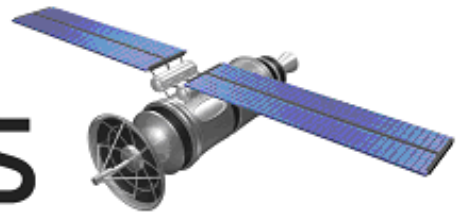


# FutureHorizons



The Global Semiconductor Industry Analysts

## FH MONDAY

18 April 2016

The road is long for China's 3D NAND flash mfg

Several knowledgeable semiconductor industry sources based in Japan told EE Times of China Inc.'s intention to speed up building its own memory business. However, some questions remain-- what is their timeline and how do they intend to make this plan a reality?

[read more](#)

Google data centres to shift to ARM, IBM

Google is holding out for the prospect shifting its massive data centres from Intel x86 to IBM Power servers. It also is preparing for the possibility it may shift to ARM servers, but it's not quite as far along on that path.

[read more](#)

NXP, HID Global team to enable wearables

NXP Semiconductors N.V. has teamed up with HID Global to enable the HID Global Seos credential technology to be embedded in NXP's SmartMX-based secure element devices

[read more](#)

FutureHorizons



TALK TO US



Rising data costs endanger IoT deployment

As emphasised by Cisco's forecast of 50 billion devices and objects connected to the Internet by 2020, the extensive roll-out of Internet of Things (IoT) devices is now facing major concerns.

[read more](#)

### EVENTS

[Silicon Chip Industry Seminar](#)

– 7 March 2016 – London UK

[Industry Forecast Briefing](#)

– 19 January 2016 – London UK

DON'T MISS OUT.-  
BOOK NOW BY CALLING

+44 1732 740440

OR EMAIL

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

Wearable electronics bring computers in your clothes

Researchers from the Ohio State University who are working to create wearable electronics have announced a major achievement.

[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

## **The Road Is Long For China's 3D NAND Flash Mfg**

Several knowledgeable semiconductor industry sources based in Japan told EE Times of China Inc.'s intention to speed up building its own memory business. However, some questions remain-- what is their timeline and how do they intend to make this plan a reality?

Abundant financial resources available from China's National IC Industry Investment Fund, often called the Big Fund, augmented local government-led funds, have lent China's "memory" dream an air of credibility.

But setting aside China's aspirations, there is intense scrutiny here about the sources of IPs and engineering talent that China badly needs.

## **Google Data Centres To Shift To ARM, IBM Servers**

Google is holding out for the prospect shifting its massive data centres from Intel x86 to IBM Power servers. It also is preparing for the possibility it may shift to ARM servers, but it's not quite as far along on that path. It has now ported to the Power8 server it developed two years ago many Google apps and most of Google's infrastructure software.

"For good software developers enabling Power is just modifying a flag in a config file and off they go," said Maire Mahony, an engineering manager in Google's platform group that is responsible for its data centre hardware and a director of the Open Power Foundation.

## **NXP, HID Global Team To Enable Wearables For Enterprise**

NXP Semiconductors N.V. has teamed up with HID Global to enable the HID Global Seos credential technology to be embedded in NXP's SmartMX-based secure element devices. Through the collaboration, NXP and HID Global aim to allow the use of wearable devices, to open electronic locks at commercial buildings, hotels and workplaces in the future.

Additionally, NXP and HID Global are cooperating on a range of opportunities to expand the adoption of secure access to more applications and use cases.

Wearables manufacturers globally with the Seos-ready NXP chips can enable users with building and parking access, PC login, authentication to IT systems and cloud applications, secure print job collection, time and attendance, point of sale and automated cashless vending, along with numerous other use cases supported by Seos. HID Global's field programmers will support these use cases in Seos-ready wearables simply with the support of loading digital credentials of specified applications.

## **Rising Data Costs Endanger IoT Deployment**

As emphasised by Cisco's forecast of 50 billion devices and objects connected to the Internet by 2020, the extensive roll-out of Internet of Things (IoT) devices is now facing major concerns. As the dream morphs toward reality, IoT system designers ponder a number of yet-to-be-sorted-out deployment challenges. These include cost [of IoT devices], limited battery life, a bandwidth-constrained network, the lack of standard protocols and a security shortfall.

But what about the cost of data? IoT is all about connected devices designed to gather data for intelligent analysis.

## **Wearable Electronics Bring Computers In Your Clothes**

Researchers from the Ohio State University who are working to create wearable electronics have announced a major achievement. According to them, they are able to embroider circuits into fabric with 0.1 mm precision to incorporate electronic components such as sensors and computer memory devices into clothing.

With this advance, the Ohio State University researchers have taken the next step toward the design of functional textiles: clothes that gather, store, or transmit digital information. With further development, the technology could lead to shirts that act as antennas for your smartphone or tablet, workout clothes that monitor your fitness level, sports equipment that monitors athletes' performance, a bandage that tells your doctor how well the tissue beneath it is healing, or even a flexible fabric cap that senses activity in the brain.