



Responsible for our environmental footprint

- Decarbonization
- Innovation
- Regional development
- Raising awareness among our stakeholders

Committed to a sustainable product life cycle

- Eco-design
- Repair, reuse and recycle processes
- Recycling

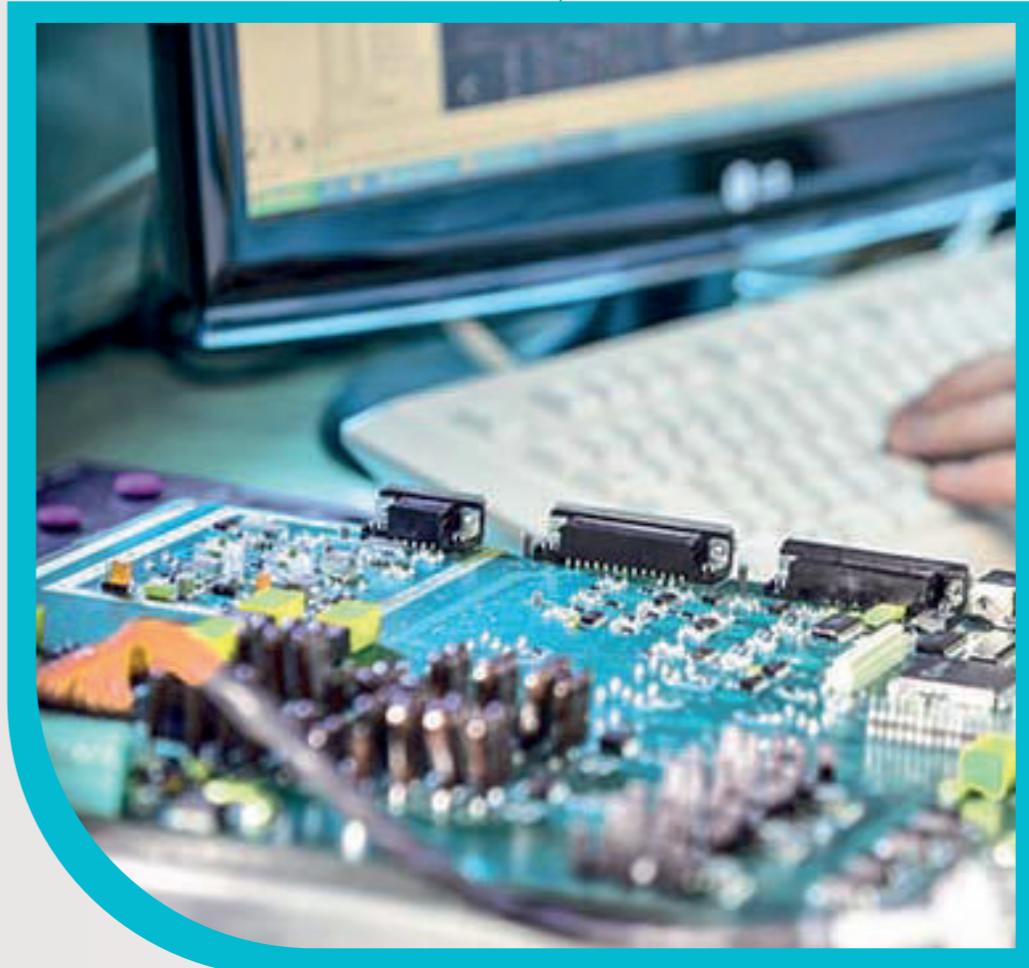
Respectful of people

- Well-being and safety of our employees
- Diverse and equal opportunities
- Support for employees with disabilities
- Intergenerational collaboration

A E R O S P A C E

PCB Cloning

Avoid Redesign Costs



PCB Cloning

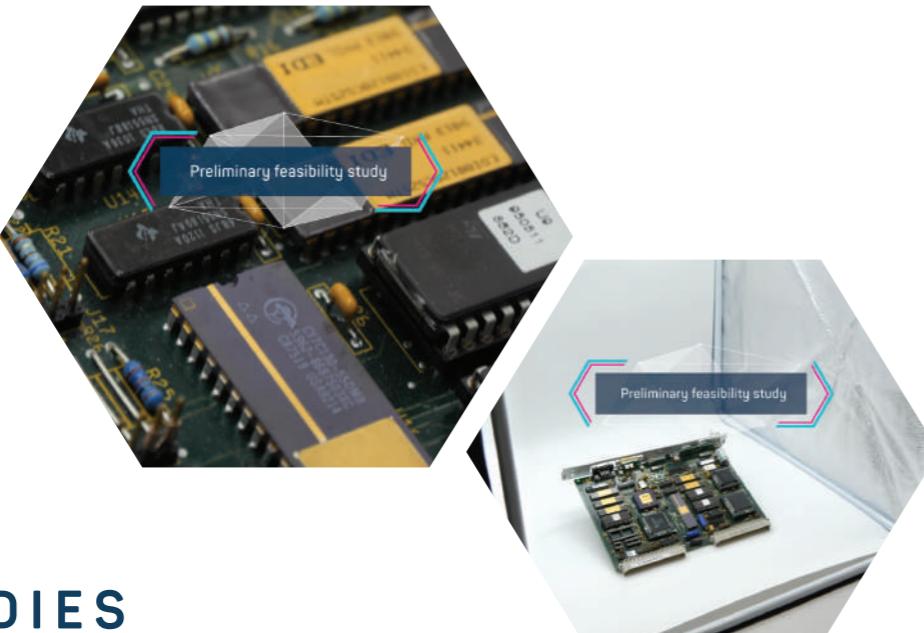
Trying to keep old systems running?

SPHEREA can provide functionally identical copies of electronic systems without the need for detailed design documentation.

Using the latest electronic analysis techniques, SPHEREA Test & Services can automate the cloning of existing electronic systems; often without any design or manufacturing data.

We've successfully cloned hundreds of printed circuit boards from simple control units to complex computers and from standard industrial applications to safety-critical Military, Aviation, Nuclear power and Transport systems.

FAISABILITY

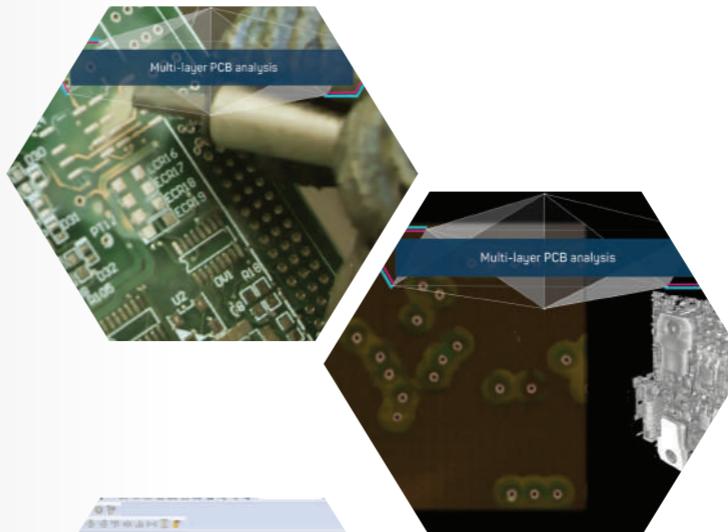


CLONING STUDIES



OUR APPROACH

DESIGN ANALYSIS AND COMPONENT SOURCING



PROTOTYPE AND VERIFICATION

NO DESIGN OR DATA? NOT A PROBLEM

Simply give us a functioning sample to copy and we can produce an electrically equivalent clone. Any additional design data will help but isn't always essential.

We take an existing printed circuit board and use advanced automated test tools to generate an electronic model of your physical design.

This includes data on the connection of points (a netlist), where points are placed and how they should look on a working unit (an electrical signature).

ELECTRONIC CLONING CAN BE USED FOR

- Multi-layer boards
- Coated boards
- Military specification systems
- Aviation specification systems
- Safety critical systems

OUR METHOD ALLOW FOR YOU TO RETRIEVE DATA

- Routing analysis
- Component characteristics
- Design data
- Production data
- Electrical test report