TPC Semiconductor Market Survey

October/November 2024

October/November '24 Survey Summary

Survey Date: 11/13-20 Respondents: ~8,500 Location: Worldwide (~80% Asia) Who: Active Electronics Industry Professionals Response Composition (multiple choices): Industrial 35%, Auto 20%, Comm 19%, Computing 23%, Mobile 22%, Data Ctr 19%, Other 16%

- Our latest monthly survey shows C3Q finishing in line with last month's survey. However, C4Q continues to show weaker expectations. C4Q bookings also continues to weaken but is still significantly above the past 7 years Q4 data.
- The survey's inventory responses also still show issues. Our initial C1Q25 outlook also shows weaker than seasonal demand and bookings. We believe all of this continues to point to a weak and delayed recovery.
- Our C3Q24 outlook (slide 4) showed little change vs. last month. This month, 76% see it as better vs. 75% last month. 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 5) showed a weakening outlook vs. last month. This month, 4% see it as better vs. 5% 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 9) remained close to neutral levels. We believe this is neither positive nor negative as inventory levels SLOWLY return to more nominal levels.
- Most key product inventories and availability (slides 10 &11) remained in the average range. The exception is DRAM where HBM continues to impact lead-times.
- Inventory levels (slide 12) showed increases for C3Q and C4Q.
- Pricing trends (slide 13) are starting to weaken for Q4 and looking into Q1 driven by continued industry malaise.

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.

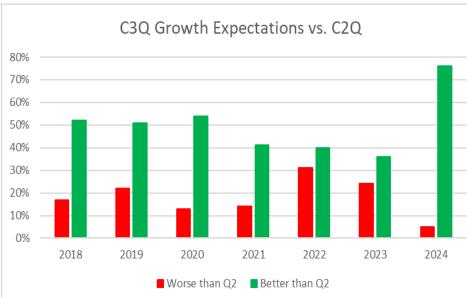
Inventory

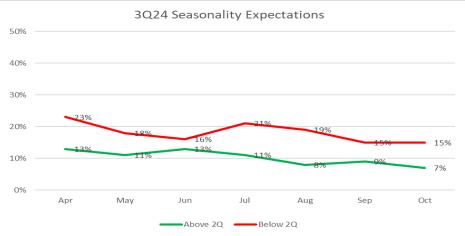
Do you see inventory for the current quarter better, worse or the same vs.
the previous quarter. Same question for the upcoming quarter.

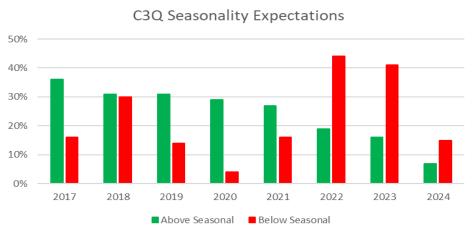
C3Q24 Outlook

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



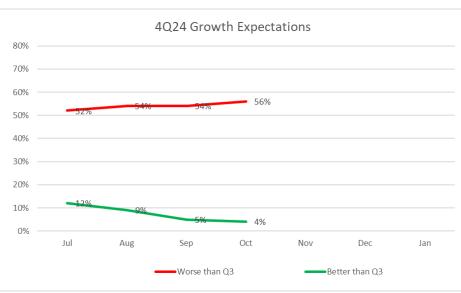




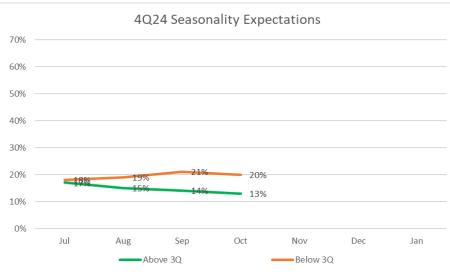


C4Q24 Outlook

C4Q's outlook continues to weaken over the last 3 months.



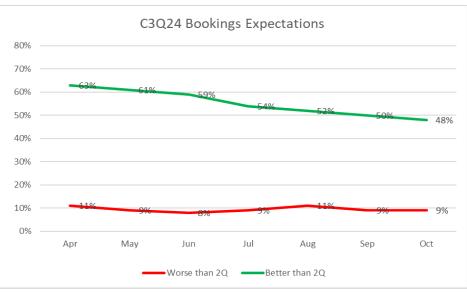




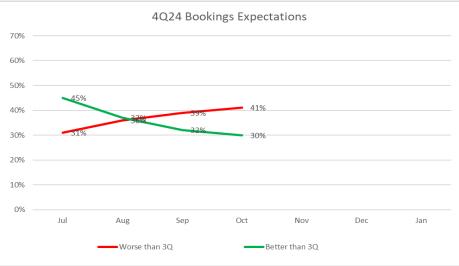


Bookings Outlook

Booking outlook has continued to weaken over the last 3 months.



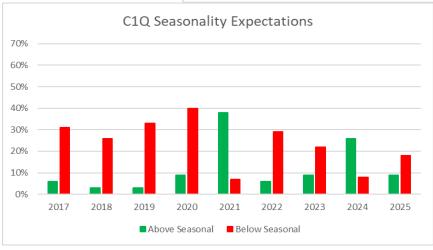






C1Q25 Initial Outlook

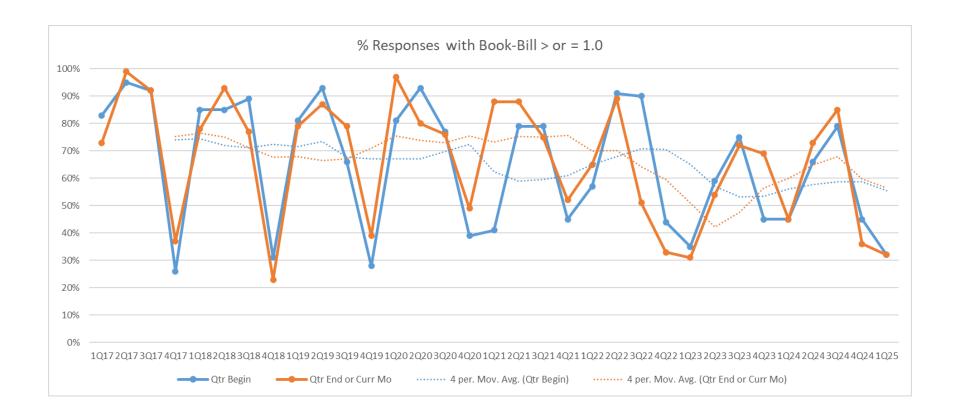






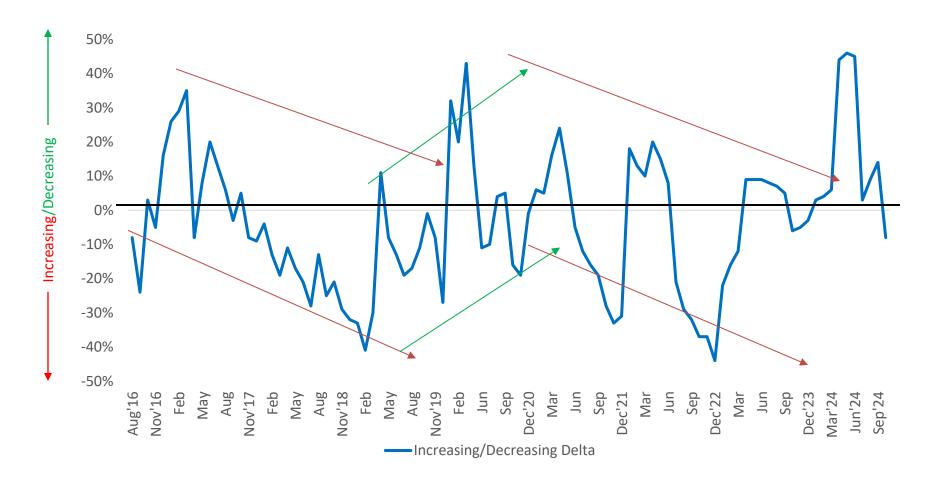
Book to Bill History & Trends

(Calendar quarters)



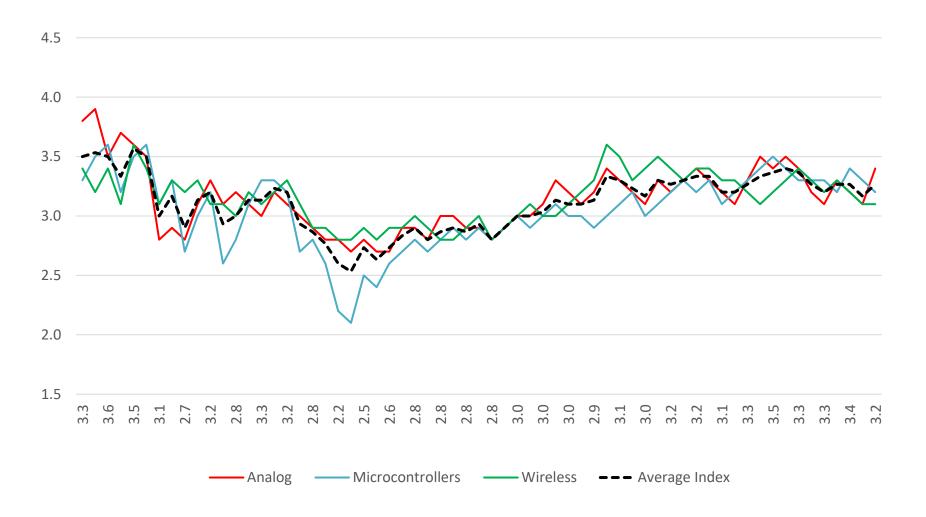
Backlog Order Push Outs/Cancellations vs. 30 Days Ago

(Delta between increasing and decreasing cancellations – Higher % is more positive)



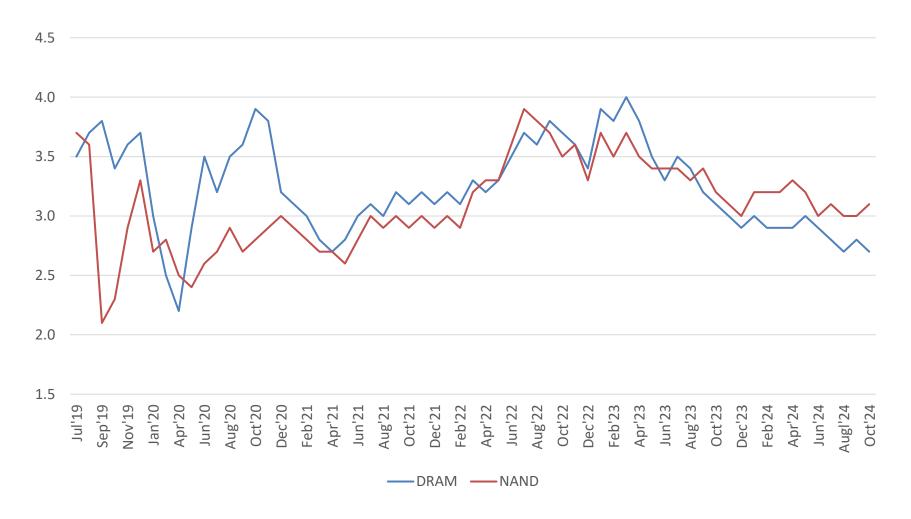
Component Inventory Status (x-Memory)

(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?)



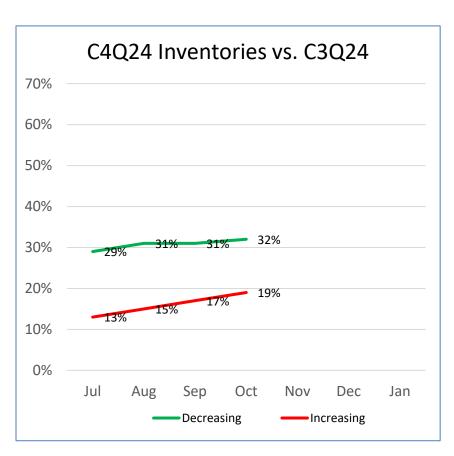
Memory Inventory Status

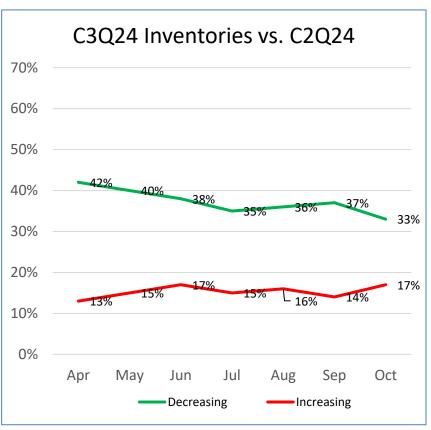
(Using a scale of 1 to 5 with 1 being extremely low inventory, 3 being the normal amount, and 5 being extremely high; how do you view inventory levels for the following memory products?)



Q/Q Inventory Growth

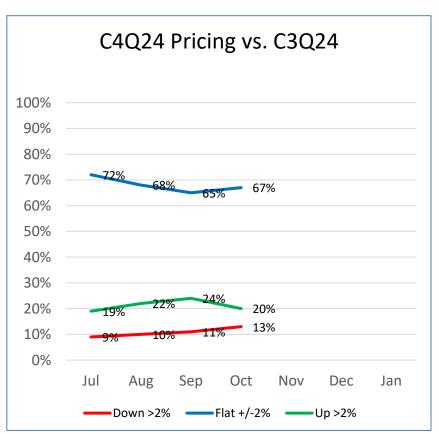
Inventory levels showed little changes for C3Q and C4Q.

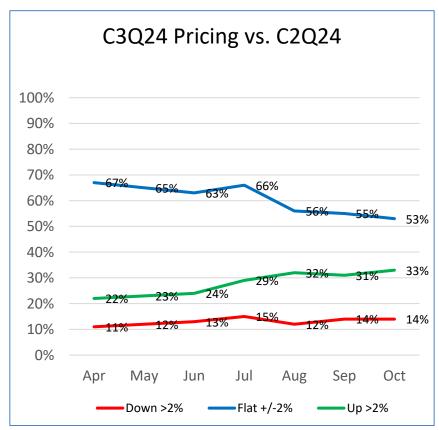




Q/Q Pricing Trends

Pricing is starting to weaken for Q4 and looking into Q1 driven by continued industry malaise.





Vertical Outlook

Industrial continues to weaken over the past year. Consumer continues to rebound.

