## **Biden's technology war against China**

Peter Symonds 2 November 2022

The Biden administration is engaged in an all-out economic war against China, aimed not only at curbing trade but above all at blocking China's ability to make advances in key hi-tech areas and compete with the US.

Last month Biden took the unprecedented step of banning the sale of the most advanced semi-conductors to China, as well as the equipment needed to make them. US citizens are also prohibited from working for Chinese computer chipmakers.

While the US has imposed the bans in the name of "national defence," semi-conductors are essential not just for military applications but for virtually every aspect of modern society, from electronic products and transport to the design and production of all manner of goods.

The dependence of China, the world's largest manufacturer, on semi-conductors is highlighted by fact that it spends more on imported computer chips than it does on oil and gas. In 2021, China imported a record \$414 billion worth of computer chips, or more than 16 percent of the value of its total imports.

While the US bans do not apply to the sale of all semiconductors to China, the embargos apply to the latest generations of computer chips that are crucial to technological areas, such as artificial intelligence, supercomputing and automation. Washington is deliberately seeking to undermine China's ambitious "Made in China 2025" plans to rapidly become a global leader in a range of hi-tech industries, including artificial intelligence, 5G wireless and quantum computing.

Biden's escalating economic war against Beijing is integral to US preparations for military conflict with China. Even as the US and its NATO allies recklessly wage war against Russia in Ukraine, the recently released US National Security Strategy identifies China as "the only competitor with both the intent and, increasingly, the capability to reshape the international order."

The dangers of Biden's semi-conductor ban on China have been all but hidden from the working class in the US and internationally. However, in economic and strategic circles, the immense implications are clearly understood. An October 19 *Financial Times* article by Edward Luce, entitled "Containing China is Biden's explicit goal," sounded the following alarm: "Imagine that a superpower declared war on a great power and nobody noticed. Joe Biden this month launched a fullblown economic war on China—all but committing the US to stopping its rise—and for the most part, Americans did not react.

"To be sure, there is Russia's war on Ukraine and inflation at home to preoccupy attention. But history is likely to record Biden's move as the moment when US-China rivalry came out of the closet."

Moreover, last week, a top Biden administration official indicated that the US was preparing new bans on China in key hi-tech areas. Speaking at the Center for a New American Security, Alan Estevez, the undersecretary of Commerce for Industry and Security, was asked if the US would ban China from accessing quantum information science, biotechnology, artificial intelligence software or advanced algorithms. Estevez admitted that this was already being actively discussed. "Will we end up doing something in those areas? If I was a betting person, I would put down money on that," he said.

The repercussions of Biden's actions not only for China, but for American corporations and the global economy, are yet to emerge. However, just as the US-NATO war against Russia severely disrupted global supply chains and is a major factor in rapidly rising inflation, the US semi-conductor ban on China is likely to be disruptive, in fact even more so.

According to CNN, the Dutch semi-conductor equipment supplier ASM International (ASMI) said last

week that it expected the US bans to hit more than 40 percent of its sales to China. China accounted for 16 percent of its total equipment sales in the first nine months of the year.

The US-based Lam Research, which also sells semiconductor equipment and services, predicted that it could lose between \$2 billion and \$2.5 billion in annual revenue in 2023 as a result of the US export bans.

Semi-conductor design and manufacture is integral to globalised production and is itself a deeply integrated global industry. The vast bulk of chip design and chip making equipment production takes place in the US and three East Asian countries—Japan, South Korea and Taiwan. But the actual manufacture of semi-conductors takes place overwhelmingly in East Asia.

When it comes to the most advanced chips, ASMI is the sole maker of the necessary equipment and the Taiwan Semiconductor Manufacturing Company (TSMC) produces 91 percent of the world's supplies, with Samsung and Intel running poor seconds.

The dominant role of TSMC in global chip manufacture underscores the recklessness of the mounting US confrontation with China. While accusing China of preparing to invade Taiwan, the Biden administration is deliberately provoking Beijing by boosting ties with Taipei and undermining the One China policy, under which the US de facto recognises Beijing as the legitimate government of all China, including Taiwan.

At the same time as goading China into taking military action, Washington is arming Taiwan to the teeth to transform the island into a quagmire for the Chinese military.

The Biden administration is acutely aware that any war over Taiwan would have a calamitous impact on global semi-conductor supply chains. It is pressuring TSMC to move substantial sections of its manufacturing to the US. While the TSMC has begun to build a plant in Arizona, it has refused to relocate its main manufacturing facilities and is in the process of constructing a huge new factory in Taiwan.

In a clear sign that the US is preparing for war with China, the Biden administration is pushing to create a national chip making capacity through legislation known as the "CHIPS and Science Act" that would allocate \$280 billion over five years to the American semi-conductor industry and scientific research. The funds needed to build a self-sufficient US industry are likely to be far larger. A report last year by the Semiconductor Industry Association and Boston Consulting Group, entitled "Strengthening the global semiconductor supply chain in an uncertain era," pointed out that all countries depend on an integrated global supply chain and that semi-conductors are the world's fourth-most-traded product after crude oil, refined oil and cars.

The report estimated the upfront cost of constructing "self-sufficient" local supply chains in the US at between \$350 and \$420 billion, just to meet 2019 demand, followed by large ongoing costs. As cited in a *Financial Times* article," Edlyn Levine, chief science officer at America's Frontier Fund, declared it was "a fantasy" to think that the US could completely decouple from TSMC. "The idea… is technically not feasible," he said.

Yet as it prepares for war with China, the US is being driven to outlay vast sums to attempt to establish national industries vital for the military, and to heap new economic burdens on the working class. Already at war with one nuclear-armed power, US imperialism, in a desperate bid to shore up its global domination, is recklessly pursuing a strategy of diplomatic, economic and military confrontation with nuclear-armed China that could lead to a catastrophic global conflict.

Luce concluded his *Financial Times* article cited above by declaring: "Will Biden's gamble work? I'm not relishing the prospect of finding out. For better or worse, the world has just changed with a whimper not a bang. Let us hope it stays that way."

In reality, Biden's semi-conductor bans are another giant step in the accelerating US war preparations that will inevitably end with a "bang" if the international working class does not put an end to the diseased and crisis-ridden profit system that gives rise to war. That is the significance of the campaign of the International Committee of the Fourth International to unify workers internationally on a socialist perspective to do just that.



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