TPC Semiconductor Market Survey

August/September 2024

August/September '24 Survey Summary

Survey Date: 9/13-16 Respondents: ~6,200 Location: Worldwide (~80% Asia) Who: Active Electronics Industry Professionals Response Composition (multiple choices): Industrial 33%, Auto 20%, Comm 24%, Computing 24%, Mobile 20%, Data Ctr 19%, Other 17%

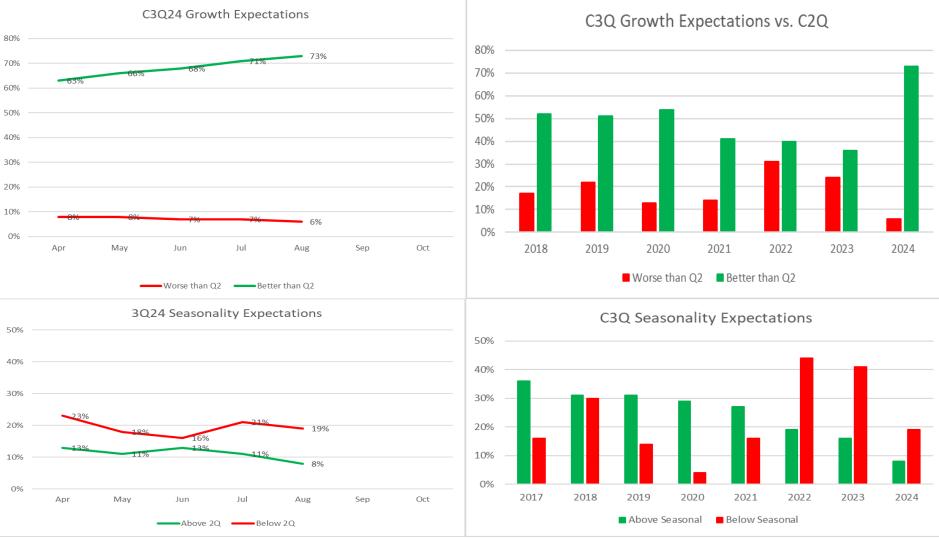
- Our latest monthly survey shows continued positive trends in C3Q, while C4Q continues to show weaker than seasonal expectations. Some of the more positive indicators continue to be the C3Q booking's outlook and end demand outlook being at a 6-year high as well as C4Q bookings outlook being significantly above the past 7 years data.
- The above continues to point to what we believe is a recovery although slower, as we head into C4Q and early CY25.
- Our C3Q24 outlook (slide 3) showed improvement vs. last month. This month, 73% see it as better vs. 71% last month with the seasonality outlook also improved. The bookings outlook for C3Q remained roughly the same vs. last month's outlook; but remained much stronger compared to previous years.
- Our C4Q24 outlook (slide 4) showed a weakening outlook vs. last month. This month, 9% see it as better vs. 12% last month with the seasonality outlook also weaker. The bookings outlook for C4Q was also weaker vs. last month's outlook; but remained stronger compared to previous years.
- Cancellation/reschedules expectations (slide 7) remained at neutral levels. We believe this is neither positive nor negative as inventory levels return to more nominal levels.
- Most key product inventories and availability (slides 8 & 9) remained in the average range. However, DRAM availability has continued to worsen over the past 4 months.
- Inventory levels (slide 10) showed little changes for C3Q and C4Q.
- Pricing trends (slide 11) are starting to stabilize and in some instances starting to increase in some areas (high end MCU's).

Survey Question Definitions

- Outlook
 - Do you anticipate end demand (billings) for the current quarter better, worse or the same vs. the previous quarter. Same question for the upcoming quarter.
- Seasonality
 - Do you see end demand (billings) for the current quarter seasonally better, worse or the same vs. the same quarter in previous years. Same question for the upcoming quarter.
- Bookings
 - Do you anticipate bookings for the current quarter better, worse or the same vs. the previous quarter. Same question for the upcoming quarter.
- Inventory
 - Do you see inventory for the current quarter better, worse or the same vs.
 the previous quarter. Same question for the upcoming quarter.

C3Q24 Outlook

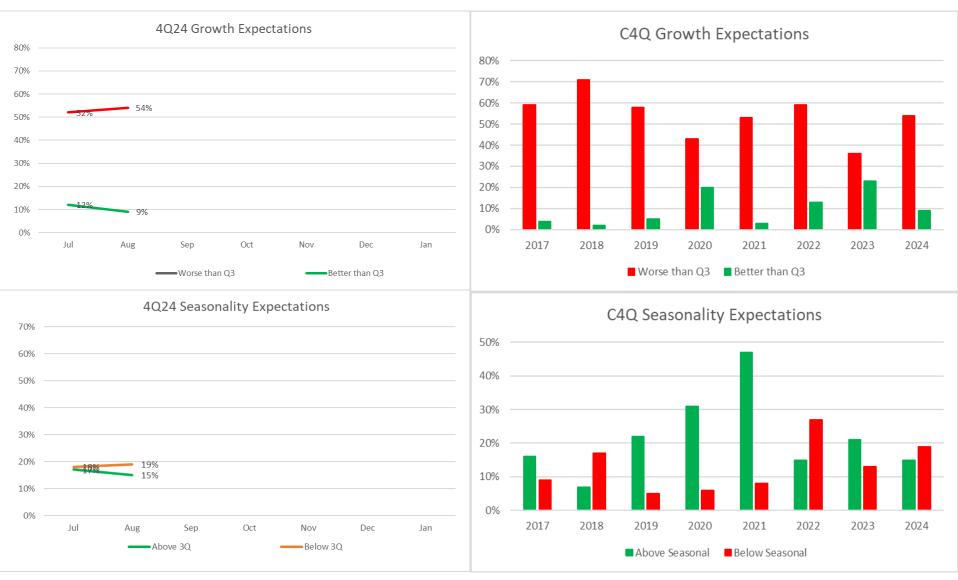
C3Q outlook continues to show growth expectations exceeding the previous 6 years



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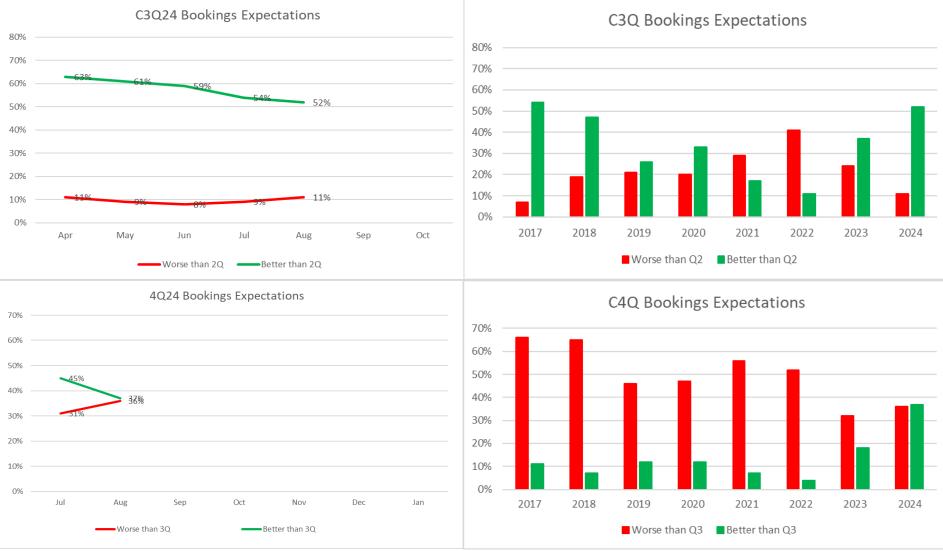
C4Q24 Outlook

C4Q's outlook has weakened over the last 2 months with seasonality weaker than the past 2 years.



Bookings Outlook

C3Q outlook shows bookings outlook at 7-year highs compared to previous Q3's; with C4Q also showing better trends compared to previous years.

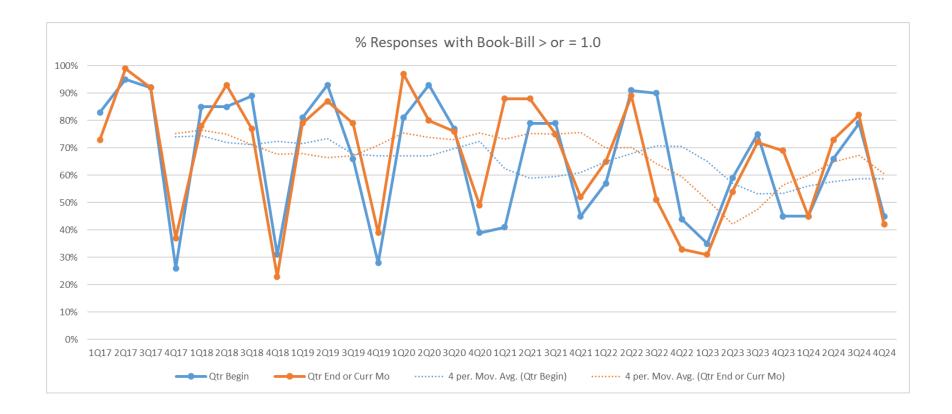


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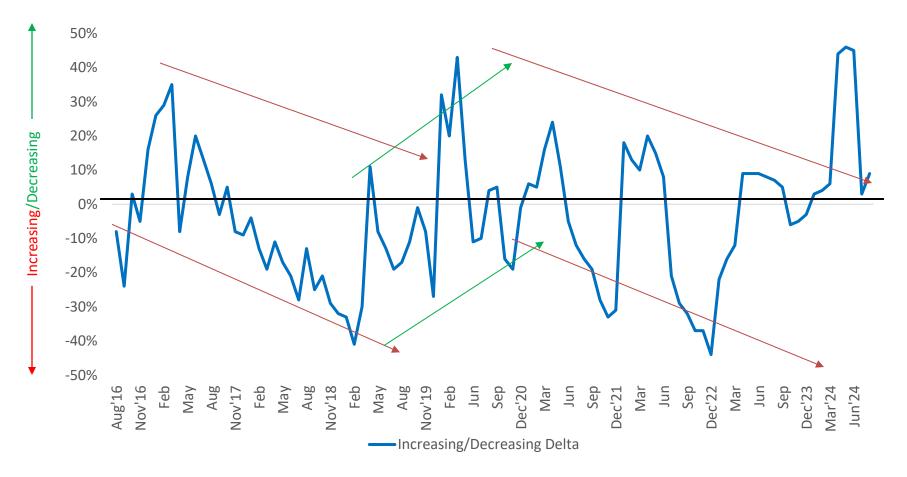
Book to Bill History & Trends

(Calendar quarters)



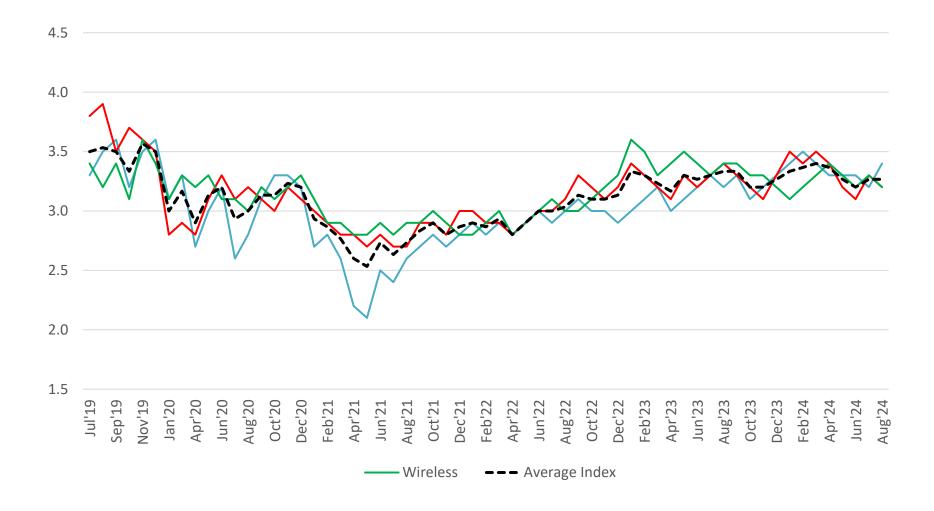
Backlog Order Push Outs/Cancellations vs. 30 Days Ago

(Delta between increasing and decreasing cancellations – Higher % is more positive) Cancellation/reschedules expectations have decreased to their lowest level in 7 years over the previous 3 months indicating that inventory depletion has reached final stages with the latest month showing stabilization.



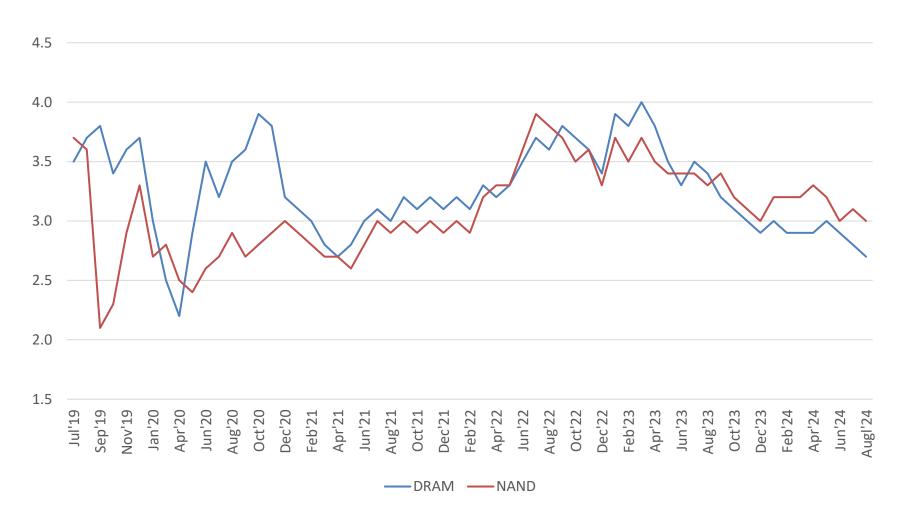
Component Inventory Status (x-Memory)

(Using a scale of 1 to 5 with 1 being extremely low inventory, 3 being the normal amount, and 5 being extremely high; how do you view inventory levels for the following products?)



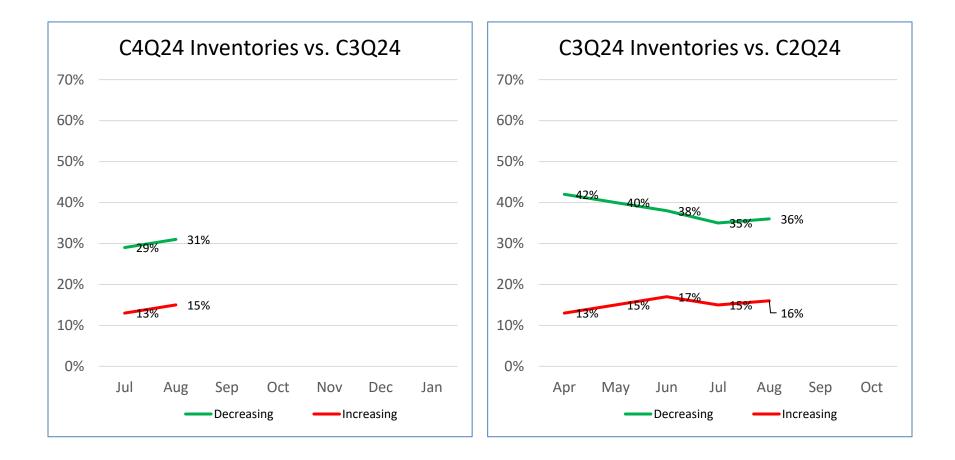
Memory Inventory Status

(Using a scale of 1 to 5 with 1 being extremely low inventory, 3 being the normal amount, and 5 being extremely high; how do you view inventory levels for the following memory products?)



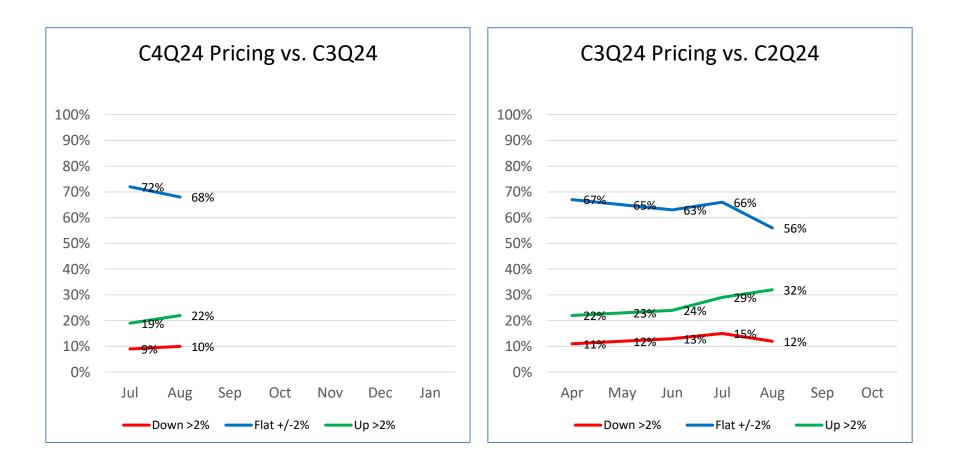
Q/Q Inventory Growth

Inventory levels showed little changes for C3Q and C4Q.



Q/Q Pricing Trends

Pricing is starting to stabilize and, in some instances, starting to increase in some areas (high end MCU's and some analog).



Vertical Outlook

Auto continues to move sideways and industrial weaken, but we are seeing consumer starting to recover.

