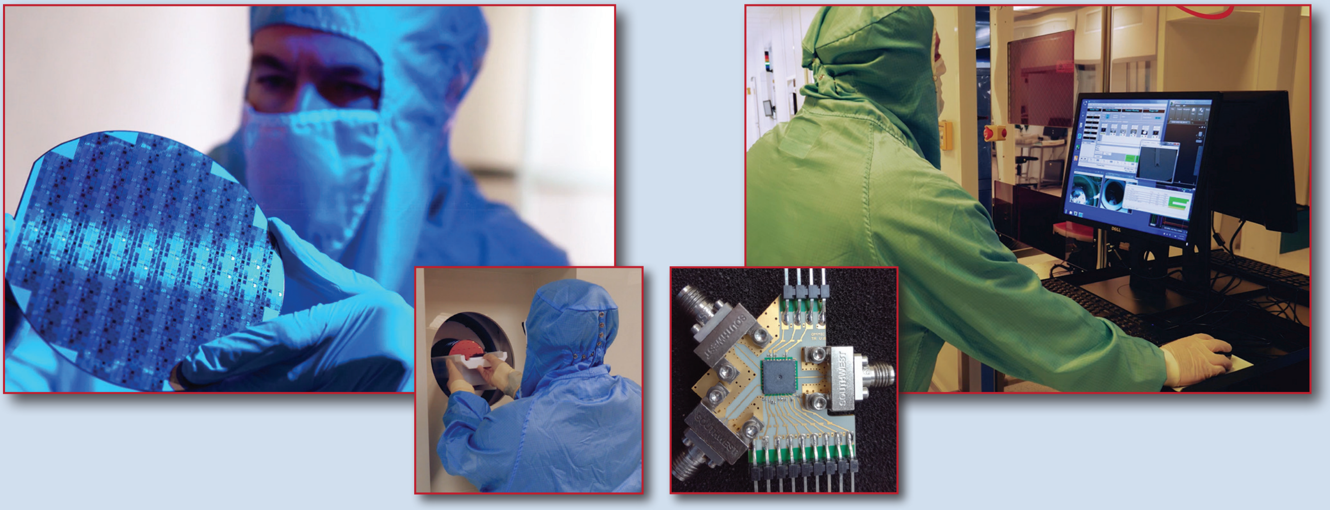
FABS and LABS

OMMIC Creates a First Designed to Last



In September 2017, OMMIC inaugurated the first European, 6-inch GaN production line and the world's first GaN-on-Si production line at its facility in Limeil-Brévannes, near Paris. After passing several qualification processes, the new line is scheduled to become fully operational by March 2018. This timing is critical: although 5G is still in development, it is expected to take off in 2019, with large-scale consumer adoption in 2020. With the new production line fully up and running in the second half of 2018, OMMIC will be in phase with the needs of the first 5G networks.

The inauguration of this significant semiconductor production line is the result of funds raised in June 2016 with the support of Bpifrance, BNP Paribas, Banque Populaire and Financière Victoire. This critical investment enabled the construction of a leading-edge factory for III-V semiconductors that will multiply OMMIC's annual production capacity by seven, with ambitious plans for that to increase 15-fold by 2020.

The initial recruitment of more than 35 technicians and engineers will be supplemented significantly in the future, not only to facilitate the deployment of the new line but to adapt to market demand. By recruiting new staff, the company is affirming its commitment to the continuation of its activities in Limeil-Brévannes and the revival and boosting of the French high-tech industry close to Paris, positioning itself as a French industrial flagship at the leading edge in the development of the European telecommunications market.

The construction of a new 1600 ft^2 clean room, with the advantage of easier maintenance, was accompanied by the renewal and upgrading of facilities and the purchase of 25 new machines, which will enable the company to improve yields and competitiveness. Thanks to this new production line, OMMIC will place itself as a leader in Europe to cover the needs of 5G antenna systems at 28 and 40 GHz, as well as continuing to serve and assist its current clients with more modern equipment. The company's processes can be used at frequencies above 15 GHz with output power that has not been reached before. Important for continuity, though, it will keep its current 3-inch line, which has been space qualified by the European Space Agency (ESA), for small volume markets and space products.

At the heart of OMMIC's success is the development of a very versatile and scalable GaN process. A single process design kit (PDK) contains all of the company's GaN processes: GaN-on-Si and GaN-on-SiC, with 100, 60 and, in the future, 40 nm gate lengths. With its GaN processes providing high gain, high output power, low noise and similar lag effect compared to traditional GaAs PHEMTs, the company predicts that its GaN technology will replace all GaAs PHEMT devices by around 2020. OMMIC first proffered this view at IMS2017, presenting the world's first GaN T/R chip that features a PA, LNA and SPDT switch on a single die, covering 25 to 36 GHz with a Pout of 4 W and 2.7 dB NF.

OMMIC is currently the fifth-ranked company for the manufacture of MMICs and identified the need for a facility that will help meet the growing market demand. With €14.5 million turnover in 2016 and a backlog of more than €20 million in 2017, this new capability will enable the company to move to its stated goal of becoming the third-largest GaN manufacturer by 2020, with sales over €100 million.

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