

Fasizi ELB0360

Fasizi USB to TTL 3.3V/5V CH340G UART Converter Module User Manual

Model: ELB0360

1. INTRODUCTION

The Fasizi USB to TTL 3.3V/5V CH340G UART Converter Module is a compact and versatile serial adapter designed for various electronic projects and device communication. This module facilitates communication between a computer's USB port and a device using TTL serial logic levels (3.3V or 5V). It is commonly used for updating device firmware, performing diagnostics, and interfacing with microcontrollers or other serial-enabled devices. Key features include an original CH340G chip for reliable performance, selectable 3.3V/5V output via a jumper, and LED indicators for power (PWR), transmit (TXD), and receive (RXD) activity.

2. PRODUCT FEATURES

- **Module Dimensions:** Approximately 4 cm x 2.2 cm.
- **Color:** Gold PCB finish.
- **Chipset:** Original CH340G for stable serial communication.
- **Voltage Output:** Selectable 3.3V or 5V TTL logic levels via an onboard jumper.
- **Indicator LEDs:** PWR (Power), TXD (Transmit Data), and RXD (Receive Data) for status monitoring.
- **Applications:** Suitable for device firmware updates, various diagnostic tasks, and LPG ECU gas interface settings.

3. COMPONENT OVERVIEW

Familiarize yourself with the key components of the Fasizi USB to TTL converter module.



Figure 1: Overall view of the Fasizi USB to TTL converter module. This image shows the compact design, including the USB-A connector on one end and the pin headers for serial communication on the other. The main CH340G chip is visible in the center.



Figure 2: Close-up of the pin headers. This image highlights the labeled pins: 5V, 3V3 (3.3V), TXD (Transmit Data), RXD (Receive Data), GND (Ground), and CTS (Clear To Send). The jumper for voltage selection is also visible near the 5V and 3V3 pins.

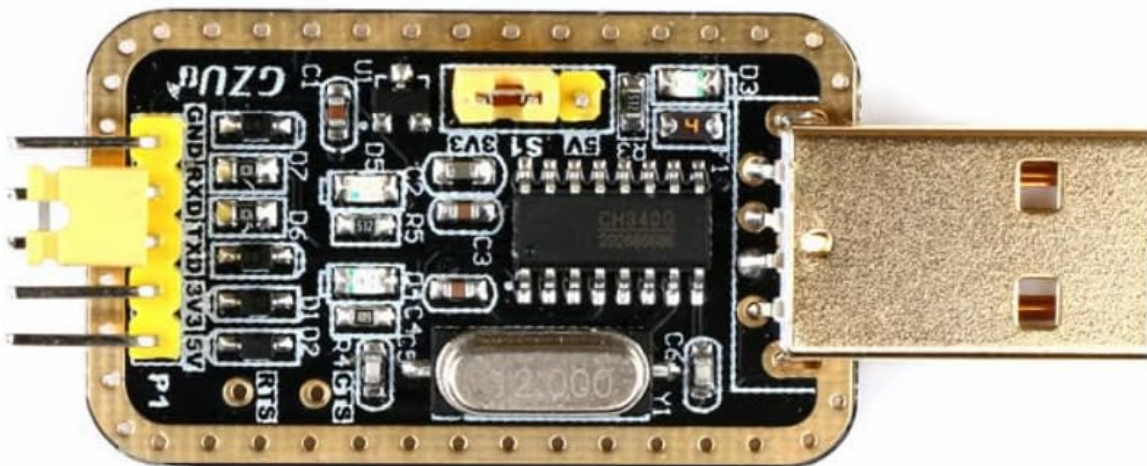


Figure 3: Top-down view of the module. This perspective clearly shows the CH340G integrated circuit, the crystal oscillator, and the PWR, TXD, and RXD LED indicators. The voltage selection jumper is also visible.

4. SETUP INSTRUCTIONS

4.1 Driver Installation

The Fasizi USB to TTL converter uses the CH340G chip, which typically requires a driver for your operating system (Windows, macOS, Linux). If the module is not automatically recognized by your computer, you will need to install the appropriate CH340G driver.

1. **Download Driver:** Search online for "CH340G driver" for your specific operating system. Official drivers are usually available from WCH (the chip manufacturer) or reputable electronics suppliers.
2. **Install Driver:** Follow the installation instructions provided with the driver package. On Windows, this often involves running an executable. On macOS/Linux, it might involve specific commands or package installations.
3. **Verify Installation:** After installation, connect the module to a USB port. Check your computer's Device Manager (Windows) or equivalent system information tool (macOS/Linux) to confirm that a new COM port (Windows) or serial device (macOS/Linux) has appeared.

4.2 Voltage Selection

The module supports both 3.3V and 5V TTL logic levels. Select the correct voltage for your target device using the onboard jumper.

- **5V Operation:** Place the jumper cap across the two pins labeled "5V" and "VCC" (or similar marking indicating 5V).
- **3.3V Operation:** Place the jumper cap across the two pins labeled "3V3" and "VCC" (or similar marking indicating 3.3V).

Caution: Ensure the correct voltage is selected before connecting to your target device. Applying an incorrect voltage can damage the target device or the converter module.



Figure 4: Voltage selection jumper. The jumper cap (yellow) is used to select between 3.3V and 5V output for the VCC pin, matching the logic level of your target device.

5. OPERATING INSTRUCTIONS

5.1 Connecting to a Target Device

Once the driver is installed and the correct voltage is selected, connect the module to your target device using appropriate jumper wires.

- **GND to GND:** Connect the GND pin of the converter module to the Ground (GND) pin of your target device. This is essential for establishing a common reference voltage.
- **TXD to RXD:** Connect the TXD (Transmit Data) pin of the converter module to the RXD (Receive Data) pin of your target device.
- **RXD to TXD:** Connect the RXD (Receive Data) pin of the converter module to the TXD (Transmit Data) pin of your target device.
- **VCC to VCC (Optional):** If your target device requires power from the USB to TTL converter, connect the VCC pin (3.3V or 5V, as selected by the jumper) to the VCC/power input of your target device. *Note: Many devices are powered independently. Only connect VCC if explicitly required and the device's power consumption is within USB limits.*
- **CTS/RTS (Optional):** If your application requires hardware flow control, connect the CTS (Clear To Send) and RTS (Request To Send) pins accordingly. For most basic serial communication, these pins are not used.

5.2 Using Serial Terminal Software

To communicate with your target device, you will need serial terminal software (e.g., PuTTY, Termit, Arduino Serial Monitor, minicom on Linux).

1. **Identify COM Port:** Determine the COM port number assigned to the Fasizi module by your operating system (e.g., COM3 on Windows, /dev/ttyUSB0 on Linux).
2. **Configure Terminal:** Open your serial terminal software and configure it with the correct settings:
 - **Port:** Select the identified COM port.
 - **Baud Rate:** Match the baud rate of your target device (common rates include 9600, 19200, 115200).
 - **Data Bits:** Typically 8.
 - **Parity:** None.
 - **Stop Bits:** Typically 1.
 - **Flow Control:** None (unless using CTS/RTS).
3. **Start Communication:** Open the serial connection in your terminal software. You should now be able to send and receive data from your target device.

5.3 LED Indicators

- **PWR LED:** Illuminates when the module is powered via the USB port.
- **TXD LED:** Flashes when data is being transmitted from the computer (via the module's TXD pin) to the target device.
- **RXD LED:** Flashes when data is being received by the computer (via the module's RXD pin) from the target device.

6. MAINTENANCE

The Fasizi USB to TTL converter module is a robust electronic component that requires minimal maintenance. Follow these guidelines to ensure its longevity:

- **Storage:** Store the module in a dry, anti-static environment when not in use. Avoid extreme temperatures and humidity.
- **Handling:** Handle the module by its edges to avoid touching the electronic components, which can be sensitive to static discharge.
- **Cleaning:** If necessary, gently clean the PCB with a soft, dry brush or compressed air to remove dust. Do not use liquids or abrasive cleaners.
- **Connections:** Ensure all connections (USB, jumper wires) are secure but not forced. Repeatedly bending or stressing the USB connector can cause damage.

7. TROUBLESHOOTING

If you encounter issues with your Fasizi USB to TTL converter module, refer to the following troubleshooting steps:

- **Module Not Recognized by Computer:**
 - **Driver Issue:** Ensure the CH340G driver is correctly installed for your operating system. Try reinstalling the driver.
 - **USB Port:** Try connecting the module to a different USB port on your computer.
 - **Cable/Adapter:** If using a USB extension cable or hub, try connecting the module directly to the computer.
 - **Operating System:** Verify compatibility with your specific OS version.

• **No Communication with Target Device:**

- **Wiring:** Double-check all wiring connections, especially TXD-to-RXD and RXD-to-TXD. Ensure GND is connected.
- **Voltage Selection:** Confirm the jumper is set to the correct voltage (3.3V or 5V) matching your target device.
- **Serial Settings:** Verify that the baud rate, data bits, parity, and stop bits in your serial terminal software match the target device's settings.
- **Target Device Power:** Ensure your target device is properly powered.
- **LED Activity:** Observe the TXD/RXD LEDs. If they are not flashing during data transmission/reception, it indicates a lack of communication.

• **Intermittent Connection:**

- **Loose Connections:** Check for any loose jumper wires or a loose USB connection.
- **Power Supply:** Ensure stable power from the USB port. Avoid using unpowered USB hubs if the target device draws significant current.

8. SPECIFICATIONS

Feature	Detail
Brand	Fasizi
Model Number	ELB0360
Chipset	CH340G
Module Dimensions	Approximately 4 cm x 2.2 cm (1.57 x 0.87 inches)
Color	Gold
Output Voltage	3.3V / 5V TTL (selectable via jumper)
Indicator Lights	PWR, TXD, RXD
Interface	USB Type-A to TTL Serial
Weight	Approximately 10 g

9. WARRANTY AND SUPPORT

For information regarding warranty coverage, return policies, or technical support for your Fasizi USB to TTL 3.3V/5V CH340G UART Converter Module, please refer to the seller or retailer from whom you purchased the product. Specific warranty terms may vary depending on the point of purchase and regional regulations. It is recommended to retain your proof of purchase for any warranty claims or support inquiries.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question