



VIA PT800

PERFORMANCE CHIPSET

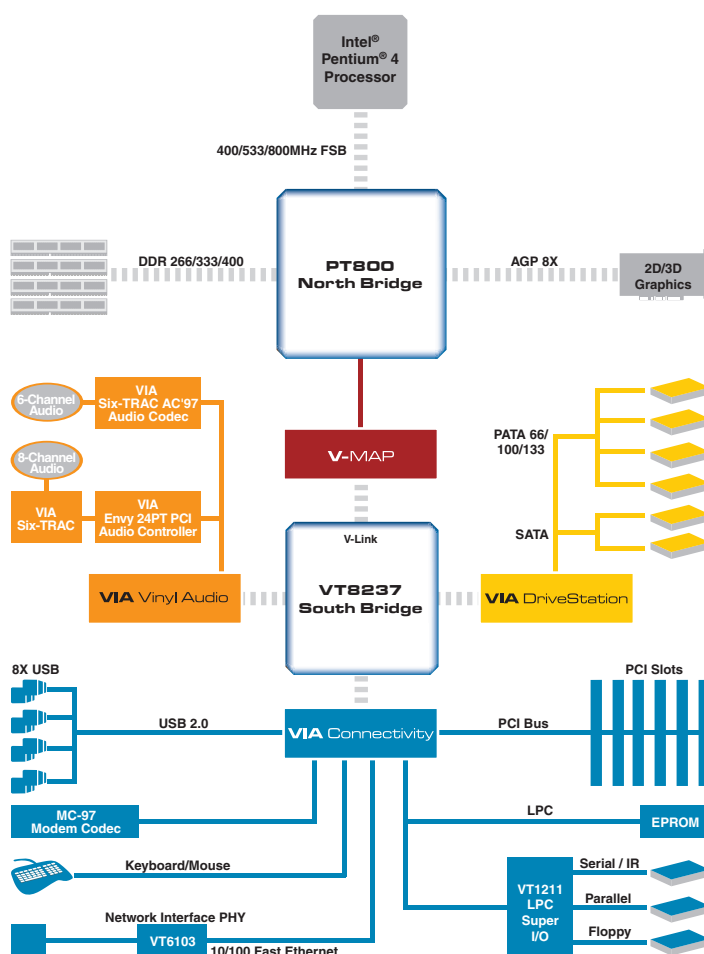
Bringing Serial ATA/RAID to the Mainstream Pentium® 4 Platform



Supporting 800MHz FSB and Intel® Hyper-Threading Technology, the VIA PT800 chipset implements VIA's advanced FastStream64™ DDR400 Memory Controller and AGP 8X graphics port in a synchronized North Bridge configuration that maximizes bus bandwidth efficiency. When coupled with the advanced new VIA VT8237 South Bridge, the VIA PT800 also delivers a host of advanced connectivity and multimedia features, including the industry's first full-featured native Serial ATA/RAID controller and rich surround sound support, to provide the most scalable and highest performance core logic chipset platform for mainstream Intel Pentium® 4 processor based PC systems.

Featuring the VIA DriveStation™ Controller Suite, the VIA VT8237 provides the most comprehensive set of high-performance integrated storage interface technologies available on the market today. In addition to enabling high-speed 150MB/s dual channel connections to Serial ATA Hard Drives while retaining support for up to four Parallel ATA-133 devices, it combines exceptionally fast disk data transfer rates and optimal data integrity with easy installation and manageability through V-RAID, the first native RAID controller integrated into a South Bridge supporting multiple RAID Level 0, RAID Level 1, RAID Level 0+1 and JBOD configurations.

The VT8237 also features the VIA Vinyl™ Multichannel Audio Suite for superlative integrated and onboard 5.1 and 7.1 surround sound, and the VIA Advanced Connectivity Suite offers a host of high-bandwidth connectivity options, including support for up to eight high-speed USB 2.0 ports and 10/100Mbps Fast Ethernet. The PT800 benefits from VIA's unique V-MAP (VIA Modular Architecture Platform) architecture that facilitates faster product development, speeding up time to market, and features the high-throughput V-Link interconnect running at speeds of up to 533 MB/s between the North and South Bridge.





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Features	PT800	P4X400
Processor	Intel® Pentium® 4 Hyper-Threading Support	Intel® Pentium® 4 Hyper-Threading Support
Front Side Bus	800/533/400MHz	533/400MHz
Memory Support	DDR400/333/266 w/ECC	DDR400/333/266
Max. Memory	8.0GB	4.0GB
AGP Support	AGP 8X/4X	AGP 8X/4X
South Bridge	VT8237	VT8235
North/South Bridge Link	8X V-Link (533MB/sec)	8X V-Link (533MB/sec)
Integrated Audio	VIA Vinyl™ Audio 5.1 surround sound	VIA Vinyl™ Audio 5.1 surround sound
SATA	Dual Channel Serial ATA supports 2 SATA devices SATALite™ interface for two additional SATA devices	No
V-RAID	RAID 0, RAID 1, and RAID 0+1 & JBOD (SATA)	No
PATA	Dual Channel Parallel ATA133 (up to 4 devices)	Dual Channel Parallel ATA133 (up to 4 devices)
USB 2.0	8 ports	6 ports
Integrated Modem	MC'97	MC'97
Integrated Network Controller	VIA MAC 10/100 Fast Ethernet	VIA MAC 10/100 Fast Ethernet
PCI Devices/Slots	6 slots	6 slots
I/O Protocols	I/O APIC / LPC Super I/O	I/O APIC / LPC Super I/O
Power Management	ACPI/APM/PCI/PM	ACPI/APM/PCI/PM

Benefits

Advanced FastStream64 Technology

VIA FastStream64™ Technology uses an expanded array of prefetch buffers to reduce latency in the memory controller, extending performance at a lower transistor cost than dual channel implementations. With a 800/533/400MHz processor bus and supporting DDR400/333/266 memory, the VIA PT800 provides lightning fast access to system memory, ensuring optimum system performance.

Native Serial ATA/RAID

The VIA DriveStation™ Advanced Connectivity Suite with native dual channel Serial ATA/RAID controller provides direct support for two 150MB/s Serial ATA devices, and its unique SATALite™ interface expands support for two additional SATA devices. The V-RAID controller features native RAID 0, RAID 1, and RAID 0+1 and JBOD, ensuring optimum data integrity and system performance. User friendly software interface enables easy disk array configuration.

VIA Vinyl Multichannel Audio Suite

Delivering rich, warm surround sound at resolutions as high as 24/96 through up to six- or eight-channel outputs, the VIA Vinyl Audio 5.1 surround sound and VIA Vinyl Gold Audio 7.1 surround sound enable crisp, clear performance, representing the highest levels of audio quality in a mainstream integrated or onboard solution.

Unified VIA Hyperion 4in1 Drivers

VIA's unified approach to drivers has been established for eight generations of chipsets, allowing end users to benefit from seamless hardware and software compatibility.

Features

- Supports full range of Intel® Pentium® 4 processors
- Supports Intel Hyper-Threading Technology
- 800/533/400MHz FSB settings
- Supports up to 8GB DDR400/333/266 SDRAM
- Support for AGP 8X/4X
- 8X V-Link 533MB/s high bandwidth North/South Bridge interconnect
- Support for VIA Vinyl™ Multichannel Audio Suite
- Serial ATA support for up to 4 devices
- Integrated V-RAID with RAID 0, RAID 1, RAID 0+1, & JBOD (SATA) support
- Parallel ATA133/100/66 support for up to 4 devices
- Support for up to 8 USB 2.0/USB 1.1 ports, UHCI compliant
- Integrated MC'97 Modem
- Integrated 10/100 Fast Ethernet MAC
- Advanced power management capabilities including ACPI/OnNow
- 858-pin BGA North Bridge
- 539-pin BGA VT8237 South Bridge

