EE Times updates list of emerging startups to version 8.0

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By Peter Clarke 02.02.2009 0

The list of *EE Times 60 Emerging Startups* , first published in April 2004, has been updated to version 8.0, reflecting the latest corporate, commercial, technology and market conditions. Twenty-three companies have been brought onto the Silicon 60.

Some companies have dropped off the list otherwise known as the Silicon 60 because they have been acquired; some have moved on to an initial public offering of shares; and others have moved beyond the list with the passage of time. As they have matured other, younger startups have been nominated to be moved off the *EE Times* radar list and on to the main list.

In version 8.0 of the *EE Times* Emerging Startups list, are companies selected by editors based on a mix of criteria including: technology, intended market, maturity, financial position and investment profile.

The startups on the Silicon 60 list are the companies involved in semiconductor technologies for analog circuits, memory, logic and power, MEMS, optoelectronics, EDA software, foundry manufacturing, semiconductor production equipment, electronic subsystems, packaging and

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materials that have made an impression on *EE Times* editors. They are emerging companies to watch for a wide variety of reasons.

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Readers are welcome to nominate their own emerging startups for inclusion in a future iteration of the *EE Times* 60 Emerging Startups list. Nominations should be supported by a short citation explaining why the company is suitable for inclusion on the list.

Send comments and nominations to Peter Clarke (pclarke@techinsights.com).

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Achronix Semiconductor Corp. (San Jose, Calif.) founded in New York in 2004 is a startup company associated with Cornell University from where it has licensed patents. In 2008 Achronix introduced FPGAs that operate at clock frequencies up to 1.5-GHz. www.achronix.com

Advanced Micro-Fabrication Equipment Inc. (Shanghai, China), founded in 2004 and also known as AMEC, has been described as the Applied Materials of China. Indeed AMEC, having rolled out its initial tools, unveiled its strategy and disclosed plans to go public, has also locked legal horns with Applied. www.amec-inc.com

Arteris Inc. (San Jose, Calif.) started in Paris in 2003 is an intellectual-property vendor commercializing a packet-based on-chip network. The company has moved its headquarters to Silicon Valley while maintaining a French subsidiary. www.arteris.com

ATEEDA Ltd. (Edinburgh, Scotland), founded in 2006, specializes in testing circuits have both analog and digital sections and has developed a tool that allows analog circuits to be tested on digital testers. www.ateeda.com

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Atoptech Inc. (Santa Clara, Calif.), founded in 2004, has developed physical design EDA tools. Aprisa, based on AtopTech's interconnect-centric optimization technology, supports leading-edge design closure. www.atoptech.com

Azuro Inc. (Santa Clara, Calif.) was founded in 2002 by Paul Cunningham and Steev Wilcox. The company has developed a technology for clock-tree synthesis that supports optimization for power consumption reduction. www.azuro.com

BeSang Inc. (Beaverton, Oregon) is a fabless semiconductor company, founded in 2003 with strong Korean connections, developing a 3-D integrated circuit technology aimed at image sensor and memory business. www.besang.com

BLX IC Design Co. Ltd. (Beijing, China) was founded in 2002 by China's Institute of Computing Technology. BLX focuses on the development of 32- and 64-bit versions of its Godson processor and support for information appliances and network computing applications. www.blxcpu.com

Boston Power Inc. (Westborough, Mass.) was founded in 2005 and has made progress in developing longer lasting, faster charging lithium-ion batteries. www.boston-power.com

BridgeLux Inc. (Sunnyvale, Calif.), founded in 2002, is a vertically integrated developer of LED chips and LED arrays for lighting applications. www.bridgelux.com

Calypto Design Systems Inc. (Santa Clara, Calif.), founded in 2002, is an EDA company focused on bridging electronic system-level design and integrated circuit implementation with an emphasis on sequential analysis and optimization for power consumption. www.calypto.com

Celeno Communications Inc. (Ra'anana, Israel), founded in 2005, is a fabless semiconductor company providing Wi-Fi chips for high-defiition multimedia and entertainment home networking applications. www.celeno.com

ChipSensors Ltd. (Limerick, Ireland), founded in 2006, is developing a technology that allows the surface of an IC to be used to sense temperature, humidity, certain gases and pathogens. The technology could be used to add functions to present day chips such as processors, or to produce new types of integrated smart sensor. www.chipsensors.com

Ciranova Inc. (Santa Clara, Calif.), founded in 2002, is a privately held EDA company focused on offering support to authors of parameterized cells. Since early 2006 the company has offered free downloads of PyCell Studio, which can be used to create OpenAccess p-cells. www.ciranova.com

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Elastix Corp. (Santa Clara, Calif.), founded in 2007, is aiming to address digital IC variability issues by helping designers generate asynchronous implementations of synchronous designs automatically. www.elastix-corp.com

Element CXI Inc. (Milpitas, Calif.), founded in 2004, is proposing a software programmable SoC platform approach to chip design with multiprocessing at its heart. www.elementcxi.com

Emotiv Systems Inc. (San Francisco, Calif.), founded in 2003, is developing biofeedback systems based on a sensor cap. Such systems look set to transform the way humans interact with computers and therefore electronic equipment. www.emotiv.com

Field Emission Technologies Inc. (Tokyo, Japan) was founded in December 2006 as a spin-off from Sony Corp. with the aim of developing and promoting the 'nano-Spindt' field emission display. www.fe-tech.co.jp

Fresco Microchip Inc. (Toronto, Canada) founded in 2004, is attacking television and consumer electronics markets with a combination of application knowledge and analog, RF and DSP silicon expertise.www.frescomicrochip.com

GainSpan Corp. (Sunnyvale, Calif.) is a developer of Wi-Fi sensor network technology. The company was an Intel incubator company before being spun out in 2006. In December 2007 the company completed its Series B funding round, raising $20 million with backing from Intel Capital. www.gainspan.com

Gemini Design Technology Inc. (Fremont, Calif.) was founded in 2005 with the aim of delivering a fast parallel SPICE simulation product. In 2006, the company augmented the technology team by adding Jim Solomon, a pioneer of the EDA industry, as executive chairman.www.gemini-da.com

Genusion Ltd. (Amagasaki, Japan) a fabless Japanese memory IC maker founded in November 2002, has been attending conferences describing its B4-flash and ecFlash memory technologies. www.genusion.co.jp

Gigle Semiconductor Ltd. (Barcelona, Spain) was founded in September 2005 with the aim of developing ICs that would deliver high-definition content and services anywhere in the home over powerline, coax and phone line wiring. www.gigle.com

HelioVolt Corp. (Austin, Texas), founded in 2001, has developed a new slant on compound semiconductors to produce a photovoltaic process that could beat existing technologies in cost of production as well as efficiency. A process based on rapid thermal annealing and anodic bonding allows copper-indium-gallium-selinide (CIGS) films to be deposited on just about any substrate. In October 2007 the company closed a $100 million Series B round of funding and in October 2008 cut the ribbon on its first factory. www.heliovolt.net

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Icera Semiconductor Inc. (Bristol, England), a fabless semiconductor company founded in 2002, provides chips for 3G-HSDPA handsets and datacards. It was founded by, amongst others, the founder of Element14 Ltd., a company which was eventually sold to Broadcom Corp. www.icerasemi.com

Imperas Inc. (Palo Alto, Calif.) was formed in 2005 by Simon Davidmann, a serial EDA entrepreneur. The company offers system development and virtual prototyping tools that combine the elaboration of both hardware and software while dealing with multiprocessing issues. www.imperas.com

Innovative Silicon Inc. (Santa Clara, Calif.) is a 2002 start-up founded by Pierre Fazan (CTO) to develop an SOI-based single-transistor memory. Now led by Mark-Eric Jones, Innovative has licensed its “floating body” memory to Advanced Micro Devices Inc. amongst others. www.innovativesilicon.com

IPtronics A/S (Roskilde, Denmark) was established in 2003 by the former managers and technical staff from Giga A/S a company sold to Intel Corp. in 2000 for $1.25 billion. IPtronics has developed a chip technology for parallel optical interconnects in the computer communications market.www.iptronics.com

Kovio Inc. (Milpitas, Calif.) was spun out from the MIT Media Laboratory by a team of scientists in 2001. The company is developing manufacturing technology that combines the low cost of graphics printing with the functionality of silicon-based semiconductor integrated circuits.
www.kovio.com

Light Blue Optics Ltd. (Cambridge, England) was founded in December 2003 by photonics researchers from Cambridge University Engineering Department. They set out to produce small, portable, power-efficient image projectors suitable for use in battery-powered electronic devices such as mobile phones and digital cameras. www.lightblueoptics.com
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Maxscend Technologies Inc. (Shanghai, China), is a venture capital backed fabless IC company founded by a group of Silicon Valley returnees in April 2006. The company has designed and started shipping, a DTMB/DAB/DAB+/DMB demodulator IC which can be used for Chinese digital terrestrial TV reception in TV set and set top box; mobile digital television reception in mobile phones, personal media players, USB dongles, vehicle entertainment systems and other mobile devices. www.maxscend.com

MimoOn GmbH (Duisberg, Germany), founded in 2006, supplies a software implementation of the 3GPP LTE physical layer and protocol stack for infrastructure devices and terminals. www.mimoon.de

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Mirics Semiconductor Inc. (Fleet, England), a fabless RF and mixed-signal chip startup founded in 2004, has software demodulation technology that can be used with its reconfigurable tuner to receive multiple broadcast standards. www.mirics.com

Nanoradio AB (Kista, Sweden), fabless semiconductor company specializing in components for Wi-Fi applications, has raised more than $50 million in venture capital funding since its founding in 2004. www.nanoradio.com

Newport Media Inc. (Lake Forest, Calif.) is fabless semiconductor company that sells chips for digital audio and mobile television standards. Founded in January 2005 the company launched a highly integrated multi-standard mobile TV receiver in June 2007. www.newportmediainc.com

Nextreme Thermal Solutions Inc. (Durham, North Carolina) makes thermal and power management products for the semiconductor, photonics, consumer, automotive, and defense/aerospace industries. The company was founded in 2004 and has embedded cooling and power generation capabilities into the copper pillar bumping process used in electronic packaging. www.nextremethermal.com

Nujira Ltd. (Cambridge, England), founded in 2002, is a supplier of RF power amplifier technology that tracks output to optimize power efficiency. www.nujira.com

Percello Ltd. (Ra'anana, Israel), founded in 2007, is a fabless semiconductor company formed to provide digital baseband ICs and software for the 3G-to-LTE femtocells markets, www.percello.com

Perpetuum Ltd. (Southampton, England) was founded in 2004 as a spinoff from the University of Southampton. The company develops electricity microgenerators that can harvest enough energy from vibrations in plant and equipment to power sensor nodes and transmit data from them wirelessly. www.perpetuum.co.uk

Polymer Vision Ltd. (Eindhoven, Netherlands) received 21 million euro (about $27.5 million) from Technology Capital SA of Luxemburg in January 2007 to help it launch a roll-up display technology and taking the company out of ownership of Royal Philips Electronics NV. www.polymervision.com

Quantenna Communications Inc. (Sunnyvale, Calif.), founded in 2006, is a developer of silicon for wireless networking that delivers guaranteed wireless bandwidth. www.quantenna.com

RMI Corp. (Cupertino, Calif.) formerly known as Raza Microelectronics Inc. was formed in 2002 by Atiq Raza, an executive who previously worked at Advanced Micro Devices Inc. and NexGen Microsystems Inc. The company is producing processors for network processing.

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www.razamicroelectronics.com

RedMere Technology Ltd. (Dublin, Ireland), is offering chips for high-definition multimedia interface (HDMI) connectors which can support multigigabit per second wire-line communications. The company has raised about $19 million since its founding in 2004 and it has its first chips out. www.redmere.com

ReVolt Technology AS (Staefa, Switzerland) was formed as a spinoff from Norwegian contract research institute Sintef in 2004. The company has developed a rechargeable zinc-air battery technology, which it claims could replace lithium-ion batteries currently used in portable applications. www.revolttechnology.com

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Sequans Communications SA (Paris, France), founded in 2003, has become a supplier of silicon and embedded software for WiMax-based wireless LAN systems. www.sequans.com

Siano Mobile Silicon Ltd. (Netanya, Israel), founded in June 2004, develops digital television receivers tailored specifically for mobile communications and entertainment devices. www.siano-ms.com

SiBeam Inc. (Sunnyvale, Calif.) was founded in December 2004 by a team from the Berkeley Wireless Research Center (BWRC) together with several wireless and high-speed communications industry veterans. The company claims to have been the first to build 60-GHz chipsets using CMOS technology. www.sibeam.com

SiDense Corp. (Ottawa, Ontario), founded in 2004, is a developer of embedded nonvolatile memory intellectual property. End-market products include home entertainment consumer products, cellular telephones, RFID, medical, automotive and other uses. www.sidense.com

Signet Solar Ltd. (Menlo Park, Calif.), was founded in September 2006 by Prabhu Goel, previously a pioneer of the EDA industry, to design and manufacture large area, low cost, thin-film silicon photovoltaic modules. The company has a manufacturing facility in Dresden, Germany with a production line supplied by Applied Materials Inc.www.signetsolar.com

SiliconBlue Technologies Corp. (Santa Clara, Calif.), founded in late 2005, has developed a range of FPGAs architected for low power aiming at suitability for handheld, mobile applications. The company was founded by Kapil Shankar, CEO, a 20-year veteran of the programmable logic industry. www.siliconbluetech.com

Silicon Hive (Eindhoven, The Netherlands), provides parallel processing technology for consumer electronics and mobile phone markets. The company licenses embedded parallel processor architectures, compilers and programming tools to chip makers. It was spun out from Philips Research in 2007. www.siliconhive.com

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Silistix Ltd. (Manchester, England), founded in December 2003 as a spin off from the Amulet asynchronous logic research group at the University of Manchester in England, has received backing from Intel Capital. www.silistix.com

SiOnyx Inc. (Beverly, Mass.),has licensed a portfolio of shallow junction photonics patents developed by Harvard University in exchange for an unspecified equity stake and downstream royalties. The company was founded in 2006 by Professor Eric Mazur and James Carey to exploit the optoelectronic properties of so-called black silicon. www.sionyx.com

Solido Design Automation Inc. (San Ramon, Calif.) was founded in 2005 with a mission to address process-variation for transistor-level designers. Solido has developed a proprietary set of algorithms forming the core of its technology. www.soliodesign.com

Tela Innovations Inc. (Campbell. Calif.), founded in 2005, offers a lithography technique that the company claims reduces die area and device variability. www.tela-inc.com

TeraNetics Inc. (Santa Clara, Calif.), founded in 2003, specializes in mixed analog-digital circuits and signal processing techniques for the physical layer of Ethernet communications, particular 10GBase-T.www.teranetics.com

Tilera Corp. (San Jose, Calif.), founded in 2004, is a developer of multicore processors and associated compilers for the networking, wireless and multimedia infrastructure markets. The company was founded by Anant Agarwal, professor of computer science at the Massachusetts Institute of Technology, who serves as chief technology officer. www.tilera.com

Varioptic SA (Lyon, France), founded in 2002, has developed a range of electrically-controlled liquid lenses for use in cameras. The company has concluded a licensing agreement with STMicroelectronics NV. www.varioptic.com

VeriSilicon Holdings Co. Ltd. (Shanghai, China), founded in 2001, is a fabless ASIC design foundry focusing on providing semiconductor IP, design services and turnkey services including manufacturing, packaging, testing, and delivery. www.verisilicon.com

XMOS Semiconductor Ltd. (Bristol, England) is a fabless semiconductor company founded by academic computer scientist David May, in 2006. The company has developed a range of ICs based on multiple event-driven processors. Designs are created in high-level languages, delivering hardware from a software-based design flow. www.xmos.com

The announcement of the previous Silicon 60, version 7.0 of the list, in February 2008 could be found here when this story was first posted.

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The announcement of version 6.1 of the list, in September 2007 could be found here when this story was first posted. Version 6.0 of the list, published in June 2007, could be found here here.

Version 5.1 of the list, from June 2006 could be found here.

Version 4.0 from November 2005, could be found here when this story was first posted.

Version 3.0 of the list, from April 2005, could be found here.

Version 2.0 of the list, published in October 2004, could be found here and version 1.0 of the list, published April 2004, could be found here when this article was first posted.

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