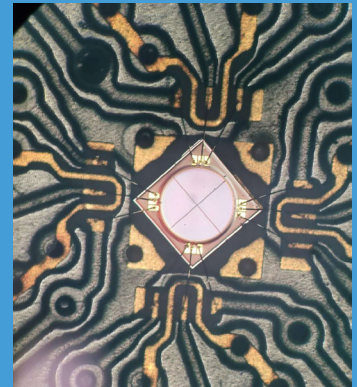


Packaging

Packaging and assembly of photonic products is one of the most critical and in-progress processes in the production flow with significant difficulties and costs.

VTEC Lasers and Sensors takes advantage of the advanced packaging facilities and equipment of our partner Electronics and Photonics Innovation Centre (EPIC) - to offer you lower risks and faster time-to-market for your optical projects.



Service description

Capabilities

VTEC Lasers and Sensors offers the best packaging for photonic devices. We use equipment with outstanding capabilities in terms of:

- Speed
- Reliability
- Placement
- Accuracy
- Size of work area

Expertise

VTEC Lasers and Sensors has a committed team of employees with expertise, but also strong partnerships with relevant players in the photonics ecosystem.

This is to help us better tailor our solutions to your exact requirements and constraints - meeting your standards while completing your optical projects as soon as possible.

Additional capabilities

Some of the technical capabilities of EPIC's facilities and equipment include:

- Classified Class 7 Cleanroom to assemble products in a controlled environment
- Palomar 3880 Die Bonder component placement die attach system which has built in four functions in one (eutectic die bonding, material dispensing, flip chip and UV bonding). Its range of applications and devices include: Optical Transceivers, AOC- Active Optical Cable, Chip-on-Carrier (CoC), Chip on Board (COB), Automated Passive Optics Assembly, Gold Box Assembly, RF Packages, VCSEL, PD, DFB Laser, and Lens Attach etc.
- Palomar 8000i: A fully automated thermosonic high-speed, ball-and-stitch wire bonder capable of ball bumping, stud bumping, wafer bumping, chip bumping.
- JCM6000Plus Scanning Electron Microscope (SEM) with a Wide magnification range from 10x (for wide area of view) up to 60,000x and a Tilt/rotation motor drive specimen holder allows the operator to tilt and rotate the sample for well-focused 3D morphological observation.
- HPS 10-19 Hybrid Package Sealer for device packaging. Suitable for square, rectangular, vertical lead and circular packages. Dimensional range between 2 to 152 mm, with plain or step lids up to 0.5 mm thick. Positional accuracy $< \pm 0.025$ mm. Repeatability within 0.025 mm. Automatic height and pressure adjustment of welding electrodes relative to the package.