

New York Times publishes graphic details of US hi-tech war with China

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A major article by journalist Alex W. Palmer, published in the *New York Times* last weekend, has revealed the extent of the high-tech war being conducted by the US against China. It has also exposed the lies of the Biden administration surrounding it.

Last October, the Bureau of Industry and Security (BIS), which operates within the Department of Commerce, issued a document setting out a series of controls on the export of computer chips. The article began by noting that underneath its 139 pages of bureaucratic jargon and technical detail it “amounted to a declaration of economic war on China.”

The war is now about to be intensified as it is expected that the US will shortly announce investment screening mechanisms designed to cut the amount of US money invested in Chinese high-tech areas as well as updating export controls to close loopholes that have emerged since the October announcement.

The official justification for the export controls is that they are aimed at curbing Chinese military development. On her recent visit to China, Treasury Secretary Janet Yellen claimed they were narrowly targeted and not aimed at the broader economy.

This fiction is exposed at the beginning of the article in a key paragraph that reads:

“With the Oct. 7 export controls, the United States government announced its intention to cripple China’s ability to produce, or even purchase, the highest-end chips. The logic of the measure was straightforward: Advanced chips, and the supercomputers and AI they power, enable the production of new weapons and surveillance apparatuses. In their reach and meaning, however, the measures could hardly have been more sweeping, taking aim at a target far broader than the Chinese security state. ‘The key here is to understand that the US wanted to impact China’s AI industry,’ says Gregory C. Allen, director of the Wadhwani Center for AI and Advanced Technologies at the Center for Strategic and International Studies in Washington. ‘The semiconductor stuff is the means to that end.’”

Palmer wrote that the October controls “essentially seek to eradicate, root and branch, China’s entire ecosystem of advanced technology.”

According to Allen the controls were not only aimed at preventing further advance, “we are going to actively reverse their current state of the art.”

Another indication of the extent of the US measures was expressed in remarks by C. J. Muse, a senior semiconductor analyst at Evercore ISO. “If you told me about these rules five years ago, I would’ve told you that’s an act of war—we’d have to be at war.”

Information provided in the article reveals that the semiconductor chip development is characterised by two powerful and interconnected

developments: the enormous speed of technological advance and the globally integrated character of chip design and manufacture.

Semiconductor chips are tiny pieces of silicon on which are carved massive arrays of electrical circuits that are switched on and off by transistors. Invented in the 1950s, transistors made their initial public appearance in so-called transistor radios which did not require the old valve technology.

The initial chips only held a “handful of transistors. Today the primary semiconductor in a new smartphone has between 10 and 20 billion transistors, each about the size of a virus, carved like a layer cake into the structure of the silicon.”

Palmer detailed some of the unprecedented technological advances by citing the case of the Dutch firm ASML which, as a result of research and development begun in 1997, produced the extreme ultraviolet (EUV) lithography machine which is used to print the layers on a chip.

“The newest version of the machine can craft structures as small as 10 nanometers; a human red blood cell, by comparison, is about 7,000 nanometers across. It used a laser to create a plasma 40 times hotter than the surface of the sun, which emits extreme ultraviolet light—invisible to the human eye—that is refracted onto a silicon chip by a series of mirrors.”

Chip production, carried out in what is known as fabs, is “the most complex manufacturing ever accomplished” and has only been made possible by the development by a highly developed international division of labour.

“The wider chip industry,” the article explained, “...is a web of mutual interdependence, spread all over the planet in highly specialised regions and companies, its feats made possible by supply chains of exceptional length and complexity—a poster child, in other words of globalisation.”

As Chris Miller, the author of a book entitled *Chip War*, told Palmer: “It’s hard to imagine how the capabilities they’ve reached would be possible without access to the smartest minds in the world all working together.”

However, this very development, making possible human advancement on a previously unimaginable scale, threatens the dominance of US imperialism over the global economy—a situation it is determined to try to reverse by all means necessary, including through military war as the outcome of the high-tech war it is already waging.

The global character of high-tech production means it cannot enforce its dominance by measures enacted by the US alone.

In the wake of the October decisions, it was soon recognised that, while the US controlled vital choke points of the process, other

countries, including the Netherlands and Japan, as well as Taiwan, controlled other areas and had they continued to sell to China US bans would have been rendered “nearly useless.”

Hence the move by the Biden administration in January to ensure that Japan and the Netherlands imposed similar controls to those enacted by the US. The logic of this move is clear. It signifies that to enforce its dictates against China, the US must become the international policeman of high-tech development.

Within the global process Taiwan and its Taiwan Semiconductor Manufacturing Company play a pivotal role as the largest chip manufacturer, particularly the most advanced. This underscores why Taiwan has become so central to the increasing US-China tensions, as the US increasingly moves in the direction of recognising Taiwan as a separate country and not part of China.

As the article noted: “If the island’s fabs were to be captured by China, or knocked offline during an invasion, the costs to the global economy would be catastrophic.” Some US war-gamers have suggested that if China did invade “the US should destroy TSMC’s fabs to stop them from falling under China’s control.”

The tech war started under the Trump administration when it imposed chip bans against the Chinese technology giant Huawei in 2019. They had a devastating impact. In 2020 Huawei was the largest smartphone seller in the world, as well as supplying crucial components for telecommunications systems. In smartphones it had 18 percent of the market share, beating both Apple and Samsung. Its revenues plunged by nearly a third in 2021 and by 2022 its market share had dropped to just 2 percent.

The experience with Huawei opened the prospect for the advancement of the war in 2020 when the Trump administration made Huawei subject to an export-control law, the foreign direct product rule, which the article described as a “sweeping assertion of extraterritorial power.”

This meant that if a product contained American technology or software, even if it were made outside the US and never entered the country and contained no US-made components in its final form, it could still be considered an American good.

According to Kevin Wolf, a former official at the BIS: “That rule subjected all semiconductors on the planet to American law, because every foundry on the planet uses US tools at least in part. If you have one US tool and 100 non-American tools in your fab, that taints any wafer moving across the line.”

What began with Huawei has been extended under the Biden administration. In the words of Gregory Allen at the CSIS think tank: “The Trump administration went after companies. The Biden administration is going after industries.”

In fact, it could be said it is going after the whole Chinese economy. Its dependence on chips is highlighted by the fact that in April China spent more on computer chip imports than it did on oil.

Remarks by Emily Kilcrease, a former US trade official, now at the Center for a New American Security, cited in the NYT article, make clear that the whole Chinese economy is the target.

“We said that there are key tech areas that China should not advance in. And those happen to be the areas that will power future economic growth and development,” she said.

Given the integrated global character of chip production and that it is impossible for the US to bring all its operations within its borders, its tech war will run into major difficulties.

That does not mean, however, there will be any let-up. On the contrary, as the actions of the Biden administration against Japan and

the Netherlands reveal, it will double down, extending its bans and restrictions to the entire globe, against friend and foe alike.

The escalation of the tech-war—the Commerce Department is preparing new controls to restrict companies such as Nvidia to sell AI-related semiconductors to China—has brought warnings of retaliation by China.

Earlier this week, China’s ambassador to the US, Xie Feng, warned that China would have to retaliate against the US measures.

“The Chinese government cannot sit idly by,” he said. “We will not make provocations, but we will not flinch from provocations. So, China definitely will make our response.”

That will not lead to any backdown by the US but rather to an acceleration of the transformation of the tech war into a military conflict.

This real and present danger—a war between two nuclear-armed powers—raises decisive political issues before the international working class.

The enormous development of computer chip technology—the result of the collaboration of scientists, engineers, and workers all over the world—is a vast expansion of the productive forces, making possible the ending for all time of hunger, misery and poverty and an unprecedented advance in the living conditions of the world’s people.

Within the framework of capitalism, it gives rise to madness. This madness is not rooted in the psyche of capitalist politicians but in the social relations of the profit system and the contradiction between global economy and the division of the world into rival and conflicting nation-states.

Almost 150 years ago Karl Marx explained that socialist revolution arose when the productive forces, created by human labour came into conflict with the social relations within which they had developed. That contradiction, which was the driving force of the wars and revolutions of the past 100 years and more, has reached a new peak of intensity.

The fight for the perspective of world socialist revolution, advanced today only by the world Trotskyist movement, the International Committee of the Fourth International, is not some distant or utopian ideal but an immediate objective necessity as the only way to prevent the relapse into barbarism and opening up a new road for humanity out of the destructive grip of the capitalist system.



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