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Server DRAM Industry Analysis－4Q19

- In retrospect, the market demand for server DRAM was able to gradually recuperate in the third quarter, in the main part because: 1) the contract price has nearly fallen to a record low; 2) the inventories on the demand side is gradually being restored to a safe level; and 3) the US-China trade war has temporarily stabilized. The orders that had originally been pushed out of 2H19 have gradually returned in 3Q19.

- On the supply and demand sides, the inventory levels have gradually begun to fall. The DRAM suppliers have gradually started to shift a part of their Server DRAM wafer capacity to Mobile DRAM (LPDDR), and the overall supply fulfillment rate, compared with the prior quarter, slid by 18% to 102%.

- As for the outlook for 4Q19, the worldwide server shipments are expected to grow by 2-3% QoQ; however, the overall DRAM purchasing orders in Q4 will be lower. Also, the price decline will continue before the excessive inventories are cleared out. We expect the market's overall price decline to remain close to 3-5% QoQ in both 4Q19 and 1Q20.

- At the supply end, the 32GB RDIMM (which is based on 8Gb) is still the mainstream product. The output of the 16Gb-based products in 2019 is relatively low mainly because the inventory level is still higher than expected. The Korean suppliers have attempted to delay their schedule to mass produce the 16Gb products from 2Q20 to 3Q20; Until then, the products will not take up more than 40% of their overall productions.

- In terms of specification and price gap, up to 85% of the supplies flowing on the market are DDR4 2666Mbps modules in 2Q19. The introduction of AMD's and Intel's new platforms didn't run well this year, which has caused the suppliers to hold back and limit their production plans for the 2933Mbps modules. Despite the fact that there is no price gap between the 2933Mbps and 2666Mbps modules, the 3200Mbps modules, of which the development is still at the DVT and sampling stage, will still be priced with a 5% premium.

- Regarding the market dynamic, a certain level of worldwide shipments have been pushed back due to the US-China trade war in 1H19. However, after 3Q19, the procuring momentum for Server DRAM has grown on a quarterly basis, which suggests that the market will slowly recover. Region-wise, the server demand from the American CSPs has remained stable, and the overall ODM direct server demand growth will remain at around 5-6% YoY in 2019.

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Dec. 3, 2019

Table of Contents

List of Figures

TrendForce & TRI – Research Coverages

- *IC*
- *Memory*
- *Display Panel*
- *LED*
- *Green Energy*
- *Consumer Electronics*
- *Smartphones & Apps*
- *Communication, Broadband & Networking*
- *Innovative Technology*
- *Cloud Computing & IoT*
- *Intelligent Living*
- *AI*
- *Automotive Technology*
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