

monitor

news 1

calendar 7

new products 8

ISSN 1448-7195

VOLUME 32 ISSUE 5 OCTOBER 2007



The advanced police car has five networks including Bluetooth and Wi-Fi which allows it to connect to PDAs or stream a live video feed to other police cars.

Future of policing revealed

An advanced police car was shown at the SmartDemo 2007 intelligent transport systems conference and exhibition in Melbourne recently.

The car is part of the \$1 million SAFE Vehicles Project from the National Safety Agency (NSA) which developed the car in partnership with the Victorian Partnership for Advanced Computing (VPAC), Monash University Accident Research Centre (MUARC), Monash University and the Co-operative Research Centre for Advanced Automotive Technology (AutoCRC). SAFE stands for "standardised approach for emergency vehicles."

Interest has been received from Emer-

gency Services Nationally in the car which is based on a Holden VE Commodore. The V6 engine has been modified with more power, a 120A alternator has been installed and there is an extra battery.

General Motors Holden provided the vehicle which is part of their standard police pack with Motorola providing a range of integrated technologies.

Some of the technologies include an automatic nameplate recognition system. This is an infrared long-distance camera mounted on the front of the car's lightbar on the roof. It can read number plates up to a range of 100m and compare them against a database to determine whether a car is

stolen or unregistered.

The car also provides two video feeds from inside the car – one towards the front and another pointing towards the rear – which can record visual information to be used for evidentiary purposes.

The advanced police car has five networks including Bluetooth and Wi-Fi which allows it to connect to PDAs or stream a live video feed to other police cars respectively. It has reflective decals on the exterior to make it more visible and create a safer working environment.

Development of the car began when the NSA approached the AutoCRC for government assistance for its SAFE Vehicles proj-

EDITOR

Justin Liew

MANAGING EDITOR

Dietrich Georg

ADVERTISING

Maria Mamone

phone (02) 9438 1533

fax (02) 9438 5934

email mmamone@engineersmedia.com.au

All editorial contributions should be sent to:

The Editor

Monitor

Engineers Media

PO Box 588, Crows Nest NSW 1585

phone (02) 9438 1533

fax (02) 9438 5934

email jliew@engineersmedia.com.au

INFORMATION, TELECOMMUNICATIONS AND ELECTRONICS ENGINEERING COLLEGE

CHAIR – A McPhail

IMMEDIATE PAST CHAIR – D Edwards

OTHER BOARD MEMBERS

B Broadway, D Burger, R Dixon-Hughes,

S Finlayson, J Gordon, D Habibi,

A Hanna, P Hitchiner, F Novacco,

K Power, G Sizer, G Thomas, J Walsh

ITEEC ADMINISTRATION

Pamela Manning

phone (02) 6270 6530

fax (02) 6273 2358

email pmanning@engineersaustralia.org.au

www.engineersaustralia.org.au/learned-groups/colleges/iteec-college/about-us

MONITOR is produced for Engineers Australia's Information, Telecommunications and Electronics Engineering College (ITEEC) by Engineers Media. The statements made or opinions expressed in this magazine do not necessarily reflect the views of the ITEEC. By accepting advertising in the magazine, the College is neither endorsing, nor is it responsible for the delivery of, the products or services offered.



ENGINEERS
AUSTRALIA

ect which aims to improve power supply management for in-vehicle technologies, minimise driver distraction and improve ergonomics for better safety. VPAC, MUARC and Monash University were engaged to assist with project coordination as well as research and development work. The organisations agreed to work together to create a concept car and address the above issues.

The concept car program ran for four months. During this time, it examined three key issues – power management, improving ergonomics such as human-machine interfaces and integration of technologies. The team sought to create a platform for electronics technologies in an extensible, modular way.

“Although the car demonstrated at the event was a police car, we are also striving to standardise technologies across emergency services, for ambulances and fire services,” said Dr Valdim Mustafa, project manager of SAFE Vehicles Project, and senior computational engineer-analyst with VPAC, based in Melbourne.

VPAC developed two proof-of-concepts, a power management one which focused on improving power to in-vehicle components and a mock-up display of the standard interface platform.

“We demonstrated the need for a collaborative approach in tackling existing issues with in-vehicle technologies and interfaces used in law enforcement and critical situations,” Mustafa said. Police cars often have high power consumption – with an average peak of up to 5kW.

Usually the bulk of this is consumed by the lightbar on the roof. By replacing the conventional incandescent lights with LEDs, the lights now use 10% of the original power.

The LED lighting on the interior and exterior for the foglights, headlamps and lightbar have reduced power costs. Ergonomics inside the vehicle was improved by removing loose objects which could be thrown around in the inside of the cabin during a car chase. The SAFE concept vehicle system is expected to be ready for deployment by mid 2009.

Companies out of incubation

Two ICT companies, Interactive Communications Solutions (ICOMMS) and Slap Systems, have graduated from i.lab Incubator, the technology incubator of the Queensland government.

Slap Systems will now operate from Holland Park and ICOMMS from Spring Hill, both in Queensland. Slap Systems was in the incubation program for three-and-a-half years, and ICOMMS for three.

In addition to office space, the firms have accessed skills development and networking programs, business development support, and mentoring from industry professionals. There are currently 31 early-stage technology based companies representing industries from ICT to biotechnology at i.lab.

ICOMMS was established in the backyard shed of founder and director Mark Leckenby's house in 1999 to address a need to monitor radiation hazards in the telecommunications sector.

Its radPro and RF-Aware software are designed to analyse and model radio frequency radiation emitted from antennas on towers, buildings and other radio communications infrastructure that service mobile phones and wireless devices.

Since joining i.lab in 2004, ICOMMS opened a UK subsidiary, raised private equity funding and has received the

consensus software award by the federal minister for communications, information technology and the arts Helen Coonan.

The number of their staff based at i.lab's Toowong facility has quadrupled in three years. It have secured markets with wireless operators in Australia and clients in Europe. The company is in the process of re-branding itself to Corearth.

Slap Systems founder Soenke Weiss started the company in the spare bedroom of his house in 2001. The company provides business and marketing management software to help hotels streamline their day-to-day operations. Its suite of products is now sold to 29 clients throughout Australia and Fiji, including hotel chains Accor and Marriot.

Over the years, it received more than \$180,000 in Queensland government funding through innovation, as well as technology and commercialisation programs.

The graduation of the companies coincided with a \$50 million investment milestone generated by the i.lab companies' grant funding since January 2004. This includes funding from angel investors, venture capitalists and the Queensland government's innovation start-up scheme and teQstart investment fund, which assists in the commercialisation of new high-tech products and services.

Computer model boosts wood yields

Victorian company Ensis has created a computer model that helps forest managers increase both the yield and profitability of wood production.

Ensis is a joint venture between CSIRO and New Zealand company Scion, a research institute for the forestry industry. The model was developed with funding by the Forests and Wood Products Research and Development Corporation (FWPRDC) in collaboration with Auspine, Forestry SA and Green Triangle Forest Products.

The computer model is based on data from experiments carried out over 12 years at 16 sites in the Green Triangle region in South Australia and Victoria. It works by integrating the results from these experiments to predict the growth response and profitability of different rates, forms and application scenarios for nitrogen and phosphorous fertiliser.

The goal is to help forest managers maximise wood production or profit. The system is based on a scientific understanding of the key processes influencing soil nutrient supply and how this drives tree growth.

Inputs for the model include basic information such as stocking, age, volume and site quality while outputs include graphs of annual or cumulative response, harvest yield, actual and discounted fertiliser costs and indications of harvest revenues.

Ensis forest scientist Dr Barrie May, who helped develop the decision support system, said it gives forest managers a tool to rapidly and automatically identify the optimum fertiliser strategy for a particular site as well as a way to compare relative growth responses and profitability across multiple sites.

“This computer model provides a way to improve fertiliser efficiency by targeting stands that will respond to fertiliser application and then highlighting strategies to boost growth and maximise wood yield using fertiliser regimes”.

May said while the model is yet to be tested beyond trees in the Green Triangle area, he is confident many of its predictive capabilities will be transferable.

He said foresters have, in the past, tended to assume fertiliser application was straightforward but the research results prove otherwise.

Results from the research underpinning the computer model showed how the efficiency of fertiliser application can be improved by targeting the most responsive sites and tailoring fertiliser strategies to suit requirements of specific areas.

For example, applying nitrogen to ar-



The computer model helps increase the yield of wood production by predicting the growth response for fertilisers.

reas previously fertilised with phosphorus increased the average value by almost double compared with applying nitrogen alone to unfertilised areas.

The findings have also shown that most sites in the Green Triangle do not respond to phosphorus alone and there is little benefit in applying it more frequently than once every ten years at most sites.

“If you choose the wrong fertiliser or wrong site, the trees may actually grow more slowly than if you did nothing,”

he said.

“Furthermore, if you wait too long before thinning or clear felling fertilised stands, much of the early fertiliser response may be eroded as a result of other factors limiting growth.

“However, the right applications can lead to a significant increase in wood production and, ultimately, greater returns. There has been a lot of guesswork in the past – now we have a means of quantifying the inputs and returns.”

Computer technology fights cancer

People with a family history of breast and bowel cancer can benefit from a new computer software program which calculates their risk of developing the disease.

Prof Jon Emery, who is chair of general practice at the University of Western Australia, was the lead researcher in a UK trial which found general practitioners in the East Anglia region of the UK were found to be more effective at referring patients with a family history of breast or bowel cancer when they used a new computer-based system called Genetic Risk Assessment on the Internet with Decision Support – or Graids.

45 general practices participated in the trial which was funded by Cancer Research UK and Britain's National Health Service. 23 adopted the Graids system while the remaining 22 used current best practice – relying on the judgment of general practitioners to make referrals, aided by a paper copy of the regional referral guidelines and a 45-minute presentation on cancer genetics. Details of the trial were recently published in the *British Journal of Cancer*.

As a result, the federal government is funding the development of a national electronic family history tool, based on the Graids software, for use by Australian general practitioners.

"The Graids system calculates family cancer risks for individual patients by using existing data on cancer risks together with information given by the patient on their



Prof Jon Emery.

family history of cancer," Emery said.

"A woman with either a mother or sister who has had breast cancer, for example, has double the risk of developing the disease compared to a woman with no family

history. A woman with two or more relatives affected is at even more risk."

Emery's research found that compared with best practice, the Graids system both increased the number of patients referred by general practitioners to regional genetics specialists and ensured that referrals more closely matched official referral guidelines.

"General practices using Graids referred 162 patients over the trial's 12-month period, compared with 84 patients referred by those using current best practice," he said.

"Our study shows for the first time the value of software that assesses family history for general practice.

"The system resulted in significantly more referrals that were consistent with guidelines for those with a family history of breast cancer and in cases where there was a history of both breast and colon cancer in the same family."

The system also produced a higher proportion of referrals meeting the criteria for increased risk – 93% of those with a family history of breast cancer, 99% for those with a family history of bowel cancer and 95% for those with a family history of both diseases. This compared with 73%, 92% and 79% respectively for patients referred through best practice alone.

Emery said patients referred using the system also reported feeling less anxious about their risk of cancer.

Grant to tackle emergency bottlenecks

Reducing delays and bottlenecks in public hospital emergency departments is the aim of a newly funded project at the e-Health Research Centre (EHRC).

The EHRC, a joint venture between CSIRO and the Queensland government, will receive \$300,000 to undertake development and pilot testing of a National Emergency Department Patient Admissions Prediction Tool.

The project is a joint undertaking between the EHRC, the Department of State Development, Queensland Health, Griffith University and the Queensland University of Technology.

Announcing the grant, Queensland premier Anna Bligh said that the coordination of bed allocation is a significant challenge confronting the emergency departments of many Queensland hospitals.

"At present there is no off-the-shelf

software in Australia that allows hospitals to properly predict the in and out flow of patients and monitor the up-to-date usage of hospital beds," Bligh said.

Chief executive officer of the e-Health Research Centre, Gary Morgan, said that the software will be designed with the needs of hospital workers in mind.

The software will be designed with the needs of hospital workers in mind.

"Our goal is always to ensure that research outcomes are translated to practical improvements for the health system," Morgan said.

"This means that the tool will enable

workers to rapidly assess bed availability to meet current demand without significantly changing their other work practices."

Bligh said that a pilot study involving clinicians at the Gold Coast Hospital emergency department has demonstrated that it is possible to predict the likely number of admissions for any given day.

"The project will be undertaken over 12 months and will include testing of the new software in two hospitals – Gold Coast Hospital and Toowoomba Hospital," she said.

"As well as decreasing overcrowding in emergency departments, it aims to reduce the regular by passing of ambulances to other hospitals due to unforeseen demand.

"It also has potential to be implemented in other Australian hospitals."



Smoothed particle hydrodynamics was used to create the virtual beer demonstration at the Siggraph 07 conference in the US.

Pour me some virtual beer

In a demonstration of fluid special effects software, a virtual glass of beer was poured at the Siggraph 07 conference in the US. The event is one of the world's largest computer graphics conferences.

The software is being developed under a four-year project by researchers from CSIRO and Korea's Electronics and Telecommunications Research Institute, a computer graphics developer for games. Most of the research is being done in Melbourne.

Smoothed particle hydrodynamics mathematics allows the software to achieve fluid effects using less computer power and time compared to traditional

special effects software.

CSIRO fluids researcher Dr Mahesh Prakash said the physics of bubble creation in carbonated drinks like beer is complex.

"As you pour beer into a glass, you see bubbles appearing on what are called nucleation sites, where the glass isn't quite smooth," Prakash said.

"The bubbles expand to a certain size then rise up in streams to the surface, where they bump into each other and form a raft of foam that floats on the top."

Prakash and his colleagues have captured the maths describing these processes in software that allows movie

makers, film production houses and others to create realistic special effects.

CSIRO's business and commercialisation manager Andrew Dingjan said the project aims to bring the fluid animation software within reach of smaller film production houses.

"Big Hollywood studios spend vast sums on single-use solutions when they make special effects-laden blockbusters but we'd like our software to make realistic special effects easier to come by," Dingjan said.

Discussions with potential global commercialisers of the software will follow next year.

Security network protects university's data

Network security company Nortel and its channel partner 3D Networks recently implemented a \$1 million network security system for Sydney's Macquarie University. The system will protect the university's information infrastructure from internal and external threats.

The system includes Ethernet routing switches and switched firewalls with checkpoint security software.

The university decided to overhaul its security systems after an audit last year revealed weaknesses in its existing infrastructure. The new system will replace

multiple separate firewalls and ad-hoc security gateways with a network of secure routers connected to a central firewall for all incoming and outgoing traffic.

"More than 30,000 students attend this university so we have the dual challenge of providing computer facilities which are open to all while protecting against unauthorised traffic originating from our users," said Peter Hole, infrastructure services manager at the university. Network security is also important in protecting the university's intellectual property. A large amount of sensitive research and commercial data

is stored on the network.

The university's tender required the new security system to be scalable, not affect system availability, and be able to detect and react to damaging and nondamaging illegitimate traffic like music and video downloads.

According to Hole, one of the design attractions in the new network is the placement of firewalls. "By placing a firewall at the network core rather than the edge and routing all traffic through the firewall, we're simultaneously protected from external and internal threats," he said.

Software companies win awards

Five IT and software businesses were state winners in their categories at the Telstra Business Awards in Sydney.

The businesses are business software specialists Ebiz Solutions from Western Australia, information security consultancy Stratsec from the ACT, software developer SRA Technology from the Northern Territory, business software provider Inzenius from Victoria and visualisation program developer Autech Software and Design from Tasmania.

Established in 1992, the awards recognise and reward outstanding Australian businesses with fewer than 100 employees.

Ebiz Solutions won the Australian Government Micro-Business Award for businesses with fewer than five employees.

It is a MYOB software specialist with three MYOB certified consultants on staff and provides training, consulting and support to small to medium sized businesses.

The company was established in 2001 and provides assistance to a range of clients including retail outlets, schools, hotels, automotive repairers and property investors.

The awards recognise and reward outstanding Australian businesses with fewer than 100 employees.

Stratsec won the MYOB Business Award for businesses with more than five employees but less than or equal to 20. It provides services in security consulting and technical assurance services such as risk management, information and communications technology security management, identity and access management, physical and personnel security management, and product evaluation.

It has recently been licensed as an Australian Information Security Evaluation Facility (AISEF) and provides product and services evaluation for US vendors, Microsoft and IBM, as well as consulting services to government bodies including intelligence, defence, healthcare and financial services.

SRA Technology was named the 2007

Telstra Northern Territory Business of the Year and also won the Hudson Business Award for businesses with more than 50 employees but less than or equal to 100. It won the AMP Innovation Award for businesses which have recently introduced an innovative product, service or process.

SRA Information Technology offers corporate custom software solutions for organisations Australia-wide, providing services such as systems analysis, web site and web based application development, IT strategic planning, and training and support.

Inzenius won the AMP Innovation Award for businesses that have recently introduced an innovative product, service or process.

Its labour management software performs rostering, validation of attendance

to roster, award interpretation, and full payroll processing and payments.

The company provides management systems and support to clients based in the health, hospitality, manufacturing and business services sectors in Australia and Dubai.

Autech Software & Design also won the AMP Innovation Award for its visualisation software for the paint and homewares industry.

Using graphics technology to visually reproduce colour and design, the visualiser product enables paint suppliers to show customers on a computer screen how a chosen paint colour might look in their home.

It allows customers to visualise how furnishings, kitchens and floor coverings will look.

Data city for Canberra

A \$1 billion data centre city will be developed in Canberra to establish the city as a global technology hub.

The Canberra Technology City (CTC) project has been devised by a consortium including utility company ActewAGL, data centre developer Technical Real Estate, and Galileo Connect, which is a UK-based data centre designer.

ActewAGL general manager retail Ivan Slavich said the CTC would incorporate dual sites at Hume and Belconnen. The

sites will be marketed around the world to capitalise on a worldwide shortage of secure and robust data centre facilities.

A marketing roadshow, taking in Melbourne, Singapore and Hong Kong, took place last month to promote the project to prospective tenants.

Real estate services provider CB Richard Ellis has been appointed to provide transaction management and advisory services for the CTC project.

SOURCE: AAP

Cable contract renewed

Prysmian Cables & Systems, a worldwide leading player in the cable industry, has announced a three year agreement to continue the supply of both fibre optic and metallic communication cables to Telstra.

The contract, based on a pre-existing agreement, has been secured by Prysmian Telecom Cables and Systems Australia Pty Limited.

The company's chief executive officer in Australia, Paul Atkinson, said the company plans to double the capacity of its Sydney manufacturing facility to meet future demand.

This investment is to be completed by early next year and will offer greater flexibility of supply and to develop supply chain efficiencies for Telstra.

Indian firm opens Queensland office

India-based IT services firm Satyam has opened a facility in Brisbane, the company's fourth in Australia.

The Brisbane CBD solutions centre will initially employ 40 staff to serve customers in the region, with particular emphasis on the government, finance and mining sectors, and on enterprise application integration technology. The company expects to

add another 50 staff in the near future.

The company's existing Australian centres are located in Sydney, Melbourne and Canberra. It claims to employ over 800 people in Australia.

The company has offered scholarships to 100 associates so they may train in India.

SOURCE: ITWIRE

For a more comprehensive list of engineering events, visit Engineers Australia's online events calendar at www.engineersaustralia.org.au/events

Electrical Engineering

Courses: **Advanced electrical safety training** (2 days)

Saskatoon 23 Oct, Winnipeg 25 Oct; **Arc flash and electrical safety** (3 days) Saskatoon Oct 22, Winnipeg Oct 24; **Canadian electrical code** (2 days) Saint John Oct 22, Halifax Oct 24; **Electrical engineering** (2 days) Vancouver Nov 1, Edmonton Nov 5, Saskatoon Nov 8, Winnipeg Nov 13, Toronto Nov 15, Ottawa Nov 19, Saint John Nov 22; *Inquiries:* +905 686 1040, fax +905 686 1078, web www.electricityforum.com/forums/advanced-electrical-safety.html

Course: **Power system harmonics, earthing and power supply quality** (2 days)

Hong Kong 22 Oct, Singapore 25 Oct, Kuala Lumpur, Malaysia 1 Nov. *Inquiries:* 1300 651 052, fax 1300 651 072, email register@apptechgroups.com, web www.apptechgroups.com

Conference: **International conference on electrical engineering and design**

(3 days) Hammamet, Tunisia 4 Nov. *Inquiries:* email jes@jes.esrgroups.org, web icesd.esrgroups.org

Courses: **Advanced power**

Engineering Education Australia

Courses: **Asset management and maintenance** (2 days)

Brisbane 14 Nov, Melbourne 27 Nov, Perth 17 Oct, Sydney 20 Nov; **Contract management** (2 days) Brisbane 19 Nov, Melbourne 29 Oct, Perth 19 Nov, Sydney 8 Nov; **Earned value methodology** (1 day) Brisbane 18 Oct, Melbourne 14 Nov, Perth 15 Nov, Sydney 17 Oct; **Electrical engineering practice – module 4 earthing systems** (2 days) Sydney 25 Oct; **Electrical engineering practice – module 5 inspection, testing, commissioning and contract management**

system protection

(3 days) Perth 29 Oct, Sydney 5 Nov; **Life management of high voltage underground power cables** (2 days) Sydney 26 Nov, Auckland, New Zealand 29 Nov, Sydney 5 Dec; **High voltage circuit breakers** (2 days) Brisbane 10 Mar, 2008, Sydney 13 Mar, 2008; **Life management of underground power cables seminar** (2 days) Sydney 26 Nov, Auckland, New Zealand 29 Nov. *Inquiries:* 02 8448 2078, fax 9412 4813, email register@cpdint.com.au, web www.cpdint.com.au

Conference: **8th international power engineering conference – IPEC 2007**

(4 days) Singapore, Singapore 3 Dec. *Inquiries:* Secretariat, +65 6356 4727, fax +65 6356 7471, email info@ipec.sg, web www.ipec.sg

Conference: **Australasian universities power engineering conference**

(4 days) Perth 9 Dec. *Inquiries:* 08 9266 2600, fax 08 9266 2584, email aupec2007@curtin.edu.au, web www.ece.curtin.edu.au/aupec2007

Conference: **International conference on information and communication technology in electrical sciences**

(3 days) Chennai, India 20 Dec. *Inquiries:* +91 044 23782176, email

(2 days) Sydney 29 Nov; **Project management**

(2 days) Brisbane 15 Nov, Canberra 11 Dec, Hobart 27 Nov, Melbourne 1 Nov, Perth 22 Nov, Sydney 6 Nov; **Risk and liability management** (2 days) Brisbane 8 Nov, Melbourne 17 Oct, Perth 21 Nov, Sydney 24 Oct; **Writing winning technical documents** (2 days) Adelaide 18 Oct, Brisbane 22 Nov, Melbourne 10 Dec, Perth 29 Nov, Sydney 4 Dec. *Inquiries:* Frank Martinelli, general manager, Engineering Education Australia 03 9326 9777, fax 03 9326 9888, email frankm@eeaust.com.au, web www.eeaust.com.au

ictes07@rediffmail.com, web www.ictesindia.org

Energy

Conference: **8th annual Australian gas turbines conference**

(2 days) Brisbane 12 Nov. *Inquiries:* 02 9080 4300, fax 02 9290 2577, email enquiries@informa.com.au, web www.informa.com.au/gasturbines

Conference: **International conference on advances in energy research**

(3 days) Mumbai, India 12 Dec. *Inquiries:* Prof Rangan Banerjee, Indian Institute of Technology +91 22 2576 7883, email icaer2007@iitb.ac.in, web www.es.e.iitb.ac.in/~icaer2007

Workshop: **Solar energy for the developing world**

(14 days) Fundacion Durika, Costa Rica 2 Feb, 2008. *Inquiries:* email sei@solarenergy.org, web www.solarenergy.org/workshops/workshop.php?id=42

Conference: **Energising sustainable communities – options for our future**

(5 days) Adelaide 17 February, 2008. *Inquiries:* 08 8379 8222, fax 08 8379 8177, email events@plevin.com.au, web www.solarcitiescongress.com.au

Conference: **West coast energy management congress**

(2 days) 14 May, 2008 Seattle, US. *Inquiries:* web www.energyevent.com

Conference: **Globalcon 2008: Energy, power and facility management strategies and technologies**

(2 days) Texas, US 19 Mar, 2008. *Inquiries:* web www.globalconevent.com

Information & Communications Technology

Conference: **Systems 2007**

(4 days) Munich, Germany 23 Oct. *Inquiries:* web www.SYSTEMS-world.de

Conference: **4th international automotive electronics congress**

(1 day) Paris, France 8 Nov. *Inquiries:* email mdeluca@reedbusiness.fr, web www.automotive-electronics-congress.com

Conference: **Mobile Asia congress**

(4 days) Macau 12

Nov. *Inquiries:* +44 20 8879 2419, email registration@mobileasiacongress.com, web www.mobileasiacongress.com

Conference: **The net generation: Alternative realities**

(1 day) Sydney 13 Nov. *Inquiries:* web www.slatteryit.com.au/netgen07.aspx

Conference: **International workshop on hyperspectral remote sensing**

(1 day) Kuala Lumpur, Malaysia, 17 Nov. *Inquiries:* www.usq.edu.au/users/apana/hypers2007

Conference: **Open source developers conference**

(4 days) Brisbane Nov 26. *Inquiries:* Arjun Lenz, email arjen@lentz.com.au, web osdc.com.au

Seminar: **Venture capital connect**

(1 day) Sydney 6 Dec. *Inquiries:* web www.slatteryit.com.au/vcconnect2007/nsw.html

Conference: **AIIA business briefing – always looking forward**

(1 day) Sydney 6 Dec. *Inquiries:* 02 9423 8850, email aiaa@slatteryit.com.au

Conference: **linux.conf.au 2008**

(6 days) Melbourne 28 Jan. *Inquiries:* 03 9235 5454, fax 03 9235 5454, email contact@melbourne.org, web linux.conf.au

Conference: **Mobile world congress**

(4 days) Barcelona, Spain 11 Feb, 2008. *Inquiries:* +44 208 879 2422, web mobileworldcongress.com

Conference: **Siggraph 2008 – the 35th international conference on computer graphics and interactive techniques**

(5 days) Los Angeles, US 11 Aug, 2008. *Inquiries:* www.siggraph.org/events/s2008

Miscellaneous

Symposium: **Malaysia-Japan international symposium on advanced technology**

(4 days) Kuala Lumpur, Malaysia 12 Nov. *Inquiries:* email azizan@citycampus.utm.my, web cairo-aisb.com/mjisat2007

Conference: **Sennet 07: International conference on sensors and related networks**

(3 days) Vellore, India 12 Dec. *Inquiries:* email sennet07@vit.ac.in, web www.sennet07.org

Portable widescreen projector

Epson has released a single plug portable widescreen home theatre and games projector for large screen entertainment.

The EMP-DM1, with integrated DVD/CD player and speakers, is a portable widescreen multifunction projector.

With no audio and video connections needed, the unit can be used to view movies, photos or listen to music. It can be used to play games or view cable, broadcast TV or browse the internet.

It has component and composite video and audio input, a USB2.0 plug for plug and play devices and two 8W virtual surround speakers.

It will accept input from a laptop computer or PC, video and still digital cameras, external DVD and video players, games consoles, multimedia players such as an iPod, multi-card readers (via the USB slot), and USB drives.

The unit has XGA resolution of 480p in a native widescreen format (480 x 854), and lamp brightness of 1000 ANSI lumens.

Accepted audio and video formats for the DVD/CD player include DVD video and audio (DVD-R/RW, DVD+R/RW, DVD-ROM, CD-R/RW, CD-ROM and DVD-VR), VCD,



The unit can be used to view movies and photos or listen to music.

SVCD, audio CD, MP3, WMA, JPEG, DivX, DivX Ultra and via the USB port: JPEG,

WMA/MP3, and DivX.

[More information – Qikreply 16](#)

Router with a hotspot function

Adelaide-based PC Range is distributing a router developed by Taiwanese company Billion which blends an ADSL2+ broadband connection with backup internet access through mobile phone networks. The BiPAC 7300GX dual-interface firewall and router provides broadband access via 3G mobile phone networks in case ADSL on a phone line drops out or is not available.

With four Ethernet ports and 802.11g wireless networking, the BiPAC 7300GX can act as a mobile hotspot for those using computers on the road. The compact unit comes with a 12-volt car adapter so it can be charged from a car's cigarette lighter.

Customers can buy a 3G data card, which plugs into a PCI card slot in the unit, from their preferred mobile phone service provider.

PC Range managing director Raaj Menon said "To date, wireless data cards only let one person use a laptop when they were out of the office. This technology allows you to share broadband access among several people when you're out and about.

"If your wired link drops out in the office, you get a broadband backup through the mobile phone network."

It uses ADSL2+ to offer download

speeds as fast as 24Mb/s over a phone line while wireless connections offer speeds up to 14.4Mb/s via 3G/HSDPA, Edge, UMTS or GPRS networks.

The four-port full-duplex 10/100 switch can directly link four PCs or attach more hubs and switches to create a larger network.

The four-port full-duplex 10/100 switch can directly link four PCs or attach more hubs and switches to create a larger network. The integrated router shares an

ADSL2+ or 3G-based internet connection with automatic fail-over to ensure an always-on internet connection in the event one internet service fails.

It can also encode all 802.11g wireless LAN transmissions with wired equivalent privacy or wi-fi protected access encryption to ensure that data is protected and has a dynamic host configuration protocol server and serial peripheral interface firewall to protect against intruders and most known internet attacks.

Secure WLAN setup is simplified by the web browser-based configuration for easy access to the internet wherever a 3G connection is available.

[More information – Qikreply 20](#)

Storage platform for image software

The DVS-SAN storage system by DVS Digital Video Systems has been certified by da Vinci Systems and will be able to be used as a central storage platform for da Vinci's Resolve and Revival products.

Both system are based on open standards. By using the DVS-SAN storage system, Resolve and Revival customers will be able to manage their content in one central location, share content with other

applications and connect to their content from every step of the workflow in real-time at SD, HD, 2K and 4K.

Resolve is a digital mastering suite for image enhancement. Revival is a film restoration and remastering system with tools to remove scratches and dirt.

The DVS-SAN has RAID controller technology.

[More information – Qikreply 23](#)



The case can be used to encase notebooks with screen sizes up to 13.3 inches.

Protection for notebooks

The new Slipskin notebook case from Targus Australia protects notebook computers from harmful elements.

Manufactured in black neoprene with a zip fastener and an orange scratch-free lining, the case can be used to encase notebooks with screen sizes up to 13.3 inches.

The case measures 34.3cm x 3.81cm x 24.8cm, weighs 200g with a contoured fit.

It can be used as a standalone product but can be slipped into a larger carrier.

The case is supported by a lifetime warranty.

[More information – Qikreply 31](#)

Multimedia elevator display

E-Motive has released its new Eavis E2 LCD elevator display which has multimedia capabilities.

In addition to providing basic lift information to passengers, floor number, travel direction, date and time, temperature and

emergency messages, the display can support television, internet, DVD and video streams and advertising.

The display is 20mm deep and users can edit the screen format and content.

[More information – Qikreply 22](#)



The elevator display can show television and video streams.

Power management circuit

Fujitsu Microelectronics Asia has announced the development of a one-chip system power management integrated circuit

The MB39C308 is designed for ultra-mobile PCs to supply power to the system, memory, and chipsets. It complies with the upcoming version of the low power architecture proposed by Intel Corporation.

It has a six-channel DC/DC converter control circuit, while integrating other peripheral components onto the chip. This enables the power management system to be reduced, extending the operating time of the battery.

The unit was jointly developed with Fujitsu VLSI Limited, using laterally diffused MOS technology. By using this technology and revising the transistor structure, the unit supplies power from a lithium-ion battery at high-efficiency rates without dispersion. The DC/DC converter control circuits incorporated in the chip generate voltages across six different channels and support power for memory, the chipset and external systems such as wireless LAN, as required in the 2008 version of the low power architecture platform.

Also, a switching field effect transistor integrated in the unit can drive a current of 1.5A to 3.5A. This benefits the memory and chipset, reducing the number of peripheral components and the size of the power management system.

In addition, by optimising components to comply with the low power architecture platform and embedding them into the power management integrated circuit, it becomes possible to eliminate the requirement to set voltage or current when designing power management systems.

[More information – Qikreply 17](#)

Upgrade for easier virtual monitoring

Avocent has introduced an upgrade for its DSView 3 management software which enables combined access and control of virtual and physical servers in the same interface. This design reduces the cost and complexity of managing data centres.

The updated software also has expanded support for blades systems to include IBM, generic blade systems, and additional HP system models, adding to the HP and Dell blades systems models supported since last year.

“Virtualisation offers significant eco-

conomic benefits to the enterprise, and we're pleased to add this powerful new capability that our data centre customers demand," said

Ed Havlik, Avocent country manager for Australia and New Zealand, said the emerging mix of virtual and physical servers is adding a new layer of complexity to IT management. "Having a single platform for combined access and control of physical and virtual servers eliminates the need for

a separate set of tools for managing the virtual component," he said.

The software also supports VMware by creating a unified view of the entire virtual infrastructure within an enterprise with multiple VirtualCenters.

Typically, VirtualCenters are viewed separately and require IT managers to access them on an individual basis for management.

The software can consolidate, display

and enable access to all virtual machines across multiple VirtualCenters. Additionally, the software can consolidate visibility across multiple ESX Servers or a combination of VirtualCenters and ESX Servers, allowing IT managers a combined view across an entire infrastructure to see all physical and virtual servers and machines on a single screen, saving time and simplifying management.

🔗 *More information – Qikreply 32*

PC module compatible with ISA bus

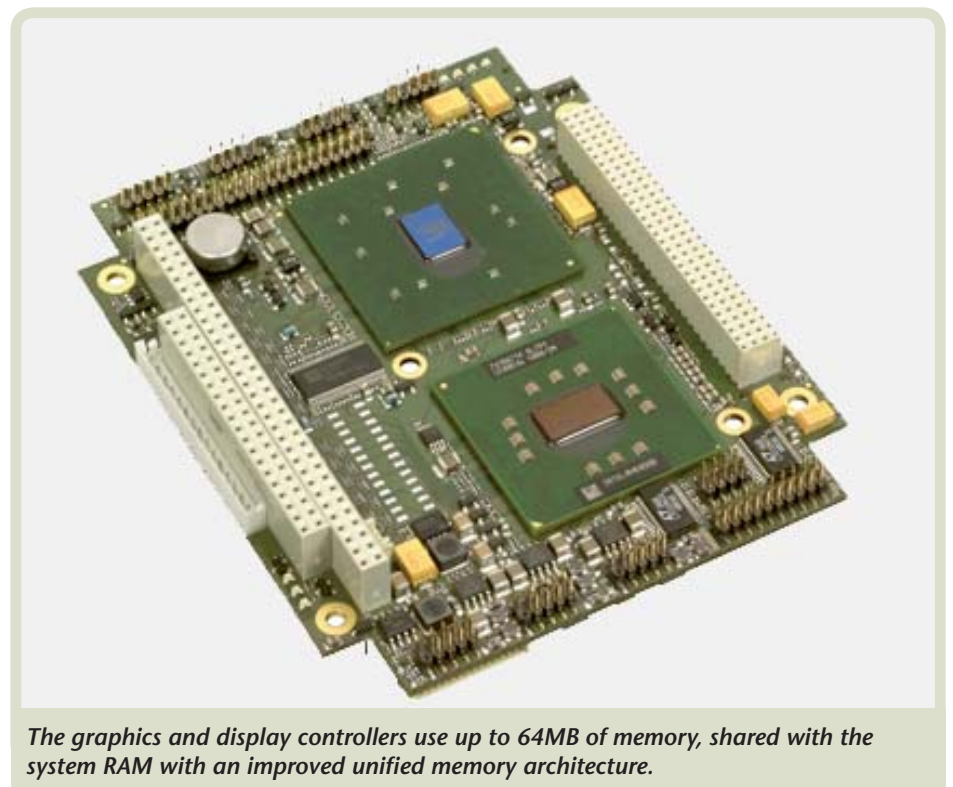
Dominion Electronics is distributing the Cool RoadRunner PC module from LiPERT Embedded Computers which supports the industry standard architecture bus and serial interfaces.

Like its predecessor, it works with a Pentium M processor and the i82855/ICH4 chipset. It is a complete single board computer, built according to the PC/104-Plus standard. There are several processor variants with different clock rates available: Pentium M 738 at 1.4GHz and Pentium M 745 at 1.8 GHz, and a Celeron M 373 1GHz.

The module's i82855GME chipset features a fast Intel Extreme Graphics 2 graphics engine with 2D and 3D capabilities, delivering outstanding graphics performance for embedded computer applications. It allows the use of legacy ISA I/O modules, which are used in the industrial markets. It comes with a graphics controller with CRT and LVDS interfaces, six USB slots and a fast Ethernet port. It has an IDE adapter for ATA100 and two serial RS232/485 interfaces.

The module is available in different speed grades. The 1GHz variant with a Celeron M needs 16W at 5V and can be ordered for the extended temperature range of -40°C to 85°C. The main memory can be expanded up to 1GB using suitable DDR-SODIMM modules.

An AC-97 codec is on-board for sound I/O. The ATA-100 compliant EIDE interface



The graphics and display controllers use up to 64MB of memory, shared with the system RAM with an improved unified memory architecture.

allows connection of standard hard disks or other storage devices.

The graphics and display controllers use up to 64MB of memory, shared with the system RAM with an improved unified memory architecture.

Display resolutions as high as 2048 x

1536 at 75Hz are supported. In addition to ordinary SVGA-monitors, TFT flat panels can be connected through the dual channel LVDS interface.

System expansion is carried out using the PCI-104 bus.

🔗 *More information – Qikreply 18*

Protocol stack added

Systec Electronic GmbH is extending its product range by adding a Powerlink protocol stack that complies with the current DS 1.0.0 specification.

The software component was developed from experience with field bus systems. Its modular software structure and ANSI-C implementation allow for portability to other target platforms such as other microcontrollers or operating systems.

Using the stack without an operating system is also possible.

It supports controlled nodes as well as managing nodes.

The company provides a preconfigured starter kit to facilitate user entry to the Powerlink technology.

The kit includes a development board with a Freescale Coldfire processor, an embedded Linux environment and a fully documented demo application.

The Powerlink protocol stack is available from Embedded Logic Solutions.

🔗 *More information – Qikreply 25*

For more information on any of these products, send an email to kharrison@engineersmedia.com.au with the subject headline "Monitor Qikreply". Your contact details and the Qikreply number of the product should be included in the body of the email.