

Embedded code trigger first at University of Leicester spin-out

By Steve Bush

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University of Leicester spin-out TTE Systems has released its first product: an integrated development environment (IDE) for time-triggered embedded code.

"There is no company we are aware of that has anything that competes with this to make time triggered applications," company founder and director Michael Pont told EW.

As opposed to event-triggered

code, tasks in time triggered software are executed strictly to the tick of a single system clock.

"Time-triggered embedded code is development-heavy, but resource-light," said Pont. "It is inherently reliable as its behaviour is highly predictable."

It is to ease development that the IDE, called RapidITy, has several elements. There are templates which support writing C code tasks suitable for time triggered applications, and an extractor which automatically

calculate the maximum duration of these tasks.

This time data is then gathered in a form that can be used to make scheduling decisions, and help is offered to select an appropriate scheduling policy.

Finally, a run-time executable is automatically created.

As launched, the tool is dedicated to ARM7. "Support for the ARM Cortex range is on-going," said Pont.

Techniques behind RapidITy were developed at the University's embed-

ded systems lab over 12 years in a programme also headed by Pont.

TTE Systems developed the tool for which it has seven patents.

£250,000 of spin-out funding came from Lachesis, the East Midlands university seed fund, with additional support from the University. "We will be looking for further funding in January 2008," said Pont, who would not discuss how much.

RapidITy Preview, an evaluation kit including hardware, is available for £495+vat.



Southampton-based fuel cell materials firm Bac2 is taking its ElectroPhen material for fuel cell bipolar plates to the Fuel Cell Seminar in San Antonio, Texas this week. CEO, Mike Stannard is pictured with one of the firm's bipolar plates.

e-passport chips 'not up to job'

Bill Jacobs

Westminster's main financial watchdog has questioned whether the chips to be embedded in the new generation of e-passports are up to the job.

The House of Commons Public Accounts Committee is concerned that the manufacturers will only guarantee them for two years when the travel documents will last ten.

The all-party committee also questioned the cost of the new system and why people will have to have both an e-passport and an identity card in the future.

Committee chairman Edward Leigh MP said: "The best manufacturer's warranty which the Identity and Passport Service could get for the electronic chip embedded in the passport was for only two years - even though passports are valid for ten years. The public will want to be told just how durable the chip is and, if it stops working, who will pay for a replacement. The prospect of e-passport failures contributing to yet further delays at border controls is not an enticing one."

"Most of us are going to have to have both an ePassport and an identity card. The Home Office needs to explain why an e-passport could not serve both purposes," he added.

Icera: Big, hairy and audacious

Icera Semiconductor is a "big, hairy, audacious plan", according to one of its venture capital backers, Martin Gibson of Atlas Ventures, which has helped make Icera Europe's best-funded fabless semiconductor start-up company amassing \$122.5m in VC funding.

Gibson told the International System and SoC Conference in Prague: "For many companies the VC-backed start-up model is broken. I don't want to focus on large, fixed

function chips for medium-sized niches," said Gibson.

"What works is big audacious plays," said Stan Boland, CEO of Icera. "If a company's market is big enough, and its technology differentiated enough to drive you to market leadership, then you make a spectacular return for investors."

Icera is still chasing its first handset design-in. "It always takes longer than you expect in cellular," said Boland.

However, with handset designers

now prepared to buy chips from the fabless community, with handset designers finding their chip suppliers stumbling over delivery dates, with an extensive programme of certification completed, with 65nm chips imminent, and with the smallest baseband processor die in the market, Icera is well-placed to crack the handset market.

Before that, it hopes to have cracked the laptop computer market with a cellular datacomms chip.