

A glowing blue microchip is centered on a circuit board. The chip has a grid of small squares on its surface and is surrounded by intricate circuitry. The entire scene is bathed in a blue light, giving it a futuristic and technological appearance.

# **TPC Semiconductor Market Survey**

**March 27, 2020**

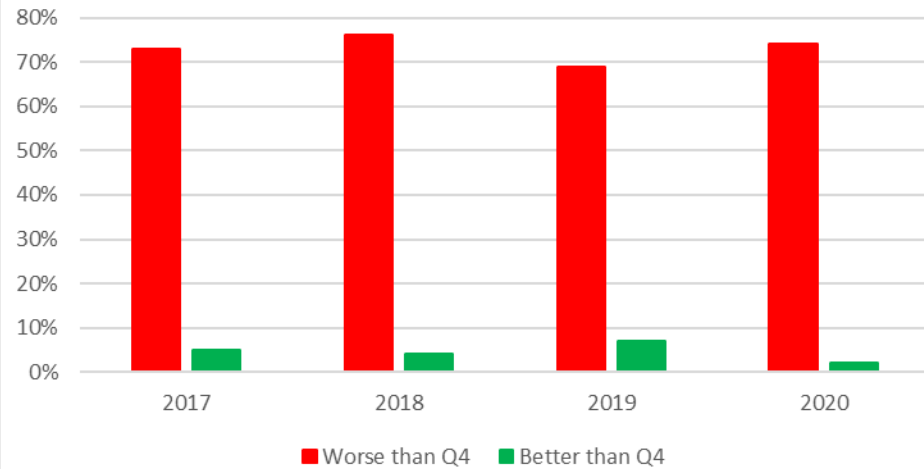
# TPC March 2020 Survey Summary

*Survey Date: March 20-23 Respondents: ~7,300 Location: Worldwide (~80% Asia) Who: Active Electronics Industry Professionals  
Response Composition (multiple choices): Industrial 37%, Auto 20%, Comm 19%, Computing 17%, Mobile 28%, Data Ctr 18%, Other 14%*

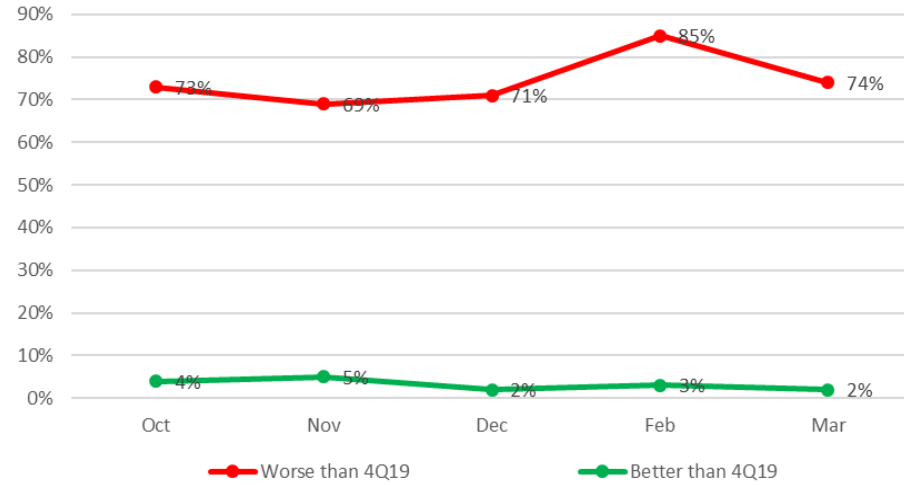
- We completed our monthly survey last weekend (~7.3k respondents) which showed an improvement in C2Q growth expectations. However, C2Q bookings expectations were weaker. We believe while this signals near term demand remaining OK but indicates anticipation in weaker demand and/or higher inventories as we move into 2H.
- Availability of critical parts are still a concern with lead-times extending and inventories remaining low. Slide 6, which shows a more granular view of inventory by key components, showed a marked decrease in inventory and availability (especially DRAM & Passives) as we believe we are headed towards longer component lead-times and allocation in some instances.
- End customers have been reluctant to cancel production to their manufactures instead pushing out production into future qtrs. The main exception appears to be smartphone production where we have seen significant cuts.
- The survey showed a growth outlook for C1Q20 remaining generally the same as last month; while C2Q's growth outlook increased with 58% expecting q/q growth vs. 49% previously, but only 19% see it as weaker.
- However, the survey showed a downtick uptick in bookings growth outlook for C2Q20 which we believe indicates anticipation in weaker demand and/or higher inventories as we move into 2H.
- Backlog cancellation expectations (slide 5) showed a slight increase in cancellation activity but not that great of a change. Orders appear to be being pushed out vs. cancelled.
- Inventories appear to be getting better.

# C1Q20 & C2Q20 Growth Outlook

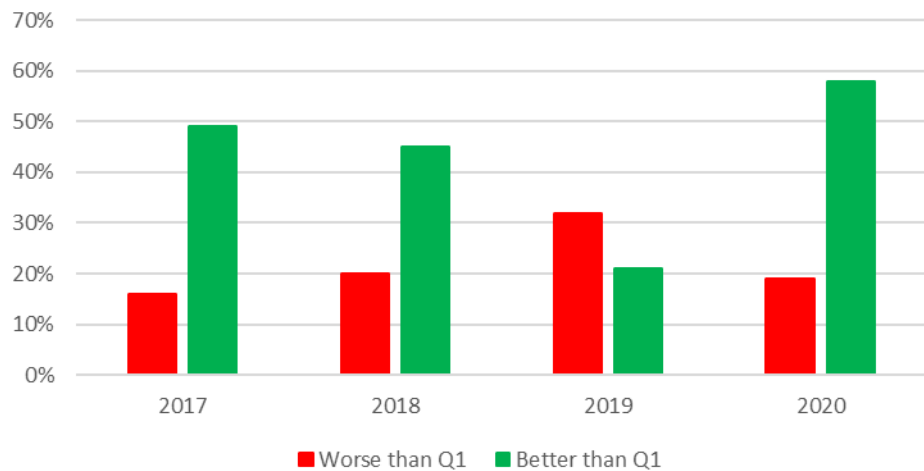
## C1Q20 Growth Expectations vs. C4Q



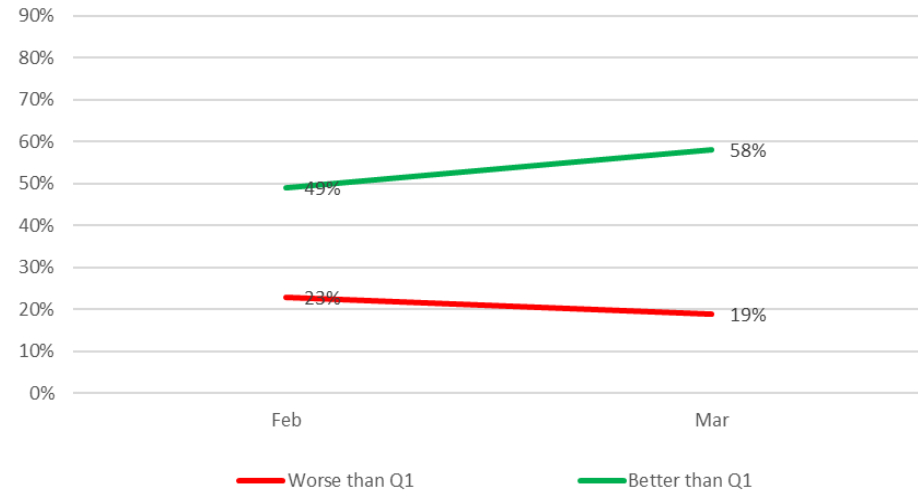
## 1Q Growth Expectations



## C2Q20 Growth Expectations vs. C1Q

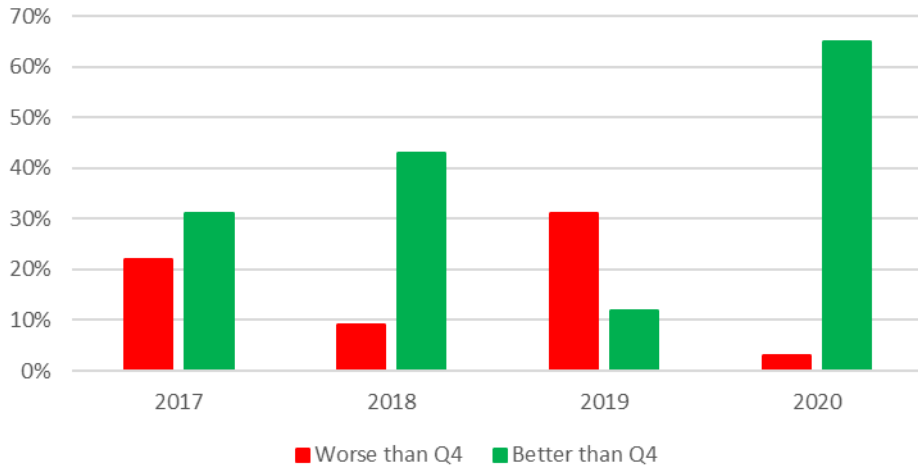


## 2Q Growth Expectations

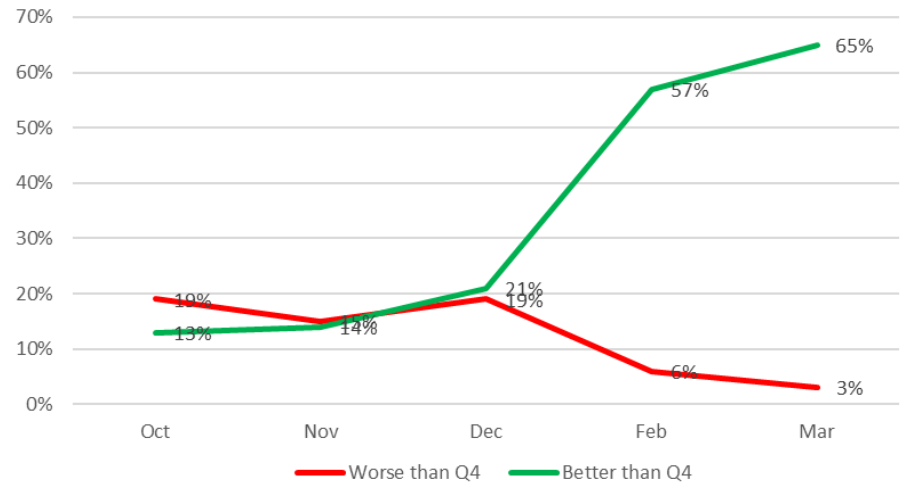


# Q/Q Bookings Growth Expectations

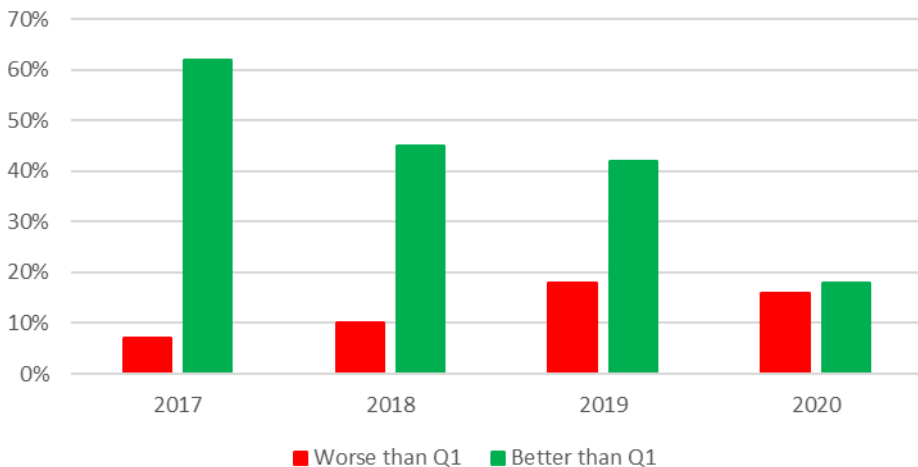
## C1Q20 Bookings Expectations Seasonality



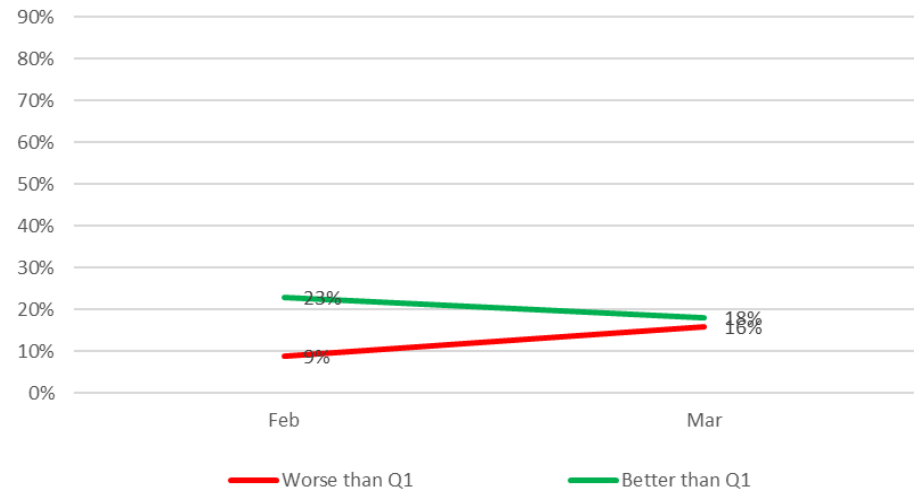
## 1Q Bookings Expectations



## C2Q20 Bookings Expectations Seasonality

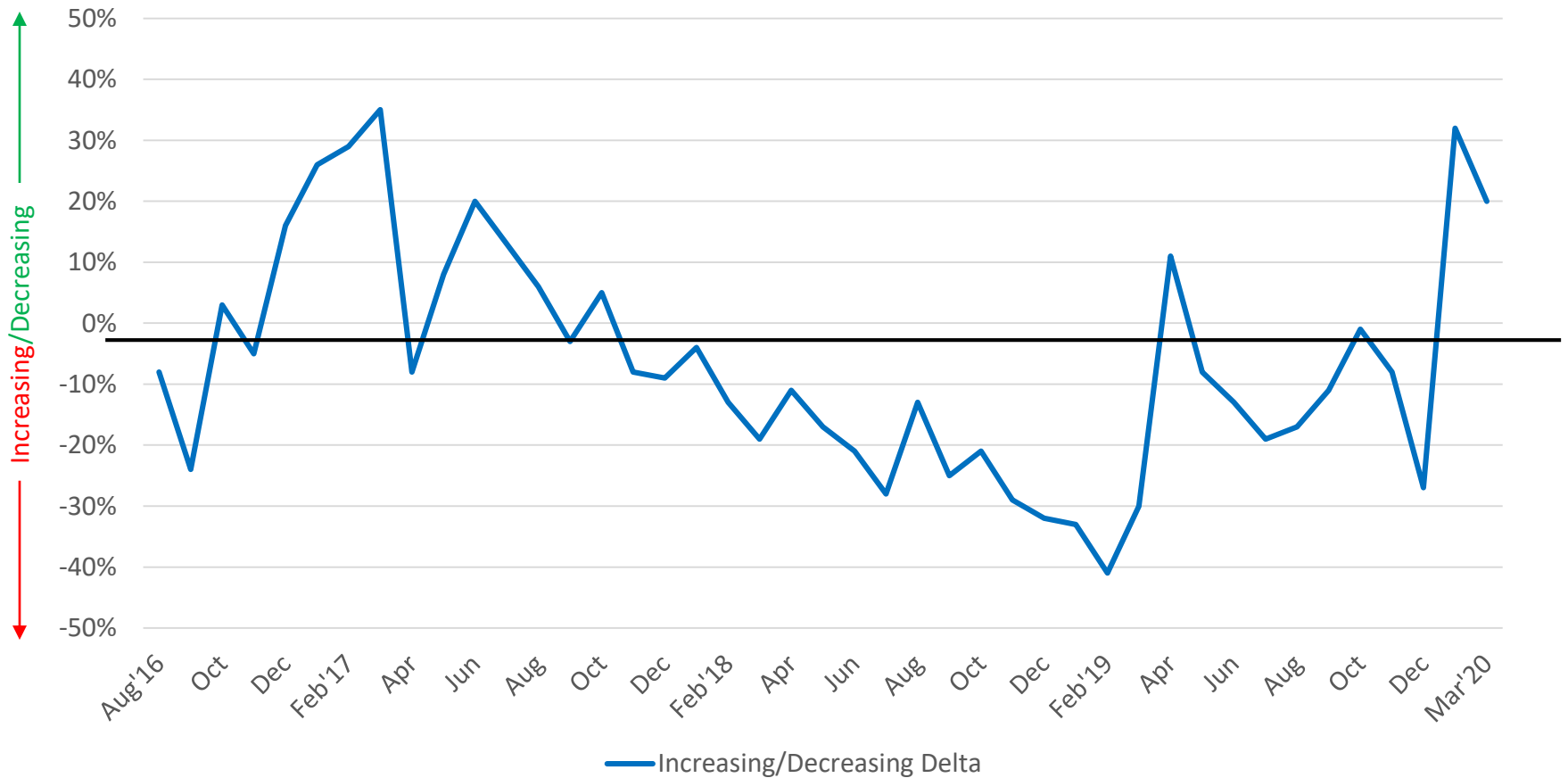


## 2Q Bookings Expectations



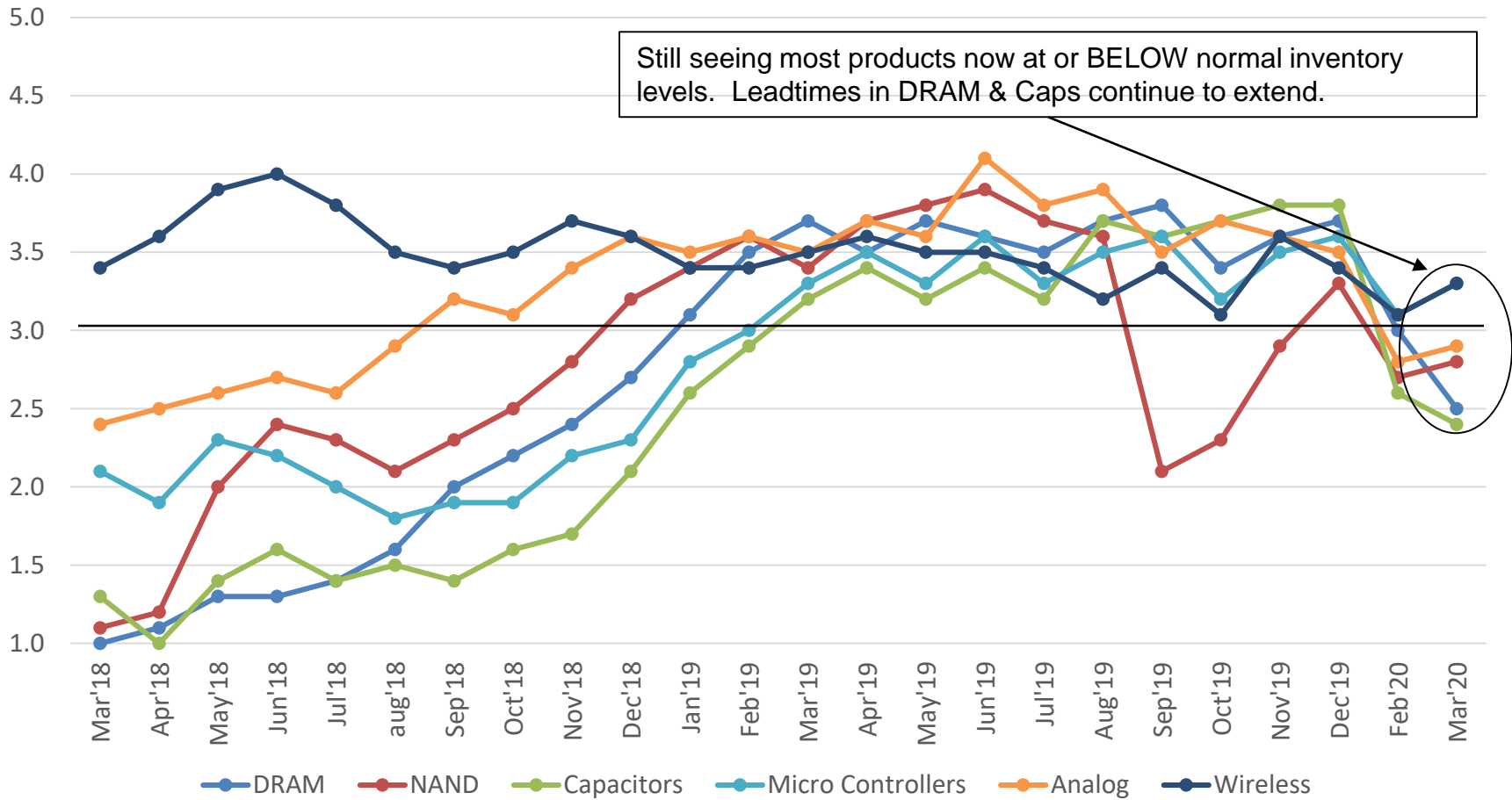
# Backlog Order Cancellations vs. 30 Days Ago

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



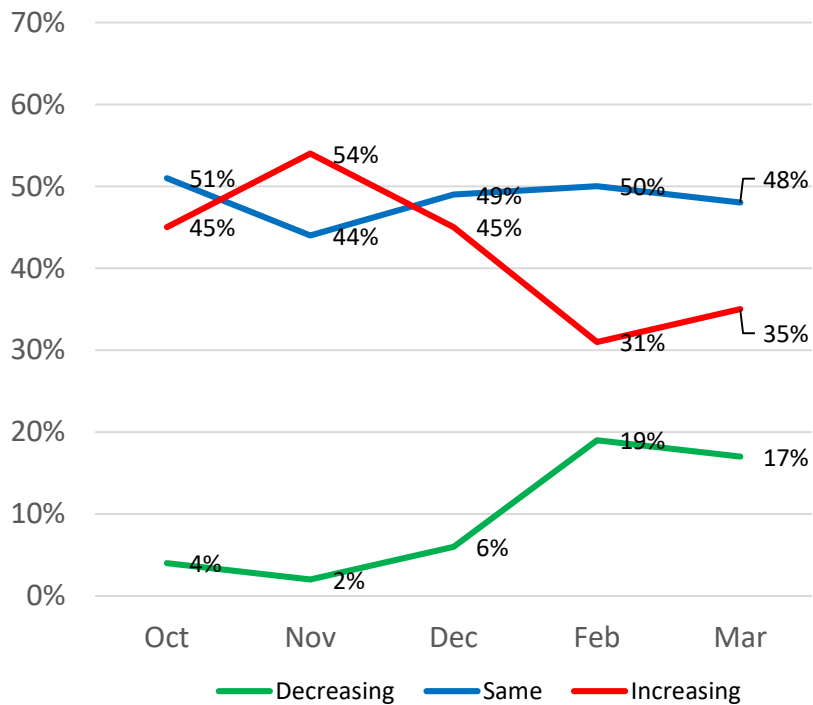
# Inventory Status

(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?)

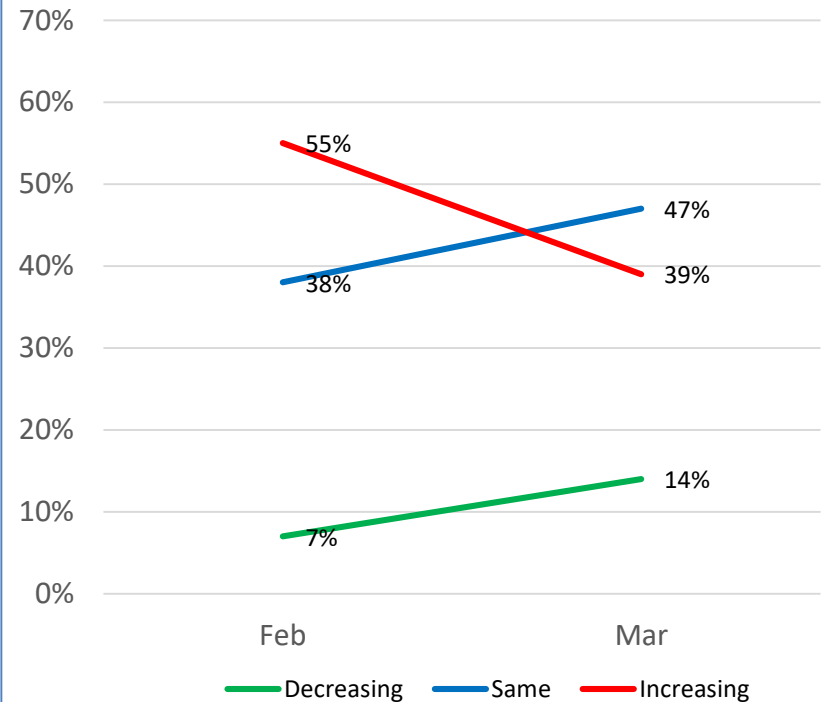


# Q/Q Inventory Growth

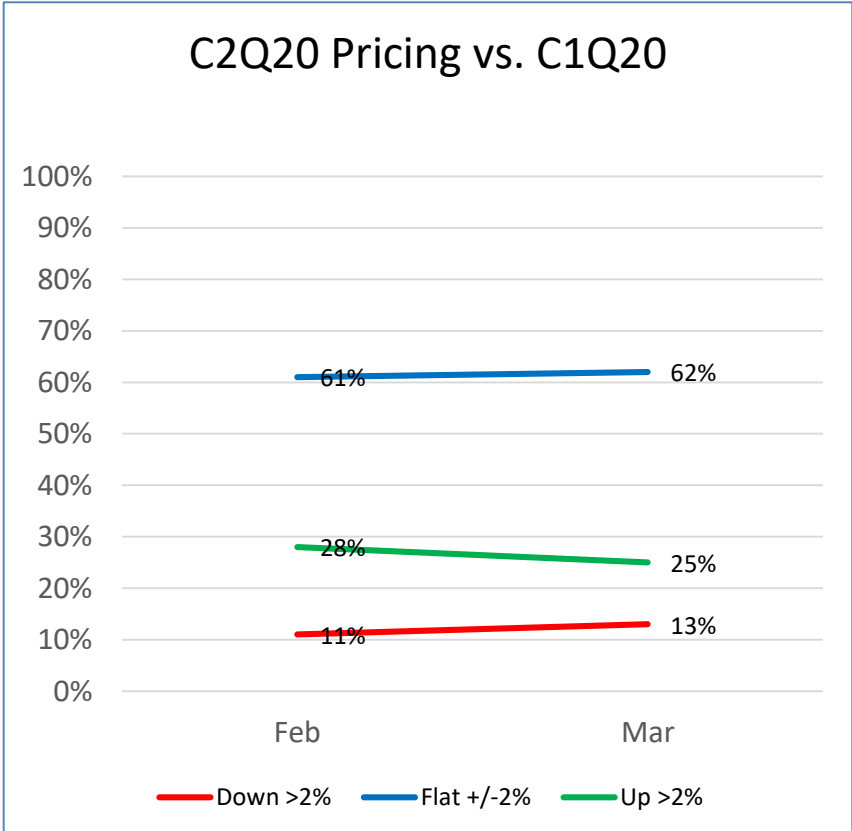
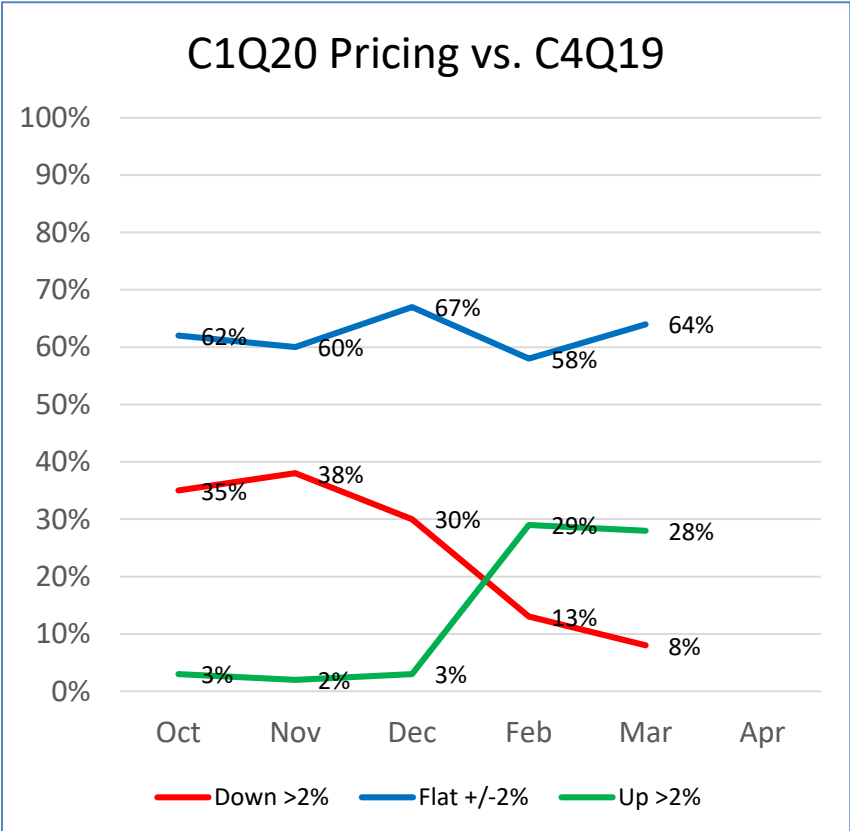
## C1Q20 Inventories vs. C4Q19



## C2Q20 Inventories vs. C1Q20



# Q/Q Pricing Trends





# Vertical Outlook

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

