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BluGlass secures first order of alpha GaN DFB lasers

Highlights

- BluGlass has received its first purchase order of alpha prototypes of its blue GaN Distributed Feedback (DFB) lasers
- Customer will use the 450nm DFB prototypes for testing in the development of next-generation defence, aviation, and scientific applications

Global semiconductor developer BluGlass Limited (**ASX: BLG**) has secured its first purchase order of alpha gallium nitride (GaN) Distributed Feedback (DFB) lasers. The customer is a pioneer in photonic and fiber-based laser technology, and will use BluGlass' blue prototype DFB lasers in the development of cutting-edge defence, aviation, and scientific applications.

Quantum sensing, navigation, and computing applications are driving significant demand for compact singlefrequency laser light sources, such as GaN DFB lasers. Single frequency visible lasers have unique characteristics required to stimulate quantum transitions for highly promising military and commercial applications, including advanced robotics, bio-medical applications, and atomic clocks for quantum navigation.

In addition to quantum applications, the unique performance properties of single-wavelength visible lasers will also enable advancements in ranging and underwater communication, gas sensing, stand-off threat detection, and high-performance spectroscopy applications. GaN DFB lasers are an ideal candidate to facilitate the strict frequency, beam fidelity, narrow linewidth, and the high power and efficiency these next-generation technologies require.

BluGlass is one of the first companies in the world to develop viable DFB lasers in gallium nitride, as part of its partnership with the University of California Santa Barbara's SLEEC Consortium.

BluGlass CEO Jim Haden said, "Our first customer order of BluGlass prototype GaN DFBs reflects the significant interest in these ultra-precision lasers for quantum, defence, and commercial applications. Novel capabilities such as DFB lasers form a key pillar of our growth strategy, and we will continue to leverage our RPCVD technology to enhance BluGlass' DFB lasers, achieving advanced single frequency performance at blue wavelengths and beyond."

While this order reflects a significant strategic step in BluGlass' development of laser diodes, and demonstrates customer need for GaN DFB lasers, the revenue for this order is immaterial.

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

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About BluGlass

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

Developing the next evolution in GaN technology Plug-and-play and custom laser diodes Listed on the ASX, BluGlass is one of just a handful of end-to-end GaN laser manufacturers globally. Its operations in Sydney, Nashua and Silicon Valley offer cutting-edge, custom 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 93 internationally granted patents and 17 trademarks in key semiconductor manufacturing jurisdictions.