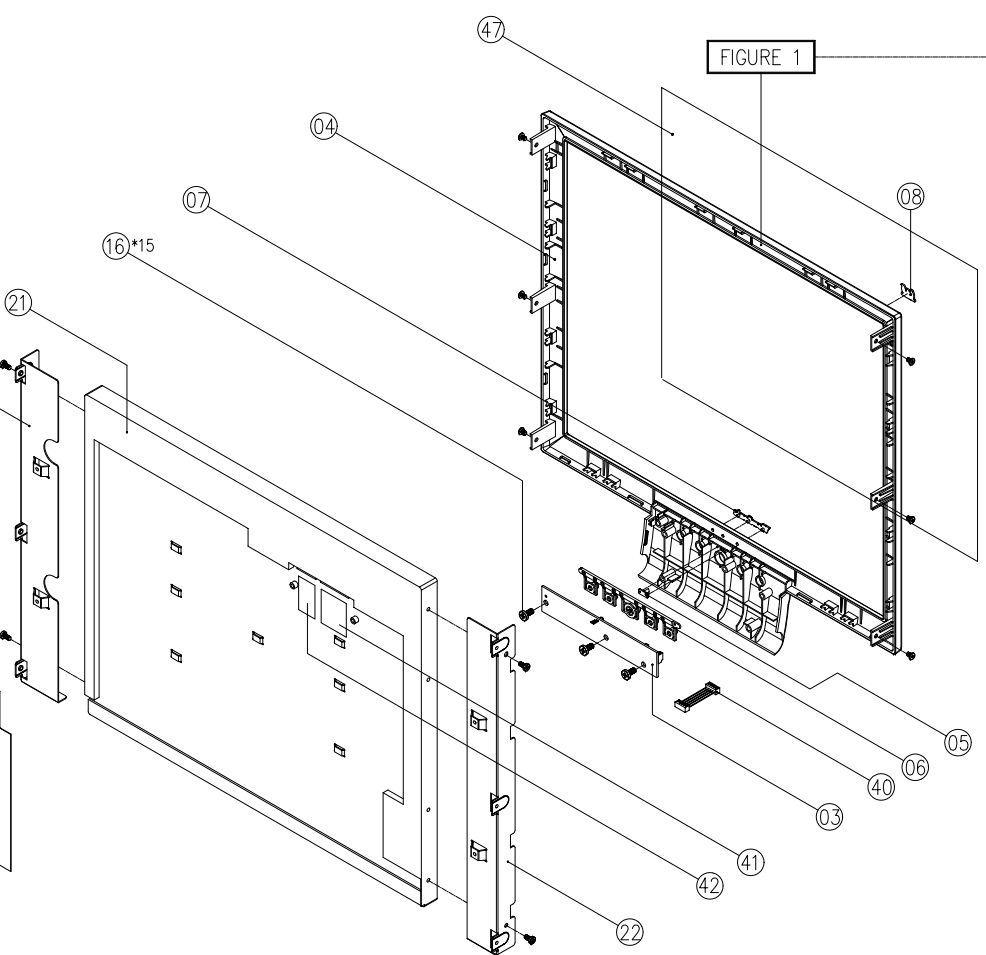


FIGURE 1

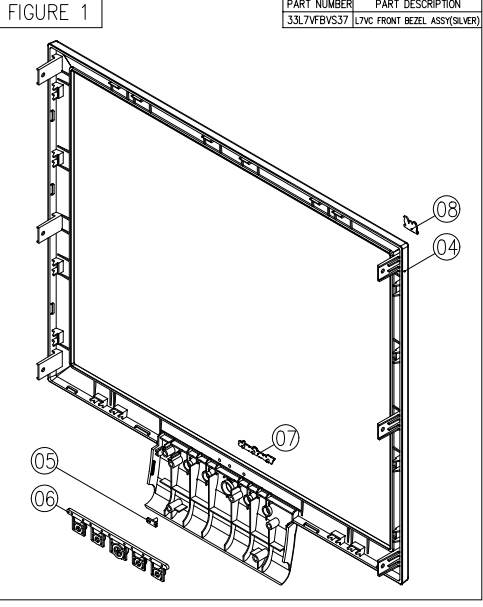
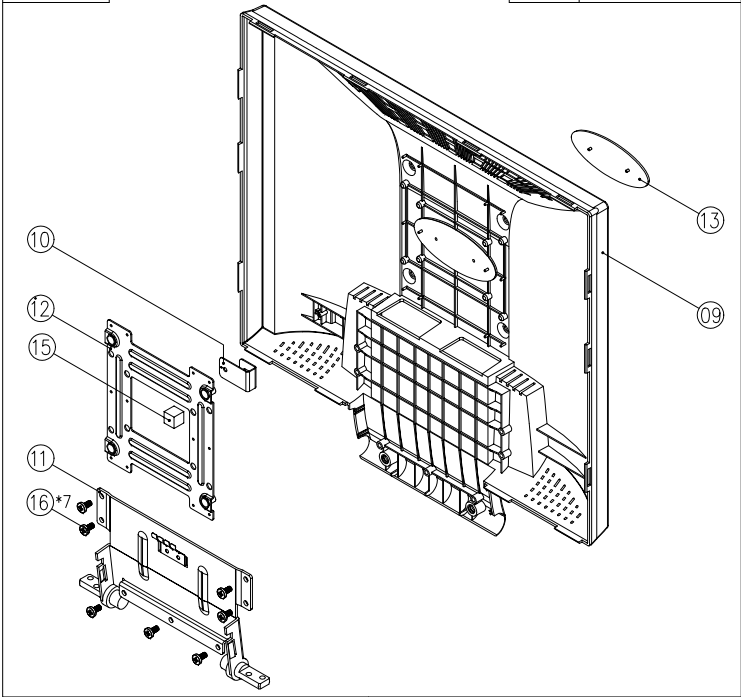


FIGURE 2

| PART NUMBER | PART DESCRIPTION     |
|-------------|----------------------|
| 37L7BCV338  | L7VC BACK COVER ASSY |



VE710 B Explode Diagram

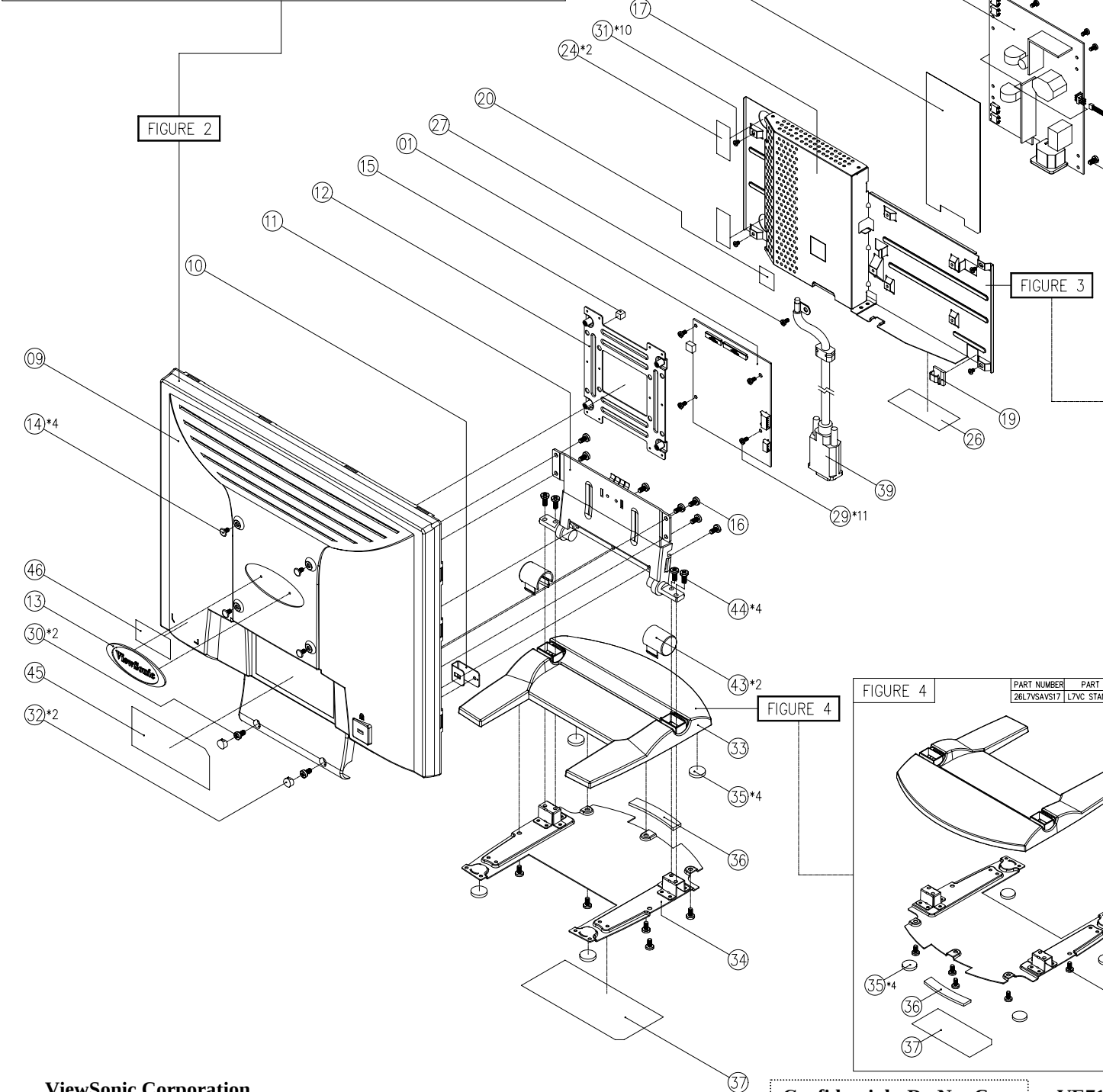


FIGURE 2

FIGURE 3

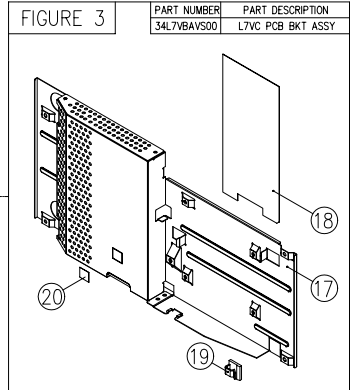
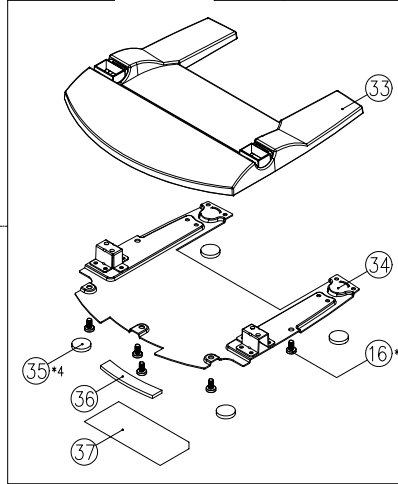


FIGURE 4

| PART NUMBER | PART DESCRIPTION |
|-------------|------------------|
| 26L7YSAVS17 | L7VC STAND ASSY  |



## VE710b-1 Exploded Parts List

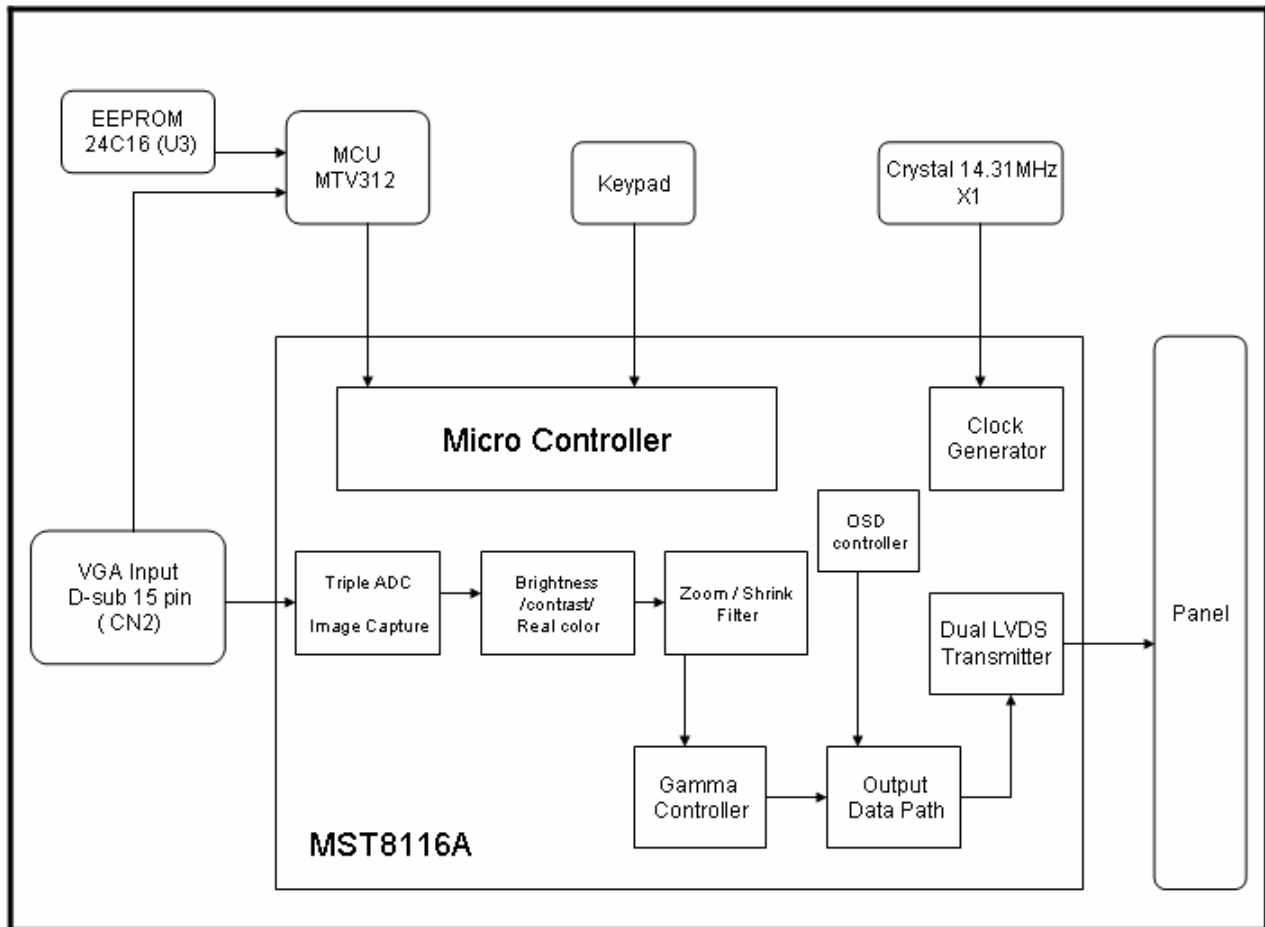
| ITEM | Part Number | ViewSonic Part Number | Part Description                         | UNIT |
|------|-------------|-----------------------|------------------------------------------|------|
| 1    | 29L7VMB0000 | B-MB-0201-2726        | L7VC M/B ASSY                            | 1    |
| 2    | AS02B012009 | B-SB-0221-0595        | ADP/INV,ADP- 40AFB,90-264VAC             | 1    |
| 3    | 23L7VBB0026 | B-CB-0206-0170        | L7VC BUTTON/B ASSY                       | 1    |
| 4    | EAL7V012014 | #N/A                  | LCD BEZEL L7VC(EAL7V012,REV3B)           | 1    |
| 5    | EBL7V021014 | #N/A                  | LENS L7VC(EBL7V021,REV3A)                | 1    |
| 6    | EBL7V022011 | #N/A                  | CONTROL BUTTON L7VC(EBL7V022,REV3A)      | 1    |
| 7    | FEL7V003019 | #N/A                  | LOGO FRONT-VSC-38MM L7VC(FEL7V003,REV3A) | 1    |
| 8    | FEL7V004015 | #N/A                  | BIRD LOGO-10MM L7VC(FEL7V004,REV3A)      | 1    |
| 9    | EAL7V013011 | #N/A                  | LCD COVER L7VC(EAL7V013,REV3B)           | 1    |
| 10   | FBL7V007011 | M-CV-0830-2484        | KENSINGTON CAP(FBL7V007,REV3A)           | 1    |
| 11   | FBL7V034019 | #N/A                  | HINGE ASSY L7VC(FBL7V034,REV3A)          | 1    |
| 12   | FBL7V036011 | #N/A                  | VESA BKT-LONG L7VC(FBL7V036,REV3A)       | 1    |
| 13   | EBL7V003016 | M-MS-0808-8718        | LOGO PLATE(EBL7V003,REV3A)               | 1    |
| 14   | GAL7V006014 | #N/A                  | RUBBER PLUG VESA L7VC(GAL7V006,REV3C)    | 4    |
| 15   | GBLM7003017 | #N/A                  | GASKET-3 LM7S(GBLM7003,REV3A)            | 1    |
| 16   | MF40080BJ29 | M-SCW-0824-6797       | SCREW F4.0*8-B(BNI)                      | 15   |
| 17   | FAL7V011018 | #N/A                  | PCB BRACKET L7VC(FAL7V011,REV3A)         | 1    |
| 18   | FCL7V011010 | #N/A                  | P/B MYLAR-UP L7VC(FCL7V011,REV3A)        | 1    |
| 19   | EBL70023013 | #N/A                  | WIRE MOUNTS L70L-E(EBL70023,REV3A)       | 1    |
| 20   | HCL7V005010 | M-LB-0813-0894        | WARNING LABEL, INVERTOR(HCL7V005,3A)     | 1    |
| 21   | AA0170EA101 | M-LCD-0826-0193       | LCD(TFT) CLAA170EA03(17",1280*1024,SXGA) | 1    |
| 22   | FAL7V012014 | #N/A                  | LCD BKT-L L7VC(FAL7V012,REV,3A)          | 1    |
| 23   | FAL7V013011 | #N/A                  | LCD BKT-R L7VC(FAL7V013,REV3A)           | 1    |
| 24   | FCL7A001014 | #N/A                  | AL FOIL L7A(FCL7A001,REV3A)              | 2    |
| 25   | FCL7V012016 | #N/A                  | P/B MYLAR-DOWN L7VC(FCL7V012,REV3A)      | 1    |
| 26   | JXLM7002011 | #N/A                  | FOIL LM7S(JXLM7002,REV3B)                | 1    |
| 27   | MM30080BBJ2 | M-SCW-0824-6798       | SCREW M3.0*8,B(NI)                       | 1    |
| 28   | MM35080BBW2 | M-SCW-0824-6799       | SCREW M3.5*8-B (NI,WASHER)               | 1    |
| 29   | MM30060IBJ8 | M-SCW-0824-6800       | SCREW M3.0*6.0-I(NI)                     | 7    |
| 30   | MF40080PBJ6 | M-SCW-0824-6801       | SCREW F4.0*8-P(NI)                       | 2    |
| 31   | MM30040IBJ9 | M-SCW-0824-6802       | SCREW M3.0*4.0-I(NI)                     | 10   |
| 32   | GAL7V009013 | #N/A                  | RUBBER PLUG COVER L7VC(GAL7V009,REV3A)   | 2    |
| 33   | EAL7V014017 | #N/A                  | BASE L7VC(EAL7V014,REV3A)                | 1    |
| 34   | FBL7V035015 | #N/A                  | BASE PLATE L7VC(FBL7V035,REV3A)          | 1    |
| 35   | GAL5V002013 | #N/A                  | RUBBER FOOT L5VC                         | 4    |
| 36   | GAL7V007011 | #N/A                  | RUBBER FOOT-FRONT L7VC(GAL7V007,R3A)     | 1    |
| 37   | HCL7V020019 | #N/A                  | STAND LABEL L7VC(HCL7V020,REV3A)         | 1    |
| 38   | DDL7VCPB101 | #N/A                  | CABLE ASSY L7VC POWER-MB(8P/8P,REV1A)    | 1    |
| 39   | DDL7VCPC001 | #N/A                  | CABLE ASSY L7VC MB-VGA(14/15P,REV1A)     | 1    |
| 40   | DDL7VCTH004 | #N/A                  | CABLE ASSY L7VC BUTTON-MB(8P/10P,REV1A)  | 1    |
| 41   | DEFC0709607 | #N/A                  | CABLE FFC L5TI MB-LCD50P/50P 70MM REV3A  | 1    |
| 42   | DEFC0709704 | #N/A                  | CABLE FFC L7VC MB-LCD(30P/30P,70MM REV1A | 1    |
| 43   | EBL7V023017 | #N/A                  | HINGE CAP L7VC(EBL7V023,REV3A)           | 2    |
| 44   | MM40100BCI2 | #N/A                  | SCREW M4*10.0-B(NI,NYLOK)                | 4    |
| 45   | HCL7V017018 | M-LB-0813-0918        | ID LABEL L7VC(HCL7V017,REV3A)            | 1    |
| 46   | HCL7V002011 | M-LB-0813-0745        | SERIAL LEBAL(HCL7V002,REV3A)             | 1    |
| 47   | JXL7V003017 | #N/A                  | LCD FILM L7VC(JXL7V003,REV3B)            | 1    |
| 48   | MM30050IBJ3 | M-SCW-0824-0728       | SCREW M3.0*5.0-I(NI)                     | 4    |

## VE710s-1 Exploded Parts List

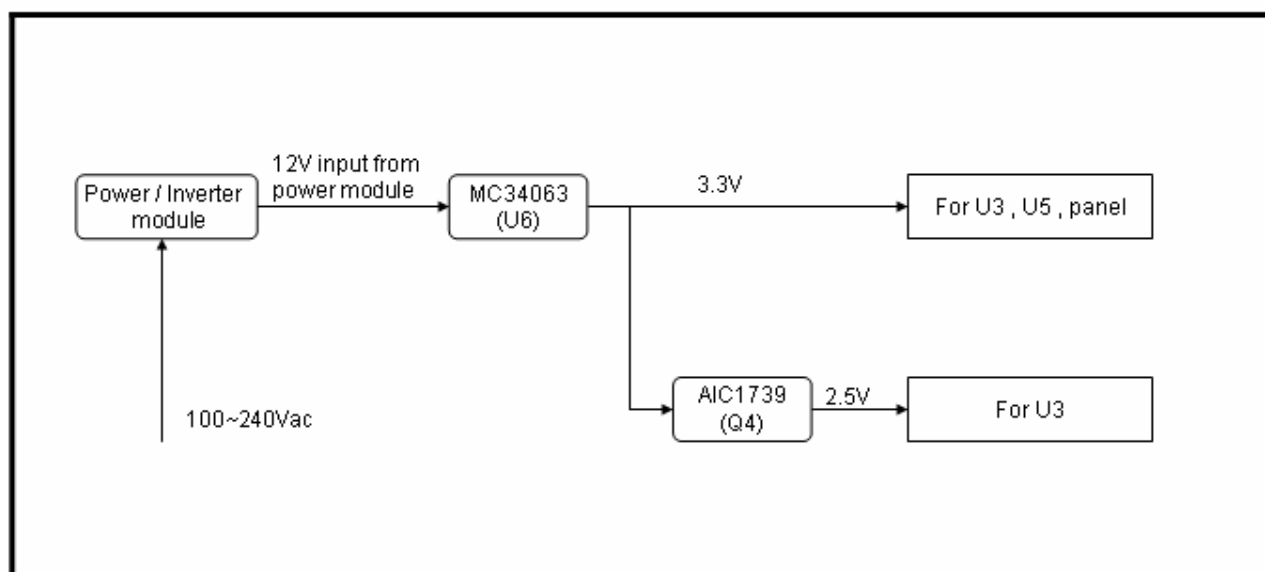
| ITEM | Part Number | ViewSonic P/N   | Part Description                         | UNIT |
|------|-------------|-----------------|------------------------------------------|------|
| 1    | 29L7VMB0000 | B-MB-0201-2726  | L7VC M/B ASSY                            | 1    |
| 2    | AS02B012009 | B-SB-0221-0595  | ADP/INV,ADP- 40AFB,90-264VAC             | 1    |
| 3    | 23L7VBB0026 | B-CB-0206-0170  | L7VC BUTTON/B ASSY                       | 1    |
| 4    | EAL7V012022 | #N/A            | LCD BEZEL-SILVER L7VC(EAL7V012,REV3B)    | 1    |
| 5    | EBL7V021014 | #N/A            | LENS L7VC(EBL7V021,REV3A)                | 1    |
| 6    | EBL7V022011 | #N/A            | CONTROL BUTTON L7VC(EBL7V022,REV3A)      | 1    |
| 7    | FEL7V003019 | #N/A            | LOGO FRONT-VSC-38MM L7VC(FEL7V003,REV3A) | 1    |
| 8    | FEL7V004015 | #N/A            | BIRD LOGO-10MM L7VC(FEL7V004,REV3A)      | 1    |
| 9    | EAL7V013029 | #N/A            | LCD COVER(BLACK) L7VC(EAL7V013,REV3B)    | 1    |
| 10   | FBL7V007011 | M-CV-0830-2484  | KENSINGTON CAP(FBL7V007,REV3A)           | 1    |
| 11   | FBL7V034019 | #N/A            | HINGE ASSY L7VC(FBL7V034,REV3A)          | 1    |
| 12   | FBL7V036011 | #N/A            | VESA BKT-LONG L7VC(FBL7V036,REV3A)       | 1    |
| 13   | FEL7V005011 | #N/A            | LOGO PLATE ELLIPSE L7VC(FEL7V005,REV3A)  | 1    |
| 14   | GAL7V008017 | #N/A            | RUBBER PLUG VESA/BK L7VC(GAL7V008,R3B)   | 4    |
| 15   | GBLM7003017 | #N/A            | GASKET-3 LM7S(GBLM7003,REV3A)            | 1    |
| 16   | MF40080BJ29 | M-SCW-0824-6797 | SCREW F4.0*8-B(BNI)                      | 15   |
| 17   | FAL7V011018 | #N/A            | PCB BRACKET L7VC(FAL7V011,REV3A)         | 1    |
| 18   | FCL7V011010 | #N/A            | P/B MYLAR-UP L7VC(FCL7V011,REV3A)        | 1    |
| 19   | EBL70023013 | #N/A            | WIRE MOUNTS L70L-E(EBL70023,REV3A)       | 1    |
| 20   | HCL7V005010 | M-LB-0813-0894  | WARNING LABEL, INVERTOR(HCL7V005,3A)     | 1    |
| 21   | AA0170EA101 | M-LCD-0826-0193 | LCD(TFT) CLAA170EA03(17",1280*1024,SXGA) | 1    |
| 22   | FAL7V012014 | #N/A            | LCD BKT-L L7VC(FAL7V012,REV,3A)          | 1    |
| 23   | FAL7V013011 | #N/A            | LCD BKT-R L7VC(FAL7V013,REV3A)           | 1    |
| 24   | FCL7A001014 | #N/A            | AL FOIL L7A(FCL7A001,REV3A)              | 2    |
| 25   | FCL7V012016 | #N/A            | P/B MYLAR-DOWN L7VC(FCL7V012,REV3A)      | 1    |
| 26   | JXLM7002011 | #N/A            | FOIL LM7S(JXLM7002,REV3B)                | 1    |
| 27   | MM30080BBJ2 | M-SCW-0824-6798 | SCREW M3.0*8,B(NI)                       | 1    |
| 28   | MM35080BBW2 | M-SCW-0824-6799 | SCREW M3.5*8-B (NI,WASHER)               | 1    |
| 29   | MM30060IBJ8 | M-SCW-0824-6800 | SCREW M3.0*6.0-I(NI)                     | 7    |
| 30   | MF40080PBJ6 | M-SCW-0824-6801 | SCREW F4.0*8-P(NI)                       | 2    |
| 31   | MM30040IBJ9 | M-SCW-0824-6802 | SCREW M3.0*4.0-I(NI)                     | 10   |
| 32   | GAL7V010011 | #N/A            | RUBBER PLUG COVER /BK L7VC(GAL7V010,R3A) | 2    |
| 33   | EAL7V014025 | #N/A            | BASE(BLACK) L7VC(EAL7V014,REV3A)         | 1    |
| 34   | FBL7V035015 | #N/A            | BASE PLATE L7VC(FBL7V035,REV3A)          | 1    |
| 35   | GAL5V002013 | #N/A            | RUBBER FOOT L5VC                         | 4    |
| 36   | GAL7V007011 | #N/A            | RUBBER FOOT-FRONT L7VC(GAL7V007,R3A)     | 1    |
| 37   | HCL7V020019 | #N/A            | STAND LABEL L7VC(HCL7V020,REV3A)         | 1    |
| 38   | DDL7VCPB101 | #N/A            | CABLE ASSY L7VC POWER-MB(8P/8P,REV1A)    | 1    |
| 39   | DDL7VCPC001 | #N/A            | CABLE ASSY L7VC MB-VGA(14/15P,REV1A)     | 1    |
| 40   | DDL7VCTH004 | #N/A            | CABLE ASSY L7VC BUTTON-MB(8P/10P,REV1A)  | 1    |
| 41   | DEFC0709607 | #N/A            | CABLE FFC L5TI MB-LCD50P/50P 70MM REV3A  | 1    |
| 42   | DEFC0709704 | #N/A            | CABLE FFC L7VC MB-LCD(30P/30P,70MM REV1A | 1    |
| 43   | EBL7V023017 | #N/A            | HINGE CAP L7VC(EBL7V023,REV3A)           | 2    |
| 44   | MM40100BCI2 | #N/A            | SCREW M4*10.0-B(NI,NYLOK)                | 4    |
| 45   | HCL7V018014 | M-LB-0813-0919  | ID LABEL (SILVER) L7VC(HCL7V018,REV3A)   | 1    |
| 46   | HCL7V002011 | M-LB-0813-0745  | SERIAL LEBAL(HCL7V002,REV3A)             | 1    |
| 47   | JXL7V003017 | #N/A            | LCD FILM L7VC(JXL7V003,REV3B)            | 1    |
| 48   | MM30050IBJ3 | M-SCW-0824-0728 | SCREW M3.0*5.0-I(NI)                     | 4    |

## 9. Block Diagram

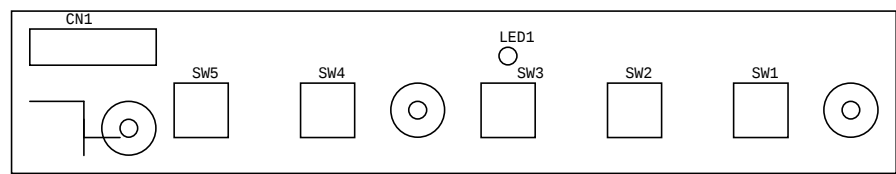
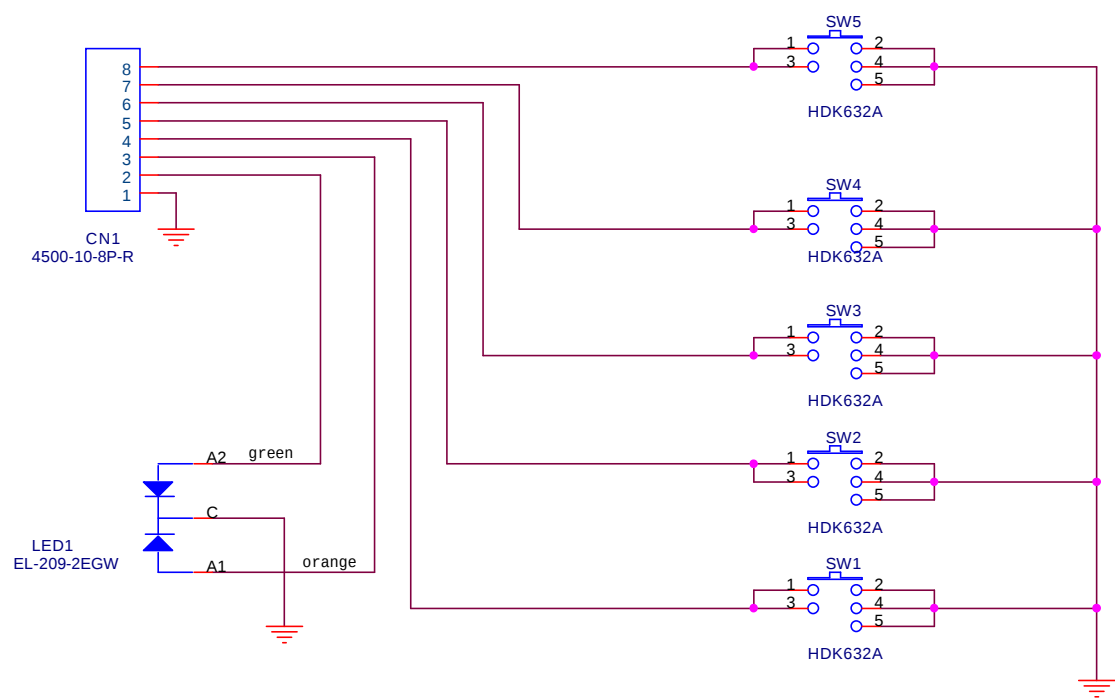
### 9.1 Video



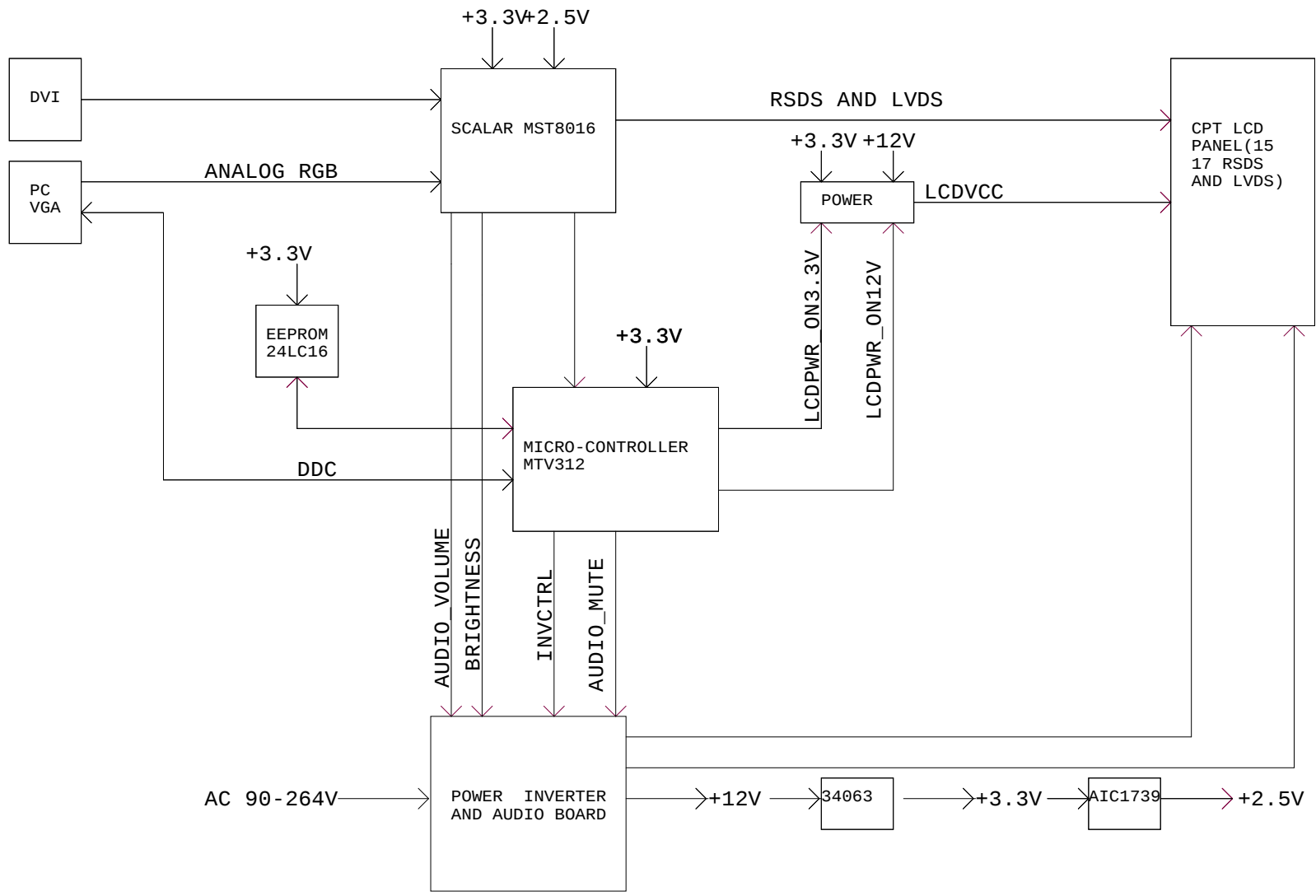
### 9.2 Power



10. Schematic Diagrams

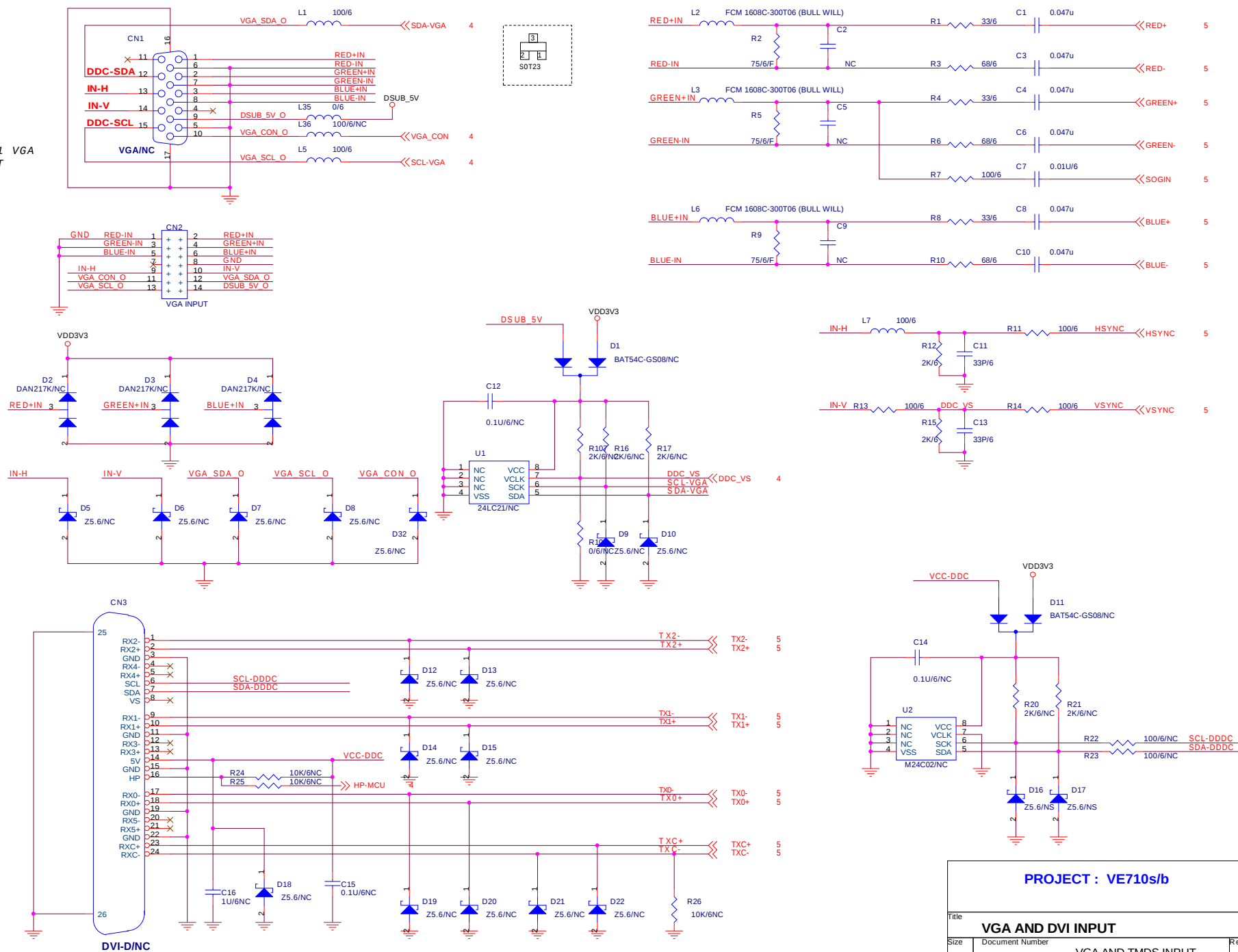


|                   |                           |              |
|-------------------|---------------------------|--------------|
| PROJECT :VE710s/b |                           |              |
| Title             |                           |              |
| Button            |                           |              |
| Size              | Document Number           | Rev          |
|                   | BUTTON-BOARD              | A            |
| Date:             | Monday, November 10, 2003 | Sheet 2 of 2 |



| PROJECT : VE710s/b |                           |       |        |
|--------------------|---------------------------|-------|--------|
| Title              |                           |       |        |
| BLOCK DIAGRAM      |                           |       |        |
| Size               | Document Number           |       | Rev    |
|                    | BLOCK DIAGRAM             |       | B      |
| Date:              | Monday, November 10, 2003 | Sheet | 2 of 7 |

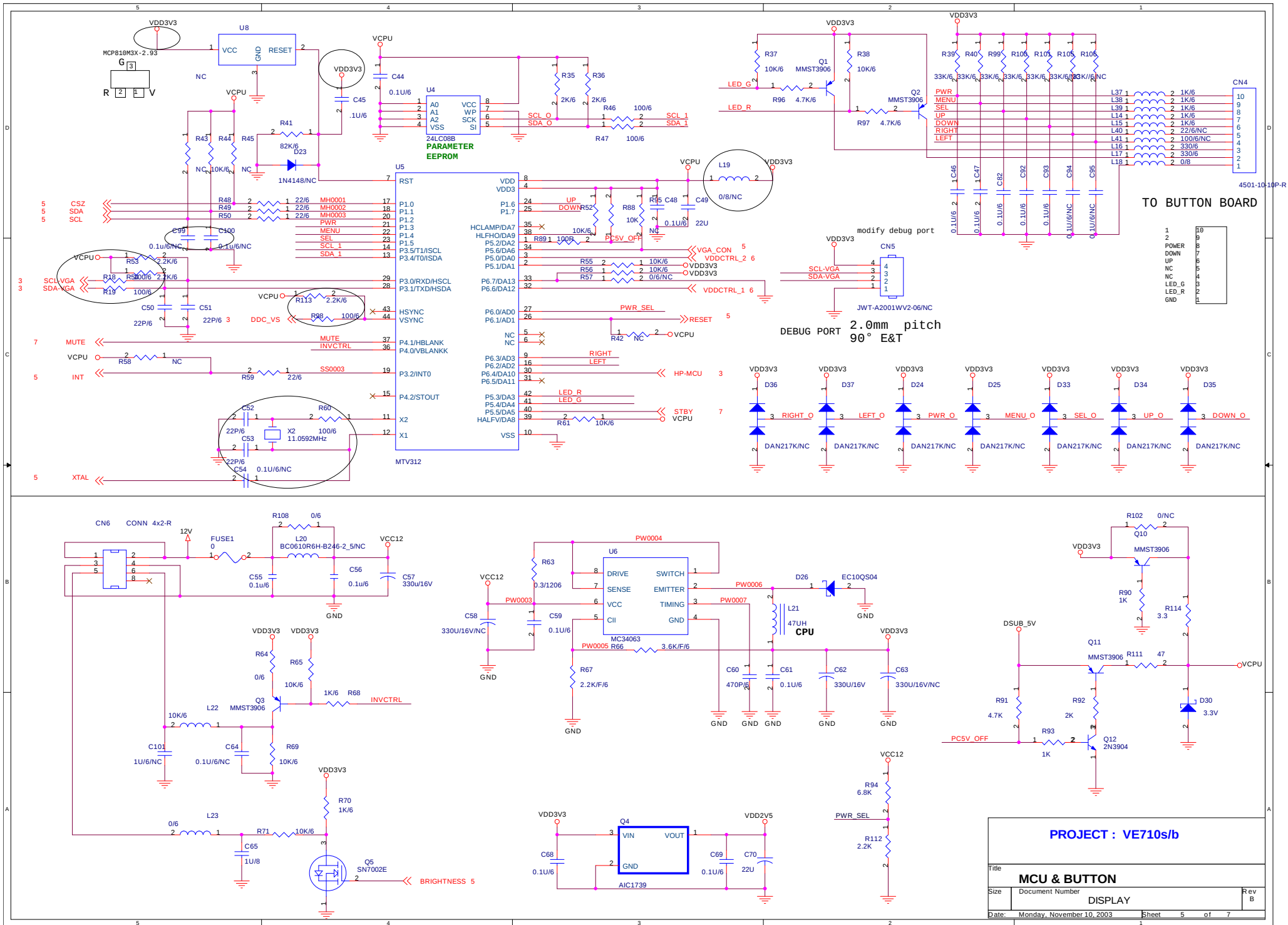
PAGE1 VGA  
INPUT

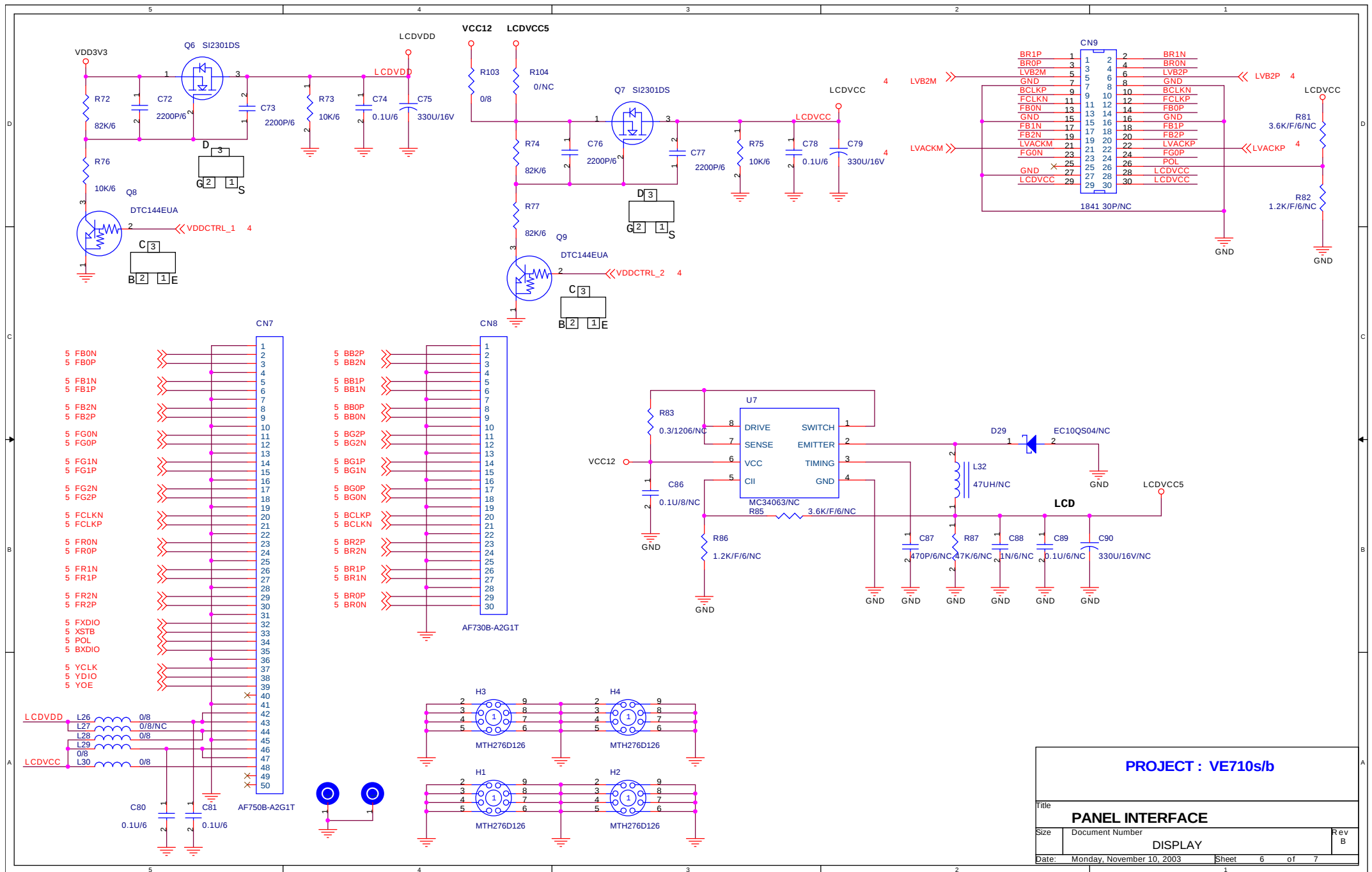


PROJECT : VE710s/b

|       |                           |                    |                   |
|-------|---------------------------|--------------------|-------------------|
| Title |                           |                    | VGA AND DVI INPUT |
| Size  | Document Number           | VGA AND TMDS INPUT |                   |
| Date: | Monday, November 10, 2003 | Sheet              | 3 of 7            |

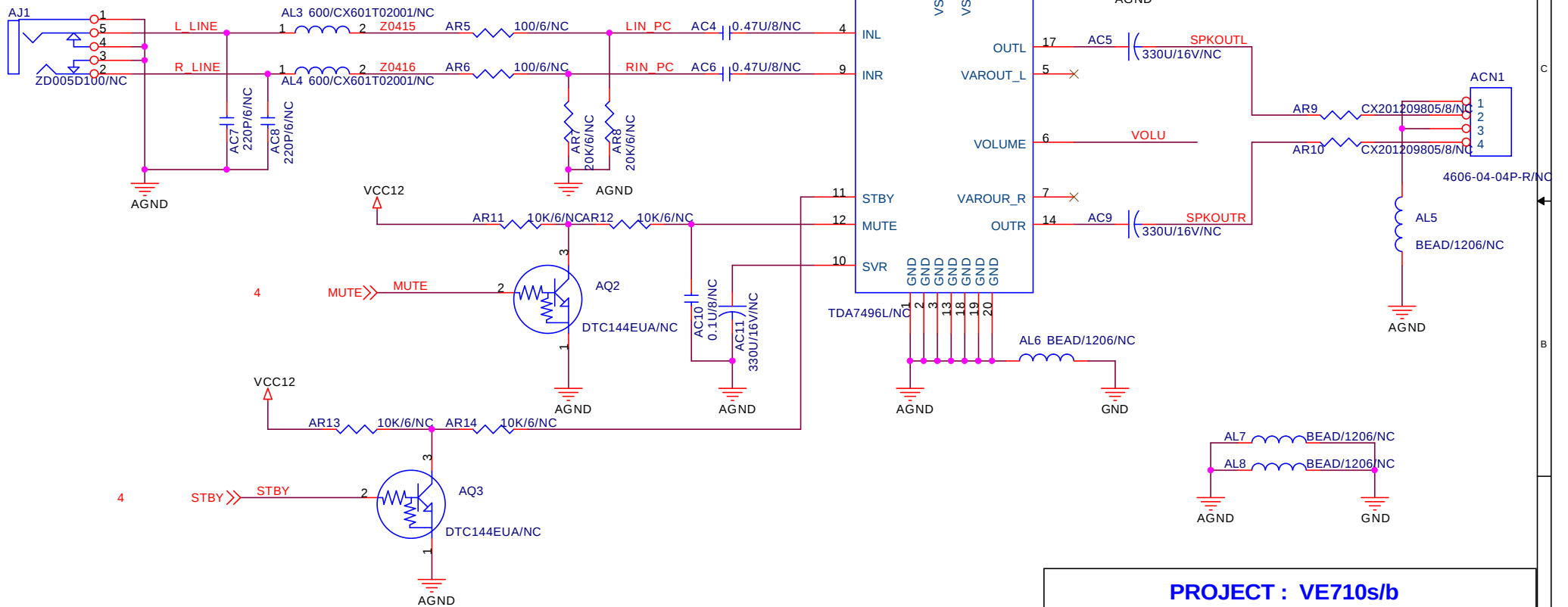






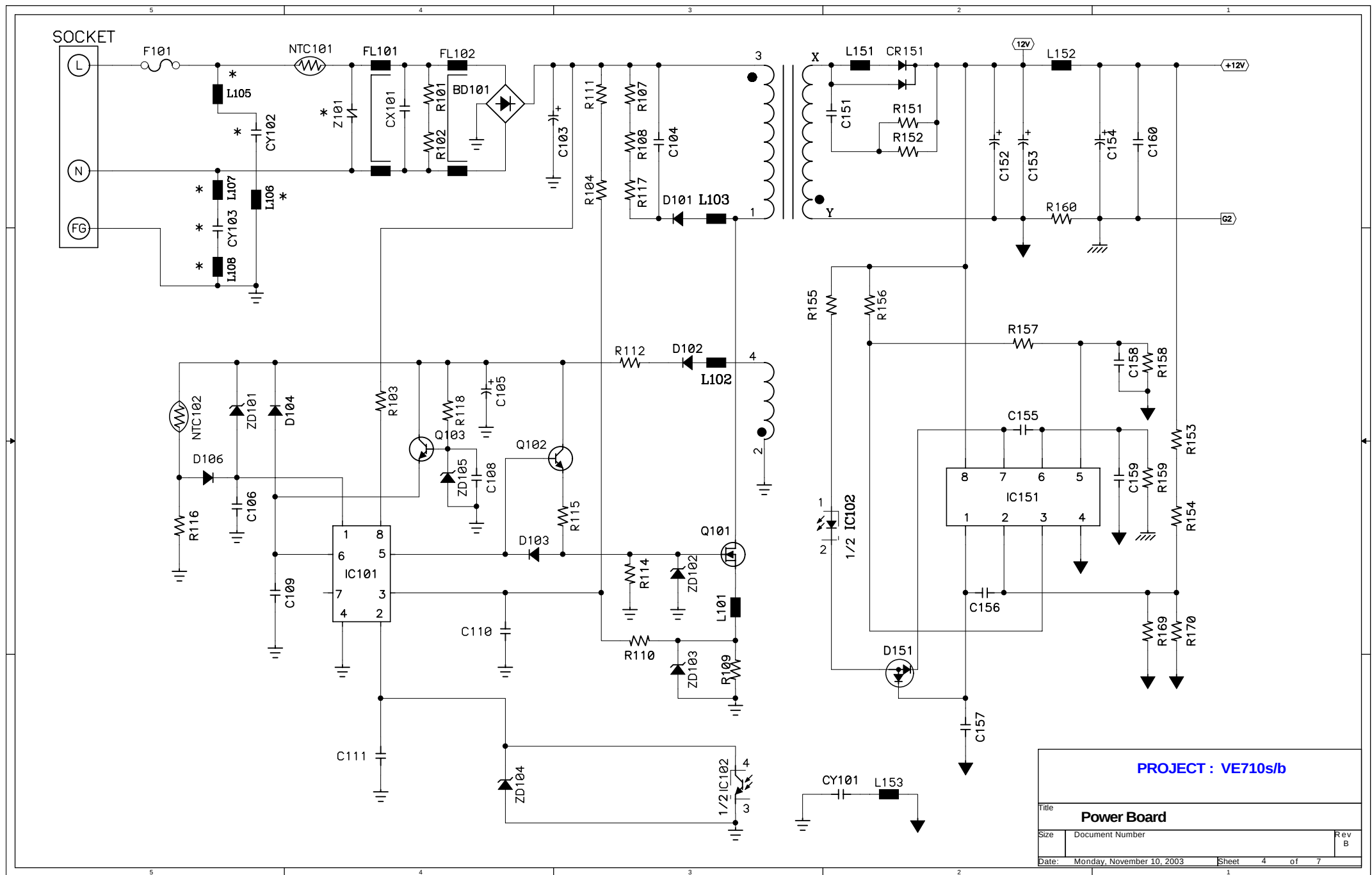
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|---------------------------|---------------------------|--------------|-------|
| <b>PROJECT : VE710s/b</b> |                           |              |       |
| Title                     |                           |              |       |
| <b>PANEL INTERFACE</b>    |                           |              |       |
| Size                      | Document Number           |              | Rev B |
| <b>DISPLAY</b>            |                           |              |       |
| Date:                     | Monday, November 10, 2003 | Sheet 6 of 7 |       |

# PC AUDIO-IN



**PROJECT : VE710s/b**

|              |                           |              |         |
|--------------|---------------------------|--------------|---------|
| Title        |                           |              |         |
| <b>Audio</b> |                           |              |         |
| Size         | Document Number           |              | Rev B   |
| Date:        | Monday, November 10, 2003 | Sheet 7 of 7 | DISPLAY |

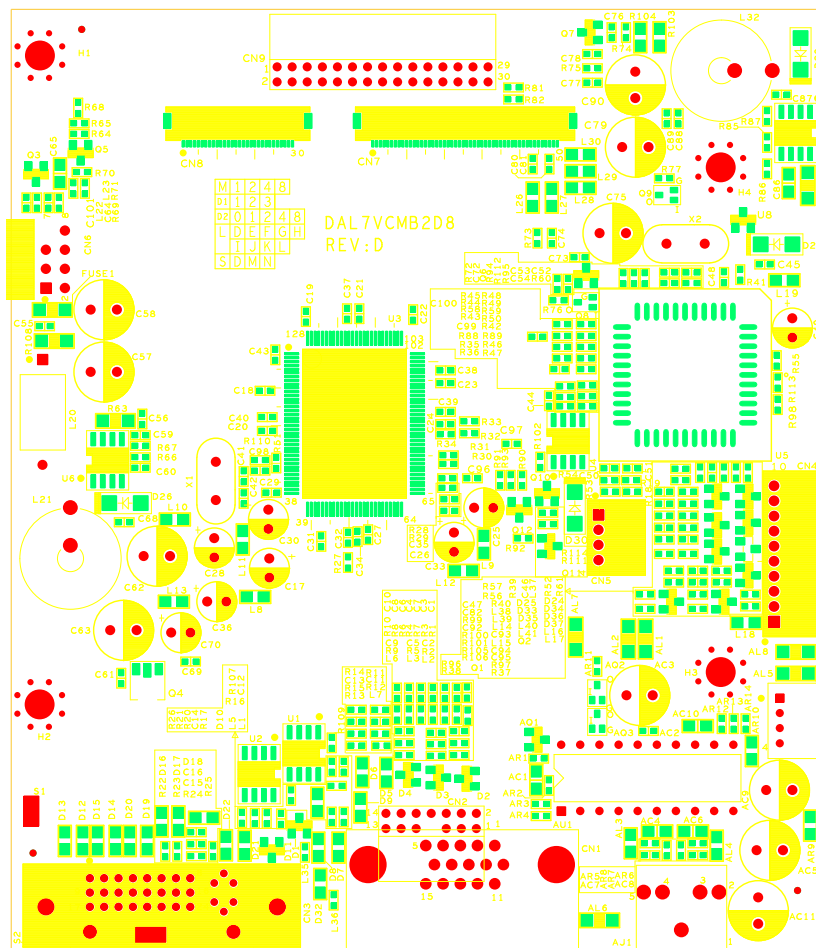
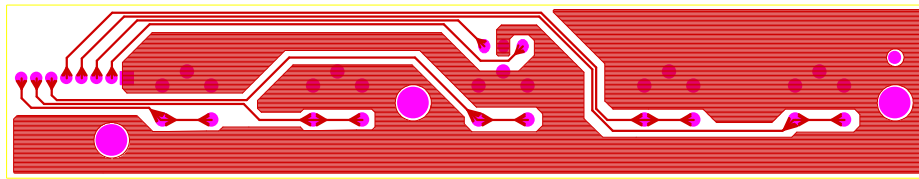
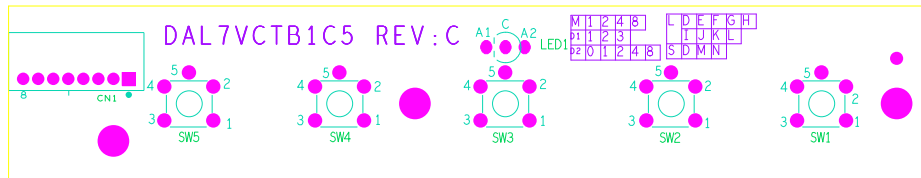


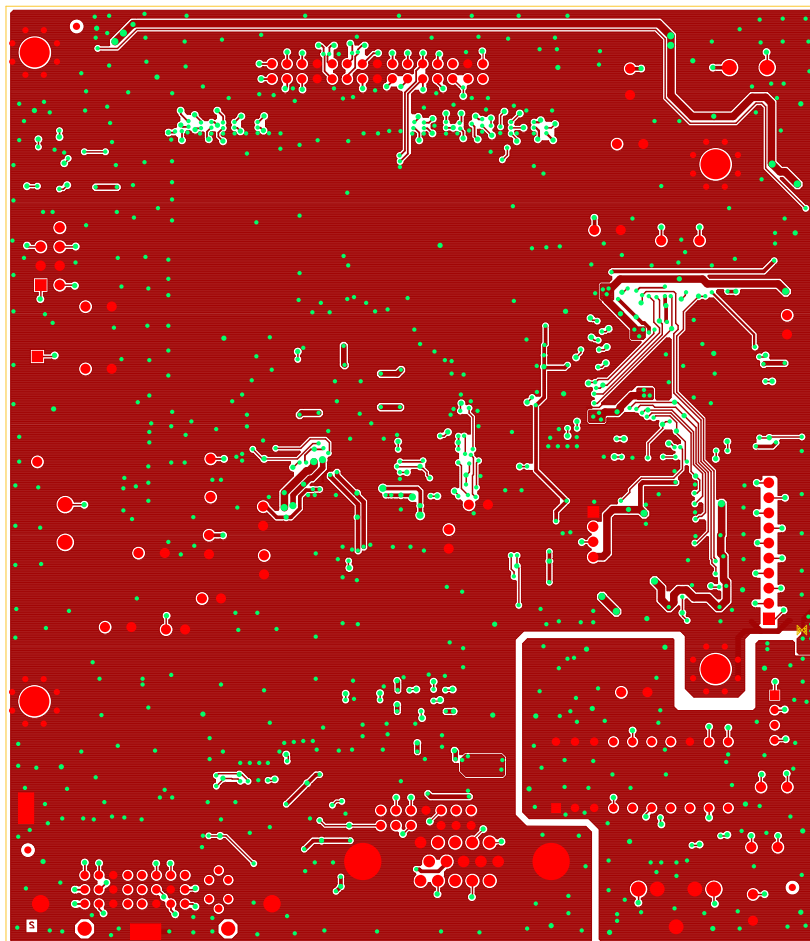
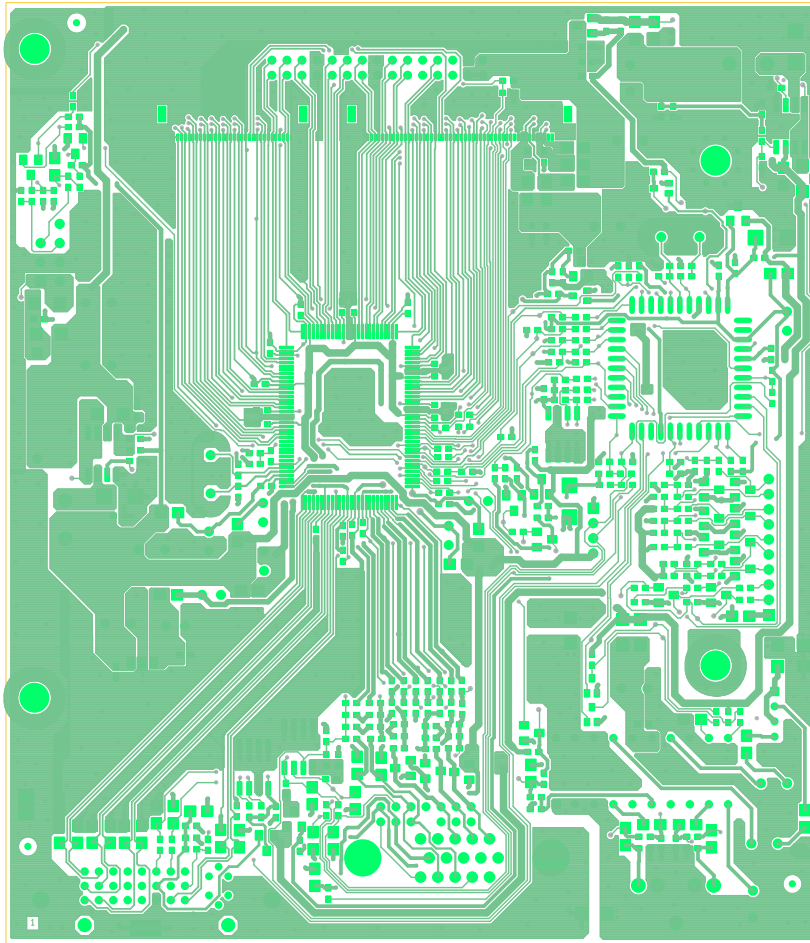
PROJECT : VE710s/b

|             |                           |              |
|-------------|---------------------------|--------------|
| Title       |                           |              |
| Power Board |                           |              |
| Size        | Document Number           | Rev B        |
| Date:       | Monday, November 10, 2003 | Sheet 4 of 7 |



## 11. PCB Layout Diagrams





## **\*Reader's Response\***

Dear Readers:

Thank you in advance for your feedback on our Service Manual, which allows continuous improvement of our products. We would appreciate your completion of the Assessment Matrix below, for return to ViewSonic Corporation.

### Assessment

A. What do you think about the content after reading **VE710b/s-1** Service Manual?

| <i>Unit</i>                                 | <i>Excellent</i> | <i>Good</i> | <i>Fair</i> | <i>Bad</i> |
|---------------------------------------------|------------------|-------------|-------------|------------|
| 1. Precautions And Safety Notices           |                  |             |             |            |
| 2. Specification                            |                  |             |             |            |
| 3. Front Panel Function Control Description |                  |             |             |            |
| 4. Circuit Description                      |                  |             |             |            |
| 5. Adjusting Procedure                      |                  |             |             |            |
| 6. Trouble Shooting Flow Chart              |                  |             |             |            |
| 7. Recommended Spare Parts List             |                  |             |             |            |
| 8. Exploded Diagram and Spare Parts List    |                  |             |             |            |
| 9. Block Diagram                            |                  |             |             |            |
| 10. Schematic Diagrams                      |                  |             |             |            |
| 11. PCB Layout Diagrams                     |                  |             |             |            |

B. Are you satisfied with the **VE710b/s-1** service manual?

| <i>Item</i>               | <i>Excellent</i> | <i>Good</i> | <i>Fair</i> | <i>Bad</i> |
|---------------------------|------------------|-------------|-------------|------------|
| 1. Service Manual Content |                  |             |             |            |
| 2. Service Manual Layout  |                  |             |             |            |
| 3. The form and listing   |                  |             |             |            |

C. Do you have any other opinion or suggestion about this service manual?

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### Reader's basic data:

|          |  |        |  |
|----------|--|--------|--|
| Name:    |  | Title: |  |
| Company: |  |        |  |
| Add:     |  |        |  |
| Tel:     |  | Fax:   |  |
| E-mail:  |  |        |  |

After completing this form, please return it to ViewSonic Quality Assurance in the USA at facsimile 1-909-839-7943. You may also e-mail any suggestions to the Director, Quality Systems & Processes (marc.maupin@viewsonic.com)