# FutureHorizons



## The Global Semiconductor Industry Analysts

### **FH MONDAY**

13 February 2017

Ford to Invest \$1 Billion in Argo AI

MADISON, Wis. — Ford Motor Company announced Friday a \$1billion investment over the next five years in a startup called Argo AI (Pittsburgh), founded by two top AI robotic talents Bryan Salesky and Peter Rander.

read more

Startup 'Eyes' Healthier Displays

TORONTO – Display technology shouldn't be left to engineers. That's what's driving a Montreal-based startup to develop eye-friendly technology for smartphones,

automotive dashboards and

virtual reality headsets.

read more

G'foundries Revamps China Deal

SAN JOSE, Calif. – Globalfoundries and city government officials from Chengdu, China, will break ground Saturday on a new fab valued at roughly \$10 billion.

read more

## **Future**Horizons

#### **TALK TO US**







Intel to Spend \$7 Billion on Arizona Fab

MADISON, Wis. – Intel Corp. Chief Executive Officer Brian Krzanich went to Washington Wednesday and stood beside President Donald Trump in the Oval Office to announce the company's \$7 billion investment in a semiconductor fab, known as Fab 42, in Arizona.

read more

#### **EVENTS**

#### Silicon Chip Industry Seminar

- 13 March 2017 - London UK

#### **Industry Forecast Briefing**

- 19 September - London UK

DON'T MISS OUT.-BOOK NOW BY CALLING

+44 1732 740440

OR EMAIL mail@futurehorizons.com

## TSMC Calls for New EDA Paradigm

SAN FRANCISCO – Engineers need a new class of tools to keep up with the complexity of designing today's semiconductors, said a keynoter at the International Solid State Circuits Conference (ISSCC) here

read more

#### Ford To Invest \$1 Billion In Argo Al

MADISON, Wis. — Ford Motor Company announced Friday a \$1billion investment over the next five years in a startup called Argo AI (Pittsburgh), founded by two top AI robotic talents Bryan Salesky and Peter Rander.

Salesky and Randar are alumni of the Carnegie Mellon National Robotics Engineering Center and former leaders on the self-driving car teams of Google and Uber.

Ford will be the majority stakeholder in Argo AI. Although Argo AI will become technically Ford's subsidiary, the automaker said Argo AI has been structured to operate with substantial independence.

Ford President and CEO Mark Fields said during the press briefing, "There is a war for talent going on out there." He explained that Argo employees will have significant equity in the company, which he believes will make it easier to hire top talent.

#### Startup 'Eyes' Healthier Displays

TORONTO - Display technology shouldn't be left to engineers.

That's what's driving a Montreal-based startup to develop eye-friendly technology for smartphones, automotive dashboards and virtual reality headsets. The genesis of IRYStec goes back to 2013, when Tara Akhavan, a second-year PhD student attending the Vienna University of Technology, was presenting at a conference around high dynamic range (HDR), where her work caught the eye who would be the company's first investor, Montreal-based TandemLaunch.

Its CEO had previously sold an HDR company 10 years ago, and initial discussions led to the idea that what is missing in display technology is human perception. "It's just in the last 10 years that we have been intimate with displays," said Akhavan, now cofounder and chief technology officer. "We're just figuring out the side effects."

#### G'foundries Revamps China Deal

SAN JOSE, Calif. – Globalfoundries and city government officials from Chengdu, China, will break ground Saturday on a new fab valued at roughly \$10 billion. The foundry simultaneously announced expansions for fabs in Germany, the U.S. and Singapore, although it declined to put dollar figures on them.

Globalfoundries suggested it is putting on the back burner a separate joint venture in Chongqing announced in May. It has a memorandum of understanding in that deal but it is focusing on Chengdu which appears to be a significantly larger, more promising deal.

The news comes at a time when China federal and provincial officials are competing in a race to build up a domestic semiconductor industry. Ironically the new joint venture comes one day after Intel announced at the White House it will spend \$7 billion to restart its Fab 42 in Arizona.

#### Intel To Spend \$7 Billion On Arizona Fab

MADISON, Wis. – Intel Corp. Chief Executive Officer Brian Krzanich went to Washington Wednesday and stood beside President Donald Trump in the Oval Office to announce the company's \$7 billion investment in a semiconductor fab, known as Fab 42, in Arizona.

Fab 42 had stood vacant and unequipped in Chandler, Ariz. since the shell was completed at the end of 2013.

"The completion of Fab 42 in three to four years will directly create approximately 3,000 high-tech, high-wage Intel jobs for process engineers, equipment technicians, and facilities-support engineers and technicians who will work at the site," Intel said in a statement. The 7nm semiconductor manufacturing process will be targeted for Fab 42.

#### **TSMC Calls For New EDA Paradigm**

SAN FRANCISCO – Engineers need a new class of tools to keep up with the complexity of designing today's semiconductors, said a keynoter at the International Solid State Circuits Conference (ISSCC) here Monday (Feb. 6). Separate tools need to target today's four major markets using new techniques and assumptions including machine learning, said Cliff Hou, vice president of R&D at TSMC.

"We need a new design paradigm to overcome chip design challenges," said Hou. "It's time for us to evolve our design paradigm, we've only covered a small portion of" the design space, he said.

Over the last 10 years the industry has been driven by mobile, building its design databases around smartphone SoCs. "Now we realize mobile is OK as a starting point but we also have to optimize circuits for automotive, high-performance systems and IoT where the considerations are very different," Hou said, showing four different SRAM designs TSMC uses just for a range of mobile and wearable designs.