VSDISPLAY M.NT68676.3

VSDISPLAY DVI VGA Audio Controller Board 68676.3 Instruction Manual

Model: M.NT68676.3

PRODUCT OVERVIEW

The VSDISPLAY DVI VGA Audio Controller Board 68676.3 is designed to convert an LVDS 40-pin WLED LCD screen into a functional display with DVI and VGA video inputs, along with audio output. This board enables the repurposing of laptop LCD panels for various applications, such as external monitors or embedded projects.

The controller board supports specific 14-inch, 15.6-inch, and 17.3-inch LCD panels with a resolution of 1600x900. It features a compact design and includes necessary connectors for power, video input, audio output, and an OSD (On-Screen Display) control keyboard.

SPECIFICATIONS

Feature	Detail
Model Number	M.NT68676.3
Compatible LCD Interface	LVDS 40 Pin WLED Backlight
Supported Resolution	1600x900
Video Input	DVI, VGA
Audio Output	Speaker Connector
Input Power Adapter	12Vdc, more than 2A (recommended)
Standby Power Consumption	<1W
Board Dimensions	139mm x 53mm x 17mm
OSD Language Support	English, French, German, Spanish, Italian, etc.

PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 1 × VGA DVI LCD Controller Board 68676.3 (new version)
- 1 × 40Pin Signal Cable
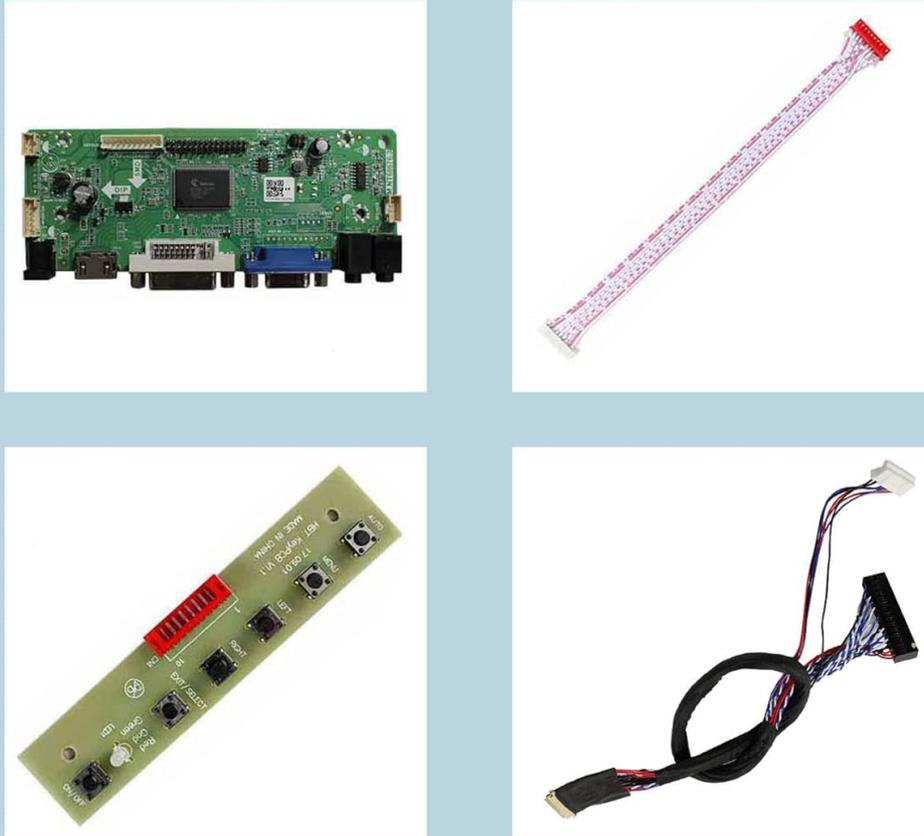- 1 × Keyboard With Cable

Figure 1: Included Package Contents. This image displays the VSDISPLAY controller board, the 40-pin LVDS signal cable, and the OSD control keyboard with its connecting cable, as typically found in the product package.

Note: A 12Vdc, 2A or greater power adapter is required for operation and is **not** included in the packing list.

COMPATIBILITY

This controller board is compatible with various 14-inch, 15.6-inch, and 17.3-inch LCD panels with a 1600x900 resolution and a 40-pin LVDS interface. Please verify your LCD panel's model number against the list below for compatibility:

- **14-inch 1600x900:** B140RTN01.0, B140RW01 V.0, N140FGE-L31, LP140WD2, B140RTN02.1, B140RTN02.2, N140O6, B140RW02
- **15.6-inch 1600x900:** LP156WD1-TLB1, LP156WD1-TLA1, LP156WD1-TLB2, LP156WD1-TLD1, LP156WD1-TLD3, LP156WD1-TLD2, LP156WD1-TLB3, LP156WD1-TLA2, LP156WD1-TLD5, LP156WD1-TLB4, B156RW01, LTN156KT02, N1156O6-L01, N1156O6-L02
- **17.3-inch 1600x900:** LP173WD1 TLXX, B173RW01, N173FGE-L21, LTN173KT01-A01, N17306-L02

Important Note: This controller board is **not** compatible with the LP156WD1-TPB1 LCD due to a different signal interface type.

SETUP INSTRUCTIONS

Follow these steps to correctly connect and set up your VSDISPLAY controller board with an LCD panel.

Step 1: Identify Components and Connectors

Familiarize yourself with the various ports and connectors on the controller board.
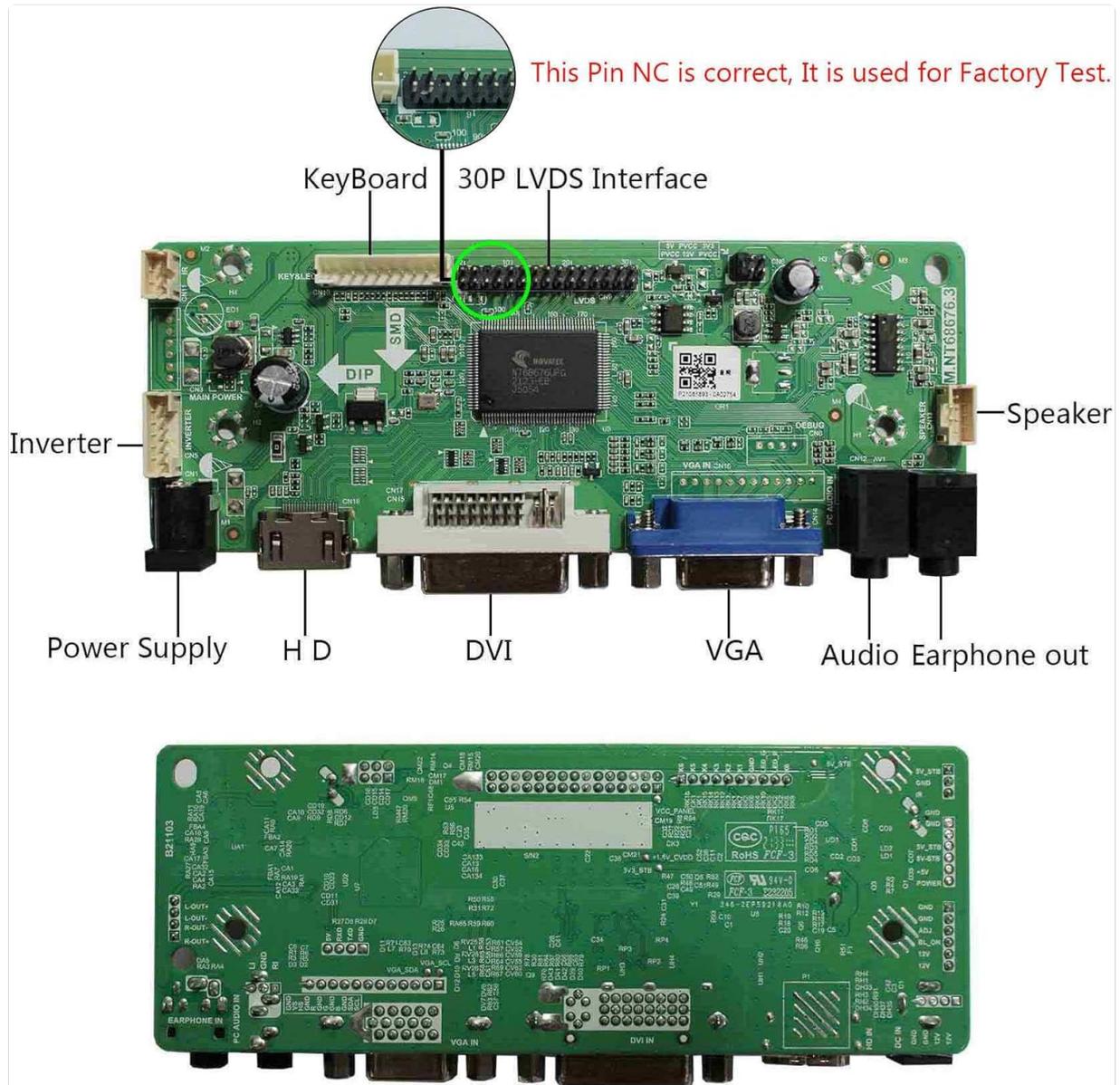

Figure 2: Controller Board Component Layout. This image highlights the key connectors on the VSDISPLAY board, including the Inverter, Keyboard, 30-pin LVDS Interface, Power Supply input, HD (HDMI), DVI, VGA, and Audio Earphone out ports.

Step 2: Connect the LVDS Signal Cable

Connect the provided 40-pin LVDS signal cable to the corresponding LVDS interface on the controller board and your LCD panel. Ensure the cable is oriented correctly and securely seated to avoid damage to the pins.
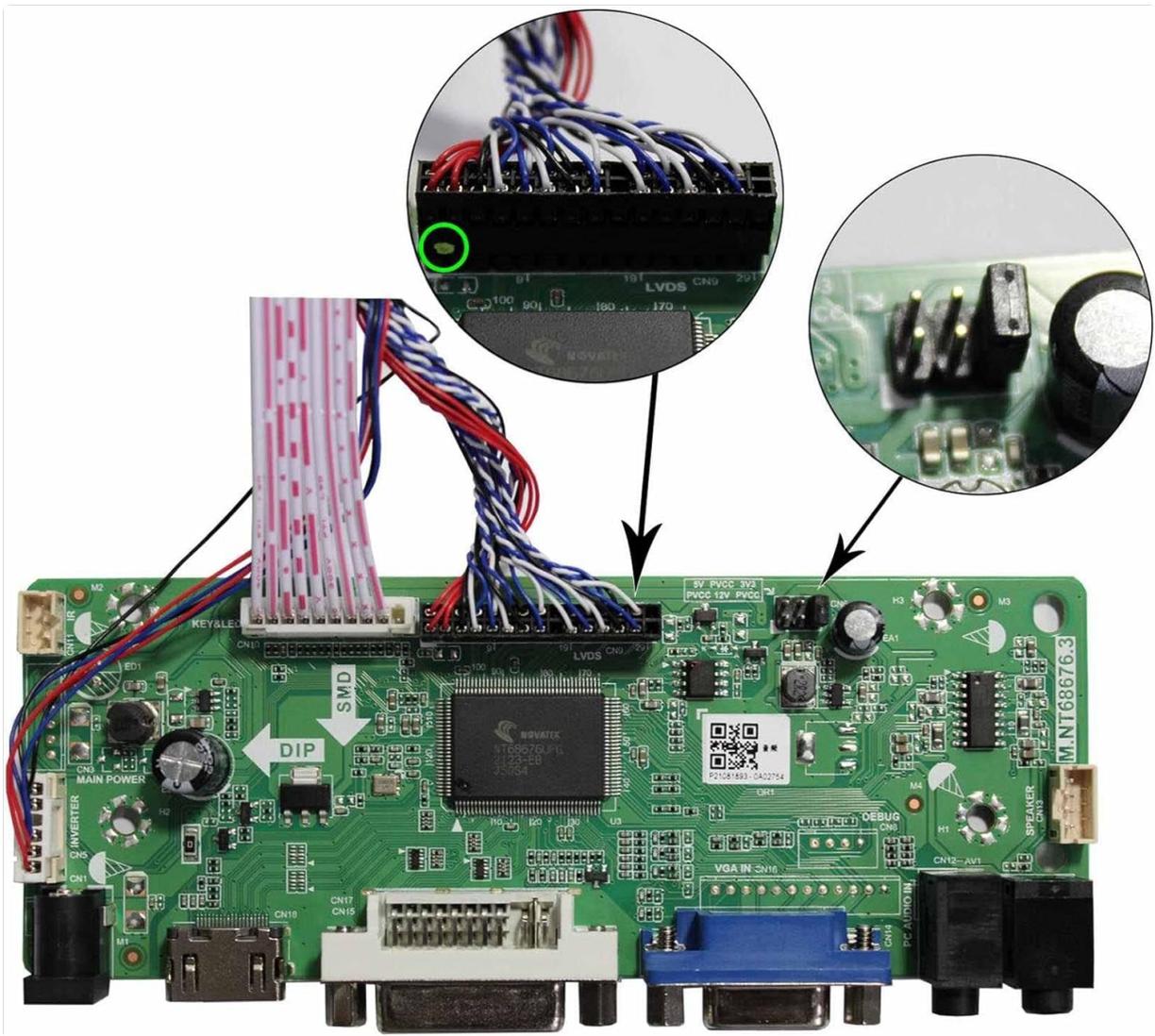
Figure 3: LVDS Cable Connection. This image shows the 40-pin LVDS signal cable properly connected to the controller board, illustrating the correct pin alignment and secure fit.
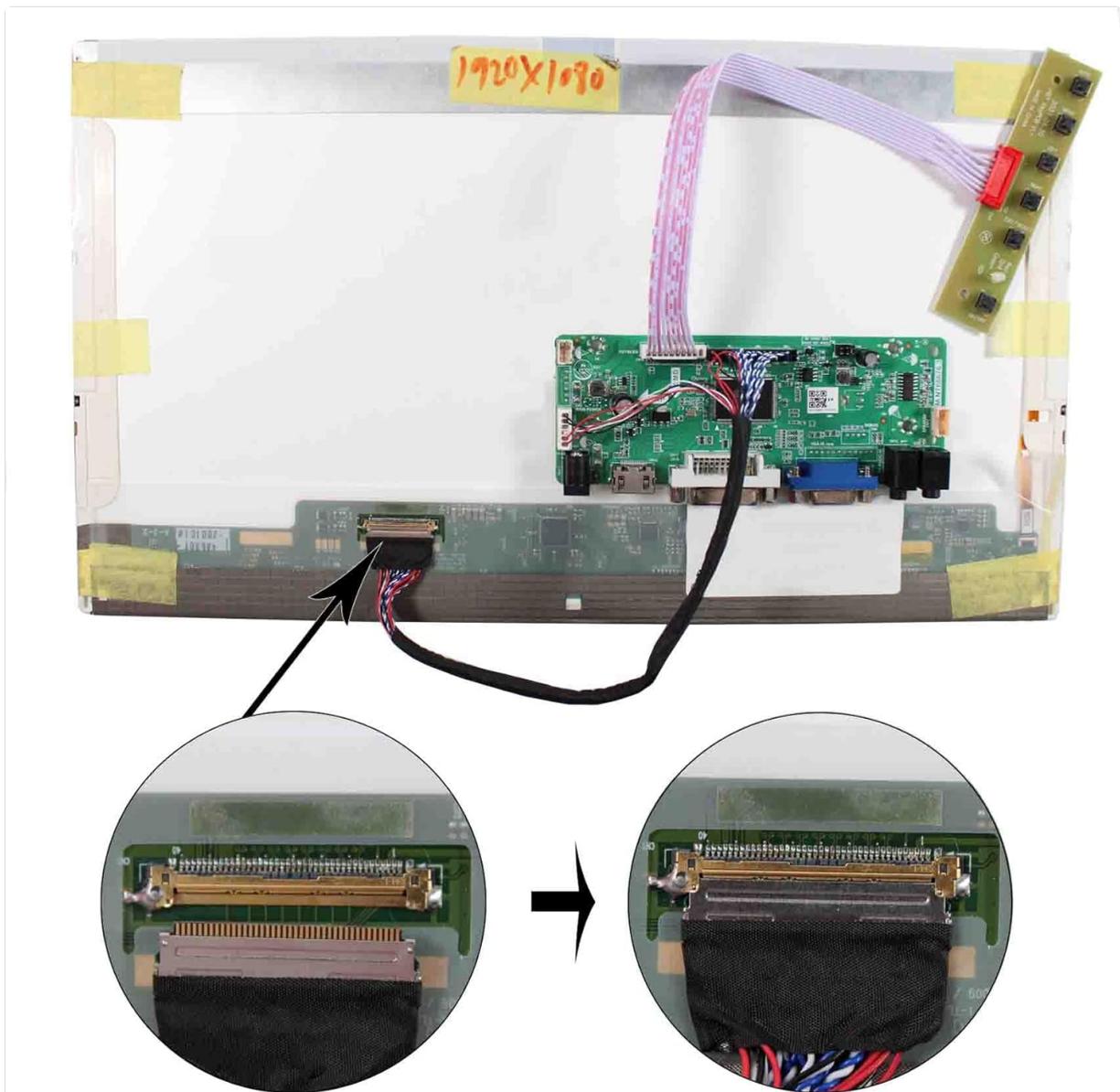
Figure 4: LCD Panel Connection Example. This image demonstrates how the LVDS cable connects from the controller board to an LCD panel, with an enlarged view of the delicate connector on the LCD panel itself.

Step 3: Connect the Keyboard and Power Supply

- Connect the OSD keyboard cable to the designated header on the controller board.
- Connect a 12Vdc, 2A or greater power adapter to the DC input jack on the board.

Caution: The controller board must be insulated. Do not place it directly on metal surfaces or conductors to prevent short circuits and potential damage.

Step 4: Connect Video and Audio Inputs

- Connect your video source (e.g., computer, Raspberry Pi) to either the DVI or VGA input port on the controller board.
- If audio output is desired, connect speakers to the audio output connector.

Step 5: Power On

Once all connections are secure, plug in the power adapter to an electrical outlet. The LCD panel should power on and display the input signal.
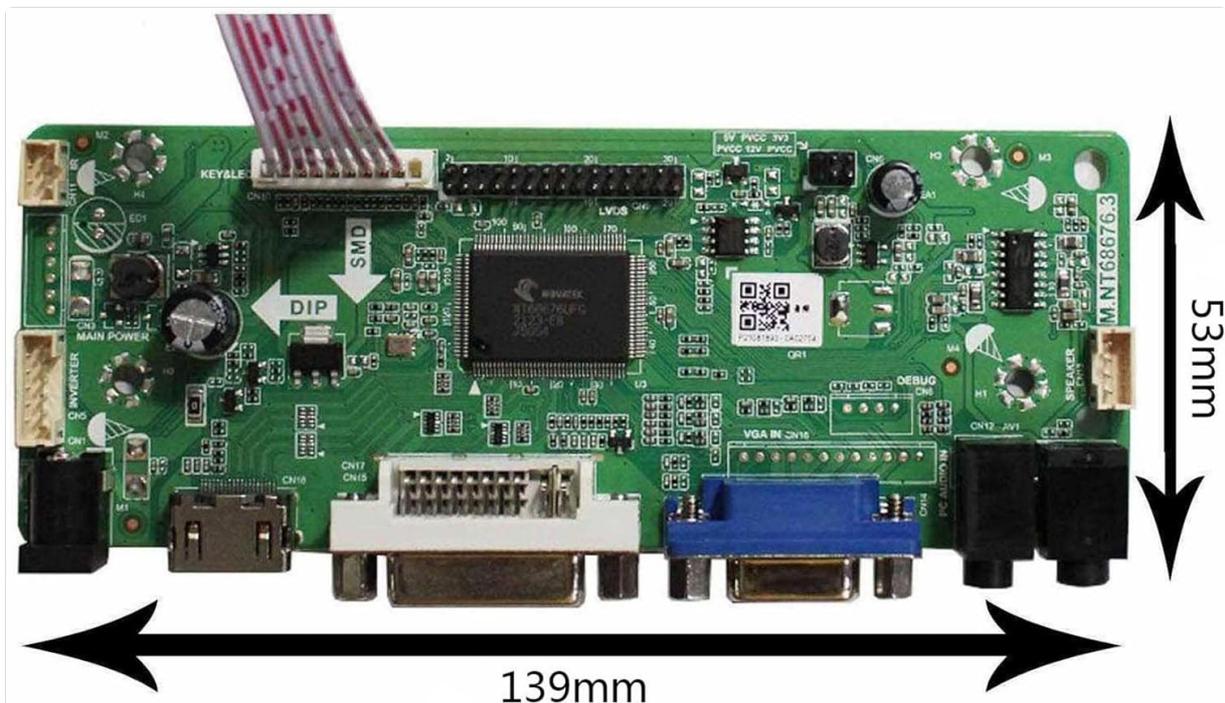
Figure 5: Controller Board Dimensions. This image provides the physical measurements of the VSDISPLAY controller board, indicating a length of 139mm and a width of 53mm.

OPERATING INSTRUCTIONS

The controller board operates automatically, entering a standby mode when no input signal is detected. Use the provided keyboard to access and navigate the On-Screen Display (OSD) menu for adjustments.

- **Input Selection:** Use the OSD menu to switch between DVI and VGA video inputs.
- **OSD Menu:** The OSD menu allows adjustment of settings such as brightness, contrast, auto-adjustment, and language. Refer to the OSD menu for specific options.
- **Standby Mode:** The board automatically enters a low-power standby mode (<1W) when no active video signal is present.

MAINTENANCE

To ensure the longevity and proper functioning of your controller board, observe the following maintenance guidelines:

- Keep the board in a clean, dry environment, free from dust and moisture.
- Avoid exposing the board to extreme temperatures or direct sunlight.
- Ensure proper ventilation around the board during operation.
- Do not attempt to modify the board or its components, as this may void any potential warranty and cause damage.
- Always disconnect power before making or changing any connections.

TROUBLESHOOTING

If you encounter issues with your VSDISPLAY controller board, refer to the following common troubleshooting steps:

- **No Signal Displayed:**
  - Verify that the LVDS cable is securely connected to both the controller board and the LCD

panel.
- Ensure the power adapter is correctly connected and providing 12Vdc, 2A or more.
- Check that your video source is active and properly connected to either the DVI or VGA input.
- Use the OSD menu to manually select the correct input source (DVI or VGA).
- Confirm your LCD panel is listed as compatible with this board.

- **OSD Menu Navigation Issues:**
  - If button labels on the keypad do not seem to match their function, experiment with the buttons to understand their actual behavior (e.g., 'Menu' might select, 'Auto' might exit, 'Left' might move down, 'Right' might move up).

- **Screen Flickering or Incorrect Colors:**
  - Ensure the LVDS cable is fully seated and not damaged.
  - Check the power supply for stability; an insufficient power supply can cause display issues.
  - Adjust OSD settings like contrast and brightness.

- **Board Not Powering On:**
  - Confirm the power adapter is functional and meets the 12Vdc, 2A+ requirement.
  - Ensure the board is not short-circuited by being placed on a conductive surface.

WARRANTY INFORMATION

Specific warranty details are typically provided at the point of purchase or with the product packaging. Please retain your proof of purchase for any warranty claims. The manufacturer generally covers defects in materials and workmanship under normal use for a specified period. Damage resulting from improper installation, misuse, unauthorized modifications, or inadequate power supply is typically not covered.

CUSTOMER SUPPORT

For further assistance, technical support, or inquiries regarding your VSDISPLAY DVI VGA Audio Controller Board 68676.3, please contact the seller or manufacturer directly. You can often find contact information on the product packaging or through the retailer's website where the product was purchased. When contacting support, please provide your product model number (M.NT68676.3) and a detailed description of the issue you are experiencing.