





Hello there,

A revolution is underway in Vermont in the world of semiconductor substrates.

Imagine reducing the number of chips on a circuit board by up to 5X, paying less to build it, and nearly eliminating heat loss.

All while sourcing substrate materials from Vermont instead of internationally.

It's all possible with GaN innovation happening at GlobalFoundries, one of the world's leading semiconductor manufacturers.

GlobalFoundries is developing the ability to create circuits on GaN substrates, not just single devices. Their experience with advanced packaging will allow GaN substrates to be paired with others to create hybrid chips with capabilities we are just beginning to understand.

If you're familiar with GaN, you know it:

- Conducts electricity 10 times more efficiently than silicon.
- Has switching speeds up to 10 times faster than silicon, resulting in more efficient power supplies
- Costs less than silicon and allows for a smaller, less expensive device, too.

This is a game-changer for high-powered devices like battery chargers, inverters, power supplies, electric motor drives, electric vehicles, and electric planes. These devices will also be revolutionary for high-frequency devices like cellular base stations and radar electronics.

All of this adds up to greener, more profitable manufacturing.

That's why Vermont was recently designated as <u>one of 31 Tech Hubs</u> by the U.S. Department of Commerce's Economic Development Administration (EDA).

The Tech Hub, known as Vermont-GaN, or V-GaN for short, **is eligible to receive up to \$75 million** of federal CHIPS Act funds to advance semiconductor technology. The Tech Hub consortium is led by GlobalFoundries, the State of Vermont, and the University of Vermont.

Pledge your support by joining our consortium and signing our MOU.

As a partner, you'll get updates about new opportunities within the Tech Hub. When we are funded, you will be poised to benefit from millions of dollars to support product development activities.

Click Here to Learn More & Sign the MOU

Virtually Tour the UVM GlobalFoundries Lab

At the UVM semiconductor lab, students characterize films, fabricate chips, and build devices in partnership with GlobalFoundries. When funded, the V-GaN Tech Hub will build a state of the art characterization lab that will be accessible to all V-GaN Tech Hub partners.



If you have any questions or need additional information, don't hesitate to reach out. We look forward to the possibility of working together.

Thanks in advance for advocating for improved manufacturing with GaN,

Doug Merrill Regional Innovation Officer V-GaN Tech Hub The University of Vermont

Developed in partnership with:





Sign on: Let's revolutionize the use of gallium nitride to speed the transition to green energy



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