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DRAM Market Deflates, Cyclical Downturn Looms

Monthly DRAM sales drop as end-users adjust inventory levels; consumer spending succumbs to inflation/recession pressure.

A vigorous DRAM market upturn that started in the last half of 2020 and continued through May 2022 is, by all accounts, over, according to data released in IC Insights' August *3Q Update to The McClean Report 2022*. After posting its highest monthly sales volume in more than two years in May, DRAM sales tumbled 36% in June and another 21% in July. The market collapse was steep and swift—so much so that July's DRAM market was about half the size it was in May (Figure 1). Concern over soaring inflation and recession has cut into consumer spending on new smartphones, computers, TVs, and other electronic goods. In turn, system manufacturers have scaled back new DRAM orders, citing the need to burn through existing inventory that they have amassed.

MORE INFORMATION CONTACT

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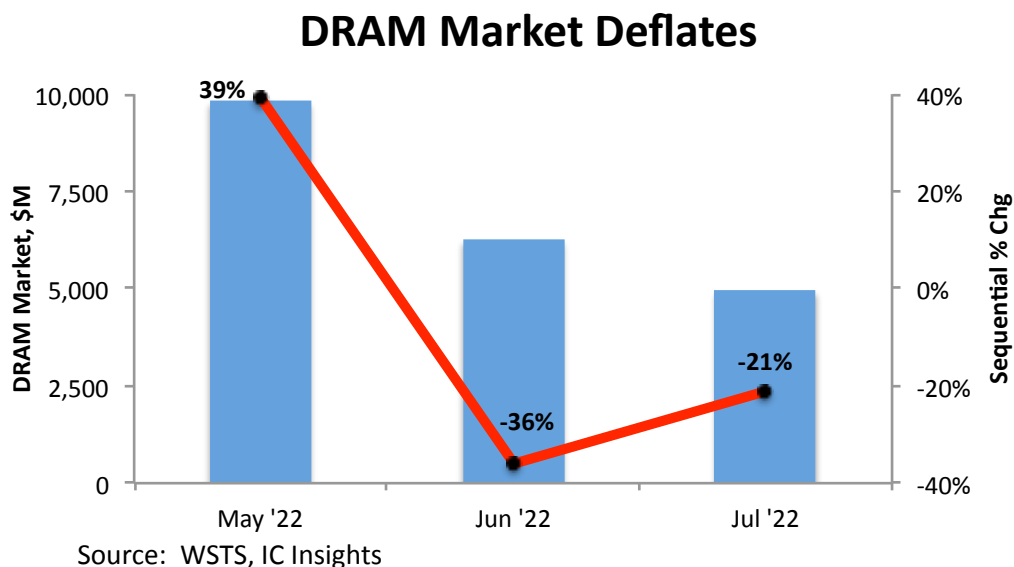


Figure 1

The sharp decline in DRAM sales seen in June and July might have been dismissed as a short-term anomaly had it not been for comments from DRAM suppliers about the developing market. For example,

- Micron guided fiscal 4Q sales results (ending August) of -21%. Micron is scheduled to report its fourth quarter and full-year sales results on September 29, 2022. Their results will likely set the tone for the rest of the industry for the balance of this year.
- Nanya's August 2022 DRAM sales, when expressed in U.S. dollars, were down 53% from its March DRAM sales.
- Kyung Kye-hyun, Samsung's co-CEO and head of its semiconductor unit said, "The second half of this year looks bad, and as of now, next year doesn't really seem to show a clear momentum for much improvement."

Industry veterans know that when the DRAM market starts on a cyclical downturn, it usually falls hard and fast. Figure 2 shows several DRAM market collapses since the year 2000. Each downturn spanned at least 5 quarters and in each case, resulted in the DRAM market falling by at least 41%. Given the current outlook, IC Insights estimates the DRAM market will be 38% smaller in 3Q22 than when it last peaked in 3Q21. Moreover, IC Insights also anticipates more downside for the DRAM market through 4Q22 and into early next year.

DRAM Market Downturns—Peak to Trough

Date	Peak, \$M	Trough, \$M	Decline	# Qtrs	Comments
3Q00-3Q01	\$8,873	\$1,924	-78%	5	Dot.com bubble bursts
4Q06-1Q08	\$10,887	\$6,299	-42%	6	Financial meltdown
3Q10-1Q12	\$10,615	\$6,260	-41%	7	Recession blues
3Q18-1Q20	\$28,244	\$14,790	-48%	7	Excess capacity, server market slows, Covid-19 outbreak
3Q21-3Q22 (Est)	\$26,043	\$16,150	-38%	≥5 ?	Rising interest rates, recession, post-Covid rebound stalls

Source: IC Insights

Denotes duration of cyclical downturn before sustained recovery.

Figure 2

Report Details: *The 2022 McClean Report*

The McClean Report—A Complete Analysis and Forecast of the Semiconductor Industry, is now available. A subscription to *The McClean Report* service includes the January *Semiconductor Industry Flash Report*, which provides clients with IC Insights' initial overview and forecast of the semiconductor industry for this year through 2026. In addition, the third of four *Quarterly Updates* to the report was released in August, with one additional *Quarterly Update* to be released in November of this year. An individual user license to the 2022 edition of *The McClean Report* is available for \$5,390 and a multi-user worldwide corporate license is available for \$8,590. The Internet access password and the information accessible to download will be available through November 2022.

<https://www.icinsights.com/services/mcclean-report/pricing-order-forms/>

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