

MadOnion Benchmark Media Usage Report Q1 2002

Sami Niemelä
BETA Program Coordinator

MadOnion.com, Inc
12930 Saratoga Avenue, Ste.B-9
Saratoga, CA 95070

Benchmark media usage report

Objectives

This report covers the usage of the 3DMark® product line within the online media for Q1 2002. The objective of the report is to analyze how extensively 3DMark® is used by the PC industry in order to gain insight and quantify the popularity of the software.

Since the initial introduction of 3DMark® 99 – The Gamers' Benchmark, the 3DMark® benchmark series has become increasingly popular amongst the computer professionals. Over 20 million copies of the benchmark software have been distributed to date, making 3DMark® the most widely spread testing software ever.

In Q1 2002 3DMark was used by 95% of online publications that wrote reviews about new PC hardware.

Survey method

Surveyed media

We selected online media as the target group of this analysis because of the speed by which they operate and it's high availability. In order to ensure that the selection is valid, we excluded all non-English online sources. This was done because it was not possible to verify that selected online sources from a different country would represent a holistic view of that country's news sources in general.

Surveyed product launches

This report covers four recent new technology launches during Q1 2002. These launches are: AthlonXP 2000+ and 2100+ CPU launched by Advanced Micro Devices Inc, Intel Pentium 4 2, 2.2 and 2.4 GHz processor launches, GeForce4 series launched by Nvidia Corp, Inc. and Radeon 7500 & 8500 product line launched by ATI Technologies Inc.

The reviews included were published during Q1 2002, with the exception of NVIDIA GeForce4 series reviews, in which we also included reviews published in April 2002. This was done because we wanted to include the GeForce4 series in this report and not many reviews were available before April. The ATI Radeon 7500 & 8500 series was launched in 2001, therefore, not many reviews were published during Q1 2002. ATI reviews are still included in order to gain a more comprehensive view of 3D Graphics hardware.

It should be noted that different companies have different promotional capabilities and programs. This directly affects the number of reviews that have been written about their new products. This does not necessarily reflect the quality of new hardware or public interest about it.

For comparison purposes we included the usage of Quake III in the reviews, which we believe is the most commonly used application-based benchmark in the gaming segment.

Key Results

AMD AthlonXP 2000+ and 2100+ launches

Total number of reviews covered:	21	
Number of reviews that used 3DMark®:	20	Usage percentage: 95%
Number of reviews that used Quake III:	17	Usage percentage: 81%

Intel Pentium 4 2GHz, 2.2GHz and 2.4GHz launches

Total number of reviews covered:	21	
Number of reviews that used 3DMark®:	17	Usage percentage: 81%
Number of reviews that used Quake III:	19	Usage percentage: 90%

NVIDIA GeForce4 series launch

Total number of reviews covered:	52	
Number of reviews that used 3DMark®:	52	Usage percentage: 100%
Number of reviews that used Quake III:	50	Usage percentage: 96%

ATI Radeon 7500 & 8500 series launch

Total number of reviews covered:	10	
Number of reviews that used 3DMark®:	10	Usage percentage: 100%
Number of reviews that used Quake III:	7	Usage percentage: 70%

Summary of surveyed reviews:

Total number of all reviews covered:	104
Total number of reviews using 3DMark®:	99

Total industry coverage for 3DMark®: 95%

Discussion

As assumed, 3DMark® continues to have the highest usage percentage within the 3D accelerator market. Since the last survey concerning Q4/2001, there is no significant difference in total usage. The total usage percentage remains stable at 95%. The usage in 3D graphics hardware reviews was again 100% and in the processor section, a slight increase was noticed (earlier 84%, now 88%).

3DMark® also seems to be the most commonly used benchmark within the processor measurement segment, which is quite surprising given that 3DMark® is meant to be a 3D/gaming benchmark. Again, the markets surprised us by having a total usage of 88% in the processor reviews including 81% usage in Intel P4 reviews and an impressive 95% in AMD XP reviews.

Noteworthy, is also the fact that MadOnion.com's PCMark2002 is already being widely used. However, since PCMark2002 was only launched in March, we are still waiting to accumulate adequate data for a separate usage report.

Summary

When measured using online press adoption, 3DMark® remains the most widely used benchmark within the industry. In Q4 2002, 3DMark® was used by 94% of all online publications that wrote reviews about new PC hardware. When online press measures and evaluates new processors, 3DMark® is used by 88% of them and when 3D accelerators are measured, 100% usage of 3DMark® is achieved.

Attachments:

Attachment 1: 3DMark® PR Testimonials

Attachment 2: Background data

Attachment 1: 3DMark PR Testimonials

3D Spotlight www.3dspotlight.com

"The latest revision of MadOnion's popular benchmarking program take more advantage of DirectX 8.1 functionality and features, making GeForce4 Ti boards look even better."

AMD Zone www.amdzone.com

"MadOnion's 3DMark2001 is a staple of the benchmarking community, and is a great test of overall video card performance."

3DGPU www.3dgpu.com

"A popular Direct3D-based benchmark that truly brings a card to its knees these days. It uses the Max Payne game engine to render the visuals, and also supports some of the GeForce4's features, such as bump mapping, pixel/vertex shading, and of course utilizing the hardware T&L onboard. It's a widely used benchmark that gives an early indication of how you'll fare with games in the future that uses the latest features, high amount of polygons, and dynamic lighting."

Virtual Zone www.vr-zone.com

"One of the good reasons why some people are getting the GeForce4 Ti4600 is due to 3DMark2001 SE which is an important indicator for performance."

Guru3d www.guru3d.com

"The Second Edition is a major enhancement to its 3DMark® benchmark solution, originally launched in 1998. Combining DirectX 8.1 support with the latest in 3D graphics, 3DMark2001 SE objectively measures how effectively a PC runs 3D graphics applications and provides users with an online results comparison tool that allows them to make informed hardware assessments and upgrade decisions"

HotHardware www.hothardware.com

"MadOnion's 3DMark 2001SE is one of the most comprehensive and reliable Direct 3D Benchmarks available today. It measures overall systems performance while focusing on the graphics subsystem and it's capabilities with leading edge 3D rendering functions, such as pixel and vertex shading."

LegionHardware www.legionhardware.com

"3Dmark2001 places a lot more pressure on the graphics processor compared to 3Dmark2000."

HexusNet www.hexus.net

"As you know, 3DMark 2001 SE is a full system benchmark with some tests relying on card performance, some on system memory bandwidth and some on CPU clock. But given the same base system it becomes a valid graphics card benchmark."

SharkyExtreme www.sharkyextreme.com

"MadOnion's 3DMark 2001 is a popular 3D benchmark tool, and one that many gamers use to compare performance results."

3Dvelocity www.3dvelocity.com

"Probably the result that will mean more to most of you than any of the others is MadOnion's 3DMark 2001 so I'll put you out of your misery."

"3DMark not only tests your graphics card to the maximum, but also acts as a great memory bandwidth indication."

MBReview www.mbreview.com

"3DMark2001 is possibly the most widely used benchmarking program for reviews on the web."

3Dextreme www.3dxtreme.org

"While I'm not a huge believer in simulated benchmark software, it does serve a purpose. Many people live by the mark...the 3dmark."

"3dmark is a good indicator of the overall system as well as the video card."

PCStats www.pcstats.com

"3DMark2001SE is the latest installment in the 3DMark series by MadOnion. By combining DirectX8 support with completely new graphics, it continues to provide good overall system benchmarks. 3DMark2001SE has been created in cooperation with the major 3D accelerator and processor manufacturers to provide a reliable set of diagnostic tools."

Sharky Extreme www.sharkyextreme.com

"MadOnion's 3DMark 2001 is a very popular 3D benchmark tool, and as long as the video component is kept absolutely consistent, then it can be an adequate system/CPU test as well."

Hexus www.hexus.net

"3DMark, although a synthetic benchmark, is quite heavily reliant on pure CPU power / memory throughput. We've seen that it scales quite well when processor speeds are increased."

AMDZone www.amdzone.com

"3DMark2001 is an excellent Direct 3D gaming benchmark."

Hardcoreware www.hardcoreware.net

"3DMark 2001 SE is a DirectX 8 based benchmark, and makes use of such advanced features as vertex shaders, pixel shaders, point sprites, and various forms of bump mapping."

AthlonXP.com www.athlonxp.com

"3DMark has become the cornerstone of benchmarking for gamers. This intensive direct 3D benchmark runs a video card through the paces but also helps show the overall performance of your gaming rig."

Attachment 2: Background data

AthlonXP Series

Domain	Url	3DMark	Quake III	Review type
3dvelocity	http://www.3dvelocity.com/	Used	Used	AthlonXP 2000+
		Used	Used	AthlonXP 2100+
Active Hardware	active-hardware.com	Used	Used	AthlonXP 2100+
AMDWorld	www.amdworld.co.uk	Used	Used	AthlonXP 1700+
AMD Zone	www.amdzone.com	Used	Used	AthlonXP 2100+
Amdmb.com	www.amdmb.com	Used	Used	AthlonXP 2100+
AthlonXP.com	www.athlonxp.com	Used	Used	AthlonXP 2100+
Firing Squad	www.firingsquad.com	Used	Used	AthlonXP 2000+
Got Apex?	gotapex.com	Used	Used	AthlonXP 2000+
Hardcoreware	www.hardcoreware.net	Used	Used	AthlonXP 2100+
Hexus	www.hexus.net	Used	Not Used	AthlonXP 2000+
		Used	Used	AthlonXP 2100+
PC Paradox	www.pcparadox.com	Used	Not Used	AthlonXP 2000+
Pure OC	www.pureoc.com	Used	Used	AthlonXP 2000+
Sharky Extreme	www.sharkyextreme.com	Used	Used	AthlonXP 2100+
SimHQ.com	www.simhq.com	Used	Not Used	AthlonXP 2100+
TechHard	www.techhard.com	Not Used	Used	AthlonXP 2000+
Tech Report	www.tech-report.com	Used	Used	AthlonXP 2100+
Tom's Hardware	www.tomshardware.com	Used	Used	Athlon XP 2300+ vs. P4 3GHz
VIAHardware	www.viahardware.com	Used	Not Used	AthlonXP 2100+
Viper's Lair	www.viperlair.com	Used	Used	AthlonXP 2000+
Total Used		20	17	
Total Reviews		21	21	
Usage percentage		95 %	81 %	

Intel P4

Domain	Url	3DMark	Quake III	Review type
Anandtech	www.anandtech.com	Not Used	Not Used	P4 2.4GHz
Firing Squad	www.firingsquad.com	Used	Used	P4 2.4 GHz
Gamersdepot	http://www.gamersdepot.com	Used	Used	P4 2,2 GHz
		Used	Used	
HardCoreWare.net	http://www.hardcoreware.net	Used	Used	P4 2.2 GHz vs. Athlon XP 2000
HardCoreWare.net	www.hardcoreware.net	Used	Used	P4 2.4 GHz
Hardwaremania	www.hardwaremania.com	Used	Used	P4 2.4 GHz
Hardware Unlimited	www-hardware-unlimited.com	Not Used	Used	
Hardware Unlimited	www.hardware-unlimited.com	Not Used	Used	P4 2.4 GHz
HardOCP	www.hardocp.com	Used	Used	P4 2GHz (northwood)
HardOCP	www.hardocp.com	Used	Used	P4 2.4 GHz
Hexus	www.hexus.net	Used	Used	P4 2.4GHz
Hot Hardware	www.hothardware.com	Used	Used	P4 NW
Intel	http://www.intel.com	Not Used	Used	P4 general
LostCircuits	www.lostcircuits.com	Used	Used	P4 NW vs. WM vs. Athlon XP
Pcstats	www.pcstats.com	Used	Not Used	AthlonXP 2000 vs. P4 2 GHz
Sharky Extreme	www.sharkyextreme.com	Used	Used	P4 2.4GHz
Sharky Extreme	www.sharkyextreme.com	Used	Used	P4 NW 2,0GHz & 2,2 GHz
Tweak 3D	www.tweak3d.net	Used	Used	P4 2.4 GHz
Tweak Town	http://www.tweaktown.com	Used	Used	P4 2,2 GHz
Virtual Zone	www.vr-zone.com	Used	Used	P4 2.4 GHz
ZDNet Uk	www.zdnet.co.uk	Used	Used	P4 2.2 GHz vs. Athlon XP 2000
Total Used		17	19	
Total Reviews		21	21	

Usage percentage

81 % 90 %

NVIDIA GeForce 4 series

Domain	Url	3DMark	QIII	Review type
3DExtreme	http://www.3dxtreme.org	Used	Used	GeForce4 MX440
3DSpotlight	http://www.3dspotlight.com	Used	Used	VisionTek Xtacy GF4 Ti4400 & Ti4600
3DGPU	www.3dgpu.com	Used	Used	Visiontek Xtasy GeForce4 Ti4600 128MB
		Used	Used	GeForce4 Ti4600 First Look
3DVelocity	www.3dvelocity.com	Used	Used	GeForce4
Anandtech	http://www.anandtech.com	Used	Used	NVIDIA GeForce4 - NV17 and NV25 Come to Life
Bjorn 3D	http://www.bjorn3d.com	Used	Used	PNY Verto™ GeForce4 Ti 4600 Review
		Used	Used	Visiontek Xtasy Geforce4 MX440 Review
		Used	Used	NVIDIA Geforce4 Preview
Evil3D	http://www.evil3d.net	Used	Used	VisionTek Xtasy MX 440
EXHardware	http://www.exhardware.com	Used	Used	GeForce4 MX440
FiringSquad	www.firingsquad.com	Used	Used	GeForce4 Ti 4200 Preview
		Used	Used	NVIDIA GeForce4 Preview
Gamersdepot	www.gamersdepot.com	Used	Used	PNY Verto Ti4600 GeForce 4
Guru3D	www.guru3d.com	Used	Used	3D Blaster GeForce4 MX 440
		Used	Used	3D Blaster 4 MX 420
		Used	Used	NVIDIA GeForce4
GameSpot	www.gamespot.com	Used	Used	MSI ComputerGF4Ti4400-VTD
		Used	Used	Verto GeForce4 Ti 4600
		Used	Used	MSI Computer GF4MX440
GamePC	www.gamepc.com	Used	Used	nVidia GeForce4 Ti4200
		Used	Used	nVidia GeForce4 Ti4400
		Used	Used	nVidia GeForce4 440 Go Mobile Graphics
Got Apex	www.gotapex.com	Used	Used	NVIDIA GeForce4 Ti4600
		Used	Used	GeForce 4 MX 440
Hothardware	www.hothardware.com	Used	Used	VisionTek XTasy GeForce4 Ti 4400
		Used	Used	VisionTek XTasy GeForce4 Ti 4600
		Used	Used	nVidia's GeForce 4 Ti & MX
HardOCP	http://www.hardocp.com	Used	Used	GeForce 4 Review
		Used	Used	GeForce 4 Ti4200 Preview
		Used	Used	MSI GeForce 4 Ti4600
LegionHardware	http://www.legionhardware.com	Used	Used	X-Micro Impact T4600 (GF4Ti4600)
		Used	Used	X-Micro Impact 440 (Gf4MX440)
Mikhailtech	http://www.mikhailtech.com	Used	Used	GeForce4MX440
MBReview	http://www.mbreview.com	Used	Used	GeForce4MX440
Motherboards.org	http://www.motherboards.org	Used	Used	MSI GeForce4 MX 440
NVMax	http://www.nvmax.com	Used	Not Used	X-Micro Geforce 4 MX 440
		Used	Used	NVIDIA Geforce 4 tech preview
SimHQ	www.simhq.com	Used	Not Used	GF4Ti4200 vs. ATI Radeon 8500LE
ViperLair	www.viperlair.com	Used	Used	MSI Starforce GeForce 4 MX 440
Hexus	www.hexus.net	Used	Used	NVIDIA GeForce 4 Ti 4200
				VisionTek Xtasy GeForce4 Ti Series Review
Speedy3D	http://www.speedy3d.com	Used	Used	

SharkyExtreme	www.sharkyextreme.com	Used	Used	VisionTek Xtasy GeForce4 Ti 4600 Review
		Used	Used	VisionTek Xtasy GeForce4 MX440 Review
Tomshardware	www.tomshardware.com	Used	Used	GeForce4 early samples
		Used	Used	GeForce4 Ti4200
Tweak3D.net	http://www.tweak3d.net	Used	Used	MSI GeForce4 Ti4600
TweakersAsylum	http://www.tweakersasylum.com	Used	Used	GeForce 4 MX440
Virtual Zone	http://www.vr-zone.com	Used	Used	GF4 Ti4600
		Used	Used	GF4 MX440
Xbit Labs	http://www.xbitlabs.com	Used	Used	GF4 MX460/MX440
		Used	Used	GF4 review
Total GF4 Reviews with 3DMark used		52	50	
Total Reviews		52	52	
Usage percentage		100 %	96 %	

ATI Radeon 7500 & 8500

Domain	Url	3DMark	Quake III	Review type
3DXtreme	www.3dxtreme.org	Used	Used	8500
		Used	Used	8500 All In Wonder
AMDZone	http://www.amdzone.com	Used	Used	FIC Radeon 8500 and ATI Radeon 7500
Digit Life	www.digit-life.com	Used	Not Used	8500
		Used	Not Used	8500Le
PC Abusers	www.pcabusers.com	Used	Not Used	ATI Radeon 7500
PCStats	www.pcstats.com	Used	Used	FIC 8500
Planet Savage	www.plaetsavage.com	Used	Used	Power Magic Radeon 8500
Rated PC	http://www.ratedpc.com/	Used	Used	ATI Radeon 7500
Serial Addiction	www.serialaddiction.com	Used	Used	8500
Total Radeon reviews with 3DMark used		10	7	
Total Reviews		10	10	
Usage percentage		100 %	70 %	