

**TRAD** is your best partner to source and qualify COTS parts for **space applications**.

Our expertise in **electronics**, knowledge of **space environment** and know-how in **parts procurement** are key to ensure full compliancy with your **project quality requirements**.

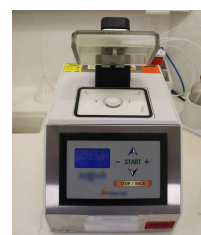
We support you throughout the **whole supply chain**: quality requirement review, parts selection and procurement, physical analysis, radiation, temperature & vibration testing and storage.



X-Ray



Microscopes



Delidding

## Quality requirement review

Each project carries its own quality requirements. Our quality experts assist you in defining which components are the most suitable (**COTS vs Space Qualified Parts**), and which test procedure is needed to guarantee full compliance with your project requirements.



## Physical and failure analysis

We provide a **complete set of analysis** including external inspection, X-ray, leak test, electrical test, parts opening, bond pull test, die shire test, PIND test, cross section, SEM, solderability, and more.

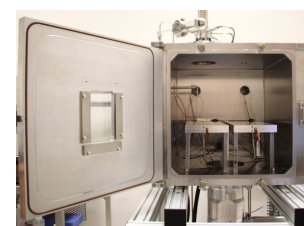
Our destructive physical analysis techniques are performed in accordance with **standards and methods** used in space program requirements.



## Radiation, temperature and vibration testing

Bench development for **Parametric** (TID / TNID) and **functional** (SEE) testing against all particles types: Gamma, heavy ions, laser, protons, neutrons, etc.

**Thermal cycling testing** with high performance ramp rates in combination with random vibration testing : **HALT** (Highly-Accelerated Life Testing), **HAST** (Highly-Accelerated Stress Testing), **HASS** (Highly Accelerated Stress Screening), and **life test**.



Thermal Cycling

### Our added value

- One-stop shop for procurement & testing
- 20 years experience in space activities
- MIL-STD & ECSS full compliance

### All EEE parts:

- Capacitors,
- ICs, diodes,
- Memories ...



907 voie l'Occitane – 31670 Labège – France  
Tel : +33 (0)5 61 00 95 60 – Fax : +33 (0)5 61 00 95 61  
E-mail : trad@trad.fr – www.trad.fr

For more info, please visit : [www.trad.fr](http://www.trad.fr)