



Governor Cuomo unveils \$4.4 billion investment to develop computer chip technology; Intel to establish 450mm manufacturing facility in Albany

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According to governor Andrew Cuomo, the state has entered into agreements providing for investments valued at a total of \$4.4 billion over the next five years from five leading international companies to create the next generation of computer chip technology. The five companies involved are Intel, IBM, Global Foundries, TSMC and Samsung. The state secured the investments in competition with countries in Europe, Asia and the Middle East.

The research and development facilities will be located in Albany, Canandaigua, Utica, East Fishkill and Yorktown Heights. In addition, Intel separately agreed to establish its 450mm manufacturing east coast headquarters to support the overall project management in Albany.

"This unprecedented private investment in New York's economy will create thousands of jobs and make the state the epicenter for the next generation of computer chip technology," Cuomo said. "IBM, which is celebrating 100 years in New York, Intel, which is making its most significant investment in New York, as well as TSMC, Global Foundries and Samsung now recognize that the state is on its way to becoming a premier location for jobs, which is why these companies are making this major investment. In the last nine months, my administration has worked to create a more confident environment for doing business in New York, and major deals like this one prove that the state is truly open for business."

The investment in these two efforts will result in the creation and retention of 6,900 jobs.

That number includes 2,500 additional high-technology positions comprising of:

- * 800 at CNSE Albany NanoTech Complex
- * 950 at IBM - Yorktown Heights and IBM - East Fishkill
- * 450 at SUNY Institute of Technology (SUNYIT) in Utica
- * 300 at CNSE's Smart System Technology & Commercialization Center in Canandaigua.

In addition, approximately 1,500 construction jobs will be created in Albany and 400 in Utica. As a result of the investment 2,500 existing jobs in Albany, Canandaigua and East Fishkill will be retained.

No private company will receive any state funds as part of the agreement. To support the project, the state will invest \$400 million in the SUNY College for Nanoscale and Science Engineering (CNSE) in Albany, including \$100 million for energy efficiency and low cost energy allowances. The state investment in CNSE will be made over a five year period. The state investment will be directed entirely to CNSE, and all tools and equipment acquired through the investment will be owned by CNSE.

Paul Otellini, Intel Corp. president and CEO said, "The Global 450 Consortium is a critical element to moving the semiconductor industry to next generation wafer size. This new technology will reduce

the cost of production, increase productivity for manufacturers and reduce our environmental footprint on a per chip basis. The involvement of the College for Nanoscale and Science Engineering and the State of New York will enable the industry to meet its goals."

Brian Krzanich, senior VP and general manager of Manufacturing and Supply Chain at Intel Corp. said, "This agreement puts New York on the forefront of the next generation of technological innovation. This is our first major investment in the State of New York and we commend Governor Cuomo for creating a business-friendly environment to foster growth and to make New York a nationwide leader."

Dr. John Kelly III, senior VP and director of IBM Research, said, "This year is IBM's centennial year and our company has been inventing, innovating and leading for 100 years - all of it with our headquarters right here in New York State. IBM continues to invest in New York because of the strong business climate and talent here, which is the result of governor Cuomo's leadership in Albany as well as the very close working relationship between the governor, leaders in New York State government, our local colleges and universities and the business community."

Ajit Manocha, CEO of GLOBALFOUNDRIES said, "The unique mix of industry and technology partners located in New York is a key component of our strategy of expanding our local operations, including the Fab 8 campus in Malta, N.Y., which will be the world's most advanced semiconductor fab when it is completed in early 2013. Governor Cuomo and the State of New York are dedicated to creating a sense of confidence that encourages businesses to invest in advanced manufacturing technology and development to create jobs and secure New York's role in driving the 21st century global economy."

Dr. Mark Liu, TSMC senior VP, operations said, "This forward-looking initiative leverages New York State's world-class technology infrastructure and workforce by pairing it with semiconductor leaders from private industry. Achieving 450mm manufacturing will be an important industry milestone that will lead to increased productivity and innovation. TSMC thanks Governor Cuomo for his dedication to New York's future and looks forward to participating in this project."

Oh-Hyun Kwon, Samsung Electronics Device Solution president said, "An increase in wafer size will significantly impact the semiconductor and electronics industries. Samsung Electronics will actively cooperate with global semiconductor companies to introduce the next generation 450mm wafer. The State of New York and governor Cuomo's decision to invest in future technology will enhance the productivity and health of the global IT industry while creating jobs and improving the lives of people across the globe."

Senate majority leader Dean Skelos said, "Although we have more to do to ensure that every New Yorker who wants a job can find one, today's announcement is further proof that New York is once again open for business. This multibillion dollar investment in New York's economy will help us create and retain thousands of good jobs, and spur even more economic growth across the State. I applaud governor Cuomo for his leadership and applaud New York's economic development professionals for their outstanding work, and credit Intel and IBM for forging a partnership for the future. I am confident that we can build on this historic investment so businesses have the tools they need to succeed."

Assembly speaker Sheldon Silver said, "Working over the past year with governor Cuomo to provide \$400 million in funding to leverage this growing industry, today we are proud to announce that worldwide leaders in semiconductor manufacturing will be making a \$4.4 billion investment in New York State. This kind of announcement is exactly what we in the New York State Assembly

envisioned 15 years ago when we provided crucial funding that would lead to the College of Nanoscale Science and Engineering -- the largest, most state-of-the-art, high-tech complex in the academic world. I commend Governor Cuomo for his strong leadership and for recognizing that even in difficult times there are investments that must be made to spur long-term economic growth and job creation. New York is indeed open for business."

SUNY chancellor Nancy Zimpher said, "I am extremely proud that SUNY is playing such a critical role as part of the extraordinary agreement reached today by governor Cuomo. This partnership will draw on SUNY's capacity to grow 21st century jobs and train a highly skilled, globally competitive workforce to fill those jobs. I want to commend governor Cuomo for having the vision to include public higher education in the revitalization of New York's economy."

The investment in the state is made up of two projects. The first project, which will be led by IBM and its partners, will focus on making the next two generations of computer chips. This new commitment by IBM brings its total investment in chip technology in New York to more than \$10 billion in the last decade. The second project, which is a joint effort by Intel, IBM, TSMC, Global Foundries and Samsung, will focus on transforming existing 300mm technology into the new 450mm technology. The new technology will produce more than twice the number of chips processed on today's 300 mm wafers thus lowering costs to deliver future generations of technology with greater value and lower environmental impact.

This investment will have other beneficial economic impacts in New York. The project will include a private "Made in NY" initiative to support the potential purchase of \$400 million in certain tools and equipment from companies around New York State to create, attract, and retain manufacturers and suppliers across the state.

In addition, the companies will support a \$15 million fund to increase the role of minority and women owned businesses. These technology developments may facilitate the possibility of building a 450mm plant in New York state. These plants are projected to cost in excess of \$10 billion each.

Semiconductors are central to modern devices from computers and cell phones to automobiles and airplanes and the industry is the cornerstone of the "innovation economy." Semiconductors are the nation's largest export industry and generate billions of dollars in revenue. New York State's investments in the semiconductor industry began in 1988 with the establishment of the advanced semiconductor program at SUNY Albany under the SUNY Graduate Research Initiative created by governor Mario Cuomo and was cemented in 1993 with the establishment of the Center for Advanced Technology at SUNY Albany by governor Mario Cuomo, which later became the basis for the College of Nanoscale Engineering.