

Sector	Prohibited Transactions under current Outbound Investment Regulations	Notifiable Transactions under current Outbound Investment Regulations	“Prohibited Technology” under COINS Act	“Notifiable Technology” under COINS Act
Semiconductors	<ol style="list-style-type: none"> <li>1. Develops or produces any electronic design automation software for the design of integrated circuits or advanced packaging;</li>   <li>2. Develops or produces any:             <ol style="list-style-type: none"> <li>a. Front-end semiconductor fabrication equipment designed for performing the volume fabrication of integrated circuits;</li> <li>b. Equipment for performing volume advanced packaging; or</li> <li>c. Commodity, material, software or technology designed exclusively for use in or with extreme ultraviolet lithography fabrication equipment.</li> </ol> </li>   <li>3. Designs any integrated circuit that meets or exceeds the performance parameters in Export Control Classification Number 3A090.a, or integrated circuits designed for operation at or below 4.5 Kelvin;</li>   <li>4. Fabricates any of the following:</li> </ol>	Designing, fabricating or packaging any integrated circuit.	Advanced semiconductor technology and microelectronics	Semiconductor technology and microelectronics

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	<ul style="list-style-type: none"> <li>a. Logic-integrated circuits using a nonplanar transistor architecture or with a production technology node of 16/14 nanometers or less;</li> <li>b. NOT-AND (NAND) memory-integrated circuits with 128 layers or more;</li> <li>c. Dynamic random-access memory (DRAM)-integrated circuits using a technology node of 18 nanometer halfpitch or less;</li> <li>d. Integrated circuits manufactured from a gallium-based compound semiconductor;</li> <li>e. Integrated circuits using graphene transistors or carbon nanotubes; or</li> <li>f. Integrated circuits designed for operation at or below 4.5 Kelvin;</li> </ul> <p>5. Packages any integrated circuit using advanced packaging techniques;</p>			

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Supercomputers	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 (64bit) petaflops or 200 or more single-precision (32-bit) petaflops of processing power within a 41,600 cubic foot or smaller envelope;	None	High-performance computing and supercomputing  (it is unclear what the additional scope, if any, of “high-performance computing” will be)	High-performance computing and supercomputing  (it is unclear what the additional scope, if any, of “high-performance computing” will be)
Quantum	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 quantum network or quantum communication system for networking to scale up capabilities; secure communications; military, government intelligence or mass-surveillance end use.	None	Quantum information technologies	Quantum information technologies

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Artificial Intelligence (AI)	<p>Develops any AI system that is designed to be <i>exclusively used for</i>, or which the relevant covered foreign person intends to be used for, any:</p> <ol style="list-style-type: none"> <li>1. Military end use, or</li> <li>2. Government intelligence or mass-surveillance end use;</li> </ol> <p>Develops any AI system that is trained using a quantity of computing power greater than:</p> <ol style="list-style-type: none"> <li>1. <math>10^{25}</math> computational operations (e.g., integer or floating-point operations), or</li> <li>2. <math>10^{24}</math> computational operations (e.g., integer or floating-point operations) using primarily biological sequence data.</li> </ol>	<p>Develops any AI system not otherwise covered by the prohibited transaction definition, where such AI system is:</p> <ol style="list-style-type: none"> <li>1. Designed to be used for any military end use or government intelligence or mass-surveillance end use;</li> <li>2. Intended to be used for any of the following: <ol style="list-style-type: none"> <li>a. cybersecurity applications,</li> <li>b. digital forensics tools,</li> <li>c. penetration testing tools, or</li> <li>d. the control of robotic systems; or</li> </ol> </li> <li>3. Trained using a quantity of computing power greater than <math>10^{23}</math> computational</li> </ol>	Artificial intelligence systems	Artificial intelligence systems

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		operations (e.g., integer or floating-point operations).		
Hypersonic Systems	<i>Not covered</i>	<i>Not covered</i>	Hypersonic systems	Hypersonic systems