Kyro2 – What You Should Know

March 2001

Kyro2 is Old – Very Old

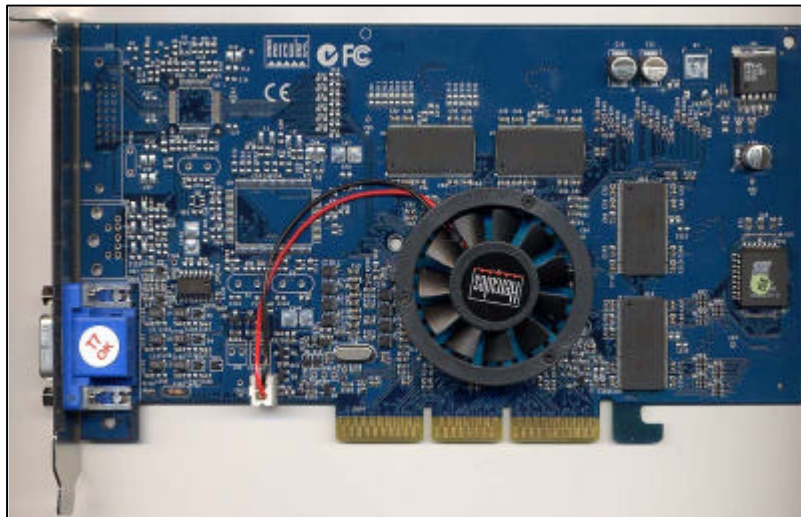- **Kyro2 is 'beefed up' Kyro designed in 1997**
  - **designed for DX6 – not DX8**
  - **only 2xAGP**
  - **no HW T&L**
  - **no TwinView dual TV out option**
  - **"designed by committee with unproven record"**
    - **Videologic design team (best effort PowerVR)**
    - **SGS Thompson manufacturing**
      - **Poor record with complex design (6x86, Transputer)**
    - **Guillemot board design**
      - **Never made their own boards before**

nVIDIA

Guillemot has no experience designing graphics boards!

Our prerelease card is actually made on a PCB based on that of the GeForce2 GTS and will most likely be shrunk by the time the product hits shelves.   **- Anandtech Review on Kyro2**

Guillemot had to hack an NVIDIA design to get Kyro2 to work!

All NVIDIA based Guillemot boards are designed by NVIDIA and released to them for distribution.

The SharkyExtreme Review

Unfortunately, the KYRO II offers no T&L support or any semblance of support for the features introduced by DirectX 8… …the lack of DirectX support raises our concerns about the shelf life of such a product.
- Sharky Extreme Review on the Kyro2

Note: We have had some difficulty in getting the 3D Prophet 4500 to work properly on our Intel-based platforms. However, we are working with Hercules to resolve this issue, and will be updating the preview when this problem is resolved.
- Sharky Extreme Review on the Kyro2

We did have an issue with Evolva, where the scene would render under Windows 2000, but no textures were applied to the models. After modifying all of the available compatibility options, we determined this must be a driver bug.
- Sharky Extreme Review on the Kyro2

nVIDIA

The SharkyExtreme Review…more

Although Hercules claims that the 3D Prophet 4500 supports DXTC, it was interesting to note that both 3D Mark 2001 and 3D WinBench were unable to take advantage of these features. If they are supported, there is apparently some work to be done still.

- **Conclusion**

There are… …caveats to buying such a card. For one, the feature set is relatively dated. While STMicroelectronics claims that T&L is ready to be implemented, the KYRO II does not sport it, so future applications that make use of gratuitous polygons may be subject to slowdown as the increased number of computations could possibly bog down the tile-based system. Similarly, a lack of DirectX 8 features means upcoming applications will slow down significantly.

nVIDIA.

Kyro2 - Unproven technology

- **Kyro2 still has serious flaws**
  - **Z problems and rendering errors**
  - **Alpha in game = slow performance**
  - **Dynamic textures (shadows) perform horribly**
  - **Bad compatibility on all games**

- **Kyro2 will look and perform terrible on new games**
  - **Giants, Black & White, Doom3**

- **Kyro2 still broken on Mercedes Benz Truck Benchmark, just like Kyro was over a year ago!**
  - **New drivers have not fixed these problems**

nVIDIA.

Kyro2 does NOT support hardware transform and lighting – these games use it!

Black & White	Lionhead	Electronic Arts
Blademasters	Ronin Entertainment	Ripcord Games
Colin McRea Rally II	Codemasters	Codemasters
Diablo II	Blizzard	Sierra
Dragonflight	Grolier Interactive	Grolier Interactive
Force Commander	Ronin Entertainment	Lucasarts
Heavy Metal F.A.K.K. 2	Ritual	G.o.D.
Incoming Forces	Rage Software	Rage Software
Max Payne	Remedy Entertainment	3D Realms
MDK 2	Bioware	Interplay
Messiah	Shiny	Interplay
Midnight GT	Rage	Rage
Oni	Bungie	Bungie
Star Trek Voyager	Raven	Activision
StarLancer	Warthog	Microsoft Games
Team Aligator	Simis	GT
Ultimate Bass Fishing 2000	EAI	Electronic Arts
Vampire: The Masquerade	Nihilistic	Activision
WarBirds 3.0	Interactive Magic	Interactive Magic

Title	Developer	Publisher
Demolition Racer	Pitbull	Infogrames
Quake III Arena	id Software	Activision
Shadowman	Acclaim	Acclaim
Test Drive 6	Pitbull	Infogrames
X-Plane	Laminar Research	Laminar Research
AMA Superbike	Mororsims	Motorsims
Evolva	Computer Artworks	Interplay
Rage Rally	Rage Software	Rage Software
Soldier of Fortune	Raven	Activision
Supreme Snowboarding	Housemarque	Infogrames

This list does not include the latest games being developed for GeForce 3!

nVIDIA.

Latest List of Games That Support Hardware Transform & Lighting

Title	Developer	Publisher
Battle Isle IV	Blue Byte Software	
Ice Wind Dale	Interplay	Interplay
Knights	Digital Infinity	N/A
Malleus	Insidia	
No One Lives Forever	Monolith Entertainment	Monolith Entertainment
Panzer Elite (Expansion Pack)	S.S.I.	Psygnosis
Paradox	Creative Asylum	N/A
Shadow Company 2	Sinister Games	Sinister Games
Soldier	Sinister Games	Sinister Games
Test Drive Cycles	Infogrames	Infogrames
Typhoon	Rage Software	Rage Software
American McGee's Alice	Electronic Arts	Electronic Arts
Bloodline	Auran	Electronic Arts
Call of Cthulu	Adventuresoft	Hasbro
Conquest	Digital Anvil	Microsoft Games
Drakkan 2	Surreal	Psygnosis
Dreamland Chronicles	Mythos	Virgin
Experience	The Whole Experience	N/A
Ferrari	Acclaim	Acclaim
Freelancer	Digital Anvil	Microsoft Games
Giants	Planet Moon	Interplay
Halo	Bungie	Bungie

Title	Developer	Publisher
Loose Cannon	Digital Anvil	Microsoft Games
Never Winter Nights	Bioware	Interplay
Oddworld 3	Oddworld Inhabitants	GT
Pool of Radiance	Mattel Interactive	Mattel Interactive
Sacrifice	Shiny	Interplay
Star Wars: Obi Wan	Lucasarts	Lucasarts
Stonekeep 2	Interplay	Interplay
Tecnomancer	Qube	Virgin
The Settlers IV	Blue Byte Software	
The World is Not Enough	Electronic Arts	Electronic Arts
Ultima Online 2	Origin	Electronic Arts
Yager	Yager	
Magic and Mayhem	Charybdis	Virgin
Rock	Single Trac	Infogrames
MotoCross Madness 2	Rainbow Studios	Microsoft Games
Nightfall	Altor Sys	
Return to Castle Wolfenstein	Grey Matter Interactive	Activision
Steel Whisper	Orange Games	N/A
Terminator 3D	Orange Games	N/A
Titanium Angels	SCI	
Tribes 2	Dynamix	Sierra
Werewolf: the Apocalypse	Dreamforge	A.S.C. Games

NVIDIA supports the X-Box and employs a large team of software development engineers

nVIDIA

Anandtech Review

- **Supplied 175 MHz boards to reviewers, spec'd to run at 166MHz (source SGS Thompson)**

"concern lies with the display errors we experienced in Mercedes-Benz Truck Racing… ….it is possible that other games may be effected by the improper rendering".

- buying Kyro2 is a risk.
- from an unproven 'committee'

Kyro2 Picture Quality…

In this picture right, one can see tire tracks that should clearly be behind the truck.

Source:

Anandtech Review

TXL: 0 FPS0: 36.9 FPS: 33

Kyro2 Picture Quality…

The second picture shows brake lights, which once again should not be visible in the rendered scene, coming through the front of the truck.

Source:

Anandtech Review

Conclusion

- **GeForce 2 MX is cheaper…**
- **…and more fully featured**
- **GeForce 2 has a brand name**
- **GeForce 2 has proven drivers**
- **GeForce 2 is available now**
- **Developers working on NVIDIA GPU's, not Kyro**

Buying Kyro2 is a risk – and when cards and PCs get returned it damages your finances and your reputation.