

Inside Micron: major goals, and last quarter's progress.

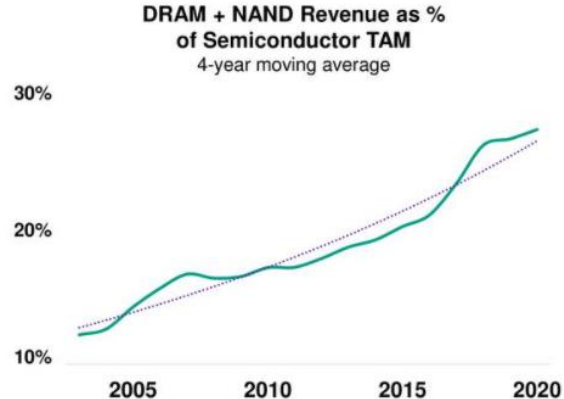
Sep. 30, 2021

Micron's string of excellent quarterly results continues, this time with the company posting another 36% growth rate and hitting the second highest quarterly revenue ever, only trailing the peak quarter of the last memory cycle in 2018. It hit multiple records this quarter, including record revenue in NAND, in its embedded business, and in the mobile, auto, and industrial sectors. Micron repurchased over \$1 billion in shares and reinstated a dividend for the first time since 1996, the ultimate testament to management's confidence in the strength of the new Micron.

Nearly all end markets continue to show strong demand for memory products. Mobile revenues grew 25% due to greater memory content in 5G phones. In the PC market, 2021 is shaping up to be the second year in a row with more than 10% growth in computer sales. Back a decade or two ago, PC and mobile were the main consumers of memory. Today, data centers have become the largest market for memory due to the explosiveness of the cloud, artificial intelligence, and data-intensive workloads. Memory and storage accounted for 30% of the cost of data center servers a few years ago. Today it makes up 40% and is expected to hit 50% in another few years' time. As seen below, memory as a percentage of semiconductor spending has grown significantly over the past couple decades and should continue to grow in the next decade.

DRAM and NAND Revenue

Growing faster than the broader semiconductor industry



Source: WSTS

September 28, 2021



Micron's stock fell a few percentage points after the earnings announcement because management expects slightly lower revenues next quarter than this past quarter (still much higher than a year ago, though). The explanation is that the PC market is expected to pull back on memory purchases in the next few months because PC production is being held up by supply shortages from other non-memory semiconductors. Management expects this pull-back to be relatively short lived. Global supply chain problems are a major reason for the current memory "upcycle" looking a little different than others. Historically, revenues marched up steadily then continuously dropped after one peak. This upcycle has

been a little bumpier and more drawn out due to the world environment the past couple years. Because of supply chain shortages, demand is being pushed out, not peaking as quickly as other upcycles but simply staying “stronger for longer,” in CEO Mehrotra’s words. He also points out that within the memory industry, Micron and its competitors are operating at extremely low inventory levels as they try to meet customers’ demand. Not only will these memory companies need to continue to meet customers’ growing demand in the next year or so, but they will have to replenish their own inventories. For these 2 reasons, Micron is confident that 2022 will be a record-breaking year yet again.