



InGrid fabrication at LAAS

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We visited LAAS (CNRS lab in Toulouse, France, specialized in micro-electronics, opto-electronics, micro- and nano-systems) in April.

LAAS : 1500 m² of clean rooms from class 10000 to 100. 20 M€ equipment for development of high technology processes : mask fabrication, submicron tolerances, 3D structures, photo- and electro-lithography, MEMs, thin film deposition, electrochemistry, plasma etching, ion implantation, etc...

RTB network : allows to submit a project, even a 'small' one, and carry it out with the help of specialists, at operation cost (no participation to the investment)

TEAM: a very experienced team of engineers who can advise and support the projects and grant access to the adapted techniques in micro-electronics.

- Most machines limited to 6 ”.
- Goal : protection layers and InGrid fabrication on top of individual TimePix chips or wafers
- In collaboration with Twente-MESA+ and others
- Improvements foreseen with respect to ‘state-of-the-art’ :
 - More (or full) automatisation of the processes
 - Lift-off process for making the grid holes
 - New ideas to avoid polymerization of the SU8 while depositing the grid material
 - Possibility of thicker grids, recharged in metal and/or resistive material