

## **From the sketch to a finished PCBA – a journey along the process chain“**

The seminar is aimed at staff who increasingly have contact with electronic assemblies in their professional life. The participants are typically development engineers but also from purchasing, quality, production and service.

### Part 1 - PCB

- Overview of standards
- Data formats in the process
- Materials of the printed circuit board
- Production process flow step by step
- Construction-related relationships
- Cost factors of printed circuit board production

### Part 2 - Assembly

- Overview of standards
- Connection technology Soldering in the most common variants
- Production process flow step by step
- Typical defects and their avoidance
- Insight into acceptance criteria according to IPC-A610 and their design relevance
- Cost factors of assembly manufacturing

The standards used in this area are presented in an overview, which allows the participants to orient themselves. The detailed representation of the production steps with graphics, photos and videos is equal to factory visiting tours in a printed circuit board production plant and a PCBA assembly. Parallel to the process steps, the design and construction relevant aspects as well as the related standards are explained.

A comprehensive collection of recommendations and advises as well as tried-and-true guidelines allow the participants to work more efficiently on topics of everyday working life. The training materials are in English, the seminar is held in English or German.