

SAL collaboration on PEALD technology brings next generation Radio Frequency Front End (RFFE) components one step closer

Silicon Austria Labs (SAL) is announcing a collaboration with leading supplier Qualcomm Technologies, Inc., through their subsidiary RF360 Europe GmbH, and thin film technology partner Evatec Europe on development of PEALD and PVD technology for the manufacture of next generation RFFE components.

The three-way cooperation over the next 4 years under SAL's CHIP2SYS program will focus on the development of both deposition and annealing processes for the AlN and InGaN seed layers required prior to deposition of AlScN piezoelectric layers and leverages the unique capability of PEALD for depositing high-quality layers with atomic precision. SAL will lead the overall project including deposition of the thin film layers using PEALD and PVD at its existing R&D facility in Villach. Evatec will support the project through hardware development whilst RF360 will benchmark any processes and assess suitability for mass production.

SAL's Project Manager and Lead Scientist **Dr Julian Pilz** commented: "We are excited to have been able to put together such a strong team of scientists and engineers for this project. The thin film cluster tool at our Villach facility is now equipped for the first time with both PVD and PEALD technology and most importantly allows us to develop process sequences using both without intermediate vacuum break. We look forward to making our first process trials already in Q4 2024."

About Silicon Austria Labs (SAL)

Silicon Austria Labs propels ideas into innovation in the fields of microsystems, sensor systems, intelligent wireless systems, power electronics and embedded systems with a consistent research excellence and economic impact. For more information visit: <https://silicon-austria-labs.com> / For press enquiries please contact Isabella Preuer press@silicon-austria.com

About Evatec

As a global leader in thin film technology Evatec designs and manufactures production systems for industry across applications in Advanced Packaging, Semiconductor, Optoelectronics and Photonics, whilst its customized engineering solutions support the equipment needed at the worlds' leading R&D institutions. For more information visit <https://evatecnet.com> / For press enquiries contact Allan Jaunzens Allan.jaunzens@evatecnet.com