

### New Export Controls Target Support for China's Advanced Computing and Semiconductor Manufacturing

#### Key Notes:

- The Rule will restrict exports to China of high-end chips and semiconductor manufacturing equipment, including foreign made items that are the product of U.S. technology.
- The Rule restricts the export of a wide range of items that would support certain supercomputing or integrated circuit production end-uses in China. In some circumstances, any item subject to the EAR is restricted.
- Specific activities of U.S. persons that support the development or production of certain integrated circuits in China will be prohibited without a license.

On October 7, 2022, the Department of Commerce's Bureau of Industry and Security (BIS) issued an [Interim Final Rule](#) (the "Rule") implementing additional export controls on advanced computing integrated circuits (ICs), computer commodities that contain such ICs and certain semiconductor manufacturing items.

#### Major Provisions

This new interim Rule is lengthy and complex, and this bulletin provides only an overview of the major provisions of the new export controls and restrictions targeting China's access to advanced computing and semiconductor items, software and technology. Companies impacted by this Rule must review its scope and potential impact not only on U.S. production and U.S.-origin applications, but also on the potential impact of the increased scope that includes foreign-produced items located outside of the United States

that are direct products of U.S.-origin software or technology.

1. **Adds certain advanced and high-performance computing chips and computer commodities that contain such chips to the CCL.** The Rule adds several new Export Control Classification Numbers (ECCNs) to the CCL: 3A090 for specified high-performance ICs and 4A090 (computers, electronic assemblies and components, not elsewhere specified (n.e.s.), containing ICs in ECCN 3A090), and ECCN 4D090 to accommodate related software. These items are now controlled on the CCL for Regional Stability (RS) purposes and require a license to export to China.

Additionally, BIS added an RS control to ECCNs 5A992 and 5D992 when these ECCNs meet or exceed the performance parameters of ECCN 3A090 or 4A090. These items also now require a license to export to China.

Notably, this RS control includes a license requirement for the export from China to any destination worldwide of certain technology (3E001 for 3A090) for the design, development or production of advanced computing chips which has been developed by an entity headquartered in China and is the direct product of software subject to the Export Administration Regulations (EAR), and is intended for the production of certain advanced

computing integrated circuits and computers or assemblies containing them.

2. **Adds certain semiconductor manufacturing equipment and related items to the CCL.** The Rule adds new ECCN 3B090 to the CCL for specified semiconductor manufacturing equipment. New ECCN 3B090 and the related software and technology controls under ECCN 3D001 and 3E001 are now controlled for RS reasons and require a license to export to China.
3. **New end-use restrictions related to “supercomputer” use in China.** The Rule imposes end-use controls related to supercomputers in China. Certain items listed in Category 3 and 4 of the CCL that would be used for the development, production, use, operation, installation, maintenance, repair, overhaul or refurbishing of a “supercomputer” in or destined for China require an export license, as will items incorporated into any component or equipment that will be used in this manner.
4. **New end-use restrictions related to semiconductor manufacturing in China.** The Rule imposes several end-use controls related to semiconductor manufacturing in China.
  - All items subject to the EAR require a license if they will be used for the development or production of integrated circuits at a fabrication facility in China that manufactures certain advanced integrated circuits. (Per the language of the regulation, it does not matter if the exported items are intended for those advanced circuits, as long as the exported items will be used for any integrated circuits.)
  - Certain items listed in Category 3 of the CCL require a license if the items will be used at a semiconductor fabrication facility but the

exporter “do[es] not know” whether the facility makes the specified advanced integrated circuits.

- All items subject to the EAR require a license if it will be used for the development or production in China of certain parts, components or equipment related to semiconductor and electronics manufacturing and equipment (specified by ECCN).
5. **Expands the scope of the EAR over certain foreign-produced advanced computing items and foreign produced items for supercomputer end uses.**<sup>1</sup> The Rule expands the scope of the foreign direct product rule (FDPR) to cover certain items that are the direct product of specified advanced computing or supercomputer-related software or technology subject to the EAR. Accordingly, these foreign-produced items would also require a U.S. export license if intended for China. According to the commentary in the Rule, the scope of the FDP rules generally aligns with new end-use controls.
  6. **Expands the scope of the foreign-direct product rule for items subject to license requirements to certain Chinese entities on the Entity List.** While the identified companies are already on the Entity List, this Rule expands the application of the FDPR which is applicable to these entities. Now, under footnote 1 and footnote 4 to the Entity List, the FDPR would restrict exports to these entities for many items that are the direct product of technology or software subject to the EAR and described in Categories 3, 4, and 5 of the CCL.
  7. **Adds new license restrictions and requirements on U.S. persons that support the development or production of certain specified ICs at semiconductor fabrication facilities in China.** The new rule notifies U.S. persons that certain activities related to semiconductor fabrication are now considered “support” for WMD end-uses in China and are prohibited without a license under pre-

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<sup>1</sup> 15 CFR §§ 734.9 and 744.23.

existing regulations.<sup>2</sup> The prohibited activities include shipping, transmitting or transferring to China any items not subject to the EAR when it is known they will be used in the development or production of integrated circuits at a semiconductor fabrication facility capable of fabricating:

- Logic chips with non-planar transistor architectures (i.e., FinFET or GAAFET) of 16/14nm or less,
- DRAM memory chips using a production technology node of 18nm half-pitch or less,
- NAND flash memory chips with 128 layers or more,
- Items that, if subject to the EAR, would be in Product Groups B, C, D, or E within the CCL Category.

The new restriction on activities is complex and additional nuances and exceptions apply, including facilitating shipments or servicing such items even if they are not subject to the EAR.

### “Model Certificate” for FDPR

To assist companies whose activities and supply chains involving China may be impacted by this new Rule, BIS has provided a “model certificate” to assist exporters “with the process of resolving potential red flags” over whether items are subject to the EAR based on the advanced computing foreign direct product rule.

The model certificate is not required, but it does assist in the process of review of any transactions and resolving any potential red flags. BIS notes that if a person in the supply chain is unable to obtain the certification, further due diligence is necessary and BIS authorization may ultimately be required. While BIS expects that “this certificate will be useful in facilitating understanding the application of the EAR to an item, BIS does not view use of this certificate alone to be a comprehensive due diligence process.”

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<sup>2</sup> 15 CFR § 744.6.

### Temporary General License

This new Rule also establishes a temporary general license (TGL) that allows, from October 21, 2022, through April 7, 2023, exports, reexports, in-country transfers and exports from abroad destined to or within China by companies not headquartered in certain specified countries to continue or to engage in integration, assembly (mounting), inspection, testing, quality assurance and distribution of items covered by the new ECCNs 3A090, 4A090 and associated software and technology in ECCN 3D001, 3E001, 4D090 or 4E001 or any item that is a computer, integrated circuit, electronic assembly or component and associated software and technology, specified elsewhere on CCL, which meets or exceeds the performance parameters set forth in the new ECCNs 3A090 or 4A090. There are specific limitations as to the applicability of this TGL and it does not remove any license requirements set forth in the EAR involving an entity on the Entity List or other prohibited end use and end-user restrictions (e.g., those applicable to military end-uses and end users).

### Public Comment

Public comments on all aspects of this Interim Final Rule must be submitted to BIS no later than December 12, 2022. Comments on this rule must be submitted to the Federal rulemaking portal ([www.regulations.gov](http://www.regulations.gov)) under Docket No. BIS-2022-0025. Submitters must refer to RIN 0694-AI94 in all comments.

### Conclusion

The scope of this rule is far-reaching in its effort to prevent sensitive technologies from being acquired by China’s military, intelligence and security services. The details of the new rule must be carefully applied to any scenario in which export restrictions or controls may now fall within its increased scope.

This new Rule imposes new and expanded controls on advanced computing ICs and certain semiconductor manufacturing items and restricts U.S. persons’ activities

that support China's semiconductor fabrication. The intent of these controls and restrictions are clear – to blunt China's efforts to “both purchase and manufacture certain high-end chips used in military applications” and, as noted in BIS' [news release](#), they do build upon prior policies and actions taken by BIS toward China. The full impact of the Rule will take time for affected manufacturers and industries to determine.

As such, BIS has indicated that it will work closely with industry as the agency implements all elements of the rulemaking to include ensuring compliance. After providing a public briefing on October 13, 2022, BIS noted that one of its first efforts to assist impacted companies and industries will be to release a series of Frequently Asked Questions (FAQs) in the coming weeks.

In the near term, companies must proceed cautiously and review this new Rule carefully to determine any new compliance requirements and, if necessary, seek specific guidance or license authority from BIS regarding activities in or involving China.

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