

Seeking Alpha α

Micron: 2 Things To Know

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| about: [MU](#), includes: [INTC](#)

Disclosure: I am long [\[\[MU\]\]](#), [\[\[INTC\]\]](#). **(More...)**

Micron (MU) reports earnings today after the close. I wish I could tell you what they would be or not be, but I can't. Micron is somewhat unique in that the company produces virtually all types of memory used today: Nor Flash, Nand Flash, DRAM, Mobile DRAM. As such Micron seems to be the supplier to the broad non-mobile, non-PC market. The average selling prices in these smaller, more diverse markets are significantly higher than the truckload commodity parts. That would leave the opportunity for an upside surprise, but I won't hold my breath for that.

There are two Micron emerging products that make me comfortable holding the shares long term.

1. Hybrid Memory Cube. The [HMC](#) is a memory device that is made by stacking memory chips using a technology called Through Silicon Vias. TSV connects the memory chips in the vertical axis. In doing so, the distance the signals must travel is significantly reduced, making the device much faster. Since driving signals over distance is also a big source of power consumption, HMCs are also lower power consuming. Specifically, the HMC has 15 times the bandwidth (speed) than DRAM the way it is used today and the device requires only 30% of the power. These devices have applications in super computers and very high-end servers, and they are not cheap. While standard DRAM chips are dollar parts, the HMC could be hundreds of dollars.

The Micron HMC was [co-developed](#) with Intel (INTC), who really needs such a memory device to keep the performance of its high performance computing devices improving.

2. Phase Change Memory. [PCM](#) is a completely new approach to memory. PCM has the potential to replace both DRAM and Nand Flash memory. PCM is non-volatile, which means the device holds its memory contents when power is off (like Flash, but unlike DRAM). Another advantage of the technology is that, in standby mode, it consumes zero power. It isn't possible to overstate the positive significance of this characteristic to the mobile world. Most of the power consumption in mobile devices is in standby mode. While Nand Flash memory is nearing the end of the trail for further cell shrinkage, PCM has several shrinks left in the technology. Micron owns the key patents for PCM.

Usually these game-changing technologies are nothing more than ideas that never come to market. In this case, Micron is [shipping](#) a 128Mb PCM device today in eight versions. You can buy one today!

These two technologies are probably the reason the Intel/Micron [joint venture](#) was "enhanced" earlier this year to include "emerging memory technologies."

Buy Micron and sleep easy. Buy Intel and collect 4% while sleeping easy.