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EETimes

THE NEWS
SOURCE FOR THE
CREATORS OF
TECHNOLOGY

ISSUE 1559 APRIL 6, 2009 WWW.EETIMES.COM

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DESIGN + PRODUCTS



With this iteration, our editors pick 23 new companies to watch, based on technology, intended market, maturity, financial position and investment profile

packaging and materials.

Readers are welcome to nominate their own picks for inclusion in the next 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).

Below, we detail the new entrants, listed alphabetically, followed by an alphabetical listing of continuing members. View the full listing at www.eetimes.eu/213000246.

NEW MEMBERS

■ BESANG INC.

(Beaverton, Ore.) is a fabless semiconductor company, founded in 2003 with strong Korean connections, that is developing a 3-D IC technology aimed at image sensors and memory. www.besang.com

■ BLX IC DESIGN CO. LTD.

(Beijing) 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 on support for information appliances and network computing applications. www.blxcpu.com

■ BOSTON POWER INC.

(Westborough, Mass.) was founded in

GLOBAL FEATURE

EE Times editors update list of top silicon startups

By Peter Clarke

THE EE TIMES 60 EMERGING STARTUPS list, first published in April 2004, has been updated to version 8.0 to reflect the latest corporate, commercial, technology and market conditions. With this iteration, 23 companies have joined the list of startups to watch (also known as the Silicon 60), while others have dropped off because they were acquired, launched an initial public offering or moved beyond startup status with the passage of time.

EE Times editors compile the Silicon 60 based on a mix of criteria, including technology, intended market, maturity, financial position and investment profile. The list includes companies involved in semiconductor technologies for analog circuits, memory, logic and power devices, microelectromechanical system devices, optoelectronics, EDA software, foundry manufacturing, semiconductor production equipment, electronic subsystems,

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

■ **CELENO COMMUNICATIONS INC.**

(Ra'anana, Israel), founded in 2005, is a fabless semiconductor company providing Wi-Fi chips for high-definition multimedia and entertainment home-networking applications.

www.celeno.com

■ **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, proposes a software-programmable system-on-chip platform approach that has multiprocessing at its heart.

www.elementcxi.com

■ **FIELD EMISSION TECHNOLOGIES INC.**

(Tokyo) 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) 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

■ **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 its 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 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 power-line, coax and phone line wiring.

www.gigle.biz



■ **IPTRONICS A/S**

(Roskilde, Denmark) was established in 2003 by 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

■ **MIMOOON 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

■ **NEXTREME THERMAL SOLUTIONS INC.**

(Durham, N.C.) makes thermal and power management products for the semiconductor, photonics, consumer, automotive and defense/aerospace industries. Founded in 2004, the company has embedded cooling and power generation capabilities into the copper pillar bumping process used in electronics packaging.

www.nextremethermal.com

■ **NUJIRA LTD.**

(Cambridge, England), founded in 2002, is a supplier of radio-frequency power amplifier technology that tracks output to optimize power efficiency.

www.nujira.com

■ **PERCELLO LTD.**

(Ra'anana), founded in 2007, is a fabless semiconductor company that was formed to provide digital base-band ICs and software for the 3G-to-LTE femtocell market.

www.percello.com

■ **QUANTENNA COMMUNICATIONS INC.**

(Sunnyvale), founded in 2006, is a developer of silicon for wireless networking that delivers guaranteed wireless bandwidth.

www.quantenna.com

■ **SIGNET SOLAR LTD.**

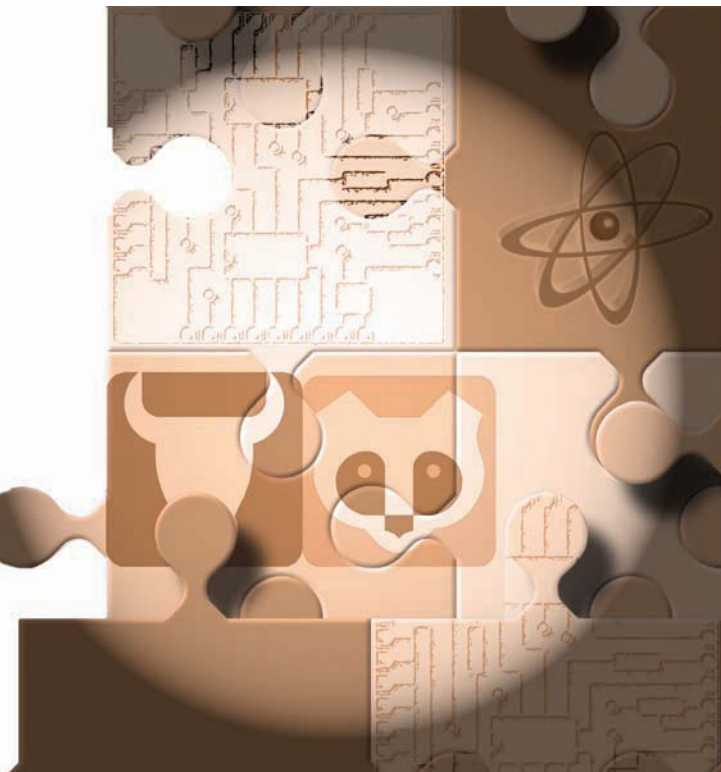
(Menlo Park, Calif.) was founded in September 2006 by EDA pioneer Prabhu Goel to design and manufacture large-area, low-cost, thin-film silicon photovoltaic modules. The company has a manufacturing facility in Dresden, Germany, with a production line supplied by Applied Materials Inc.

www.signetsolar.com

■ **SILICONBLUE TECHNOLOGIES CORP.**

(Santa Clara), founded in 2005, has developed a range of FPGAs architected for low power in handheld, mobile applications. It was founded by CEO Kapil Shankar, a 20-year veteran of the programmable logic industry.

www.siliconbluetech.com



We invite readers to nominate their own picks for inclusion in the next Silicon 60 listing

■ **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 Eric Mazur and James Carey to exploit the optoelectronic properties of so-called black silicon.
www.sionyx.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), founded in 2003, specializes in mixed analog-digital circuits and signal processing techniques for the physical layer of Ethernet communications, particularly 10GBase-T.
www.teranetics.com

CONTINUING MEMBERS

ACHRONIX SEMICONDUCTOR CORP.

(San Jose, Calif.)

ADVANCED MICRO-FABRICATION EQUIPMENT INC.

(Shanghai, China)

ARTERIS INC. (San Jose)

ATEEDA LTD. (Edinburgh, Scotland)

ATOPTECH INC. (Santa Clara)

AZURO INC. (Santa Clara)

CALYPTO DESIGN SYSTEMS INC. (Santa Clara)

CHIPSENSORS LTD. (Limerick, Ireland)

CIRANOVA INC. (Santa Clara)

EMOTIV SYSTEMS INC. (San Francisco)

GAINSPAN CORP. (Sunnyvale)

HELIOVOLT CORP. (Austin, Texas)

ICERA SEMICONDUCTOR INC. (Bristol, England)

IMPERAS INC. (Palo Alto, Calif.)

INNOVATIVE SILICON INC. (Santa Clara)

KOVIO INC. (Milpitas)

LIGHT BLUE OPTICS LTD. (Cambridge, England)

MAXSCEND TECHNOLOGIES INC. (Shanghai)

MIRICS SEMICONDUCTOR INC. (Fleet, England)

NANORADIO AB (Kista, Sweden)

NEWPORT MEDIA INC. (Lake Forest, Calif.)

PERPETUUM LTD. (Southampton, England)

POLYMER VISION LTD. (Eindhoven, Netherlands)

REDMERE TECHNOLOGY LTD. (Dublin, Ireland)

REVOLT TECHNOLOGY AS (Staeafa, Switzerland)

RMI CORP. (Cupertino, Calif.)

SEQUANS COMMUNICATIONS SA (Paris)

SIANO MOBILE SILICON LTD. (Netanya, Israel)

SIBEAM INC. (Sunnyvale)

SIDENSE CORP. (Ottawa)

SILICON HIVE (Eindhoven)

SILISTIX LTD. (Manchester, England)

SOLIDO DESIGN AUTOMATION INC.

(San Ramon, Calif.)

TILERA CORP. (San Jose)

VARIOPTIC SA (Lyon, France)

VERISILICON HOLDINGS CO. LTD. (Shanghai)

XMOS SEMICONDUCTOR LTD. (Bristol, England)