



TPC Semiconductor Market Survey

August 6, 2020

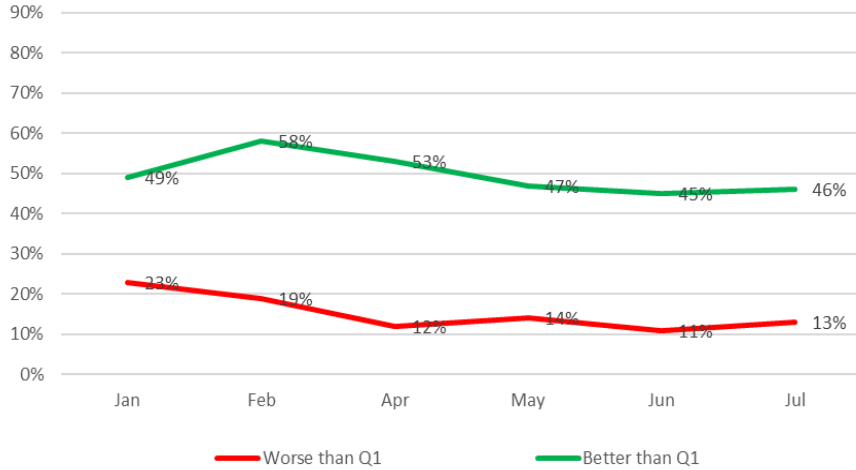
TPC July 2020 Survey Summary

*Survey Date: July 31- Aug 3 Respondents: ~10,700 Location: Worldwide (~80% Asia) Who: Active Electronics Industry Professionals
Response Composition (multiple choices): Industrial 45%, Auto 18%, Comm 20%, Computing 24%, Mobile 38%, Data Ctr 22%, Other 14%*

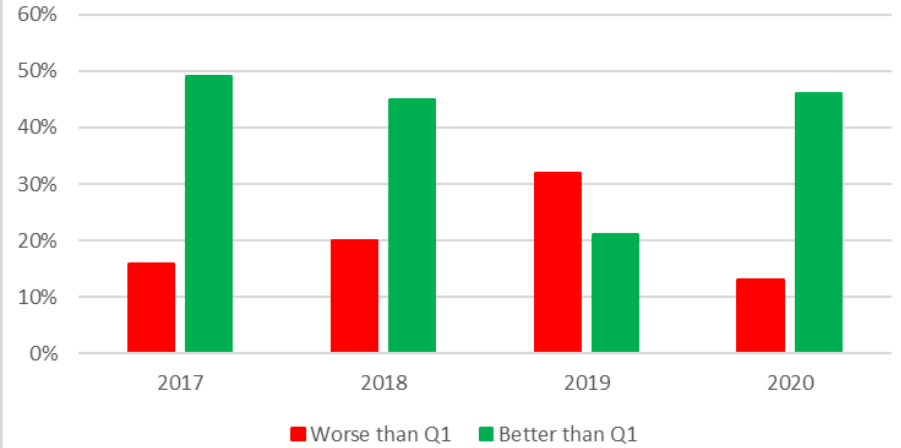
- We completed our monthly survey last weekend (~10,700 respondents) which saw continued weakening in C3Q growth expectations. In addition the initial C4Q outlook is weaker than last year.
- End customers have still been reluctant to cancel production to their manufactures instead pushing out production into future quarters but appear to be booking less for the near term during the past 30 days.
- The survey showed a growth outlook for C2Q20 finishing about the same vs. last month with 46% expecting q/q growth vs. 45% previously and 13% seeing it as weaker vs. 11% last month.
- The survey showed a growth outlook for C3Q20 weaker vs. last month with 46% expecting q/q growth vs. 54% previously and 16% see it as weaker vs. 12% last month.
- The survey showed about the same outlook in bookings for C3Q20 with 22% expecting improving bookings vs. C2Q compared to 11% last month, but 32% now expect weaker bookings vs. 25% last month.
- The initial C4Q outlook is weaker vs. last year in growth, bookings and seasonality.
- Backlog cancellation expectations (slide 6) appeared to move sideways vs. last month but remains in the increasing area which we view as a leading negative indicator.
- Availability of critical parts continues to improve and in most cases are at or below normal levels. Slide 7, which shows a more granular view of inventory by key components, showed improvements across most products in inventory and availability.
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Q/Q Demand Growth Outlook

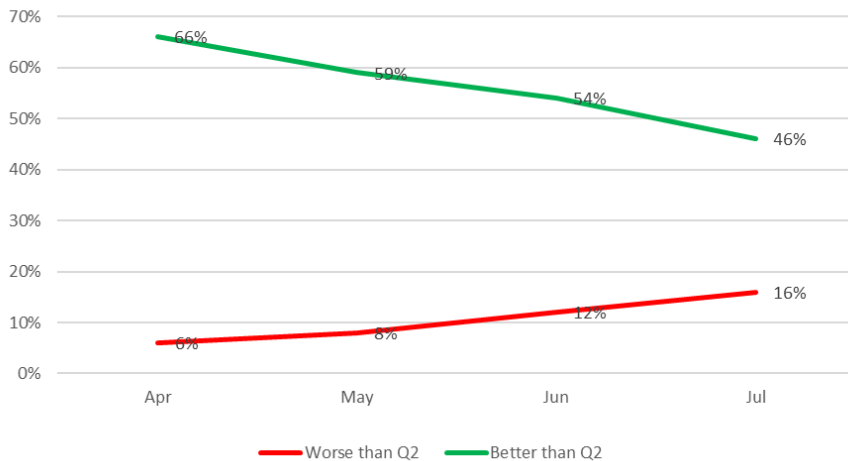
C2Q20 Growth Expectations



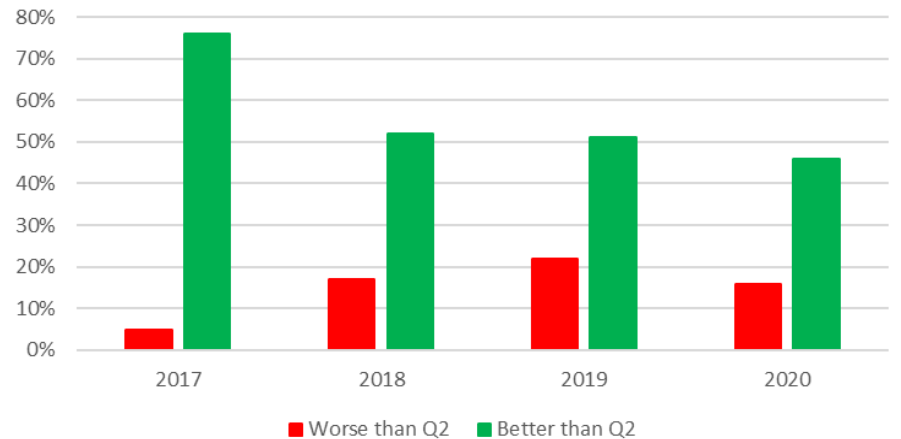
C2Q Growth Expectations vs. C1Q



3Q Growth Expectations

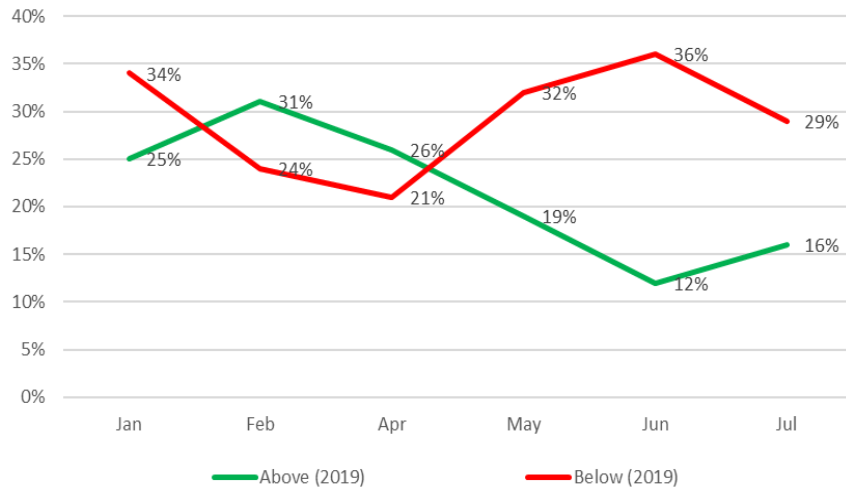


C3Q Growth Expectations vs. C2Q

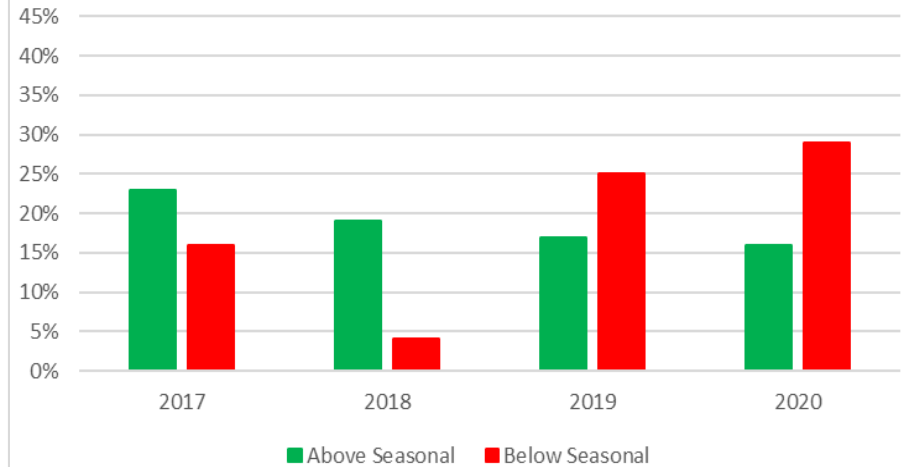


Q/Q Seasonality Expectations

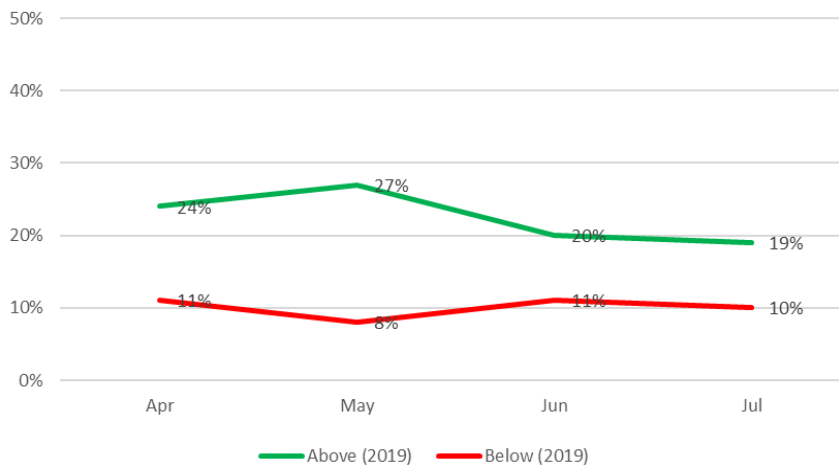
C2Q Seasonality Expectations



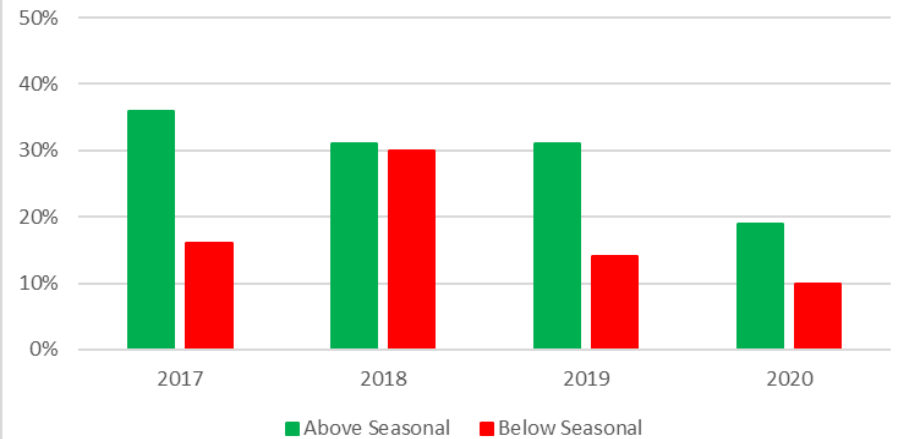
C2Q Seasonality Expectations



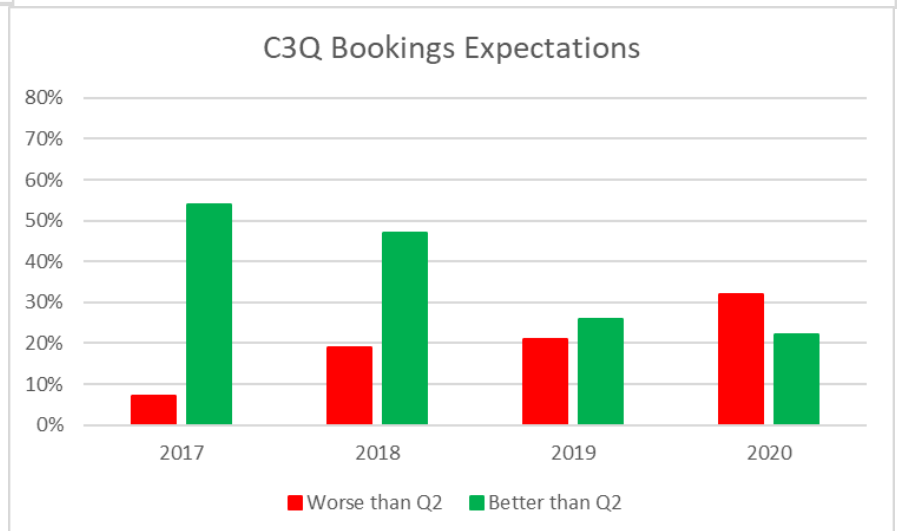
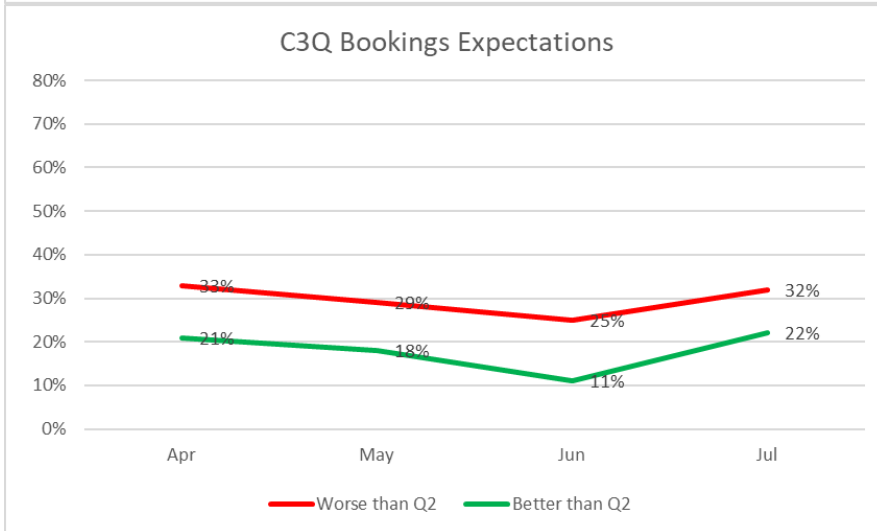
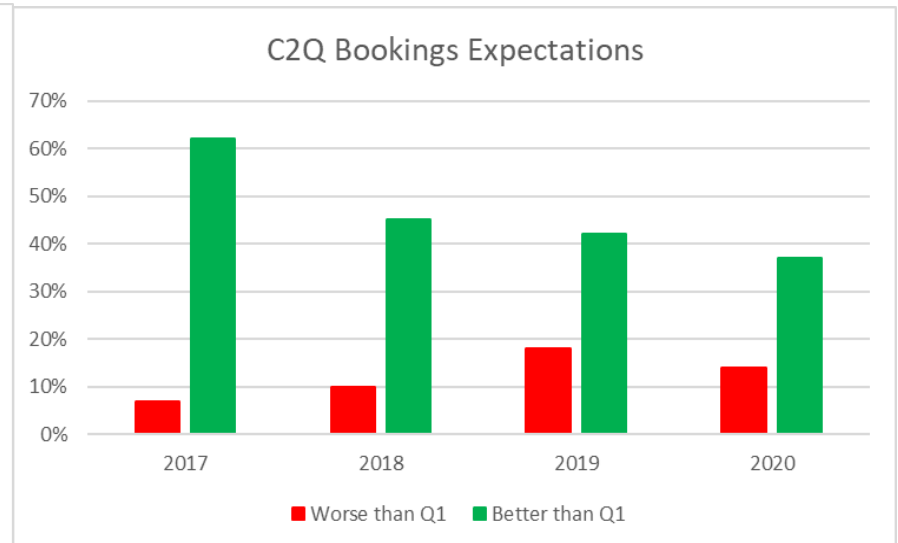
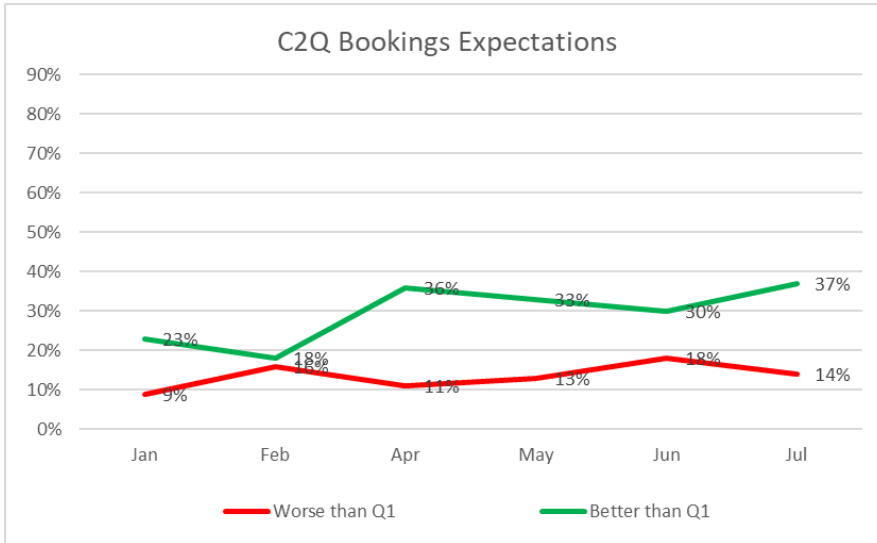
3Q Seasonality Expectations



C3Q Seasonality Expectations

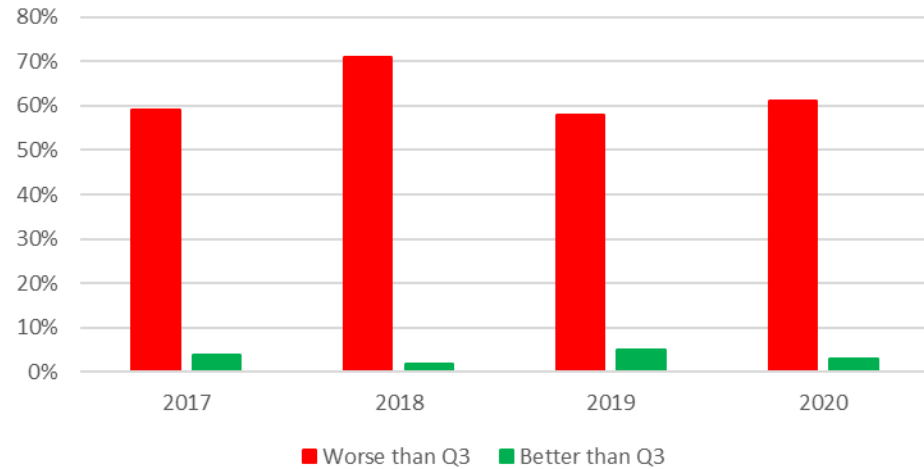


Q/Q Bookings Growth Expectations

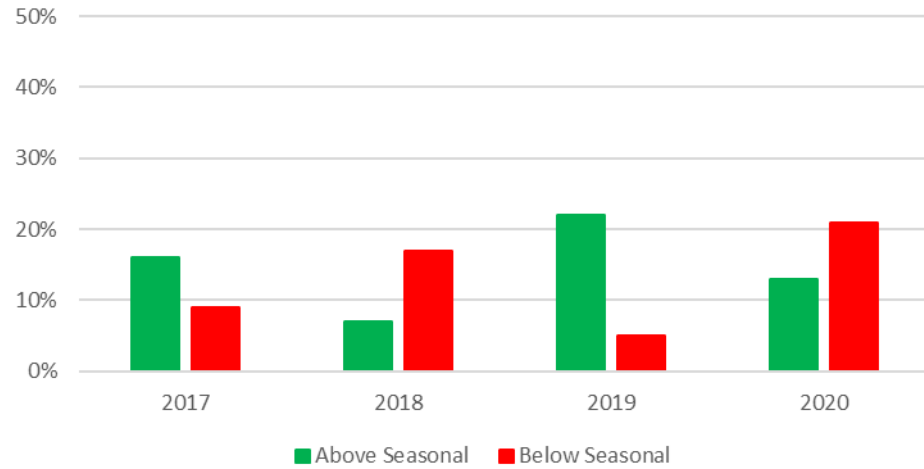


C4Q20 Growth Outlook

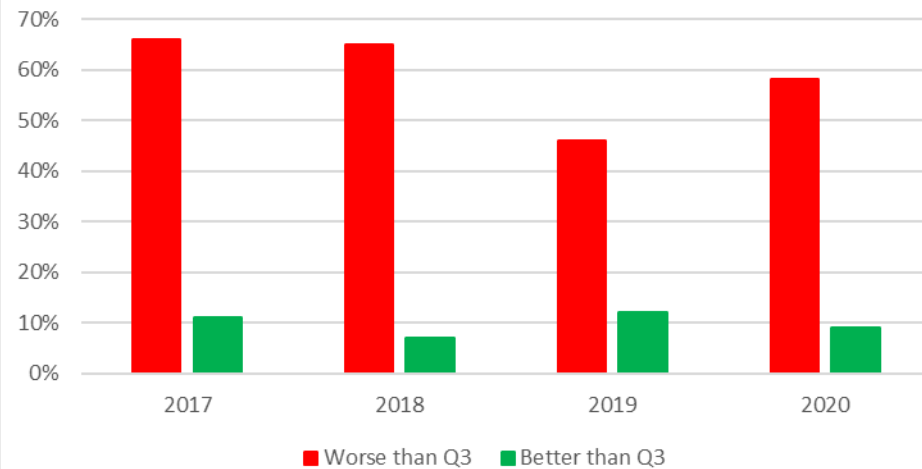
C4Q Growth Expectations vs. C3Q



C4Q19 Seasonality Expectations

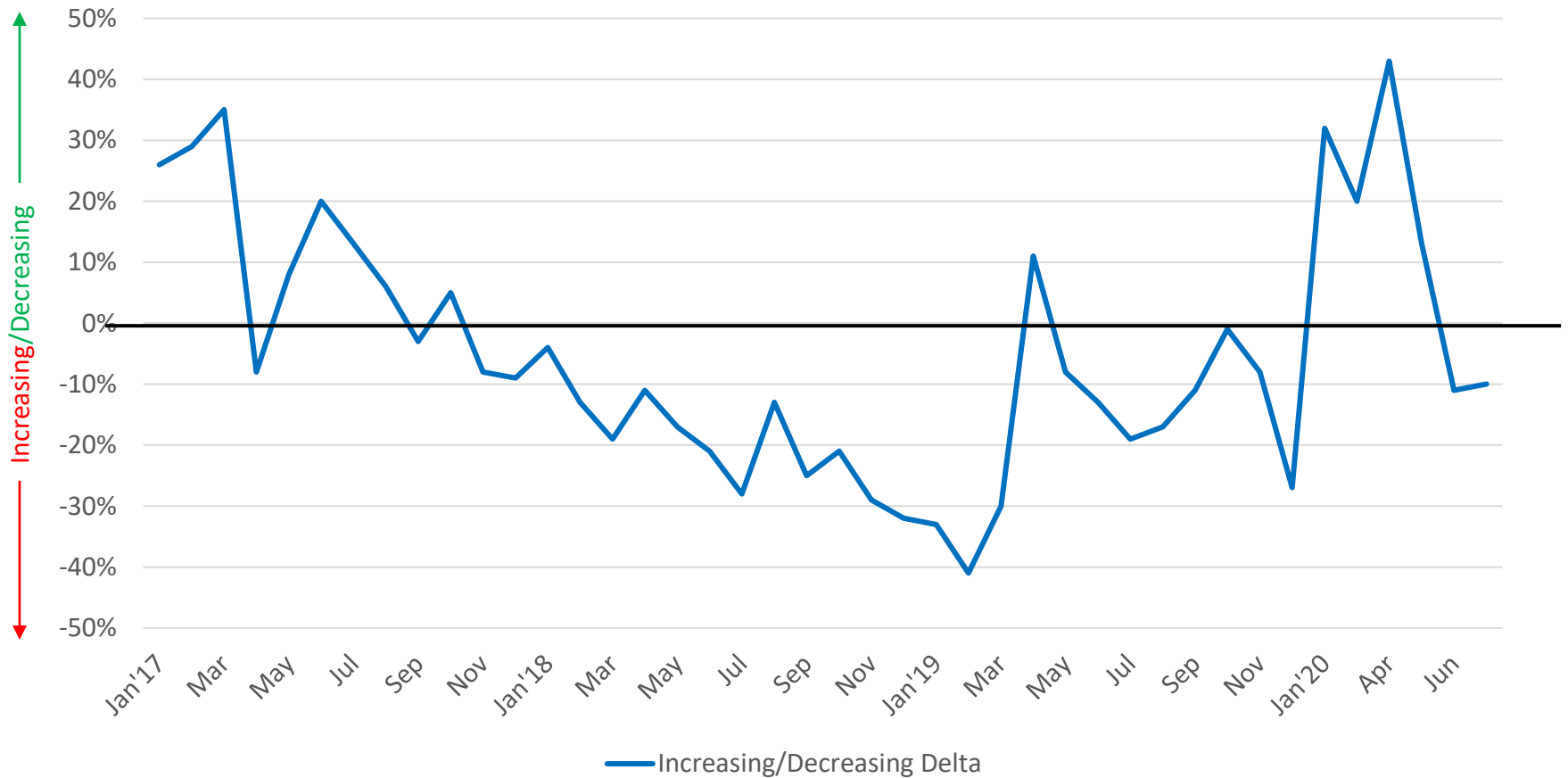


C4Q19 Bookings Expectations Seasonality



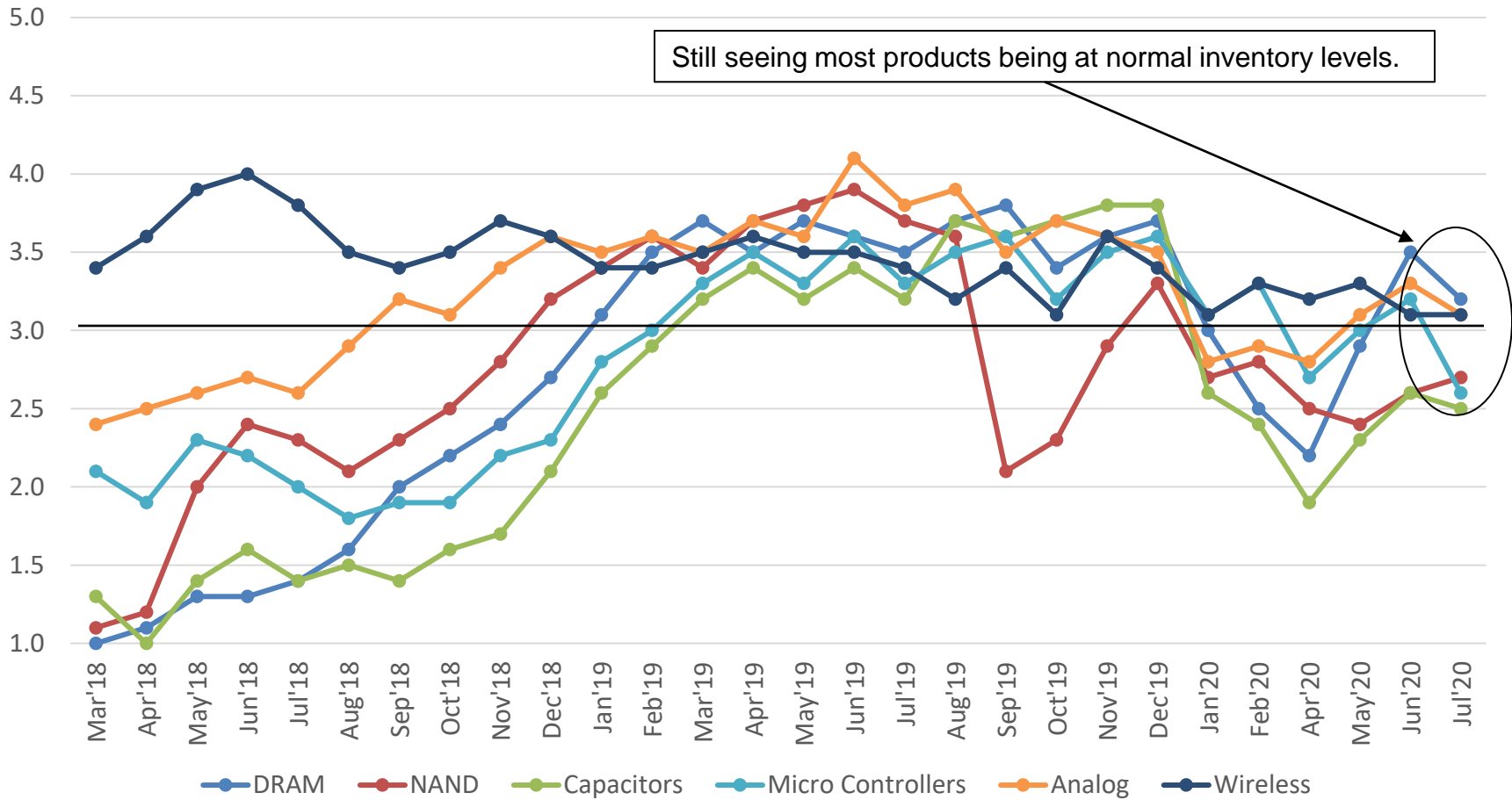
Backlog Order Cancellations vs. 30 Days Ago

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

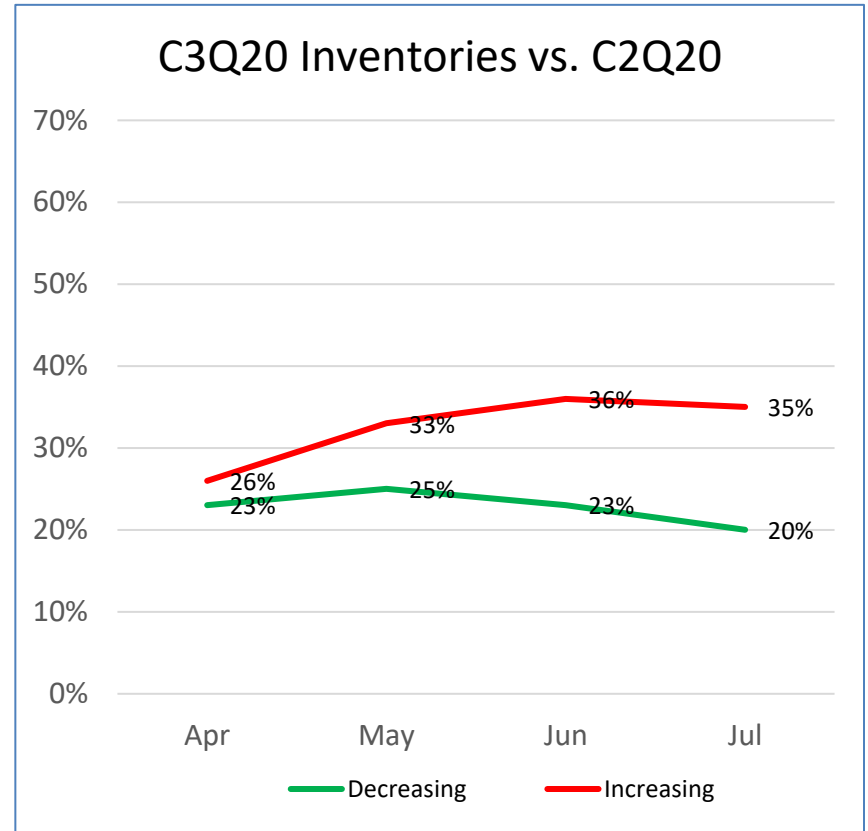
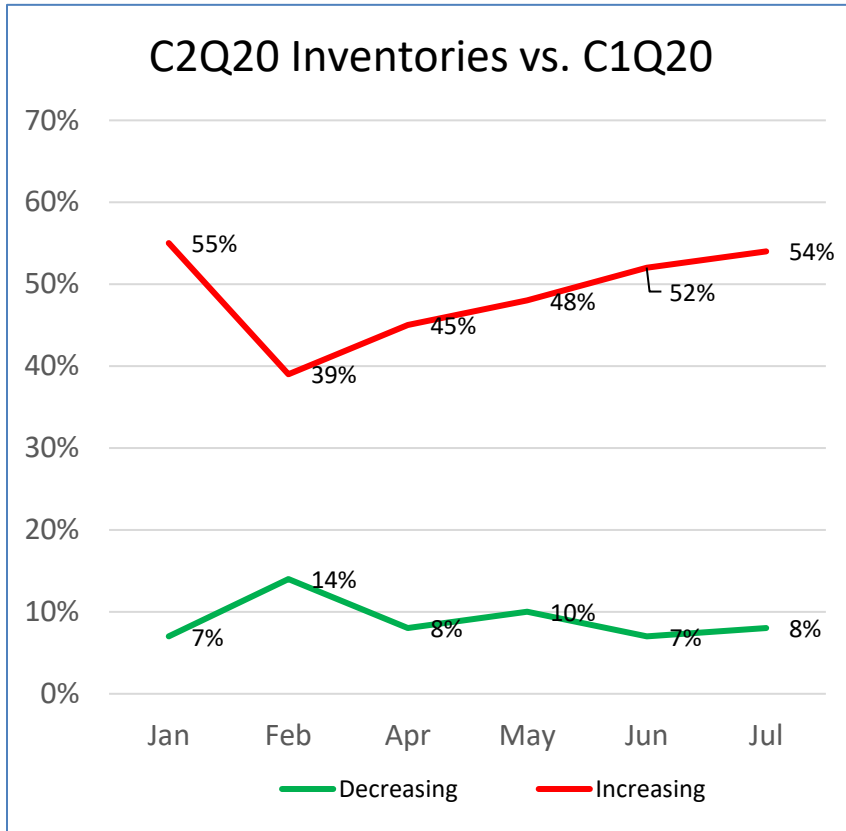


Inventory Status

(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?)

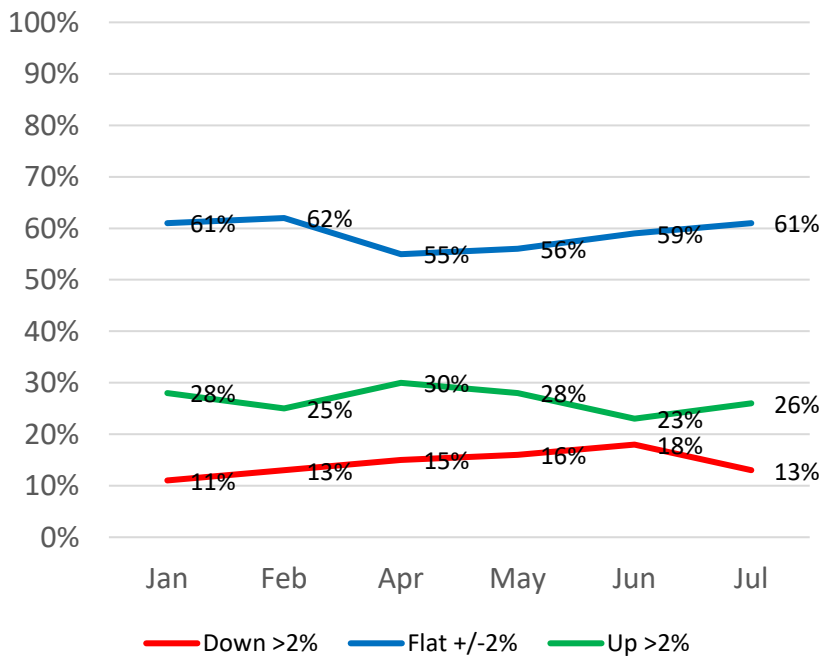


Q/Q Inventory Growth

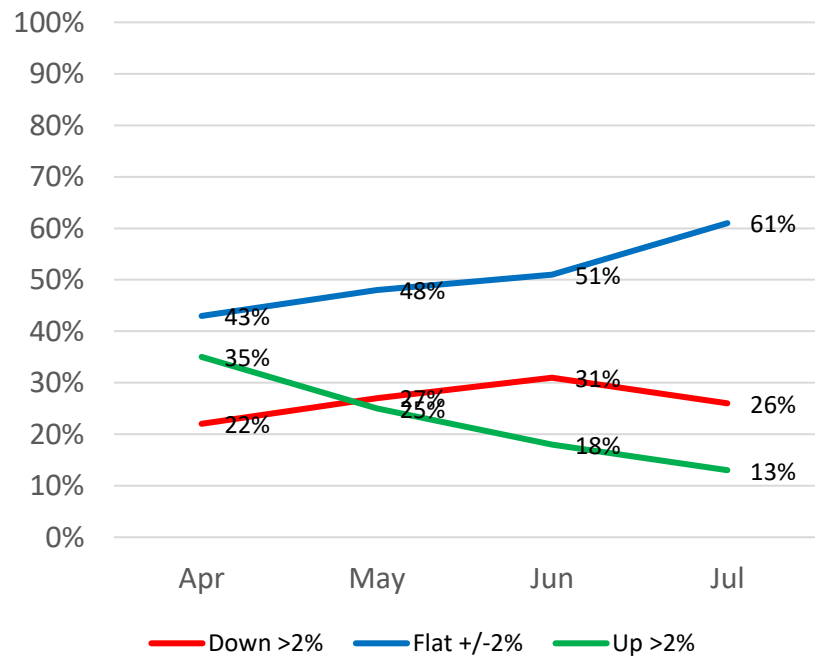


Q/Q Pricing Trends

C2Q20 Pricing vs. C1Q20



C3Q20 Pricing vs. C2Q20



Vertical Outlook

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

