

THE SECURITY ISSUE

SA's LARGEST TECH MAGAZINE

www.techsmart.co.za

## WELCOME TO BROADBAND CENTRAL



Getting to where you want to go on the Internet is easy, as long as you start from the right place. Altech Autopage Cellular is South Africa's preferred independent service provider. We didn't get there simply by offering the most

networks with the most options, but also because of the analysis and advice we provide to each and every one of our clients. Which is why wherever you need to go on the Internet, start with Altech Autopage Cellular.

For more information please visit www.autopage.co.za or any of our stores nationwide.

Alternatively call 0860 82 83 84.

# ALL ABOARD FOR NONSTOP DATA



#### **FREE HUAWEI E1550**

On Vodacom MyMeg 300

SIM & Connection worth R202 (incl VAT) 300MB Data PM

Subscription

R129PM



vodacom



Sign up

and get a

R500

Gift Card

#### FREE HUAWEI E1550

On MTN Extended Data 350MB

SIM & Connection worth R239 (incl VAT) 350MB Data PM

INCLUD

Subscription

R159 PM







#### FREE BLACKBERRY 8520

on Vodacom Weekend Everyday

120 Off peak minutes PM BIS BIS

Total monthly cost

R169<sup>PM</sup>

Once-off SIM & connection cost of R202 (incl VAT) MONTHLY MANDATORY COSTS Itemised/Online Billing R23.00, AutoSIM R4.00, CLI R8.50

- Dedicated Media Keys Easy Media Sharing
- Easy Trackpad Navigation





Total monthly cost:

R99<sub>PM</sub>

- Upfront device fee of R599 (incl VAT)
- No bundled offer, pay according to use
- Monthly reimbursement of R25 (maximum) across voice, SMS and data usage
- NeoMail Basic





#### Register for Rica now!

Rica is a new law that requires every SIM card to be registered, whether it's in your phone or modem. It's free, and it's easy, because we'll do it for you! Just follow these two steps...

- Grab your green barcoded ID book or passport.
   A recept hill that above your address.
- A recent bill that shows your address.
- Register your SIM card at any one of our stores nationwide.

#### We'll do the rest!

Remember, you have until 31 December 2010 to register. If you don't, your SIM card will be blocked.

PRETORIA:

Parkview Mall (012) 993-3984/ 3764

vodacom

Brooklyn Mall Centre (012) 460-9213/4 Pretoria-Central (012) 323-6000 Centurion Mall (012) 663-5157 Centurion

Lifestyle Centre (012) 653-7738 Faerie Glen (012) 991-3659 Gezina (012) 335-8790 Irene Village Mall (012) 662-4292 Menlyn Park (012) 348-7394 Montana (012) 548-7864 Pretoria-North (012) 546-5333 Pretoria-West (012) 327-7161 Zambezi (012) 808-1003



Terms and Conditions apply. For full terms and conditions visit www.autopage.co.za.

Offers valid until 06 August 2010 and while stocks last.

All prices quoted include VAT. E&OE.

#### Access all areas

s a free and open source of Ainformation, the internet has completely changed the way we relate to information. So when people in power start questioning what one is able to view on there, I get concerned. This is exactly what deputy minister of Home Affairs Malusi Gigaba is trying to do with a proposed Bill aimed at the total ban of pornography on the net and cellphones.

While this is done under the fair cause of protecting children against harmful content, someone is still trying to limit what you and I are allowed to access. The problem here is where will it stop? In China the "Great Firewall of China" is also implemented under the guise of "protecting" people from pornography, but at the same time it

severely limits other content and services. Can this proposed ban not lead to the further encroachment of what we are allowed to read and publish?

The Bill is yet to be laid before Parliament, and while South Africa remains a free and open democracy, curbing our freedom to access information should set certain alarm bells ringing.

Mike Joubert <michael@techsmart.co.za> The phone featured is the new Samsung Wave.

Copyright © 2010, All rights reserved. No material, text or photographs may be reproduced, copied or in any other way transmitted without the written consent of the publisher. Opinions expressed are not necessarily those of the publisher or of the editor. We recognise all trademarks and logos as the sole property of their respective owners. *TechSmart* shall not be liable for any errors or for any actions in reliance thereon. All prices were correct at time of going to print.

#### HIRED!

TechSmart.co.za would like to welcome two new fulltime journalists to our editorial staff.



om Manners joins us from MvBroadband.co.za to take over the Head Journalist position. He comes with a heap of experience writing about tech and, defying the conventional geek image, is actually in a well known rock band. Tom is currently seriously considering the new iPhone 4 (see p8) and is on a continued quest to find a working Sega Megadrive and a copy of Sonic the Hedgehog.



ohan Keyter has swopped fast cars for fast PCs since joining us from Car and Leisure magazine. Apart from trying to get his mits on the new Nintendo 3DS (see p10), Johan is also pondering how to arrange his living room to make sure the coffee table doesn't get smashed once Microsoft's Kinect (again p10) arrives.

#### techsmart.co.za | July 2010

#### **Feature**

10 Best of E3

#### Regulars

- 6 Feedback
- Tech News
- TechSmart Poll
- 9 Sci News
- 26 Virus safe and secure: Parental control on the weh
- 28 DIY Dude: How to: Make a Matrix themed keyboard
- 29 PC Medic
- 29 Jargon Busters!
- 30 Web Time Wasters

#### **Mobiles**

- 12 LG Pop GD510
- 14 Nokia N97 mini

#### **PC Hardware**

- 16 Asus G51J 3D Gaming Notebook
- Samsung R580 Notebook
- 18 Acer D241H Monitor
- 18 Evetech Intel Core i3 overclocked Gaming PC

#### Gadgets

18 Canon IXUS 210

#### Security

- 22 Miro distribution Buyers Guide
- Security Gadgets and Goodies
- EDP Communications: Server room protection
- 23 EMID

#### **Software**

- 24 Kaspersky Pure
- 24 Kaspersky Mobile Security 9

#### **Peripherals**

25 Iomega iConnect Wireless Data Station

#### Gaming

- 37 Super Mario Galaxy 2
- 38 Modnation Racers
- 38 SBK X Superbike World Championship

#### Competitions and Give-aways

6 Lexmark INTERACT 3-in-1 Printer

Editor TechSmart & TechSmart.co.za Mike Joubert > 083-290-2889

michael@techsmart.co.za **Business Manager** George Grobler > 083-460-0402

Advertising: Key Accounts
Suzanne Grobler > 083-742-6370 suzanne@smartpublishing.co.za

Advertising: Sales Manager Anneke Kirchner > 083-301-9134

anneke@smartpublishing.co.za Head Designer Brett Wilson

Contributors Mike Joubert [MJ], Linda Pretorius [LP], Johan Keyter [JK] Hanleigh Daniels [HD], Tom Manners [TM] MJ Stephenson

**Accounts & Subscriptions** 

Ronel Keet > 012-362-2732 accounts@techsmart.co.za Distribution

Renier van Vuuren > 073-166-1515 renier@smartpublishing.co.za



98 513 copies per month Consumer: SciTech [Oct - Dec 2009]

#### Published by



SMARTPUBLISHING MASS MEDIA SPECIALISTS

Distributed by







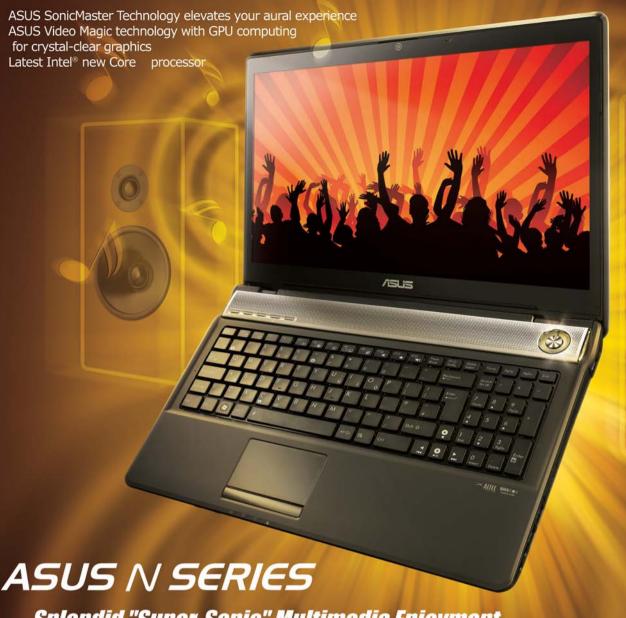








CTP Printers JHB 101:(011)230



Splendid "Super-Sonic" Multimedia Enjoyment.

Powered by an Intel® Core™ i5 processor and Windows® 7 Professional, the ASUS N61J Series notebook has put a world of unlimited multimedia enjoyment at your fingertips. It's perfect for the new age of rich multimedia content. With its high speed USB 3.0 capable of data transfer 10 times faster than USB 2.0, High definition Video, nothing is impossible with the ASUS N61J. The audio-visual performance of the N Series is simply awesome. Its exclusive SonicMaster technology is specially designed to enhance sound quality and voices for MP3 playback, while the Video Magic technology with color Intelligence Splendid technology and Zero-Bright-Dot panel Guarantee pushes visual performance to a stunning new level of clarity and vibrancy. Experience multimedia like never before with the ASUS N Series notebooks.

#### N61JA

16" HD ATI HD5730 1GB N61JV 16" HD White nVidia GT325M 1GB

- i5 430 2.27GHz Processor
- 4GB DDR3 Memory
- 500GB 5400rpm HDD
- 8x Super Multi-Dual DVD R-RW
- Microsoft Windows 7 Home Premium



Faster. Smarter.

Celeron, Celeron Inside, Centrino, Centrino Inside, Core Inside, Intel, Intel Logo, Intel Atom, Intel Atom Inside, Intel Core, Intel Inside, Intel Inside Logo, Intel Viv. Intel VPro Inside Xeon, and Xeon Inside, are trademarks of Intel Corporation in the LLS and other countries.



For more information please visit www.rectron.co.za or call 0860 502 835 / For Support call our National Technical Support Line: 0861 788 789

Johannesburg: Tel: (011) 203 1000 Fax: (011) 203 1940 Cape Town: Tel: (021) 555 8200 Fax: (021) 555 7136 **Durban:** Tel: (031) 582 0200 Fax: (031) 582 0280 Port Elizabeth: Tel: (041) 398 7082 Fax: (041) 398 7135 Bloemfontein: Tel: (051) 430 0000 Fax: (051) 430 1144

South Africa - (011)783 5450 - ASUS\_za@asus.com - www.asus.com - Find us on Facebook (ASUS South Africa) and Twitter (ASUS\_za)

WE WANT YOUR FEEDBACK!!! Comment on the news and reviews on TechSmart.co.za or our Facebook and Twitter pages and you might win the incredible Lexmark INTERACT 3-in-1 printer, scanner and copier with touch-screen.

#### **TECHSMART FEEDBACK**

#### **Comment on the Canon IXUS 210** (see p.18)

Wan-Ting on **TechSmart.co.za** says: I have a thing for reading about the latest cameras as if they were collectables! I absolutely enjoy reading the TechSmart reviews, as they give me so much insight and are also a very big deciding factor in whether or not I'd actually purchase it one day, or tell someone about it. I'm a student and cannot afford a grand camera, but reading the reviews almost makes me feel like I own one!

Thanks Wan-Ting. You'll find most reviews on our website are much more in-depth than those placed in the magazine. Congrats on winning the Lexmark INTERACT 3-in-1.

#### FEEDBACK FROM THE NET

Privilege Tavagwisa says: Mike, I love your editorial in the June issue! It's AYOBA! Go Bafana for sho!

#### **Comments on Vodacom to release R400** smartphone

Sbusiso Ngubane says: Question is how does it compare with BlackBerry and the likes? Does it give them any competition? @afairweather says: Not bad for R400 -

but lack of 3G may be a deal breaker.

- CASH REGISTERS - PC POINT OF SALE - SCANNING -TOUCH SCREEN - NETWORKING - SCALES - BAR CODING -

#### Comment on PayPal and FNB

Leon Uys says: I've used the FNB - PayPal linkup now for two months, and for a smalltime blogger like myself (www.lu.co.za) it works very well to get Google Ads money back into my pocket. Recommended.

Comment on the Mecer M770CUH laptop Adam Jorgensen on TechSmart.co.za says: Got this laptop last Friday and it is a very nice buy. Can now be had for R11k and is an even better deal at that price. Perfect for a roaming software developer.

#### **Comments on Nokia N8 announced**

Jaco says: Is this a decent competitor to iPhone? Hope so, as I'm a Nokia fan!!

Marnus Pietersen says: I'll second you on that and add that I hope it kicks the Samsung Wave's butt!

#### Comment on Google Street View launched in SA

John Gore says: Great news, we have been looking forward to the release of Google Street View in South Africa for a long time now. There is even a website for all the funny and interesting images the Google Street View cars photographed at www.360streetview.co.za

#### Comment on New iPhone 4

Benedict Moeti says: Now that's what I'm talking about. Go Apple go...



PRINT LESS SAVE MORE

Did you know? 1 in 6 pages printed in the workplace are never used!

Let's protect the planet together. Let's stop printing waste!



Print internal/proof documents in draft, it uses less ink toner.

Tips from Lexmark for those of us looking to improve our printing practices, for the benefit of the environment.

Give us your feedback on any of the



articles by emailing us on info@techsmart.co.za or leave comments on our website or Facebook page.

The Feedback of the Month wins the incredible Lexmark INTERACT 3-in-1 printer, scanner and copier with touch-screen. It includes paper saving Eco Mode and a three-year guarantee with lifetime phone support.



**B** Uniwell 086 100 5855 Superb Uniwell Systems 555 Mitchell Street Pretoria West 0183 South Africa Tel: 012 327 5855 Fax: 012 327 6275 sales@superb.co.za www.superb.co.za

**HUniwell** 

CONN CTION

olivetti





e-PoS







#### **IMPORTER & DISTRIBUTOR**











www.superb.co.za

**Dealers Countrywide** 

Franchise/Dealer Opportunity Available

CASH DRAWERS - SCANNERS - POLE DISPLAY -- POS PRINTERS - RIBBONS - RENTALS-REPAIRS TO ALL MAKES OF CASH REGISTERS -



#### DEDICATED TO

Focus specifically on the Hospitality, Retail & ....Catering Global distribution and support network Software development for PoS, Back Office & Head Office Systems integration with option of embedded or PC based systems Range of PoS terminals to suit various styles of operation & budgets



## TOUGHBOOK®

**Computers** for the **Outside World**™

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

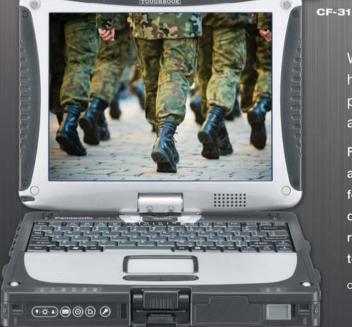
#### **SPECIFICATIONS**

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

**Available August 2010** 







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.

Conditions apply. E&OE.

**CF-19** 

#### Panasonic ideas for life

#### New iPhone (officially) announced

Cteve Jobs officially launched the new Apple SiPhone 4 to much praise. At 24% thinner than its predecessor, the new phone contains the same mysterious A4 processor as found on the iPad, and will run on the new iOS4 operating system (also available to download for older models). Apple also targets previous weak points by opting to include a 5 megapixel camera with 720p video recording capabilities and a larger battery. (http://bit.ly/aQvteI)



#### OnLive brings gaming over the cloud

ow does top quality gaming without a high-end PC or console sound? That is exactly what the newly launched OnLive gaming system promises. With OnLive you can simply connect your PC to the net, open the OnLive client and start playing. There are no installs or requirement issues to deal with, since computing takes place in the cloud. At this stage it's only available in the US. (http://bit.ly/cH2vdK)

#### No more sitting in traffic

ive traffic updates on GPS units are at long last available to traffic weary South Africans. TomTom was first out of the blocks with their LIVE Service, which integrates data coming from Tracker and TrafficNet and sends





#### BANDWIDTH SPECIALS

Get your information there ... FAST!



High speed Diginet Internet access for companies. Unlimited, synchronous data transfer service.

Standard Features include:

- World class Firewall
- Diainet leased line
- Fixed IP Addresses
- 24/7 Line Monitoring & management
- 24/7 Technical Support

Pricing Options from 256Kb for R2,999 pm to **2Mb for R21,999 pm** (Ex Vat)

updates every three minutes to their new SIM card integrated units such as the GO 750 LIVE.

Garmin soon followed after partnering with Altech Netstar Traffic to launch Garmin Live Traffic. Radio Data Service (RDS) is used to update units, with the Garmin nüvi 1300 the first to sport this feature. Both these services require subscription. although some units will be bundled with free first year. (http://bit.ly/9iIYbb) (http://bit.ly/cUedq4)

#### Hot new Products

#### Vodacom R400 smartphone

Jodacom has announced plans to launch a lowcost R400 smartphone. The ZTE Vodafone 546 will feature a 2.2" screen, a 2 megapixel camera, microSD support but no 3G support, only EDGE. There is no news on when it will be available vet. (http://bit.ly/9Mb2Ew)



#### **Garmin Forerunner 110**

adget obsessed athletes Take note, Garmin has launched their latest Forerunner running watch. The less bulky 110 uses a GPS to track your run and when paired with Garmin's heart rate monitor will also be able to display your heart rate data and can perform heart rate-based calorie computations. It will set you back R2200. (http://bit.ly/ak9afS)

#### Libretto W100 limited edition

ouch-screens are very hot right now, but two in one laptop? That's exactly what Toshiba did with the Libretto W100 with dual touch-screens. The second touch-screen is situated where the keyboard is usually placed allowing you to surf the web on one screen whilst checking email or documents on the other, even displaying a webpage across both screens simultaneously. (http://bit.ly/d598Kd)



#### Nokia X5

 $T^{t's}$  hip to be square with Nokia's latest X5, featuring a slide-out QWERTY keyboard, social media integration and a 5 megapixel snapper. It should reach our shores later this year. (http://bit.ly/9fFOsD)



#### TechSmart.co.za online poll results

#### What's the most important feature you want in a smartphone?

	•	
Good browsing ability.		25%
Decent battery life.		20%
Lots of available Apps.		] 14%
GPS with navigation.		] 13%
Ease of making calls and SMSing.		] 8%
Push email.		] 8%
Wi-Fi connectivity.		] 6%
Personalised User Interfa	ice.	] 4%
Social Networking integr	ation.	] 2%

FOLLOW US Facebook: http://tiny.cc/TSFB Twitter: @TechSmartMag

#### Pinning down pain



The Chinese have sworn by the power of acupuncture for thousands of years. And now scientists in the journal *Nature Neuroscience*, say that they may

know why the prickly method works. The results point to a release of adenosine, a natural painkiller and antiinflammatory chemical. Researchers gave mice with paw pain each a half hour acupuncture treatment similar to the technique used on people. In those without active adenosine receptors, the acupuncture had no effect. But for mice with normal adenosine function, the levels in the pricked tissues were significantly higher shortly after the treatment than before. When the acupuncture was combined with a drug known to delay adenosine removal from tissue, the pain relief lasted almost three times as long as after normal acupuncture treatment. Sharp.

 Help to untangle the mystery of knots: http://tinyurl.com/notaknot

#### Right on the nose



Sharks don't waste time when they smell their food. Really. According to a recent study published in the journal Current

Biology, sharks use the time difference between a scent hitting their left and right nostrils to steer them in the right direction. A time lag of up to half a second will cause the fish to turn to the side that picked up the scent first. But in the absence of a time difference or if the lag between the two nostrils' sensation is too long, a right or left turn is equally likely. The finding explains why sharks can track their dinner so effectively, despite the chaotic distribution pattern of scent molecules under water. The discovery may help underwater robots to locate chemical leaks.

#### OTHER COOL READS

 There's much more water on the moon than thought: http://tinyurl.com/ wateringthemoon

HP 4320s

Intel Core i3-350M 2.26GHz

3GB DDR3 Memory

320GB Hard Drive

13.3" LCD Display

**DVD-Write** 

Wireless Lan Bluetooth

Windows 7

Professional

#### Break out the bubbly



If you thought bursting bubbles is child's play, think again. According to a recent article in the journal Nature, 'pop'

science is quite complex. Bubbles form when tiny gas pockets get trapped under thin liquid films, which in turn are held tight by surface tension. When scientists recorded bursting bubbles they found that at the burst moment, a pressure change between the inside and outside of the bubble causes the film to fold in on itself. This traps a new pocket of gas and because of renewed surface tension tiny secondary bubbles form. After two rounds though the bubbles become too small and no longer have the round shape needed to create the right amount of surface tension, causing the gas to dissolve in the liquid. See how it happens at http://tinyurl.com/ bubblesgopop. [LP]

What will cities look like in 20 years time?
 http://tinyurl.com/citiesforyou



#### FOR ALL YOUR NOTEBOOK NEEDS

1292 Heuwel Avenue | Centurion, 0157 | (Next to GWM) | Prices Quoted are CASH or EFT only!

#### OI2-663-II55 www.laptopcity.co.za | sales@laptopcity.co.za

#### Lenovo G550



R5550

#### HP Compaq 620



R4990



HP 4520s

HP Compaq 620

Intel Core i5-430M 2.26GHz

18850

3GB DDR3 Memory

320GB Hard Drive

**DVD-Writer** 

Bluetooth

**Built in 3G** 

Windows 7

**Professional** 

Wireless Lan

R6950



Alcohol-free Cleaning Solution Brush, Microfiber Cloth, Carrying Bag

LCD Mini Cleaning Kit



R50 🦹

#### Dell Studio 1558

Intel Core i5-540M 2.53GHz 3GB DDR3 Memory 320GB Hard Drive 512MB ATI HD4570 VGA DVD-Writer Wireless Lan, Bluetooth Built in 3G Windows 7 Professional 64Bit

R11800 🦹

#### 3 Fan Cooling Pad



R120\mathbb{R}

#### Laptop Batteries



Laptop Chargers







Terms and Conditions apply. Stocks are limited. E&OE. Product may vary from picture. Prices may change without notic due to Rand Dollar fluctuations. All price gueted are cash or FFT only and Incl. VAT

#### SPECIALISTS IN LAPTOP REPAIRS

Printer Repairs | Repairs | Upgrades | Projector Repairs | LCD Screen Repairs

All repairs done in our workshop



## OW GAMING WILL CHANGE

#### WHAT WENT DOWN AT THE 2010 E3 GAMING CONFERENCE



The globe's largest annual gaming conference, E3, was recently held in Los Angeles. Console manufacturers Sony, Microsoft and Nintendo were particularly vocal regarding plans for their respective consoles as well as roadmaps for advanced motion control and 3D technology. We check out what might be some major changes on the gaming front.

# **Xbox 360 Kinect** NINTENDE 3DS Nintendo 3DS

PlayStation Move

Project Natal becomes Kinect

After months of referring to Microsoft's motion sensitive gaming hardware as Project Natal, the company finally revealed that it will be released under the name 'Kinect'.

This will bring motion controlled gaming to the Xbox 360 and will reportedly expand on the capabilities of Nintendo's Wii, which was released in 2007, giving players more accurate playability and additional functionality.

The slender peripheral will be available in black and will incorporate a camera, audio sensors as well as a motion-sensing technology which tracks 48 points of movement on the human body and connects to any Xbox 360 console. It will also be able to recognise human faces.

Thus far Microsoft has remained tight lipped regarding pricing and release details. Nonetheless we expect Kinect to hit shelves in time for the festive rush.

#### Microsoft updates Xbox 360

Microsoft announced its response to Sony's PlayStation3 Slim, which was released in September 2009, during E3 this year. The company has officially confirmed that it will be releasing a more compact version of the Xbox 360 which will eventually replace the current

Details so far confirm that it will be considerably smaller and more angular than its bulky cousin and will also ship in a black gloss finish. Initially it will be available for \$299 (R2300).

In addition it will also feature a 250 GB removable hard drive, an internal power supply, a Kinect port for the upcoming motion control system, five USB ports and compatibility with all existing Xbox 360 hardware and titles. It will also sport a new cooling system, which should cure any overheating issues previously

associated with the Xbox 360 console.

Significantly, the new console will also incorporate 802.11n Wi-Fi support, but uUnfortunately it still DVD drive.

does not include a Blu-ray player, with Microsoft opting to stick with a regular

Nintendo 3DS

Nintendo also made its own readical announcement at E3 this year, revealing details behind its 3D enabled portable console, which works without having to wear silly glasses. The 3DS has two displays, one 3.5" screen showcasing the 3D gaming content and a smaller unit which features a touch interface.

Nintendo has included two cameras at the back of the device which will allow users to capture pictures in 3D and another camera above the top display, enabling users to take self portraits while they are using the device.

Also new to the DS range is the inclusion of a gyroscope and a motion sensor for motion-based games.

#### PlayStation Move

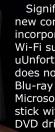
During E3, gaming heavyweight Sony also revealed further details behind its own motion control interface designed for the PlayStation 3.

Known as the PlayStation Move, it will use the PlayStation Eye camera to track a motion sensitive Wand and secondary controller which will allow the player control while playing compatible games. It will be released internationally in September, with SA prices unconfirmed.

#### box Live in South Africa

Microsoft also announced that South Africa will be one of the nine emerging countries to receive Xbox LIVE support this year. This is a serious step forward for local Xbox 360 fans who have been forced to register fake accounts internationally in the past in order to gain access to the online gaming service. In addition to this Microsoft South Africa is reportedly 90% sure that existing local players will be able to migrate their international accounts to South Africa when the service goes live this year.

Overall Microsoft certainly took the prize at this year's conference for making some if its most exciting and groundbreaking announcements in its time as a console manufacturer. This should see competition between themselves, Sony and Nintendo intensifying over the next year as each company makes its bid to capture greater market share. [TM]



techsmart.co.za | July 2010

## Complete DSL Solutions



Simplified telecoms



12 month contract

384k + 1Gig = R139 p.m.\*



month to month

512k + 5Gig = R549 p.m.\*

## ADSL 10 Gig

month to month

4096k + 10Gig = R999 p.m.\*

\*Go to www.lantic.net for Terms and Conditions.

## Ring... Ring... Ka-Ching!

Receive calls = Receive Cash

## supafone™

#### Product Information

The Vox Supafone<sup>™</sup> is a multi-functional cordless phone for making calls over the internet. It offers dual mode functionality, which means you can easily switch between internet (Vox) and fixed-line calls at the touch of a button. Enjoy the convenience of internet calls with exceptional sound quality.

The Vox Supafone<sup>™</sup> is multi-line so you can register up to 6 handsets and make up to 3 calls simultaneously: 2 Vox and 1 fixed-line call.

Plus, with its energy-saving ECO DECT technology, calling is environmentally friendly.

- > Lower cost outbound calls
- > Get paid to receive calls
- > Free Vox to Vox calls

#### Supafone 225

This includes the Vox Supafone handset and a base station plus R200 worth of talk time p.m.

for only R225 p.m.

Month-to-month contract



"Hurry, these offers might escape you!"



Contact us on 087 805 0003 or go to www.lantic.net to find your local reseller

LG Pop GD510

The Global Leaders in "ultra low cost and ultra green desktop virtualization"







Put 1000's on a server





X550 1 WATT PC PCi connected

From **R2999** / 5 user kit



L300-Enterprise 4 WATT PC Ethernet connected

Buy 10 get 1 FREE From R1699 each



2 WATT PC

**USB** connected Buy 10 get 1 FREE



Buy 10 get 1 FREE

From R1399 each

- Efficiently share one PC with up to 30 users
- Dramatically reduce acquisition & support costs
- Easy to set up, maintain, and secure
- Compact and reliable
- Exceptional multimedia performance
- Supports Windows and Linux
- Energy-efficient (just 1–4 watts per user)

"NEVER before has a single technology connected so many people at such a low cost"

Save money, time, and aggravation



Official importer and distributor of NComputing Products



CALL: 011 465-7952 Email: info@ncs.co.za Web: www.ncs.co.za

• E&OE • While stocks last • Prices are ex VAT and subject to the Rate of Exchange ruling at the time of invoice

Popping the entry-level

touch bubble



Design

The GD510 is really compact, measuring a mere 97.8 x 49.5 x 11.2 mm and weighing in at just 87 g. The 3" resistive touchscreen (240 x 400 pixels) takes up most of the space, with only 1 physical button underneath the screen. That button displays your call info showing calls received, missed and made. It also changes colour depending on the mode that its in, for example when opening an application the button will turn red to indicate that pressing it will close the app.

#### **User Interface**

LG's Pop sports the company's S-class UI that boasts three home-screens. The first home-screen is for arranging your chosen widgets (such as the music player and calender) on. The second home-screen can't be loaded with widgets, only allowing quick access to your favourite contacts, while the final home-screen features a graphical interface that LG calls Livesquare, providing users with graphical representations of the people who contacted them throughout the day. Not only does this look good, but is actually useful for quickly contacting or adding people to your phonebook.

Complimenting the three home-screens are four icons located at the bottom of the screen which are for the phone's onscreen dialler, contacts, messages and the main menu.

#### Other features

The notable user interface (UI) is displayed on its 3" screen which despite being a resistive touch-screen is still quite responsive and also boasts an accelerometer to easily switch between portrait and landscape mode. Landscape handled the menu structure wonderfully, but we did however find the QWERTY keys too small in this mode.

Browsing the web is a pretty basic affair and it lacks the speed that comes with 3G. The camera's image capture abilities are decent, but not impressive, coming courtesy of a 3 megapixel snapper that lacks flash. Onboard storage is paltry but the GD510 supports microSD cards of up to 8 GB in size (we didn't receive one in the box).

#### Final thoughts

Although it doesn't have a flash for the camera, 3G or a 3.5 mm audio jack, the GD510 is a pretty good all-round touchscreen phone for the entry-level market, thanks to its spiffy UI and compact size. It retails for a decent R1749. [HD] Read the full review on TechSmart.co.za.

techsmart.co.za | July 2010

Windows®. Life without Walls™. Toshiba recommends Windows 7.





# SUPER SATELLITE



#### > SATELLITE PRO L650-16U

- Intel® Core™ i3-330M Processor
   (2.13 GHz I FSB: 1,066 MHz I 3 MB 2nd Level Cache)
- Genuine Windows® 7 Professional
- 2 GB DDR3 RAM
- 320 GB HDD
- DVD Super Multi Drive (D/L)
- 15.6" Toshiba TruBrite® HD TFT Display
- ATI Mobility Radeon™ HD 5145 Supporting HyperMemory™ Technology
- 512 MB Dedicated VRAM
- Integrated Wi-Fi®; Bluetooth®; Web Camera
- Toshiba Face Recognition
- 2-Year Warranty



Celeron, Celetron Inside, Centrino, Inside, Xoon, and Xoon Inside are

Works the way you want. Windows® 7 is designed to improve the performance of your Toshiba laptop, so it's faster, more secure, and more reliable.

MUSTEK CALL CENTERS: JOHANNESBURG (011) 237-1000, (011) 237-1364, (011) 237-1400, (011) 237-1420
• CAPE TOWN (021) 413-3000 • KZN (031) 413-3000 • PE (041) 397-8700 • BLOEM (051) 405-0400
or visit www.toshiba.co.za Some product features are only available in certain Genuine Windows™ 7 editions and may require advanced or additional hardware or internet services.



Nokia N97 mini

## The Finnish mini me

Nokia's popular N97 was recently sent on a diet and fitness program and came back in the lean and mean guise that is the N97 mini.

Now measuring  $113 \times 52.5 \times 14.2$  mm, the mini is only somewhat smaller than the N97 (117.2  $\times$  55.3  $\times$ 15.9 mm). The same operating system and processor doing duty on the N97, also runs the show on the mini. Although performance during general usage is respectable, there is a noticeable dip while multitasking. The N97 mini can on occasion also be unresponsive when selecting an application and our unit crashed a few times.

Just like its big brother the mini also boasts a multitude of connectivity options such as HSDPA, easy Wi-Fi setup and Bluetooth v2.0 with A2DP. Also onboard is aGPS which keep you on track with Nokia's free Maps that boasts



voice quided navigation. It's

also easy to configure your personal email (like Gmail and Yahoo! mail) but business email (via POP account) takes a bit more effort.

Complimenting the host of connectivity options is the great variety of office and business functionality on offer, including QuickOffice, a PDF viewer as well as a Zip manager. Typing mail or a SMS is easy and effortless using the phone's three-row QWERTY keyboard that is located underneath the sliding tilt display.

The N97 mini makes use of a 3.2" resistive touch-screen but unfortunately the troubles we experienced on the N97

response that was somewhat lacking. The home-screen is still easy to customise by choosing the widgets you want displayed.

Another casualty of the mini tag is the phone's storage, as the 32 GB of storage that the N97 provides has been reduced to 8 GB.

>15 000. App submissions per week received by Apple. 97%. Of those apps processed within 7 days.

Although the ARM processor can do with some extra juice, the N97 mini's hardware is up there with the best, but its operating system definitely isn't. Although the N97 mini was released quite recently, it's basically a N97, which debuted in SA almost a year ago. Compared to more recent offerings from other manufacturers, the N97 mini's interface looks aged. We're also not too sure about the pricetag of R5999 which also seems a bit steep. [HD]



## breakfree and SAVE

with a software telephone based system for Windows

#### The Facts:

- Multiple Award winning IP PBX
- The leading Windows based IP PBX system
- 3CX is a 100% channel company
- 30 000+ downloads per month Worldwide
- Increasingly taking Telephony market share
- Run 3CX using HyperV or Vmware Full CRM integration: SalesForce and Outlook

#### **Partner Benefits:**

- Automatic Leads generator
- NFR (Not for resale) Key
- Full Support and Training in SA
- Partner discounts
- Partner possibilities for other African Countries
- Assistance with configuration and implementation

#### **Latest Case Studies:**

www.3cx.com/clients/remax.html LOTUS F1: www.3cx.com/clients/lotus.html

#### To become a partner:

Visit our Website www.3cx.co.za www.3cxshop.co.za Or contact us on 086 11 3CX 11











# Africa SD: Your network solution distributor in Africa









- Email Archiving
- Unified Threat Management
- Anti-Virus
- Intrusion Detection/Prevention
- Anti-Spam
- VPN
- Content Monitoring
- Firewalls

Tel: 012-665-2513 | Fax: 012-665-0509

Email: info@africasd.com

Website: www.africasd.com

Asus G51J 3D Gaming Notebook

## Into the Game

**Gaming notebooks have** always been popular, and now that Nvidia has released its stereoscopic 3D gaming technology, a number of manufacturers are delivering gaming notebooks which allow the owner to take 3D on the road.

lere the machine in question is Asus' G51J gaming notebook, sporting the quad-core Intel Core i7 720QM processor running at 1.6 GHz, 4 GB of RAM, dual 320 GB hard drives, a 15.6" LED lit full HD display, and HDMI and eSATA ports. In addition to that mouthful it also features Nvidia's GeForce GTX260 graphics card which comes equipped with 1 GB of VRAM, which is ideal for gaming.

#### 3D Vision

Packaged with the machine are a 3D USB IR emitter and a set of wireless IR 3D glasses, required if you want to view



games and content in 3D. Overall the system was extremely easy to set up and simply required a quick installation and configuration process

We moved onto game testing with Call of Duty: Modern Warfare 2. This is where the G51J really stood out; throughout the single player campaign the machine was able to produce clear imagery on 4X antialiasing with full video specifications.

Supported gaming titles have been well adjusted by the developers and Nvidia to allow for smooth and

engrossing gameplay. Watching movies in 3D (converting regular 2D to 3D) however was somewhat less seamless and resulted in a grainy feel to the

#### Conclusion

What is most striking about this machine is its ability to demonstrate just how far 3D technology has come in a very short time. This characteristic alone certainly makes the G51J worthwhile for any serious mobile gamer.

Although the Asus G51J is one of the more impressive gaming notebooks we've tested recently, the question why an individual would ever need such a machine looms heavily over its

What we find in the gaming notebook market are essentially 'PC consoles' where the purchaser is locked into a setup, at a greater price, for the sake of portability. Nonetheless the G51J performs extremely well within this market. Availabel from PC Pro Shop (012-348-4000) for **R20 200**. [TM]

#### **QUICK SPECS**

- 3D Gaming Notebook
- Intel Core i7 processor (1.6 GHz)
- 640 GB hard disk space
- 4 GB of RAM
- 15.6" Screen

#### XDSL's New Pretoria/Midrand Data Centre

Move your hosting requirements to our convenient site

**Service Offerings:** 

Co Location

**Dedicated Server Hosting** 

Dedicated access or per gig access services available

See our website for more details.



call us on

086 100 9375 www.xdsl.co.za info@xdsl.co.za Samsung R580 notebook

## Samsung smart

At present the notebook market is teeming with machines, all of which are vying for the public's attention. This has made it even harder for impressive, notebooks to gather the interest they deserve. Among these is Samsung's recently released R580, a media centre with a little extra kick.

#### **Processing power**

In terms of features Samsung has outfitted the R580 with Intel's new Core i3 M330 processor which runs at a stock frequency of 2.13 GHz and 4 GB of DDR3 RAM. Graphically speaking the R580 performs well with a dedicated Nvidia GPU set up.

The 15.6 LED backlit screen supports 16:9 widescreen and features a maximum resolution of 1366 x 768. Despite a glossy TFT coating, reflections

samsung

nks to
e. are
also minimal

are
also minimal
which makes usage easier in brightly lit
conditions.

#### Physically speaking...

Physically speaking the R580 follows in the footsteps of its Samsung brethren – it is really visually appealing, incorporating a glossy black and red finish. In this case though we can't help but think that Samsung opted for style over ease of use with regards to the mobile nature of office workers today. Nonetheless it weighs in at a light 2.5 kg which, when combined with a respectable battery life, makes it perfect for home and office.

This is however tarnished by the fact

that Samsung chose not to distinguish the mouse trackpad from the rest of the notebook body. This means that users are required to run their fingers over a highly glossy surface when scrolling, which, in hot conditions, can become very difficult.

#### **Features**

In terms of additional features the R580 includes a 500 GB hard drive which, upon first usage, can be partioned according to user preference. An eSATA port, four USB ports, an HDMI out and VGA connection round off the port offerings, with a DVD multidrive to boot.

#### Conclusion

Although we have some complaints about the R580, no notebook is absolutely perfect. Overall it packs a punch in terms of performance and overall appeal, but we feel the **R9576** price tag is a bit rich for an i3 machine. Call Phase2 Computers on 011-444-2347 for more information. [TM]

#### **QUICK SPECS**

- General usage notebook
- Core i3 M330 processor (2.13 GHz)
- 500 GB hard drive
- 4 GB of RAM
- 15.6" Screen

#### SPAAR DUISENDE RANDE / SAVE THOUSAND OF RANDS

#### DIE PROBLEEM / THE PROBLEM

- · Duur krag / Expensive power
- Onvoorspelbare kragvoorsiening / Load shedding
- · Gekompliseerde sonkragstelsels / Complicated solar systems

#### **DIE OPLOSSING / THE SOLUTION**

- Vooraf ontwerpte ligstel / Pre-designed light kit
- · Maklike "DIY"-stel / Easy DIY set
- Batterye werk onafhanklik van elektrisiteitsvoorsieningsnetwerk / Independent from grid on batteries



#### **Betta.Life.Light Solar Solution**

6 Volt, DIY Kit, Solar Power (5x LED Lights)



Upgrade pricing available on request E&OE Excluded Valid for July only Conditions apply

3 light package (2 ceiling mount lights with 1 reading lamp) upgradeable to 8 lights 5 light package (4 ceiling mount lights with 1 reading lamp) upgradeable to 8 lights

package complete (7 ceiling mount lights with 1 reading lamp)

8 liaht

R2 800

**R3 300** 

**R4 400** 

Prices exclude VAT.

**Application:** Low Cost Housing, Informal Housing, Farming Communities or any off-grid lighting requirements.

Start saving today, call Natural Power 012-656-8467 083-403-8056 info@naturalpower.co.za



## More than a monitor

cer's D241H is much more than a

ALCD panel designed to display your desktop. It also functions as a personal organiser, digital photo frame, media player and online content aggregator.

Integrated into the monitor's menu functionality are several widgetbased options. Users have a choice to access functionality such as calendar, poster,



weather, new clock and digital photo frame. Interface navigation is achieved with a remote which also features a slide out QWERTY keyboard and built-in voice recorder.

We must admit however, that the set-up wizard and overall integration was lacking and at times felt counter intuitive.

The 24" screen has a contrast ratio of 80 000:1 and features a response time of 2 ms. It also supports a full HD resolution of 1920 x 1080.

Although the D241H pushes the envelope in terms of what a monitor is capable of achieving, we can't help but wonder if it's too much. Although the features demonstrated by the unit are impressive, Acer could have spent more time improving the onboard operating system and menu integration. It retails for R4999.

Evetech Intel Core i3 overclocked gaming PC

Gaming with the overclocked i3

t seems as though Evetech has out-It seems as though 2.001

done itself with its most recent Intel Core i3 overclocked PC and at this price gamers would be silly not to consider this system.

The Evetech rig features an Intel Core i3 processor which has been bumped up from a static 2.9 GHz to an impressive 4.08 GHz. Despite the hefty overclocking we found the system to be more than stable during benchmarking and gaming and it retained a consistent temperature throughout.



It also includes an MSI P55 motherboard with the GD65 chipset which, when combined with the monstrous Nvidia GTX 480 and the G.skill Rip Jaws Gaming series DDR3 RAM module offers a perfect platform for any gamer.

This Evetech rig is also fitted out with a Thermalright Venemous X CPU cooler, which is necessary to sustain such a considerably overclocked system, and a more than adequate Cooler Master GX 650 W PSU. A Cooler Master USP 100 Gaming Case finishes off the package perfectly, providing ample room for cooling and additional components.

At a price of just **R12 999** this deal is hard to beat. Call 012-653-0033 or visit http://tinyurl.com/evetechi3.

#### **GADGETS**

Cameras

Canon IXUS 210

#### A touch of class

Canon's IXUS 210 is the follow-up to the Japanese company's first foray into touch-screens - last year's Ixus 200. The 210 feels like a mature product; it's not only stylish but its touch-screen functionality is fantastic.

rue to the 210's IXUS heritage it features an extremely classy design. This 14 megapixel point-and-shoot includes a lovely 24 mm wide-angle lens, while its 5x zoom with optical image stabilisation should be more than sufficient in most cases. It's let down by a disappointing 4.3 speed rating, way off the 2.0 offered by Canon's S90 masterpiece.

#### 3.5" LCD screen

Canon's trust in their touch-screen is testament in the 3.5" screen that completely covers the back-end. It looks delightful, with no other buttons to talk about and all functions displayed and controlled from the screen.

This touch-screen solution worked better than we expected and we actually found navigation more intuitive than Canon's regular button setup.

The on-screen icons were sufficiently large and the touch-screen generally very responsive.



#### Using the touch-screen

When capturing pics you can, just as with the iPhone, select where you want to focus. The touch-screen playback was surprisingly fast, with it being dead-easy to scroll through your photos via either sliding your finger over the photo, pressing the arrows on the side or, strangely enough, tapping the Canon's body. You can zoom into your pics by simply clicking on the segment of the photo you want to zoom into. Without a

touch-screen this is a cumbersome process, but here it works fast and efficiently.

#### **New shooting-modes**

Three new features included amongst the 17 scene modes are the gimmicky Fisheye Effect, the Miniature Effect and the Creative Light Effect. Although we couldn't quite create anything decent out of the first two, the Miniature Effect was a lot of fun to play around with. It creates a tilt-shift effect which makes far-off objects appear like miniatures.

#### Video

Canon includes HD ready 720p video plus also an HDMI port to play back your photos and videos on HDTVs. While the quality of video was good, we did have some trouble with focus which seems a bit finicky if you want to quickly start recording.

#### Conclusion

Canon's move to touch-screen cameras could have been gimmicky but we found the Ixus 210 easy to work on, intuitive and a very good touch-screen solution. The Canon IXUS 210 costs a bit more, retailing for about R3378

www.webantics.co.za. [MJ]



Prices include assembly. Prices include VAT at 14%. Full warranty on all products. Stocks are limited. visiontechnologies0@gmail.com

riana@vistech@gmail.com | 3dimport@lantic.net

#### PRETORIA

SHOP 71, 73, 75 GLEN VILLAGE SOUTH CNR HANS STRYDOM/OLYMPUS FAERIE GLEN

TEL: 012-751-2036 (TECHNICAL) TEL: 012-751-2037/8 (SALES)

> MONDAY TO FRIDAY: 8:30AM TO 5:00PM SATURDAY & SUNDAY: 9:00AM TO 1:00PM

#### SEAGATE HARD DRIVE SPECIALS

500GB 3.5 INCH DESKTOP SATA2 7200RPM 320 GB 3.5 INCH DESKTOP SATA2 7200RPM 1TB 3.5 INCH DESKTOP SATA2 7200RPM 2TB 3.5 INCH DESKTOP SATA2 1.5TB 3.5 INCH DESKTOP SATA2 500GB 2.5 INCH NOTEBOOK SATA2

R369 R699 R1350 R1020 R630

VISION CHNOLOGIES CELEBRATION ECIALS

#### MIDRAND

UNIT 9, 817, 16TH ROAD STANFORD BUSINESS PARK

TEL: 011-314-0442/0452 TEL: 011-023-7403 (TECHNICAL) TEL: 011-023-7402/4/5 (SALES)

MONDAY TO FRIDAY: 8:30AM TO 5:00PM SATURDAY

9:00AM TO 1:00PM WWW.VTECHNOLOGIES.CO.ZA

#### VISION TECHNOLOGIES 2.5 INCH USB POWERED EXTERNAL HARD DRIVE SPECIAL

VISION TECHNOLOGIES 2.5 INCH 320GB EXTERNAL VISION TECHNOLOGIES 2.5 INCH 500GB EXTERNAL SEAGATE FREE AGENT EXTERNAL GO 2.5 INCH 500GB SEAGATE FREE AGENT EXTERNAL GO 2.5 INCH 1TB

R1599

#### VISION TECHNOLOGIES MEMORY SPECIALS

2GB DDR2 800 MHZ DESKTOP MEMORY 2GB DDR3 1333 MHZ DESKTOP MEMORY 1GB DDR2 400 MHZ DESKTOP MEMORY 1GB DDR2 800 MHZ NOTEBOOK MEMORY R299

#### **AERCOOL POWER** SUPPLY SPECIALS

EN53372 E78-530W EN53365 E78-430W EN53389 E78-730W EN53310 E85M 700 **R799** EN53297 E85-700 V12XT 1000W V12XT 600W **R780** V12XT-700W V12XT 800 W

ALL V12XT POWER SUPPLY HAVE A **BUILT IN SURGE PROTECTOR** 

GET A FREE AEROCOOL VIZXT **BLUE LINE EDITION FAN FREE** WITH PURCHASE OF ANY AEROCOOL POWER SUPPLIES. VALUE OF FAN IS R90

#### CHAINTECH GAMING MEMORY SPECIALS

DDR3 2000 MHZ 3X2GB MEMORY DDR3 1600 MHZ 3X2GB MEMORY DDR3 1600 MHZ 2X2GB OC MEMORY DDR3 2000 MHZ 2X2GB OC MEMORY DDR3 1800 MHZ 2X2GB OC MEMORY DDR3 1866 MHZ 3X2GB MEMORY DDR3 1800 MHZ 2X2GB MEMORY DDR3 1333 MHZ 3X2GB MEMORY DDR3 1333 MHZ 1GB NOTEBOOK DDR3 1333 MHZ 2GB NOTEBOOK

Aero

R2050 R1650 R1120 R1250 R1880 R1250 R270



#### VISION TECHNOLOGIES USB FLASH DRIVE SPECIALS

2GB USB 4GB USB 8GB USB R145 16GB USB 32GB USB

PRICES NEVER TO BE REPEATED AGAIN, GET YOURS TODAY

#### AEROCOOL GAMING CASE SPECIAL

GET A FREE AEROCOOL VIZXT BLUE LINE EDITION FAN FREE

EN52627 V12 CARBON FIBER EN52665 VX-9 GAMING CASE EN52658 VX-R GAMING CASE EN52009 M40-BB W/LCD DISPLAY **EN52666 SYSCLONE RED** EN52481 TOP GUN W/25CM FAN EN52672 VX-9 PRO GAMING CASE EN52689 VX-E GAMING CASE EN52696 VX-E PRO GAMING CASE EN52474 AERO RACER PRO GAMING CASE EN52238 HITECH 7 PRO GAMING CASE EN52443 HITECH 7A ACRYLIC SIDE PANEL



#### 19 INCH WIDE R999 R1380 22 INCH WIDE 23 INCH WIDE

24 INCH WIDE R1880

EE 4GB USB FLASH DRIVE, 3 YEAR WARRANTY ON ALL LG MONITORS

VISION TECHNOLOGIES ONE YEAR CELEBRATION SPECIALS!

VISIT WWW.VTECHNOLOGIES.CO.Z. FOR COMPUTER AND NOTEBOOK SPECIALS

VISION TECHNOLOGIES

LG MONITORS SPECIAL

WITH PURCHASE OF ANY AEROCOOL CASE Valid till 31/07/2010. E&OE.



Prices include assembly. Prices include VAT at 14%. Full warranty on all products. Stocks are limited.

visiontechnologies0@gmail.com riana@vistech@gmail.com I 3dimport@lantic.net



## VISIT WWW.VTECHNOLOGIES.CO.ZA FOR COMPUTER AND NOTEBOOK SPECIALS

#### VISION TECHNOLOGIES COMBO SPECIALS NOW ON

ATX CASE+400W PSU+MOUSE+KEYBOARD+2GB USB FLASH DRIVE



**NOW ONLY RI99** 

#### VISION TECHNOLOGIES UPGRADE SPECIALS

#### UPGRADE 1

VISION ATX CASE WITH 400W PSU 1GB DDR2 MEMORY LG DVD WRITER 320 GIG HARD DRIVE INTEL G31 MOTHERBOARD INTEL E5400 2.7 GHZ CPU DUAL CORE

**NOW ONLY RI940** 

FREE KEYBOARD, FREE MOUSE, SPEAKERS, FREE 2GB FLASH DRIVE

#### **UPGRADE 2**

VISION ATX CASE WITH 400W PSU 1GB DDR2 MEMORY LG DVD WRITER 22X SATA 320 GIG HARD DRIVE SATA INTEL G31 MOTHERBOARD INTEL CELERON 1.8 GHZ CPU

**NOW ONLY RI699** 

FREE KEYBOARD, FREE MOUSE, FREE SPEAKERS, FREE 2GB FLASH DRIVE

## VISION TECHNOLOGIES POWER SUPPLY SPECIALS

VISION 400W POWER SUPPLY
VISION 500W POWER SUPPLY
VISION 600W POWER SUPPLY
R199

#### VISION TECHNOLOGIES LG DVD WRITER SPECIAL

LG 22X SATA DVD WRITER RETAIL R240

R1040

R1399 R980 R1360

R2070

R1680

R1060

FREE BGB USB FLASH

#### CPU & MOTHERBOARD SPECIALS

ECS AMD MOTHERBOARD + AMD 6000+ CPU
ECS AMD MOTHERBOARD+ AMD 9650 QUAD CORE CPU
ECS G31 MOTHERBOARD+ INTEL 2.7 DUAL CORE CPU
ASUS M2N68-AM SE2 MOTHERBOARD+ AMD X3 440 CPU
ASUS M4N68T-M MOTHERBOARD+AMD 945X4 CPU
ECS INTEL MOTHERBOARD+ INTEL Q8300 QUAD CORE CPU
ECS INTEL MOTHERBOARD+ INTEL E6500 2.93 GHZ CPU

## VISION TECHNOLOGIES EXTERNAL HARD DRIVE SPECIALS

VISION 500 GIG EXTERNAL HARD DRIVE 3.5 INCH VISION 1TB EXTERNAL HARD DRIVE 3.5 INCH VISION 1.5TB EXTERNAL HARD DRIVE 3.5 INCH VISION 2TB EXTERNAL HARD DRIVE 3.5 INCH

R599 R745 R999 R1550



## VISION TECHNOLOGIES ONE YEAR CELEBRATION SPECIALS!

Valid till 31/07/2010. E&OE.

#### VISION TECHNOLOGIES NOTEBOOK BAG SPECIALS

ASPIRE BRIEFCASE CHARCOAL /BLUE ASCEND GURU BACK PACK

R180

FREE WIRELESS MOUSE

## VISION TECHNOLOGIES STARTER GAMING COMPUTER SPECIAL

ECS AMD MOTHERBOARD, AMD ATHLON 6000+ CPU, 2 GIG MEMORY, GEFORCE GTS 240 1GB GRAPHICS CARD, VISION ATX CASE WITH 400W PSU, 500 GIG HARD DRIVE 7200RPM, LG DVD WRITER, 22 INCH LCD MONITOR, PS2 KEYBOARD, PS2 MOUSE, SPEAKERS

**NOW ONLY R4399** 



#### Aero

-0-0-0-0-0-0-0

#### AEROCOOL SPECIALS NOW ON

#### **BE COOL, BE AEROCOOL**



TOP GUN W/25CM FAN R630 AEROCOOL SYSCLONE R630 AEROCOÓL VX-R W/ 430W PSU R570

AEROCOOL GAMING CASE R399 AEROCOOL V12 CARBON FIBER R670 AEROCOOL VX-9 GAMING

GAMING AEROCOOL
CASE M40-BB W/LCD
R350 R460

## VISION TECHNOLOGIES CPU SPECIAL

INTEL DUAL CORE E5300 2.6 GHZ CPU
INTEL DUAL CORE E5400 2.7 GHZ CPU
INTEL QUAD CORE Q8300 2.33 GHZ CPU
INTEL QUAD CORE Q8400 2.66 GHZ CPU
INTEL CORE I3 530 2.93 GHZ CPU
INTEL CORE E6500 2.93 GHZ CPU
INTEL CORE I5 650 3.2 GHZ CPU
INTEL CORE I5 650 3.2 GHZ CPU
INTEL CORE I5 750 2.66 GHZ CPU
INTEL CORE I7 920 2.66 GHZ CPU
INTEL CORE I7 920 2.66 GHZ CPU
INTEL CORE I7 930 2.8 GHZ CPU
INTEL CORE I7 950 3.06 GHZ CPU

## VISION TECHNOLOGIES SOFTWARE SPECIALS

MICROSOFT WINDOWS 7 HOME BASIC 32BIT
MICROSOFT WINDOWS 7 HOME BASIC 64BIT
MICROSOFT WINDOWS 7 HOME PREMIUM 32BIT
MICROSOFT WINDOWS 7 HOME PREMIUM 64BIT
MICROSOFT WINDOWS 7 PROFESSIONAL 32BIT
MICROSOFT WINDOWS 7 PROFESSIONAL 64BIT
MICROSOFT WINDOWS 7 ULTIMATE 32BIT
MICROSOFT WINDOWS 7 ULTIMATE 64BIT
MICROSOFT OFFICE 2010 HOME/STUDENT
MICROSOFT OFFICE 2010 HOME/BUSINESS
MICROSOFT OFFICE 2010 PROFESSIONAL
R720
R730
MICROSOFT OFFICE 2010 PROFESSIONAL
R74099

## VISION TECHNOLOGIES GRAPHIC CARD SPECIALS

ATI RADEON HD5770 1GB ATI RADEON HD5670 1GB ATI RADEON 5850 1GB DDR5 R2999 R3999 R930 ATI RADEON 5870 1GB DDR5 GEFORCE 9800GT 512MB DDR3 GEFORCE 8400GS 256MB GEFORCE 9400GT 512MB DDR2 GEFORCE 9500GT 512MB DDR2 R380 GEFORCE GTS250 512MB DDR3 R1170 GEFORCE 9500GT 1GB DDR2 GEFORCE GT210 512MB DDR2 GEFORCE GT220 1GB DDR2 GEFORCE GT240 1GB DDR3 GEFORCE GTX470 1280MB DDR5 GEFORCE GTX480 1536MB DDR5

## AEROCOOL ACCESSORIES SPECIALS

EN55062 FP-01 R330
EN55215 COOL PANEL III R260
EN55390 F4XT R110
EN55406 F6XT R120
EN55284 LIGHTWAVE FAN R60
EN55314 RS12 CARBON FIBRE R67
EN55321 RS12 CARBON FIBRE R67
EN55307 RS12 CARBON FIBRE R67
EN55338 TOUCH 1000 PANEL R238
EN55345 TOUCH 2000 PANEL R375
EN55376 V12XT BLACK EDITION R49
EN55389 V12XT BLUELINE EDT R49
EN55369 V12XT TOUCH PANEL R330
EN55260 V14 BLACK LINE EDT R58

#### A bullet for security

This high-end bullet network camera from VIVOTEK features a two megapixel resolution providing coverage six times larger than a VGA camera.

with features like concealed wiring to prevent any tampering or cutting of its cables, the IP7361 is ideal for parking lots, building entrances and high traffic flow areas.

To maximize the benefit of the 2-megapixel sensor, the IP7361 employs several innovative technologies for optimized bandwidth efficiency. The ePTZ function enables users to quickly move to a target area for close-up shots without moving the camera physically. Users can also receive only the portions of the images they are interested in via the cropping function.

Furthermore, multiple video streams can be delivered simultaneously in different resolutions, frame rates, and image qualities for viewing on different platforms so as to meet different needs or bandwidth constraints.

With other advanced features such as tamper detection, 802.3af compliant PoE, SD/SDHC card on-board storage, and two-way audio via SIP protocol, the IP7361 is an all-in-one network camera for outdoor environments.

Available for R7291 (excl VAT). For more info contact Miro distribution.

VIVOTEK IP8330 network camera

#### Lots of frames for low light

VIVOTEK's IP8330 is a bullet-style network camera offering night visibility for diverse outdoor applications.

This camera can record up to a massive 60 frames per second at VGA resolution at a really low light sensitivity down to 0.1 lux.

For protection against harsh outdoor environments, the camera comes in an IP66-rated housing and weather-proof casing to withstand rain and dust. The IP8330 also supports the industry-standard H.264 compression technology, drastically reducing file sizes and conserving valuable network bandwidth. With H.264, MPEG-4, and MJPEG compatibility all included, multiple streams can be simultaneously transmitted in any of these formats at different resolutions, frame rates, and image qualities for versatile applications. The streams can also be individually configured to meet different needs or bandwidth constraints, thereby further optimising bandwidth and storage.

Incorporating a number of advanced features standard for VIVOTEK cameras, including tamper detection, Power over Ethernet, SD/SDHC card slot, and VIVOTEK's 32-channel recording software, the IP8330 is a solid solution for outdoor surveillance for low light and high frame rate applications. It retails for R3261 (excl VAT). Contact Miro distribution for more info.











POWERFUL I COMMUNICATION I SOLUTIONS 086 123 MIRO(6476) WWW.miro.co.za

VIVOTEK IP7133 network camera

#### One for the home

VIVOTEK's IP7133 is an easy-to-use network camera designed specifically for home security applications with a compact, stylish exterior.

espite its ultra-compact size, this unit incorporates a number of advanced features to fit your surveillance needs.

This camera can simultaneously deliver dual streams in MPEG-4 and MJPEG formats with different video resolution and quality for different devices such as PCs or 3G cellphones. With this network camera, you can

quickly and easily view the current status of your children, the elderly, or even your pets with live, clear videos while you are away from home.

Additionally, this camera comes with a push button on the front side for privacy, allowing you to manually suspend video monitoring with ease when returning home. With its elegant design and versatile functions, the VIVOTEK IP7133 is the best choice for the fundamental establishment of home security.

The VIVOTEK IP7133 network camera costs R1448 (excl VAT). For more info contact Miro distribution.

VIVOTEK SD7323S dome camera

#### Dome with a zoom

VIVOTEK's SD7323S dome network camera comes with a massive 35x integrated zoom lens, designed for outdoor surveillance applications where high reliability, sharp images and weatherproofing are required.

he SD7323S is 100% infrared capable, drastically improving light sensitivity during nighttime. To mitigate the influence of vibration caused by winds or camera rotation,

the camera also features an electronic image stabiliser so that recorded images are sharp and clear.

Also included is a 3D privacy mask function guaranteeing that private areas are completely sheltered even when the camera pans, tilts, and zooms. When zooming in, the privacy mask will be enlarged to provide comprehensive blockage of the private area. In addition, the SD7323 incorporates an SD/SDHC card slot offering temporary on-board recording.

Similar to the advanced features of VIVOTEK's other cameras. the SD7313/7323 includes 3GPP mobile surveillance, dualcodec, dual-stream, two-way audio via SIP protocol, digital I/O, 802.1X authentication for network protection, and USB joystick for remote PTZ control.

Available for R21 740 (excl VAT). For more info contact Miro distribution.



\$10 billion. Extra amount Steve Jobs would be worth if he didn't cancel stock options in 2003.



## SECURITY GADGETS AND GOODIES

#### PC and notebook locks

While you might have all the digital protection you need, you're still left with the physical security that needs to be taken care off. PC Pro Shop sells a Mecer 1.8 mm computer lock system that uses a 1.8 m cut resistant security cable to secure your desktop PC tower and LCD screen.

The Okion security key lock with a 6 mm thick cable should ensure that your notebook (or netbook) stays exactly where you put it. R150 each from PC Pro Shop on 012-348-4000.

#### Infra-red video cam

ooking for a security camera that can also help with recording during the night via infra-red? Phase 2 Computers sells the EDA outdoor camera for R369 (excl VAT) and it includes waterproof housing. Call them on 011-444-5956.

#### Spy Cap

The Spy Cap with a built-in VGA video recorder can be ideal for sport or for more important undercover spying operations done on behalf of the safety of all citizens of earth. With 4 GB of onboard storage you won't easily run out of space. R850 from www.cameratron.co.za.



#### Clock spy cam

ameratron, based in Bruma, has one of the most interesting collections of security and spy cameras around. For example their motion detection clock, whick looks just like a regular analogue clock but inside it carries a VGA (640x480) video recording and a 5 megapixel camera. If motion is detected in the room it will start recording to its 4 GB storage. R690 from Cameratron on 011-622-0556.



#### Sunglass video recorder

ameratron's 1.3 megapixel sunglasses can capture 30 fps video while you are doing sport and are capable of five hours of recording on one charge of the battery. It uses microSD cards to record. R590 from Cameratron on 011-622-0556.

#### HP Notebook security

Your data is your business so it's good to know that HP secures not just your notebook from theft, but also the data on your the device and access to it. With HP you get multiple layers of security, namely secured docking, drive lock technology, biometric fingerprint reader, smartcard security, and hardware based encryption to name a few ProtectTools.



**Advertorial** EDP Communications

## Server room protection now with cameras



We've written before about AVTECH's server room monitors, like the Room Alert 11ER, which provide a low cost solution to assist with monitoring server room temperature, humidity and environment in multiple locations.

They've upped the stakes by incorporating AXIS M10 network cameras into the system. Using the Device ManageR software that comes free with the Room Alert hardware, you can not only monitor changes in your server room but also consolidate the control of these cameras. For example when someone enters the server room, the AXIS cameras can take a picture or stream video, which can be viewed remotely on any PC with the software installed and access to the internet. The same goes for any eventuality that may hit your server room.

The AXIS M10 cameras are low cost yet high quality, with the capabilities of multiple H.264 and motion JPEG streams provided simultaneously. The Device ManageR software makes it easy to discover all AXIS cameras on the network.

Contact EDP Communications on 012-811-0931 or visit www.avtech.co.za.

Advertorial EMID

## The backbone for ICT and finance in SA

Behind every popular ICT and financial group there are a number of 'unspoken heroes' which facilitate and maintain the backbone systems which allow these services to run efficiently.

Chief among these, locally speaking, is EMID, which has been providing financial systems delivery, integration and maintenance to South African financial services groups for a number of years.

In addition to this the company also owns a high availability ICT infrastructure which is geared towards adaptability for different clients needs.

According to Sandy Stoltz, head of managed services at EMID, the company's special focus on the security systems behind such major operations cannot be downplayed. As a result EMID also offers security solutions to its clients which encompass the physical, application and network safety required to operate such complex systems.

In addition to this, the company recently assisted one of its financial services clients in achieving the newly implemented PCI DSS security accreditation, something Stoltz admitted was a challenging but positive experience overall.

In conclusion the company encourages prospective clients to approach them regarding comprehensive development and hosting solutions which are tailored towards their needs.

Call them on 012-421-5238 or visit www.emid.co.za.

Kaspersky Pure

#### Home network protection

For single PC solutions a lot of people still prefer the free packages available on the net such as avast! and AVG, since it's free and offers basic protection. But when considering an antivirus package for a complete home network, Kaspersky Pure comes highly recommended.

Tt allows you to easily manage a home network from a single PC for far less than what commercial packages are going for and is well worth it for small networks, being a genuine "install and forget" product.

It's not resource intensive, something that Norton is particularly guilty of, is non-intrusive and has built in "Gaming Profiles" that can make it truly

invisible when you need all your resources.

It has easy to understand prompts when attention is required but doesn't sacrifice advanced options for users willing to delve into the settings. Noteworthy features include cross network parental control, so your kids can have their own computers but still be kept safe; distributed updates, so only a single PC needs to download updates; and browser integration to help manage sensitive user details.

Available from Africa SD (www.africasd.com) on 012-665-2513 for **R599**.

Kaspersky Mobile Security 9

## Smart protection for your smartphone

Kaspersky is not only leading the charge against smartphone viruses with Mobile Security 9, but also offers a bunch of extra features.

If for example your phone is stolen, you can block it remotely by sending an SMS with your secret code from another device. You can also wipe your data using the same process. With Mobile Security 9's SIM Watch feature, the phone will detect when another SIM card is inserted and even send you the thief's number.

And if you think that isn't enough, you can also track your stolen phone via GPS. After receiving your secret code,

Kaspersky will send your phone's coordinates to you via SMS and email, allowing you to track it via Google Maps. Yet another useful feature is the anti-spam system, where you can select numbers to put on your "black list", which are then prohibited from calling or messaging you.

Mobile Security 9 is an incredibly useful product, but unfortunately only destined for smartphones running Windows Mobile or Symbian operating systems.

Available from Africa SD (www.africasd.com) on 012-665-2513 for **R299**.



## Premium SUN Direct Importer

Looking for area distributor and sales person

Please send CV to sales@timeline.za.net







500VA
700VA
1000VA
CAT-5E

CAT-5E CAT-6E Network Cable Solid/ Flexible Switching Power Supply

Available in
500W
600W
700W



## **Timeline Computer**

www.timeline.za.net sales@timeline.za.net

Tel: 011 7912468 Fax: 011 7912268 Iomega iConnect Wireless Data Station

## Your data everywhere

Iomega's latest plaything keeps you connected with your data wirelessly, even when you aren't there.

The Iomegai Connect Wireless Data Station has no onboard storage capacity of its own, instead it allows users to integrate all their desktop and portable USB storage devices into their network.

Setting up the iConnect proved to be a very simple task. You simply connect the device to your router in either a wired or wireless configuration, working on 802.11 b/g/n wireless protocols.

After the iConnect has been connected to a router simply install the Iomega Storage Manager software on your PC (included on CD), and plug your external USB devices into any of the four USB ports on the iConnect device. Your USB drives will now be automatically connected to and accessible from any computer on your network.





The Iomega Storage Manager software works via an easy to use web-based interface from which you can customise individual settings on your iConnect device.

#### Compatibility

The iConnect supports both the NTFS and FAT32 file systems, and is compatible with PC, Mac and Linux computers, even supporting Apple's Time Machine software which allows Mac users to easily backup their data.

#### **Features**

Aside from the ability to easily share files, backup data and access your data remotely, even over the internet, the iConnect has a surprising number of features for such a straightforward device. For example, the iConnect has a "QuikTransfer" button which allows users to easily backup data by copying it from one device to another.

A UPnP DLNA certified AV media server

also provides users with the ability to stream photos, audio content and videos to a variety of media devices. It is compatible with the Xbox 360, Playstation 3, iTunes, digital picture frames and other Iomega products.

Another useful add-on is the iConnect's self download feature. With this feature the iConnect can manage your torrent downloads (supports BitTorrent) without the need for a dedicated PC.

#### Conclusion

All in all we found the Iomega iConnect to be reliable and easy to use. It executes its function perfectly and for such an affordable device we found it very impressive. If you'd like to keep connected to your external data devices or if you have an extensive network at home the iConnect will definitely come in useful. The Iomega iConnect has a RRP of **R999** from

www.webantics.co.za. [JK]



#### The AV-620 delivers real, measurable benefits from day one:

- · Eliminate vehicle misuse
- Reduce running costs
- Increase driver and vehicle efficiency
- Increase customer service
- Increase vehicle and cargo security

#### The AV-620 offers a host of great features:

- Live track single and multiple vehicles on detailed maps & images
- Detailed, unlimited trip history and custom reporting
- Accurate vehicle running cost and service reports
- Create alarms relating to no-go zones and system tamper
- Obtain exact vehicle location on your mobile phone



Included with every modem purchase





#### Vodafone K4505



For Hassle Free Wireless Internet: 08600 GOGGA (46442)

sales@goggapostpay.co.za www.goggapostpay.co.za



FREEDOM TO SURF

#### 26 VIRUS SAFE & SECURE

#### Parental control on the web



Jonathan Holton, general manager at Holton and Associates, distributors of BitDefender, continues his series on PC security by taking a look at how to keep your family secure on the internet.

Ensuring that you and your family stay protected involves more than just installing an anti-virus solution, as you have to look at a more comprehensive internet security program that integrates some parental control functionality.

Parental control allows users to prevent access to undesirable websites as well as certain apps like chatting software and can also be employed to limit web browsing time (and in some cases gaming time too) done on the home PC.



Internet security solutions and certain web-based services will allow you to control the access that the users in the network have, as well as providing you with reports on the activity of users. The use of the net can be managed, including when and for how long it can be accessed, which websites must be blocked and even the contacts that can be messaged on instant messaging programs (such as Google Talk) as well as social networking sites (such as Facebook and Twitter).

Online services also have a couple of additional benefits such as web-based apps that monitor your children's online activities, uploads that info onto your family account and then also sends alerts to you when any suspicious activity has taken place.

#### **Security Question |**

Is internet security really necessary, when you already have an anti-virus package installed? I have heard many people saying it only slows down your computer and that it does not help to secure your computer further – Cobus

A If you have no internet access or only receive emails through an ISP then anti-virus should suffice, but if you browse the net, protection considerations change. Not only are you facing possible malicious downloads and sites but also hackers, for which the extra security features, such as firewalls, is necessary.

For this question Cobus receives BitDefender Internet Security 2010.



Send your Security related questions to info@techsmart.co.za. The best question will win BitDefender Internet Security 2010 for one year, courtesy of Holton & Associates.

techsmart.co.za | July 2010



# Comfortable Computing





Antivirus

1 user = R299.95 3 user = R349.95

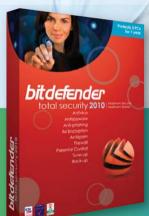
5 user = R499.95

bitdefender

**Internet Security** 1 user = R399.95

3 user = R44<u>9.95</u>

5 user = R599.95



**Total Security** 1 user = R499.95 3 user = R599.95

5 user = R699.95

#### Antivirus 2010

- Protect against 6.25 million viruses
- Only Antivirus system to encrypt your Yahoo & MSN Chat
- Protect your personal details from hackers

#### Internet Security 2010

All Antivirus 2010 features PLUS

- Flexible settings to control children accessing the Internet (web and chat)
- Settings to allow you to be at home to monitor activity of children

#### **Total Security 2010**

All Internet Security 2010 features PLUS

- Backup your computer automatically and keep data safe
- Tuneup your computer for improved performance

Available at the following stores:









Or purchase online from:

www.holton.co.za 011.789.6181





## How to: Make a Matrix themed keyboard.



Remember the beat-up looking keyboards in *The Matrix*? Let's combine it with the green and black theme used in the movie.



# Conceptualisation design innovation design innovation design innovation. Conceptualisation design innovation design innovation and division of Smart Publishing Are you looking for a new logo, business cards or website? We specialise in design (print and web) for small to medium sized businesses. Contact us today on the provided sign of the



#### You'll need:

- An old keyboard
- Black spray paint
- Clear green LED's and 150 Ohm resistors
- Thin insulated wire and a small switch
- A soldering iron, drill and some heat shrink

The parts should be less than **R50** at your local electronics (**www.communica.co.za**) and hardware store.



#### **Opening the keyboard**

First open up your keyboard and remove all the electronics and buttons, the buttons pop off easily if pried with a knife or screwdriver. This is an excellent time to put your keyboard in the dishwasher (only the non electronic parts of course) and after you have a look at the ecosystem that's

spawned inside your keyboard, I can guarantee you'll want to.

Drill 5 mm holes where each LED should go, you want them sticking out sideways through the plastic under the keys. Drill an extra hole for the switch where it won't be in the way. You can add as many LED's as you want but more than 20 might anger the USB gods, you'll need a resistor for each LED and enough wire to hook it up with.

#### **Soldering**

Solder a resistor to the shortest leg of each LED, solder a wire to the other end of the resistor and another wire to the other leg. The connection coming from the PC will have four or five wires, the opposing wires are power and ground, test with one of your LED/Resistor pairs to see which is which (if the LED lights up the pin, connected to the resistor is ground), connect this ground pin to one end of the switch and the other end of the switch to all the resistors wires. Finally connect the power pin to the other wire of all the LED's and tidy it all up with heat shrink.

#### **Spraying**

When spray painting your keyboard try to avoid getting paint in the holes, this makes the keys stick when you put them back. Note that keys in different rows have different shapes, swapping these around at random gives you a make-shift feel that suits the theme. As an extra touch I went over my keys with a metal brush, giving it a rugged rust like feel and removing all the lettering, this might help keeping those pesky siblings away if you know your way around a blank keyboard.

techsmart.co.za | July 2010

## PC Medic

PC Medic is taking a break from a hectic World Cup watching schedule in order to answer some tech related queries.

Dear PC Medic. Is there software I can use to backup my Outlook mail to a memory stick? Johan Barnard

PCM: Hi Johan, you don't even need any additional software, just use Outlook itself. All you do is go to "File" and select "Import and Export". Once the Import and Export Wizard starts, select "Export to file" and click next, then select "Personal Folder File (.pst)" and click next again. Following that you just select



the Inbox and click on "Include subfolders" and then click next once more. Click on "Browse" to select your memory stick (as well as the folder your want to save your email in), give the file a name and click on "Finish". Voila your mail's all backed up.

Hello PC Medic. I heard it's possible to create your own program shortcuts in Windows 7. Is this true and how is it done? Luhrén Slinger

PCM: Ola Luhrén, just go to any program icon within Windows 7, right click on it and select "Properties". Click on the shortcut tab and type in the keyboard shortcut you want within the provided space next to Shortcut key, for example Ctrl + Alt + S to launch Skype.

What's up PC Medic. Is there any way to place a link to your videos on the Start menu in Windows 7, just like the ones for your documents, pictures and music? Candice Bruinders

PCM: If you want to add a link to your videos on the Start Menu, all you have to do is to right-click on "Start" and select "Properties". Now just click on "Customize" and scroll to the bottom untill you get to the Video section. In that section select "Display" as a link and press "OK".

Hey PC Medic. I am on a lot of social networking sites, is there a way to easily update them, without having to log into all the sites on your browser? Jeremy Felix

PCM: Hi J. The program we prefer to use in the office is TweetDeck, which is free and can be downloaded (www.tweetdeck.com) and installed in minutes. You can add your Facebook, MySpace as well as Twitter accounts to be able to easily update your status, upload pics and send messages to your friends on any of your social networking sites from the TweetDeck user interface.

Mail your questions to info@techsmart.co.za.

Tech Jargon

## Jargon Busters!

Tech spawns jargon like Brazil spawns goals. We try to clarify a little bit of the more difficult terms you might come across in the magazine.

#### Anti-aliasing (found on p16)

If you're into games you've probably come across this term. In a nutshell anti-aliasing is a method that fools the eye into thinking that a jagged edge is actually smooth. Remember that deep down games and displays still work on pixels, and since one pixel can't consist of different colours we end up with slightly jagged edges sometimes. After applying anti-aliasing the resulting image should appear softer and more realistic. 2x and 4x anti-aliasing simply means the full frame is rendered at double or quadruple the display resolution.

#### 2D to 3D conversion (found on p16)

At the moment still a costly and time consuming technology, 2D to 3D conversion does just what it says, it converts a 2dimensional image into a 3-dimensional one on 3D TVs and notebooks. This may sound easy, but the problem is that the original video or image was captured in two dimensions. To create the 3D effect a program is usually used to determine the depth of the objects on screen, in other words it determines how far the objects are from the point of view of the camera operator. Multiple layers of different elements are then used to create the illusion of a three dimensional image.

#### **Hyper-threading**

Developed by Intel, this technology basically improves a computer's ability to execute multiple tasks at once. Hyperthreading works by duplicating certain sections of the processor allowing it to appear as multiple processors to the operating system. For each physically present processor the operating system addresses two virtual processors, sharing the workload between them and making it possible for you to seamlessly run different programs simultaneously.

#### Tilt-shift effect (found on p18)

The tilt-shift effect or tilt-shift photography is a unique style of photography in which the camera and angles are manipulated so that a life-sized image of a location or subject looks like a miniature-scale model. For this a tilt-shift lens which simulates a shallow depth of field was always necessary, but this effect can now be recreated digitally too.



#### SSD (Solid-state drive)

A solid-state drive is a data storage device similar to a hard disk drive that uses solid-state memory to store data. The term solid-state is used to differentiate solid-state electronics from electromechanical devices, with solid-state having no moving parts. Since it doesn't have moving parts an SSD is less fragile than hard disks, silent, more power efficient and since there are no mechanical delays they have very low latency.



INTERNET

Websites



#### July 2010 Web Time Wasters

#### 1. App of the Day

#### http://appoftheday.com

Apple's App Store has some of the best mobile apps around (of course only for Apple products), but with an overwhelming 200 000+ apps to choose from you may need a little help sifting through them. App of the Day features the best iPhone and iPad apps, as voted for by its members. The site is easy to use with a quick review and screenshots of each featured app.

#### 2. Startup Nation

#### www.startupnation.com/

For the budding entrepreneurs out there who think that they have got what it takes to take on the likes of Donald Trump and Patrice Motsepe then Startupnation.com is a must visit. It features step-by-step guides to assist people in starting their own business and although it's targeted at Americans, the principles involved remain largely universal.

For an excellent SA site check out <a href="http://southafrica.smetoolkit.org">http://southafrica.smetoolkit.org</a>.

#### 3. Secret Life Of Zombies

#### www.secretlifeofzombies.com

Fans of horror movies such as *Zombieland*, 28 Days Later and Shaun of the Dead will love Secret Life Of Zombies. It contains a large selection of Zombie pics and artwork, plus you can learn about Zombies role in pop culture as well as philosophy. For the best ways to kill them though go visit <a href="http://tinyurl.com/zomkillkill">http://tinyurl.com/zomkillkill</a>.

#### 4. Sporcle.com

#### www.sporcle.com

Sporcle.com is a nifty little time waster offering "mentally stimulating diversions" in the form of several quizzes and mini games. And the diversions are actually mentally stimulating, you'll see for yourself when you rack your brain for the name of that obscure Southeast Asian country that's on the tip of your tongue.

#### 5. McCord Museum flash game

#### http://tinyurl.com/victoriangamers

Do you pride yourself in having good manners? Well now you can see how your manners would've fared against Victorian etiquette with this amusing flash game courtesy of the McCord Museum of Canadian History. In the game you can choose to play the role of either a man or woman and are then tasked with successfully navigating the quagmire of Victorian mannerisms.

techsmart.co.za | July 2010





PC HARDWARE



## IT SUPPORT R250p/h

- SAME DAY REPAIRS
- **DATA RECOVERY**
- HARDWARE AND SOFTWARE SALES
- **NETWORK INSTALLATIONS**
- **OFFSITE BACKUPS**
- **MAINTANANCE CONTRACTS**
- **NETWORK SECURITY**

## CALL OUT - FREE

Cnr Gerhard / Vonwilligh, Centurion Tel: 012-663-8389 | Cell: 079-4979-933 / 079-4979-955

#### 

#### TOSHIBA e-Studio 212

## The BEST deal in Gauteng

copy print scan fax

only

**R499** 

per month on rental\* **EXCL VAT** 

\* Subject to credit approval. Terms and Conditions apply.



TOSHIBA brother. AMSUND MECER







TEL: 0861-462-782 | 0861-GNCPTA Email: info@gncholdings.co.za A content client is a GNC Holdings client.





14 294. New apps added to the Android Marketplace during May 2010.

DATA RECOVERY











PC HARDWARE

#### CoolIT Domino A.L.C ( CPU WaterCooling )



**BUSINESS DIRECTORY** 

- \*Quiet Performance: 1100-2500 RPM
- \*LCD Display
- \*Full Speed: 2900 RPM
- \*Power Consumption: 8W (Max)
- \*Long Life Cycle: 50,000 Hours (MTBF)
- \*Noise: 19.2 dBA (Min)
- \*2 Year Warranty



#### Inno3D GTX465

- \*Core Clock: 607MHz
- \*Shaders Frequency: 1215Mhz
- 352 Stream Processors
- \*Memory Frequency: 3206MHz
- \*Memory Type: GDDR5
- \*Memory: 1024MB ( 256-Bit )
- \*Memory Bandwidth: 102.4GB/s

R650.00 Incl

#### R2464.00 Incl

#### Intel Core i7 930



- \*Processor Interface: LGA1366
- \*Processor Class: Core i7
- \*Processor Speed: Ci7 930 / 2.88GHz
- \*Cores: Quad
- \*L3 Cache: 8MB
- \*Fan: Included
- \*Wattage: 95W
- \*Additional Technologies: Hyper-Threading



- \*SATA 2.0 \*5900RPM
- \*32MB Cache
- \*3 Year Warranty
- \*LP Series

R2750.00 Incl

R679.00 Incl



Nationwide Delivery: R50.00

www.iKonicIT.co.za 011-788-6204 For The Best Prices Online.

#### MAHALA MONTH-END MADNESS!! WE WILL BEAT ANY WRITTEN QUOTE!

2 YEAR WARRANTY AND FREE DELIVERY!



Fujitsu 20" LCD Get a true 20" experience with this 1600 x 900

R979

excl



- EGreat Full HD Media Player (with 1TB HDD) ► Full HD 1080P capable
- ► Network card built-in ► Supports .mkv files
  - R1699



30m IR Camera with w/proof housing Infrared Camera - View 30M clear footage in

full-colour. View night time footage up to 30M Ideal fo offices, shops, restaurants.

R369

excl

Embedded Digital Video Recorder. 100fps, real phone. Fit up to 500gb hdd to give you 100 days

R1299

4 Channel Embedded DVR System

excl

8 Channel Embedded DVR System



#### Mr i5 Advance

► Intel Core i5 650 3.2GHz ► MSI H55 P31 Mainboard ▶512MB Dedicated Graphics ▶2GB DDR3 RAM > 500GB SATA HDD > 22x Dual Layer DVD Writer ► Stylish Tower Case
► Keyboard & Mouse ► 2 Year Warranty

Potent Power Squared

► Intel Core Duo 2.7GHz E5400 ► Intel LGA775 G31 Mainboard ► Onboard Sound, LAN, Video ► 1GB DDR2 RAM ► 500GB SATA HDD ► 22v Dual Layer DVD Writer ► Stylish Tower Cas
► Keyboard & Mouse ► 2 Year Warranty





Mr Win 7 Killer

► Intel Core Duo 2.93GHz E6500 ► Intel LGA775 G31 Mainboard ▶ Onboard Sound, LAN, Video ▶ 2GB DDR2 RAM ▶500GB SATA HDD ▶22x Dual Layer DVD Writer ► Stylish Tower Case ►
Keyboard & Mouse ► 2 Year Warranty

> R2395 excl



Samsung R519 Notebook ► Dualcore 2.2GHz CPU►2GB RAM ► 250GB

SATA HDD ► DVD Writer ► Wireless LAN ► Stylish Tower Case ► Webcam ► 15.6" LCD screen ►Windows 7 Home

R3699

R1999 excl

FREE DELIVERY WITHIN

nesburg: 🖀 DII 444-5956 | DII 444-2347/8 🗎 DII 262-0281 🕟 15 Dartfield Road. Kramerville, Sandton directsales@phase2.co.za | Trading Hours (Mon-Fri) 8h00 - 17h00 (Sat) 8h30 - 13h00

Price V.A.T. Exclusive | Terms & Conditions Apply | E&OE | Product might differ from Images

JHB & PRETORIA\*

R4499

PC HARDWARE



#### WE BUILD COMPUTERS FOR

• Home • School • Office • Gaming

#### INTERNET EXPERTISE

• Network set-up • Modem set-up • Skype set-up We can solve all your internet-related problems

#### **INSTORE TECHNICIANS**

CALL OUTS · UPGRADES

## BEST PRICES ON CARTRIDGES

#### MENLYN PARK

TEL: 012 348 4000 MENLYNPCPRO@GMAIL.COM



#### **TRADING HOURS**

Monday - Thursday: 09.00 - 19.00 Friday: 09.00 - 21.00

Saturday: 09.00 - 21.00 Sunday: 09.00 - 17.00













• Understanding Service •



### YOU DREAM IT, WE BUILD IT

BUILD YOUR OWN GAMING RIG @ WWW.EVETECH.CO.ZA

i7-980X Overclocked 5970 Extreme

**BUSINESS DIRECTORY** 



Core i7-980X Overclocked To 4GHz Six Core CPU GIGABYTE X58 UD7 USB 3.0 Motherboard ATI Radeon HD 5970 2GB DX11 Card Thermalright 120 ultra eXtreme CPU Cooler Cooler Master CM 690 Professional Case Corsair 850W PSU Windows 7 Home Premium 6GB DDR3 1600MHz Gaming RAM Seagate 1TB Hard Drive, WIn 7 Premium 64bit BLU-RAY Reader, DVD±R/±RW Combo Dri

i7 Overclocked GTX 470 SLI



Core i7 920 Overclocked To 3.6GHz CPU 2 x GTX 470 1.2GB DDR5 320bit Cards in SLI Thermalright ultra eXtreme CPU Cooler Cooler Master CM690 Case Corsair 850W Gaming Power Supply 6GB DDR3 1600MHz Gaming RAM Seagate 1TB SATA 2 Hard Drive

i7 Overclocked 3.6GHz GTX 480 Phenom Six Core Overclocked 4.0GHz 5870 R17, 499 inc vat Blu-Ray

Core i7 920 Overclocked To 3.6GHz CPU GTX480 1 5GB DDR5 384bit DX11 Card Thermalright ultra eXtreme CPU Cooler Cooler Master CM690 Case Gigabyte 720W PSU 6GB DDR3 1600MHz Gaming RAM Seagate 1TB SATA 2 Hard Drive LCD & OS Optional etc

R12, 799 inc vat Blu-Ray

Phenom Six Core 2.8GHz Overclocked to 4.0GHz ASUS P6X58D Premium USB 3.0 Motherboard ASUS P6X58D Premium USB 3.0 Motherboard Gigabyte 890GX-UD3H USB 3.0 Motherboard ATI Radeon HD 5870 1GB DX11 Card Thermalright 120 ultra eXtreme CPU Cooler Cooler Master USP 100 Case Gigabyte 720W PSU, Gigabit LAN 4GB DDR3 1333MHz Gaming RAM With Heatsink Seagate 500GB SATA 2 Hard Drive 24X DVD Writer, LCD & OS Optional etc

#### INTEL & AMD DirectX 11 gaming systemsi

Core i5 Overclocked 5850 Gamer



Core i5-750 2.66GHz Overclocked to 3.6GHz ATI Radeon HD 5850 1GB DDR5 DX11 Card 4GB DDR3 1600MHz Gaming Ram With Heatsink Seagate 500GB Hard Drive Cooler Master GX 650W PSU Cooler Master Elite Case, 7.1 HD Sound Support USB 3.0 & SATA 3.0 LCD and OS Optional

Core i3 Overclocked GTX 470



Core i5-530 2.9GHz Overclocked to 4.0GHz Gigabyte P55A-UD4P Enthusiast Motherboard Gigabyte P55A-UD4P Enthusiast Motherboard ATI Radeon HD 5850 1GB DDR5 DX11 Card 4GB DDR3 13333MHz Gaming Ram With Heatsink Seagate 500GB Hard Drive Cooler Master GX 650W PSU Cooler Master Elite Case, 7.1 HD Sound 24X Dual Layer DVD Writer, Thermalright CPU Cooler 24X Dual Layer DVD Writer, Thermalright CPU Cooler Support USB 3.0 & SATA 3.0.LCD and OS Optional

Phenom Six-Core GTX 470 Gamer



Phenom II X6 1055T 2.8GHz Six Core CPU AMD 785G Chipset DDR3 Motherboard NVIDIA GTX 470 1280MB 320bit DX11 Card 4GB DDR3 13333MHz Gaming Ram With Heatsink Seagate 500GB SATA 2 Hard Drive Cooler Master GX 650W PSU Cooler Master Elite Case, Gigabit LAN 24X Dual Layer DVD Writer 8-Channel HD Sound 1 CD & OS Ontional

Introducing AMD Phenom II Six Core CPU! Phenom Six-Core 5750 Gamer



Phenom II X6 1055T 2.8GHz Six Core CPU AMD 785G Chipset DDR3 Motherboard ATI Radeon HD 5750 1GB DX11 Card 4GB DDR3 13333MHz Gaming Ram With Heatsink Seagate 500GB SATA 2 Hard Drive Gigabyte 585W Power Supply Cooler Master Elite Case, Gigabit LAN 24X Dual Layer DVD Writer 8-Channel HD Sound, LCD & OS Optional

Budget Home & Office PC



AMD Sempron™ 140 2.7GH CPU Integrated Nvidia 6150 512MB GPU 1GB (1 x 1GB) 800Mhz DDR2 RAM Seagate 250GB Hard Drive 24x Dual Laver DVD +/- Writer Black Case 400W Power Supply Integrated 6.1 Channel Sound Card 6-Channel HD Audio LCD & OS Optional

AMD Dual Core PC



AMD X2 250 (2 x 3.0GHz) Dual Core CPU AMD 740G with ATI Radeon HD3200 Graphics 2GB 800Mhz DDR2 RAM Seagate 250GB Hard Drive 24x Dual Layer DVD +/- Writer Black Case 400W Power Supply 1xDVI Connector 1xVGA Port (Supports Dual Monitors) 8-Channel HD Audio, Gigabit LAN LCD & OS Optional

AMD Quad Core PC



AMD X4 635 (4 x 2.9GHz) Quad Core CPU AMD 740G Chipset Motherboard ATI Radeon HD3200 512MB onboard Graphics 2GR 800Mbz DDR2 RAM Seagate 250GB Hard Drive 24x Dual Layer DVD +/- Writer Black Case 400W Power Supply orts Dual Monitors) 1xDVI Connector 1xVGA Port (Supp 8-Channel HD Audio, Gigabit LAN LCD & OS Optional

The power of Quad-Core within your reach! AMD Six Core Pro PC R4,799 inc vat 6 Core CPU! Grab it while it's HUT

> Phenom II X6 1055T 2.8GHz Six Core CPU AMD 785G Chipset DDR3 Motherboard ATI Radeon HD4200 512MB onboard Graphics 2GB DDR3 1333MHz RAM Seagate 250GB SATA 2 Hard Drive Gigabyte 585W Power Supply Cooler Master Elite Case, Gigabit LAN 1xDVI Connector 1xVGA Port (Supports Dual Monitors) 24X Dual Layer DVD Writer 8-Channel HD Sound, LCD & OS Opt

#### Motherboards

Gigabyte X58-UD7 Extreme - R3999 ASUS P6X58D-Premium USB3.0- R3399 Gigabyte P55A UD4P USB3.0 - R2499 Gigabyte AMD 890GPA-UD3H - R1799

**EVGA GTX 470 1280MB** R3599 Graphics Card

Gainward GTX 480 1536MB Card R4899

#### Gaming RAM

4GB DDR3 1333MHz - R1199 4GB DDR3 1600MHz - R1449 6GB DDR3 1600MHz - R1999 6GB DDR3 2000MHz - R2199

All our PCs are fully customizable with 24 months warranty. Visit our website for more amazing deals!!



Tel: 012 653 0033 Cell: 079 466 6636 sales@evetech.co.za

Unit 2 Diamond Park 92 Jakaranda str.Hennopspark Centurion 0157 www.evetech.co.za



## Sisense SiSense Prism. Business Intelligence Evolved.

## See Better. Understand Better. Act Better.



Do It Yourself BI – from mountains of raw data to powerful intelligence in a single product.

Forget about OLAP cubes and IT-managed data warehouses. Prism's breakthrough technology delivers

the fastest and easiest DIY business intelligence solution available; including its own high-performance data repository. Prism is a highend, all-inclusive BI solution in a single product.



For more information visit: www.sisense.co.za or contact SiSense's approved reseller for South Africa



Let Sakhu show you how to make the most of your Business Intelligence through Process Analytics.

151 Murray Street, Brooklyn Pretoria, South Africa Phone: 012 997 3791

Email: info@sakhu.co.za Website: www.sakhu.co.za

Action

Super Mario Galaxy 2

# Mario goes ballistic

Super Mario Galaxy 2 is quite simply the best platform title to hit the Wii since its release in 2007



Throughout
Nintendo's lengthy hroughout gaming history, the Mario franchise has been regarded as one of the company's finest (and most profitable) creations. The release of the Wii console in 2007 only served to further

this by offering a platform to a number of outstanding releases such as Super Mario Galaxy and Super Mario Bros.

Despite the impressive standards set by previous titles it appears that Nintendo have managed to step it up a notch with the release of Super Mario Galaxy 2,

which takes the 3D platform version of the series to new heights.

#### **Gameplay**

The gameplay in Super Mario Galaxy 2 is very similar to that found in its predecessor in the respect that it involves platform based mechanics on and around planets, known as galaxies. Each of these vary in size and make up with regards to flora, fauna, terrain and overall aesthetics.

For navigation the player is given access to Starship Mario, an enormous craft shaped like Mario's head. This is accessible at any time and, as the game progresses, serves as a hub for unlocked items, worlds and challenges.

#### **Challenges**

What is most enjoyable about Super Mario Galaxy 2 however, is the diversity of challenges and dynamics which are available to the player throughout. Each of the title's seventy worlds introduces a new movement to be mastered or a new item to be found which really adds to Super Mario Galaxy 2's longterm appeal.

Mario is still able to ride Yoshi, as well as use him to eat fruit which offers certain bonuses to the player depending on type. His tongue is still used to swing

between gaps and is aimed and

Wii GAMING

controlled by the player. Most of the mechanics found in the original such as Power Ups, Launch Stars and Sling Stars for interplanetary navigation make their return in Super Mario Galaxy 2. Several new items including the Rock Mushroom and the Cold Flower have however been included and make a nice addition to the overall game.

#### **Graphics**

Despite the Wii's lack of HD (it is only able to deliver video in 420p format) Super Mario Galaxy 2 is a truly beautiful game which demonstrates the creativity behind the Mario series.

#### Conclusion

Overall Super Mario Galaxy 2 is a fantastic game which, amazingly, manages to push motion control and open world platformer boundries even further forward than Super Mario Galaxy. [TM]

The Good	The Bad
Everything about this game is fantastic.	Nothing, get it now

July 2010 I techsmart.co.za

**Modnation Racers** 

# Redefining karting, in HD

As the second title in Sony's 'Play, Create, Share' catalogue (the first being critically acclaimed platformer Little.Big.Planet) Modnation Racers is almost instantly worthy of distinction. The kart racing genre is arguably one of the most mature in the gaming world and there is an indefinable quality to a few of these titles (think Mario Karts) which has made them classics. Modnation Racers, developed by United Front Games, brings together a collection of appealing characters mixed with the High Definition imagery that the Wii is unable to provide.

#### **Game structure**

Modnation Racers features a single player campaign mode, but focuses heavily on the creation of new content and online community. In single player the primary goal is to progress through 28 increasingly difficult tracks, while playing as a character called Tag; each track also holds two additional unlock options.

#### Gameplay

In terms of gameplay racers are able to accelerate and drift around the track. Successful drifts contribute points towards a boost meter which, when full, gives the player a short burst of speed or a shield to protect themselves from attacks. Weapons,

which incorporate the likes of sonic attacks, missiles and lightning, are also available to the player and are collected and

upgraded throughout the race.

For those who do wish to participate online there are a number of racing options available, including Quick Race, Split Screen and Career as well as a Coming Attractions portal where players can view and download upcoming DLC packages.

#### **Content creation**

In terms of content creation Modnation Racers is fluid and expansive, with a range of choices available for both characters (referred to as Mods) and vehicles. When building a track you has four general thematic options – alpine, desert, seaside or jungle and the freedom to lay down tracks you please.

#### Conclusion

So many releases these days are heavily layered and difficult to master – to the extent that gamers are expected to spend ten to fifteen hours before really mastering the in-game features. Overall Modnation Racers is just good clean fun and reminds us, in some ways, of what some game developers should spend more (or less) time focusing on. [TM]

#### The Good

## Content creation was limitless, online play is comprehensive.

#### The Bad

Overall the game may be too simplistic for some.

SBK X Superbike World Championship

# The leader of the pack?



Petrolheads have always had a large selection of car racing games to choose from, but the same cannot be said for those who

prefer their riding action on two wheels, rather than four. Enter SBK X Superbike World Championship to fill that gap.

The game is divided into three main modes, namely Arcade, Simulation and Multiplayer. Once you've hit the tarmac the choice between Arcade and Simulation greatly affects your bikes' handling. The Simulation mode takes

some practice as the racing experience feels real and very involved, giving you a good idea of the effort that goes into handling a superbike to deliver the fastest laps.

#### Arcade and Simulation

In Arcade mode, you lack the depth found in Simulation mode, but you'll be able to set a blistering pace without much practice, as your rider is virtually superglued to his bike. You'll also be provided with a coloured strip, indicating the perfect racing line to take as

well as where you're supposed to "gooi" and where to brake hard (strip goes from green to red).

There is also a boost function available to you in this mode, which allows you to power your way past other riders on long straights.

#### The look

The choice of modes isn't the only thing that has been done well; Black Bean Games also did a good job on the

modelling of the bikes and riders. Overall the graphics are competent, but not spectacular enough to move SBK X to the front row of the desirability grid. The presentation of the game could also do with some sprucing up as it feels somewhat uninspired for the most part and doesn't really add anything to the racing action.

#### Conclusion

SBK X sports some competent graphics, impressive physics (in Simulation mode) and enjoyable, 'look mom no

hands" racing (in Arcade mode), but it runs out of petrol in the race to obtain a broader following than

following than those people who know the difference between Superbike racing and MotoGP. [HD]

#### The Good

Arcade mode that allows for plenty of racing fun.

#### The Bad

The graphics and presentation won't blow you away.

July 2010 I techsmart.co.za

## UNBELIEVABLE COMBO DEAL: FREE Mecer 42" Full HD LCD Flat Panel







## STUDIO212

#### FREE Mecer 42" Full HD LCD Flat Panel

- 42.02" Screen (CMO)
- Full HDTV (1920 x 1080) Resolution
- Brightness (400 cd/m<sup>2</sup>)
- Improved Colour & Luminance Transient
- Reduced Digital Noise
- Extended Black & White Level
- 176° Wide Viewing Angle



\* Subject to credit approval. Terms and Conditions apply.

copy print scan fax (option)

From

R595
per month on rental\*

per month on rental<sup>3</sup> EXCL VAT

Contact Jayson Mac Gregor

TEL: 011 796 4889 | CELL: 082 557 6490 EMAIL: jmacgregor@toshiba-sa.co.za

www.toshibasa.co.za





## **GENERATION GAP?**

Not with the new Webonline hassle free, easy to setup ADSL

**Broadband** solution

1 gig bandwidth including monthly

ADSL line (384kb/s)
Free ADSL modem
Free Email address
Free telephonic technical support

#### **Benefits of ADSL:**

- MUCH faster than dial-up
- Always on (don't pay for time you spend online)
- Fixed monthly fee (no more surprises on your phone bill!)

pm all included!

#### **IMPORTANT TO NOTE:**

- R399 setup fee includes Telkom ADSL line activation as well as shipping of the modem.
- You need to have an existing Telkom line before we will be able to provide the service.

For full details visit www.webonline.biz or call us on 0861-666-555



\* All services are subject to terms and conditions. E & OE. All names and trademarks are the property of their respective owners.