



Newsletter 01/2012

Testing facilities at Europe's biggest space parts agent



Over the last years Tesat has continuously enlarged its capacity and facilities for testing of EEE High Rel parts for use in space applications.

Tesat Testing facilities offer

- Destructive Physical Analysis
- Constructional Analysis
- Failure Analysis
- Screening
- Lot Acceptance Test (LAT)
- Qualification and Quality Conformance Inspection (QCI)

The main laboratory extends over an area of 125 sqm.
All test facilities are within an Electrostatic Protected Area: EPA3.

Staff:

- 7 engineers and technicians working on DPA and Screening
- 16 engineers working on Constructional Analysis, Failure Analysis & more
- All engineers are qualified as PhDs, Masters, Bachelors or have relevant Technical / Vocational Training

Within the last 5 years over 6500 lots have been inspected.

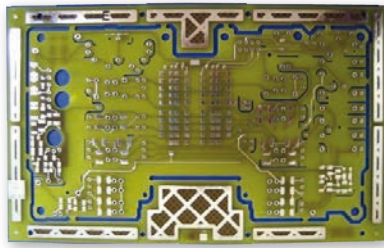
The Test Equipment includes

- 10 Optical Microscopes
- 3 SEM systems with material analysis
- 3 PIND test systems
- 3 X-Ray (radiography) systems
- 1 Precision Temperature Forcing System for electrical measurements at different temperatures
- 4 Temperature Cycling Systems
- 3 Seal Test (fine and gross leak) Systems
- 2 Bond Wire Pull Test + Die Shear Test Systems
- 2 Solderability Test + Steam Aging Setups
- Equipment for Electrical Measurements
- Microsectioning
- Chemical Laboratory

>> **Our testing facilities are used to ensure the quality of EEE parts that we supply to our customers** <<

Printed Circuit Boards

Since 1972 Tesat supplies standard and complex printed circuit boards with state of the art features for space for almost every application. At Tesat all PCBs used in our equipment are manufactured in-house.



Tesat now provides this service to external customers. We check your PCB-design for compliance to our design rules and manufacture your product!

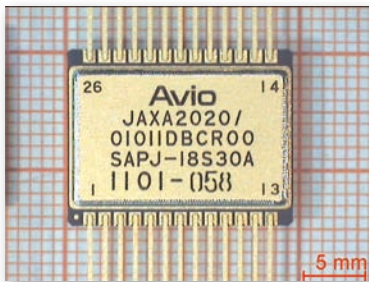
The product range includes 2-sided boards, multi-layer boards, flexible and composite multi-dielectric boards as well as special designs with metal core for thermal management and control of thermal expansion. Various surface finishes and combinations of different surface finishes can be produced, e.g. tin/lead reflow, copper/tin diffusion layer, electroless nickel/gold.

To our external customers, we offer our ESA ECSS-Q-ST-70-10C certified products including 2-sided boards, multi-layer boards in Htg FR4 with tin/lead reflow finish, copper/tin diffusion layer finish. In addition, we also offer electroless nickel/gold finish.

For further information please check <http://www.tesat.de> or contact sven.zeidler@tesat.de

Market introduction: POL Converters

Because developments in design and technology need more decentralized and efficient DC/DC converters, the demand for such parts is rising significantly. A newly developed POL converter is now being introduced into the European market: the SAPJ series from Nippon Avionics. These innovative devices come with numerous properties:



- EPPL Listing (expected for 01-JUL-2012)
- fully JAXA qualified and QPL listed
- High efficiency up to 92%
- Preset output voltage : 1.2V, 1.5V, 1.8V, 2.5V, 3.3V
- Output current up to 3A
- Input range : 4.5V to 16V
- TID: 100krad(Si)
- SEE: 64MeV*cm²/mg

Tesat will be carrying out constructional analysis on flight models from this new device. Combined with a recently performed evaluation from ESA we are confident to be able to give the prospective users good support for their particular application.

For more information please contact martin.veith@tesat.de or michael.moesken@tesat.de

MTG – Meteosat Third Generation

For the new generation of meteorological satellites Tesat has been selected by the prime to give EEE parts support to the users providing equipment for the Third Generation Meteosat satellites. Beside the procurement of the parts in the frame of the CPPA procurement, Tesat shall also perform consolidation and standardization of the parts needed as well as give the users engineering assistance for the selection or qualification of parts.

Dates

10.07.-11.07.2012	Avio POL Product Presentation, Tesat Spacecom, Backnang
11.09.-16.09.2012	International Air Show ILA 2012, Berlin
12.03.-14.03.2013	ESCCON, Noordwijk, The Netherlands

Your Tesat - Parts Agent