

Please visit [www.edn.com/2006hot100](http://www.edn.com/2006hot100) for links to *EDN's* original coverage of each of the Hot 100 products. For continuous new-product coverage, check out [www.edn.com/productfeed](http://www.edn.com/productfeed).

As the calendar nears January, popular culture inevitably begins to cough up countless "best-of" lists, covering frivolous topics from reality TV to celebrity hairstyles. In an effort to counteract this tide of inanity, we at *EDN* proudly offer you something of substance: A Hot 100 list built by and for electronics engineers.

Our editors mercilessly cull the herd of new-product announcements they see during the year, resulting in this distillation of the most innovative and significant offerings. You'll find process technologies, power sources, storage devices, processors, IP (intellectual-property) cores, communication controllers, test instruments, embedded boards, EDA tools, and more. If they advanced the state of the art in electronics, they're here. And not a movie star in sight.

# HOT products 100

## **ANALOG ICs**

### **Allegro Microsystems**

ACS760 series Hall-effect hot-swap controller  
[www.allegromicro.com](http://www.allegromicro.com)

### **Analog Devices**

ADA4899-1 ultralow-noise amplifier  
[www.analog.com](http://www.analog.com)

### **Cirrus Logic**

CS3003 chopper amplifier  
[www.cirrus.com](http://www.cirrus.com)

### **Intersil**

ISL29001 and ISL29002 light-to-digital output sensors  
[www.intersil.com](http://www.intersil.com)

### **Linear Technology**

LT6244 low-noise CMOS amplifiers  
[www.linear.com](http://www.linear.com)

### **Maxim**

MAX9982 800- to 1000-MHz mixer  
[www.maxim-ic.com](http://www.maxim-ic.com)

### **Microchip**

MCP6G01 and MCP6G02 gain-selectable amplifiers  
[www.microchip.com](http://www.microchip.com)

### **National Semiconductor**

LM4562 audiophile amplifier  
[www.national.com](http://www.national.com)

### **NEC**

$\mu$ PC835 JFET amplifier  
[www.am.necel.com](http://www.am.necel.com)

### **Texas Instruments**

OPA365 rail-to-rail input amplifier  
[www.ti.com](http://www.ti.com)

### **Texas Instruments**

TPA203xD1 Class D audio power amplifier  
[www.ti.com](http://www.ti.com)

## **ASICs, IP, AND PROCESS TECHNOLOGY**

### **Certicom**

Production Control Core intellectual-property core  
[www.certicom.com](http://www.certicom.com)

### **Infineon Technologies**

Disk read-channel intellectual-property core  
[www.infineon.com](http://www.infineon.com)

## Key ASIC

ASIC service  
www.keyasic.com

## NEC Electronics

55-nm CMOS process  
www.necel.com

## Sonics

LX interconnect intellectual property for systems on chips  
www.sonicsinc.com

## Texas Instruments

45-nm CMOS process  
www.ti.com

## COMMUNICATIONS

### Cswitch Corp

Configurable switch array  
www.cswitch.com

### DS2

DSS9001 power-line-networking IC  
www.ds2.es

### Enigma Semiconductor

EN6100 family packet-switching chip set  
www.enigmasemi.com

### Infrant

NSP IT310x network-storage processor  
www.infrant.com

### Integrated Device Technology

Serial RapidIO preprocessing switch  
www.idt.com

### SiConnect

POEM power-line-transceiver chip  
www.siconnect.com

### SMSC

LAN9131 network multimedia coprocessor  
www.smisc.com

## Texas Instruments

UR8 Universal DSL chip family  
www.ti.com

## Tzero Technologies

TZ7110/7210 ultrawideband chip set  
www.tzerotech.com

## COMPONENTS

### Celsia

Microspreader heat spreader with fluid core  
www.celsiatechnologies.com

### Nanoident

Photonics Solution Platform for designing image sensors combining LEDs, photosensors, and simple IC functions  
www.nanoident.com

### SiTime

SiT11xx MEMS oscillators  
www.sitime.com

## COMPUTERS AND PERIPHERALS

### Allmotion

EZHR17EN stepper-motor controller  
www.allmotion.com

### BitWare

Tetra-PMC+ analog-input board  
www.bitware.com

### Cornice

Dragon series 1-in. hard-disk drives  
www.corniceco.com

### Curtiss-Wright Controls Embedded Computing

Champ-AV6 DSP engine  
www.cwembedded.com

### Dust Networks

SmartMesh-XT mesh-networking platform for industrial environments  
www.dustnetworks.com

## Extreme Engineering Solutions

XPedite6240 AMC computer  
www.xes-inc.com

## General Micro Systems

V469 Patriot computer  
www.gms4sbc.com

## Gumstix

Netstix 200xm-cf computer  
www.gumstix.com

## Inova Computers

Hercules CompactPCI system  
www.inova-computers.com

## Kontron

ETXexpress-PM COM Express module  
www.kontron.com

## Mercury Computer Systems

ECV4-RFT remote fiber transceiver  
www.mc.com

## Mosaic Industries

Ethersmart Wildcard expansion board  
www.mosaic-industries.com

## Performance Motion Devices

Ion drive network-motion controller  
www.pmdcorp.com

## Rabbit Semiconductor

RabbitFlex custom computer  
www.rabbitsemiconductor.com

## Seagate

Barracuda 7200.10 series 3.5-in. perpendicular recording-based hard-disk drives  
www.seagate.com

## Seagate

ST1.3 series 1-in. perpendicular recording-based hard-disk drives  
www.seagate.com

## DIGITAL AND PROGRAMMABLE ICs

### Actel

Sandman FPGA  
www.actel.com

### Altera

Stratix 3 65-nm FPGA  
www.altera.com

### Analog Devices

ADE7100 power-meter IC  
www.analog.com

### Andigilog

ThermalEdge aSC7512 thermal-management controller  
www.andigilog.com

### Fujitsu Microelectronics

MBF 320 biometric sweep sensor  
www.fujitsu.com

### PLX Technology

PEX 8548 PCI Express switch  
www.plxtech.com

### Texas Instruments

SN65LVDS301 FlatLink 3G  
www.ti.com

### Xilinx

Virtex 5 65-nm FPGA  
www.xilinx.com

## EDA

### Apache Design Solutions

Sahara-PTE power/thermal/electrical analysis tool  
www.apache-da.com

### Berkeley Design Automation

Analog FastSpice Spice simulator  
www.berkeley-da.com

### Blaze DFM

Blaze MO design-for-manufacturing tool  
www.blazedfm.com

## Cadence Design Systems

Space-based router (previously known as Precision)  
www.cadence.com

## Ciranova

PCell Xtreme tool for PCell information  
www.ciranova.com

## Invarium

Dimension PPC (process- and proximity-correction) patterning-synthesis tool  
www.invarium.com

## The MathWorks

Simulink HDL coder  
www.mathworks.com

## Mentor Graphics

Calibre LFD (lithography-friendly design) design-for-manufacturing tool  
www.mentor.com

## Novas Software

Siloti RTL debugging tool  
www.novas.com

## OneSpin Solutions

CVE (circuit-verification environment) formal-verification product  
www.onespin-solutions.com

## Sierra Design Automation

Olympus-SOC IC router  
www.sierra-da.com

## Sigma-C (Synopsys acquired in June 2006)

Solid+ microlithography simulator for design and optical-proximity correction  
www.synopsys.com

## Silistix

ChainWorks tool set for asynchronous design  
www.silistix.com

## Synopsys

PrimeTime VX digital statistical-timing-analysis tool  
www.synopsys.com

## MULTIMEDIA

### Akustica

AKU2000 MEMS microphone  
www.akustica.com

### Ambarella

A1 high-definition-video processor  
www.ambarella.com

### Texas Instruments

DM6443/6 DaVinci video processors  
www.ti.com

### Toshiba America Electronic Components

TC90400XBG/FG digital-video systems on chips  
www.toshiba.com

## POWER

### Analog Devices

ADuM524X isoPower family of dual-channel isolators  
www.analog.com

### Enpirion

EP53x2Q 1A/3W buck converter  
www.enpirion.com

### Freescale

MC34703 Quiccsupply 3 power-management IC  
www.freescale.com

### International Rectifier

IR1167 SmartRectifier IC  
www.irf.com

### Intersil

ISL6326 and ISL6327 PWM controllers  
www.intersil.com

### Maxim

DS2790 battery fuel gauge  
www.maxim-ic.com

### Microchip

dsPIC30F1010/202X family of digital-signal controllers for switched-mode power supplies  
www.microchip.com

## National Semiconductor

LM5071 power-over-Ethernet controller  
www.national.com

## Power Integrations

PeakSwitch power-conversion IC  
www.powerint.com

## Primarion

PX7510/20 digital-power-conversion and -management ICs  
www.primarion.com

## XP Power

RCL175 ac/dc switching power supply  
www.xppower.com

## Zilker Labs

ZL2105 IC digital-power-conversion and -management IC  
www.zilkerlabs.com

## PROCESSORS

### AMD

Turion 64 X2 mobile CPUs  
www.amd.com

### Altera

Nios II V6.0 and C2H (C-to-hardware-acceleration) compiler  
www.altera.com

### Atmel

AT91SAM7SE512/256/32 ARM7-based microcontrollers  
www.atmel.com

### Cavium Networks

CN31XX and CN30XX MIPS64-based processors  
www.caviumnetworks.com

### Freescale

MSC8144 quad-core DSP  
www.freescale.com

### Intel

Core Microarchitecture CPUs (Merom, Conroe, Woodcrest)  
www.intel.com

## Intel

Core 2 Extreme QX6700 Quad-Core CPU  
www.intel.com

## Luminary Micro

LM3S101/102 Stellaris 32-bit microcontrollers  
www.luminarymicro.com

## Microchip

PIC18F97J60 8-bit microcontrollers  
www.microchip.com

## Ramtron

VR51L2070 8051 microcontroller  
www.ramtron.com

## Renesas

SH7785 microcontroller with multimedia support  
www.renesas.com

## STMicroelectronics

STR910F ARM9E-based microcontrollers  
www.st.com

## Tensilica

Diamond Standard family of Xtensa processors  
www.tensilica.com

## TEST AND MEASUREMENT

### Agilent

V1250 series handheld digital multimeters  
www.agilent.com

### LeCroy

WaveSurfer and WaveRunner digital-storage oscilloscopes with WaveScan feature  
www.lecroy.com

### National Instruments

LabView 8.20  
www.ni.com

### Tektronix

RSA6100A real-time spectrum analyzer  
www.tek.com