

5.3 ASSEMBLY AND TEST HOUSES (ATH)

5.3.1 FIRST SENSOR LEWICKI, GERMANY

The Process Capability Approval (PCA) of ATH services from First Sensor Lewicki in Oberdischingen, Germany, has been certified by ESA in accordance with the requirements of ESCC Basic specification No. [2567000](#).

5.3.1.1 *Contact Information*

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5.3.1.2 *Process Capability Approval*

Certificate No.	Certified since:	Type Designation
379	March 2022	Hermetically Encapsulated Discrete Semiconductor Components in SMD and TO Packages

5.3.1.3 *Capability Abstract ATH service for hermetic discrete components*

First Sensor Lewicki's assembly and test capabilities are defined within the associated Process Identification Document (PID) FSL797000-002 PID Issue B.

This PID describes discrete components assembly, packaging, screening, test and quality assurance processes for hermetic encapsulated power MOSFETs in SMD and TO packages.

Hermetic power MOSFETs form a key component in many applications such as general power supply of systems and sub-systems, DC-DC converter, motor control. The power MOSFETs are screened and tested in house according to the PID and are fully compliant with the ESCC5000.

The choice, definition and procurement of chips and packages, the incoming inspection and LAT test are performed according to custom specifications or PID procedures.

In-house process capabilities:

- Bare dices components: automatic pick-and-place assembly
- Solder die attach
- Automatic wire bonding
- Parallel seam sealing (for SMD and rectangular TO packages)
- Projection welding (for circular TO packages)

Screening of n-channel power MOSFETs according to ESCC5000 including environmental and mechanical tests, electrical tests, endurance tests and assembly tests.