



Section 57 of the Competition Act 2004

Grounds of Decision issued by the Competition and Consumer Commission of Singapore

In relation to the proposed acquisition of ZT Group Int'l, Inc. by Advanced Micro Devices, Inc.

Date: 30 December 2024

Case number: 400-140-2024-004

Confidential information in the original version of this Decision will be redacted from the published version on the public register. Redacted confidential information in the text of the published version of the Decision is denoted by [X].

I. Introduction

1. On 22 November 2024, the Competition and Consumer Commission of Singapore (“**CCCS**”) accepted a joint application by Advanced Micro Devices, Inc. (“**AMD**”) and ZT Group Int’l, Inc. (“**ZT**”), through Allen & Gledhill LLP, for a decision pursuant to section 57 of the Competition Act 2004 (the “**Act**”) as to whether the proposed acquisition of ZT by AMD (the “**Proposed Transaction**”) will infringe section 54 of the Act, if carried into effect.
2. In reviewing the Proposed Transaction, CCCS conducted a public consultation from 26 November 2024 to 10 December 2024 and sought feedback from various stakeholders, including competitors and customers of AMD and ZT (collectively, the “**Parties**”). Most respondents had no competition concerns in relation to the Proposed Transaction.
3. At the end of the consultation process and after evaluating the available information, CCCS has concluded that the Proposed Transaction, if carried into effect, would not infringe section 54 of the Act.

II. The Parties

4. AMD is a fabless global semiconductor company that develops computer processors and related technologies. As part of its data centre business segment, AMD supplies semiconductor devices globally for use in data centres, including the following: central processing units (“**CPUs**”); discrete graphics processing units (“**GPUs**”); field programmable gate arrays (“**FPGAs**”); and Smart Network Interface Cards (“**SmartNICs**”). AMD’s Singapore facility is a product development centre that conducts R&D activities for pre- and post-silicon development. AMD offers all products globally, including to customers in Singapore.
5. ZT is an original design manufacturer (“**ODM**”) of server and storage solutions for data centres. It has design, engineering, and manufacturing capabilities, principally located in the United States. ZT’s data centre business comprises of server design and engineering, server manufacturing and related services (including test, integration and support services). ZT helps its customers, which are primarily large-scale data centres (known as hyperscalers), build customised server solutions. ZT also enters into design partnerships with component vendors, other semiconductor providers, and chip original equipment manufacturers (chip “**OEMs**”). ZT provides server integration activities in Singapore. ZT offers all services globally, including to customers in Singapore.

III. Competition issues

6. The Parties do not supply any overlapping goods or services in Singapore or globally. However, the semiconductor products supplied by AMD for use in data centres (i.e. CPUs, GPUs, FPGAs and SmartNICs) are used as an input by ZT and other suppliers of data centre design and manufacturing services. Hence, CCCS considered potential vertical and conglomerate effects arising from the Proposed Transaction.
7. CCCS notes that the nature of the supply arrangements for semiconductor products for data centres is such that it is the end customer (i.e. the data centre operator), and not the

server ODM, that decides which components to use in its servers and handles the purchasing of these components. Therefore, CCCS's assessment focused on whether the Proposed Transaction would result in tying or bundling (in either direction) of AMD's supply of each semiconductor product for data centres, namely server CPUs, discrete GPUs, data centre FPGAs, and data centre SmartNICs with ZT's supply of data centre servers.

IV. Relevant markets

8. Based on the information received, CCCS assessed that the relevant markets for this assessment are:
 - a. the global supply of server CPUs, discrete GPUs, data centre FPGAs, and data centre SmartNICs for data centre servers (collectively, the "**Relevant Semiconductor Product Markets**"); and
 - b. the global supply of data centre servers ("**Data Centre Server Market**") (collectively, the "**Relevant Markets**").

V. Competition assessment

9. Based on information received from the Parties and third parties, CCCS assessed that the Proposed Transaction is unlikely to give rise to tying or bundling concerns for the reasons below.
 - a. AMD and ZT are unlikely to possess significant market power. AMD does not have high market shares in any of the Relevant Semiconductor Product Markets and ZT does not have high market shares in the Data Centre Server Market. Third party feedback also indicated that customers have sufficient choice of suppliers for the Relevant Semiconductor Products and can generally switch between competing suppliers. Further, the nature of the industry is such that it is hyperscaler end-customers that decide on and purchase specific semiconductor components to be used in their data centres and not ODMs (such as ZT) that do so. In this regard, the merged entity would not have any additional ability or incentive to prioritise AMD's products over that of competitors for use in the merged entity's own data centre servers.
 - b. The merged entity is unlikely to be able to foreclose competition by engaging in a tying or bundling strategy. As noted above, CCCS considers that neither AMD nor ZT has high market shares in their respective relevant markets, and neither is likely to have significant market power. In this regard, it is unlikely that the merged entity will be able to leverage market power in one market via a tying or bundling strategy to profitably increase sales in another market.

VI. Ancillary Restrictions

10. The Parties submitted a non-compete restriction and a non-solicitation restriction (collectively, the "**Submitted Restrictions**") for CCCS's consideration.¹

¹ Paragraphs 46.1 to 46.10 of Form M1.

11. CCCS accepts the Parties' submission that the Submitted Restrictions are directly related to and necessary for the implementation of the Proposed Transaction. The Submitted Restrictions only apply to [X]. The duration of the Submitted Restrictions are also within the usual range of duration (2 to 5 years) accepted in previous merger cases as indicated in the CCCS Merger Guidelines.² Hence, CCCS concludes that the Submitted Restrictions constitute ancillary restraints which benefit from the exclusion under paragraph 10 of the Third Schedule to the Act, insofar as they apply to Singapore.

VII. Conclusion

12. For the reasons above and based on the information available, CCCS has assessed that the Proposed Transaction, if carried into effect, would not lead to a substantial lessening of competition in Singapore and consequently, would not infringe section 54 of the Act.
13. In accordance with section 57(7) of the Act, the decision will be valid for a period of one year from the date of CCCS's decision.

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² Paragraph 11.12 of the *CCCS Guidelines on the Substantive Assessment of Mergers*.