SEARCH [ ] Go
Advanced Search
Newsletters | **Career Center**
Print Subscription | **ProductCasts**

HOME | LATEST NEWS | SEMI NEWS | EDA NEWS | LOCAL LANGUAGE | DESIGN ARTICLES | NEW PRODUCTS | ABOUT | FEEDBACK | MEDIA KIT | RSS | CONTACT

EE Times: Latest News

U.S. EDA monopoly may wane

Fueled by government and consortia funding, European research in design automation is accelerating fast

Richard Goering
EE Times
(06/12/2006 9:00 AM EDT)

PRINT THIS STORY
SEND AS EMAIL
REPRINTS

While microelectronics is a global industry, a crucial enabling technology--electronic design automation (EDA)--has been largely a U.S. enterprise for several decades. Recent developments in Europe may challenge that dominance in years to come. At the recent Medea+DAC workshop in Prien, Germany, I was impressed with the depth and scope of EDA R&D efforts under way at large European IDMs, research institutes and startups. Cutting-edge work is going on in electronic system-level (ESL) design, analog/ mixed-signal, design-for-manufacturability, integrated nanoelectronics and other subjects. Europeans have a strong determination to be at the forefront of hardware and software design technology for sub-90-nanometer, multiprocessor systems-on-chip.

Europe has its own distinctive approach, however. While some notable startups have emerged, especially in the ESL market, much of the R&D work is undertaken by large consumers of EDA tools, such as Infineon, STMicroelectronics and Philips. These companies actively collaborate on research, development and standards. Large research institutes like Leti in France or IMEC in Belgium also have active EDA programs.

Much of the European research is backed by government-funded consortia. Medea+, sponsor of the Medea+DAC event, is a pan-European consortium that funds microelectronics research projects in many areas, including design automation. One successful Medea+ project was Anastasia, a broad-ranging analog/mixed-signal effort that brought together European IDMs, systems houses, EDA vendors, universities and research institutes. It culminated in a commercial tool offering from German startup MunEDA, offered in the United States by ChipMD. Medea+ also maintains a comprehensive EDA road map that helps guide funding priorities.

European EDA startups are likely to be spin-offs from a large IDM, a research institute or a Medea+ project. In the United States, startups are more likely to arise in somebody's living room and to be on their own until venture capital funding kicks in. There is, of course, a lot of basic R&D work at American universities. But out in the commercial world, there's less government funding, fewer consortia and research institutes, and less obvious collaboration among large consumers of EDA tools than one would find in Europe.

It would appear that Europe puts more emphasis on cooperation, the U.S. on competition. Most Americans would rather have private venture capitalists take risks than taxpayer-supported entities. And there's resistance here to anything that smacks of centralized planning.

The United States does not need to follow the European model. But no matter how it's done, developing next-generation EDA technology will take a lot of money, an open collaboration among multiple stakeholders and some kind of common vision. The Europeans are meeting those requirements through Medea+ and similar initiatives. To retain its edge in EDA, the United States must find its own way to drive the next generation of IC design technology.

PRINT THIS STORY
SEND AS EMAIL
REPRINTS

Related News

• Hynix completes $1.5 billion stock sale

• Startup tackles transistor-level IC design

• Analog EDA startup offers modeling tool

• China writes its own digital TV standard

• Intel Capital invests in Chinese tech firms

Related Products

• PIC controllers boost next-generation digital power

• System-in-package tools roll

• Tool suite hits the market for 65-nm Virtex-5 FPGAs

• Wi-Fi test suite measures portable design's battery current, voltage

• 16-bit hybrid A/D modules address digital RF, imaging, ATE

Technical Papers

» **Via Doubling to Improve Yield**

» **Challenges to Silicon Modeling in the Nanometer...**

» **IC DFM Framework for Deep Subwavelength Processes**

All White Papers »

Sponsored Products
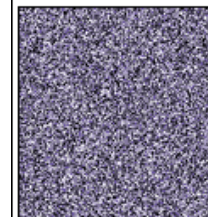
Search Jobs
Enter Keyword(s):
[ ]

Function:
[Engineering & Arch. ▼]

State:
[ ] Search

Post Your Resume

Employers Area

FEATURED TOPIC

DSO

ADDITIONAL TOPICS

▶ Outsource middleware development to free up in-house engineering resources

▶ Using TLM to move the verification process up the design flow

▶ Break through network congestion bottlenecks with high-performance ICs

POWER MANAGEMENT DesignLine
Product Categories:
▶ Power Supplies
▶ Power Components
▶ UPS
▶ Battery Management
▶ New Power Plays

🔍 **SPEC SEARCH**
eeProductCenter Launches SpecSearch®, New Parametric Parts Search Engine
In our continuing effort to enhance our site, eeProductCenter introduces SpecSearch® powered by GlobalSpec. Click here.

7 People Wanted to Work at Home Online
Online Business Associates, Inc.
New York, NY US
6/24/2006 9:06:50 PM

Work at Home Online - Earn up to $3,000/mo - $12,5
Online Home Business Managers, Inc.
Houston, TX US
6/24/2006 9:06:52 PM

Free Subscription to EE Times

First Name		Last Name	
Company Name		Title	
Business Address		City	
State	Select State/Province ▼	Zip	
Email address			CONTINUE ⇒

Electronics Marketplace

Site Features

Calendar Events
Conference Coverage
Forums
Career Center
Multimedia
Print Edition
  Column Archive
  Special Reports
Subscriptions
  Print | Digital

• **Webinar: Cable Assembly Models for SPICE Simulatio**
Join Samtec SI/EMI specialist Jim Nadolny for a FREE WEBINAR covering high-speed cable assembly SPICE model development, how well the models match measurements and what cable assembly models Samtec has available. Thursday, June 29 at 11:00 AM EST.

• **Prototype Circuit Boards from PCBexpress**
Leading Internet supplier of prototype circuit boards. Successfully selling pcbs online since 1997. Easy order process for quick turn pcbs (24-hrs) 2-6 layers up to 100 pieces. No tooling charges for our quality prototype boards. Order your pcb here.

• **Free Webinar! Serial RapidIO for Design Engineers**
This online seminar discusses the ATCA and MicroTCA market benefits of sRIO, provides an sRIO hardware implementation example with enhancements tailored to wireless applications, and considers future developments in the specification.

• **Tektronix: Download Your Free SDRAM Memory Primer**
Keep up with the pace of memory technology with this 20-page SDRAM Memory Primer. Discover how to handle: increasing number of banks and burst length, decreasing supply voltages and logic voltage swings, faster clock rates and data rates and more.

• **Gold Phoenix PCB- Great PCB Deals!**
North American services, Chinese market prices. 2 layers 100 inch sq, US79.99 include shipping; 4 layers 75 inch sq, US205 include shipping and Testing; PTH SMT assembly US150 for 1000 pins.

Buy a link NOW:

HOME | ABOUT | EDITORIAL CALENDAR | FEEDBACK | SUBSCRIPTIONS | NEWSLETTER | MEDIA KIT | CONTACT | REPRINTS

NETWORK WEBSITES
CommsDesign | DeepChip.com | Design & Reuse | Embedded.com | Planet Analog | eeProductCenter | Electronics Supply & Manufacturing | Automotive DesignLine | Power Management DesignLine | Wireless Net DesignLine | Video/Imaging DesignLine | Green SupplyLine | Industrial Control DesignLine | Network Systems DesignLine | Digital TV DesignLine | Programmable Logic DesignLine | Audio DesignLine | Mobile Handset DesignLine | TechOnLine | DSP DesignLine

INTERNATIONAL
EE Times Europe | EE Times JAPAN | EE Times Asia | EE Times CHINA | EE Times FRANCE | EE Times GERMANY | EE Times Korea | EE Times Taiwan | EE Times UK
Electronics Express | Elektronik i Norden | Electronics Supply & Manufacturing - China | Microwave Engineering Europe

NETWORK FEATURES
Career Center | Conference/Events | Custom Magazines | EE Times Info/Reader Service | GlobalSpec
NetSeminar Services | Sponsor Products | Subscribe to Print | Global Supply Chain Summit | Product Shopper| ProductCasts | Reprints | EDA Tech Forum

DSP DesignLine Is ......
Your One-Stop Online Resource for DSP Answers **DSP DesignLine**