

4 December 2023

## BluGlass enters contract with Microelectronics Commons CLAWS Hub lead NCSU

### Highlights

- BluGlass has signed a US\$1.775M (AU\$2.6M) contract with North Carolina State University (NCSU) for laser development activity in FY24
  - The contract is part of the US\$39.4M Commercial Leap Ahead for Wide Bandgap Semiconductors (CLAWS) Hub, led by NCSU
  - It is in support of an award for year one under the US Department of Defense's US\$2B Microelectronics Commons program which has been appropriated for a total of five years.
- As a member of the CLAWS Hub, BluGlass is an approved commercial manufacturing supplier of photonic gallium nitride (GaN) lasers

Global semiconductor developer BluGlass Limited (**ASX: BLG**) has signed a US\$1.775 million (AU\$2.6 million) contract with North Carolina State University (NCSU) for BluGlass' laser development as part of the Commercial Leap Ahead for Wide Bandgap Semiconductors (CLAWS) Hub. This initial contract is for development work in FY24<sub>1</sub> and supports the Microelectronics Commons program.

Established by the US Department of Defense, the Microelectronics Commons is a collaborative capability-building program for defence and dual use technologies, allocated US\$2B of CHIPS and Science Act funding. Led by NCSU, the CLAWS Hub is one of eight innovation hubs under the Microelectronics Commons program and has been awarded US\$39.4M for the base year of performance. The CLAWS hub comprises seven members, including BluGlass, Coherent, Wolfspeed, General Electric, Adroit Materials, Kyma, and North Carolina A&T State University.

Under its FY24 contract, BluGlass is developing single frequency DFB lasers as well as advancing its violet (405nm, 420nm) and blue (450nm) single-mode lasers. If BluGlass is successful in securing additional core development contracts over the CLAWS program, its collaborative role may include the development of ultra-violet through to green single-mode lasers, single frequency DFB lasers, and Photonic Integrated Circuits (PICs).

In addition to the core programs and funding, BluGlass is eligible to participate in specialist projects through the CLAWS Hub. These high-priority projects are focused on expanded GaN wavelengths, epitaxy and process development, and high value devices for quantum applications that may be submitted for funding opportunities by the broader US\$2B Microelectronics Commons.

BluGlass CEO Jim Haden said, "We are thrilled to have secured our first contract as part of the CLAWS Hub, where we will be collaborating with recognised industry leaders to develop and commercialise next-generation wide-bandgap photonic and optoelectronic devices.

"This core development contract for FY24 aligns with BluGlass' GaN expertise and supports our longer-term product roadmaps, leveraging the benefits of our proprietary RPCVD technology. Our laser development within the CLAWS Hub has the potential to create significant advancements across our target verticals, including materials processing, sensing, quantum applications, and critical defence capabilities. At the same time, our collaboration with NCSU and Microelectronics Commons provides BluGlass with growing revenues and industry profile, specifying us as an approved US commercial manufacturing supplier of GaN laser epitaxy, fabrication, packaging, and testing. The

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collaboration with NCSU as part of the CLAWS Hub has the potential to become a game-changing partnership over the next five years.”

Director of the CLAWS Hub, and Distinguished Professor of ECE John Muth said, “Part of the purpose of CLAWS is to accelerate the development of dual use technologies. BluGlass is an important part of our roadmap to manipulate UV and visible spectrum light on a chip as a photonic integrated circuit. We see the ability to deliver high quality, reliable single frequency DFB lasers as well as blue and violet lasers to the DoD and the research community as important first steps toward a wide variety of commercial applications.”

1. FY refers to US Financial Year (1 October – 30 September).

*This announcement has been approved for release by the BluGlass Board.*

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**BluGlass Limited (ASX:BLG)** is a leading supplier of GaN laser diode products to the global photonics industry, focused on the industrial, defence, quantum, bio-medical, and scientific markets.

Listed on the ASX, BluGlass is one of just a handful of end-to-end GaN laser manufacturers globally. Its operations in Australia and the US offer cutting-edge laser diode development and manufacturing, from small-batch custom lasers to medium and high-volume off-the-shelf products.

Its proprietary low temperature, low hydrogen, remote plasma chemical vapour deposition (RPCVD) manufacturing technology and novel device architectures are internationally recognised, and provide the potential to create brighter, better performing lasers to power the devices of tomorrow.

BluGlass’ technical innovations are protected by 53 internationally granted patents and 17 trademarks in key semiconductor manufacturing jurisdictions.

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