



MEDIA RELEASE

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DIGITAL STORAGE: CCS CLEARS PROPOSED ACQUISITION BY WESTERN DIGITAL CORPORATION OF SANDISK CORPORATION

1. The Competition Commission of Singapore (“CCS”) has cleared the proposed acquisition (“the Proposed Transaction”) of sole control by Western Digital Corporation (“WDC”) of SanDisk Corporation (“SanDisk”) (collectively “the Parties”). The Proposed Transaction, if carried into effect, is unlikely to lead to a substantial lessening of competition within the market for the global supply of interface-specific Enterprise Solid State Drives (“Enterprise SSDs”) to customers globally (the “Relevant Market”).
2. Both Parties are involved in the manufacture and supply of digital storage solutions. WDC produces hard disk drives (“HDD”)s for a number of uses.¹ WDC also produces certain external storage and business storage solutions. SanDisk, on the other hand, specialises in flash memory solutions.² SanDisk also produces flash storage solutions for enterprise datacentres and client computing platforms; and storage solution software used in its consumer products.
3. CCS has determined that the only area of overlap between the Parties, both globally and in Singapore, is in the supply of Enterprise SSDs.
4. For the purposes of the merger assessment, CCS has considered the Relevant Market as that for the global supply of interface-specific Enterprise SSDs³ to customers globally as different interfaces help determine the functionalities and performance of Enterprise SSDs.⁴
5. After reviewing the Parties’ submissions and feedback from customers and competitors following a public consultation, CCS concluded that the Proposed Transaction is unlikely to lead to a substantial lessening of competition within the Relevant Market in Singapore for the reasons stated below.

¹ These may be used in personal computers, consumer electronics, cloud computing and datacentre applications; enterprise class solid state drives; and hybrid drives.

² These include Enterprise SSDs, SSDs for consumer-operated devices, as well as removable cards, USB flash drives and embedded flash products for mobile and connected applications and consumer electronics.

³ There are three main interface standards used for Enterprise SSDs, namely: (i) Serial Advanced Technology Attachment (“SATA”); (ii) Serial Attached SCSI (“SAS”) where SCSI stands for small computer system interface; and (iii) Peripheral Component Interconnect Express (“PCIe”).

⁴ The Parties submitted a wider product market definition of all Enterprise Solid State Storage products, which would include at minimum Enterprise SSDs of all interfaces and NAND-based All Flash Arrays (“AFA”)s.

6. In clearing the Proposed Transaction, CCS found that:
 - a. Post-Transaction, there will still be numerous credible competitors to the merged entity, including Samsung, Intel and Toshiba, in the Relevant Market;⁵
 - b. Barriers to entry are relatively low as entry into the Relevant Market in Singapore is not regulated and prospective entrants do not need to be physically present in Singapore; and
 - c. Customers are able to switch to alternative suppliers without substantial switching costs, and some customers are able to procure components to develop their own Enterprise SSDs or sponsor new entrants.
7. On 4 December 2015, the Parties notified CCS of the Proposed Transaction. On 19 January 2016, CCS notified the Parties of its decision within the 30 working days period for a Phase 1 review.
8. More information about the Proposed Transaction, including the Grounds of Decision for the clearance, will be available in due course under “Public Register – Mergers & Acquisitions” on CCS’s website - <http://www.ccs.gov.sg/content/ccs/en/Public-Register-and-Consultation/Public-Register/Mergers-and-Acquisitions.html>.

⁵ Although the post-Transaction market share figures of the Parties cross the indicative thresholds for both SAS interface Enterprise SSDs and PCIe interface Enterprise SSDs, the market can be categorised as that of a bidding market, and hence historical market shares might not be completely reflective of competition in future bids. The number of credible competitors is thus a better reflection of competition in the Relevant Market.

About The Competition Commission of Singapore (CCS)

CCS is a statutory board established under the Competition Act (Chapter 50B) on 1 January 2005 to administer and enforce the Act. It comes under the purview of the Ministry of Trade and Industry. The Act empowers CCS to investigate alleged anti-competitive activities, determine if such activities infringe the Act and impose suitable remedies, directions and financial penalties.

About the Section 54 Prohibition under the Competition Act & Merger Procedures

Section 54 of the Act prohibits mergers that have resulted, or may be expected to result, in a substantial lessening of competition in Singapore.

CCS is generally of the view that competition concerns are unlikely to arise in a merger situation unless:

- The merged entity has/will have a market share of 40% or more; or
- The merged entity has/will have a market share of between 20% to 40% and the post-merger combined market share of the three largest firms is 70% or more

Merging entities are not required to notify CCS of their merger but they should conduct a self-assessment to ascertain if a notification to CCS is necessary. If they are concerned that the merger has infringed, or is likely to infringe, the Act, they should notify their merger to CCS. In such cases, CCS will assess the effect of the merger on competition and decide if the merger has resulted, or is likely to result, in substantial lessening of competition in Singapore. CCS will endeavour to issue a decision within 30 -120 working days, depending on case complexity.

In the event that CCS makes an unfavourable decision, CCS has the power to issue directions to remedy, mitigate or eliminate the adverse effects arising from the merger situation.

For more information, please visit www.ccs.gov.sg

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