



VIA ProSavageDDR **PN266T**(Twister T DDR)

Chipset Introduction

# VIA ProSavageDDR PN266T

- Driving the Intel® Pentium® III Processor-M and mobile VIA C3™ to a whole new level of performance
- DDR266 SDRAM Memory Smashing the PC133 performance ceiling in mobile systems
- •S3 Graphics ProSavage8™ 128-bit 2D/3D Graphics core Rich graphics, smooth DVD playback and a comprehensive driver set
- •Supports Intel Speedstep™ and VIA
  LongHaul™ power management technology
  for extended battery life

  1266T



# VIA ProSavage Mobile Chipsets: Building on a record of success

VIA **ProSavage PN133** (Twister) & PN133T (Twister T)

























(Twister K)





# DDR SDRAM For Mobile Systems



### High Performance

- Doubles Memory Bandwidth and Minimizes Latency yielding higher performance in every type of application
- Exploits the power of new generation mobile processors including the Intel® Pentium® III Processor-M and VIA C3™
- Takes Mobile System Performance to professional desktop level

### Lower Power Consumption

- DDR SDRAM runs at 2.5V as opposed to 3.3V for PC133 SDRAM
- Reduces Memory Subsystem Power Consumption by 30%
- Extends system battery life



# Integrated Graphics For Mobile Systems

### **S3 Graphics Performance**



 Industry leading ProSavage8<sup>™</sup> technology with DDR memory bandwidth, boosts integrated graphics performance by 100%, for discrete graphics equivalent quality

### **Reduces Cost**

No discrete graphics required

### Saves Real Estate on the Mainboard

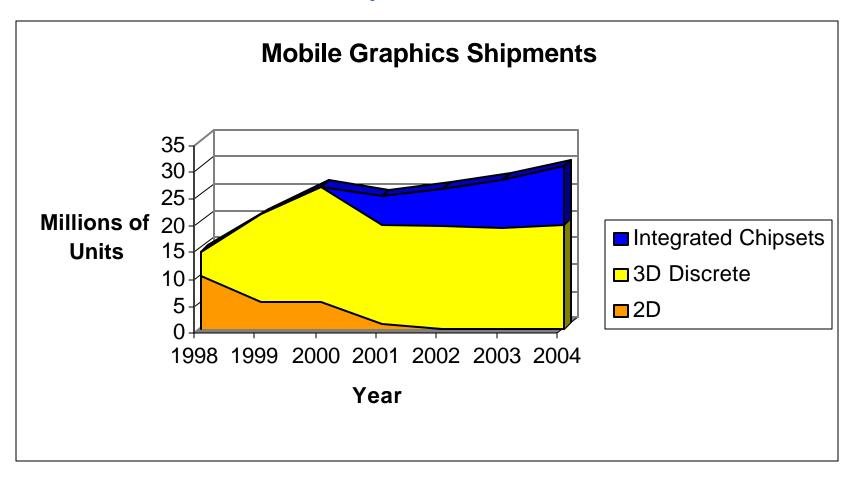
 Enables high performance mobile systems in thinner, lighter form factors than ever before

### **Reduces Power Consumption**

 Lower transistor count and elimination of dedicated frame buffer lowers system power consumption



## Integrated Mobile Solutions -Set For Explosive Growth





Source: Jon Peddie Research

# VIA: Leadership in Integrated Desktop Chipsets with solutions for every segment

AMD Athlon™ XP AMD Duron™	VIA ProSavageDDR KM266 – Professional Desktop Systems VIA ProSavage KM133 – Value Desktop Systems  1266
Intel® Pentium® 4	VIA ProSavageDDR P4M266 – Professional Desktop Systems  P4M266
Intel® Pentium® III, Intel® Celeron™, VIA C3™	VIA ProSavageDDR PM266 – Professional Desktop Systems VIA ProSavage PM133 – Value Desktop Systems







# VIA: Leadership in Mobile Integrated Graphics Chipsets

AMD Athlon™ 4 and AMD Duron™ mobile processor platforms.

New VIA ProSavageDDR KN266

Performance/Professional

Notebooks

**KN266**VIA ProSavage KN133

(Codename: Twister K)

Mainstream/Value Notebooks

Intel® Pentium ® III-M, Intel® Celeron™ and VIA C3™ mobile processor platforms New VIA ProSavageDDR PN266T

Performance/Professional Notebooks **P1266T** 

VIA ProSavage PN133T

(Codename Twister T)

**VIA ProSavage PN133** 

(Codename: Twister)

Mainstream/Value Notebooks









# Enhanced ProSavage8 Graphics

ProSavage8™ High Performance
Integrated Graphics Shared Memory
Architecture (SMA) enables the
ProSavage8™ graphics to utilize the
system memory for frame buffer and
texture memory.



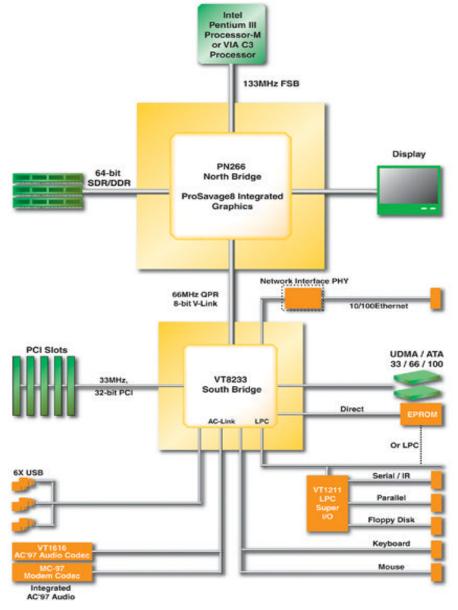
- 128-bit internal data paths
- Effective AGP 8X internal bandwidth
- 2.1GB/s transfer rate
- 8M triangles/s
- 32-bit Rendering, Bump Mapping,
- S3TC Texture Compression
- DSTN and LVDS LCD Support
- 8KByte Texture Cache
- DVD Motion Compensation 30fps
- AGP 4X Sideband Addressing



"VIA's ProSavageDDR delivers high-quality graphics whilst maintaining a high average frame rate."

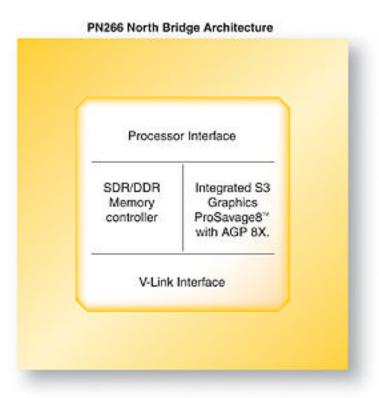


# VIA ProSavageDDR PN266T





# VIA ProSavageDDR PN266T North Bridge



### **Leading Edge Performance Features**

- •133MHz Front Side Bus
- Integrated S3 Graphics ProSavage8™ Graphics Core with internal AGP 8X equivalent bandwidth, 32MB Frame Buffer and DVD Motion Compensation
- Support for up to 4GB High-Speed DDR200/266 SDRAM: Peak data transfer rate of 2.1GB/sec
- High Speed V-Link Architecture: Peak bandwidth of 266MB/s

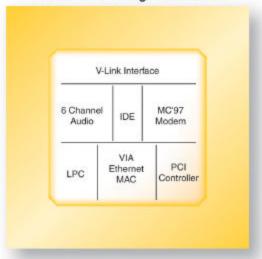
### **Unmatched Flexibility & Scalability**

- Supports full range of mobile Intel processors including Intel® Pentium® III Processor-M
- DDR266 SDRAM or PC133 SDRAM Memory



## V-MAP South Bridge Options

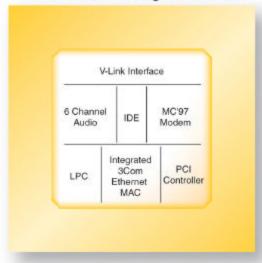
#### VT8233 South Bridge Architecture



#### VT8233

V-Link South Bridge AC/97 audio, MC'97 Modem 6 ports USB VIA MAC with MII Interface Home PNA, 10/100 BT w/ Ext. PHY Dual UDMA 33/66/100, LPC Super IO/APIC Adv. Power Management

#### VT8233C South Bridge Architecture



#### VT8233C

V-Link South Bridge AC/97 audio, MC'97 Modem 6 ports USB 3Com® 10/100 Ethernet MAC Dual UDMA 33/66/100, LPC Super IO/APIC Adv. Power Management





Feature	PN266T	Intel 830MG
North Bridge	VT8613	82830 GMCH-M
Processor Support	Intel® Pentium® III-M Intel® Celeron™ VIA C3™	Intel® Pentium® III-M Intel® Celeron™ VIA C3™
Front Side Bus	100/133MHz	100/133MHz
Memory Bus Settings	100/133/200/266MHz	100/133MHz
AGP Support	AGP 4X (Effective Internal bandwidth AGP 8X)	AGP 4X
Memory Type	DDR200/266 SDRAM PC100/133 SDRAM	PC100/133 SDRAM
Max. Memory	4.0GB	1.0GB
Integrated Graphics	S3 Graphics ProSavage8™	Intel® 82830M Graphics Controller
South Bridge	VT8233, VT8233C	82801BA ICH3-M
North/South Bridge Link	VIA V-Link@ 266MB/s	Intel Hub Architecture @ 266MB/s
ACR Support	Yes	No
Integrated Audio	AC'97 6 Channel	AC'97 2.1 Compliant
Integrated Modem	MC'97	MC'97
Integrated Network Controller	VIA or 3Com Ethernet MAC -10/100 Fast Ethernet	Intel Ethernet MAC -10/100 Fast Ethernet
PCI Devices/Slots	5 PCI	5 PCI
IDE	ATA 33/66/100 ATA 133 with VT8233A South Bridge	ATA 33/66/100
USB	6 Ports	6 Ports
Super I/O	LPC Super I/O	LPC Super I/O
IO APIC	Yes	Yes
Power Management	ACPI/APM/PCI/PM	ACPI/APM/PCI/PM



# VIA ProSavageDDR PN266T Performance Highlights

15% More Performance in Business Winstone 2001

25.1% More Performance in Content Creation Winstone 2001

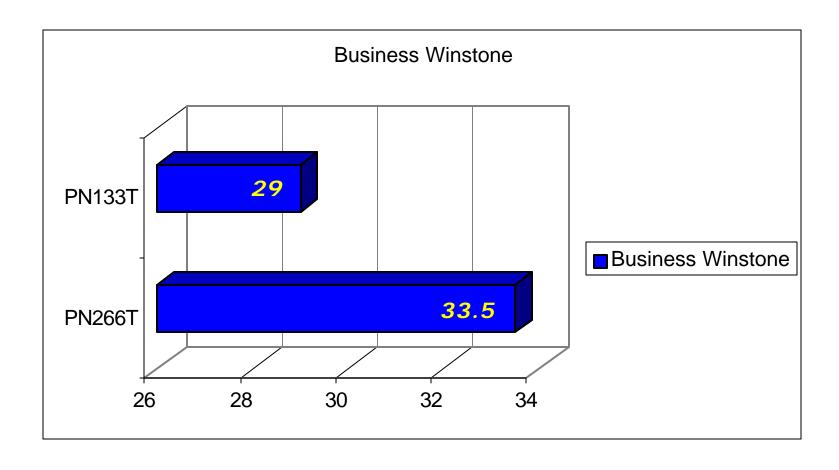
66.3% More Performance in Quake

52.6% More Performance in 3D Winmark 2000





## **Business Winstone 2001**



PN266T: VIA PN266T Reference Board, Intel Pentium III Processor-M 1GHz, 256MB Micron PC2100

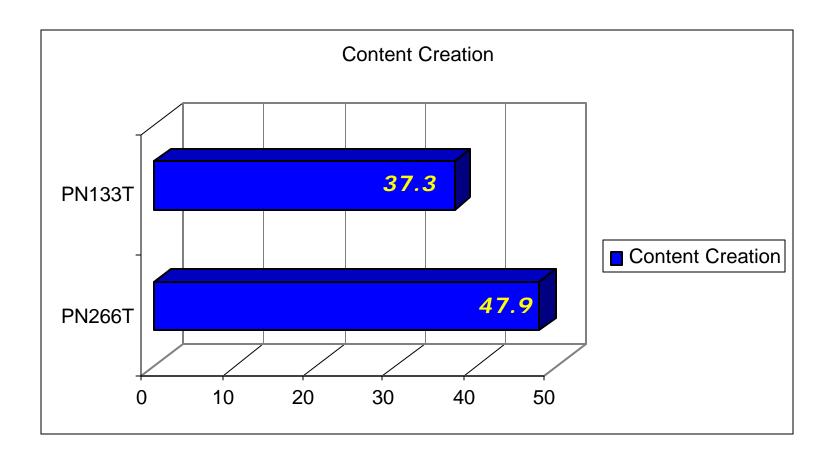
Memory, Integrated ProSavage4 Graphics, IBM 40GB HDD, MS Windows® XP Professional

PN133T: VIA PN133T Reference Board, Intel Pentium III Processor-M 1GHz, 256MB Apacer PC133

Memory, Integrated ProSavage4 Graphics, IBM 40GB HDD, MS Windows® XP Professional



## **Content Creation Winstone 2001**



PN266T: VIA PN266T Reference Board, Intel Pentium III Processor-M 1GHz, 256MB Micron PC2100

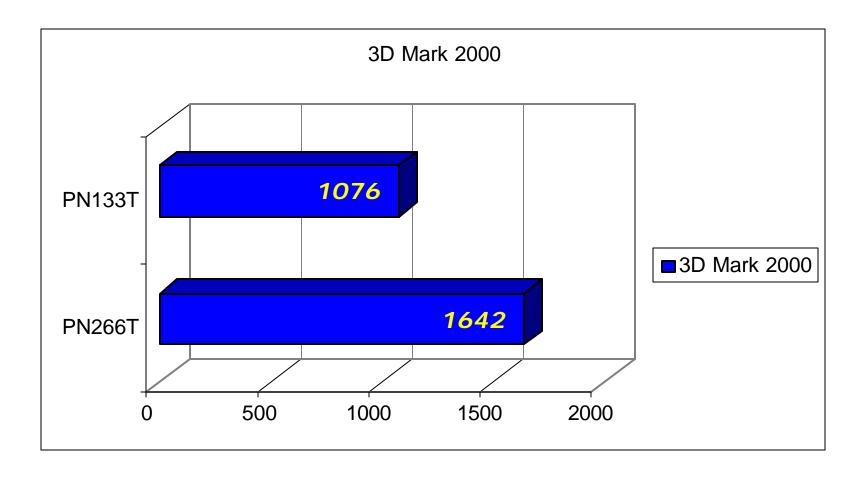
Memory, Integrated ProSavage4 Graphics, IBM 40GB HDD, MS Windows® XP Professional

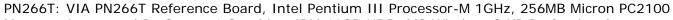
PN133T: VIA PN133T Reference Board, Intel Pentium III Processor-M 1GHz, 256MB Apacer PC133

Memory, Integrated ProSavage4 Graphics, IBM 40GB HDD, MS Windows® XP Professional



### 3D Mark 2000





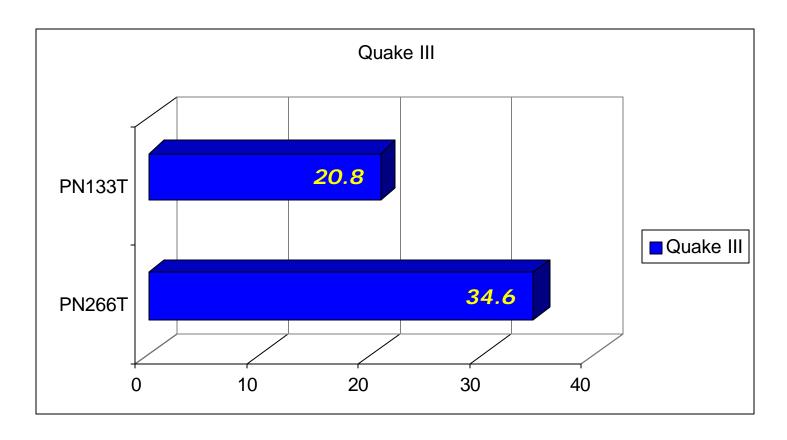
Memory, Integrated ProSavage4 Graphics, IBM 40GB HDD, MS Windows® XP Professional

PN133T: VIA PN133T Reference Board, Intel Pentium III Processor-M 1GHz, 256MB Apacer PC133

Memory, Integrated ProSavage4 Graphics, IBM 40GB HDD, MS Windows® XP Professional



## Quake III



PN266T: VIA PN266T Reference Board, Intel Pentium III Processor-M 1GHz, 256MB Micron PC2100 Memory, Integrated ProSavage4 Graphics, IBM 40GB HDD, MS Windows® XP Professional

PN133T: VIA PN133T Reference Board, Intel Pentium III Processor-M 1GHz, 256MB Apacer PC133 Memory, Integrated ProSavage4 Graphics, IBM 40GB HDD, MS Windows® XP Professional



## VIA ProSavageDDR PN266T: Empower Your Mobile with DDR

- First Mobile Chipset for the Intel® Pentium® III Processor-M with DDR266 SDRAM memory support
- Market Leading Performance
- Market Leading Power Consumption
- Market Leading Communication and Networking Options
- Flexibility for OEMs and System Integrators
- Rich Integrated Graphics With A Comprehensive Driver Set





