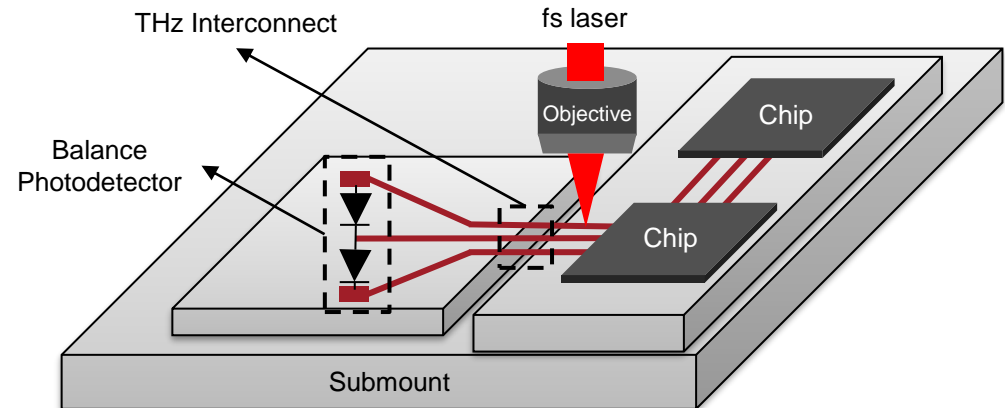
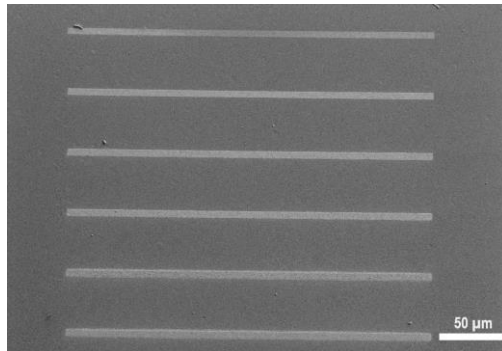


Bachelor Thesis:

THz packaging using Laser-printed metallic microstructures

The potential to create micrometer-scale metallic structures using lasers opens the possibility of producing laser-printed microelectronics without the need for cleanroom lithography or high vacuum metal deposition. The **3D printing** of metallic elements through the multiphoton reduction process can help realize many practical THz elements like **interconnects**, **waveguides** and **antennas**, which can solve many fabrication problems in electrical and optical packaging. The objective is to establish a comprehensive **THz packaging** procedure with 3D-printed chip-chip interconnects for applications spanning multiple chips made of different materials and operating at various frequencies and temperatures. This methodology can yield a compact device with minimal losses and a high-density integration capacity.

Laser
Printed
Silver
Lines



Your tasks:

- Laser printing
- Chip assembly
- Creating LabVIEW Processes
- Participation in characterization experiments
- Evaluation of packaged devices

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