Call:
Factories of the Future 12
Industrial technologies for advanced joining and assembly processes for multi-materials

Proposal:
Hi-RAMP
High Reliability Assembly and Multi-material Processing.
Project Focus:
Advanced electronic components comprised of multi-materials. These are impacted by buried joining defects between layers:
- voids
- delamination.

HI-RAMP will improve YIELDS:
Automated, non-destructive detection of buried defects In line within the production process.

Goals:
Improve material joining processes
Improve production yields.
Innovation: Photoacoustic in line imaging through optically opaque materials to 800 μm

Current applications
- Delamination (tape, pad, wafer)
- Metal Voiding
- Buried micro-fractures

Application roadmap
- Film Thickness Measurements
- Film Uniformity Measurements
- Bio electronics
Consortium

We have:
NDT Sensor Engine, End-User, Optics, Correlation, Dissemination.

We need:
Surface Conditioning, VCSEL Lasers, Simulation Software.
For more information on consortium or Sonex’s sensor

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