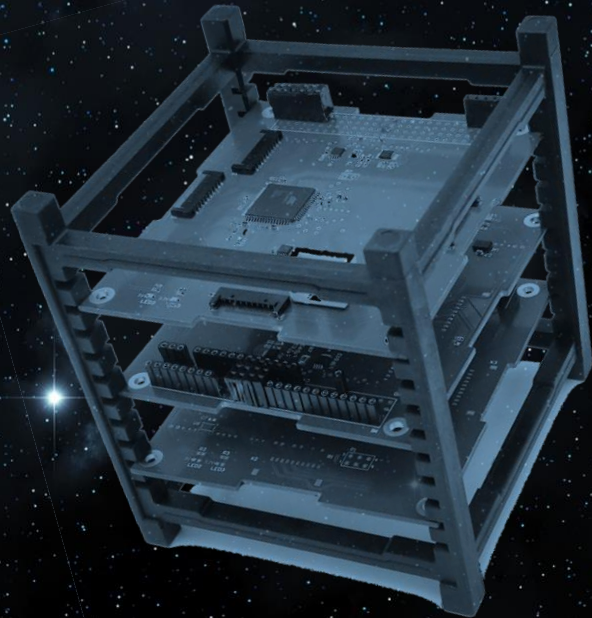


LAMBDA SPACE

GREEN SPACE TECHNOLOGIES



THE FUTURE OF SPACE TRAVEL:

COST EFFICIENCY

MEETS

ENVIRONMENTAL

AWARENESS

STATUS QUO IN SPACE APPLICATIONS

- ✓ **High component and system costs**

- Use of expensive materials and manufacturing processes
- High qualification costs

- ✓ **Long timeframes**

- Long planning and production times until launch

- ✓ **Poor carbon footprint**

- Use of energy-intensive processed metals, such as aluminum alloys



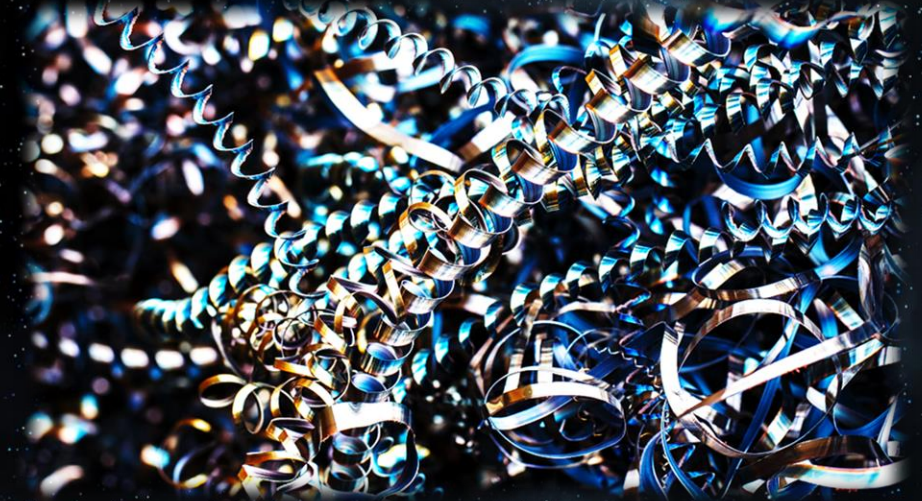
STATUS QUO IN SPACE APPLICATIONS

✓ Waste of resources

- Utilization of rare materials that are lost to the earthly raw material cycle
- Complex manufacturing processes with a lot of production waste

✓ Contamination of the Earth's atmosphere

- Metals and ceramics do not burn up completely
=> Particles remain in Earth's atmosphere



OUR DEMANDS ON NEWSPACE

- ✓ **Radical simplification of production processes**
 - Use of efficient and agile industrial manufacturing processes
- ✓ **Focus on cost efficiency**
 - Integration of standardized components and plug-and-play systems based on industrial products
- ✓ **New strategies and mindsets**
 - Many small and inexpensive satellites (swarm intelligence), instead of large expensive satellites (dinosaurs)



OUR DEMANDS ON NEWSPACE

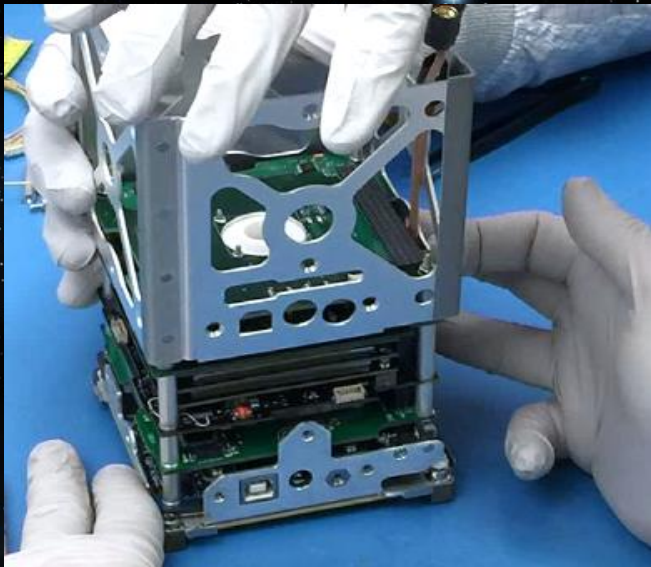
- ✓ **Design of CO₂-neutral space products**
 - Use of less energy-intensive or recycled materials or materials made from renewable raw materials (bioplastics)
- ✓ **Reduction of space debris**
 - Use of systems for targeted burning in the Earth's atmosphere after 5 years
- ✓ **Reducing contamination of the Earth's atmosphere**
 - Use of materials that burn up completely (polymers)



LAMBSPACE'S INNOVATIVE APPROACH

- ✓ **Cost- and resource-efficient production**
 - Use of processes (e.g. plastic injection molding) that enable series production of space applications in the shortest possible time and with minimal resources
- ✓ **Sustainable materials and concepts**
 - Production of satellite structures made of plastic (in future bioplastics) with integrated release mechanisms (SMA)



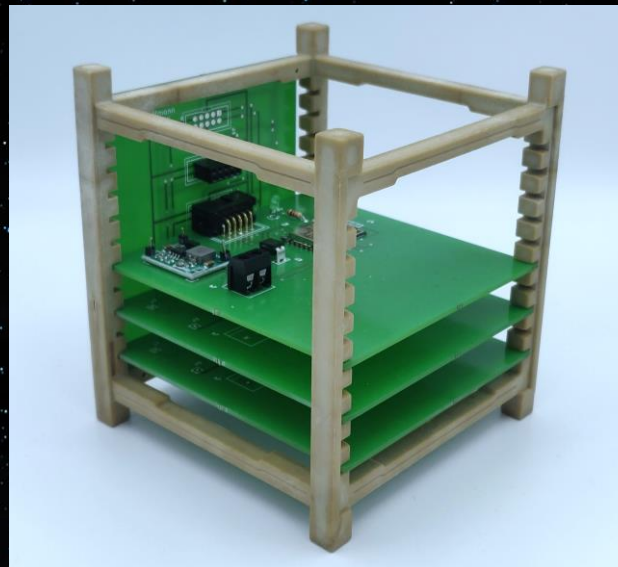


State of
the art

AI

CubeSat
structure

- ✓ Inefficient manufacturing process
- ✓ High assembly effort
- ✓ Complex connection technology
- ✓ High weight
- ✓ High cost and time effort
- ✓ Poor carbon footprint



Our
solution

PEEK

CubeSat
structure

- ✓ Efficient industrial production process
- ✓ No assembly work
- ✓ Plug-and-play for any PCB at any time
- ✓ Lower weight => less fuel
- ✓ Reduction of time and costs
- ✓ Sustainable and resource-efficient

- It is our technological and moral obligation to design and produce space applications in a low-emission and resource-saving way! Especially because the number of launches and the demand for satellites will increase significantly in the future.
- We look forward to shaping the future of NewSpace sustainably together!

THANKS FOR YOUR TIME!

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