



Broome County is a critical geographic link in the electronics supply chain - by Stacey Duncan

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Microchips, as their name implies, are incredibly small — with billions of transistors packed into a space no larger than a single fingernail. But the supply chain necessary to manufacture this critical technology is both far-reaching and complex.

If we play our cards right, the Southern Tier — with our rich history as a cradle of technological innovation and legacy of physical and human infrastructure to support the next generation of innovation — can become a critical link in that chain.

Within a two-hour drive of Broome County, Global Foundries and Wolfspeed are already cranking out chips that will end up in essential technology around the globe. In Central New York, Micron is gearing up to build the nation's largest semiconductor manufacturing facility, with the intent of restoring America's role as a high-tech manufacturing leader.

The size of the supply chain necessary to support this industry cannot be overstated. There are companies that design, manufacture, package, test, and distribute the chips themselves. But that's just the tip of the iceberg.

There's also a significant industrial base that makes the equipment used in chip manufacturing and the components for those tools, as well as the many systems – like HVAC, electrical and water – required in the chip-making process. All of those need routine upgrading to keep operations humming at the highest level.

Every link of this chain offers high-quality career opportunities that bring significant community benefits. There's a range of positions for people of varied skill levels, from engineers with advanced degrees to technicians with vocational certificates. That means significant potential for upward mobility for a cross-section of people like few other industries have provided in recent memory.

We're already well acquainted with what a successful supply chain company needs and creates, hosting here in Broome County Universal Instruments, which is leading the industry with its high-speed wafer feeder equipment. We're ready to put that knowledge to use through growth spurred by the federal CHIPS & Science Act, authored by New York's own senior senator, majority leader Chuck Schumer, which prioritizes the onshoring of as much of this manufacturing capability as possible.

Of course, the supply chain that feeds major manufacturers won't develop organically. Companies are looking for locations that readily offer easy access to the materials they require – as well as an educated workforce, strong transportation systems, and a reliable, accessible, and sustainable power supply.

Broome County has the potential to win big in this arena, thanks to our proximity to the state's semiconductor anchors and wealth of available, attractive, shovel-ready real estate.

Take the Huron Campus location in Endicott. With 4.2 million s/f of space, ample power, nearby highway access, and other amenities, it's a perfect fit for a wide range of semiconductor supply chain companies. Just a few miles away, the potential Broome Technology Park could also provide ample room to cluster complementary companies that serve the manufacturing hubs to our north.

Yet we know companies need more than adequate space in the right location. The high-tech manufacturing movement in New York has been complemented by a rapid buildout of partnerships among educational institutions, labor unions, and community organizations — all of which have a key role to play in ensuring equitable, long-term growth.

Binghamton University's leadership in the New Energy New York battery tech hub is an example of the kind of synergy we simply can't have enough of for high-tech industries. That initiative is about collaboration on research and development, workforce development, supplier certification, innovation and entrepreneurship, and community initiatives to address barriers to entry into the high-tech workforce.

And that's to say nothing of the progress already happening in the region to train the next generation of semiconductor workers. Binghamton University was recently awarded a \$1 million federal grant to purchase advanced packaging equipment for the campus's nanofabrication laboratory, a critical hub for training in the region.

Developing a proper supply chain ecosystem is not an either-or proposition. The upstate tech renaissance can make winners of us all. Regions of the state must work together to identify the best sites that fit supply chain companies' needs while maintaining the proximity to customers, workforce development opportunities, and other amenities that employers and employees alike highly value.

The Southern Tier offers that for those hungry to locate close to the anchor companies in Central New York, the Mohawk Valley and the capital region. By clustering the right companies here, we will be part of a strong, successful supply chain that propels New York forward as a global tech leader.

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