



HYBRID
INTEGRATION

Imagine you can have any optic you want in days

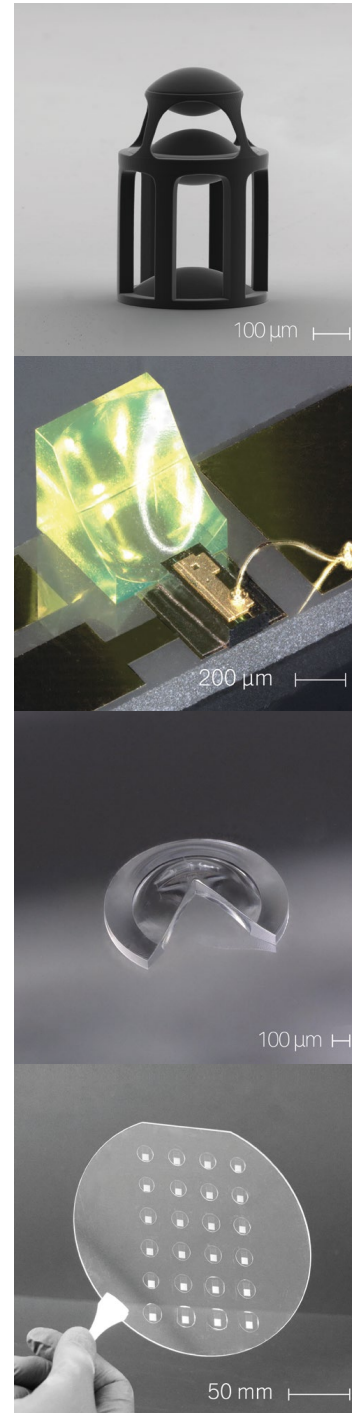
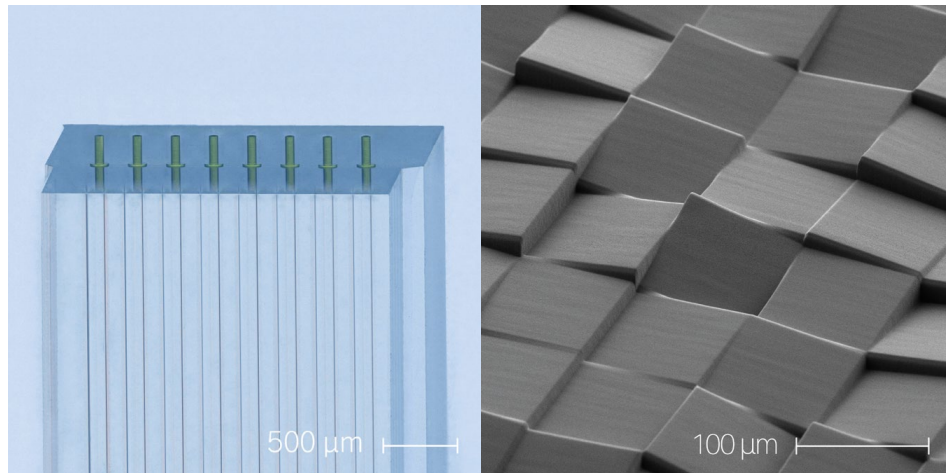
How Hybrid Integration can help you with
nanoscale printing for photonics

Imagine you can have any optic you want in days

Hybrid Integration has a variety of packaging techniques to apply to your photonics packaging needs.

Two photon polymerisation (2PP) printing offers many advantages over traditional coupling techniques, fundamentally lending itself to one-off, fast iterations, with the ability to reliably form:

- **Ex-situ micro-optics**
 - Microlens array
 - Compound optical systems
 - Fresnel lenses
- **In-situ optical elements**
 - Responsive and corrective to coupling misalignments
 - More easily realise low-loss optical coupling to fibres
 - Dynamically couple between elements like quasi-photonic wire bonding
- **Precision mechanical features**
 - V-grooves
 - Ferrules
 - Keying structures



Expertise. Fabrication. Integration.

We can unlock techniques not possible with your existing assembly methods - all with rapid turnaround and a host of remarkable benefits available only with 2PP printing.

Whether printing directly onto a fibre or PIC, or printing parts for subsequent assembly, 2PP printing allows for nanoscale resolution, with very low surface roughness and high shape accuracy - perfect for printing micro-optics, mechanical positioning features and anything else you can imagine.

Hybrid Integration offers an end-to-end pipeline of initial consultancy, application of our expertise to your challenge, fabrication of structures and subsequent integration with your wider system. You can engage us on some or all of these steps in response to your own individual requirements and we will be delighted to help.

Let your imagination explore the many possibilities unlocked by 2PP printing and talk to us today about how we can help you realise new approaches.

We help you leverage the **power of nanoscale printing** for your photonics application.

Hi, how can we help?

We're your technical partner, helping you navigate microelectronic and photonic packaging challenges with confidence.

Why we exist

We founded Hybrid Integration after years of facing the same challenges in advanced packaging.

As customers, we saw how difficult it was to find solutions that met our technical and commercial needs – with slow turnaround, limited flexibility and communication challenges forcing us to compromise.

We set up Hybrid Integration to change this.

What sets us apart

- We shape the packaging approach for the project – not the other way around.
- We take the time to understand your needs and help you navigate trade-offs.
- We take ownership of your outcomes – surfacing risks early, communicating honestly and fixing problems fast.
- We keep things transparent, with regular updates and full traceability.
- We build verification into our process to ensure your product performs as intended.

Ready to get started?

hi@hybrid-integration.co.uk

[hybrid-integration.co.uk](https://www.hybrid-integration.co.uk)

[linkedin.com/company/hybrid-integration-ltd/](https://www.linkedin.com/company/hybrid-integration-ltd/)