

Market Update :

NAND Flash Market Bulletin

—Jan. 08, 2020—

1. Contract Market:

The main customers in the channel market have been raising their procurement quantities since December last year as they want to build up their inventories to a safer level. Furthermore, memory module makers had for a while suspended providing quotes for their NAND Flash products because their wafer inventories were too low. As a result, some 2D NAND wafers saw a small MoM price increase in their contract prices for December last year. Contract prices of mainstream 3D TLC wafers experienced a larger MoM price hike of more than 10% for the same month. TrendForce currently forecasts that contract prices will continue to rise in January this year.

2. Spot Market:

Spot prices of wafer products have been on an upward trajectory recently due to the anticipation that prices in general will rise every month through 1Q20 as well as the strong demand from the leading memory module makers. The power outage at Samsung's Hwaseong base on December 31 last year has also helped to push up spot prices further. The average spot price of mainstream wafers (i.e., 3D TLC 256Gb) rose by 9.48% from US\$2.447 last week to US\$2.679 this week. For these products, spot prices are expected to keep climbing in the near future as they are still below contract prices.

3. Market Momentum:

Coming into 1Q20, the inventory pressure on NAND Flash suppliers has already lessened considerably because of the higher-than-expected demand from the OEM side and the aggressive inventory build-up by customers in the channel market. Hence, there is a high probability that contract prices of wafer products will continue their ascent during the quarter. As for the whole 2020, TrendForce is optimistic that NAND Flash prices will stay on the uptrend during the year. However, there are two variables that could affect the overall price trend. The first variable is the ongoing US-China trade dispute that still has the potential to generate a lot of uncertainties on the demand side. The second variable is how much progress that the Chinese memory maker YMTC will make during 2H20 with respect to raising its production capacity and yield rate for 64L products. Going forward, TrendForce will be updating its members on the latest developments in the trade dispute and the activities of YMTC, as either variable could determine whether prices will be able to maintain their upward momentum in 2H20 or 4Q20.

TrendForce's View :

With regard to the power outage at Samsung's Hwaseong base on December 31, this incident is not expected to have a significant impact on the overall NAND Flash supply. The UPS systems that safeguard the operation of the fabs within the base immediately kicked in and limited the effect of the outage, which lasted for less than 3 minutes. The only NAND Flash plant in the Hwaseong base is Line 12, and this facility mostly manufactures products based on the 2D NAND architecture rather than the 3D NAND architecture that is now the market mainstream. The operation of Line 12 was suspended temporarily after the power outage, as plant personnel needed to inspect the process equipment. According to the latest update of the incident given by Samsung to its clients, Line 12 already resumed production on January 6 and suffered only a very minor wafer loss. Samsung also stated that the power interruption has not altered its quotes and shipments for NAND Flash products in 1Q20. As Samsung already has a sufficient stockpile of 2D NAND products to address this kind of emergency, TrendForce believes that the influence that the incident has on the entire NAND Flash market is marginal and of short duration. What happened at the Hwaseong base will unlikely produce the same kind of effect as did the more serious power outage at Kioxia's Yokkaichi base in June last year.