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The Global Semiconductor Industry Analysts

FH MONDAY

26 December 2016

OEMs to add 3D printing to manufacturing roadmaps

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China Dominates Planned Chip Fabs

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Startup Launches IoT Net in Canada

A startup co-founded by a pair of former BlackBerry developers launched a network for the Internet of Things they hope to spread across Canada. Eleven-X switched on a LoRa network in Waterloo this week, aiming to extend it to major cities across the country by the end of 2018.

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TALK TO US



NXP extends S08 8bit MCU line with new models

NXP Semiconductors has revealed that it will be extending the longevity program for six S08 8bit microcontrollers (MCU) to five more years. The move is in response to the demand and broad market usage of the MCUs.

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5G mobile networks speed towards an uncertain future

When chancellor of the exchequer Philip Hammond declared he wanted Britain to become a "world leader in 5G" during his Autumn Statement on the UK economy, he was praised for his ambition by parliamentary colleagues.

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OEMs To Add 3D Printing To Manufacturing Roadmaps

By using 3D printing, companies can make a physical object from a three-dimensional digital model by laying down many thin layers of a material in succession in the multilayer environment that 3D modelling software provides. This process is also referred to as additive manufacturing (AM), a term which attempts to describe the layer-by-layer digital build of an object that is ultimately rendered into a physical form.

3D printing has been used successfully in manufacturing relatively small objects that require high levels of customisation such as hearing aids and dental titanium implants. The process saves time in design, enables rapid prototyping and checkout of experimental designs, and gives companies advance visibility of potential design problems before these problems physically manifest themselves in production and are exponentially costlier to correct. One by one, 3D printing success stories are growing. In the hearing aid market alone, over 10 million people worldwide are now using 3D printed hearing aids.

China Dominates Planned Chip Fabs

More than 40% of front end semiconductor fabs scheduled to begin operation between 2017 and 2020 are in China, a clear indication that China's long-stated ambition to build a significant domestic semiconductor industry is taking shape.

According to SEMI, a trade group that represents semiconductor equipment and materials suppliers, of 62 front end fabs that will open worldwide over the next three years, 26 are in China, representing 42% of the global total.

Of the 62 fabs currently on the drawing board or in construction, most are volume manufacturing fabs, with seven slated to be R&D or pilot fabs, according to Christian Dieseldorff, director of semiconductor industry research at SEMI (San Jose, Calif.).

Startup Launches IoT Net in Canada

A startup co-founded by a pair of former Blackberry developers launched a network for the Internet of Things they hope to spread across Canada. Eleven-X switched on a LoRa network in Waterloo this week, aiming to extend it to major cities across the country by the end of 2018.

LoRa is one of a handful of low power wide area networks (LPWA) operating in sub-gigahertz bands for IoT. Its open specification has helped it achieve traction in a highly competitive market of players including Sigfox, Ingenu and emerging cellular IoT variants. The LoRa Alliance currently has more than 400 participants

The network launched with "multiple pilot customers" but no paying customers yet, said a company spokesperson.

NXP extends S08 8bit MCU Line With New Models

NXP Semiconductors has revealed that it will be extending the longevity program for six S08 8bit microcontrollers (MCU) to five more years. The move is in response to the demand and broad market usage of the MCUs.

In a span of 12 years, NXP introduced 25 product families to its S08 8bit MCUs, including the S08QG, S08QD, S08SF, S08SH, S08AC, and S08FL MCU families. Next year, it will be adding more S08 products, which it expects will help customers address future challenges.

NXP's 8bit MCUs are ideal for harsh working environments, such as in automotive, industrial control and home appliance applications. The S08 portfolio comes in 3V and 5V options.

5G Mobile Networks Speed Towards An Uncertain Future

When chancellor of the exchequer Philip Hammond declared he wanted Britain to become a "world leader in 5G" during his Autumn Statement on the UK economy, he was praised for his ambition by parliamentary colleagues. Yet he was, if anything, late to the party, with the chorus of governments, companies and academics pushing the case to become 5G pioneers having grown louder during the past two years.

Despite years of industry wrangling, there is still no clear definition of what 5G means — little more than a year before some countries have pledged to launch network trials of the technology. The hardware standards for the fifth generation of wireless communications were set at a conference in Nevada last month but the software elements have yet to be agreed, as the industry players continue to battle for supremacy.

The hype cycle has nonetheless been in overdrive. AT&T has boasted of achieving data speeds of 14 gigabits per second in lab trials of a 5G-like technology with Ericsson and Intel, while one of the telco's senior executives claimed that the next generation of networks had "unlimited potential".