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*SA's tablet invasion starts*



**Nokia C7**  
*S^3 for the masses*



**Gran Turismo 5**  
*The racer to lead them all*



## TECH TRENDS FOR 2011

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# Trends for 2011 » January 2011



## This year I will ...

The start of the new year always brings about noble resolutions, good about for two weeks before going the same route as the numerous other ones of previous years. For what it's worth here are my 2011 tech resolutions:

1. Backup more. There's this nagging voice constantly telling me to backup my data and email. That voice will still be there one sorry day, telling me that you really should have backed-up.
2. No more checking the BlackBerry's mail after hours. That little flashing red light is sometimes just too enticing to resist. And of course you just have to reply, immediately. I suppose no-one ever looks back upon their life thinking "I really should have checked my mail more often".
3. No more reading news first thing in the morning. Rhino killings and politicians' craziness are not good for the heart while still lying in bed. Thanks again smartphone.
4. Sort out my phonebook. After years of use I can sometimes stare at my phone's contact list and ask "Who are these people?" SA Chris, Hollywood Sac and Igor Securit please identify yourself before getting deleted.

With tech you're almost sure that whatever is coming next will always be better, so here's to an excellent tech-filled 2011.

Mike

*P.S. Remember the BlackBerry Torch competition that you can enter on [www.techsmart.co.za](http://www.techsmart.co.za).*

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TechSmart exclusively uses the LG W2794V monitor for all reviews.



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# KASPERSKY Lab

## TOP TECH TITBITS

### Google Phone: The sequel



Google recently unveiled the Nexus S, their second venture into the smartphone market. The Nexus S was co-developed by Samsung and boasts a 1 GHz Hummingbird processor and 16 GB of internal memory. It's also the first phone to make use of Android version 2.3 (Gingerbread), bringing numerous OS improvements such as a new keyboard and text selection tool, internet (VoIP) calling abilities, improved copy/paste functionality and gyroscope sensor support. Also included is Near Field Communication, taking us one step closer to paying via your smartphone.

### » Hot new products

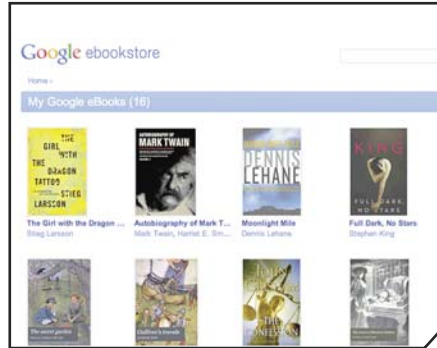
#### 1 Tron Light Cycle

If you are a big Tron fan then an idea of riding around on a real Tron light cycle gives you a tingle, why not buy one from Parker Brothers Choppers custom motorcycle manufacturers? These Light Cycles go for \$55 000 (around R376 000), each sporting a Suzuki TLR1000 V-twin engine with steel frames and fibreglass body work. The Light Trail weapon is unfortunately not included.

#### 2 Powermat Wireless Charging

Wires – you have to hate them. Luckily the Powermat has recently been introduced here in SA, allowing phones to charge without being connected to a wall socket. Simply put your phone on the surface and it charges – like magic. This however is only possible alongside a special Powermat receiver which at this stage is only available for certain iPhone, BlackBerry and HTC models. You can however charge basically anything, from smartphones to a Nintendo DS, via the Powermat thanks to a useful universal connector.

### Google eBooks, where art thou? Sales blizzard for 3rd WoW



Staying with our digital overlords, Google has opened its eBooks store last month in the US, in line to rival Amazon and other online ebook retailers. The interesting thing about eBooks is that the titles available to purchase will be stored in the cloud and will work across multiple platforms (PCs, Smartphones, eBook readers, Tablets). You can start reading in the morning on your smartphone and continue later on your PC, bookmarked at exactly the place where you left off. There are currently three million titles available, but not for South Africans yet, although a few free titles have made their appearance. We join other book lovers out there in the hope that eBooks will be here soon.



World of Warcraft (WoW): Cataclysm, the third expansion for the massively multiplayer online role-playing game (MMORPG), sold over 3.3 million copies in the first 24 hours following its release. According to Blizzard Entertainment, this has made it the fastest-selling PC game of all time, topping the former record of more than 2.8 million copies sold in 24 hours, which was set in November 2008 by the second WoW expansion, Wrath of the Lich King. There is approximately 12 million people playing WoW world-wide, which is more than the population of Greece. Massively multiplayer indeed, but who to play, Worgen or Goblin? ❖

#### 3 PSP 2 rumours

Recently some solid news finally appeared on the long rumoured PSP (PlayStation Portable) 2. The PSP 2 will feature a larger touch-enabled display, will forgo its predecessor's UMD drive for a download-only option plus will feature both front and rear cameras. A rear-mounted touch-panel will also be included for some new controller options and apparently the little device will be so powerful in the graphics department that it will rival early PS3 games. No pricing or release date info has been released yet. (This image is a fanboy concept, not the real thing.)

#### 4 Kinect-powered Forza 4

Microsoft recently announced the next title in the Forza series, Forza Motorsport 4, promising also that this will be the first true Kinect racer. Supporting the motion-sensing peripheral means virtual racers can now control their rides with nothing but their bodies. The game will (luckily) still feature traditional controller support in addition to Kinect and developers, Turn 10, have flaunted it as "an automotive experience unlike anything before it." ❖



# Ideos Tablet S7

## Ignite the fun.



## Ideos Tablet S7

The charm of Ideos Tablet S7 far exceeds your imagination. With its 7" touch screen in hand, you can surf the Internet, browse pictures and play favorite videos anytime, anywhere. And the excellent Android™ platform in Ideos Tablet S7 enables you to enjoy abundant Android™ applications. Be ready to fill your life with unlimited fun!

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- Abundant Android™ applications
- Enjoyable HD media playing and multi-tasking
- Popular mobile communication services





# TECH TRENDS FOR 2011

With Moore's Law still proving relevant each year, we're almost always guaranteed of something interesting happening in the world of technology. 2011 looks set to be no different, heralding tablets, smartphones and the move towards even faster networks.



## TABLETS EVERYWHERE

With Apple getting the jump on everybody, the true tablet showdown is scheduled for this year since the majority of PC (and even cellphone) manufacturers are ready to jump the market with their own devices.

Apple's traditional smartphone rival, BlackBerry, is due to release the BlackBerry PlayBook. Featuring a 1 GHz dual-core CPU, 1 GB RAM and front and rear cameras, the PlayBook is one of the most anticipated tablets yet. HP's often delayed Slate 500, running Windows 7, is also set to finally enter the market. It should sport a zippy Intel 1.86 GHz Atom Z540 CPU, GMA500 graphics, 2 GB RAM and a 64 GB SSD, making it the most powerful tablet yet. The 8.9" device will display at an impressive 1024 x 600 resolution and should play HD content without a hiccup. Also to watch out for is the Cisco Cius, HP PalmPad, the dual-screen Acer Iconia notebook/ tablet and devices from Toshiba amongst others.

Despite all these efforts, Apple might just steal the show again. Though its predecessor is just a few months old, there are already rumours of the iPad 2 making an appearance as soon as February. At this stage it is widely believed that the iPad 2 will feature front and rear facing cameras, also supporting the iPhone 4's FaceTime video calling. Increases in the processor and memory sectors are also likely, while the screen resolution should also get a boost. The iPad 2 is surrounded by a strict veil of Apple lawyers at the moment, but when more info drops, we'll be there to report. The Consumer Electronic Show (CES) taking place in Las Vegas this month should provide a more solid tablet roadmap.



## THE RISE AND RISE OF ANDROID

Google's free Android operating system had a good year in 2010, not only reviving the fortunes of a number of smartphone manufacturers but also starting to make an appearance on netbooks and tablet PCs. All signs point to a stunning 2011 for this operating system.

According to Google's vice president of engineering, Andy Rubin, Google is activating 300 000 smartphones each day with the Android platform, with research firm Canalis measuring a 886% difference in Android shipments in Q2 of 2010 than the same quarter in 2009. Market analysts, Gartner, goes so far to predict that Android will be surpassing the Symbian platform as most used mobile operating system (OS) market in the world by 2014. Amazing, considering the amount of Nokia phones out there with Symbian installed.

Android is also the preferred weapon of choice for tablet manufacturers looking to produce the next iPad killer, with companies such as Samsung, Toshiba, Acer, Cisco, Dell and Motorola either having released or planning to release Android tablet devices. According to research firm, IMS Research, Android tablet devices could be as much as 15% of the market this year, not bad taking into account the massive head-start Apple's iPad had. Android is also making the trek to netbooks, with Acer recently releasing the Happy netbook that dual-boots Windows 7 and Android, while Toshiba has also produced an Android netbook. Although if Google is to be believed their new Chrome OS, to be released later this year, should be the domain of netbooks. (Check our top apps for Android on p. 27) *cont...p9*



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### INTERNET + TV = SMART TV

So what exactly is "Smart TV"? Simply put it is a merger between two of the most important technological advances the past couple of centuries – good old TV and the internet.

The strongest Smart TV offering we've seen so far comes from global search giant Google, partnered with Intel, Sony and Logitech with their Google TV. The Google TV setup allows viewers to watch either traditional television broadcasts or enjoy a variety of shows streamed from the internet, access websites from their TV, and even run applications on it.

So what is powering Smart TV? Well hardware wise the leaders in the field at this stage is Intel with its Intel Atom CE4100 processor. This is Intel's first system-on-a-chip aimed at Smart TV's based on the Atom architecture. The chip allows Smart TV top boxes to be able to handle dual-stream 1080p video support and other processing duties.

But Google TV is facing its share of problems though, with Viacom (representing MTV, Comedy Central, Nickelodeon and VH1) recently opting out of an agreement with the service. They join News Corp, NBC Universal, Disney and CBS who've also shut out Google's TV ambitions. Google is also encountering software issues and have last month asked manufacturers at this year's Consumer Electronic Show (CES) in Las Vegas to delay their showing of Google TV devices.

At the end of the day they say content is king, and if Google can't get the big guys interested Google TV will be off to a very shaky start. Oh yes, there is no news regarding a release date for Google TV in SA yet.



### YOUR NEXT PHONE WILL BE A SMARTPHONE

In 2010 more and more manufacturers moved away from standard feature phones to the connected, application spewing smartphones of today. In fact, according to *Mobile magazine*, up to 80% of mobile phone users are expected to move to smartphones in the coming months, signifying the gradual extinction of the "call and sms" phones of yesteryear.

While the old feature phones may have been able to run some advanced Java applications, smartphones take this further by running a complete OS (Operating System), just like your PC runs Windows. At the same time developers are creating applications that can be downloaded onto smartphones to enhance usability.

Did you care what OS your last phone ran? Chance are you didn't, but now mobile OS's are becoming just as important a factor in the decision making process as the hardware. With the new Android 2.3, Symbian S^3 (Nokia), iOS 4.2 (iPhone), BlackBerry 6 OS and the Windows Phone 7 OS, the mobile OS realm is charged with competition for 2011.

Smartphones are also becoming cheaper as Huawei recently announced its IDEOSTM U8150 smartphone which will retail below R2000, while LG released the excellent Optimus One for just under R2500. Vodacom also announced the ZTE Vodafone 543, taking the spartan smartphone cake at only R499 a pop. cont...p11



20 minutes. Battery life on the first mobile telephone.



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**HUAWEI**



**3.5G GOES 4G**

4G is the successor to the 3G and 2G standards, and although a lot of companies have branded WiMAX and first release 3G LTE (Long term evolution) technologies as "4G", these standards don't actually comply with the definition of a 4G network.

A true 4G network must fulfil two crucial roles: the first is that it has to be IP-based and use orthogonal frequency-division multiplexing (OFDM) technology (a modulation technique for transmitting large amounts of digital data over a radio wave). The second, and perhaps more important requirement, is that it needs to support peak download speeds of at least 100 Mbps.

No true 4G network has been operational in South Africa yet and it seems that the most positive estimates point to true 4G in SA in about two years' time. All three major South African mobile providers are currently offering 21 Mbps HSPA+ networks in selected areas, although full country-wide penetration is expected to be completed at the end of the year.

Meanwhile the 4G dream is becoming more of a reality in first world countries such as the USA. Several 4G capable handsets and 4G compatible networks have already surfaced. HTC is one of the leaders at the moment, with its **HTC EVO 4G** being the first widely available 4G handset. A whole host of 4G enabled devices are set to surface at the Consumer Electronics Show in Las Vegas this month.



**WHAT TRENDS WE PREDICTED LAST YEAR:**

So how did we do predicting the tech trends for 2010? Well it was a bit of a hit and miss affair. Here are three of our 2010 predictions and one we missed completely.

**Gesture Driven Gaming**

2010 was indeed a good year for grand gestures, especially if you've played with the Microsoft Xbox Kinect, which is not only motion-based (it tracks your body movements) but also completely controller-less. The Kinect sold 2.5 million units in just 25 days – a good start in anyone's books.

**Google Chrome OS**

We thought Google's Chrome operating system might just offer some competition against the mighty Windows, but it did not even see the light of day, with the search giant citing "bug problems" as reason for the delay. The first netbooks running the Chrome OS should be out in the first half of 2011, but in the meantime at least their Android OS is performing well.

**3D technology**

Yes we saw a lot of 3D in 2010, but after the success of *Avatar* it all turned a bit ho-hum. High prices for 3D telly's and the need for silly glasses of course did not help either. We're actually holding thumbs for holographic TV soon.

**The iPad**

Not a lot of people saw the Apple iPad coming. We certainly didn't, consequently missing the biggest tech news of 2010. At least we were not alone seeing that the success of the device left a number of manufacturers scrambling to get their own tablets to market. ❄️

LG Optimus 2X. World's first smartphone with a dual-core processor, the Tegra 2.

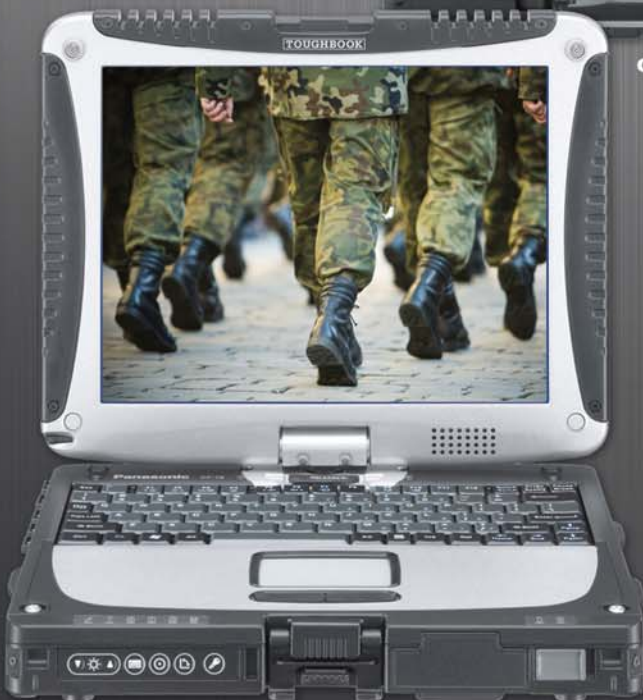
# TOUGHBOOK®

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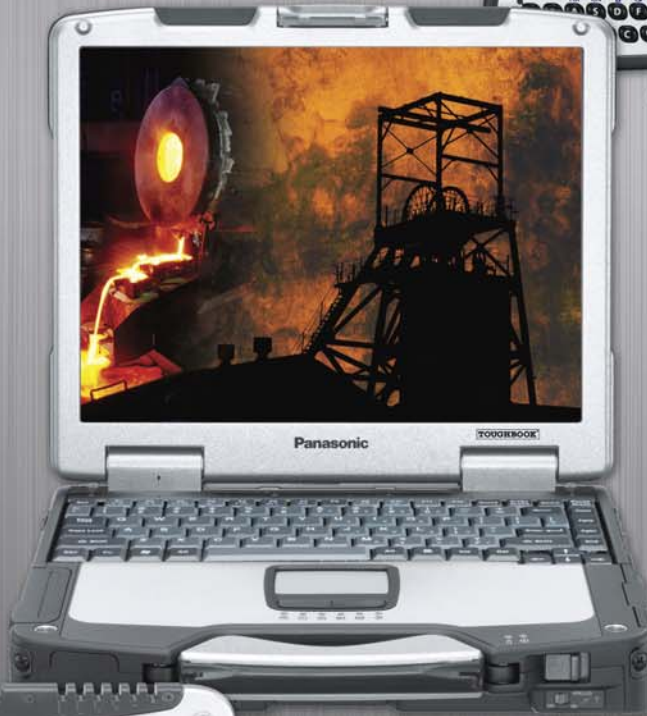
Offering the ultimate balance of screen, performance and rugged reliability, the CF-31 is the flagship of the Toughbook range

## SPECIFICATIONS

- Intel® Core™ i5-540M vPro™
- 13.1" high brightness 1 100 NIT outdoor readable display with circular polarizer



CF-19



CF-31

With magnesium alloy cases, shock-mounted hard drives, and unsurpassed wireless performance, Toughbook laptops are durable and reliable for today's hectic mobile lifestyle.

Fully-rugged Panasonic laptops and Toughbook U1 are the first computers to be MIL-STD-810G certified for a range of extreme conditions including 6-foot drops, shocks, vibration, humidity, altitude, IP65 rain-, dust- and sand-resistance, thermal shock and temperature extremes ranging between -20° and 60°C.

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CF-U1



CF-H1 Field

Shock, dust and drop resistant. Standard features: Solid state drive, camera, fingerprint, smartcard and 2D barcode reader, RFID.

## Panasonic ideas for life

For more information: Rohan van Heerden – 011 313 1618 or email: [rvanheerden@pansolutions.co.za](mailto:rvanheerden@pansolutions.co.za)

# PANASONIC TOUGHBOOK CHALLENGE WHAT YOU NEED TO KNOW

If choosing the rough and tumble road is your preference, Panasonic's Toughbook range are the only notebooks that will be able to keep up. We check out the CF-31 and CF-19.

## CF-31

### Display

The Panasonic CF-31 is equipped with a 13.1" XGA touch-screen display with Panasonic CiruLumin technology. LED backlighting ensures a clear and bright display. It is rated at a bright 1100 nit.



### Processor

The Toughbook 31 makes use of the powerful Intel Core i5-540M vPro processor rated at 2.53 GHz, with Turbo Boost functionality taking it up to 3.07 GHz.

### Storage

Being sturdy is paramount in a device such as this, so Panasonic has armed the CF-31 with a shock-mounted 250 GB hard drive with a quick-release option for easy drive swapping.

### Memory

The Toughbook 31 as standard sports 2 GB of DDR3 SDRAM which is expandable to up to a powerful 6 GB.

### Dimensions and weight

Measuring in at 292 x 302 x 73 mm, and weighing a solid 3.6 kg, the CF-31 isn't the smallest notebook around. But rugged is the name of the game and we're sure you can handle that extra strain.

### Durability

Of course, the most important aspect on a Toughbook is its durability. The CF-31 is certified by military standards for drop shock protection with MIL-STD-810G and IP65 certification, while this fully-rugged notebook also has a magnesium alloy handle and reinforced locking port covers for extra protection.

## CF-19

### Display

The Panasonic CF-19 features a 10.4" sunlight-viewable XGA Active Matrix (TFT) colour LCD display, fully viewable even in direct sunlight. The display is dual touch, meaning it supports a touch-screen and digitizer, plus the screen can be adjusted to turn the device into a tablet PC.



### Processor

The Toughbook 19 comes equipped with an Intel Core i5-520UM vPro processor with a clockspeed of 1.2 GHz and Turbo Boost taking it up to 2.0 GHz.

### Storage

The Toughbook 19 faces bumpy terrain and accordingly is equipped with a sturdy 160 GB super fast SATA hard drive which is shock resistant and can withstand drops of up to an amazing 1.8 m.

### Memory

The CF-19 supports 2 GB worth of DDR3 SDRAM as standard and this can be upgraded to a maximum 4 GB.

### Dimensions and weight

At 271 x 216 x 49 mm, the CF-19 is a bit smaller than its counterpart and also weighs less, coming in at only 2.3 kg.

### Durability

The rugged CF-19 passed the IEC529 water resistance test and features a double waterproof structure for tight water and dust-proofing. It can be dropped from 180 cm and passed the military MIL-STD 810G vibration resistance test and IP65 certification. ❄️

## Military Specifications and Standards as set by the U.S. Department of Defense

- **Free fall test:** PC falls onto plywood from 90 cm onto each face, edge and corner for a total of 26 drops.
- **Dust resistance test:** Tiny particles continually sprayed onto PC when operating.
- **Water resistance test:** Precipitation of the PC for 10 minutes at a rate of 10 mm of water per minute.
- **Typing Test:** Each key was typed two to five million times.
- **Vibration test:** PC was subjected to vibration for 1 hour at each of its axes.
- **Agging:** Tested at -20 °C and 60 °C.

## Business Workstation (PC)

- Black and Silver Handle 450W Case
- Intel Chipset G31 1333FSB
- M Celeron 430 1.8GHZ
- PC-800 1024MB DDR2
- 350GB Sata HDD
- Samsung 22x DVD Writer



**R1599**

## AOC 18.5" LCD

- Display Type: LCD
- Screen Size: 18.5 inch
- Aspect Ratio: 16:9
- Resolution: 1366 x 768 pixels
- Energy Power Use: Max 25 Watts
- Wall Mountable



**R899**

## HP Deskjet 2050 All-in-One

Printer **R499**



## LG Portable DX325B

Business Projector **R5499**



## Fujitsu ESPRIMO Mobile V6555 Celeron 900

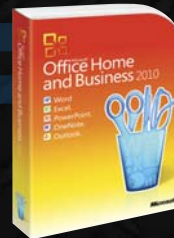


- CPU: Celeron 900 (2.2GHz 1MB 800MHz)
- HDD: 250GB HDD
- RAM: 2GB DDR2-800
- Graphics: Nvidia GeForce 8200M Graphics
- Screen size: 15.4" WXGA Bright Display
- Other: DVD Super Multi, Gigabit LAN, WLAN, 802.11b/g, Integrated Webcam, Windows 7 Home Basic + OfficeReady

**R3999**

## MS OFFICE 2010 HOME & BUSINESS

2 user licences **R1499**



## KASPERSKY 2010

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## KINGSTON 8GB USB FLASH DRIVE **R139**



## Samsung External HDD

- G2 320GB 2.5" **R429**
- G2 500GB 2.5" **R549**
- S2 1TB 2.5" **R999**
- G3 2Tb 3.5" **R999**



## MINIX Netbook



- CPU: Intel Atom N450 1.66 GHz
- HDD: 160GB 5400RPM
- RAM: 2GB DDR2
- Screen size: 10.0" LCD
- Other: 1.3M Pixel Webcam, 802.11b/n wireless technology, Keyboard skin and Screen Cleaner cloth included

**R2299**

## TRANSCEND Slim Portable USB DVD-Writer 8X **R399**



## Display Adapter - USB to VGA Extend Multiple Monitors

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# lenovo™



## LENOVO THINKPAD – WHAT THE FATHER HAS TO SAY

TechSmart was recently invited to visit Yamato Labs in Japan, birthplace of the legendary ThinkPad, to talk to the father of the device, Arimasa Naitoh.

In the easy come, easy go world of technology, it's not often that a device can reach iconic status. If there is one brand though that can lay claim to this, it is the ThinkPad. As a business tool the ThinkPad range of notebooks has a hefty pedigree – the first modern notebooks in space, the first to include a CD-drive and DVD-drive, the first to include integrated Wi-Fi and the first to integrate a fingerprint reader. Many companies though can tick off firsts, but as they say the proof is in the pudding. The pudding in this case being that in the year that the ThinkPad range is celebrating its 18th birthday, Lenovo announced that it has shipped the 60 millionth ThinkPad.

### Yamato Labs, birthplace of the ThinkPad

The unpretentious Yamato Labs is tucked away in a leafy suburb a few kilometres from Kyoto. It is here where Arimasa Naitoh, known as the father of the ThinkPad, introduced the first

ThinkPad in 1992. Those days the ThinkPad still belonged to IBM and innovation was the name of the game, especially since notebooks were still in its infancy.

IBM's PC division was acquired by Chinese PC manufacturer Lenovo in 2005 and today Naitoh holds office as vice president of Development of Lenovo's Notebook Business Unit. As both an IBM and Lenovo Fellow, the highest honour than can be bestowed on a technologist at these companies, he comes across as very pragmatic. This trait is clearly reflected in the ThinkPad range, which up until recently have not appeared in any other colour but business black. Naitoh refers to notebooks as "weapons" for your business, there to make your business more "powerful". "If you use a notebook and get distracted by the problems it gives you it impacts negatively on your productivity," he told TechSmart. "We are constantly innovating to lower or eliminate these customer pain points," Naitoh continued.

### What's next?

Naitoh is adamant that smaller and lighter is the way to go. "A reduction in notebook weight is my first goal," relating further that 1.2 kg seems to be the magical number in this regard. He also mentions a few other developments which in the next two to three years should have an impact on the notebook market. Firstly screen technology might incorporate flexible display / colour E-ink technology, making for foldable thin screens that are basically unbreakable. Secondly there's a convergence of smartphone and PC architecture which should see high performance devices coupled with much better battery life. A third technology which can already be felt in the market is cheaper, higher capacity Solid-State Drives, making for lighter, safer and faster computer storage.

The quality of the ThinkPad range is reflected in the 60 million ThinkPads sold, and after spending some time with the father of the device, we're certain that that figure is only the beginning. [MJ] 🐼

### Innovation at Lenovo – the cat and the owl

Innovation is the name of the game for the ThinkPad range, even for the smallest detail. The shock absorbing feet on newer ThinkPads for example

was inspired by the pads on cats' feet, bringing down hard disk system failures due to hard drops by as much as 20 – 50%. Owls' feather structure inspired the

ThinkPad's silent fan blades, managing to keep machines both quieter and cooler by as much as 4.5°C than on 2007 machines.

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## Samsung Galaxy Tab

### » The invasion starts

**With a number of features that the iPad does not support, Samsung's Galaxy Tab sure is impressive – but is it just too expensive?**

Clearing one million units in one month, the Galaxy Tab looks like the fiercest competition for Apple's iPad yet. And it's no surprise, since the Galaxy Tab incorporates a number of offerings which Apple chose to ignore. These include MicroSD support for up to 32 GB cards and mobile network support by default (3G support is only available on selected iPad models). Additionally, users are able to make cellular calls using the Galaxy Tab – a luxury which is not available on the iPad.

#### Screen

The Galaxy Tab incorporates a 7" TFT capacitive touch-screen which boasts a resolution of 1024 x 600 pixels. Although this is smaller than the iPad, which measures in at 9.7", the resolution is competitive – Apple's offering measures in at 1024 by 768 pixels. Unfortunately, the Galaxy Tab's Gorilla Glass display (which also supports multi-touch), gets dirtier far

quicker than the iPad's – something which we found a nuisance.

In terms of storage, the Galaxy Tab is available in 16 GB and 32 GB variants which, when coupled with a 32 GB MicroSD card, can mean up to 64 GB of storage space. It also features a 3.5 megapixel camera with video capture (not present in the iPad), 7.2 Mbps HSDPA and Wi-Fi 802.11 b/g/n support, plus of course full integration with the Android Marketplace and Google applications such as maps and mail. Doing the computing is a 1 GHz ARM Cortex processor which is perfect most of the time but can struggle if you do heavy multi-tasking.

## "The Galaxy Tab incorporates a number of offerings which Apple chose to ignore"

The Galaxy Tab also features DivX media and full 1080p support for a number of video file formats and can function as an external drive should the user choose this option. Compared to Apple's relatively restrictive iTunes software, it is far easier to load and remove data onto the device.

#### Galaxy Tab versus iPad

So, is it worth purchasing a Galaxy Tab

over an iPad? Overall, the iPad is arguably more attractive in terms of design and certainly prevails over Samsung's device with regards to its 'cool' factor. But the Tab has a number of decent



features the iPad doesn't have, including microSD support and calling.

Had Samsung priced the Galaxy Tab more aggressively, the answer would have been more clear – but at a cost of R8500 locally, it really is a issue of personal preference. Still, with the iPad not officially launched in SA, the Galaxy Tab is the only proper tablet currently officially available. [TM] ❖

## Nokia C7 » Symbian ^3 smartphone for the masses

**Nokia is facing some strong competition in the mid-range in the form of decently priced Android-powered devices. How does their new C7 with the revamped Symbian ^3 (S^3) operating system perform?**

The C7 reminds a lot of the popular XpressMusic 5800, although more rounded and also a lot thinner. The build quality struck us as really good and the device feels very solid in hand. Its 3.5" AMOLED capacitive touch-screen feels slick when tapping or swiping your way through its menu system, a lot more so than on LG's Optimus One but is less impressive than Samsung's Wave. It doesn't boast the 1 GHz processor usually found on the top-end devices, still the 680 MHz ARM 11 CPU did a good job of keeping things smooth.

Bluetooth 3.0.

Given that amount of functionality, its battery life of 1½ to two days is above average. The C7 makes use of an eight megapixel camera with auto-focus (sans the usual Carl Zeiss optics) that captures really good quality videos in high-definition (720p). But its bigger brother, the N8, still takes the cake if it's a good camera and video you're after.

We're not big fans of Nokia's new S^3 OS and the C7 offers users access to a less than average three home-screens, to populate with your chosen widgets. It also integrates social networking, including Facebook, but you have to be hooked up with a Nokia Ovi account



#### Conclusion

Overall the C7 is a solidly built device with good multimedia functionality. S^3 is a great deal better than its predecessor (Symbian Series 60), but in our opinion this new OS isn't as good as iOS and Android. This leaves us eager to get our hands on Nokia's first smartphone running their new Meego operating system co-developed with Intel, to be released later this year. [HD] ❖

**"The build quality struck us as really good and the device feels very solid in hand."**

#### Features

This smartphone packs HSDPA connectivity, integrated GPS with A-GPS receivers, 8 GB of internal memory, Wi-Fi 802.11 b/g/n and the faster

(available for free though) through which to do this. Afterwards you can only manually link phonebook contacts with Facebook, which is a more cumbersome process than on BlackBerrys for example.

#### » Quick specs

- 3.5" Capacitive touch-screen
- 680 MHz ARM 11 CPU
- 8 GB onboard memory
- Wi-Fi, HSDPA
- Bluetooth 3.0

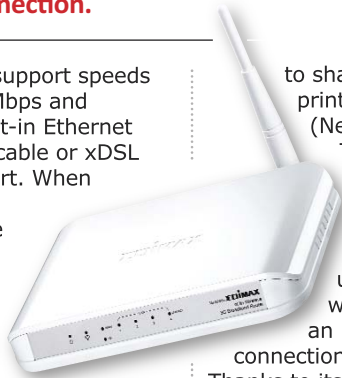
## Edimax 3G-6200n wireless router

» Tired of sluggish connections?

The Edimax 3G-6200n is a multi-function wireless broadband router which can be used to connect to either a 3G or 3.5G USB modem and allows users to share this internet connection.

The device support speeds up to 7.2 Mbps and includes a built-in Ethernet WAN port for cable or xDSL modem support. When connected to either of these modem types, the 3G-6200n will enable the xDSL or cable broadband connection automatically when a 3G connection is not available.

The device also features a USB port which can be used to connect a printer and function as a print server to enable users on the network



to share the same printer. A built-in NAT (Network Address Translation) function is also included allowing the router to connect up to 253 wired or wireless clients to an internet connection simultaneously. Thanks to its compatibility with the IEEE 802.11n wireless standard the router can reach speeds of up to 150 Mbps, three times better than what you would get with a standard 802.11b/g device. It is available from Matrix Warehouse Computers. **R629**

## Edimax 3G-6210n wireless router

» Fast speeds, small router

The 3G-6210n is a portable wireless 3G broadband router which really puts the emphasis on the "portable" part.

Users can connect either a 3G or 3.5G USB modem to the router, upon which all users on the network can share this internet connection. According to Edimax, the 3G-6210n is currently the smallest wireless 3G router in its range, with a compact design making it easy to carry around wherever you go.

The router is capable of supporting speeds of up to 7.2 Mbps and includes a built-in Ethernet WAN port for a cable or xDSL modem. A rechargeable Li-ion battery also makes an appearance, providing up to 1.5 hours of wireless internet whenever



you need it. The 3G-6210n complies with the IEEE 802.11b/g wireless standard and is compatible with the faster IEEE 802.11n standard as well. When finely-tuned to operate using 802.11n technology, the device can reach data transmission speeds of up to 150 Mbps. It is available from Matrix Warehouse Computers. **R849**

## Edimax AR-7266WnA/B wireless router

» Fast for the home or business

If you're looking to seriously speed up your home or small business connection, the Edimax AR-7266WnA/B may be just what you're looking for.

This high performance router provides the full rate of ADSL2+ connectivity and complies with the latest wireless standard of 802.11n.

Featuring advanced MIMO technology, it is able to provide users with a data transmission rate of up to nine times better (up to 300 Mbps), while providing five times the coverage of standard 802.11b/g routers. The device also enables users to share the wireless broadband connection with up to 253 users, with Edimax claiming downstream speeds of up to 24 Mbps and upstream speeds of 1 Mbps. The AR-7266WnA



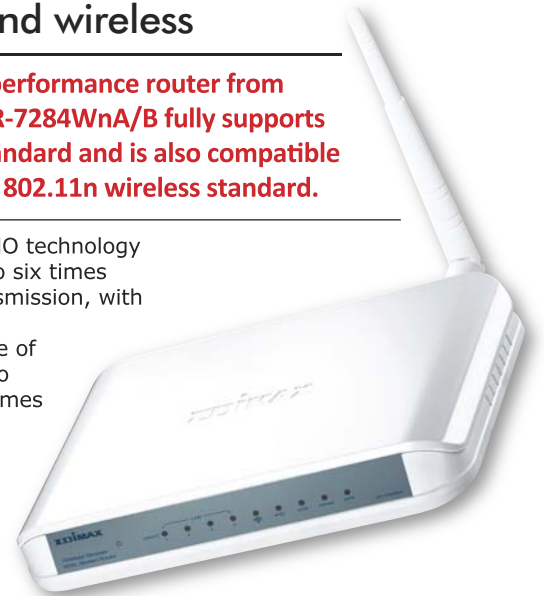
includes two detachable 3dB RP-SMA antennas, ensuring you get the most robust coverage possible. It is available from Matrix Warehouse Computers. **R639**

## Edimax AR-7284WnA/B wireless router

» Wired and wireless

Another high performance router from Edimax, the AR-7284WnA/B fully supports the ADSL2+ standard and is also compatible with the latest 802.11n wireless standard.

Advanced MIMO technology enables up to six times better data transmission, with a claimed data transmission rate of 150 Mbps. It also provides three times better wireless coverage than a standard 802.11b/g router. The connection can be shared among both wired and wireless users on the network, supporting up to 253 clients simultaneously, with up to 24 Mbps downstream speed and 1 Mbps downstream speed. This device also feature a built-in



virtual server and DMZ function enabling applications that require open ports (such as games and VoIP services), to be enjoyed. It is available from Matrix Warehouse Computers. **R459**

## Edimax EW-7711n wireless adapter

» Connected in a jiffy

**Getting wireless connectivity doesn't have to be a painful process, as the Edimax EW-7711n 32-bit wireless PCI adapter demonstrates.**

This PCI adapter supports data rates of up to 150 Mbps if connected to a 802.11n device. The EW-7711n is an easy way to add or upgrade your wireless connectivity on your notebook or desktop PC. Users can also connect to any public hotspot to access the internet using the EW-7711n.

A detachable antenna with an extended cable comes in handy if you have connectivity issues within your office, with the device even able to connect to external

dipole antennas. Security is of course important when walking around with a wireless internet connection and the EW-7711n supports 64/128-bit WEP data encryption to protect your network from unwanted visitors. It is available from Matrix Warehouse Computers. **R249**



## Edimax EW-7711UAn wireless adapter

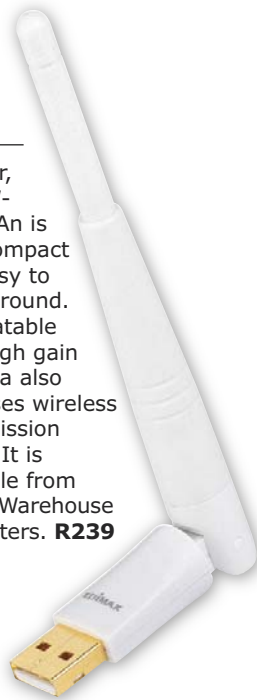
» Small for a big connection

**The EW-7711UAn is yet another quick and easy way to add or upgrade wireless connectivity on your computer of choice.**

The device features a high-gain USB adapter which can support a data transfer rate of up to 150 Mbps when connected to a wireless 802.11n device. Users simply need to plug the adapter into a free USB port on their computer and they can enjoy wireless internet access hassle free.

The EW-7711UAn complies with the 802.11n wireless standard and thanks to new wireless technology can increase wireless coverage range by up to three times compared to previous models, also reducing "dead spots" within the wireless range. Toted as the company's smallest wireless

adapter, the EW-7711UAn is very compact and easy to carry around. Its rotatable 3dBi high gain antenna also increases wireless transmission range. It is available from Matrix Warehouse Computers. **R239**



## Edimax BR-6225n wireless router

» No hassle management

**The Edimax nLite BR-6225n is a compact, high speed wireless router solution that complies with the 802.11b/g wireless standard and is compatible with the stronger 802.11n standard.**

Edimax claims the device can reach peak data speeds of up to 150 Mbps when optimised to work with 802.11n technology.

A built-in NAT (Network Address Translation) function allows the device to support up to 253 clients. The device introduces the new Edimax EZView system, which allows users to manage their

router either locally or from a remote location using the internet. UPnP compatible devices are automatically detected and information about the devices are listed in the management interface of the router. Users can remotely manage IP addresses, bandwidth control, open ports and DMZ. The BR-6225n is available from Matrix Warehouse Computers. **R399**



## Edimax EW-7811Un wireless adapter

» Nano size, macro performance

**The Edimax EW-7811Un is a nano USB wireless adapter which despite its super compact size supports a high data transmission rate of 150 Mbps when connected to a wireless 802.11n device.**

Simply plug the USB connector into a free USB port and enjoy wireless high-speed wireless network access – especially handy if your PC or notebook does not include built-in Wi-Fi. Supporting the 802.11n wireless standard, the device increases wireless coverage by up to three times and helps reduce "dead spots" in wireless connectivity.

Edimax is also thinking green with this new device as it automatically adjusts transmission output by distance and CPU offload to help reduce power consumption when the

wireless connection isn't in use. The EW-7811Un sports a compact design making it very easy to carry around, it is also very small, meaning you can keep it plugged into a USB port on your notebook at all times.

It is available from Matrix Warehouse Computers. **R159**



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transfer. It retails at **R1599** and is available from The G.A.D.G.E.T. Shop on 012-346-2726

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This eco friendly clock from Oregon Scientific utilises a solar powered battery to charge it, so there's no need for a regular battery or adapter. The solar battery is fully detachable to allow it to be charged wherever the sun is the brightest. With only six hours in the sun needed for the +ECO clock to work for a full two weeks, it's easy to see why this is a green favourite.



It retails for **R649** and is available from The G.A.D.G.E.T. Shop on 012-346-2726

## Asus SBW-061S-U 6x external Blu-ray writer » Blu-ray and 3D too

If you want to enjoy Blu-ray movies without having to buy a Blu-ray player or PS3, then the Asus SBW-061S-U 6x external slim Blu-ray writer may just be what you were looking for.

In addition to Blu-ray playback the drive can also write BDmedia at 6x. CDs and DVDs can also be burned at blistering speeds, making the Asus one of the most versatile external drives around.

As a bonus the Asus is able to convert 2D movies to 3D content (with a pair of 3D glasses included), as long as you have the Nvidia graphics card to support this.

The drive is essentially noiseless, even when operating at maximum speed and is also compact so you can travel around with it fairly easily and a stand is included so it can attractively blend into your desktop jungle. It is available for a recommended retail price of **R1999**.



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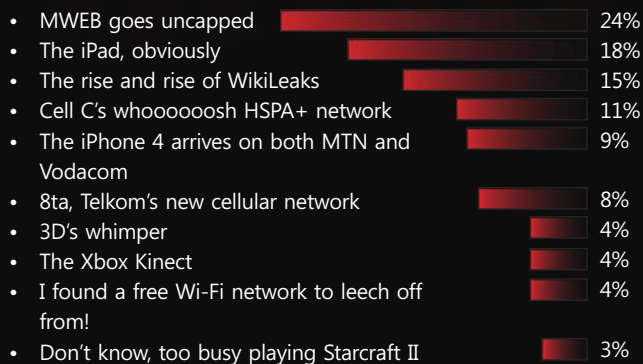
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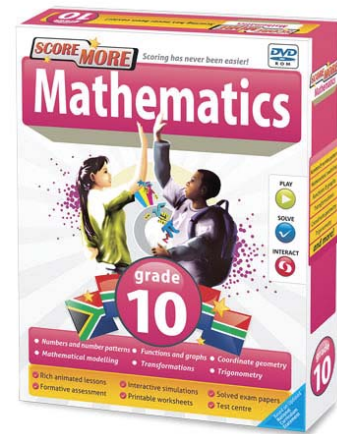
The Score More educational software packages, based on the South African curriculum, has recently been added to Edutain's wide range of educational software.

These packages offer a digital way of learning for the 21st century student, allowing learners to play and interact while actually mastering the subject, claiming that "Scoring has never been easier!"

Score More offers digital curriculum content in the form of multimedia

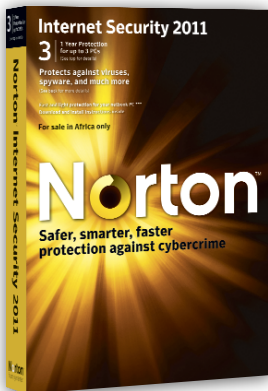
animations, simulations, activities and games to keep students engaged in the after-school learning process. With the use of richly animated lessons and interactive games, the software will keep any learner glued to their PC for the next lesson.

The packages also offer formative assessments, completed exam papers, printable worksheets and a test centre so students can test their knowledge. With low system requirements the program will run on most computers and it is available for grade 10, 11 and 12 learners in Physical Science and Maths. The software is available from Edutain Distribution ([www.edutain.co.za](http://www.edutain.co.za)) at **R295** each. For more info call 011-450-4168. ☘



## Norton Internet Security 2011 » Stopping online threats in their tracks

Norton Internet Security 2011 sees Symantec introducing a streamlined new user interface (UI) along with useful new tools. Most importantly the software uses much less of your precious processing power to get the job done this time around.



From the start things are markedly faster. Install time has been sped up in Norton Internet Security 2011, with the program now including a smooth new install

interface that can be completed in less than a handful of clicks. From popping the disc into the optical drive to running the program for

the first time, less than two minutes had gone by, while online registration can also be quickly completed.

### Interface

Norton Internet Security 2011's interface remains largely the same as last year's version. On the left side of the interface the three main security sections are plainly laid out – computer protection, network protection and web protection. The sections include functionalities such as antispyware, firewall protection, safe surfing and identity protection settings.

### Features

As can be expected users can easily scan their system for viruses, with a full, quick and custom scan option, with Norton offering firewall and online protection settings too.

Norton System Insight version 2.0 monitors your system for programs using an unnecessary amount of memory. By clicking on the 'Performance' button in the upper right part of the interface, the UI flips around and users can see exactly how System Insight is monitoring their computer.

Norton's SONAR (Symantec Online

Network for Automatic Response) makes an appearance once again, policing your PC for suspicious software behaviour. Users can now even tell the program to scan their Facebook walls for any malicious links that might have been carried over.

### Conclusion

Norton Internet Security 2011 offers users a comprehensive antivirus solution that keeps them safe from viruses, malware, spyware and online threats. Most importantly 2011 shakes the resource intensive image of old Norton packages since it uses a minimal amount of system resources. A three PC license is available for **R899**. [JK] ☘

### Norton Activity Map

An interesting new feature is the Norton Activity Map – a small map of the world which can be used to see virus threat statistics for the world's major cities. Clicking on different parts of the world will display threats blocked by Norton. At the time of writing Pretoria sported 1605 active threats, Cape Town 2094 threats, with JHB in the lead for SA with 3271 threats.

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11%. PCs that are recycled, a higher percentage than televisions.

## Sci News



### Pretty flamingo

Birds want to look pretty to catch a suitor's eye. But we're not talking about the human kind. A study which recently appeared in the journal *Behavioral Ecology and Sociobiology*, showed that flamingos apply natural make-up to their feathers to stand out during the mating season. During this time the birds' plumage tends to be a bright pink-orange, which fades shortly after they start to breed. The scientists found that the surface of the feathers is tinged by an orangey secretion from a gland near the base of the tail, which the birds probably apply by rubbing their heads on their necks, breast and back feathers. The specific rubbing behaviour occurs regularly during the mating season. Pretty in pink indeed.

#### » Other interesting stuff

Is good luck at gambling all in the genes? <http://bit.ly/genegamble>



### Fast touch

Some people are really good at touchy feely stuff. According to an article recently published in the *Journal of Neuroscience*, people who have been blind from birth can respond to touch much faster than those with normal vision or who became blind later in life. Scientists measured the response time to a tap on the index finger in normal sighted people and those with various levels of vision loss. On simple tasks, such as distinguishing between a light and a strong tap, the two groups performed similarly. But when a light touch was followed immediately by a longer vibration, the participants who had been blind from birth responded much quicker than any of the other volunteers. Researchers believe that the lack of visual stimulation changes the way the brain processes tactile information.

New cell type implicated in vision <http://bit.ly/iseevision>



### Food for thought

Here's a handy tip for those of us without grand culinary skills: make your guests work for their dinner. According to a study in the *Proceedings of the Royal Society B*, food becomes more attractive if it was hard to come by.

Scientists trained mice to press a lever to receive a food reward. In one test, the lever had to be pressed only once to drop the titbit, while in another it had to be pressed 15 times before delivering a similar nibble.

Later, when the mice had free access to the two treats, they clearly preferred the type they had to work for – and seemed to enjoy it more. The results suggest that food enjoyment may be linked to the amount of effort that goes into getting it. Bon appétit. [LP] ❄

Total number of known stars in universe triples <http://bit.ly/starsinthesky>

## Eco News



### Legendary achievement looming for the Toyota Prius

Toyota's poster child vehicle for the green car industry, the Prius, has been the best-selling car in Japan for the past 18 months. But even more impressive is the fact that the Prius is on track to beat the record set by Toyota's legendary Corolla (300 008 cars) for most sales in Japan within a calendar year.

January to November Japanese sales of the Prius clocks in at 297 563, which is a mere 2 445 cars shy of the record set by the Corolla two decades ago. Seeing that Toyota has been selling around 20 000 Prius's per month, this green car looks to be a certain bet to become the new record holder.

#### » Other interesting stuff

Dreams of a world where fuel-less planes occupy the skies. <http://tcrn.ch/hHKFg5>



### Cisco makes other IT companies green with eco-envy

Networking and communications technology company, Cisco, has claimed the number one spot on Greenpeace's Cool IT Leaderboard. The environmental watchdog group named Cisco, Ericsson, as well as Fujitsu, as the top three most environmentally responsible IT companies. Cisco scored 70 out of 100 possible points, whilst Ericsson notched up 57 points and Fujitsu 52 points. Points are awarded based on a company's efforts to offer economy-wide technological climate solutions, which will contribute to global greenhouse gas reductions, initiatives that they offer to reduce their own global warming emissions and whether they are actively engaged in political advocacy as well as support for science-based climate and energy policies.

Manure will become a valuable commodity in the US again. <http://bit.ly/grNDFh>



### HP first to ship new greener Ethernet Standard

HP has announced that it is the first company to ship products based on a new energy-efficient Ethernet standard, which the company helped to develop. Products utilising this new standard enables their users to reduce the energy consumption and operational costs of their IT equipment.

This IEEE Energy Efficient Ethernet standard (IEEE 802.3az) reduces power consumption of IT equipment by automatically adjusting energy use based on actual network traffic between switches as well as other networked devices in real time. The new HP E-Series zl modules are the first IEEE Energy Efficient Ethernet-enabled switches to automatically enter "sleep mode" as will connected EEE-devices, when no traffic is being transmitted. [HD] ❄

Excellent website for all things green. <http://www.thedailygreen.com/>

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200. Memory caching servers needed for Facebook's day to day operation.





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\$2 billion. Expected sales for Facebook for year end 2010.

## PC Medic » First aid for your PC

It is said that the idea for the Large Hadron Collider came to him in a dream and that he knows how to turn off the entire internet. The PC Medic answers some of your tech related queries.

**Q** Hallo PC Medic. I recently bought a new portable hard-drive for my PC to keep videos and music on. When trying to copy high-definition movies though it keeps saying the drive is full, even though there's more than enough space to be able to copy it. Fix? Romana Bailey

**A** It would seem that your drive has been formatted as a FAT 32 drive, which will allow you to copy files up to 4 GB in size. Just reformat it (after you've moved all your stuff off it) so that it utilises the NTFS file format, which should fix this issue as the NTFS file size limit is 16 TB (or 16 000 GB).

**Q** Hiya PC Medic. I wanted to know if there is a way in Windows that will

allow me to encrypt my flash-drive that I use to save work files on, without having to download new software to do this? I use Windows 7 Ultimate both at work and home. Pieter Uys

**A** You can utilise Windows BitLocker Drive Encryption in order to protect your memory sticks. To employ BitLocker, insert the flash-drive (that uses the FAT/FAT32/NTFS file system), click on the "Start" button and then select "Computer" (alternatively just double click the "My Computer" icon on your desktop). Right click on the flash-drive and then click on turn on BitLocker.

Where it says "Choose How You Want To Unlock This Drive", select one or more of the options such as "Use a password to



unlock this drive" and then click "Next". Now you can just save/print your recovery key (for if you happen to forget your password) and on the "Ready to Encrypt This Drive" page click on "Start Encrypting". Remove the memory stick only when the encryption process is complete. This is only available in the Ultimate and Enterprise editions of Vista and Windows 7 though.

### » Tips for Windows 7:

#### Taking a screenshot

Want to take a screenshot of an interesting page or high-score? Simply hold down ALT and press the "Print Screen" key if you want to include the entire screen. For some added

functionality, such as the ability to take a snapshot of only a certain section of the screen, as well as highlighting certain paragraphs within the screenshot, you can make use of a very useful program in Windows 7

called the "Snipping Tool". Click on the "Start" button, then "All Programs" and you'll find it under "Accessories". You'll be able to save your screen-grab as an image file such as JPEG or BMP (or even an HTML webpage file). ❖

## Jargon Busters » The Intel Edition

We continue our series of jargon busting features as we take a look at some amazing, yet sometimes confusing, technology from Intel.



#### Core i3, i5, i7 processors

So what exactly does it mean when a computer has an i3 or i5 processor? Well, firstly they are naming conventions, designed to differentiate between the different offerings on the market, with processing power increasing from i3 through to i7. While Intel's Celeron and Pentium are seen as entry-level processors, the Core range is aimed at mid to high performance users. The Core processors are all based on the Nehalem micro-architecture and while there may be vast performance differences between an i3 and i7 chip, they do share a couple of similarities. For the layman, the only knowledge really required is knowing that the different strengths of the processors are indicated by their numbering conventions, just like a Pentium 4 is better than a Pentium 3.

#### Sandy Bridge

Sandy Bridge is the codename for the next generation of Intel micro processors,

slated to be the successors to the current Nehalem range. The processors will be manufactured using the same 32 nm (nanometre) process as used in the current range. The new generation is purported to be equipped with impressive integrated graphics which are apparently powerful enough that it might eliminate the budget graphics solution market (not good news for AMD and Nvidia). These next generation processors will be officially launched at the Consumer Electronics Show 2011 in Las Vegas, Nevada, on the 5th of January 2011.

#### Intel GMA graphics

Intel GMA (Graphics Media Accelerator) is a graphics solution built into the company's Core i (see above) line of processors. This enables users to gain access to decent graphical performance without needing to buy dedicated video cards. Intel GMA includes built-in support for graphic intensive 1080p full HD playback, supports DirectX 10, Shader Model 4.0 and OpenGL 2.0, making it a very useful solution that will effortlessly take care of any media playback as well as allowing you to play a couple of games on the system.



#### Moore's Law

Moore's Law, not to be confused with scientific laws, is a long-term predictable trend that has been observed in computing hardware since the 1950's. The law states that the number of transistors that can be placed on an integrated circuit doubles approximately every two years, basically doubling processing power. The trend has continued since the invention of the integrated circuit in 1958 and today many digital devices have been linked to Moore's Law. Advances in processing speed, memory capacity and even the number of pixels in digital cameras can all be measured using Moore's Law. The law is named after Intel co-founder Gordon E. Moore, who first described the trend in a 1965 paper. ❖

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Top 5 games of 2010: "Starcraft II was an obvious one, I  
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though. Other than that it's gotta be an awesome game  
even though I've never laid my hands on it."

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## Need for Speed Hot Pursuit » Fast cars, furious police

**16 years and 16 titles down the line, Need for Speed Hot Pursuit might possibly just be the greatest Need for Speed title ever created.**

The plot this time round is simple, since in Seacrest County all the rich people around the world, including you, flock to race their expensive cars. The police, having to deal with these racers, have in turn upgraded their cars to become the fastest law enforcement agency in the world.

From the word go this game is an adrenaline fuelled ride. The first cars available to you are already top tuned and breathing fire from the exhaust pipes. There is no need to constantly upgrade your vehicles as in previous NFS titles since every car is already tuned to its maximum performance level and equipped with racing nitrous system, excellent suspension and bad boy racing tyres.

### Gameplay

At the start of the game a map of Seacrest County is revealed, with the ability to do missions as either the ones doing the racing or the cops doing the

chasing. The racer part of the game is fairly simple. You select a car and off you go into winding desert tracks, crowded country roads and snowy mountain slopes. The races are either a one-on-one challenge, a four to eight car race or a solo timed race. In these races players collect bounty which makes their drivers and car choices level up and unlocks new tracks. Just be careful of the hated Seacrest County Police who will appear and try to run you off the road, and they are not gentle.

### Performance

The cars in Hot Pursuit are meticulously animated and the scenery is picture perfect. The cars handled very realistically, sliding on wet tracks, losing speed when driving on dirt road shortcuts and losing all grip when activating nitrous. A big problem, graphic and sound-wise, comes in with the police missions, since you can't switch off the sirens or lights. So every police mission is filled with the annoying screeching of sirens and the constant flashing of red and blue (insert epilepsy warning here).

### Conclusion

Brilliant graphics, great sounds and realistic gameplay makes this, in our



opinion, one of the best Need for Speeds ever. The missions are sometimes incredibly challenging to even the most experienced video game driver but it is worth doing some missions over and over again just to see how beautiful it all looks. The game is available for **R499**. [CM] 🌟

### » The Good

Offers great graphics, realistic handling, great tunes and days of re-playability.



### » The Bad

Police missions tend to get annoying with the sirens blaring the whole time, while the game is sometimes incredibly difficult.

## Gran Turismo 5 » Racer to rule them all

**The latest iteration of "The Real Driving Simulator" has taken six years to take to the track, but has it been worth the wait?**

The original Gran Turismo was released in 1998 on the PlayStation, sporting almost 200 cars to drive, an amount unheard of then. The new GT5 boasts a line-up of over 1000 cars that can be raced on 71 tracks within 26 different locations – all in glorious high-definition (HD).

### GT Life

The bulk of GT5's activities lie within the overarching main mode dubbed GT Life. Here you learn the ins and outs of racing via the licence tests, as well as partake in what is certainly the heart of any GT game – buying your first wheels, race, upgrade it, purchase a better ride and do it all over again.

Most of the racing action in GT Life takes place in either the A spec or B spec modes. In the former you get behind the wheel as a driver, to increase your level by challenging a variety of racing events. Within the B spec races you assume the role of the director of a racing team and give commands in races to your AI-controlled driver, such as maintain pace, increase pace and overtake. This might not be nearly as exciting as racing

yourself, but it certainly is a lot more difficult to win races, since you are relying on the driving skills of someone else.

### Sound and graphics

Although the HD visuals are stunning the music soundtrack of the game isn't really, as the uninspiring smooth jazz music comes across as really cheesy. But it's the on-screen action which takes precedence over the music and the game's graphics will not disappoint in that regard, seeing that GT5 boasts full HD (1080p) visuals and incredibly high-detail on all the vehicles and tracks. Simply put, if you want to see something more real, you have to watch racing events on DStv's Supersport HD channel.

### Final word

Is GT5 still king of the driving simulation racers? The short answer is yes. The long answer is hell yes! Is it perfect? No, far from it, but like its tagline promises, it is the most realistic racing title available boasting the best graphics and most realistic handling. It retails for **R699**. [HD] 🌟



### » The Good

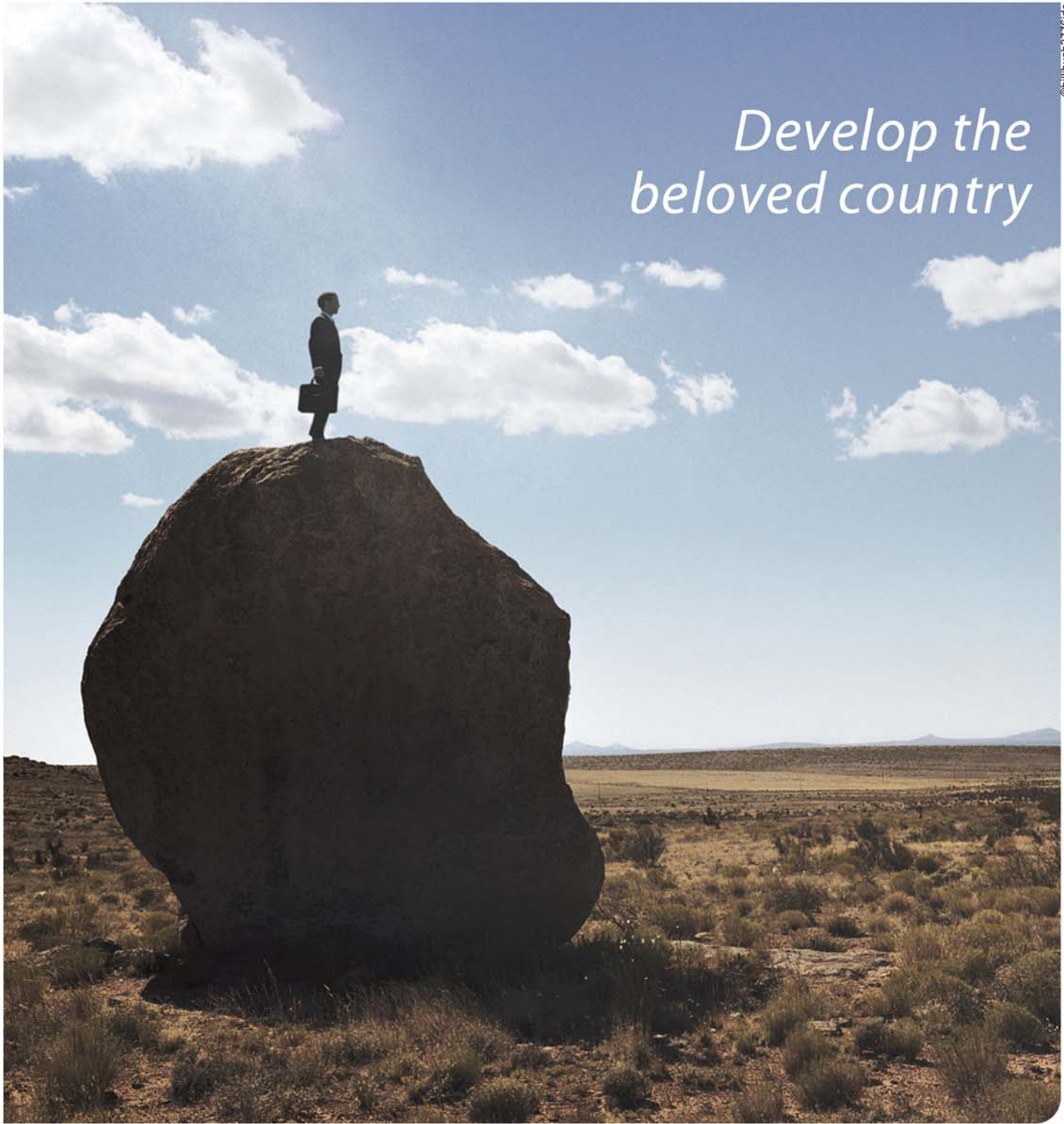
The HD graphics are amazing, the cars look stunning and the tracks are completely gorgeous.



### » The Bad

Long loading times and cheesy game music.

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