



ECN Webcast Series

Gesture Recognition: Laser and Infrared Technology Enabling 3D Applications

ON DEMAND NOW REGISTER FREE

Sponsored by: **OSRAM** Opto Semiconductors



Computing | Consumer | Wireless | Power | Industrial | Medical | Mil/Aero | Automotive


NEWS PRODUCTS FEATURES BLOGS MULTIMEDIA RESOURCES SUBSCRIPTIONS

Advanced Search

ECN FREE e-Newsletter Subscription

E - m a i l :

Sponsored Product



First Instrumentation Amp with On-Chip Diagnostics/More easily detect shorts, open circuit, and degraded connections with National Semiconductor's LMP8358, the industry's first zero-drift, programmable instrumentation amplifier with on-chip diagnostics. Its patented techniques measure and correct input offset voltage to eliminate offset drift over time and temperature, and the effects of 1/f noise while EMI filters reduce unwanted RF interference from external sources.

[For more information click here](#)

Latest News | **News From Europe** | **News From Asia**

Dell lowers 1Q profit to build \$100M legal reserve
1 hour ago

Mark Cuban to tender Lions Gate shares to Icahn
1 hour ago

Best Buy melds Speakeasy unit with Covad, MegaPath
2 hours ago

USDA grants fund studies of organic agriculture
3 hours ago

Stretched molecules allow electron studies
4 hours ago

[Home](#) > [News](#)

[View Comments](#)

Cutting the Internet's carbon footprint

Share:

E-mail: Print: Bookmark: RSS:

Text [+]

Wednesday, June 9, 2010

Over the last 20 years the Internet has grown from almost nothing to something of enormous economic and social value. But in the meantime, its consumption of electricity, which currently stands at 3% to 5% of the global supply, is increasing exponentially.

★ [HotSearch](#)

Double-click any word to search

Highlight any

[More Latest News >>](#)

Interdisciplinary research being undertaken by the Universities of Leeds and Cambridge has received a major boost through a £5.9m, five- year EPSRC Programme Grant award to address this issue of enabling growth of ICT networks while at the same time reducing energy consumption.

The vision of the 'INTElligent Energy aWare NETworks' (INTERNET) project is to reduce the carbon footprint of ICT networks by at least an order of magnitude - along with a corresponding reduction in non-renewable energy consumption. This will enable comparable growth beyond the current energy barrier.

Professor Jaafar Elmirghani, the project's lead investigator, said: "The funding will offer us the stability and flexibility needed to address the major challenges associated with energy utilisation in telecommunication networks. I am delighted that we have been recognised in this way."

Energy efficient processes are increasingly key priorities for ICT companies with attention being paid to both ecological and economic drivers. Although in some cases the use of ICT can be beneficial to the environment - for example by reducing journeys and introducing more efficient business processes - countries are becoming increasingly aware of the large growth in energy consumption of telecommunications companies.

"The predicted future growth in the number of connected devices, and of the bandwidth of the Internet of an order of magnitude or two, is not practical if it leads to a corresponding growth in energy consumption. Regulations may therefore come soon, particularly if governments worldwide enforce moves towards carbon neutrality," Professor Elmirghani said.

"The INTERNET project is therefore of great importance in seeking to establish the current limits on ICT performance due to known environmental concerns and then developing new ICT techniques to provide enhanced performance. In particular, substantial advances can be achieved through the innovative use of renewable sources," he added.

The collaborative project will draw together leading research in three key areas: optical networks (led by Professor Elmirghani at the University of Leeds), optimization of internet and Web protocols and services (led by Professor Jon Crowcroft at the University of Cambridge) and optical routing and data communications (led by Professor Richard Penty and Professor Ian White at the University of Cambridge).

[SOURCE](#)

[Click here to view or to leave comments on this article.](#)

phrase & click
HotSearch



Blogs

Forums



Kinetic Hydropower Emerges as a Viable Energy Solution

11 hours ago

Energy captured from the natural flows of tides and rivers, without the use of dams

or large civil structures – kinetic hydropower – has begun to emerge as a viable, low-impact clean energy option.

Powering Portable Military Devices

download white paper now



The Newest Products For Your Newest Designs

TEXAS INSTRUMENTS Authorized Distributor

DualCool™ NexFET™ Power MOSFETs

Learn More

click here



mouser.com

For Low Cost High Performance Power Products: **GO Direct!!**

Click Here  For Pricing, Free Samples

www.micropowerelectronics.com

MicroPower Direct

efficiency zone

Sponsored by **MICROCHIP**



clean energy system



Looking at Chip on Flex Filtering

Jun 8

Lightning never strikes the same place twice; but, once is enough to send an aircraft into electrical failure, which can have catastrophic results.

[More Blogs >>](#)

Join the Discussion

Rate Article:  Average 0 out of 5
[register](#) or [log in](#) to comment on this article!

 0 COMMENTS

 ADD COMMENT

Text Only 2000 character limit

Add Comment

Page 1 of 1

What can we do to get you **MORE GREEN** out of your Power Supplies?



DONGAH
THE POWER YOU NEED!

STAY INFORMED, EVERY DAY.

Receive a **FREE** subscription to the ECN Daily e-Newsletter

E - m a i l

C o m p a n y

N a m e

S u b s

Video of the Day



[Advertise with Us](#) | [Contact ECNmag.com](#) | [Terms & Conditions](#) | [Privacy Statement](#)

An ECNmag.com Network Site © 2009 Advantage Business Media. All rights reserved.

Use of this web site is subject to its [Terms and Conditions of Use](#). [View our Privacy Policy](#).