

## VB Series

NEW

VIA

# VB8003

Mini-ITX Nano™ Board with  
4 Display Outputs, HDMI,  
DVI, CF, Dual GigaLAN  
Support

## Features

- Onboard S3 Chrome 435 ULP. Supports ChromotionHD™ multimedia video engine, enabling hardware acceleration for H.264, VC-1, MPEG-2, WMV-HD, and AVS
- Supports 4 display outputs including HDMI, DVI, & CRT
- Supports two Gigabit Ethernet
- Supports one IDE and two SATA hard drives
- Supports Compact Flash type II
- Supports six USB 2.0 ports
- Supports two COM ports
- Supports HD audio



## Board Placement

PS2 KB/MS

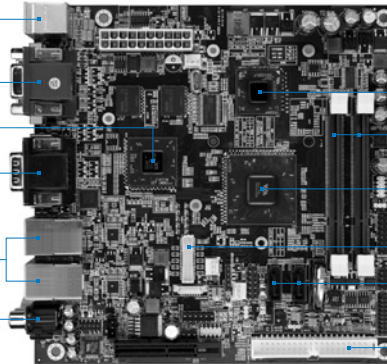
VGA

S3 Chrome 435 ULP GPU

COM1

RJ-45

RCA x 2



VIA Nano™ processor

DDR2 533/667 SDRAM SODIMM

VIA VX800 chipset

LVDS

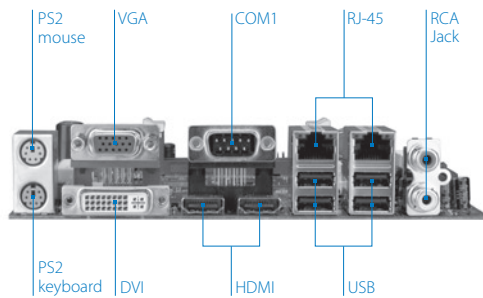
2 x SATA

IDE

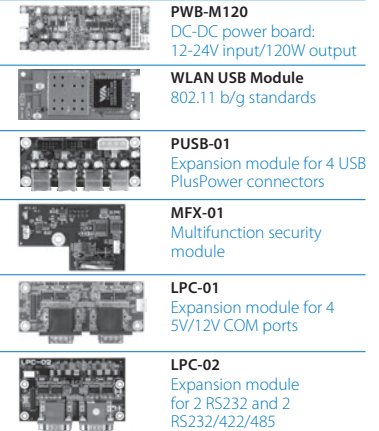
## Specifications

<b>Model Name</b>	<b>VB8003</b>
<b>Processor</b>	1.6GHz VIA Nano™ with FSB 800MHz
<b>Chipset</b>	VIA VX800 Unified Digital Media IGP chipset
<b>System Memory</b>	2 x DDR2 533/667 SDRAM SODIMM sockets. Up to 4GB memory size
<b>Graphic</b>	S3 Chrome 435 ULP through PCIe x 4 GDDR3 256MB 32x32 x 2 4 displays support by S3+VX800: <ul style="list-style-type: none"><li>• 1 x HDMI (S3)</li><li>• 1 x DVI-I (S3)</li><li>• 1 x HDMI (VX800/AD9389) or 1 LVDS (VX800)</li><li>• 1 x VGA (VX800)</li></ul>
<b>Storage</b>	1 x PATA (40-pin with power), supports HDD/SSD/DOM 1 x CF type II 2 x SATA (supports power for DOM)
<b>Onboard LAN</b>	2 x VIA VT6130 Gigabit Ethernet controller
<b>Onboard Audio</b>	1 x VIA VT1708B High Definition Audio Codec
<b>Onboard Super I/O</b>	1 x VIA VT1211 LPC Super I/O
<b>Onboard I/O Connectors</b>	3 x fan connectors: CPU/Sys/GPU FAN 1 x USB pin connectors for 2 additional USB 2.0 ports (supports VIA VT6656 WLAN module) 1 x Serial port pin connector for COM2 (5V/12V selectable) 1 x VCP slot for video capture function or 2 COM ports with 5V/12V support (add-on card is required) 1 x PS2 keyboard/mouse pin connector 1 x DIO pin connector (GPI x 4 + GPO x 4) 1 x LPC header 1 x FIR pin connector (IRDA 1.0) 1 x SMBus connector 1 x System temperature reading pin connector 1 x Front panel pin connector (2 pin for WLAN LED) 1 x Front panel audio pin connector (Mic-in and Line-out) 1 x SPDIF pin connector 1 x Digital video input for CCIR-656/601/transport stream video 1 x MFX pin connector for VIA MFX module 1 x 24-bit dual channel LVDS connector (optional with HDMI by VX800) 1 x Backlight control connector for inverter power and brightness control 1 x ATX power connector
<b>Back Panel I/O</b>	1 x PS2 mouse port 1 x PS2 keyboard port 2 x HDMI 1 x Serial port 1 x DVI-I 1 x VGA port 2 x RJ-45 LAN ports 4 x USB 2.0 ports 2 x RCA jacks

## Back Panel I/O



## Accessories



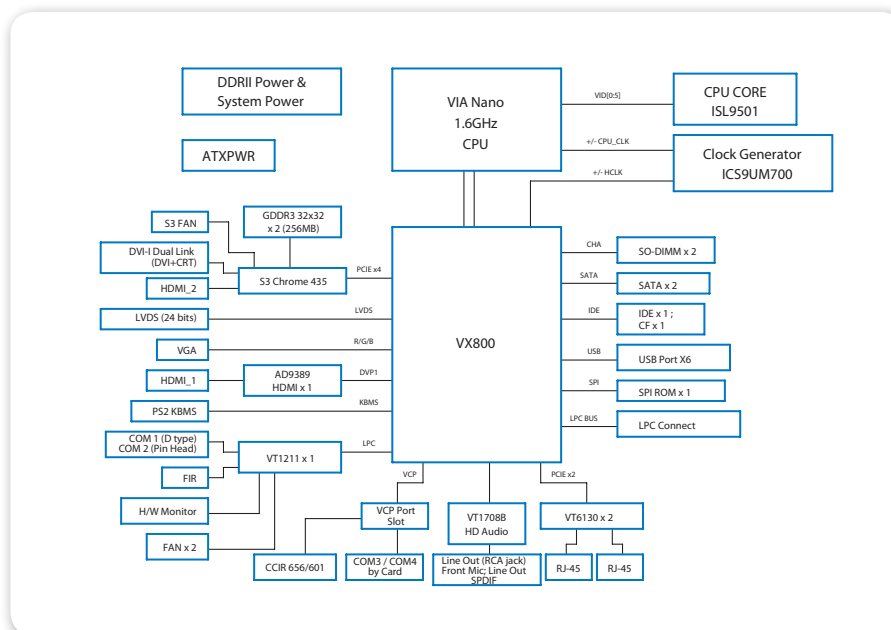
## Specifications

<b>Model Name</b>	<b>VB8003</b>
<b>BIOS</b>	Award BIOS, SPI 4/8Mbit flash memory
<b>Operating System</b>	Windows XP, Linux, XPe
<b>System Monitoring &amp; Management</b>	CPU/System voltage monitoring System temperature monitoring Fan speed monitoring Watch Dog Timer Wake-on LAN, Keyboard Power-on, Timer Power-on AC power failure recovery
<b>Operating Temperature</b>	0 ~ 60 °C
<b>Operating Humidity</b>	0% ~ 95% (relative humidity; non-condensing)
<b>Form Factor</b>	17 cm x 17 cm

## Ordering Information

Model Name	CPU Frequency	Description
VB8003	1.6GHz Nano™	Mini-ITX Board with 1.6GHz Nano™, up to 4 Display Outputs Supporting HDMI, DVI, CRT, USB, COM, CF, IDE, SATA, GigaLAN

## Block Diagram



## Packing List

Items
1 x Box content card
1 x SATA cable
1 x I/O bracket
1 x Driver CD
1 x Screw accessory pack for DVI