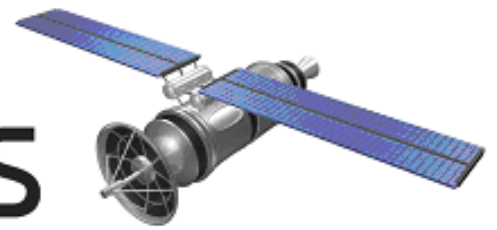


# FutureHorizons



The Global Semiconductor Industry Analysts

## FH MONDAY

16 December 2019

### 4D Imaging Startup Develops Sensor to 'See Through Walls'

Israeli startup Vayyar Imaging Ltd. has raised \$109 million in a series D financing round to scale its 4D radar imaging technology and further expand the range of applications. The total capital raised to date is \$188 million.

[read more](#)

### Boosting the Quantum Computing

Researchers Samuele Ferracin, Theodoros Kapourniotis, and Dr. Animesh Datta of the University of Warwick have developed a protocol that allows a quantum computer to control its responses to difficult problems. In other words, it permits to quantify the effects of noise on the outputs of quantum computers

[read more](#)

### Apple Asks Chinese Suppliers to Double AirPods Production

In response to rising demand for one of its hottest products, Apple is increasing its business in China, despite the U.S.-China trade war. Recent reports suggest that Apple has asked two Chinese manufacturers to increase production of AirPods to meet demand over the holiday period. As a result, the stock prices of both Chinese manufacturers have risen.

[read more](#)

FutureHorizons



### TALK TO US



### ChangXin Emerging as China's First & Only DRAM Maker

ChangXin Memory, formerly known as Innotron Memory, claimed the company has become — officially — “China’s only DRAM producer.” Having completed its Fab 1 and R&D facility in Hefei, ChangXin is currently running 20,000 wafers per month.

[read more](#)

### EVENTS

#### [Silicon Chip Industry Seminar](#)

10 June - 2019 – London UK

#### [Industry Forecast Briefing](#)

– 17 Sept 2019 – London UK

**DON'T MISS OUT.-  
BOOK NOW BY CALLING**

**+44 1732 740440**

**OR EMAIL**

**[mail@futurehorizons.com](mailto:mail@futurehorizons.com)**

### Cadence Consolidates RF Design with AWR Buy

For \$160 million, Cadence will get board- and system-level RF design capabilities to complement its circuit-level RF expertise.

[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](mailto:mail@futurehorizons.com) • <http://www.futurehorizons.com/>

Affiliates in Europe, India, Israel, Japan, Russian, San Jose California, USA

## **4D Imaging Startup Develops Sensor To 'See Through Walls**

Israeli startup Vayyar Imaging Ltd. has raised \$109 million in a series D financing round to scale its 4D radar imaging technology and further expand the range of applications. The total capital raised to date is \$188 million.

At the time Raviv Melamed, Naftali Chayat, and Miri Ratner founded Vayyar, their ambition was to develop an alternative for breast cancer detection, using RF to quickly and affordably look into human tissue and detect malignant growth. Eight years later, their 4D imaging sensor goes beyond the medical sphere to serve a myriad of markets.

Vayyar claims it has designed a small, sensor-based chip that, with its 72 transmitters and 72 receivers, tracks and maps everything without a camera. It detects obstacles and monitors people's location, movement, height, posture and vital signs wirelessly, in all lighting and weather conditions, and in real time. A key differentiator is its ability to "see" through walls, closed doors, and other solid objects, the company said.

## **Boosting the Quantum Computing**

Researchers Samuele Ferracin, Theodoros Kapourniotis, and Dr. Animesh Datta of the University of Warwick have developed a protocol that allows a quantum computer to control its responses to difficult problems. In other words, it permits to quantify the effects of noise on the outputs of quantum computers. Noise is a variable that influences the hardware state of a quantum machine but is outside the user's control, such as temperature fluctuations. This can affect the accuracy of the results of any system.

The test produces two percentages of analysis that allow determining if their machines are working properly to improve their performance: a crucial first step in establishing the usefulness of quantum computing in the future.

## **Apple Asks Chinese Suppliers to Double AirPods Production**

In response to rising demand for one of its hottest products, Apple is increasing its business in China, despite the U.S.-China trade war.

Recent reports suggest that Apple has asked two Chinese manufacturers to increase production of AirPods to meet demand over the holiday period. As a result, the stock prices of both Chinese manufacturers have risen.

According to a recent Nikkei Asian Review report, the threat of tariffs has not deterred Apple from increasing production of its wireless earbud series, AirPods. Anticipating a boom during the holiday period, it is reported that Apple has asked its suppliers in China to double shipments.

## **ChangXin Emerging as China's First & Only DRAM Maker**

SHENZHEN, China — ChangXin Memory (CXMT) has claimed the distinction of being — officially — "China's only DRAM producer."

China is boastful of its plan to produce homegrown memory devices, but aside from the NAND flash memory in the works at Yangtze Memory Technologies Co., Ltd. (YMTC) and NOR flash designed by GigaDevice, China has had more ambition than results.

Creating DRAM would be a big step in validating China's semiconductor ambitions, but industry opinion has been split on whether China can deliver DRAM at all. Even if it does, observers ask how soon China can start shipping commercial DRAMs in meaningful volume.

## **Cadence Consolidates RF Design with AWR Buy**

For \$160 million, Cadence will get board- and system-level RF design capabilities to complement its circuit-level RF expertise.

Cadence Design Systems is purchasing National Instruments subsidiary AWR Corp. for \$160 million. In conjunction with the acquisition, Cadence and NI, which have been working together for some time, have also entered a strategic alliance to work in tandem to serve mutual customers in the communications sector.

AWR specializes in design tools for millimeter wave (mmWave) and microwave products, largely at the board and system level, while Cadence's heritage is in chip design and IP. AWR also has more experience with III-V semiconductors that out-perform silicon in high-frequency devices.