



TPC Semiconductor Market Survey

September 14, 2021

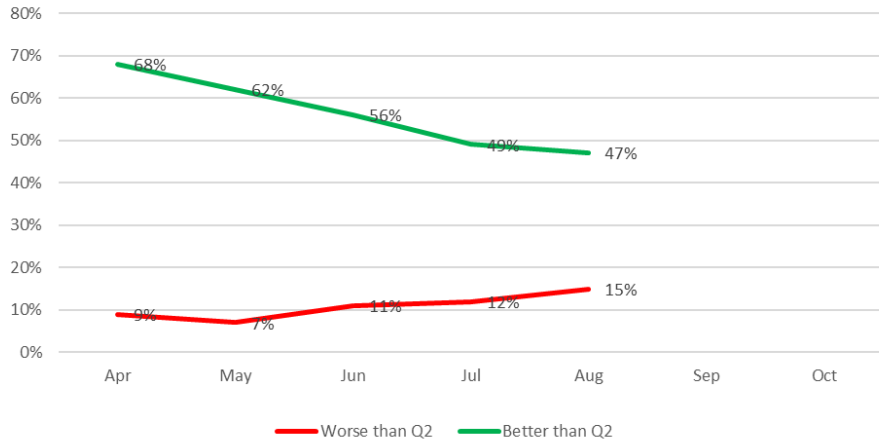
TPC August 2021 Survey Summary

*Survey Date: 9/3-9/7 Respondents: ~9,500 Location: Worldwide (~80% Asia) Who: Active Electronics Industry Professionals
Response Composition (multiple choices): Industrial 39%, Auto 20%, Comm 20%, Computing 20%, Mobile 32%, Data Ctr 18%, Other 15%*

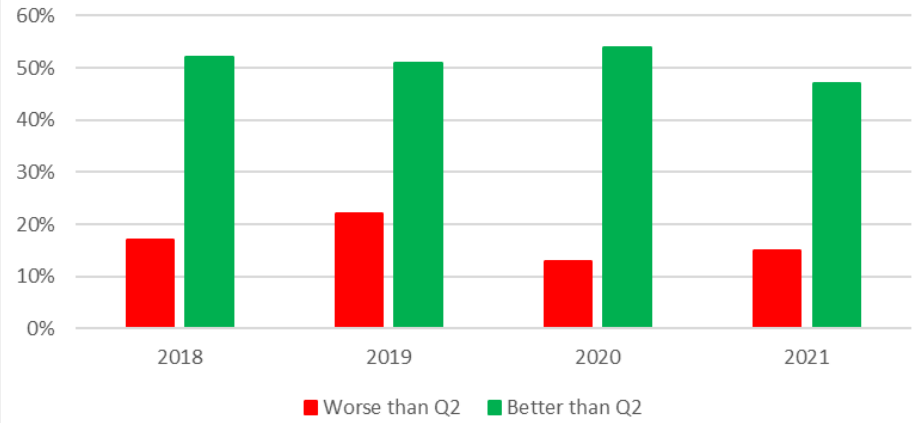
- We recently completed our monthly survey (~9,500 respondents) which saw decreases in both C3Q21 and C4Q21 growth as well as weakening seasonality expectations. The bookings outlook for C3Q and C4Q also declined vs. last month.
- Based on the past 2 months of more negative growth outlook, one might look at the data as an early indicator of a rolling over in demand. However, we point to the majority of responses still seeing growth in both C3Q as well as the 2nd half seasonality expectations being higher than in previous years. Finally, our “ground level” checks still point to robust demand with very little inventory growth.
- The survey showed a growth outlook for C3Q21 weakening vs. last month with 47% expecting q/q growth vs. 49% previously and 15% see it as weaker vs. 12% last month. The C4Q outlook decreased with only 5% expecting q/q growth vs. 7% previously; while 54% see it as weaker vs. 51% last month.
- The survey showed a decrease in bookings outlook for C3Q21 with 16% expecting improving bookings vs. C2Q compared to 18% last month; while 31% now expect weaker bookings vs. 28% last month. Bookings outlook for C4Q21 also weakened with 6% expecting improving bookings vs. C3Q compared to 9% last month; while 61% now expect weaker bookings vs. 57% last month. For reference, general WW book to bills are still in the 1.10-1.25 range.
- Backlog cancellation expectations (slide 7) has shown increases in cancellations over the past 3 months. Inventories (slide 9) has also shown a steady increase for both C3Q and C4Q.
- Availability of DRAM and NAND weakened slightly, while capacitors and microcontrollers improved.
- Pricing has been on a trend of increasing due to tighter product availability, with C3Q responses indicating continued increases in pricing.

Q/Q Demand Growth Outlook

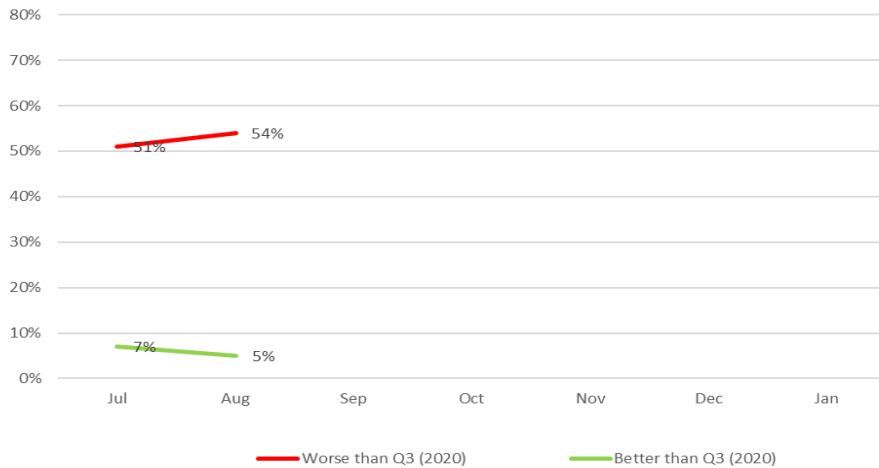
C3Q21 Growth Expectations



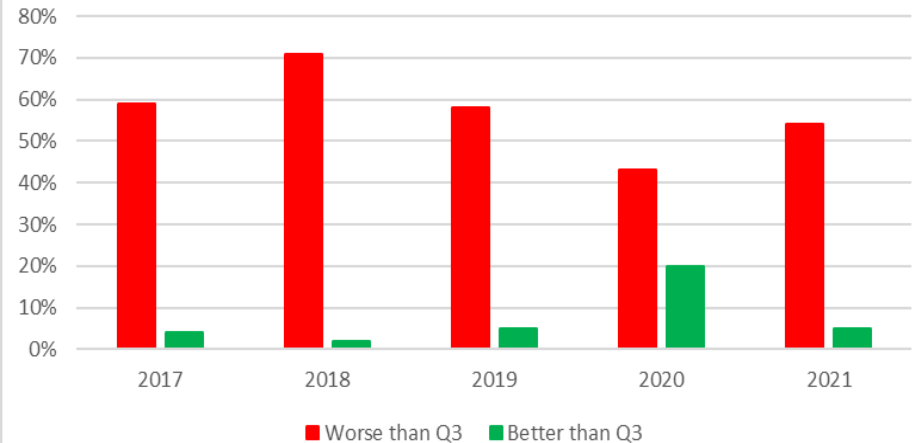
C3Q Growth Expectations vs. C2Q



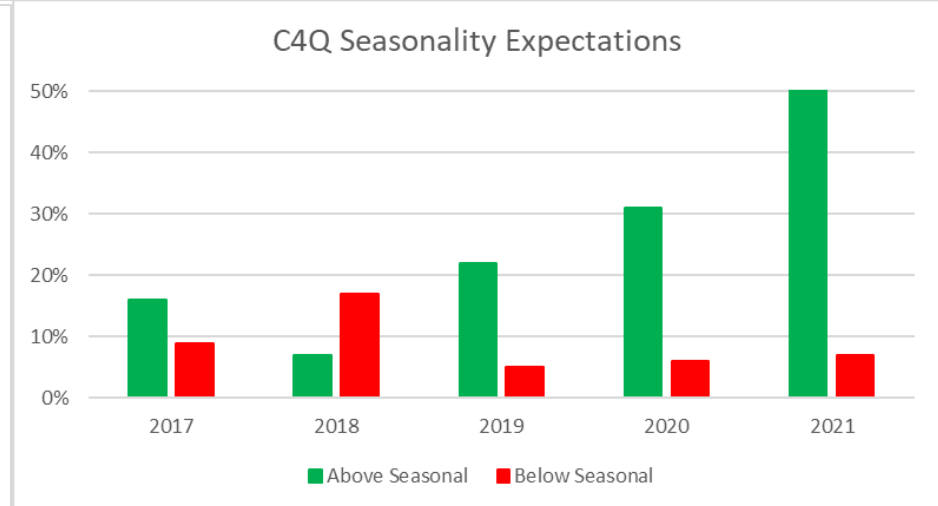
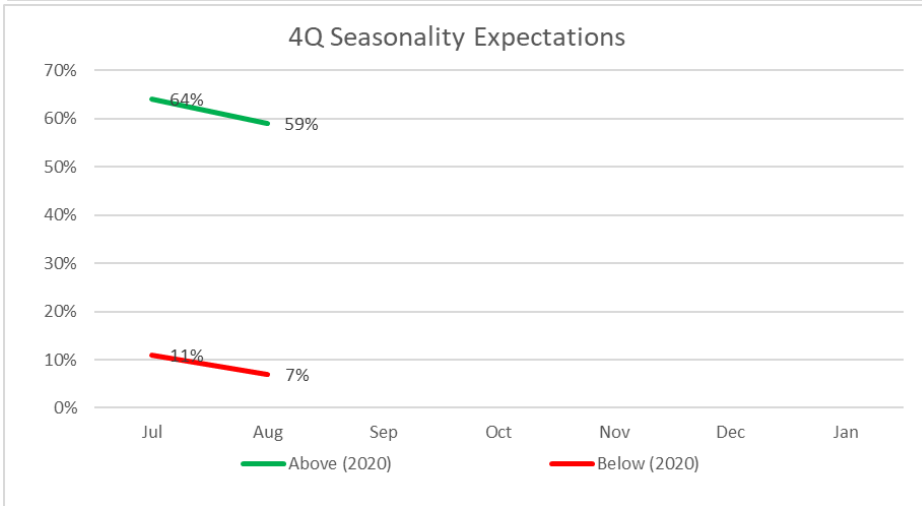
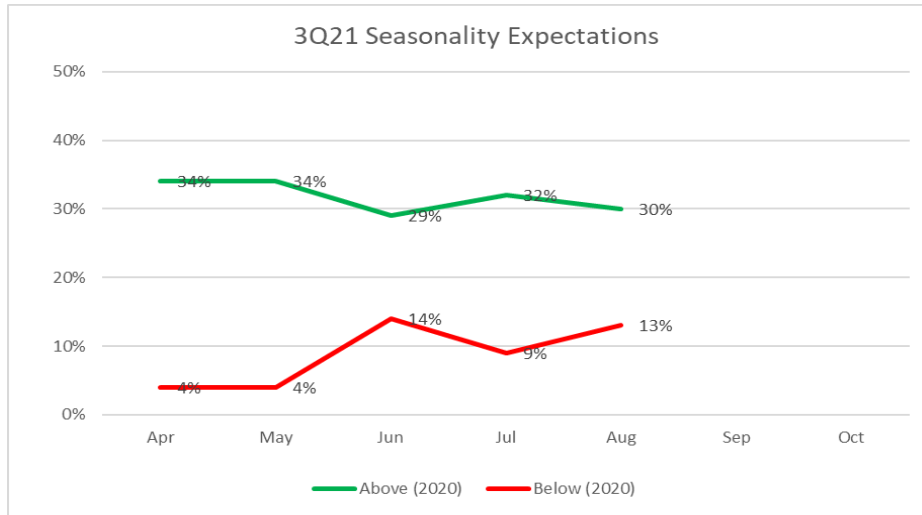
4Q Growth Expectations



C4Q Growth Expectations vs. C3Q

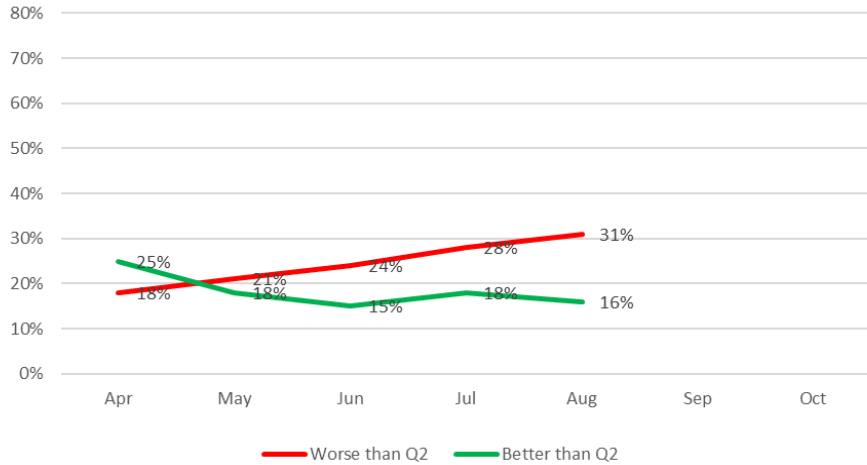


Q/Q Seasonality Expectations

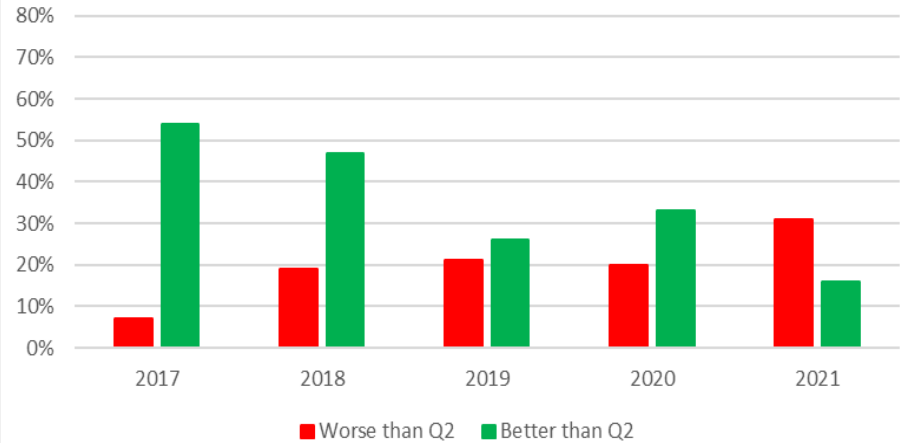


Q/Q Bookings Growth Expectations

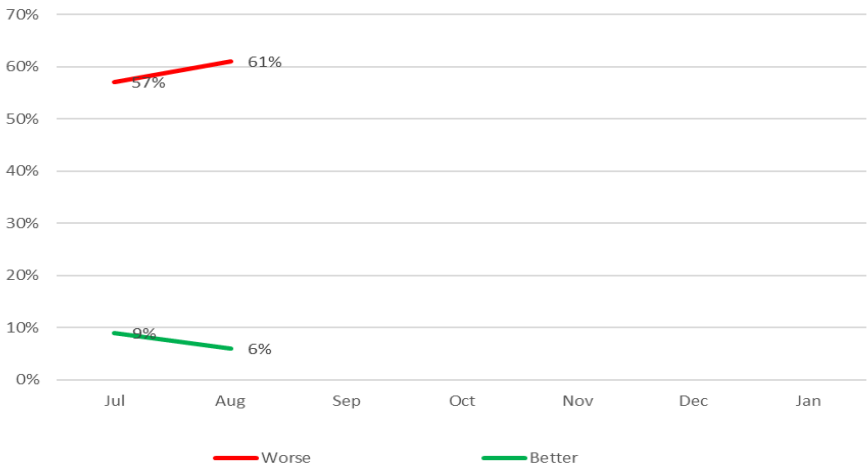
C3Q21 Bookings Expectations



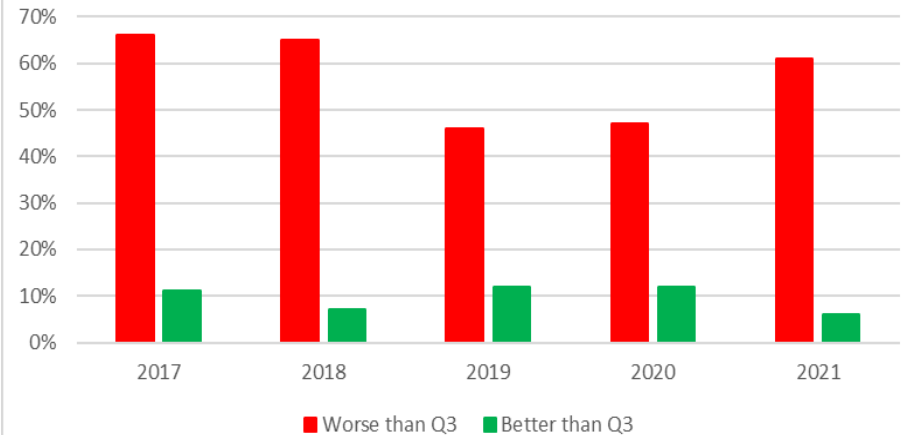
C3Q Bookings Expectations



4Q Bookings Expectations

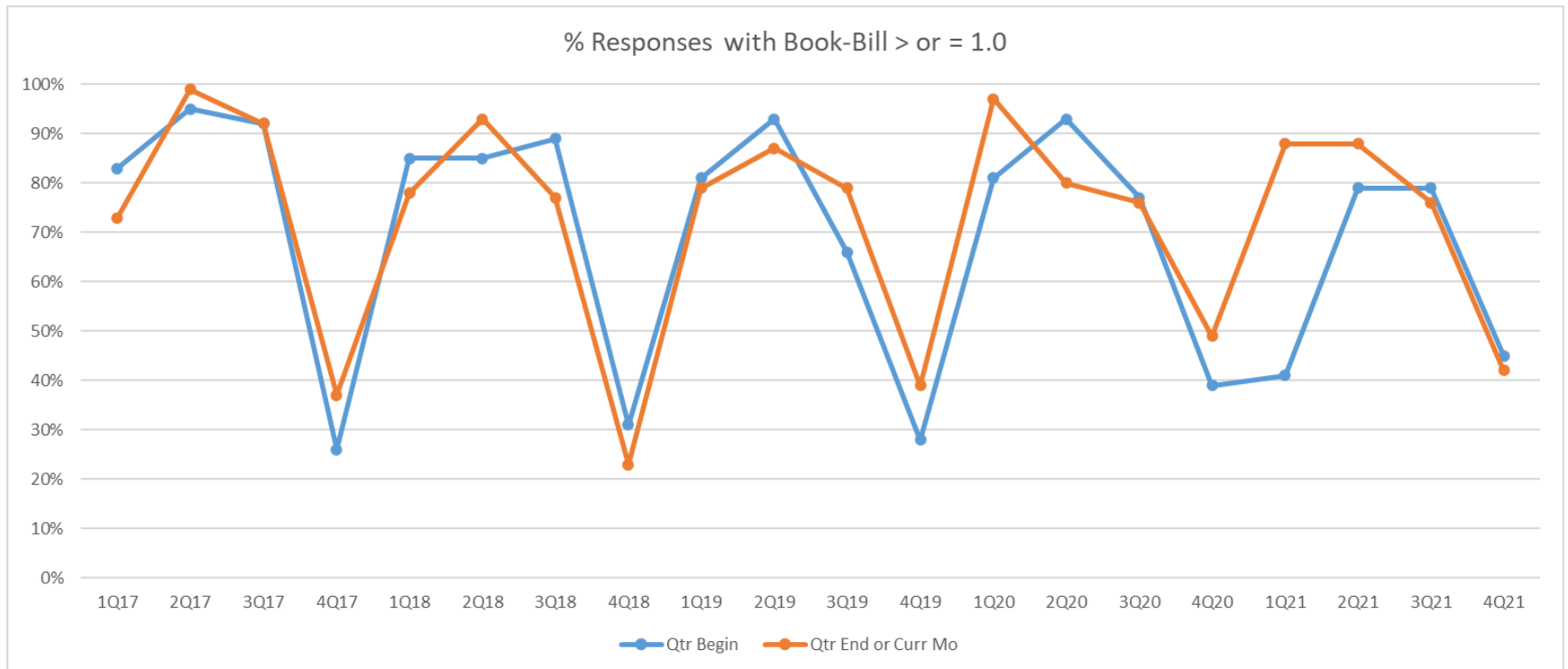


C4Q Bookings Expectations Seasonality



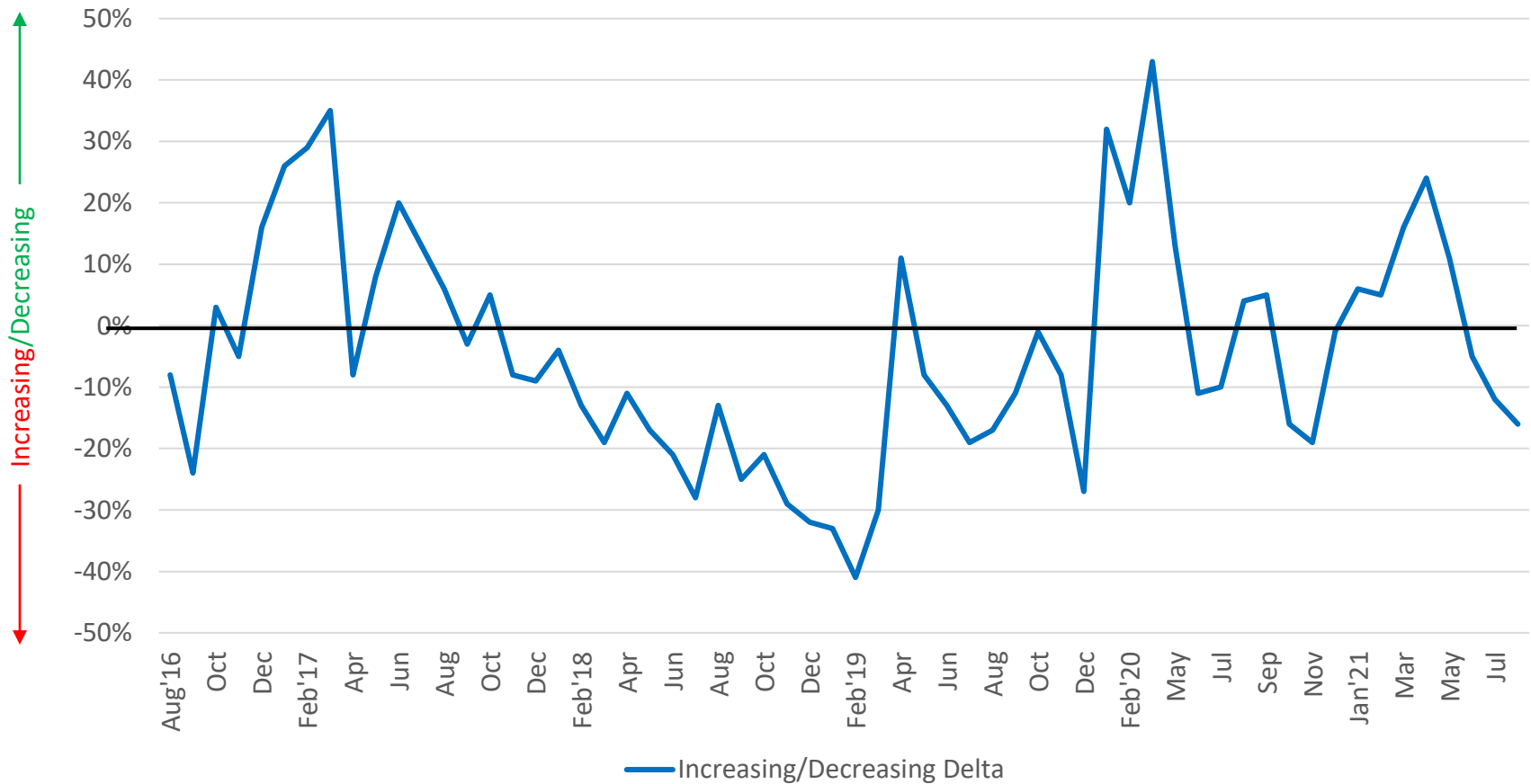
Book to Bill History & Trends

(Calendar quarters)



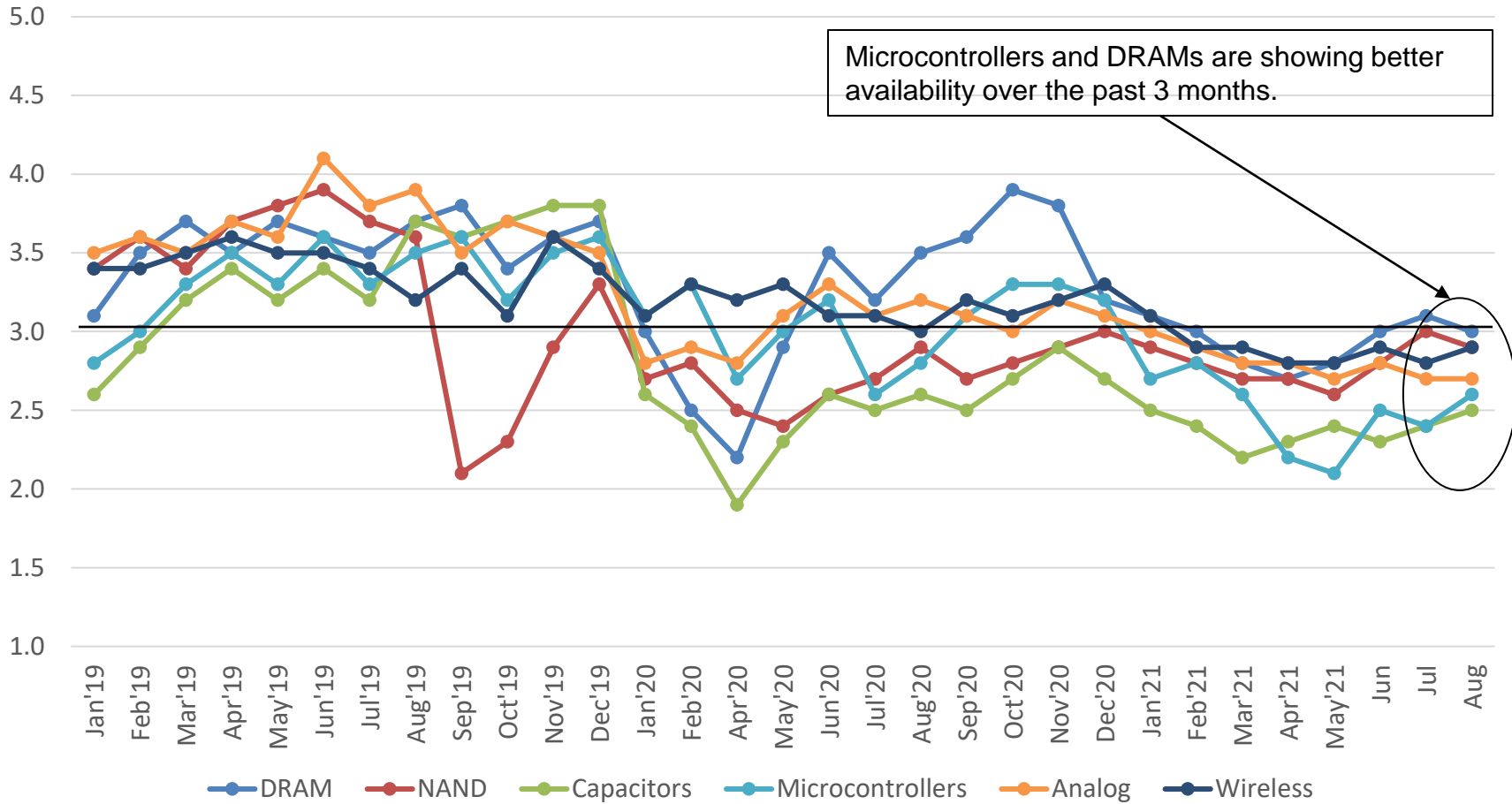
Backlog Order Cancellations vs. 30 Days Ago

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



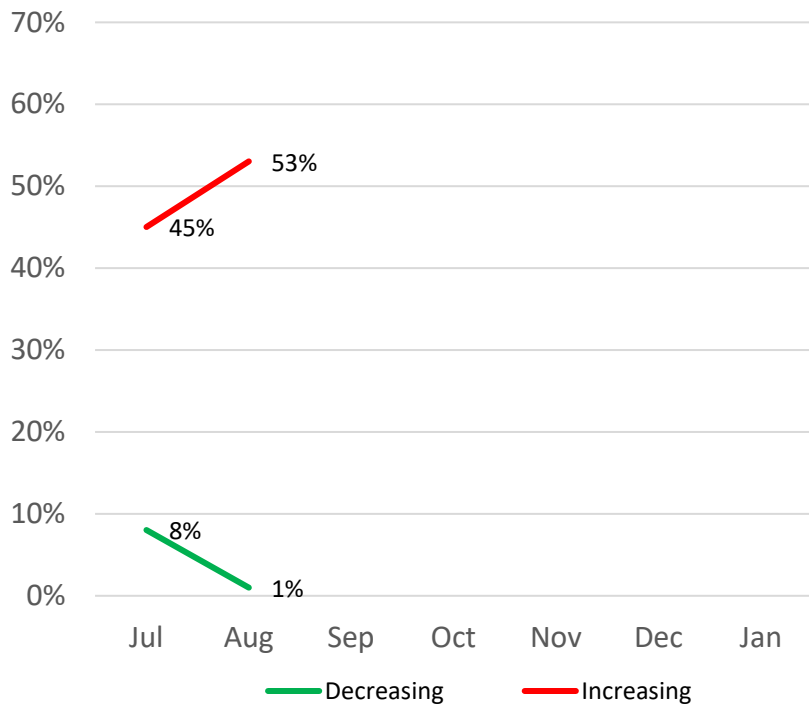
Inventory Status

(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 products?)

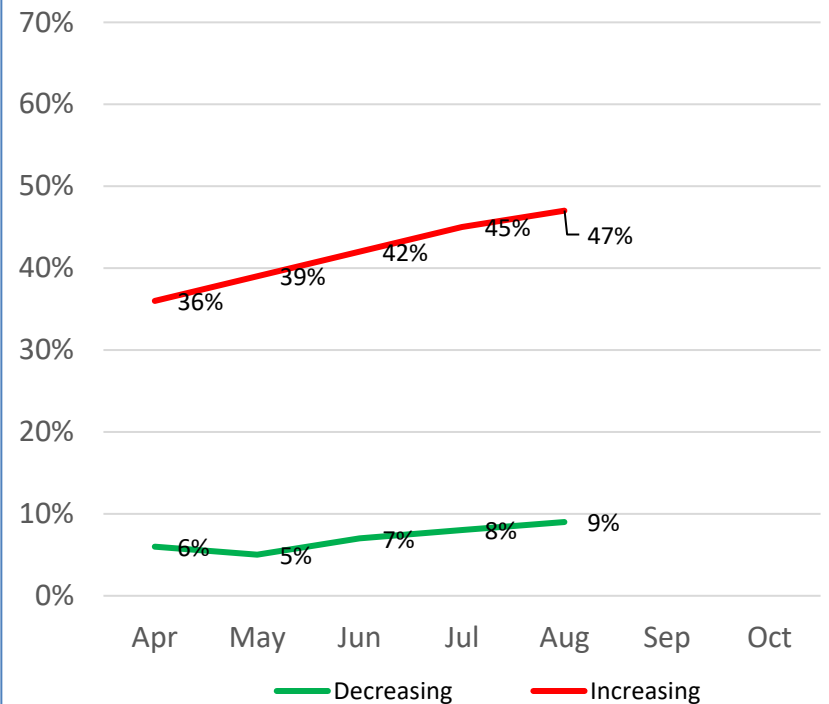


Q/Q Inventory Growth

C4Q21 Inventories vs. C3Q21

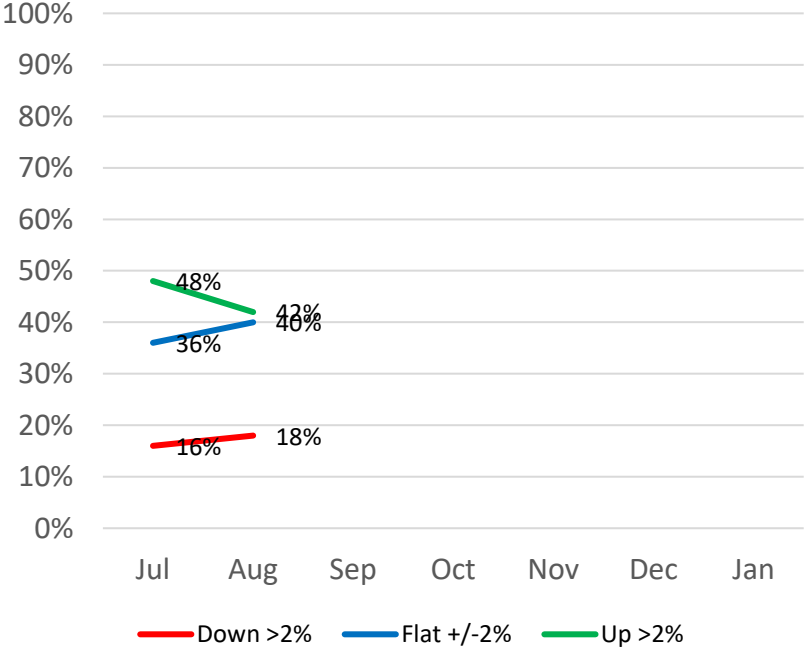


C3Q21 Inventories vs. C2Q21

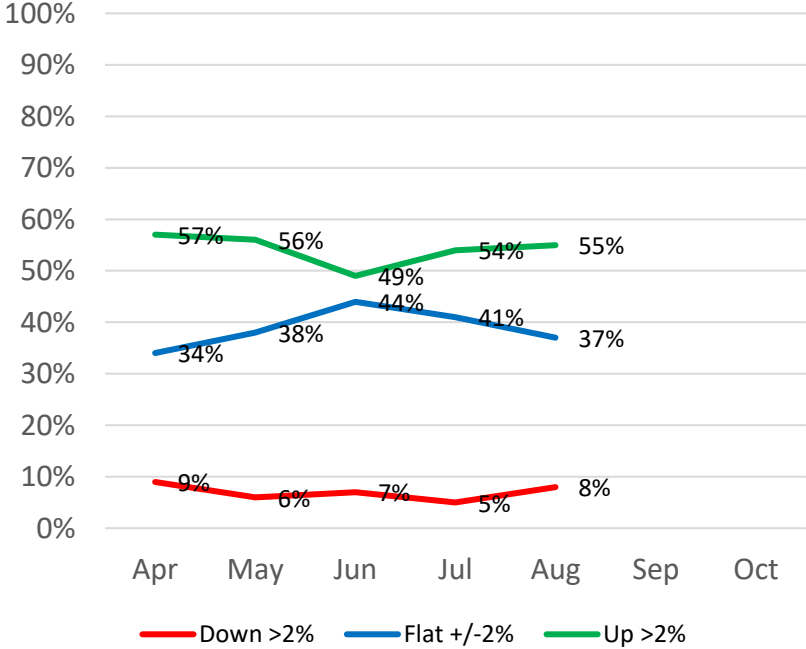


Q/Q Pricing Trends

C4Q21 Pricing vs. C3Q21



C3Q21 Pricing vs. C2Q21



Vertical Outlook

The outlook for Communications continues to be above previous years while Auto continues to erode

