

# ODYSSEY SEMI



## **Odyssey Semiconductor Achieves 1200 Volt Rating on Vertical GaN Power Devices**

- *650 and 1200 volt power device fabrication is underway, planned for completion in Q4 2022*
- *Customer commitments secured for product evaluation, commencing in Q1 2023*

ITHACA, N.Y., September 14, 2022 – Odyssey Semiconductor Technologies, Inc. (OTCQB: ODII), a semiconductor device company developing innovative high-voltage power switching components based on proprietary Gallium Nitride (“GaN”) processing technology, today announced it reached the stated goal of 1200 volt rating on vertical GaN power field-effect transistors (FETs). The Company is now applying this validated technology to fabricate product samples in Q4 2022 for internal and customer evaluations, planned through Q1 2023.

## **Recently Accomplished Odyssey Technology Milestones**

- Announced today the 1200 volt vertical GaN power device.
- On-track to build Gen1 product samples of 650 and 1200 volt power devices in Q4 2022.
- Validated figures-of-merit for both 650 and 1200 volt power devices that will provide industry-leading efficiency with remarkably low on-resistance at high switching frequencies for reduced solution size.
- Validated process for large-scale device fabrication, currently in use to manufacture product samples.
- Secured commitments from three customers to evaluate Gen1 product samples. Expanded customer engagement is underway to confirm additional customers for product samples.

## **CEO Commentary**

“The importance of Odyssey achieving this milestone of 1200 volt vertical GaN power devices cannot be over-emphasized,” said Mark Davidson, Odyssey’s Chief Executive Officer. “We are emerging from process and materials R&D to delivering products at voltages that lateral GaN can’t practically reach with economics unattainable by silicon and silicon carbide. Our vertical GaN products will deliver high power conversion efficiency at almost 10x smaller than a silicon carbide transistor for the same application.”

“We are not just fabricating test structures. We’re building product samples that customers need. Odyssey continues to close new commitments for product samples as customers gain a full understanding of the capabilities of Odyssey’s power devices. The Company is uniquely positioned with the expertise and the IP portfolio to protect it. And with our own foundry in Ithaca, New York, we can innovate quickly and control our ability to supply products to customers,” concluded Davidson.

**Odyssey Uniquely Positioned in High Growth Megatrend Movement to High Voltage.  
40% CAGR to 2027 in Odyssey's Addressable Market**

The market the Company is pursuing is large and fast growing. **Odyssey's approach to vertical GaN will offer an even greater improvement that silicon, silicon carbide, and lateral GaN cannot deliver.** The 650 volt is the larger market today, expected to grow at a 20% compound annual growth rate. The 1200 volt product market segment is expected to grow faster at 63% CAGR and will become the larger market in the second half of this decade. Together, the 650 and 1200 volt power device market is expected to grow to approximately \$5 billion in 2027, a 40% combined CAGR according to Yole, a French company that gathers market statistics.

Customers can request samples of the 650 and 1200 volt vertical GaN power devices at [info@odysseysemi.com](mailto:info@odysseysemi.com).

**Odyssey Participation in Upcoming Investor Conferences**

The Company has previously announced its participation in these investor conferences.

- **Sequire Semiconductor Virtual Conference on September 15, 2022**

Mark Davidson, Odyssey's Chief Executive Officer, will be featured as an industry expert on a special semiconductor panel discussion to be available for viewing on September 15, 2022 at 12:00 PM ET. In addition, Odyssey's corporate presentation will be made available for viewing on September 15, 2022 at 12:30 PM ET.

Investors may register to watch the semiconductor panel session and company presentation webcasts on September 15 [HERE](#). The live webcasts and slide presentation can also be accessed on the Company's Investor Relations website under the Events tab [HERE](#). These webcasts will be available for replay for up to four months.

- **LD Micro Main Event XV Conference in Los Angeles on October 25, 2022**

Odyssey management will be available for one-on-one meetings and will present at the LD Micro Main Event XV Conference at the Luxe Sunset Boulevard Hotel in Los Angeles, California. The investment community may register and request one-on-one meetings with Odyssey on October 25 [HERE](#). Management will present in a group webcast at this event on October 25, 2022 at 11:00 AM PT.

The live webcast and slide presentation can be accessed on the Company's Investor Relations website under the Events tab [HERE](#). The webcast will be archived on the website for future viewing.

**About Odyssey Semiconductor Technologies, Inc.**

Odyssey Semiconductor Technologies, Inc. ([www.odysseysemi.com](http://www.odysseysemi.com)), has developed a proprietary technology that is designed to allow for vertical GaN to replace SiC as the emerging high-voltage power switching semiconductor material. Based in Ithaca, NY, the Company owns and operates a 10,000 sq. ft. semiconductor wafer manufacturing facility complete with a mix of class 1,000 and class 10,000 clean space as well as tools for advanced semiconductor development and production. Odyssey Semiconductor also offers a world-class semiconductor device development and foundry service.

## **Forward-Looking Statements**

Statements in this press release that are not descriptions of historical facts are forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, statements about our plans, objectives, forecasts, representations and contentions and are not historical facts and typically are identified by use of terms such as "may," "will," "should," "could," "expect," "plan," "forecast", "anticipate," "believe," "estimate," "predict," "potential," "continue" and similar words, although some forward-looking statements are expressed differently. These forward-looking statements are based on management's current expectations and assumptions and are subject to risks and uncertainties described more fully in the company's filings on Forms 10-K and 10-Q and other periodic filings with the Securities and Exchange Commission. Factors that could cause actual results to differ materially from those currently anticipated include, without limitation, risks relating to the results of our research and development activities, including uncertainties relating to semiconductor process manufacturing; the early stage of our GaN-based technology presently under development; our ability to protect our intellectual property rights that are valuable to our business, including patent and other intellectual property rights; our ability to successfully market and sell our technologies; the ability to achieve high volume manufacturing and the size and growth of the potential markets for any of our technologies, the rate and degree of market acceptance of any of our technologies and our ability to raise funding to support operations and the continued development and qualification of our technology.

In light of these risks, uncertainties and assumptions, the forward-looking statements regarding future events and circumstances discussed in this press release may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. The forward-looking statements included herein speak only as of the date hereof, and we undertake no obligation to update publicly or privately any forward-looking statements for any reason after the date of this release to conform these statements to actual results or to changes in our expectations.

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