

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

**Sep. 30, 2019**

When Micron announces its quarterly earnings, a big part of the market crowd pays very close attention. Many long-term investors (like Outlook) recognize Micron's strength and extremely promising long-term future. But speculators love to "play" with Micron, because its business operations are very cyclical and, especially right now, because "Micron is at the epicenter of the U.S./China trade war," as one analyst put it. Since as usual the speculators greatly outnumber the investors, the day after each quarterly report almost always shows big spikes or drops in the stock. This time was no exception!

Still operating somewhere near the bottom of its latest cyclical downturn in memory demand and prices, Micron's past quarter reflected sharply lower revenue and earnings from a year ago, but many improved conditions from last quarter. Demand for its 2 products, DRAM and NAND memory, started to pick back up in the last 3 months, as management has predicted for several quarters now. 3 of those improvements were:

- 2019 full fiscal-year sales in its cell phone business only 3% lower than its record 2018. NAND shipments in mobile more than tripled from last year.
- Customer inventory levels have dropped in the data center business, creating increased demand for DRAM. (A perfect example of the cycle working normally.) Micron also saw higher demand for DRAM in its PC, graphics cards, and gaming console business.
- 2019 full year sales in the automotive business actually increased from 2018, despite the pricing downturn and the overall weak auto industry. Revenue increased because of the increased amount of memory content per car. DRAM is becoming more important and more widely used for infotainment and driver-assist systems. Sales for the type of DRAM used in these systems increased 5x from a year ago.

Despite the price of DRAM falling by 30% and NAND falling by around 45% for the full year of 2019, Micron still recorded the second highest annual revenue in company history. This is the single most important fact to take away from last quarter's results. Micron is still facing the hard part of its cycle, and future actions between China and the US may hurt even more, but there are pockets of success in some of its businesses that point to the downturn starting to reverse. Recording the second highest revenue in history proves that today's Micron really is the "new Micron", as management has been telling the market ever since CEO Mehrotra took over in 2016. Mr. Mehrotra's team has improved costs, focused on the right new technologies, and reacted well to any problems the downcycle threw at them.

As we reflect on this quarter's report and the potential bottom of the cycle, Micron's achievements are clear. This is the first cycle that the company has continued to produce positive earnings and free cash flow. The speculating part of the market loves to trade heavily on Micron's news, as we noted above, so last Friday's reaction of -11% wasn't really a surprise to long time Micron followers. Even with "normal speculating behavior," that big plunge was a little bit of a mystery, this time, given the positive facts in the report. Our guess at Outlook is that it happened, in essence, because the positives pointed to slow improvement in the cycle, rather than instantaneous improvement—and because Micron's biggest Chinese customer, Huawei, still hasn't been cleared to purchase many Micron products by the U.S. government.

Those were more than enough reasons for speculators to hammer Micron down. But as the first chart below makes very obvious, even the speculating crowd knows “the new Micron” is a fact, and is far stronger than ever.

### Micron at the Cycle Bottom: 2016 versus 2019

