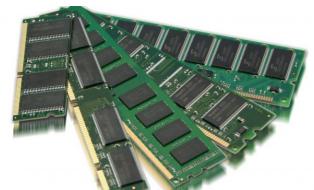
Written by Frederick Douglas 23 January 2019

According to TrendForce division DRAMeXchange DRAM prices are set to decline by nearly -20% Q-o-Q in Q1 2019, as high inventory, weak demand and a pessimistic economic outlook for the medium to long term affect the entire memory industry.



Overall DRAM prices did remain stable in December across both Europe and N. America, with no noticeable change from November. As such, the average price of 8GB DRAM modules remained at \$60, while 4GB modules cost around \$30. However DRAMeXchange predicts January will see a drop of at least -10% M-o-M, before prices fall even further in February and March.

According to the analyst, the biggest problem currently faced by the DRAM market is not the growth of bit output, but the early arrival of the traditional slow season in Q4 2018. As a result, inventory levels grew earlier than expected. Among the major DRAM suppliers, Micron witnessed the biggest price drop in Q4 2018, and in turn the company lowered inventory levels. In comparison, S. Korean suppliers experienced the lowest price fall, and thus lower shipments, leading to "considerable" inventory levels throughout Q1 2019.

For the short term, supply bit growth should remain constantly higher than sales bit growth, so inventory levels will remain rising and prices will keep falling. The price downtrend may even last for over 4 quarters from Q4 2018.

DRAM contract prices may have turned turned downward since H2 2018, but further price competition in the highly concentrated market will only harm the high profitability of suppliers. Thus, DRAM suppliers have scaled CAPEXs for 2019 back to stabilise prices and moderate oversupply. DRAMeXchange points out the distribution of profit across the DRAM supply chain is heavily skewed towards suppliers in 2018, and the rising prices prior to Q4 2018 did not bring "significant" gains for clients in the downstream.

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Most memory module makers did do very well in 2017 thanks to the short-term price surge in the early phase of the 2-year price uptrend, since it allowed the translation of low-price inventory into profit. However, module makers failed to extract profit from the price differences of early 2018, since by then DRAM prices became excessively high. Their profitability became dependent on just the additional processing work.

As DRAM prices have swung downward in H2 2018, module makers carrying high inventories have suffered losses in each successive month. With revenues dropping, many are projecting 2018 profits to be down to around 10% of 2017, and some even expect an annual loss. Going forward, 2019 will be even more challenging to module makers, as well as the rest of the supply chain.

Go <u>A Sharper Price Decline of Nearly 20% Is Expected for 1Q19 in DRAM Market, Says</u> <u>TrendForce</u>