Electronics Packaging & Reliability Services

The Electronics Packaging and Reliability Services Team at Tyndall offers comprehensively equipped laboratories which specialise in the development of assembly & integration processes for Integrated Circuit and sensor devices. The team also offers expertise in valuation of assembly quality & reliability for standard and novel assemblies and a wide range of component analysis capabilities. The services available from the team include:

- Assembly of ICs and sensors in a wide variety of formats including – ceramic packages, chip-on-board, flip-chip & Multi-Chip Modules (MCMs).
- Development of customised packaging solutions & prototyping for specific applications.
- Evaluation of new materials and technologies for use in high reliability applications.
- Quality, reliability and failure analysis of all levels of packaging and interconnection.
- Destructive and non-destructive physical analysis of components and PCB-based assemblies.
- Environmental stress (reliability) testing up to space standards

The team has been involved in collaborative projects with leading industry clients for over 25 years and has been working with the European Space Agency (ESA) since 1998. All services are managed & provided in accordance with Tyndall’s ISO 9001:2015 quality system.
Examples of the packaging and assembly work carried out by the Tyndall packaging & reliability services team – this includes a fold-up substrate for a swallowable capsule based on a combination of rigid & flexible PCBs, encapsulated chip-on-board IC packaging and sensor packaging.

The Tyndall packaging & reliability services team offer a range of non-destructive and destructive component analysis services. These include Scanning Acoustic Microscopy (SAM) imaging (left) and component decapsulation (right).
of the facilities available in the reliability test laboratory at Tyndall – from left: Thermal shock testing, Temperature
cycling, Temperature / Humidity testing, High & low temperature storage, & Corrosive atmosphere (salt mist) testing.

Contact enquiry (at) tyndall (dot) ie for all Business Development enquiries

Contact

- **Graeme Maxwell**  
  Specialty Products and Services - Specialty Products and Services  
  00353 21 234 6727  
  graeme.maxwell (at) tyndall (dot) ie
- **Finbarr Waldron**  
  Specialty Products and Services - Electronics Packaging and Reliability Services  
  +353 (0)21 2346093  
  finbarr.waldron (at) tyndall (dot) ie