VIA PM880/PM800
PERFORMANCE CHIPSET

Features	PM800	PM880	P4M266A
Processor	Intel Pentium 4	Intel Pentium 4	Intel Pentium 4
Front Side Bus	800MHz	800MHz	533MHz
Memory Controller	FastStream64	DualStream64	Single Channel
Memory Support	Single Channel	Dual Channel	Single Channel
Max. Memory	8GB, DDR400	8GB, DDR400	4GB, DDR266
AGP Support	AGP 8X	AGP 8X	AGP 4X
North/South Bridge Link	Ultra V-Link (1GB/s)	Ultra V-Link (1GB/s)	V-Link (266MB/s)
Graphics Core	UniChrome Pro IGP	UniChrome Pro IGP	ProSavage8
Video Acceleration	Yes	Yes	Yes
Dual Monitor Support	Yes	Yes	No
Video De-blocking	Yes	Yes	No
Adaptive De-interlace	Yes	Yes	No
Hardware Display Rotation	Yes	Yes	No
Video Capture Ports	Yes	Yes	No
CRT RGB Interface	350MHz	350MHz	250MHz

Benefits

Advanced Memory Controller
The distinguishing feature between the VIA PM800 and PM880 chipsets is the memory controller. The PM800 uses the proven FastStream64 single channel memory controller, while the PM880 uses the ultra-high performance DualStream64 dual Memory Controller. Both controllers support up to 8GB of DDR266, 333, or 400 memory.

High Performance CPU Interface
The PM800/880 chipsets enable connection to the latest Intel® Processors supporting 800MHz front side bus speeds, and Hyper-Threading technology.

S3 Graphics UniChrome Pro IGP Graphics Core
With an internal data flow equivalent to what is available to the latest AGP 8X graphics cards, UniChrome Pro has a separate 128-bit data path between the North Bridge for pixel data flow and texture/command access. Separate 128-bit 2D and 3D graphics engines ensure optimal performance for all multimedia, entertainment, and productivity applications.

Hi-Def Visual Experience
UniChrome Pro with its optimized shared memory architecture and high definition video support through the Chromotion CE Video Display Engine, offers a breathtaking visual experience with the latest HDTV formats up to 1080p, such as Microsoft's® WMV HD.

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

- Full support for the latest Pentium® 4 Processors
- Supports 400/533/800MHz Front Side Bus Settings
- Supports up to 8GB DDR266/333/400 SDRAM
- Ultra V-Link 1066 MB/s high bandwidth North/South Bridge interconnect
- Full featured Accelerated Graphics Port (AGP) compliant with 8X/4X transfer modes
- Integrated UniChrome Pro Graphics
- Optimized Unified Memory Architecture (UMA)
- 200MHz Graphics Engine Clock with separated 128-bit data paths
- 128-bit 2D and 3D Graphics Engine
- Chromotion CE Video Display Engine
  - MPEG-2 Decoder   - Video De-blocking
  - Adaptive De-Interlace - Full HDTV support up to 1080p
- Two 8-bit Video Capture Ports
- Three 12-bit Digital Video Ports for connection to TV out, Video Capture In, and external TMDS transmitter
- Full Software support including Microsoft DirectX 7.0, 8.0, 9.0 and Open GL support
- Support for VIA Vinyl Gold 8-channel Audio controller & integrated VIA Vinyl 6-channel Audio
- Serial ATA support for up to 4 devices
- Integrated V-RAID with RAID 0, RAID 1, RAID 0+1*, and 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
- Support for VIA Velocity Gigabit Ethernet companion controller & Integrated 10/100 Fast Ethernet
- Advanced System Power Management Support

* RAID Level 0+1 requires four SATA drives; support for the two additional drives can only be implemented with two external Serial ATA ports enabled through a SATALite PHY.

VIA PM880/PM800 MULTIMEDIA CHIPSETS

Performance IGP Chipsets integrating the UniChrome™ Pro Graphics Core

Optimized to deliver a great Hi-Def™ visual experience when playing digital video content, the VIA PM800 and PM880 IGP chipsets meet the requirements of rapidly emerging markets for HDTV-ready Media Center PCs and small form factor/low profile PCs, as well as mainstream multimedia PCs.

With a robust shared memory architecture and support for up to 8GB of DDR400 memory, the VIA PM880 integrates the acclaimed DualStream64™ dual channel memory controller, while the PM800 integrates the single channel FastStream64™ memory controller. Both chipsets feature an Accelerated Graphics Port (AGP) 8X controller, and a high speed Ultra V-Link interface for a 1GB/s connection to VIA's feature-leading VT8237 South Bridge.

Integrating the S3 Graphics UniChrome™ Pro IGP graphics core, the chipsets feature an internal data flow equivalent to what is available to the latest AGP 8X graphics cards with separate 128-bit data paths between the North Bridge for pixel data flow and texture/command access. UniChrome Pro also integrates the Chromotion CE Video Display Engine, a multi-faceted approach to displaying multimedia content that includes features in every stage of processing, and interfaces to better control the final output.

To connect to the latest displays, UniChrome Pro integrates a DVI flat panel interface and support for all HDTV formats including the latest 1080p displays. For systems with an integrated display, UniChrome Pro provides a DFP interface that supports single or dual channel LVDS encoders, while a dedicated interface is also provided for TV encoders to standard NTSC or PAL TV displays.

In combination with the VIA VT8237 South Bridge, the VIA PM800 and PM880 offer a comprehensive range of integrated storage, multimedia and connectivity options, including native Serial ATA and V-RAID, with support for RAID 0, RAID 1, RAID 0+1 and JBOD arrays, as well as support for VIA Vinyl Audio, and high-throughput Gigabit Ethernet with the VIA Velocity controller.