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TSMC Details The Benefits MixComm Acquired by ITU Approves Non-cellular 5G of Its N3 Node Sivers Semiconductors Tech The recent acquisition of A novel non-cellular 5G TSMC, now chugging along startup MixComm by Sivers technology targeting enterprise with its N5 process node, said Semiconductors would allow and massive IoT networks has it will have its evolutionary N4 the Swedish chipmaker to made a significant step forward node ramped up to volume for further development and expand its portfolio to deliver production this year. The N3 commercialization after formal 5G millimeter-wave devices node, which will provide more approval by the WP5D unit within while obtaining radio of a technological leap than the ITU's Radiocommunications frequency/beam-forming N4, is planned to go into Sector (ITU-R) and, importantly, circuits along with silicon included it as part of the 5G volume production in the germanium and and RF-SOI standards in the IMT-2020 second half of 2022. technology. technology recommendations. read more read more read more FutureHorizons TALK TO US STMicroelectronics—Leading Bosch to Invest Another €400m in the Industry in Sustainability German, Malaysian Chip Facilities **EVENTS** Silicon Chip Industry The world has come a long way The global chip shortage from when Milton Friedman wrote Seminar continues to severely impact his "A Friedman Doctrine-The the supply chain. In response, Social Responsibility of Business -November 2021– London UK Bosch has announced plans is to Increase Its Profits," which to invest more than €400 was published by The New York Industry Forecast Briefing million in expanding its wafer Times in September 13, 1970. manufacturing fabs in - January 2022- London UK Sure, the responsibility of the Dresden and Reutlingen, executives employed by a DON'T MISS OUT.-Germany, and in its chip business is, first and foremost, to BOOK NOW BY make profits for the business. testing operations in Penang, Otherwise, the business will not Malaysia. CALLING survive, of course. +44 1732 740440 read more read more OR EMAIL mail@futuraharizana aam

> 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

ITU Approves Non-cellular 5G Tech

A novel non-cellular 5G technology targeting enterprise and massive IoT networks has made a significant step forward for further development and commercialization after formal approval by the WP5D unit within the ITU's Radiocommunications Sector (ITU-R) and, importantly, included it as part of the 5G standards in the IMT-2020 technology recommendations.

The technology was dubbed the ETSI DECT-2020 NR since its standardization was largely coordinated by the Sophia Antipolis, France-based European Telecommunications Standards Institute (ETSI) and involved numerous European

Because it is inherently decentralized and thus not tied to any single infrastructure, the technology is said to cost significantly less than existing cellular networks, both in terms of money and in its carbon footprint.

TSMC Details The Benefits of Its N3 Node

TSMC, now chugging along with its N5 process node, said it will have its evolutionary N4 node ramped up to volume production this year. The N3 node, which will provide more of a technological leap than N4, is planned to go into volume production in the second half of 2022. N3 will indeed offer customers the kind of performance improvements they might hope for from a major node jump, though the speed improvement will be at the low-end of TSMC's projected aspirations from last year; the company also just missed its target for density improvement.

The announcements were made at a TSMC house event, the 2021 Online OIP Ecosystem Forum.

The foundry also highlighted the participation of its EDA partners in helping to support the N3 node, to assure eager chip designers that the tools to design and test ICs for N3 will be ready and available. Synopsys jumped the gun; it announced its tools for supporting N3 a full week before TSMC's event. Cadence subsequently had its quarterly earnings call and mentioned its products supporting N3 only after being chided by an analyst for not responding immediately to Synopsys. Siemens waited until the opening day of TSMC's conference to announce its N3 tools.

MixComm Acquired by Sivers Semiconductors

The recent acquisition of startup MixComm by Sivers Semiconductors would allow the Swedish chipmaker to expand its portfolio to deliver 5G millimeter-wave devices while obtaining radio frequency/beam-forming circuits along with silicon germanium and and RF-SOI technology.

Among those listed in the EE Times Silicon 100 startups to watch in 2021, MixComm said the deal with Sivers is worth between \$135 million and \$155 million, depending on achieving commercial milestones. That represents a more than 10-fold return on \$116 million investment by early backer Kairos Ventures.

STMicroelectronics—Leading the Industry in Sustainability

The world has come a long way from when Milton Friedman wrote his "A Friedman Doctrine—The Social Responsibility of Business is to Increase Its Profits," which was published by The New York Times in September 13, 1970.

Sure, the responsibility of the executives employed by a business is, first and foremost, to make profits for the business. Otherwise, the business will not survive, of course.

However, there are some statements there that, in this time and age, seem to no longer apply. Such as that the corporate executive should not make expenditures on reducing pollution beyond the amount that is in the best interests of the corporation or that is required by law in order to contribute to the social objective of improving the environment. Because such an act will reduce the returns to stockholders of the business, as he is spending their money.

Bosch to Invest Another €400m in German, Malaysian Chip Facilities

The global chip shortage continues to severely impact the supply chain. In response, Bosch has announced plans to invest more than €400 million in expanding its wafer manufacturing fabs in Dresden and Reutlingen, Germany, and in its chip testing operations in Penang, Malaysia.

Most of the capital expenditure is for Bosch's recently launched 300-mm wafer fab in Dresden, where manufacturing capacity is expected to ramp up faster in 2022.

The €1 billion fab began producing chips for Bosch power tools in July, six months ahead of schedule, and chips for the automotive sector in September 2021, three months ahead of the original plan.