FutureHorizons

The Global Semiconductor Industry Analysts

FH MONDAY

17 May 2021

Navitas Semiconductor Agrees to Live Oak SPAC Merger

Navitas Semiconductor, a maker of power chips, has agreed to go public through a merger with Live Oak Acquisition Corp. II, a blank-check firm, according to a person with knowledge of the matter.

read more

Tesla, Apple Supplier Delta To Pour $7M In AI Semiconductor Startup

Tesla, Apple Supplier Delta To Pour $7M In AI Semiconductor Startup Amid Chip ShortageTesla Inc TSLA and Apple Inc AAPL power components supplier Delta Electronics is backing Kneron, an artificial intelligence startup that develops semiconductors with a $7 million investment, reported TechCrunch.

read more

Device Makers Seek Etching, Printing Innovation

Even as electronics companies strive to improve the designs of their semiconductor products and printed circuit boards, suppliers of manufacturing equipment contribute just as much innovation to improve successive generations of ICs and PCBs.

read more

FutureHorizons

TALK TO US

ASIL Requirements Drive Memory Evaluations

TORONTO—It will be a while before DDR5 dominates the DRAM market, but when it comes to automotive applications, it makes sense to get a head start to qualify memory devices to meet reliability and functional safety requirements in the latest and greatest automotive systems.

read more

EVENTS

Silicon Chip Industry Seminar

-November 2021– London UK

Industry Forecast Briefing

– September 2021– London UK

DON'T MISS OUT.- BOOK NOW BY CALLING

+44 1732 740440

OR EMAIL

mail@futurehorizons.com

Startup Transforms Compute-In-Memory

At the TinyML Summit, early-stage analog AI accelerator startup Areanna presented the first public reveal of its architecture, disclosing some of the features of its 40 TOPS/W SRAM array-based design..

read more

Future Horizons Ltd, • 44 Bethel Road • Sevenoaks • Kent TN13 3UE • England
Tel: +44 1732 740440 • Fax: +44 1732 740442
e-mail: mail@futurehorizons.com• http://www.futurehorizons.com/
Affiliates in Europe, India, Israel, Japan, Russian, San Jose California, USA

Navitas Semiconductor Agrees to Live Oak SPAC Merger

Navitas Semiconductor, a maker of power chips, has agreed to go public through a merger with Live Oak Acquisition Corp. II, a blank-check firm, according to a person with knowledge of the matter.

The transaction, which could be announced as soon as this week, is set to value the combined entity at about $1 billion, said the person. That includes a so-called private investment in public equity, or PIPE, of about $145 million, the person said.

A Live Oak representative declined to comment. A Navitas representative didn't immediately respond to a request for comment.

Live Oak raised $253 million in a December initial public offering. The SPAC is led by CEO Richard J. Hendrix.

Tesla, Apple Supplier Delta To Pour $7M In AI Semiconductor Startup Amid Chip Shortage

Tesla Inc TSLA and Apple Inc and AAPL power components supplier Delta Electronics is backing Kneron, an artificial intelligence startup that developsemiconductors with a $7 million investment, reported TechCrunch Thursday.

What Happened: The San Diego, California headquartered Kneron has also reportedly agreed to buy Vatics, a part of Delta Electronics' subsidiary Vivotek, for $10 million in cash as a part of the deal.

The acquisition will complement Kneron's existing business as it makes efforts to expand to the smart car industry.

Vatics executives will join Kneron in order to lead the latter's surveillance and security camera division. The merged workforce will develop both surveillance and automotive products for Kneron

Device Makers Seek Etching, Printing Innovation

TORONTO — Even as electronics companies strive to improve the designs of their semiconductor products and printed circuit boards, suppliers of manufacturing equipment contribute just as much innovation to improve successive generations of ICs and PCBs.

Lam Research is a vendor many electronics manufacturers turn to for new processes and tools to reduce their cost per bit from node to node. One of its latest offerings is aimed specifically at delivering better etching for current DRAM and future NAND flash memory devices. Vantex is a dielectric etch technology designed specifically for the company's Sense.i platform, designed with chipmakers building 3D memory devices in mind — in particular, those providing memory devices for smartphones, graphics cards, and solid-state storage drives, said Thomas Bondur, the company's corporate vice president of product marketing and business development for its Etch Product Group.

ASIL Requirements Drive Memory Evaluations

TORONTO—It will be a while before DDR5 dominates the DRAM market, but when it comes to automotive applications, it makes sense to get a head start to qualify memory devices to meet reliability and functional safety requirements in the latest and greatest automotive systems.

Micron's LPPDR5 DRAM has already been in production in high volumes for mobile devices. (Courtesy Micron)

Micron Technology recently began sampling its low-power DDR5 DRAM (LPDDR5) memory that is hardware-evaluated to meet the most stringent Automotive Safety Integrity Level (ASIL), ASIL D. It's one of many companies supplying semiconductor content to the automotive market that seeks external certification or review to meet the requirements of International Organization for Standardization (ISO) 26262 standard that is widely applied automotive systems. The ISO 26262 standard covers automotive functional safety, including advanced-driver assistance system (ADAS) technologies that were once a premium feature, but now prevalent on all new vehicles.

Startup Transforms Compute-In-Memory

At the TinyML Summit, early-stage analog AI accelerator startup Areanna presented the first public reveal of its architecture, disclosing some of the features of its 40 TOPS/W SRAM array-based design. The unusual design integrates analog-to-digital and digital-to-analog conversion within the memory array. Since ADCs and DACs typically take up the vast majority of silicon area and power budget for compute-in-memory designs, integrating this functionality within the memory array could be a game changer for analog compute technology.

Areanna is led by former Tektronix analog design engineer Behdad Youssefi alongside another ex-Tek colleague, Patrick Satarzadeh. They remain the company's only two full-time employees, alongside a couple of part time engineers and several advisors. The company has achieved a test chip with one computing tile based on its architecture up and running.