MVDIT TECH
BOOK
november 2009

XBOX 360

Experience the magic of the worlds first multi touch mouse

a RAJKUMAR HIRANI film
3 idiots
a VIDHU VINOD CHOPRA production
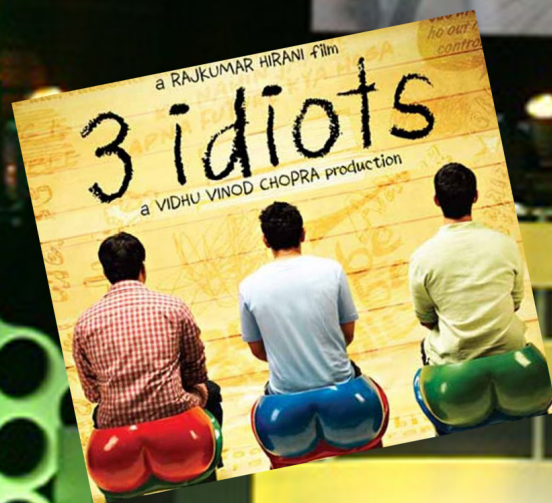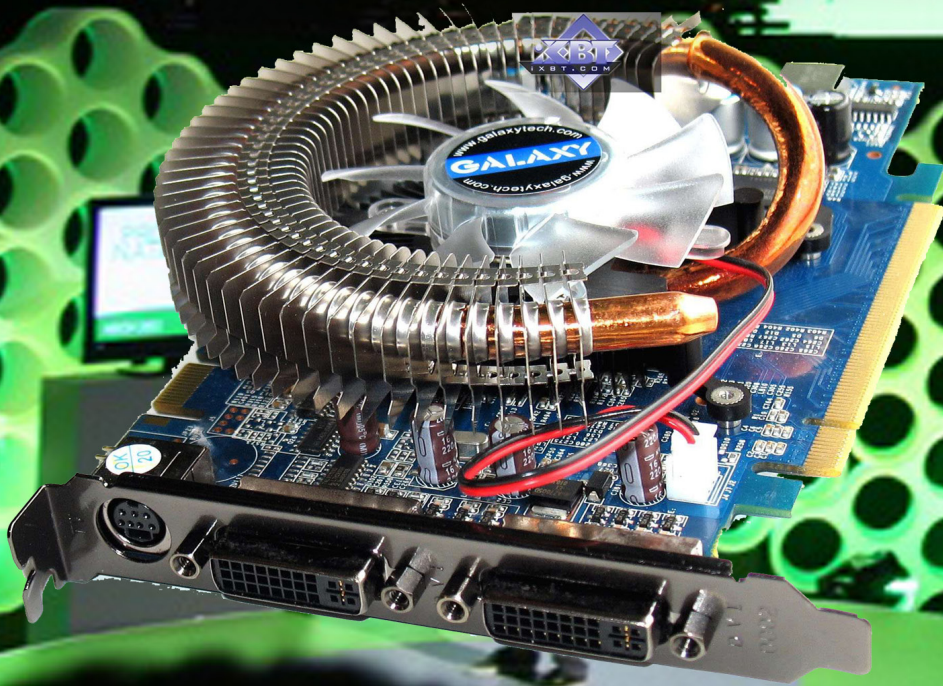
{ Indulge with The Tech inventions of the furture and d ythe Games that blow your mind!

EDITORIAL

It is my pleasure to present to you this edition of my magazine to you.

This edition of the e-zine has much in store the gaming lovers & the Tech Inventors. A cover story on Project Natal, Hands on Preview of the new elastic conductores, Geforce 9500GT Review, Review of the NFS Shift and ofcource all our routine articles.

I sadly regret my unability to give the October edition of the magazine and being too late on the November editions aswell. It has just been that our editors have been a bit too busy with other stuff these months.

The different editions for magazines are available for download at www.mvdittechbook.co.nr in a pdf format. Suggestions are welcome for the improvement of the magazine.
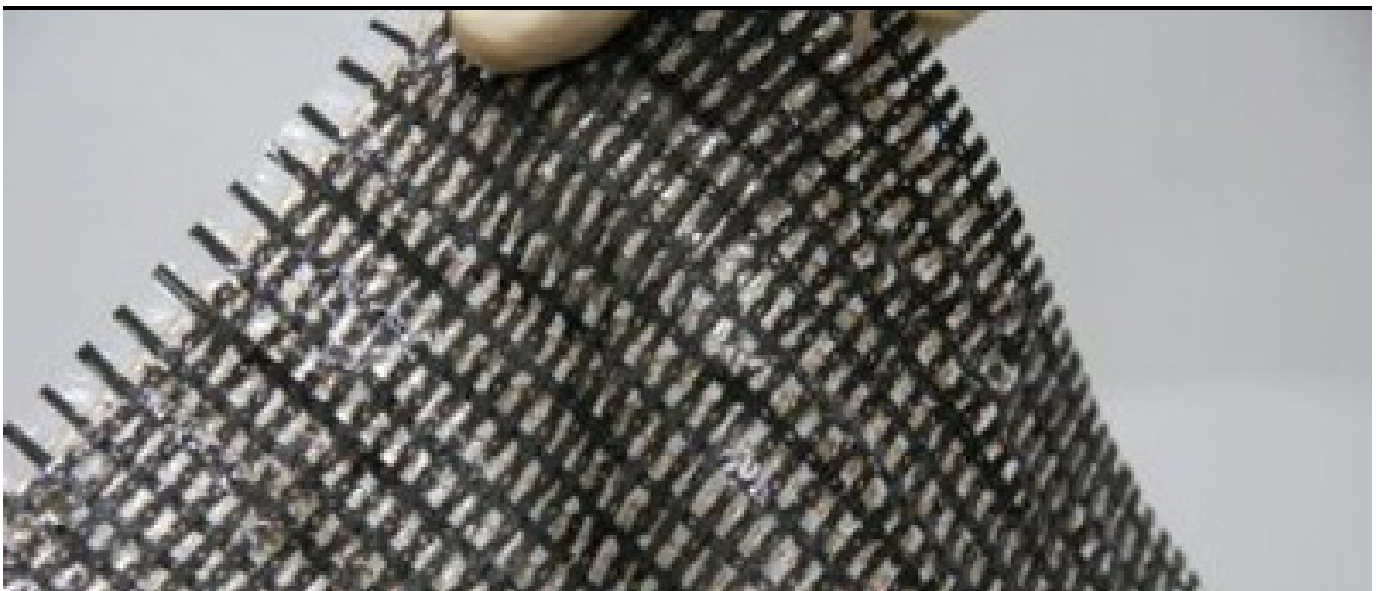
Vidit Bhargava
Editor MVDIT TECH BOOK

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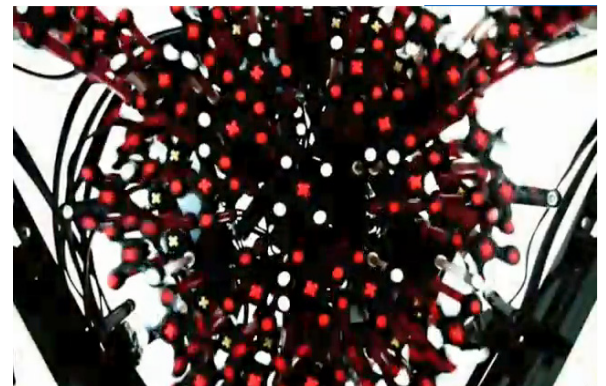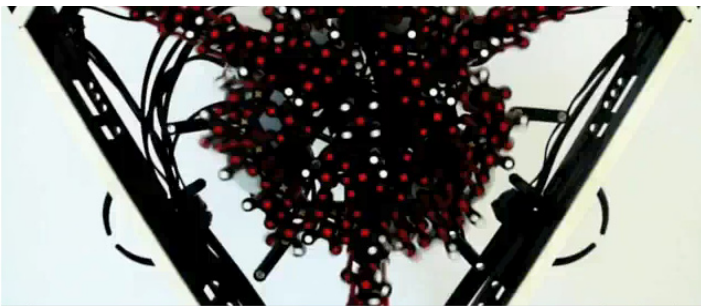
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PROJECT NATAL

Vidit Bhargava

Project Natal was first addressed at the E3 2009. This is the most impressive effort by Microsoft to take on the 'Wii Crowd'. It's a combination of hardware and software that recognize gestures and voice to create simple controls for complex activities, like painting a landscape with vivid colors.

Project Natal is expected to release in November 2010 as a pheripheral for the XBOX 360. Microsoft said that over a thousand software development kits began shipping to game developers that same day.

YOU ARE THE CONTROLLER

As a part of the Software which involves 5 basic controlling parts are:

Recochet: No controller required, it's just the body moves which enable you to play a game.

Paint Party: This is somewhat contrary to the xbox 360. This is a new way to **PAINT** on Screen. You make splashing emotions on the Screen to draw on the wall & use speech recognition to add colors. Not much impressive in my view afterall its tough to draw through body moves.

Milo and Katy: Is a full game in which the player interacts with a young child and his/her dog Kate by performing real-life actions. Interaction was demonstrated only with Milo at this event.

Sensor: Oh I just forgot to mention about the sensor, which is the actuall base of all the above features. The Project Natal sensor is an approximately 9-inch (23 cm) wide horizontal bar connected to a small circular base with a ball joint pivot, and is designed to be positioned lengthwise above or below the video display. The device features an "RGB camera, depth sensor, multi-array microphone, and custom processor running proprietary software", which provides full-body 3D motion capture, facial recognition, and voice recognition capabilities. The Project Natal sensor's microphone array enables the Xbox 360 to conduct acoustic source localization and ambient noise suppression, allowing for things such as headset-free party chat over Xbox Live.

Not much is known as of now about the Project Natal. Even 'Natal' is not the final name of the sensor we have been talking about. Apparently we just know the sensor is a fight back to the wii console by Microsoft & *for once is not coppied by any other console*. Well this is it, not much can be penned down about the project. As it is more of a visual experience than a textuall one. I had recieved a hands on preview of the project natal, and from all this we can still make out that it needs much more developement to release. May be they take more time but still we would like to see a finished version of the project.

Mvdit Technology Times

Windows 8 set to arrive in 2012

At the Professional Developers Conference 2009, Microsoft announced public beta of Office Professional Plus 2010 productivity suite. In all the fanfare, Stephen Chapman of Microsoft Kitchen managed to grab a Microsoft roadmap pointing next Windows operating system's arrival. Microsoft launched Windows 7 on October 22 and now the plans of Windows 8 roadmap were spotted on the Interwebs. The successor to Windows 7 is tentatively codenamed as Windows 8 and is expected to be next "Major Release" in 2012. On the contrary, Windows 7 is being treated as "Release Updates" - to what? Maybe the wild Vista code.

Apple iPhone 4G rumored

A package used by Panday from Pinchmedia successfully managed to track down the phone which is yet to be announced under the moniker iPhone 3.1. This is expected to be the very next generation iPhone.

According to Macrumors references have been made to the iPhone 3.1 some three months ago and it has been suggested that the smartphone may well come with a multi core processor.

Speculation continues and we would expect to see this on Verizon, and you can look forward to a launch date of around June 2010 for the iPhone 4G or whatever it will be named. That's about as solid as the information is at the moment, and we still have some seven months or so before the next iPhone becomes available.

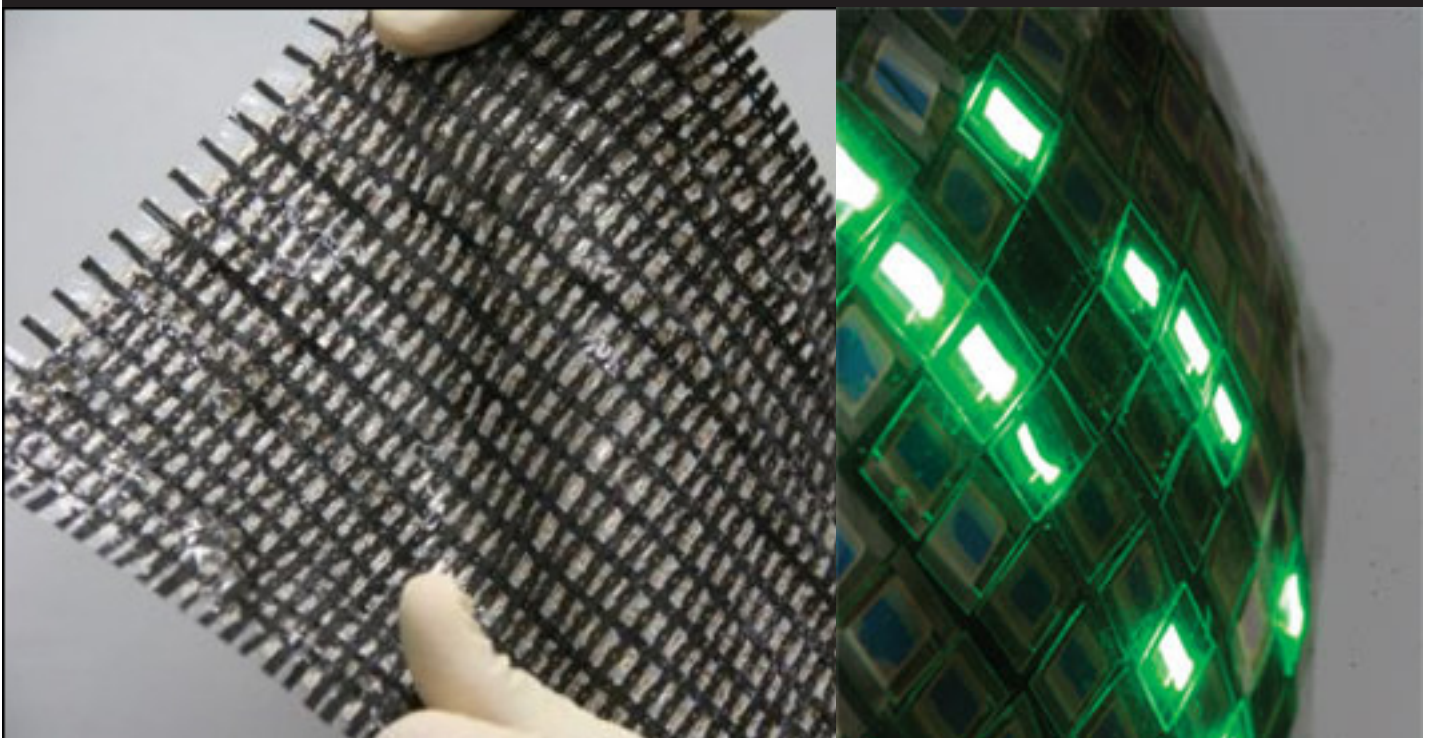## Samsung announces Diva Phones

Samsung has, out of nowhere, announced two new mid-range handsets at a Corby related event last week. Strangely, the new phones belong to Samsung's new design range of phones that is known as "Diva" - which is not quite, what the Corby range is all about.The new devices in question are the S7070 and the S5150 (codenamed Olivia) - both of which belong to different design categories. One is a touchscreen, while the other is a clamshell.

ELASTIC CONDUCTORS

Tech Inventions - Elastic Conductors

Led by Takao Someya, a team at the University of Tokyo embedded carbon nanotubes in a polymer matrix to produce the world's first highly conductive, chemically stable elastomer. 'Carbon nanotubes are sometimes used to increase a material's stiffness.

The grinding process prevents the nanotubes sticking together in large bundles, helping to reduce stiffness.

After combining with a fluorinated copolymer, which gives the material its elasticity, the gel is poured and dried. The resulting film is then coated with silicone rubber to form an elastic conductor. It can be punched with holes, increasing its elasticity even further, or stamped with organic transistors to make an electronically active sheet that can withstand being stretched by up to 70 per cent without any impact on its electronic performance.

In addition to making screens that can be rolled up and stuck in our back pocket, a lot of scientists and doctors want to use elastic conductors to make flexible-lensed cameras... to be fitted to the back of the eyeball.

This is one is actually one of the greatest inventions of the century, as now this could give new dimensions to the Nano Technology field, today the Nano stuff remains Nano, who knows with the inventions of these elastic screens we may get an LCD TV that fits in our pocket and expands to a full size TV once, fitted on the wall! The possibilities are endless and don't worry these products won't be much expensive as the elastic conductors and matrixes are quite cheap.

MUST BUY THIS MONTH

1. Aal izz Well - 3 Idiots
2. Fiqrana - Blue
3. Main Tera - Ajab Prem ki Ghazab Kahani
4. Khanabadosh - London Dreams
5. Zoobi Doobi - 3 Idiots
6. Bhoola Tujhe - Blue
7. Man Ko - London Dreams
8. Rehnuma - Blue
9. Rocket Mein Pocket Hai - Rocket Singh
10. Shukran Allah - Kurbaan
11. Blue Theme - Blue
12. Kya Karoon - Wake Up Sid
13. Iktara - Wake Up Sid
14. Prem Ki Nayya - Ajab Prem Ki Ghazab Kahani
15. Paisa - De Dana Dan
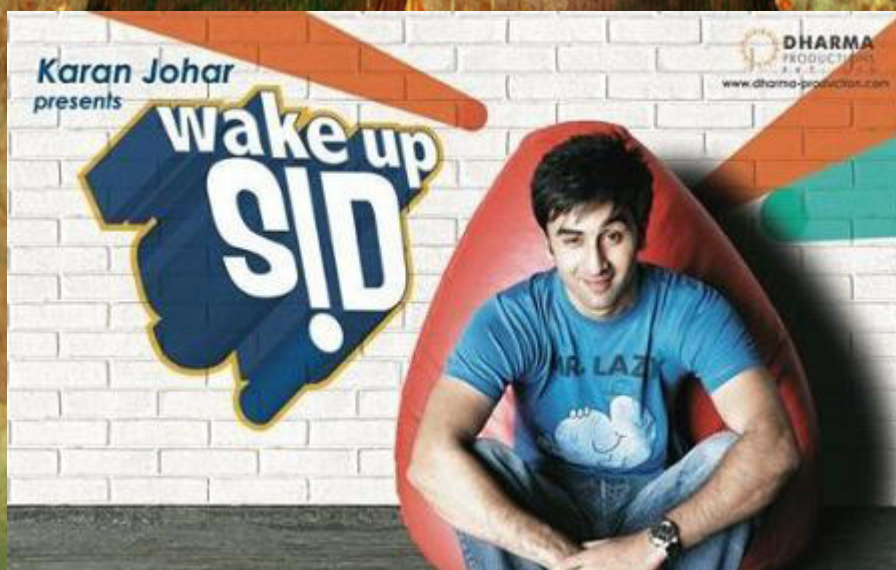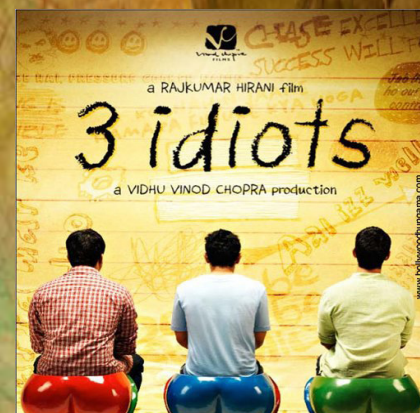
APPLE MAGIC MOUSE

Introducing Magic Mouse. The world's first Multi-Touch mouse.

A better mouse
It began with iPhone. Then came iPod touch. Then MacBook Pro. Intuitive, smart, dynamic. Multi-Touch technology introduced a remarkably better way to interact with your portable devices — all using gestures. Now we've reached another milestone by bringing gestures to the desktop with a mouse that's unlike anything ever before. It's called Magic Mouse. It's the world's first Multi-Touch mouse. And while it comes standard with every new iMac, you can also add it to any Bluetooth-enabled Mac for a Multi-Touch makeover.

The mouse requires Mac OS X 10.5.8 and Bluetooth. It can be configured as a two-buttoned left-handed or right-handed mouse, but the default is a single button. It uses laser tracking for increased pointer accuracy over previous generation Apple mice. Since its release, it has been included along with a wireless keyboard with the iMac.
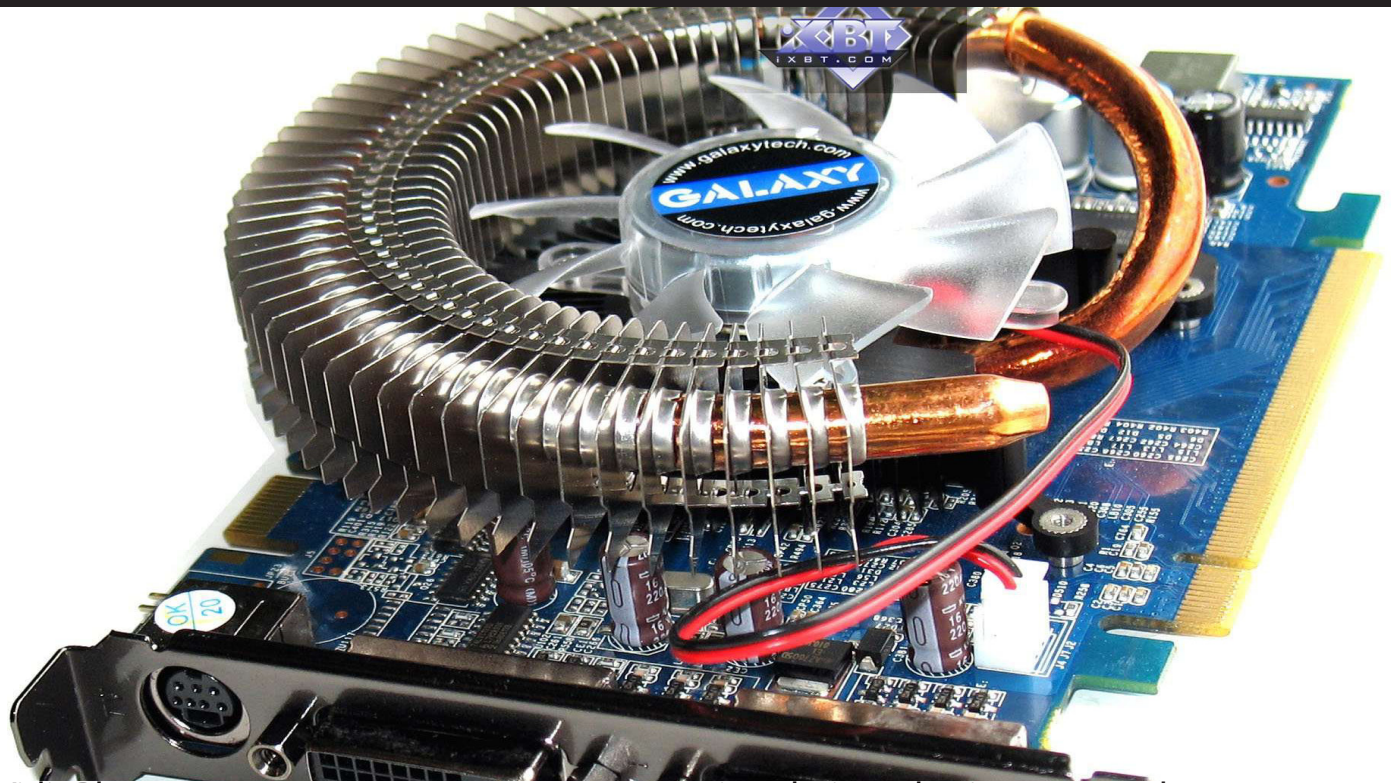
nitial reception to the Magic Mouse has been mixed, with positive reactions to its scrolling functions but negative reactions to its inability to middle click, or trigger Exposé, Dashboard or Spaces (features offered by its predecessor).

GALAXY GeForce 9500GT

Vidit Bhargava
Rating ⭐⭐⭐⭐

OK, so in the last edition we had discussed about the basic range graphics card. So we have actually got one 'NVIDIA GeForce 9500GT'.

The card hasn't got much to offer interms of the unboxing, we get a DVI connector, a S-Video out adapter, and an installation CD which includes a converting software and ofcource a Manual. That's not much but still works for me as I am more interested in gaming.

Our first benchmark was Quake 4, the card does fairly well. I was really surprised in this test as it takes the lead across all the resolu-

tions being a basic range card.

Call of Juarez was next, In Call of Juarez, the Geforce 9500GT is slightly faster than the XFX 8600GT at the lower resolution, but as we go higher the 8600GT seems to have a little lead.

One thing I liked about this card is the cooler with a custom fan, which is really quite, and even when overclocked at a high level the card barely gets warm.

At this moment there isn't any competition from the 'Red' team but I suspect ATI to launch a mainstream card to rival the 9500GT pretty soon. That should be one hell of a contest and I can't wait for it given the raw performance of the RV770 core.

Specifications	Geforce 8500GT	GeForce 8600GT	**Geforce 9500GT**	ATI HD4550
Core Clock	450	540	**550**	600
Memory Clock (Mhz)	800	1400	**1600**	800
Stream Processors	16	32	**32**	80
Shader Clock(Mhz)	900	900	**1400**	600
Memory Bus(bits)	128	128	**128**	64
Bandwidth (GB/s)	12.8	22.4	**25.6**	12.8
Fabrication Process (nm)	80	80	**65**	55

Quake 4 : 1280*1024 with No AA/AF
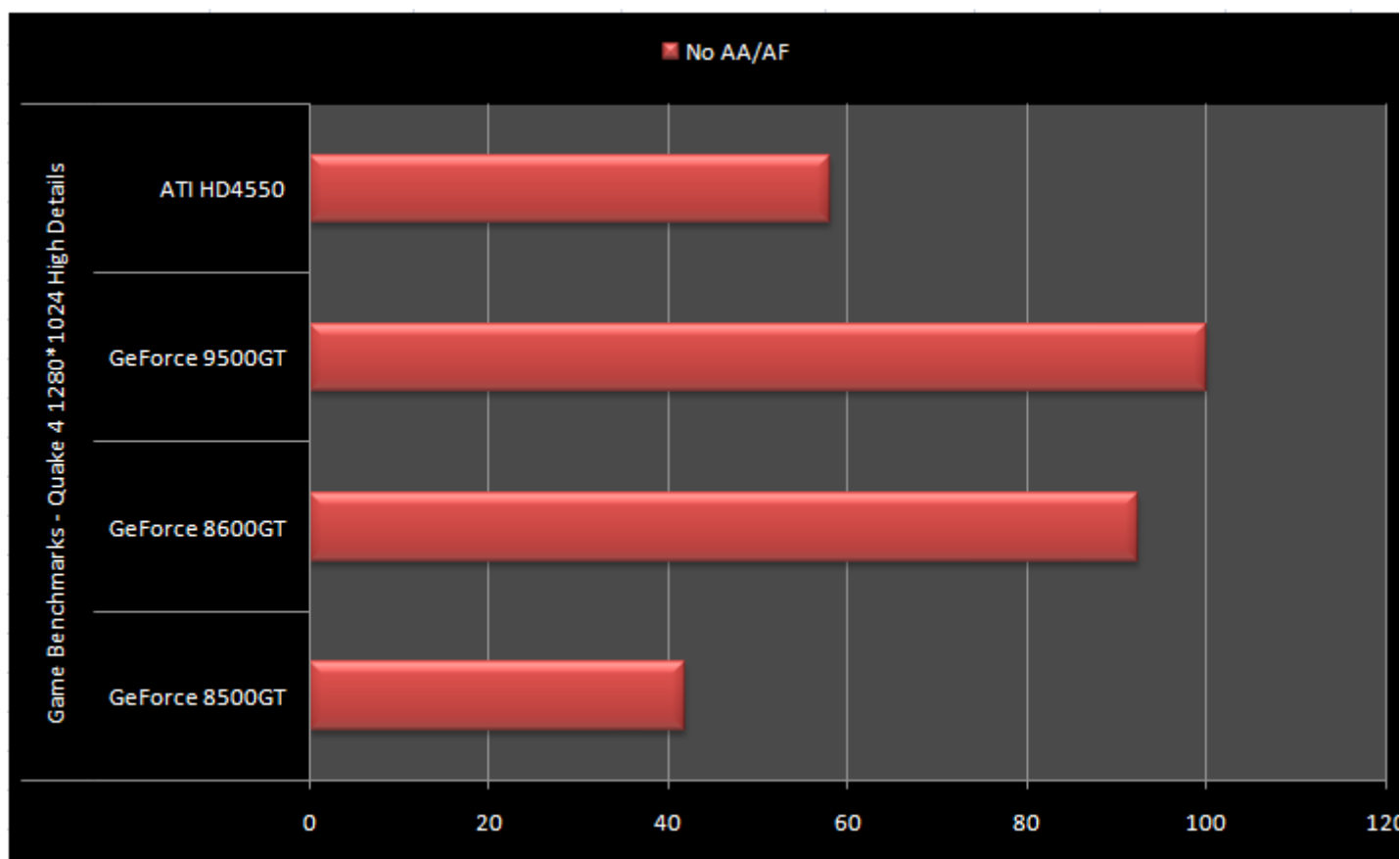
On the whole, the card is very nice in terms of gaming even the HD Videos worked well on the card. The GALAXY model is available for 3k in Delhi. Which is a great deal over the much similar 8600GT which comes for about 3.5k to 4k.

I personally like the card very much. It's the beast outside but the beauty inside.

Gaming
NEED FOR SPEED SHIFT

vidit Bhargava
Rating - 8/10

NEED FOR SPEED is the latest installment of the NFS series of Electronic Arts. I had already been looking forward to the new NFS version since March. Indead this is an honest effort by EA. But there's a change this time, the earlier games in the NFS category didnot provide simulation options. This one does! The last time they included the feature was in NFS High Stakes 'wonder why they removed it then. I am awed by this simulation'. This time the developers are Slightly Mad Studios, the folks behind the PC racing series GTR, to create Need for Speed Shift. So did the changing of the guard pay off? You should get your answer by the end of the review!

Graphics
Graphics haven't improved slightly or partially, they have improved immensely. The level of detail even the car bonet shows is astonishing. NFS Shift is easily the best Next-gen game in terms of graphics. The simulation mode, shows an immense detail of the car from inside. The Shocks you get after banging your car in the edges of the track couldn't do well if such high level graphics weren't provided. The tracks not 100% accurate though, show immense detailing & great graphics. Concluding there have been certain improvements in the graphics pane after NFS ProStreat and NFS Undercover! Actually flatens me in terms of graphics
Rating: 10/10

Gameplay & AI

Let me step back a little bit before delving into the racing experience. NFS Shift returns to the track-based racing of old (and ProStreet) rather than the open-world stuff seen in most of the modern titles. I hope one day, we get a game with both the track-based racing as well as the open-world racing. Racing here is largely associated to Speed management rather than bashing up the cars or hiding from cops or even playing as an undercover agent.

The closest thing you're going to get to some sort of tale is the voiceover that you'll hear After that, the voice only returns to explain new events and the like, but never to tell you that the cops are on your tail or that your love interest can introduce you to some jackass in a garage.

All this stuff is great, but not good enough in front of the cockpit view, I explained abo The cockpit view is what which stands out amongst all the camera views or racing experi ence. This can't be explained much you should play the game to experience it yourself.
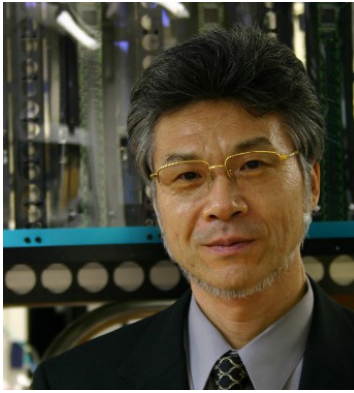
When you're doing 200+mph, you'll get scared. More than pretty much any other racing game I've ever played NFS Shift makes you respect speed.

ortunately, the AI holds up its end of the bargain and puts on a good show. I believe it could do better!

So again I would give this one a good thumbs up and a 8/10 for the great gameplay experi-ence, justh hope next time they provide a wider range of racing experience and not only a specific one (track-based racing, here). The AI too can improve much.

THE INVISIBILITY CLOAK
By Susumu Tachi

Susumu Tachi was born in Tokyo, Japan, on January 1, 1946. He received his B.E., M.S., and Ph.D. degrees in mathematical engineering and information physics from the University of Tokyo in 1968, 1970, and 1973, respectively.

Dr. Tachi has also invented the Invisibility Cloak which is the Major invention we'll be talking about.

Susumu Tachi, who showed off the cloak at an exhibition in San Francisco earlier in June 2004, said he was hopeful of providing a way to provide a view of the outside in windowless rooms.

"This technology can be used in all kinds of ways, but I wanted to create a vision of invisibility," he told BBC World Service's Outlook programme.

"My short-term goal would be, for example, to make a room that has no outside windows appear to have a view to the outside, then the wall would appear to be invisible."
Professor Tachi's cloak works by projecting an image onto itself of what is behind the wearer.

A computer generates the image that is projected, so the viewer effectively sees "through" the cloak.

The key development of the cloak, however, was the development of a new material called retro-reflectum.

"This material allows you to see a three-dimensional image," Professor Tachi said.

"This material is the key to our technology."

There are many potential uses of the cloak, ranging from espionage and military purposes to helping pilots see through the floor of the cockpit to the runway below.

Partial Source: Wkipedia

MVDIT ROBO-CLUB

NXT Magnetic Dance
By: Youtube user: NeXTSTORMING
### Rating: ⭐⭐⭐⭐

Vidit Bhargava
Oh its been hard to find bots for this competition with great capabilities. This one is a prototype of the 2091 AD project this user is building but also is a working model, I have really liked this one.

Some technical details:

The project is equipped with two NXT bricks that communicate each other via Bluetooth.

-The core structure with the "space molecules" is powered by four NXT Servo Motors. The Master NXT is connected with the three that move the outer shells. The Slave NXT is also connected with three NXT Servo Motors (One motor for the center of the core structure and two for controlling the Linear Actuators).

The demo program (NXT-G) demonstrates four differed moving patterns of the space molecules. The whole programming of this project was quite easy.
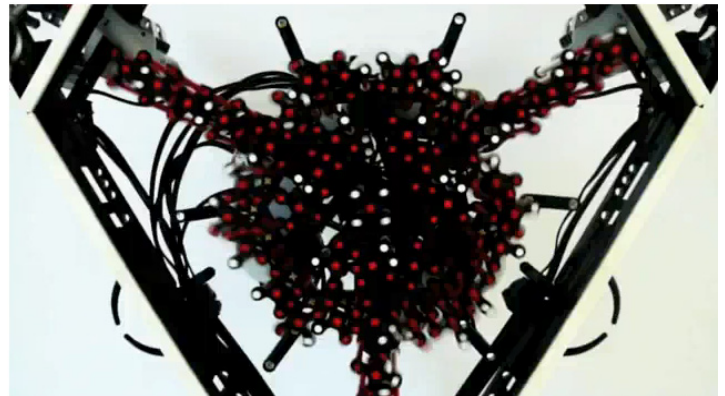
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