

nVidia-Geforce	Core Clock Speed	Texels/sec	Pixels/sec	Memory Interface	Memory Speed	Memory Bandwidth
<u>GF2 MX200</u>	175 Mhz	700 Million	350 Million	64-bit SDR 32/64 MB	166 Mhz	1.3 GB/sec
<u>GF2 MX400</u>	200 Mhz	800 Million	400 Million	128-bit SDR 32/64 MB	166 Mhz	2.7 GB/sec
<u>GF2 Ti</u>	250 Mhz	1 Billion	1 Billion	128-bit DDR 64 MB	200/400 Mhz	6.4 GB/sec
<u>GF2 Ultra</u>	250 Mhz	1 Billion	1 Billion	128-bit DDR 64 MB	230/460 Mhz	7.4 GB/sec
<u>GF3</u>	200 Mhz	1.6 Billion	800 Million	128-bit DDR 64 MB	230/460 Mhz	7.4 GB/sec
<u>GF3 Ti 200</u>	175 Mhz	1.4 Billion	700 Million	128-bit DDR 64/128 MB	175/350 Mhz	6.4 GB/sec
<u>GF3 Ti 500</u>	240 Mhz	1.92 Billion	960 Million	128-bit DDR 64/128 MB	250/500 Mhz	8.0 GB/sec
<u>GF4 MX420</u>	250 Mhz	1 Billion	500 Million	128-bit SDR 32/64 MB	166 Mhz	2.7 GB/sec
<u>GF4 MX440-SE</u>	250 Mhz	1 Billion	500 Million	128-bit DDR 64/128 MB	165/330 Mhz	5.3 GB/sec
<u>GF4 MX440</u>	270 Mhz	1.08 Billion	540 Million	128-bit DDR 64/128 MB	200/400 Mhz	6.4 GB/sec
<u>GF4 MX440 8X</u>	275 Mhz	1.1 Billion	550 Million	128-bit DDR 64/128 MB	256/512 Mhz	8.2 GB/sec
<u>GF4 MX460</u>	300 Mhz	1.2 Billion	600 Million	128-bit DDR 64 MB	275/550 Mhz	8.8 GB/sec
<u>GF4 Ti 4200</u>	250 Mhz	2 Billion	1 Billion	128-bit DDR 64/128 MB	250/500 Mhz	8.0 GB/sec
<u>GF4 Ti 4200 8X</u>	250 Mhz	2 Billion	1 Billion	128-bit DDR 64/128 MB	256/512 Mhz	8.2 GB/sec
<u>GF4 Ti 4400</u>	275 Mhz	2.2 Billion	1.1 Billion	128-bit DDR 128 MB	275/550 Mhz	8.8 GB/sec
<u>GF4 Ti4400 8X</u>	275 Mhz	2.2 Billion	1.1 Billion	128-bit DDR 128 MB	275/550 Mhz	8.8 GB/sec
<u>GF4 Ti 4600</u>	300 Mhz	2.4 Billion	1.2 Billion	128-bit DDR 128 MB	325/650 Mhz	10.4 GB/sec
<u>GF4 Ti 4600 8X</u>	300 Mhz	2.4 Billion	1.2 Billion	128-bit DDR 128 MB	325/650 Mhz	10.4 GB/sec

nVidia-Geforce	Core Clock Speed	Texels/sec	Pixels/sec	Memory Interface	Memory Speed	Memory Bandwidth
<u>GeforceFX 5200</u>	250 Mhz	1 Billion	1 Billion	128-bit DDR 64/128 MB	200/400 Mhz	6.4 GB/sec
<u>GeforceFX 5200 Ultra</u>	325 Mhz	1.3 Billion	1.3 Billion	128-bit DDR 64/128 MB	325/650 Mhz	10.4 GB/sec
<u>GeforceFX 5600</u>	325 Mhz	1.3 Billion	1.3 Billion	128-bit DDR 128/256 MB	275/550 Mhz	8.8 GB/sec
<u>GeforceFX 5600 Ultra</u>	350 Mhz	1.4 Billion	1.4 Billion	128-bit DDR 128/256 MB	350/700 Mhz	11.2 GB/sec
<u>GeforceFX 5800</u>	400 Mhz	3.2 Billion	1.6 Billion	128-bit DDR-II 128 MB	200/800 Mhz	12.8 GB/sec
<u>GeforceFX 5800 Ultra</u>	500 Mhz	4 Billion	2 Billion	128-bit DDR-II 128 MB	250/1000 Mhz	16 GB/sec
<u>GeforceFX 5900</u>				256-bit DDR 128/256 MB		
<u>GeforceFX 5900 Ultra</u>	450 Mhz	3.6 Billion	1.8 Billion	256-bit DDR 128/256 MB	425/850 Mhz	27.2 GB/sec

ATI Radeon	Core Clock Speed	Texels/sec	Pixels/sec	Memory Interface	Memory Speed	Memory Bandwidth
<u>7000</u>	183 Mhz	550 Million	183 Million	128-bit SDR 32/64 MB	145 Mhz	1.6 GB/sec
<u>7200</u>	183 Mhz	1.098 Billion	366 Million	64-bit DDR 32/64 MB	183/366 Mhz	2.9 GB/sec
<u>7500 All-in-Wonder</u>	260 Mhz	1.56 Billion	520 Million	128-bit DDR 64 MB	180/360 Mhz	5.8 GB/sec
<u>7500LE</u>	250Mhz	1.5 Billion	500 Million	128-bit SDR 64 MB	166 Mhz	2.7GB/sec
<u>7500</u>	290 Mhz	1.74 Billion	580 Million	128-bit DDR 64 MB	230/460 Mhz	7.4 GB/sec
<u>8500 DV</u>	230 Mhz	1.84 Billion	920 Million	128-bit DDR 64 MB	190/380 Mhz	6.1 GB/sec
<u>8500 All-in-Wonder</u>	275 Mhz	2.2 Billion	1.1 Billion	128-bit DDR 128 MB	275/550 Mhz	8.8 GB/sec
<u>8500LE</u>	250 Mhz	2 Billion	1 Billion	128-bit DDR 64/128 MB	230/460 Mhz	7.4 GB/sec
<u>8500</u>	275 Mhz	2.2 Billion	1.1 Billion	128-bit DDR 64/128 MB	275/550 Mhz	8.8 GB/sec
<u>9000</u>	250 Mhz	1 Billion	1 Billion	128-bit DDR 64/128 MB	200/400 Mhz	6.4 GB/sec
<u>9000 Pro</u>	275 Mhz	1.1 Billion	1.1 Billion	128-bit DDR 64/128 MB	275/550 Mhz	8.8 GB/sec
<u>9200</u>	250 Mhz	1 Billion	1 Billion	128-bit DDR 64/128 MB	250/500 Mhz	8.0 GB/sec
<u>9200 Pro</u>	275 Mhz	1.1 Billion	1.1 Billion	128-bit DDR 128 MB	275/550 Mhz	8.8 GB/sec
<u>9500</u>	275 Mhz	1.1 Billion	1.1 Billion	128-bit DDR 64/128 MB	270/540 Mhz	8.6 GB/sec
<u>9500 Pro</u>	275 Mhz	2.2 Billion	2.2 Billion	128-bit DDR 128 MB	275/550 Mhz	8.8 GB/sec
<u>9600</u>	325 Mhz	1.3 Billion	1.3 Billion	128-bit DDR 64/128 MB	200/400 Mhz	6.4 GB/sec
<u>9600 Pro</u>	400 Mhz	1.6 Billion	1.6 Billion	128-bit DDR 128 MB	300/600 Mhz	9.6 GB/sec

ATI Radeon	Core Clock Speed	Texels/sec	Pixels/sec	Memory Interface	Memory Speed	Memory Bandwidth
<u>9700</u>	275 Mhz	2.2 Billion	2.2 Billion	256-bit DDR 128 MB	270/540 Mhz	17.3 GB/sec
<u>9700 Pro</u>	325 Mhz	2.6 Billion	2.6 Billion	256-bit DDR 128/256 MB	310/620 Mhz	19.8 GB/sec
<u>9800</u>	325 Mhz	2.6 Billion	2.6 Billion	256-bit DDR 128/256 MB	310/620 Mhz	19.8 GB/sec
<u>9800 Pro</u>	380 Mhz	3.04 Billion	3.04 Billion	256-bit DDR 128/256 MB	340/680 Mhz	21.8 GB/sec
<u>10000</u>				256-bit DDR-II 128/256 MB		
<u>10000 Pro</u>				256-bit DDR-II 128/256 MB		

3dfx Voodoo	Core Clock Speed	Texels/sec	Pixels/sec	Memory Interface	Memory Speed	Memory Bandwidth
<u>2 2000</u>	90 Mhz	180 Million	90 Million	192-bit EDO 8/12 MB	90 Mhz	1.4 GB/sec
<u>3 1000</u>	125 Mhz	250 Million	125 Million	128-bit SDR 8/16 MB	125 Mhz	2 GB/sec
<u>3 2000</u>	143 Mhz	286 Million	143 Million	128-bit SDR 16 MB	143 Mhz	2.3 GB/sec
<u>3 3000</u>	166 Mhz	332 Million	166 Million	128-bit SDR 16 MB	166 Mhz	2.7 GB/sec
<u>3 3500</u>	183 Mhz	366 Million	183 Million	128-bit SDR 16 MB	183 Mhz	2.9 GB/sec
<u>4 4500</u>	166 Mhz	333 Million	333 Million	128-bit SDR 32 MB	166 Mhz	2.7 GB/sec
<u>5 5500</u>	166 Mhz	664 Million	664 Million	256-bit SDR 64 MB	166 Mhz	5.3 GB/sec
<u>5 6000</u>	183 Mhz	1.46 Billion	1.46 Billion	512-bit SDR 128 MB	183 Mhz	10.7 GB/sec

3dfx

Geforce 2 MX Series (NV11)

HDVP – High Definition Video Processor

NSR – Nvidia Shading Rasturizer

DVC – Digital Vibrance Control

Twinview – dual display architecture

T&L - integrated Transform & Lighting engines with texturing & shading

UDA – Unified Driver Architecture

Max Resolution – 2048x1536 at 60Hz

API – Direct X 7 & OpenGL 1.1 ICD

Geforce 2 Ti/Ultra Series (NV15)

HDVP – High Definition Video Processor

NSR – Nvidia Shading Rasturizer

T&L - integrated Transform & Lighting engines with texturing & shading

UDA – Unified Driver Architecture

Max Resolution – 2048x1536 at 60Hz

API – Direct X 7 & OpenGL 1.2



Geforce 3 (NV20)

InfiniteFX Engine – programmable 3D textures, effects, pixel & vertex Shaders

LMA – Lightspeed Memory Architecture increases memory bandwidth

HRAA – High Resolution Anti Aliasing

HDVP – High Definition Video Processor

UDA – Unified Driver Architecture

Max Resolution – 2048x1536 at 60Hz

API – Direct X 8.0 & OpenGL 1.2

Geforce 3 Ti Series (NV20)

InfiniteFX Engine – programmable 3D textures, effects, pixel shaders, vertex shaders, & real-time shadow buffers

LMA – Lightspeed Memory Architecture increases memory bandwidth

HRAA – High Resolution Anti Aliasing

HDVP – High Definition Video Processor

UDA – Unified Driver Architecture

Max Resolution – 2048x1536 at 60Hz

API – Direct X 8.1 & OpenGL 1.3



Geforce 4 MX Series (NV17/18)

LMA II – Lightspeed Memory Architecture II boosts memory bandwidth

AAA – Accuvie Anti Aliasing/Multisampling

nView – multi display architecture

VPE – Video Processing Engine-TV/HDTV/DVD/MPEG-2 enhanced

NSR – Nvidia Shading Rasturizer

DVC – Digital Vibrance Control

UDA – Unified Driver Architecture

T&L – integrated Transform & Lighting engines with texturing & shading

8X - NV18 - 8X AGP bus

Max Resolution – 2048x1536 75Hz

API – Direct X 7 & OpenGL 1.3

Geforce 4 Ti series (NV25/28)

LMA II – Lightspeed Memory Architecture II boosts memory bandwidth

AAA – Accuvie Anti Aliasing/Multisampling

nView – multi display architecture

InfiniteFX II Engine – programmable 3D textures, pixel shaders, dual vertex shaders, matrix palette skinning, real-time fur & hair shading, & real-time shadows & shadow buffers

EMBM – Environmental Bump Mapping

8X - NV28 – 8X AGP bus

HDVP – High Definition Video Processor

UDA – Unified Driver Architecture

Max Resolution – 2048x1536 at 60Hz

API – Direct X 8.1 & OpenGL 1.3

GeforceFX 5200 Series (NV34)

CineFX Engine – dynamic flow control, procedural shading, hardware-accelerated soft shadows, framebuffer post-processing effects, programmable matrix palette skinning, fully programmable pixel & quad vertex shaders 2.x
VMR – Video Mixing Renderer
DVC 3.0 – Digital Vibrance Control 3.0
nView – multi display architecture
Intellisample – anti aliasing/multisampling without Color compression and Z compression
LMA II + – Lightspeed Memory Architecture II+ boosts memory bandwidth
UDA – Unified Driver Architecture
Max Resolution – 2048x1536 at 85Hz
API – DirectX 9.0 & OpenGL 1.4



GeforceFX 5600 Series (NV31)

CineFX Engine – dynamic flow control, procedural shading, hardware-accelerated soft shadows, framebuffer post-processing effects, programmable matrix palette skinning, fully programmable pixel & quad vertex shaders 2.x
VMR – Video Mixing Renderer
DVC 3.0 – Digital Vibrance Control 3.0
nView – multi display architecture
Intellisample – anti aliasing/multisampling
LMA II + – Lightspeed Memory Architecture II+ boosts memory bandwidth
UDA – Unified Driver Architecture
Max Resolution – 2048x1536 at 85Hz
API – DirectX 9.0 & OpenGL 1.4



GeforceFX 5800 Series (NV30)

CineFX Engine – dynamic flow control, procedural shading, hardware-accelerated soft shadows, framebuffer post-processing effects, programmable matrix palette skinning, fully programmable pixel & quad vertex shaders 2.x
VMR – Video Mixing Renderer
DVC 3.0 – Digital Vibrance Control 3.0
nView – multi display architecture
Intellisample – anti aliasing/multisampling
LMA II + – Lightspeed Memory Architecture II+ boosts memory bandwidth
UDA – Unified Driver Architecture
Max Resolution – 2048x1536 at 85Hz
API – DirectX 9.0 & OpenGL 1.4



GeforceFX 5900 Series

CineFX Engine 2.0 – dynamic flow control, procedural shading, hardware-accelerated soft shadows, framebuffer post-processing effects, programmable matrix palette skinning, fully programmable pixel & octo vertex shaders 2.x

VMR – Video Mixing Renderer

DVC 3.0 – Digital Vibrance Control 3.0

nView – multi display architecture

Intellisample HCT – High Compression Technology anti aliasing/multisampling

UltraShadow – real-time cinematic shadows

LMA II + – Lightspeed Memory Architecture
II+ boosts memory bandwidth

UDA – Unified Driver Architecture

Max Resolution – 2048x1536 at 85Hz

API – DirectX 9.0 & OpenGL 1.4

Radeon 7000 (R100)

Hydravision – multi display architecture
Hyper Z – increases memory bandwidth
Pixel Tapestry – 3D rendering engine
Video Immersion – video processing engine-
DVD & MPEG-2 enhanced
Max Resolution – 2048x1536 at 60Hz
API – Direct X 7 & OpenGL 1.1 ICD

Radeon 7200 (RV100)

Charisma Engine - matrix vertex skinning, &
integrated T&L engines
Pixel Tapestry – 3D rendering engine
Video Immersion – video processing engine-
DVD & MPEG-2 enhanced
Max Resolution – 2048x1536 at 60Hz
API – Direct X 7 & OpenGL 1.1 ICD

Radeon 7500 (RV200)

Charisma Engine - matrix vertex skinning, &
integrated T&L engines
Pixel Tapestry – 3D rendering engine
Video Immersion – video processing engine-
DVD & MPEG-2 enhanced
FSAA – Full Scene Anti Aliasing
Max Resolution – 2048x1536 at 60Hz
API – Direct X 8.0 & OpenGL 1.2



Radeon 7500 All-in-Wonder/DV

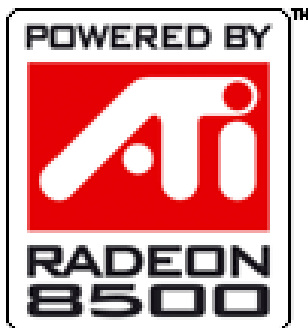
All features of 7500 but also includes:
Hydravision – multi display architecture
TV-on-Demand – TV options including
pausing live TV & instant replays

Radeon 8500 Series (R200)

Hyper Z II – increases memory bandwidth
Smoothvision – anti aliasing/supersampling
Hydravision – multi display architecture
Truform – 3D rendering engine
Pixel Tapestry II – 3D rendering engine
Charisma Engine II - matrix vertex skinning
& T&L engines
Smartshader – pixel & dual vertex shaders
Max Resolution – 2048x1536 at 60Hz
API – Direct X 8.1 & OpenGL 1.3

Radeon 8500 All-in-Wonder/DV

All features of 8500 but also includes:
TV-on-Demand – TV options including
pausing live TV & instant replays



Radeon 9000 series (RV250)

Hyper Z II– increases memory bandwidth
Smoothvision – anti aliasing/supersampling
Fullstream – streaming video processing
engine-video de-blocking & smoothing
Pixel Tapestry II – 3D rendering engine
Charisma Engine II - matrix vertex skinning
& T&L engines
Video Immersion II– video processing
engine-TV/HDTV/DVD/MPEG-2 enhanced
Hydravision – multi display architecture
Smartshader – pixel & dual vertex shaders
Max Resolution – 2048x1536 at 75Hz
API – Direct X 8.1 & OpenGL 1.3

Radeon 9200 Series (RV280)

Hyper Z II – increases memory bandwidth
Smoothvision – anti aliasing/supersampling
Fullstream – streaming video processing
engine-video de-blocking & smoothing
Charisma Engine II - matrix vertex skinning
& T&L engines
Video Immersion II – video processing
engine-TV/HDTV/DVD/MPEG-2 enhanced
Hydravision – multi display architecture
8X AGP – 8X AGP bus
Smartshader – pixel & dual vertex shaders
Max Resolution – 2048x1536 at 75Hz
API – Direct X 8.1 & OpenGL 1.3



Radeon 9500 Series (RV300)

Hyper Z III – increases memory bandwidth

Smoothvision 2.0 – anti aliasing/supersampling

Videoshader – video pixel shaders

Fullstream – streaming video processing engine
- de-blocking & smoothing

Smartshader 2.0 – programmable pixel & quad vertex shaders, advanced matrix palette skinning, fur rendering, microstructure modeling, & shadow volume extrusion.

Truform 2.0 – 3D rendering engine

Max Resolution – 2048x1536 at 60Hz

API – Direct X 9.0 & OpenGL 1.3

Radeon 9600 Series (RV350)

Hyper Z III+ – increases memory bandwidth

Smoothvision 2.1 - anti aliasing/ multisampling

Videoshader – video pixel shaders

Fullstream - streaming video processing engine
- de-blocking & smoothing

Smartshader 2.0 – programmable pixel & quad vertex shaders, advanced matrix palette skinning, fur rendering, microstructure modeling, & shadow volume extrusion.

Truform 2.0 – 3D rendering engine

Max Resolution – 2048x1536 at 60Hz

API – Direct X 9.0 & OpenGL 1.4



Radeon 9700 Series (R300)

Hyper Z III – increases memory bandwidth

Smoothvision 2.0 – anti aliasing/supersampling

Videoshader – video pixel shaders

Fullstream – streaming video processing engine
- de-blocking & smoothing

Smartshader 2.0 – programmable pixel & quad vertex shaders, advanced matrix palette skinning, fur rendering, microstructure modeling, & shadow volume extrusion.

Truform 2.0 – 3D rendering engine

Max Resolution – 2048x1536 at 60Hz

API – Direct X 9.0 & OpenGL 1.3

Radeon 9700 All-in-Wonder/DV

All features of 9700 but also includes:

TV-on-Demand – TV options including pausing live TV & instant replays

multView - simultaneous viewing (Picture in Picture) & recording

Videosnap - TV de-blocking & smoothing



Radeon 9800 Series (R350)

Hyper Z III+ - increases memory bandwidth

Smoothvision 2.1 -anti aliasing/multisampling

Videoshader – video pixel shaders

Fullstream – streaming video processing engine
- de-blocking & smoothing

Smartshader 2.1 – programmable pixel & quad vertex shaders 2.0, advanced matrix palette skinning, fur rendering, microstructure modeling, & shadow volume extrusion.

Truform 2.0 – 3D rendering engine

Max Resolution – 2048x1536 at 85Hz

API – Direct X 9.0 & OpenGL 1.4

Radeon 9800 All-in-Wonder/DV

All features of 9700 but also includes:

TV-on-Demand – TV options including pausing live TV & instant replays

multView - simultaneous viewing (Picture in Picture) & recording

Gemstar Guide + - scheduling and programming guides

Thruview – translucent TV, video and DVD



Voodoo 2 Series (VSA-100)

lighting & texturing

Max Resolution – 1024x768 at 60Hz

API – Direct X 6 & OpenGL 1.1 ICD



Voodoo 3 Series (VSA-100)

anti aliasing & texture mapping

Max Resolution – 2048x1536 at 75Hz

API – Direct X 6 & OpenGL 1.1 ICD



Voodoo 4 Series (VSA-200)

FSAA – Full Scene Anti Aliasing

Max Resolution – 2048x1536 at 75Hz

API – Direct X 6 & OpenGL 1.1 ICD



Voodoo 5 Series (VSA-200 x2)

FSAA – Full Scene Anti Aliasing

T&L – Transform & Lighting engine

Max Resolution – 2048x1536 at 85Hz

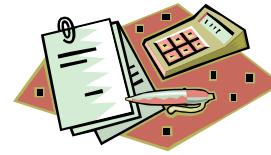
API – Direct X 6 & OpenGL 1.1 ICD



<u>Chipset Name</u>	<u>Textures/Texel</u>	<u>Texels/clock</u>	<u>Pixels/clock</u>	<u>Micron Process</u>	<u>AGP bus Speed</u>	<u>Transistors</u>	<u>RAMDAC</u>
<u>NV11</u>	2	4	2	.18	2X/4X	23 Million	Single 350 Mhz
<u>NV15</u>	2	4	4	.18	2X/4X	25 Million	Single 350 Mhz
<u>NV17</u>	4	4	2	.15	2X/4X	29 Million	Dual 350 Mhz
<u>NV18</u>	4	4	2	.15	2X/4X/8X	29 Million	Dual 350 Mhz
<u>NV20</u>	4	8	4	.15	2X/4X	50 Million	Single 350 Mhz
<u>NV25</u>	4	8	4	.15	2X/4X	63 Million	Dual 350 Mhz
<u>NV28</u>	4	8	4	.15	2X/4X/8X	63 Million	Dual 350 Mhz
<u>NV30</u>	16	8	4	.13	2X/4X/8X	125 Million	Dual 400 Mhz
<u>NV31</u>	16	4	4	.13	2X/4X/8X	80 Million	Dual 400 Mhz
<u>NV34</u>	16	4	4	.15	2X/4X/8X	45 Million	Dual 350 Mhz
<u>NV35</u>	16	8	4	.13	2X/4X/8X	135 Million	Dual 400 Mhz
<u>R100</u>	3	3	1	.18	2X/4X	30 Million	Single 350 Mhz
<u>RV100</u>	3	3	2	.15	2X/4X	30 Million	Single 350 Mhz
<u>RV200</u>	3	3	2	.15	2X/4X	60 Million	Dual 350 Mhz
<u>R200</u>	3	8	4	.15	2X/4X	60 Million	Single 400 Mhz
<u>RV250</u>	6	4	4	.15	2X/4X	73 Million	Dual 350 Mhz
<u>RV280</u>	6	4	4	.15	2X/4X/8X	73 Million	Dual 350 Mhz
<u>RV300</u>	16	4	4	.15	2X/4X/8X	107 Million	Dual 400 Mhz
<u>R300</u>	16	8	8	.15	2X/4X/8X	107 Million	Dual 400 Mhz
<u>RV350</u>	16	4	4	.13	2X/4X/8X	75 Million	Dual 400 Mhz
<u>R350</u>	16	8	8	.15	2X/4X/8X	107 Million	Dual 400 Mhz
<u>VSA-100</u>	1	2	1	.25	2X/4X	14 Million	Single 350 Mhz
<u>VSA-200</u>	1	2	2	.25	2X/4X	28 Million	Single 350 Mhz



Calculations



Memory Bandwidth = $\frac{\text{Memory bit}}{8} \times \text{memory speed} = x\text{GB/sec}$

Examples GeforceFX 5800 Ultra memory bandwidth = 16 GB/sec

$128\text{bit} / 8 \times 1000\text{mhz} = 16 \text{ GB/sec}$

Radeon 9800 Pro memory bandwidth = 21.8 GB/sec

$256\text{-bit} / 8 \times 680\text{Mhz} = 21.8 \text{ GB/sec}$

Pixel Fillrate = $\text{Overall clock speed} \times \text{pixels/clock} = x\text{pixels/sec}$

Examples GeforceFX 5800 Ultra pixel fillrate = 2 Billion

$500\text{Mhz} \times 4 = 2 \text{ Billion pixels/sec}$

Radeon 9800 Pro pixel fillrate = 3.04 Billion

$380\text{Mhz} \times 8 = 3.04 \text{ Billion pixels/sec}$

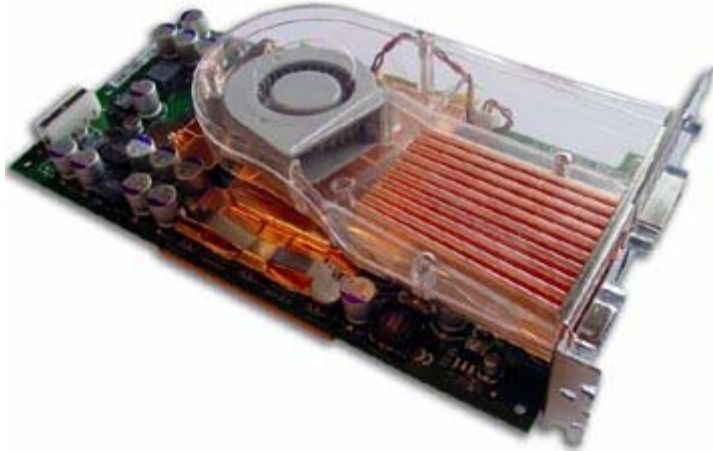
Texel Fillrate = $\text{Overall clock speed} \times \text{texels/clock} = x\text{texels/sec}$

Examples GeforceFX 5800 Ultra texel fillrate = 4 Billion

$500\text{Mhz} \times 8 = 4 \text{ Billion texels/sec}$

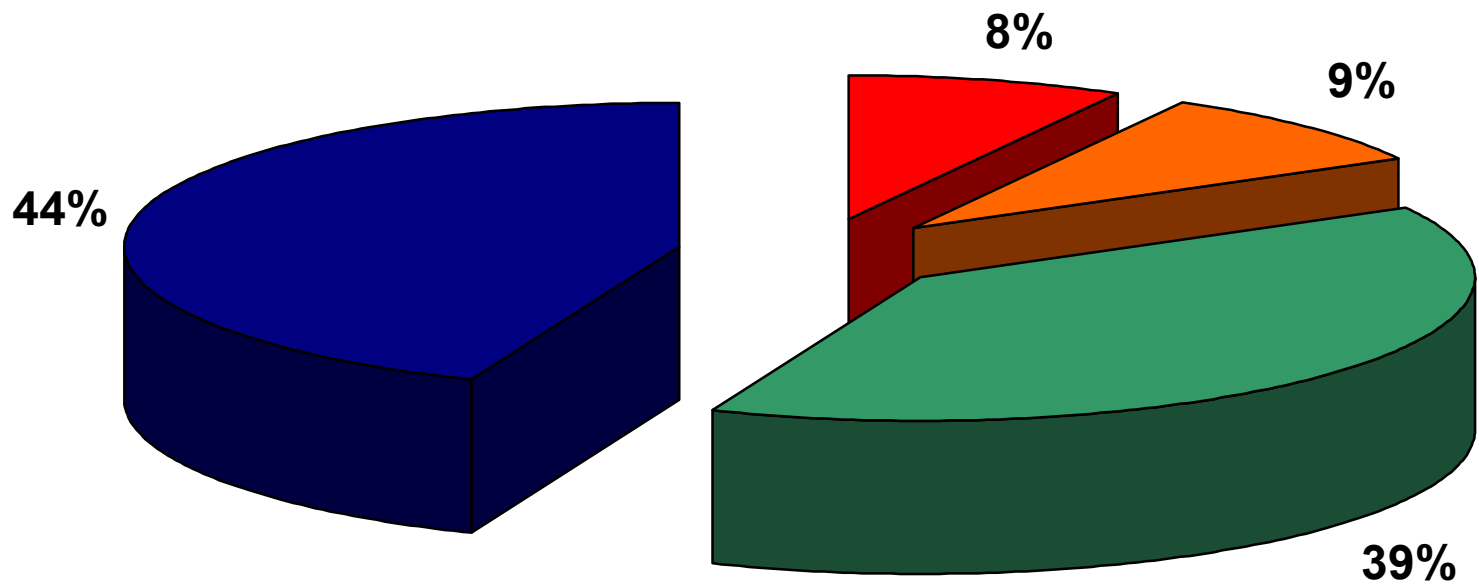
Radeon 9800 Pro texel fillrate = 3.04 Billion

$380\text{Mhz} \times 8 = 3.04 \text{ Billion texels/sec}$





3D Market



- High End \$250 +
- Performance Mainstream \$150-\$250
- Mainstream \$100-\$150
- Value sub \$100