

Letter of Interest

To be submitted together with

the Stage II Proposal "**Pre-standardisation of incremental FIB micro-milling for intrinsic stress evaluation at the sub-micron scale (ISTRESS)**"

To whom it may concern,

We have been informed from Fraunhofer ENAS and the ISTRESS consortium about the upcoming submission for funding of the above mentioned proposal. We hereby express our interest in this line of research activity.

Residual stresses introduced into semiconductor and microsystem products by different manufacturing steps are a basic concern for future reliability of products. Knowledge about the stress distribution both, with depth in multilayer systems and with lateral resolution, is important for advanced reliability assessments and therefore for product development. For the same reason, reliable information on stress creation mechanisms is an essential key for designing new components and devices.

Unfortunately, the choice of measurement methods with the required high spatial resolution is not really satisfying. Commercially available tools either do not exhibit sufficient resolution or their application is extremely expensive or not applicable to all materials. The FIB micro-milling approach proposed seems to be a promising new method that could be of essential interest to us.

Given this mutual interest, with the Fraunhofer ENAS, in the progress of development and implementation of the FIB micro-milling method, we agree to support the ISTRESS project in case of funding by the European Commission and the pursued commercialization of the measurement tools.

In doing so, we agree to provide, from our MEMS manufacturing line, measurement samples of various multilayer systems for testing and development of the method during the project.

Sincerely,


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