



AS THE MERCURY DROPS below freezing, it's nice to be able to focus our attention on something hot. For some of you, this scenario might mean lounging on a sunny beach in Hawaii, piña colada in hand. For *EDN*, it's compiling our annual Hot 100 Products list. The following pages list those products and technologies we chose from our print and Web pages in 2007 that our editors believe generated heat in the electronics community—from analog ICs to test-and-measurement devices. Warm up (pun intended) by reading the list here, and then go to [www.edn.com/hot100](http://www.edn.com/hot100) for links to *EDN*'s original coverage of each of these hot and innovative products. (Be careful you don't burn yourselves!) And, as always, for continuous new-product coverage, visit [www.edn.com/productfeed](http://www.edn.com/productfeed).

#### ANALOG ICs

##### Analog Devices

**AD8663 precision 16V op amps**  
[www.analog.com](http://www.analog.com)

##### Austriamicrosystems

**AS1710 amplifier**  
[www.austriamicrosystems.com](http://www.austriamicrosystems.com)

##### Kenet

**KAD5512-50 12-bit, 500M-sample/sec ADC**  
[www.kenetinc.com](http://www.kenetinc.com)

##### Maxim Integrated Products

**MAX13486E RS485 transceivers**  
[www.maxim-ic.com](http://www.maxim-ic.com)

##### Analog Devices

**AD5754R multichannel DACs**  
[www.analog.com](http://www.analog.com)

##### Cypress

**EZ-Color controller**  
[www.cypress.com](http://www.cypress.com)

##### Linear Technology

**LTC6400 1.8-GHz amplifier**  
[www.linear.com](http://www.linear.com)

##### Maxim Integrated Products

**MAX9730 audio amplifier**  
[www.maxim-ic.com](http://www.maxim-ic.com)

**Melexis**

**MLX90316 Hall-effect rotary-position IC**  
www.melexis.com

**SMSC**

**EMC1046/47 and EMC1428 SMBus temperature monitors**  
www.smssc.com

**COMMUNICATIONS AND NETWORKING**

**Avnera**

**AudioMagic wireless audio-transmitter/receiver chip set**  
www.avnera.com

**Hifn**

**4450 FlowThrough communication processor**  
www.hifn.com

**Intellon**

**INT6300 HomePlug AV transceiver**  
www.intellon.com

**COMPONENTS, ACTUATORS, AND SENSORS**

**Allegro MicroSystems**

**A3423 dual-channel direction-detection sensor**  
www.allegromicro.com

**Analog Devices**

**ADIS 16355 inertial-measurement unit**  
www.analog.com

**Copley Controls Corp**

**Model STA11 direct-drive linear actuator**  
www.copleycontrols.com

**Dimatix**

**Printer cartridge for organic electronics R&D**  
www.dimatix.com

**Laird Technologies**

**Activv internal-antenna circuit**  
www.lairdtech.com

**Luxtera**

**40G optical active cable**  
www.luxtera.com

**Microbridge Technologies**

**MBT-303-A MEMS-based resistor divider**  
www.mbridgetech.com

**Molex**

**I-Trac backplane connector system**  
www.molex.com

**Nuventix**

**Synjet cooling device**  
www.nuventix.com

**Omron**

**WXA-N2SL surface-mounted polymeric antenna**  
www.omron.com

**Semtech**

**EClamp238xP**  
www.semtech.com

**Seoul Semiconductor**

**Acriche AW32X0 ac-powered high-brightness LED**  
www.acriche.com

**STMicroelectronics**

**VM6101 color-ambient-light sensor**  
www.st.com

**STMicroelectronics**

**LIS302ALK three-axis accelerometer**  
www.st.com

**TeraVista Technologies**

**TT2214AD and TT1414AD MEMS switches**  
www.teravista.com

**COMPUTERS, BUSES, AND BOARDS**

**Adlink Technology Inc**

**NuPro-965 single-board computer**  
www.adlinktech.com

**Aitech Defense Systems Inc**

**C108 single-board computer**  
www.rugged.com

**Domain Technologies**

**A3P-MRAM-1000 development card**  
www.domaintec.com

**Embedded Systems Design Inc**

**StreamBlade SOE-4 single-board computer**  
www.embedded-sys.com

**Emerson Network Power**

**KonsaiPM AdvancedMC module**  
www.gotoemerson.com

**Extreme Engineering Solutions**

**XPedite8070 single-board computer**  
www.xes-inc.com

**Kontron America**

**ETXexpress-MC computer on module**  
www.kontron.com

**MEN Micro Inc**

**D7 server blade**  
www.menmicro.com

**National Instruments**

**cRIO-9014 controller**  
www.ni.com

**Pentek Inc**

**Model 7140-420 transceiver**  
www.pentek.com

**Sensoray Inc**

**Model m2251 frame grabber**  
www.sensoray.com

**WinSystems**

**PPM-GX single-board computer**  
www.winsystems.com

**DATA STORAGE**

**Hitachi**

**Deskstar 7K1000 1-Tbyte, 3.5-in. hard-disk drive**  
www.hitachigst.com

**Samsung**

**MH80 hybrid hard-disk drive**  
www.samsung.com

**Seagate**

**Momentum 5400 PSD hybrid hard-disk-drive family**  
www.seagate.com

**Toshiba**

**MK3252GSX 320-Gbyte, 2.5-in. hard-disk drive**  
www.toshibastorage.com

**DIGITAL, MEMORY, AND PROGRAMMABLE ICs**

**Actel**

**Igloo FPGA and Libero 8.1 development tool**  
www.actel.com

**Altera**

**Arria GX FPGA**  
www.altera.com

**Lattice Semiconductor**

**XP2 FPGA**  
www.latticesemi.com

**PLX Technology**

**89PESxxx PCIe Gen2 switches**  
www.plxtech.com

**SST**

**All-In-OneMemory**  
www.sst.com

**STMicroelectronics**

**STMPE2401 logic-expander chip**  
www.st.com

**Toshiba America**

**TC358730XBG MIPI controller**  
www.toshiba.com

**Xilinx**

**Spartan-3AN FPGA**  
www.xilinx.com

**EDA**

**Apache Design Solutions Sentinel system-analysis tool**  
www.apache-da.com

**Breker Verification Systems**  
**Trek functional-test-synthesis tool**  
www.brekersystems.com

**Calypto**  
**PowerPro CG clock-gating tool**  
www.calypto.com

**Certess**  
**Certitude functional-qualification tool**  
www.certess.com

**CLK Design Automation**  
**Amber Analyzer timing-analysis tool**  
www.clkda.com

**GateRocket**  
**RocketDrive simulation accelerator**  
www.gaterocket.com

**Mentor Graphics**  
**Veloce logic emulator**  
www.mentor.com

**Pyxis Technology**  
**Nexus Route IC router**  
www.pyxistech.com

**Sigrity**  
**OptimizePI decoupling-capacitor tool**  
www.sigrity.com

**Solido Design Automation**  
**SolidoStat statistical-analysis tool**  
www.solidodesign.com

**Synopsys**  
**VMM IC-verification tools**  
www.synopsys.com

## **POWER SEMICONDUCTORS AND ICs**

**Catalyst Semiconductor**  
**CAT4201 buck-regulator driver**  
www.catsemi.com

**Fairchild**  
**FAN5350 buck converter**  
www.fairchildsemi.com

**Intersil**  
**ISL6257 NVDC battery-charger controller**  
www.intersil.com

**Linear Technology**  
**LT4356-1 overvoltage protection**  
www.linear.com

**Linear Technology**  
**LT3080 adjustable linear regulator**  
www.linear.com

**National Semiconductor**  
**LM25574/5/6 Simple Switcher**  
www.national.com

**National Semiconductor**  
**FDP95120 display driver**  
www.national.com

**Power Integrations**  
**DPA422 power-over-Ethernet chip**  
www.powerint.com

**Texas Instruments**  
**bq27500 system-side battery-fuel gauge**  
www.ti.com

## **POWER SOURCES**

**Cap-xx**  
**HS and HW line of supercapacitors**  
www.cap-xx.com

**Cherokee International**  
**CAR2500 front-end/rectifier series**  
www.cherokeepwr.com

**Coldwatt**  
**1U1200W power supply**  
www.coldwatt.com

**EaglePicher**  
**Catheter-implantable Micro battery**  
www.eaglepicher.com

**Linear Technology**  
**Switching buck and buck-boost power modules**  
www.linear.com

**Maxwell Technologies**  
**HTM390 ultracapacitor**  
www.maxwell.com

**NetPower**  
**NAT1vvvXcc family of point-of-load converters**  
www.netpowercorp.com

**Power-One**  
**SSQE48T2033 16th-brick converter**  
www.power-one.com

**XP Power**  
**MFA350 ac/dc-power supply**  
www.xppower.com

## **PROCESSORS**

**Advanced Micro Devices**  
**Barcelona quad-core Opteron microprocessor**  
www.amd.com

**Atmel**  
**AVR32 UC3 processor and core**  
www.atmel.com

**Freescale**  
**Flexis QE128 processors**  
www.freescale.com

**Intel**  
**Penryn 45-nm microprocessor family**  
www.intel.com

**Intel**  
**Santa Rosa mobile-core-logic chip set**  
www.intel.com

**Intel**  
**E5335 and E5345 quad-core Xeon embedded processors**  
www.intel.com

**Microchip**  
**PIC32 32-bit microcontrollers**  
www.microchip.com

**MIPS**  
**1-GHz 74K processor core**  
www.mips.com

**Nvidia**  
**GeForce 8800 series graphics processors**  
www.nvidia.com

**Stream Processors**  
**SP16-G160 and SP8-G80 processors**  
www.streamprocessors.com

**Texas Instruments**  
**TMS320DM355 DaVinci processor**  
www.ti.com

**Tilera**  
**Tile64 processor**  
www.tilera.com

## **SOFTWARE**

**Hi-Tech Software**  
**PICC-18-Pro OCG (omniscient-code-generation) compiler**  
www.htsoft.com

**Mathworks**  
**Matlab 7.5**  
www.mathworks.com

**Microsoft**  
**Microsoft Robotics Studio**  
www.microsoft.com/robotics

## **TEST & MEASUREMENT**

**Agilent**  
**DP1400 PCI digitizer**  
www.agilent.com

**LeCroy Corp**  
**Eye Doctor**  
www.lecroy.com

**National Instruments**  
**PXIe-5122 PXIe digitizer**  
www.ni.com

**Tektronix**  
**AWG5000 arbitrary-waveform generator**  
www.tektronix.com

