FutureHorizons

The Global Semiconductor Industry Analysts

FH MONDAY

16 March 2020

Huawei: UK Carriers to Be **ISSCC:** Automotive Ceva Pitches New DSP Processors, Chiplets, and 5G Hit by Clampdown Core This year's processor session at For telecom equipment The U.K. Government's the ISSCC led off with two decision to allow Chinese vendors, designing the right presentations by AMD (for the 5G network gear is a moving infrastructure group Huawei to first time) followed by target that keeps going higher. continue supplying equipment presentations from Samsung and As 5G advances from the in the country, but at a MediaTek talking about their latest 5G smart phone chips, a current New Radio (NR) controlled rate, will have research project/proof of concept Phase I to Phase II, the new significant and lasting design from CEA technology, an 5G Radio Access Network implications for many in the automotive system on chip (SoC) demands more transport industry, even leaving aside from Texas Instruments (TI), and flexibility and different base the politics and security the latest IBM Z series mainframe station functional splits concerns. processor. read more read more read more FutureHorizons TALK TO US Hailo Raises \$60m for AI 5G RF Issues Send Soitec Chip Productization Seeking New Wafer Material **EVENTS** Al chip startup Hailo, based in Tel-Aviv. Israel. has raised \$60 Silicon Chip Industry BARCELONA – Despite the million in a B-round of funding, Seminar Mobile World Congress bringing the company's total cancellation, the pursuit of 5G financing to \$88 million. This -15 June 2020– London UK grows fiercer by the hour, funding will be used for further especially among electronics productization and Industry Forecast Briefing players who are hitting silicon commercialization of the performance limits for 5G RF - 15 Sept 2020 - London UK company's chip, the Hailo-8, as front-end modules. well as continued development of DON'T MISS OUT.the company's hardware and BOOK NOW BY CALLING software, and to support an increased global presence as the +44 1732 740440 company grows. **OR EMAIL** read more read more mail@futurehorizons.com

Future Horizons Ltd, • 44 Bethel Road • Sevenoaks • Kent TN13 3UE • England Tel: +44 1732 740440 • Fax: +44 1732 740442 e-mail: <u>mail@futurehorizons.com</u>• <u>http://www.futurehorizons.com/</u> Affiliates in Europe, India, Israel, Japan, Russian, San Jose California, USA

Ceva Pitches New DSP Core

PARIS — For telecom equipment vendors, designing the right 5G network gear is a moving target that keeps going higher. As 5G advances from the current New Radio (NR) Phase I to Phase II, the new 5G Radio Access Network demands more transport flexibility and different base station functional splits.

With that in mind, Ceva, a licensor of DSP cores, unveiled Wednesday its newest DSP architecture, called the Gen4 CEVA-XC.

The Gen4 CEVA-XC is "much more than a DSP core," according to Nir Shapira, business development director, mobile broadband business unit at Ceva. Describing it as "more of a complete compute platform," he said the new DSP core natively features multithread and multicore architecture. It contains a built-in scheme designed for dynamic-vector computing resource allocation

Huawei: UK Carriers to Be Hit by Clampdown

The U.K. Government's decision to allow Chinese infrastructure group Huawei to continue supplying equipment in the country, but at a controlled rate, will have significant and lasting implications for many in the industry, even leaving aside the politics and security concerns.

Huawei has also been excluded for gear in the security sensitive 'core network' as the country gears up for 5G.

Those with the biggest calls to make include: the country's mobile and landline network operators — notably BT, Vodafone and Three; Huawei itself as regards its business in the U.K., perhaps its most significant in Europe; and the alternative network gear providers — Nokia, Ericsson, and Samsung.

ISSCC: Automotive Processors, Chiplets, and 5G

SAN FRANCISCO — This year's processor session at the ISSCC led off with two presentations by AMD (for the first time) followed by presentations from Samsung and MediaTek talking about their latest 5G smart phone chips, a research project/proof of concept design from CEA technology, an automotive system on chip (SoC) from Texas Instruments (TI), and the latest IBM Z series mainframe processor.

And because this conference is primarily a circuit design conference, each vendor focused on one or more specific aspects of circuit design that was unique in their processors.

The International Solid-State Circuit Conference (ISSCC) is one of the longest-running technical conferences in the semiconductor industry; it takes place every February here. The conference has a mix of academic and industry participants to discuss the latest challenges in chip circuit designs.

Hailo Raises \$60m for AI Chip Productization

Al chip startup Hailo, based in Tel-Aviv, Israel, has raised \$60 million in a B-round of funding, bringing the company's total financing to \$88 million. This funding will be used for further productization and commercialization of the company's chip, the Hailo-8, as well as continued development of the company's hardware and software, and to support an increased global presence as the company grows.

Hailo launched its Hailo-8 processor for edge and endpoint devices in May 2019. It uses a novel architecture in which compute, memory and control blocks are mixed together; software allocates adjacent blocks to work on each layer of a neural network, depending on the compute and memory requirements of that layer. It offers 26 TOPS at 2.8 TOPS/W for AI inference acceleration in edge and endpoint devices.

5G RF Issues Send Soitec Seeking New Wafer Material

BARCELONA – Despite the Mobile World Congress cancellation, the pursuit of 5G grows fiercer by the hour, especially among electronics players who are hitting silicon performance limits for 5G RF front-end modules.

Among the candidate materials to supplant silicon are compound materials such as gallium nitride (GaN), gallium arsenide (GaAs), and silicon carbide (SiC), along with piezoelectrics, which are being used to improve filters. GaAs has been used for power amplifiers in 4G and 5G handsets. GaN has begun gaining traction for power amplifiers in 5G mmWave markets.

More and more RF fabless chip companies are seeking "new materials to solve their problems," Paul Boudre, CEO of Soitec, told EE Times this week in an interview here.