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Intel Looks to Regain Innovation Lead

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US Tightens Chip Export Screws on Huawei

The Trump Administration has moved to tighten chip export screws on China, further restricting access to U.S. advanced semiconductor manufacturing gear by adding more Huawei Technologies affiliates to its list of required licensees.

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Qualcomm, Cisco, 5G and the Trade War

Executives from Qualcomm, Cisco, and Inseego participated in a webinar about "the impact of rapidly evolving government policy" on the 5G market. They divulged little that's new, but did provide commentary on current events that was probably unintelligible to all but those closely following President Trump's trade war against China, including his crusade to cripple Huawei.

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TALK TO US



Deploying 5G Edge Cloud Infrastructure for vRAN

Operators worldwide are deploying 5G at pace, with new devices coming to market all the time and 5G penetration on track to exceed 25 percent by 2023 in advanced markets, according to a recent Heavy Reading report. The 5G era is only just getting started.

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Inclinometer with ML core delivers high accuracy, low power

STMicroelectronics has introduced the IIS2ICLX 2-axis digital inclinometer for use in applications such as industrial automation and structural health monitoring of buildings and infrastructure such as roads, bridges, and tunnels.

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Intel Looks to Regain Innovation Lead

Intel held an Architecture Day for the first time in two years; it was the company's chance to reclaim the lead in technology innovation after some recent missteps. The company argued that future progress in IC performance will be predicated less on process shrinks and more on architectural innovations. It then went on to demonstrate it's getting its groove back with work in several categories of architectural innovation.

Intel has codified those categories. Intel's Raja Koduri, SVP, chief architect and GM Intel Architecture, Graphics and Software, focused on what Intel calls the Six Pillars of Innovation.

There are several variations of the six pillars of (or keys to) innovation. Raja Koduri explained Intel's version.

They are: process (which included packaging), architecture, memory, interconnect, security, and software. Packaging is a critical element to putting heterogeneous design methodology together in an efficient coherent manner

US Tightens Chip Export Screws on Huawei

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Caught unawares, the U.S. semiconductor industry groups expressed surprise at what one executive called the administration's "sudden shift" away from a narrower approach to controlling chip gear exports.

The U.S. Commerce Department said Monday (Aug. 17) it will add 38 Huawei affiliates to its Entity List of companies required to obtain export licenses to purchase advanced U.S. chip technologies. The expanded list follows a May decision to slap stiffer U.S. export controls on American chip design software and manufacturing equipment. The new rules specifically target Huawei, its HiSilicon chip unit and other affiliates in an attempt to cut off access to leading edge chip technology.

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Given the subject, it was both fascinating and enervating watching the panelists do backflips to avoid saying "Huawei" or comment on the President's trade machinations. For instance, they completely elided the fact that the President recently blind-sided the semiconductor industry again when he expanded the so-called entity list – the list of Chinese companies with which U.S. companies cannot trade without special permission (see: US Tightens Chip Export Screws on Huawei).

Deploying 5G Edge Cloud Infrastructure For vRAN

Operators worldwide are deploying 5G at pace, with new devices coming to market all the time and 5G penetration on track to exceed 25 percent by 2023 in advanced markets, according to a recent Heavy Reading report. The 5G era is only just getting started.

One of the most anticipated changes in the 5G network is the deployment of edge cloud infrastructure capable of supporting network functions, media content, and applications via frameworks such as mobile edge computing (MEC). This new nexus in the mobile network architecture enables operators to offer higher performance services — particularly low latency services — that are impossible or impractical to deliver with 4G and cannot be effectively delivered from large, centralized data centers.

Inclinometer With ML Core Delivers High Accuracy, Low Power

STMicroelectronics has released a new 2-axis inclinometer with high accuracy and low power for industrial automation and structural health monitoring.

STMicroelectronics has introduced the IIS2ICLX 2-axis digital inclinometer for use in applications such as industrial automation and structural health monitoring of buildings and infrastructure such as roads, bridges, and tunnels. Key features include a programmable machine-learning (ML) core and 16 independent programmable finite state machines that help edge devices save power and reduce data transfers to the cloud.

The IIS2ICLX also lowers system-level power consumption to extend the operation of battery-powered nodes thanks to its advanced embedded functions. The inclinometer, using MEMS accelerometer technology, offers a selectable full scale of $\pm 0.5/\pm 1/\pm 2/\pm 3$ g and provides outputs over an I2C or SPI digital interface. The operating temperature range is -40°C to 105°C