With all the hype related to the downturn in compute and storage and the hype for future growth, I want to review what the breakdown looks like today and what it will look like in 2025

Couple introductions for our analysis

We focus on EBs shipped. Units are not useful other than to look at why EBs shifted.

As the numbers will show, there are large differences between SSD and HDD. As a result, the key is to focus on high level view, not the details. We have data on details as well but it is more difficult to extract from company reports.

Enterprise/Cloud/Hyperscale ("datacenter", non-client) is the market to focus on. HDDs are becoming niche market players in other markets. SSD have the best growth potential in datacenter. In this market servers typically have HDDs and SSDs attached.... but they exist at about a 9:1 ratio and there is no drive for widespread HDD replacement.

HDD total EBs are shown. The data indicates that 85% of the HDD bits are Nearline (Datacenter).

eSSD is all datacenter SSDs (non-client)

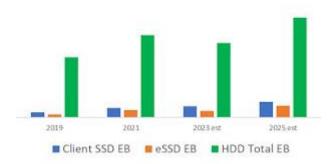
Spoiler Alert: SSDs are growing. But they are nowhere near to becoming dominant overall. SSD EBs will not out-ship HDD EBs in the next 10 years. SSDs are dominant in the client space, but are a fraction of the bits shipped in the Datacenter space.

In the period from 2019-2025. The <u>INCREASE</u> in HDD bits is higher than the <u>TOTAL</u> bits shipped for ALL SSDs. HDD is not going away ... but is will be 90% nearline by then

2023 will be a downturn in total for all storage

2025 will be a peak and show the return to growth

SSD and HDD Capacity Shipments



Source: TrendFocus, Trendforce, Statista, MKW Ventures

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