

Update on Memory Market Crash and Recovery (coming soon)

In previous blogs, we mentioned how and why the current crash happened and why

Normal Cyclical behavior that causes ups and downs based on pricing and perceived shortages. This happens every 4 years regardless of economy, wars, pandemics, ChatGPT, 5G.

- This was exacerbated by customers and suppliers thinking that DRAM and NAND bit growth were going to be higher than long term models of 15% and 25%
- This was exacerbated by PC market returning to normal TAM when PC OEMs had built inventory and assumed 300M+ unit TAM going forward
- This was exacerbated by DC entering their digestion phase.

End result was >12 weeks of EXCESS inventory. Typical downturn is 4-6 weeks excess inventory

This all led to the largest downturn in OVER 10 years. Perhaps the largest downturn ever

- Bits dropped for DRAM and NAND YoY. These is essentially unprecedented
- Prices dropped well below cost. 50% price drop in 9 months
- All memory companies are losing billions in earnings and cash flow.
- Memory Capex has been cut by 50%

Memory will grow again, the market cycle will return up as it always does

The NEW issues will be that once we eliminate the perception of excessive inventory (real or not)

- We need to get back to the long term bit growth curves
- Capex has been cut and pushed out. wafer starts were cut
- Pricing needs to increase 50% to break even and 100% to get us to "good margins" where we can afford growth. We have not been this far below cost in price on both NAND and DRAM for over 10 years

This means we will have a shortage overall, wrong part at wrong time (DDR4/5, Mobile vs SSD NAND) and decisions made by suppliers on which markets to support and at what price

When?

- The CQ1 numbers looked bad.... real bad
- CQ2 numbers look flat on bit growth/bad on ASP, this should be the bottom.
- CQ3 should be flat with some customers starting to question whether then can get supply
- During CQ4 we will eliminate the perception of excess inventory (Perception matters). Then the correction to get to an acceptable price will begin.

We have updates on how to track this on a weekly basis and what the new bit and price growth will be. We also have data on what will prevent this in the future.

The next downturn will be in 2026 and everyone will be surprised. but it does not need to be as bad as this downturn

Updated ROUGH timeline

