

# Electronics Weekly

FIRST FOR DESIGN &amp; TECHNOLOGY NEWS SINCE 1960

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## Inside News

### Sharper space pics

Astronomers have developed a telescope camera and processing software that together can produce sharper images of space than the Hubble telescope →p7

### Power for arms

The inventor of NAND flash memory Toshiba is aiming for pole position with the aid of the world's largest flash memory fab →p10

### Finding GPS routes

Antenna designer Sarantel believes the firm can cash in on opportunities in the GPS positioning market →p15

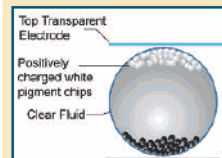
### Start-up of the Year



Spotlight on business prowess as EW looks at this year's Start up of the Year Award for the Elekras →p25

### DISPLAYS

## ELECTRIC FIELDS AND SUNSHINE



The movement of particles by an electric field is the technology behind electrophoresis displays that use coloured powders →p18  
Readability in sunlight is one of the most important factors when information screens are put up in major cities for tourist info →p24

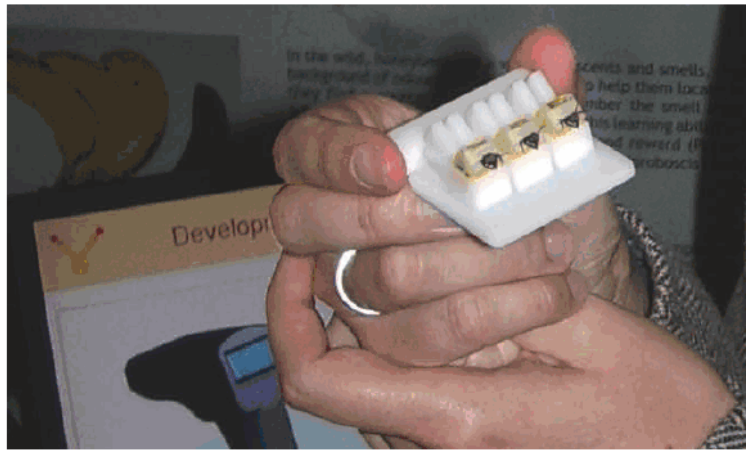
## BLACK SWANS ON IP LAKE

The expanding IP market and where it is going lends itself to the periodic appearance of Black Swans. Read Core Values at: [www.electronicsweekly.com/blogs](http://www.electronicsweekly.com/blogs)

## LATEST JOBS

### 42 | CAREER MOVES

The top jobs in the electronics industry are advertised in EW. Make sure you don't miss out. Also go to: [www.electronicsweekly.com/jobs](http://www.electronicsweekly.com/jobs)



## UK start-up gets a buzz with sensor for security

A Cambridge start-up is using honey bees as the sensor to detect traces of explosives and chemicals in security and health applications in an extension of the idea of sniffer dogs.

The bees are held in a cartridge (pictured) and trained using the target chemical while being rewarded with sugar syrup. When the bee detects the chemical its tongue comes out and is seen by a video camera and image recognition software to give a yes/no output.

"We can detect parts per trillion of TNT explosive, and we can test for anything," said Mathilde Briens, R&D manager at Inscintel, based at the Rothamsted research Institute in Harpenden and backed by soap company Unilever. "It only takes a few minutes to train one bee but we use a group of three in a cartridge, and we tend to keep the bees for two days and then release and replace them."

The Volatile Analysis by specific Odour Recognition (VASOR) system could also be used as a low cost tester to detect acetone on a person's breath as an indicator of diabetes in developing countries, and for detecting multiple chemicals. "We can detect multiple chemicals with multiple cartridges and it can scale from a handheld to thousands of bees in a box," she said.

EW [www.electronicsweekly.com/startups](http://www.electronicsweekly.com/startups)

## 1Gbit/s technology for in-car standard

By David Manners

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BMW, Fujitsu and Inova Semiconductors have got together to try and standardise on a gigabit interface technology from Inova for linking to in-car displays.

To promote standardisation, Inova has agreed to license its APIX technology and the first licence has been given to Fujitsu for incorporation in its microcontrollers and graphics display controllers.

"APIX will become an open standard, and everyone will use it," said Robert Isele, manager for driver information concepts, dis-

play technologies, at BMW, "the other car makers will see the benefits. Now that the technology is licensed, we will be able to use a good portfolio of products in special architectures. Before that, APIX only came in discrete solutions."

Promoting APIX's aim of becoming an automotive standard, is according to Gerhard Roos, senior director of the automotive and industrial business unit at Fujitsu, the fact that: "APIX is the only candidate to set up an open standard in the gigabit domain."

"For automotive applications, you need to be able to manufacture to the correct

quality. You have to another source, i.e. another fab, and you have to be able to supply a part for many years," said Roos.

For Inova, a company founded on the fabless semiconductor model selling discrete chip products, the move into licensing is a new departure. This is the first time it has licensed its technology.

Asked if Inova had suggested the move to licensing, or if Fujitsu and BMW had pressured Inova to license APIX, Robert Krause, CEO of Inova, said: "Sometimes you have to listen to your customers and do as they want."

## Call for Government to copy US innovation funding scheme

Entrepreneurs are calling

on the UK Government to set up a scheme to channel money directly into innovation in small and medium companies by copying

a scheme in the US.

"There is a gap once you get past the government innovation grant schemes or angle investment before you reach the rich uplands of ven-

ture capital," said David Gill, managing partner at venture capitalist ETCapital, at the 8th Cambridge Enterprise conference.

There may be potential

problems with EU legislation. But, according to Gill: "We are not going to give up on this one and this is a battle that's worthwhile to fight."

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