

Final US Outbound Investment Rules to Be Effective January 2, 2025: Key Questions Answered

The Final Rule prohibits or requires notification of certain US investments in Chinese and Chinese-controlled entities involved in semiconductors, quantum information technologies, and artificial intelligence.

On October 28, 2024, the US Department of the Treasury (Treasury) issued final regulations ([Final Rule](#)) to implement [Executive Order 14105](#), “Addressing United States Investments in Certain National Security Technologies and Products in Countries of Concern” (August 9, 2023) (the Order). The Order, which we discussed in our August 2023 [Client Alert](#), directed Treasury to issue regulations to address the national security threat posed by certain US investments that may accelerate the development of sensitive technologies and products in “countries of concern,” currently defined in the Order as China and the Special Administrative Regions of Hong Kong and Macau. The Final Rule addresses public comments received to the Advanced Notice of Proposed Rulemaking and the Notice of Proposed Rulemaking (NPRM), which we discussed in our June 2024 [Client Alert](#).

The Final Rule prohibits or requires notification of certain investments by “US persons” or their foreign subsidiaries in “covered foreign persons,” which are defined as certain individuals or entities associated with a country of concern that are engaged in, or associated with parties engaged in, activities involving semiconductors and microelectronics, quantum information technologies, or artificial intelligence (AI). The Final Rule applies if the covered foreign person or a related party is working with specified technologies in one of those fields.

When a specified technology is present, the jurisdictional scope of the Final Rule is broad. The definition of “US person” captures US entities, US citizens or residents, and any person (regardless of nationality) in the United States. The Final Rule also applies to controlled foreign entities of US persons and prohibits US persons from knowingly directing a non-US person to engage in a prohibited transaction. The definition of “covered foreign person” encompasses not only Chinese entities and citizens or permanent residents of a country of concern (including dual nationals with a non-US country), but also subsidiaries of Chinese companies, some non-Chinese investors in Chinese companies, and some non-Chinese companies that derive 50% or more of their revenue from China or incur 50% or more of their expenses in China. Accordingly, compliance with the Final Rule could be complex and require significant diligence efforts when one of the specified technologies may be present.

The Final Rule takes effect on **January 2, 2025**, with an exception for transactions made pursuant to a binding, uncalled capital commitment entered into before such date.

This Client Alert answers 10 key questions about the Final Rule.

1. What are the obligations on US persons?

Under the Final Rule, US persons are:

- restricted from engaging in prohibited transactions; and
- required to report notifiable transactions.

A US person is defined as a US citizen, a US lawful permanent resident (a so-called “green card” holder), an entity organized under the laws of the United States, including foreign branches, and any person in the United States, irrespective of nationality. Note that the “any person in the United States” will capture non-US nationals temporarily in the United States, including on vacation, business trips, or simply transiting the United States during a layover.

Controlled Foreign Entity

US persons are required to take “all reasonable steps” to “prohibit and prevent” a controlled foreign entity from engaging in a prohibited transaction. US persons must also file a notification with respect to a notifiable transaction undertaken by a controlled foreign entity no later than 30 calendar days after the completion date of the regulated transaction.

“Controlled foreign entity” means a foreign entity of which a US person is a parent.

A “parent” is defined as a person who: (i) directly or indirectly holds more than 50% of the outstanding voting interest in the entity or the voting power of the board; (ii) is the general partner, managing member, or equivalent of an entity; or (iii) is the investment adviser to a pooled investment fund.

To determine whether a US person took “all reasonable steps,” Treasury will consider, among other factors, the following: (i) agreements with respect to compliance with the Final Rule; (ii) governance or shareholder rights by the US person; (iii) training and internal reporting requirements; (iv) internal policies, procedures, and guidelines; and (v) documented testing and auditing processes for such controls.

Knowingly Directing

The Final Rule prohibits US persons from knowingly directing a non-US person to engage in a prohibited transaction.

A US person “knowingly directs” a transaction when such person (i) has the authority, individually or as part of a group, to make or substantially participate in the decisions of a non-US person, and (ii) exercises that authority to direct, order, decide upon, or approve a transaction. An officer, director, and a person who otherwise possesses executive responsibilities is deemed to have such authority.

A US person will be considered not to have knowingly directed a transaction if they recuse themselves from each of the following activities: (i) participating in approval and decision-making related to the transaction, (ii) reviewing, editing, commenting on, approving, and signing the transaction documents, and (iii) engaging in negotiations with the counterparties. We expect that recusal statements will become an important component of compliance under this new regime.

2. What types of transactions are covered transactions?

The Final Rule identifies six broad categories of direct and indirect investments by US persons that can be a covered transaction if the US person knows the target is a covered foreign person at the time of the transaction.

- **Equity and Contingent Equity:** the acquisition of an equity interest or a contingent equity interest.
- **Debt Financing:** the provision of a loan or debt if it affords the US person an interest in profits, board rights, or other financial or governance rights characteristic of an equity investment but not typical of a loan.
- **Conversion of Contingent Equity Interests:** conversion of a contingent equity interest that the US person acquires on or after January 2, 2025.
- **Greenfield and Brownfield Investments:** acquisition, leasing, or other development of operations or assets in a country of concern that result in the establishment of a covered foreign person or engagement of a person of a country of concern in a covered activity.
- **Joint Ventures:** entrance into a joint venture with a person of a country of concern that will, or is intended to, engage in a covered activity. While Treasury did not define the term “joint venture” in the Final Rule, it provided in commentary that joint ventures involve “the contribution of capital and/or assets by two parties and the sharing of profits and losses.” Treasury also explained that, “absent other facts, a ‘joint venture’ would not ordinarily result simply where there is a licensing arrangement, the sale or barter of goods and services, or resale of goods and services.”
- **Investments Made as a Limited Partner:** the acquisition of a limited partner (LP) or equivalent interest in a non-US venture capital fund, private equity fund, fund of funds, or other pooled investment fund if (i) the US person knows the fund likely will invest in a person of a country of concern that is in the semiconductors and microelectronics, quantum information technologies, or AI sectors, and (ii) the fund undertakes a transaction that would be a covered transaction if undertaken by a US person.

3. Who qualifies as a “covered foreign person”?

A “covered foreign person” includes:

- a person of a country of concern that engages in a covered activity,
- a person that, directly or indirectly, has: (i) a board seat, a voting or equity interest, or the power to direct the management or policies with respect to a person described above; and (ii) derives or incurs more than 50% of certain financial metrics (e.g., revenue, income, expenditures, or expenses) from such person.

A “person of a country of concern” is defined to include citizens, permanent residents, governments, and government-controlled entities of a country of concern; entities legally organized, headquartered, or with a principal place of business in a country of concern; and entities that are at least 50% owned or controlled by any of the foregoing. Therefore, the Final Rule would apply to investments in entities that are (i) directly or indirectly majority owned or controlled by an entity that is organized or has its principal place of business in a country of concern and (ii) engaged in a covered activity.

Under the Order, a “country of concern” is currently defined to include China and the Special Administrative Regions of Hong Kong and Macau. The list could grow in the future.

4. What is the level of due diligence a US person investor must undertake?

In determining whether a US person violated the Final Rule, Treasury will assess whether the US person has or had knowledge of the relevant facts and circumstances with respect to a covered transaction. “Knowledge” is defined as (i) actual knowledge, (ii) an awareness of a high probability, or (iii) reason to know of a fact or circumstance’s existence. Treasury applies a similar standard in evaluating apparent violations of US export control rules.

If a US person failed to conduct a “reasonable and diligent inquiry” as of the time of the transaction, Treasury may conclude that the US person had reason to know that a transaction was a covered transaction. Treasury will consider the totality of the relevant facts and circumstances in assessing whether a US person undertook a reasonable and diligent inquiry, including the following:

- The inquiry made and questions asked of the investment target or counterparty (such as a joint venture partner)
- Contractual representations or warranties obtained from the investment target or counterparty
- Efforts to obtain and consider available public and non-public information
- Whether the US person purposefully avoided learning or seeking relevant information
- The presence or absence of warning signs, such as evasive responses or refusal to provide information by the target or counterparty
- The use of public and commercial databases to identify and verify relevant information

5. What are the prohibited and notifiable transactions?

The Final Rule defines prohibited and notifiable transactions with reference to whether the covered foreign person engages in a covered activity, as outlined below.

Please see the Appendix for a more detailed description of the prohibited and notifiable transactions.

Sector	Prohibited Transactions	Notifiable Transactions
Semiconductors and Microelectronics	<p>A covered transaction in which the covered foreign person:</p> <p>Develops or produces electronic design automation software for the design of integrated circuits or advanced packaging (integrated circuits that support the two-and-one-half-dimensional (2.5D) or three-dimensional (3D) assembly of integrated circuits).</p>	<p>A covered transaction in which the covered foreign person:</p> <p>Designs, fabricates, or packages integrated circuits that do not meet the technical specifications for prohibited transactions.</p>

Sector	Prohibited Transactions	Notifiable Transactions
	<p>Develops or produces front-end semiconductor fabrication equipment designed for performing the volume fabrication of integrated circuits, equipment for performing volume advanced packaging, or other items designed exclusively for use in or with extreme ultraviolet lithography fabrication equipment.</p> <p>Designs integrated circuits that meet or exceed the performance parameters in Export Control Classification Number 3A090.a, or integrated circuits designed for operation at or below 4.5 Kelvin.</p> <p>Fabricates certain integrated circuits.</p> <p>Packages integrated circuits using advanced packaging techniques.</p>	
Quantum information technologies	<p>Develops, installs, sells, or produces supercomputers enabled by advanced integrated circuits that can provide a theoretical compute capacity of 100 or more double-precision (64-bit) petaflops or 200 or more single-precision (32-bit) petaflops of processing power within a 41,600 cubic foot or smaller envelope.</p> <p>Develops a quantum computer or produces critical components required to produce a quantum computer (such as a dilution refrigerator or two-stage pulse tube cryocooler).</p> <p>Develops or produces a quantum sensing platform designed or intended for military, government intelligence, or mass-surveillance end uses.</p> <p>Develops or produces quantum networks or quantum communications systems designed or intended to be used for networking to scale up the capabilities of quantum computers; secure communications; or other applications that</p>	N/A

Sector	Prohibited Transactions	Notifiable Transactions
	has a military, government intelligence, or mass-surveillance end use.	
Artificial intelligence	<p>Develops AI systems designed to be exclusively used or intended to be used for a military, government intelligence, or mass surveillance end use.</p> <p>Develops AI systems that are trained using a quantity of computing power greater than 10²⁵ computational operations, or 10²⁴ computational operations using primarily biological sequence data.</p>	<p>Develops an AI system that does not meet the criteria to make the transaction a prohibited transaction, but nevertheless is (i) designed to be used for a military end use, or government intelligence or mass-surveillance end use, (ii) intended to be used for cybersecurity applications, digital forensic tools, penetration testing tools, or the control of robotic systems, or (iii) trained using computing power greater than 10²³ computational operations.</p>
Transactions involving persons on certain sanctions- and export controls-related denied persons lists	<p>A covered transaction in which the covered foreign person engages in a covered activity (including a notifiable transaction) and is:</p> <p>Included on the Bureau of Industry and Security's (BIS) Entity List or Military End User List;</p> <p>A "Military Intelligence End-User," as defined by BIS;</p> <p>Included on Treasury's list of Specially Designated Nationals and Blocked Persons List (SDN List), or is 50% or majority owned by individuals or entities on the SDN List;</p> <p>Included on Treasury's Non-SDN Chinese Military-Industrial Complex Companies List; or</p> <p>Designated as a foreign terrorist organization by the Secretary of State under 8 USC § 1189.</p>	N/A

6. Are there exceptions for certain transactions?

Certain categories of transactions are excepted transactions, and therefore not covered transactions, under the Final Rule.

- **Passive Investments:** certain investments that are less likely to provide “intangible benefits” to a covered foreign person, *as long as* the US person is not afforded rights beyond standard minority shareholder protections. These include:
 - **Publicly traded securities:** an investment in any publicly traded “security,” as defined under Section 3(a)(10) of the Securities Exchange Act of 1934, in any jurisdiction. Notably, in the comments to the Final Rule, Treasury “emphasizes” that a US person’s acquisition of equity that is not yet publicly traded for purposes of facilitating an IPO, including as part of an underwriting arrangement, would not fall under this exception and could be a covered transaction; however, the provision of a service ancillary to an IPO that does not include the acquisition of an equity interest is not a covered transaction.
 - **Securities issued by investment companies:** an investment in a security issued by an SEC-registered “investment company,” as defined in Section 3(a)(1) of the Investment Company Act of 1940, such as index funds, exchange-traded funds, and mutual funds; or by a company that is regulated as a “business development company” pursuant to Section 54 of the Investment Company Act of 1940.
 - **Certain LP investments:** LP investments in a venture capital, private equity fund, fund of funds, or other pooled investment fund if: (i) the LP’s committed capital is not more than \$2 million, aggregated across investments and co-investment vehicles of the fund; or (ii) the LP received a binding contractual assurance that its capital will not be used to engage in a prohibited or notifiable transaction. If the fund refuses to agree to such a covenant, an LP may consider limiting its committed capital to \$2 million or less to avail itself of this exception.
 - **Derivatives:** an investment in a derivative that does not confer the right to acquire equity, rights associated with equity, or assets in or of a covered foreign person.
- **Full buyouts from a person of a country of concern:** the acquisition by a US person of all the equity in an entity held by all persons of a country of concern, and the entity does not constitute a covered foreign person after such acquisition.
- **Intracompany transactions:** transactions between a US person parent and its controlled foreign entity that (i) support operations that are not covered activities, or (ii) maintain covered activities that the controlled foreign entity was engaged in prior to January 2, 2025.
- **Syndicated loans:** the acquisition of a voting interest in a covered foreign person upon default or similar condition if the US lender (i) is not the syndication agent and (ii) cannot on its own initiate action against the debtor.
- **Equity-based compensation:** the receipt of employment compensation in the form of equity or stock options in a covered foreign person, or the exercise of such an option.
- **With or involving a designated country:** the Final Rule contemplates that the Treasury Secretary can issue a public notice designating certain countries or territories as adequately addressing national

security risks described in the Order; transactions with or involving a person of such a country or territory would not also be subject to the Final Rule. No countries or territories have been designated to date.

- **Capital commitments made prior to the effective date:** transactions pursuant to a binding, uncalled capital commitment entered into before January 2, 2025.

7. What are the procedures for notification?

A US person that engages in a notifiable transaction is required to submit an electronic notification to Treasury within 30 calendar days following the completion of the transaction.

The Final Rule notes that a notification must include the following information with a certification that the notification is complete and accurate in all material respects:

- a description of the US person (including a post-closing organizational chart showing the intermediate and ultimate parent entities);
- the commercial rationale for the transaction;
- a description of the determination that the transaction is a covered transaction;
- transaction information, such as current status, completion date, and value;
- aggregate equity interest, voting interest, and board seats being acquired by the US person;
- information regarding the covered foreign person;
- a description of the covered activities; and
- an explanation regarding why any required information is unavailable or cannot be obtained.

After submitting the notification, Treasury may reach out to the submitter and request additional documents and information within deadlines established by Treasury. The US person must maintain a copy of the filed notification and supporting documentation for 10 years.

Notably, if a US person acquires actual knowledge that a completed transaction was a covered transaction, the US person has 30 calendar days following the acquisition of such knowledge to submit a notification. In such a late-submitted notification, the submitter must explain why the information was not available to the US person at the time of the transaction and what type of diligence had been carried out at the time of the transaction. This ongoing monitoring obligation also applies to updating Treasury when a US person submitter learns that a previously submitted notice was materially incomplete or inaccurate. These are effectively mandatory disclosure requirements that will require US persons to develop responsive post-completion compliance systems.

8. Will information and materials provided in connection with notifications be kept confidential?

Except to the extent required by law, Treasury generally may not disclose to the public information and documentary materials that are submitted under the Final Rule. However, the Final Rule provides that,

subject to appropriate confidentiality and classification requirements, Treasury may disclose information or documentary materials:

- that are relevant to a judicial or administrative action or proceeding;
- that are provided to Congress or any duly authorized committee of subcommittee thereof;
- that are provided to a domestic governmental entity, or to a foreign governmental entity of a US partner or ally if important to the national security analysis or actions of such governmental entity or Treasury;
- when the person who submitted or filed the information has consented to its disclosure to the recipient; or
- that is determined by a Treasury official, at the Assistant Secretary level or above, to be in the national interest.

9. Can investors request authorization to engage in prohibited transactions?

Treasury declined to establish a licensing regime, explaining in comments to the Final Rule that a licensing regime would be resource- and time-intensive to administer.

US persons can seek an exemption from the requirements of the Final Rule if they can demonstrate that a covered transaction is in the national interest of the United States. In determining whether a transaction qualifies under the national interest exemption, Treasury, in consultation with other agencies, will consider, among other factors, the transaction's effect on critical US supply chain needs, domestic production needs related to national defense, and US technological leadership globally. A determination that a covered transaction is exempt may be subject to binding conditions.

10. What are the penalties for violations?

Violations of the Final Rule are subject to civil and criminal penalties under the International Emergency Economic Powers Act (IEEPA), as follows:

- A maximum civil penalty up to the greater of (a) twice the amount of the transaction that is the basis for the violation or (b) approximately \$368,000 (adjusted annually for inflation); and
- A criminal fine up to \$1 million, a prison sentence of up to 20 years, or both for willful violations.

Under the Final Rule, Treasury may also take any action authorized under IEEPA to nullify, void, or compel the divestment of a prohibited transaction.

Because the penalty scheme of this new outbound investment program is established under IEEPA, it would also reach parties that conspire to violate or "cause" a violation of the Final Rule. This is significant because it can expose non-US parties to enforcement insofar as such foreign persons are involved in a covered transaction.

The Final Rule also establishes a voluntary self-disclosure program for reporting potential non-compliance. In the coming weeks and months, Treasury is expected to provide additional information regarding compliance with this new outbound investment program. Parties should monitor Treasury's Outbound Investment Security Program [website](#).

Conclusion

The Final Rule largely aligns with the NPRM, issued in June 2024. The requirements for prohibited and notifiable transactions provide the US government with increased visibility into outbound US investments involving technologies and products that pose an acute risk to US national security. In summarizing the underlying rationale of the Final Rule, Assistant Treasury Secretary Paul Rosen [explained](#) that “US investments, including the intangible benefits like managerial assistance and access to investment and talent networks that often accompany such capital flows, must not be used to help countries of concern develop their military, intelligence, and cyber capabilities.”

In contrast to his prior remarks regarding the NPRM, the Chairman of the House Financial Services Committee, Patrick McHenry, [praised](#) “Treasury’s attempts to focus narrowly on military technologies” in the Final Rule. However, he reiterated his skepticism of a “sectoral approach to regulating outbound investment,” in contrast to the “time-tested sanctions regime.” While the incoming President could revoke the Order, there appears to be bipartisan support for its policy objectives.

Latham & Watkins will continue to monitor and report on developments related to the Final Rule and the Outbound Investment Security Program.

If you have questions about this Client Alert, please contact one of the authors listed below or the Latham lawyer with whom you normally consult:

[James H. Barker](#)

james.barker@lw.com
+1.202.637.2200
Washington, D.C.

[Les P. Carnegie](#)

les.carnegie@lw.com
+1.202.637.1096
Washington, D.C.

[Damara L. Chambers](#)

damara.chambers@lw.com
+1.202.637.2300
Washington, D.C.

[Zachary N. Eddington](#)

zachary.eddington@lw.com
+1.202.637.2105
Washington, D.C.

[Ruchi G. Gill](#)

ruchi.gill@lw.com
+1.202.654.7126
Washington, D.C.

[Catherine Hein](#)

catherine.hein@lw.com
+1.202.637.3382
Washington, D.C.

[Ragad Alfaraidy](#)

ragad.alfaraidy@lw.com
+1.202.637.2138
Washington, D.C.

[Asia Y. Cadet](#)

asia.cadet@lw.com
+1.202.637.2251
Washington, D.C.

[Monica Calce](#)

monica.calce@lw.com
+1.212.906.4850
New York

[Sara Castiglia](#)

sara.castiglia@lw.com
+1.202.350.5073
Washington, D.C.

[Julie Lee Choi](#)

julielee.choi@lw.com
+1.617.880.4509
Boston

[Matthew J. Crawford](#)

matthew.crawford@lw.com
+1.617.880.4588
Boston

[Elliot W. Hecht](#)

elliott.hecht@lw.com
+1.202.654.7215
Washington, D.C.

[Christine Kalpin](#)

christine.kalpin@lw.com
+1.617.880.4713
Boston

The authors would like to thank Drew Weisberg for his contribution to this Client Alert.

You Might Also Be Interested In

[New CFIUS Developments Signal Heightened Attention on Enforcement: 4 Areas to Watch](#)

[White House Issues Outbound Investment Executive Order and Treasury Department Solicits Comments on This New Regulatory Program: 5 Key Takeaways](#)

[Committee on Foreign Investment in the United States — Key Questions Answered](#)

Client Alert is published by Latham & Watkins as a news reporting service to clients and other friends. The information contained in this publication should not be construed as legal advice. Should further analysis or explanation of the subject matter be required, please contact the lawyer with whom you normally consult. The invitation to contact is not a solicitation for legal work under the laws of any jurisdiction in which Latham lawyers are not authorized to practice. A complete list of Latham's Client Alerts can be found at www.lw.com. If you wish to update your contact details or customize the information you receive from Latham, [visit our subscriber page](#).

Appendix — Notifiable and Prohibited Transactions

§ 850.217 Notifiable transaction.

The term notifiable transaction means a covered transaction (that is not a prohibited transaction) in which the relevant covered foreign person or, with respect to a covered transaction described in § 850.210(a)(5), the relevant joint venture:

- Designs any integrated circuit that is not described in § 850.224(c);
- Fabricates any integrated circuit that is not described in § 850.224(d);
- Packages any integrated circuit that is not described in § 850.224(e);
- Develops any AI system that is not described in § 850.224(j) or (k) and that is:
 - Designed to be used for any military end use (e.g., for weapons targeting, target identification, combat simulation, military vehicle or weapons control, military decision-making, weapons design (including chemical, biological, radiological, or nuclear weapons), or combat system logistics and maintenance); or government intelligence or mass-surveillance end use (e.g., through incorporation of features such as mining text, audio, or video; image recognition; location tracking; or surreptitious listening devices);
 - Intended by the covered foreign person or joint venture to be used for any of the following:
 - cybersecurity applications;

- digital forensics tools;
 - penetration testing tools; or
 - the control of robotic systems; or
- Trained using a quantity of computing power greater than 10^{23} computational operations (e.g., integer or floating-point operations).

Note 1 to § 850.217: Consistent with section 3 of the Order, the Secretary, in consultation with the Secretary of Commerce, and, as appropriate, the heads of other relevant agencies, shall periodically assess whether the criterion described in paragraph (d)(3) is serving to effectively address threats to the national security of the United States described in the Order and make updates, as appropriate, through public notice.

Note 2 to § 850.217: Consistent with the definition for develop at section 850.211, to develop an AI system defined at section 850.202(b) in a manner subject to these notification requirements, the relevant covered foreign person or joint venture must engage in the activities enumerated in section 850.211, such as design or substantive modification, with respect to the third-party AI model or machine-based system that is being used by a data system, software, hardware, application, tool, or utility to operate in whole or in part.

Note 3 to § 850.217: For purposes of section 850.217(d), a person customizing, configuring, or fine-tuning a third-party AI model or machine-based system strictly for its own internal, non-commercial use (e.g., not for sale or licensing) would not implicate the notification requirements for related transactions solely on that basis unless the person's internal, non-commercial use is for government intelligence, mass-surveillance, or military end use, or for digital forensics tools, penetration testing tools, or the control of robotic systems.

§ 850.224 Prohibited transaction.

The term prohibited transaction means a covered transaction in which the relevant covered foreign person or, with respect to a covered transaction described in § 850.210(a)(5), the relevant joint venture:

- Develops or produces any electronic design automation software for the design of integrated circuits or advanced packaging;
- Develops or produces any:
 - Front-end semiconductor fabrication equipment designed for performing the volume fabrication of integrated circuits, including equipment used in the production stages from a blank wafer or substrate to a completed wafer or substrate (i.e., the integrated circuits are processed but they are still on the wafer or substrate);
 - Equipment for performing volume advanced packaging; or
 - Commodity, material, software, or technology designed exclusively for use in or with extreme ultraviolet lithography fabrication equipment.

- Designs any integrated circuit that meets or exceeds the performance parameters in Export Control Classification Number 3A090.a in supplement No. 1 to 15 CFR part 774, or integrated circuits designed for operation at or below 4.5 Kelvin;
- Fabricates any of the following:
 - Logic integrated circuits using a non-planar transistor architecture or with a production technology node of 16/14 nanometers or less, including fully depleted silicon-on-insulator (FDSOI) integrated circuits;
 - NOT-AND (NAND) memory integrated circuits with 128 layers or more;
 - Dynamic random-access memory (DRAM) integrated circuits using a technology node of 18 nanometer half-pitch or less;
 - Integrated circuits manufactured from a gallium-based compound semiconductor;
 - Integrated circuits using graphene transistors or carbon nanotubes; or
 - Integrated circuits designed for operation at or below 4.5 Kelvin;
- Packages any integrated circuit using advanced packaging techniques;
- Develops, installs, sells, or produces any supercomputer enabled by advanced integrated circuits that can provide a theoretical compute capacity of 100 or more double-precision (64-bit) petaflops or 200 or more single-precision (32-bit) petaflops of processing power within a 41,600 cubic foot or smaller envelope;
- Develops a quantum computer or produces any of the critical components required to produce a quantum computer such as a dilution refrigerator or two-stage pulse tube cryocooler;
- Develops or produces any quantum sensing platform designed for, or which the relevant covered foreign person intends to be used for, any military, government intelligence, or mass- surveillance end use;
- Develops or produces any quantum network or quantum communication system designed for, or which the relevant covered foreign person intends to be used for:
 - Networking to scale up the capabilities of quantum computers, such as for the purposes of breaking or compromising encryption;
 - Secure communications, such as quantum key distribution; or
 - Any other application that has any military, government intelligence, or mass- surveillance end use;
- Develops any AI system that is designed to be exclusively used for, or which the relevant covered foreign person intends to be used for, any:

- Military end use (e.g., for weapons targeting, target identification, combat simulation, military vehicle or weapon control, military decision-making, weapons design (including chemical, biological, radiological, or nuclear weapons), or combat system logistics and maintenance); or
- Government intelligence or mass-surveillance end use (e.g., through incorporation of features such as mining text, audio, or video; image recognition; location tracking; or surreptitious listening devices);
- Develops any AI system that is trained using a quantity of computing power greater than:
 - 10^{25} computational operations (e.g., integer or floating-point operations); or
 - 10^{24} computational operations (e.g., integer or floating-point operations) using primarily biological sequence data;
- Meets the conditions set forth in § 850.209(a)(2) because of its relationship to one or more covered foreign persons engaged in any covered activity described in any of paragraphs (a) through (k) of this section; or
- Engages in a covered activity, whether referenced in this section or § 850.217 and is:
 - Included on the Bureau of Industry and Security's Entity List (15 CFR part 744, supplement no. 4);
 - Included on the Bureau of Industry and Security's Military End User List (15 CFR part 744, supplement no. 7);
 - Meets the definition of "Military Intelligence End-User" by the Bureau of Industry and Security in 15 CFR 744.22(f)(2);
 - Included on the Department of the Treasury's list of Specially Designated Nationals and Blocked Persons (SDN List), or is an entity in which one or more individuals or entities included on the SDN List, individually or in the aggregate, directly or indirectly, own a 50 percent or greater interest;
 - Included on the Department of the Treasury's list of Non-SDN Chinese Military-Industrial Complex Companies (NS-CMIC List); or
 - Designated as a foreign terrorist organization by the Secretary of State under 8 U.S.C. 1189.

Note 1 to § 850.224: Consistent with section 3 of the Order, the Secretary, in consultation with the Secretary of Commerce and, as appropriate, the heads of other relevant agencies, shall periodically assess whether the criterion described in paragraph (k) of this section is serving to effectively address threats to the national security of the United States described in the Order and make updates, as appropriate, through public notice.

Note 2 to § 850.224: Consistent with the definition for develop at section 850.211, to develop an AI system defined at section 850.202(b) in a manner subject to these prohibition requirements, the relevant covered foreign person or joint venture must engage in the activities enumerated in section 850.211, such as design or substantive modification, with respect to the third-party AI model or machine-based system

that is being used by a data system, software, hardware, application, tool, or utility to operate in whole or in part.

Note 3 to § 850.224: For purposes of section 850.224(j) and (k), a person customizing, configuring, or fine-tuning a third-party AI model or machine-based system strictly for its own internal, non-commercial use (e.g., not for sale or licensing) would not implicate a prohibition for related transactions solely on that basis unless the person's internal, non-commercial use is for government intelligence, mass-surveillance, or military end use, or for digital forensics tools, penetration testing tools, or the control of robotic systems.