

U.S. Commerce Department Adopts Third Major Round of Export Controls Aimed at China

by Lawrence Ward, Justin T. Huff, Dave Townsend, and T. Augustine Lo

On December 2, 2024, the U.S. Department of Commerce's Bureau of Industry and Security ("BIS") adopted yet another round of amendments to the Export Administration Regulations ("EAR") to curb advances by the People's Republic of China ("PRC") in artificial intelligence ("AI") and advanced semiconductor design and production.^[1] These EAR amendments aim to impede China's ability to develop an indigenous semiconductor manufacturing base and to prevent the PRC from applying such key technologies to significant military uses in the PRC's modernization of its armed forces. The EAR amendments became effective immediately with a delayed compliance date of December 31, 2024, for certain of the changes. This third round of EAR changes follows and substantially expands previous EAR amendments in October 2022 and October 2023 with respect to exports to the PRC of items relating to advanced semiconductor manufacturing.

These latest changes to the EAR add export controls on 24 categories of semiconductor manufacturing equipment ("SME") and on three kinds of software tools used to design or manufacture advanced chips. In addition, BIS has adopted new controls on the export of high-bandwidth memory ("HBM") products. BIS noted that these EAR amendments are expressly intended to slow the PRC's domestic production of certain technologies, most notably advanced-node chips and the SME needed to make such chips. The PRC's access to such technologies is viewed as especially problematic since they could be applied to advanced weapons development and advanced military AI programs.

Significantly, BIS also added 140 companies, including both investment firms and microelectronics firms up and down the industry supply chain, to its Entity List, requiring U.S. suppliers (including those with non-U.S. manufacturing sites) to obtain a BIS export license before providing any goods, software, or technology that are subject to the EAR to these entities.^[2] Some of these entities have a "Footnote 5" designation and are subject to a new foreign direct product ("FDP") rule concurrently announced by BIS (see below). The vast majority of entities are based in the PRC but entities from Japan, Singapore, and South Korea were also added. Assistant Secretary for Export

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Enforcement Matthew Axelrod explained, “[b]y adding key semiconductor fabrication facilities, equipment manufacturers, and investment companies to the Entity List, we are directly impeding the PRC’s military modernization, WMD [weapons of mass destruction] programs, and ability to repress human rights.”[3]

In its December 2 announcement, BIS also quoted President Biden’s National Security Advisor Jake Sullivan as saying, “[t]he United States has taken significant steps to protect our technology from being used by our adversaries in ways that threaten our national security. As technology evolves, and our adversaries seek new ways to evade restrictions, we will continue to work with our allies and partners to proactively and aggressively safeguard our world-leading technologies and know-how so they aren’t used to undermine our national security.”[4]

As we had reported in 2022[5] and also earlier this year,[6] BIS asserts that recent developments in large-scale AI models have the potential to enable adversaries to scan and assess much greater quantities of data and much more rapidly than has been possible with earlier generations of computer-aided technology. Such AI models thus have the potential to accelerate vital combat decisions by warfighters, to design and enable more harmful cyber attacks against U.S. information systems, or to be applied to other WMD usage. AI technology also has the potential to be used for voice or facial recognition in ways that would violate human rights.

The new BIS measures announced on December 2 include:

- **Expanded EAR export license requirements for SME** used to manufacture advanced-node chips, including certain etch, deposition, computational lithography, ion implantation, annealing, metrology and inspection, and cleaning tools;
- **Expanded EAR export license requirements for software or technology tools** used to design or manufacture advanced-node chips, including software that improves the productivity of advanced SME or allows less-advanced SME to manufacture such advanced chips as well as for Electronic Computer Aided Design (“ECAD”) and Technology Computer Aided Design (“TCAD”) software and technology. These new license requirements apply if the U.S. supplier has “knowledge” that such items will be used for the design of advanced-node chips to be made in Macau or in any country listed in EAR Country Group D:5 (which includes the PRC);
- **Expanded EAR export licensing for HBM** used to enable AI training or AI inference at scale and to support advanced chips, including any U.S.-origin HBM or foreign-produced HBM that would be subject to the EAR under the BIS advanced computing FDP rule. However, BIS has also added a new license exception to EAR Part 740 called “HBM” that will authorize license-free export of certain HBM to packaging sites that are owned and operated by companies headquartered in the United States or U.S. allied countries;
- **Expanded EAR export license requirements for SME under two more new FDP rules and related *de minimis* criteria** that will now be applied to non-U.S. suppliers of comparable chip development or manufacturing equipment, software or technology that rely on certain U.S. origin technology (such as those produced in Japan or the Netherlands):
 - **SME FDP Rule** that covers specified foreign-produced SME and related items if the exporter, reexporter, or transferor has “knowledge” that the foreign-produced

commodity will be supplied to Macau or to any country listed in EAR Country Group D:5, (which includes the PRC); and

- **Footnote 5 (“FN5”) FDP Rule** that covers specified foreign-produced SME and associated items if the exporter, reexporter, or transferor has “knowledge” that an entity named by BIS to the Entity List with a FN5 designation for foreign policy or national security reasons (e.g., for its support of the PRC’s military modernization) will be involved in the transaction.

Moreover, to maximize the reach and effect of the expanded EAR controls, BIS has precluded any *de minimis* exclusion for certain items. In other words, BIS now asserts its extraterritorial jurisdiction over specified foreign-produced SME and related items controlled if such foreign-produced items contain any amount of U.S.-origin chips, software or technology, no matter how minor. BIS also clarified that export controls apply to the export, reexport, and transfer of software keys that enable the use of software and hardware that are subject to control under the Commerce Control List in the EAR. BIS also added eight “Red Flags” situation descriptions that BIS believes should put persons on notice of potential export control violations.

Finally, BIS and its law enforcement arm, the Office of Export Enforcement (“OEE”) added 140 entities to the EAR Entity List and modified the Entity List status of 14 PRC entities that were already on the Entity List. Several of these entities are also designated for the new FN5 FDP Rule. This group of companies includes semiconductor production facilities, SME suppliers, and investment companies that finance such firms and that are acting at the direction of the PRC government to further its national advanced chip objectives deemed to threaten the national security of the United States and its allies around the world. These Entity List designations will effectively cut off the ability of these entities to obtain virtually anything “subject to the EAR.”

It should also be noted that, even as BIS adopts these stern new measures to limit the flow of advanced U.S. technologies to the PRC, the incoming Administration has signaled that it would be open to even more expansive export controls being applied to the PRC’s military modernization efforts. Thus, the regulatory environment for U.S.-China trade is likely to remain volatile and in flux for the foreseeable future as the new Administration’s national security team takes shape and new appointments are made throughout the U.S. Commerce Department and elsewhere in the Executive Branch.

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Dorsey’s national security and international trade lawyers are able to advise on such complex export control issues. Persons with such questions may contact any of the above-listed Dorsey lawyers.

[1] 89 Fed. Reg. 96790 (Dec. 5, 2024).

[2] 89 Fed. Reg. 96830 (Dec. 5, 2024).

[3] Commerce Strengthens Export Controls to Restrict China’s Capability to Produce

Advanced Semiconductors for Military Applications | Bureau of Industry and Security

[4] *Id.*

[5] Biden Administration Restricts U.S. Exports of Advanced Computing and Semiconductor Manufacturing Equipment, Software, and Technology to China | News & Resources | Dorsey

[6] Commerce Department Adopts Sweeping Changes in U.S. Export Controls | News & Resources | Dorsey