

## VB Series

# VIA VB8001

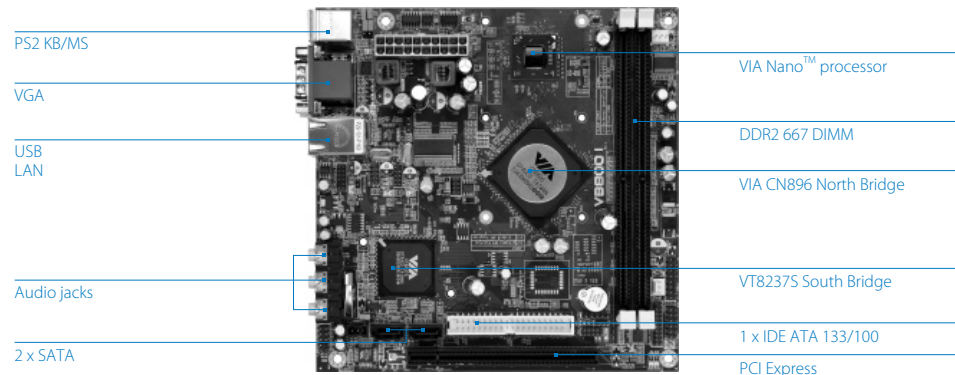
Mini-ITX Nano™ Board  
with USB, Mini PCI, SATA,  
GigaLAN

## Features

- Integrated VIA Chrome9™ HC graphics with 2D/3D and video acceleration
- Supports DDR2 667 SDRAM
- Supports one IDE and two SATA hard drives
- Supports one PCIe Gigabit Ethernet
- Supports one VGA port
- Supports two COM ports
- Supports six USB 2.0 ports
- Supports one 16-lane PCIe and one Mini PCI



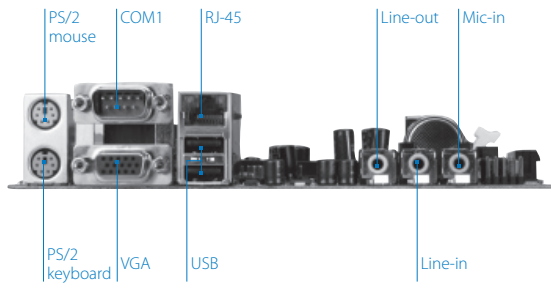
## Board Placement



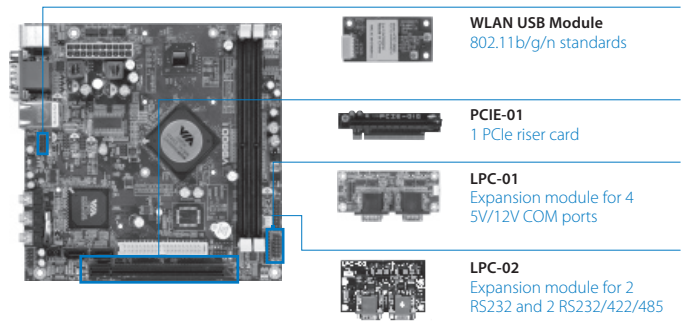
## Specifications

|   |  |
|---|--|
| <b>Model Name</b>                         | <b>VB8001</b>  |
| <b>Processor</b>                          | 1.6GHz VIA Nano™   |
| <b>Chipset</b>                            | VIA CN896 North Bridge<br>VT8237S South Bridge   |
| <b>System Memory</b>                      | 2 DDR2 533/667 DIMM sockets<br>Up to 4 GB memory size  |
| <b>VGA</b>                                | Integrated VIA Chrome9™ HC graphics with 2D/3D and video acceleration  |
| <b>Expansion Slots</b>                    | 1 x 16-Lane PCIe slot<br>1 x 32-bit Mini PCI slot  |
| <b>Onboard IDE</b>                        | 1 x UltraDMA 133/100/66 connector  |
| <b>Onboard LAN</b>                        | 1 x VIA VT6130 PCIe Gigabit Ethernet controller  |
| <b>Onboard Audio</b>                      | VIA VT1708A High Definition Audio Codec  |
| <b>Onboard Super I/O</b>                  | VIA VT1211 LPC Super I/O   |
| <b>Onboard I/O Connectors</b>             | 2 x SATA connectors<br>2 x Fan pin connectors: CPU/Sys FAN<br>3 x USB pin connectors for 6 additional USB 2.0 ports (1 supports VIA WLAN module)<br>1 x Serial port pin connector for COM2 (5V/12V selectable)<br>1 x LPC header<br>1 x CIR pin connector (switchable for KB/MS)<br>1 x FIR pin connector (IrDA 1.0)<br>1 x SMBus connector<br>1 x Buzzer<br>1 x S/PDIF out pin connector<br>1 x Front panel pin connector<br>1 x Front panel audio pin connector (Mic-in and Line-out)<br>1 x ATX power connector |
| <b>Back Panel I/O</b>                     | 1 x PS2 mouse port<br>1 x PS2 keyboard port<br>1 x Serial port<br>1 x VGA port<br>1 x GigaLAN port<br>2 x USB 2.0 ports<br>3 x Audio jacks: Line-out, Line-in and Mic-in (horizontal, Smart 5.1 Supported)   |
| <b>BIOS</b>                               | Award BIOS, SPI 4/8Mbit flash memory   |
| <b>Operating System</b>                   | Windows XP, Windows Embedded CE, Windows Embedded Standard, Linux  |
| <b>System Monitoring &amp; Management</b> | CPU/System voltage monitoring<br>Watch Dog Timer<br>Wake-on LAN, Keyboard Power-on, Timer Power-on<br>AC power failure recovery  |
| <b>Operating Temperature</b>              | 0 ~ 50 °C  |
| <b>Operating Humidity</b>                 | 0% ~ 95% (relative humidity; non-condensing)   |
| <b>Form Factor</b>                        | Mini-ITX (6-layer)<br>17 cm x 17 cm  |

## Back Panel I/O



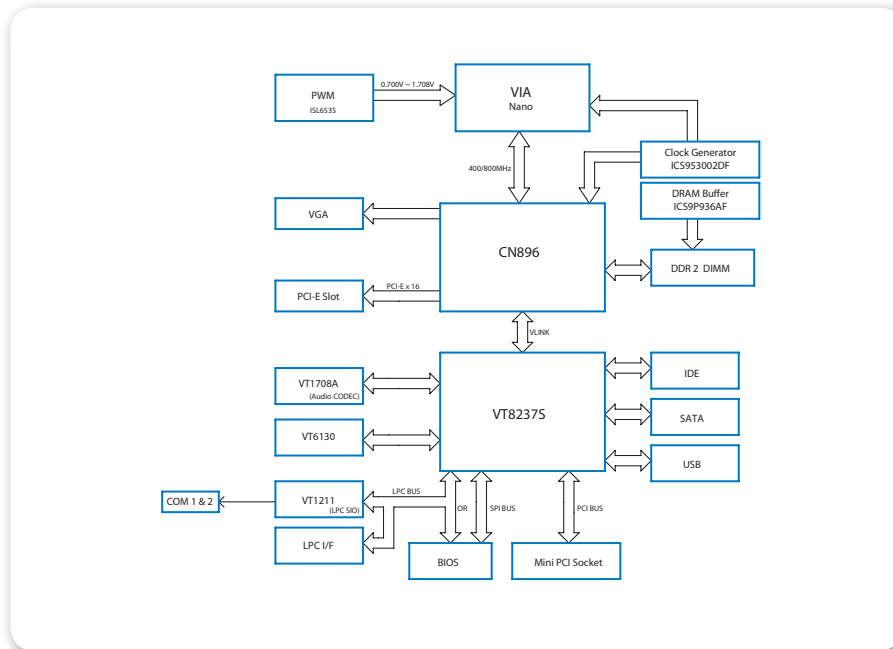
## Accessories



## Ordering Information

| Model Name | CPU Frequency | Description  |
|------------|---------------|--|
| VB8001     | 1.6GHz Nano™  | Mini-ITX Board with 1.6GHz Nano™, VGA, USB 2.0, COM, GigaLAN, SATA, Mini PCI, PCIe x16 |

## Block Diagram



## Packing List

| Items                            |
|----------------------------------|
| 1 x ATA 133/100 IDE ribbon cable |
| 1 x Driver CD                    |
| 1 x I/O bracket                  |
| 1 x SATA cable                   |