

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

February 14, 2022

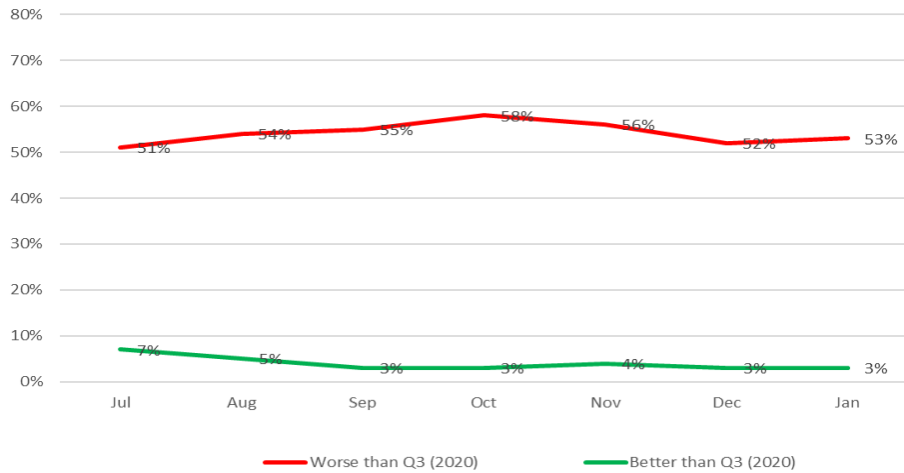
TPC January 2021 Survey Summary

*Survey Date: 2/5-2/8 Respondents: ~5,900 Location: Worldwide (~80% Asia) Who: Active Electronics Industry Professionals
Response Composition (multiple choices): Industrial 38%, Auto 21%, Comm 20%, Computing 18%, Mobile 30%, Data Ctr 17%, Other 18%*

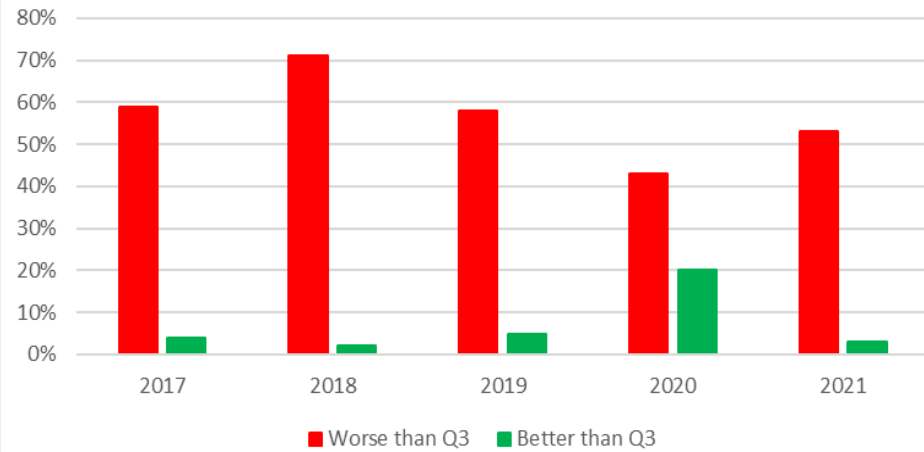
- We recently completed our monthly survey (~5,900 respondents) which saw a slight decrease in C4Q21 outlook for growth while showing little change in C1Q22's growth outlook. The outlook for seasonality stayed largely unchanged. However, C1Q bookings improved ~3% from last month's survey although much weaker than the last 4 years.
- Our C1Q22 outlook shows a return to more normal pre-COVID expectations, but still slightly better seasonality vs. CY18 & 19. However, the bookings outlook for C1Q22 is markedly weaker vs. CY18 & CY19. This could be a possible harbinger of weaker component demand heading into 2H22.
- Based on our survey's past 3 months of more negative growth outlook, as well as seeing a continued increase in inventories, we believe we are in the beginning stages of an inflection in demand. However, this will likely take a couple of quarters to play out.
- The survey showed C4Q21 weakening slightly vs. last month with 3% expecting q/q growth vs. 3% previously; while 53% see it as weaker vs. 52% last month.
- The survey showed C1Q22 outlook improving slightly vs. last month with 7% expecting q/q growth vs. 7% previously; while 57% see it as weaker vs. 58% last month.
- Backlog cancellation expectations (slide 7) continues to show negative trends.
- Key product inventory and availability (slide 8) generally stayed the same vs. last month with most key products are at or just under nominal levels.
- Inventories growth outlook (slide 9) remained roughly the same for both C4Q and C1Q.

Q/Q Demand Growth Outlook

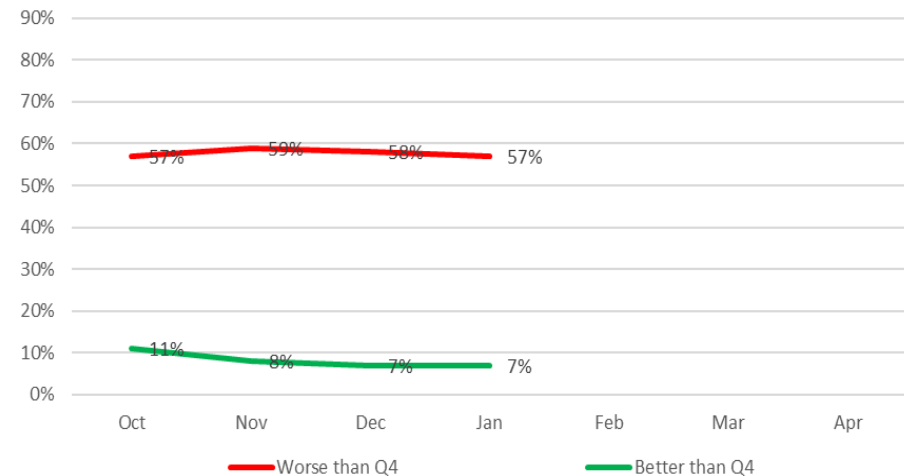
4Q21 Growth Expectations



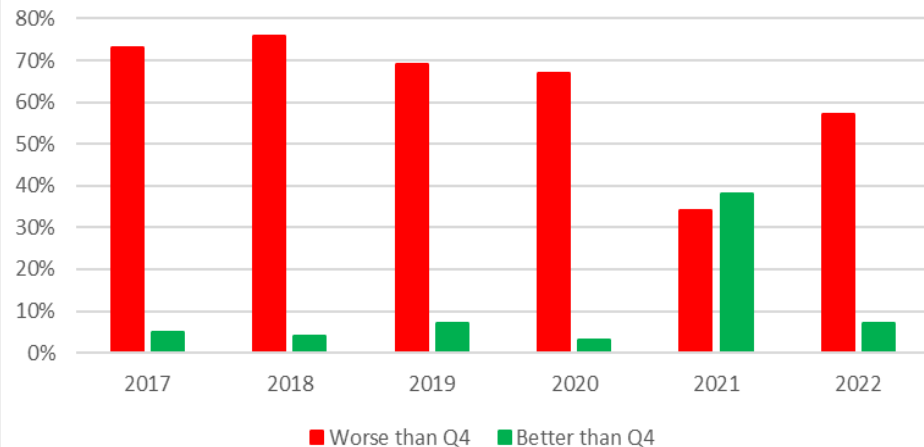
C4Q Growth Expectations vs. C3Q



C1Q22 Growth Expectations

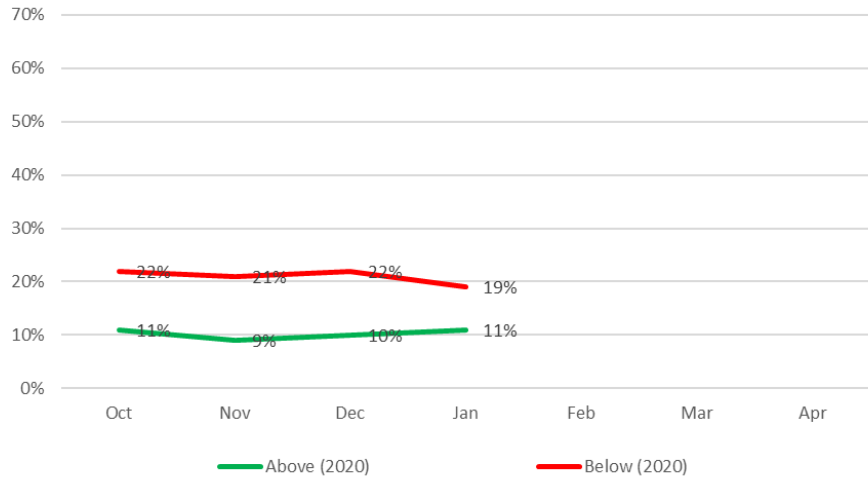


C1Q Growth Expectations vs. C4Q

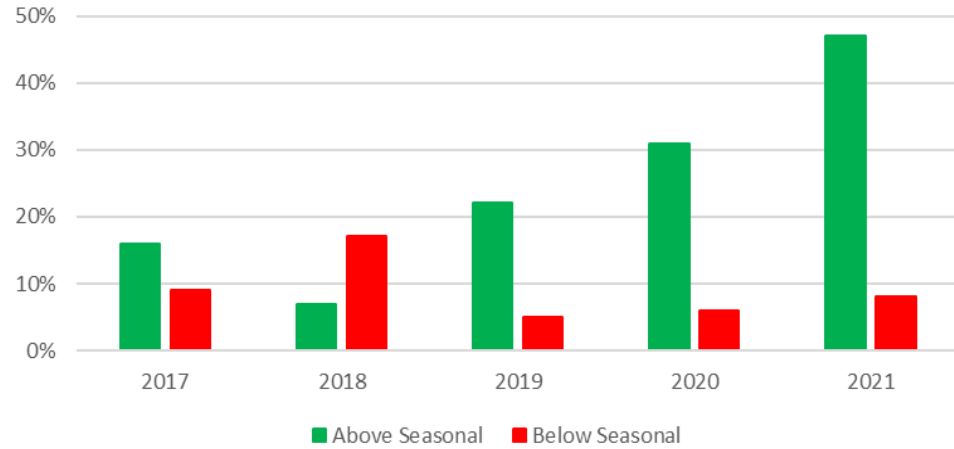


Q/Q Seasonality Expectations

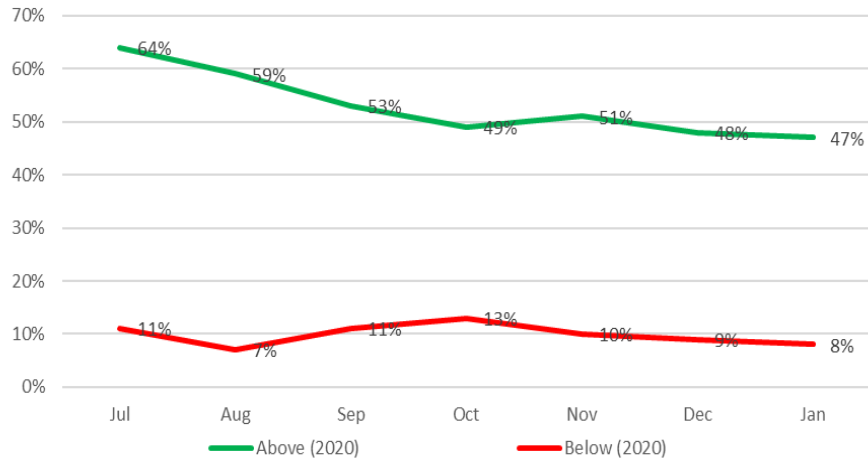
C1Q22 Seasonality Expectations



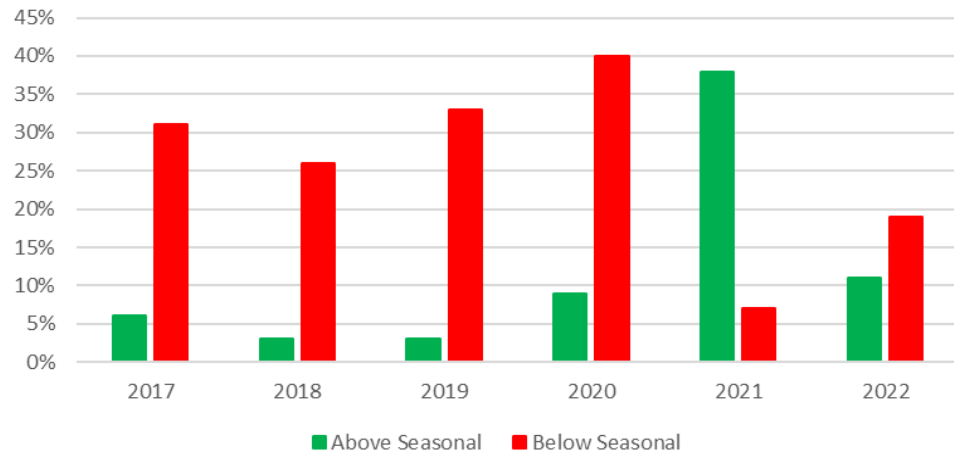
C4Q Seasonality Expectations



4Q21 Seasonality Expectations

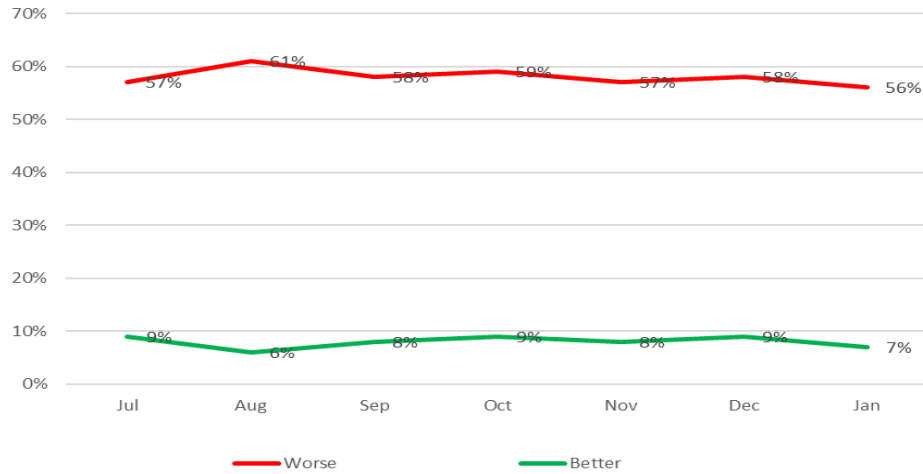


C1Q Seasonality Expectations

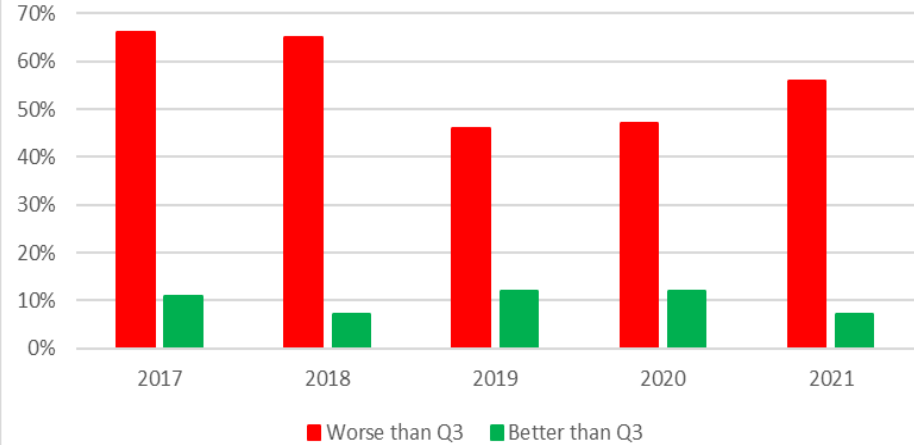


Q/Q Bookings Growth Expectations

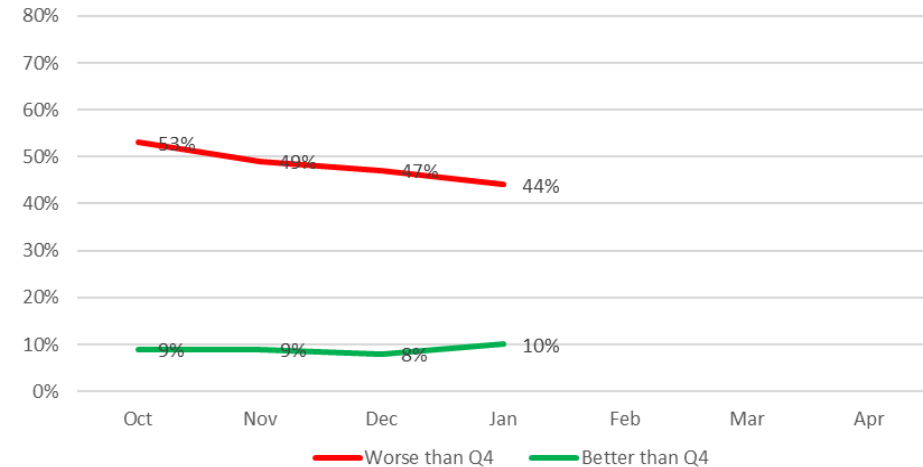
4Q21 Bookings Expectations



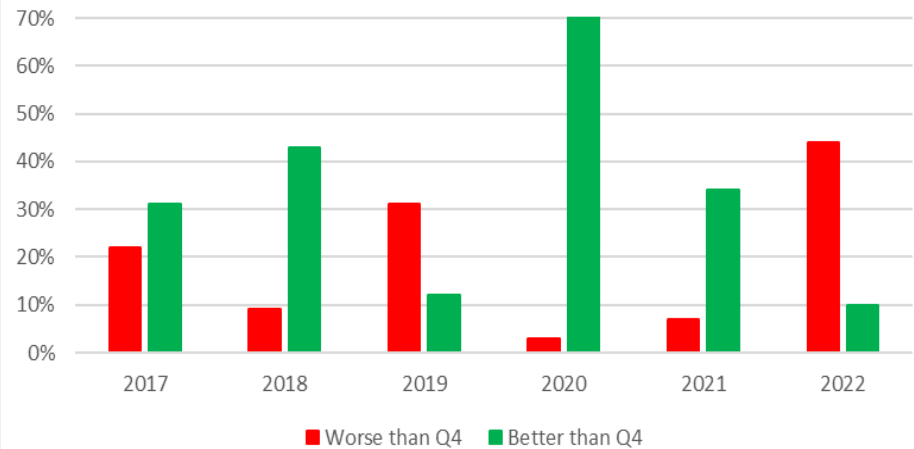
C4Q Bookings Expectations Seasonality



C1Q22 Bookings Expectations

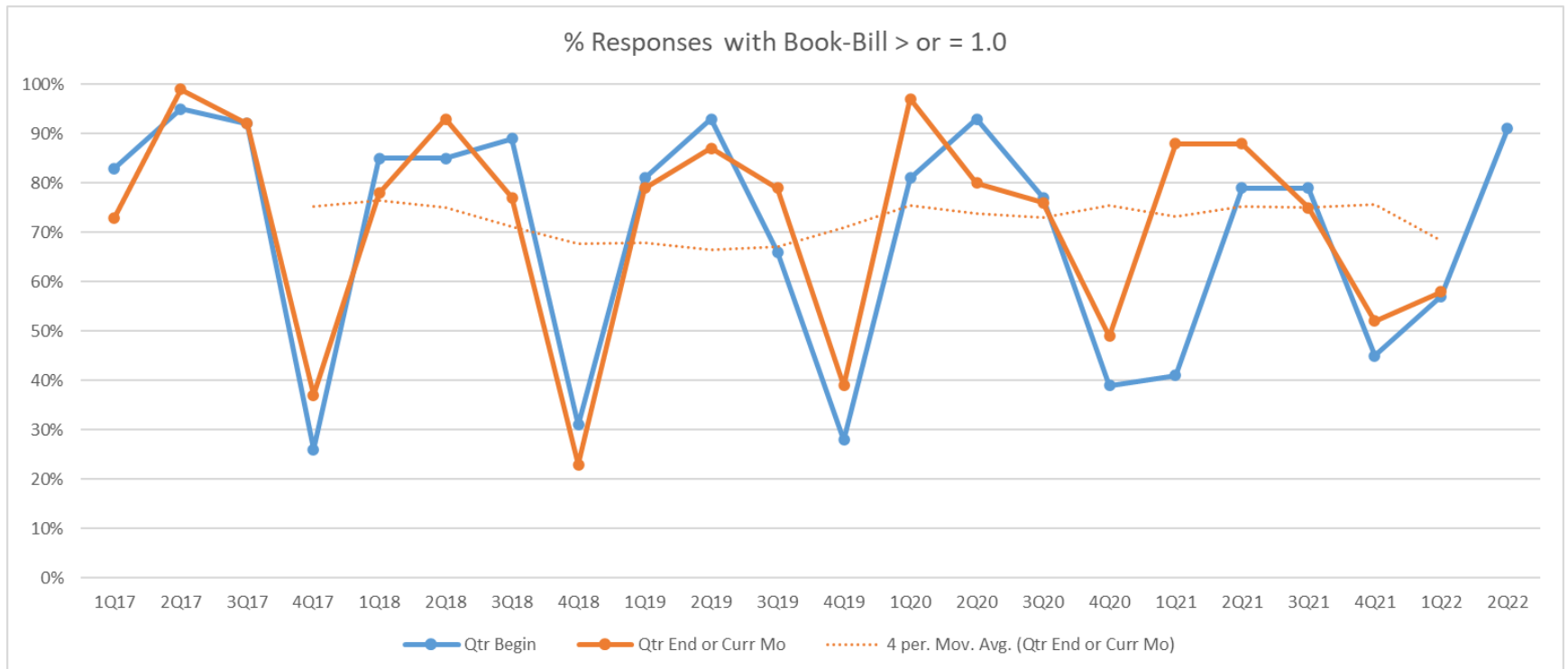


C1Q Bookings Expectations



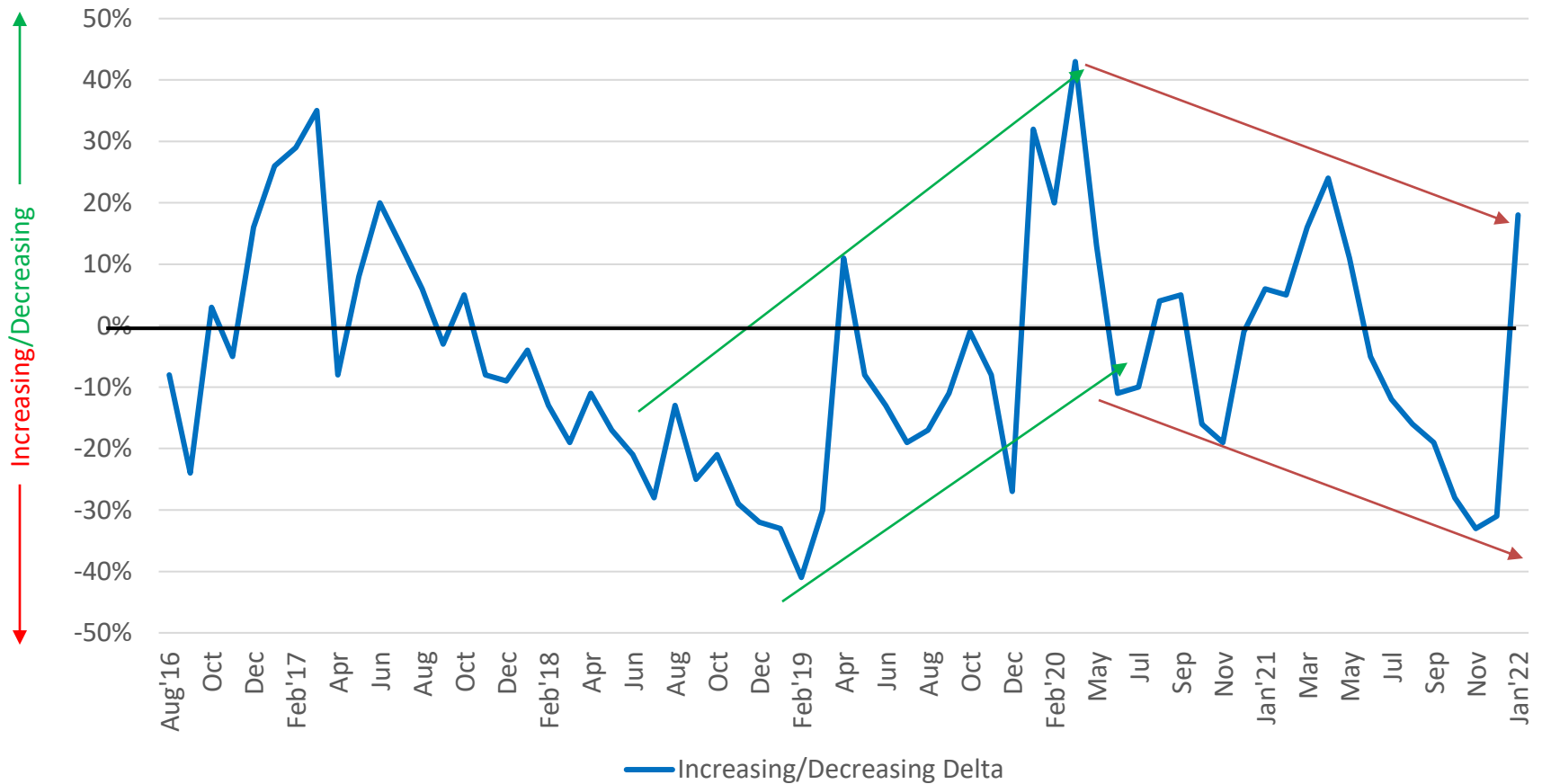
Book to Bill History & Trends

(Calendar quarters)



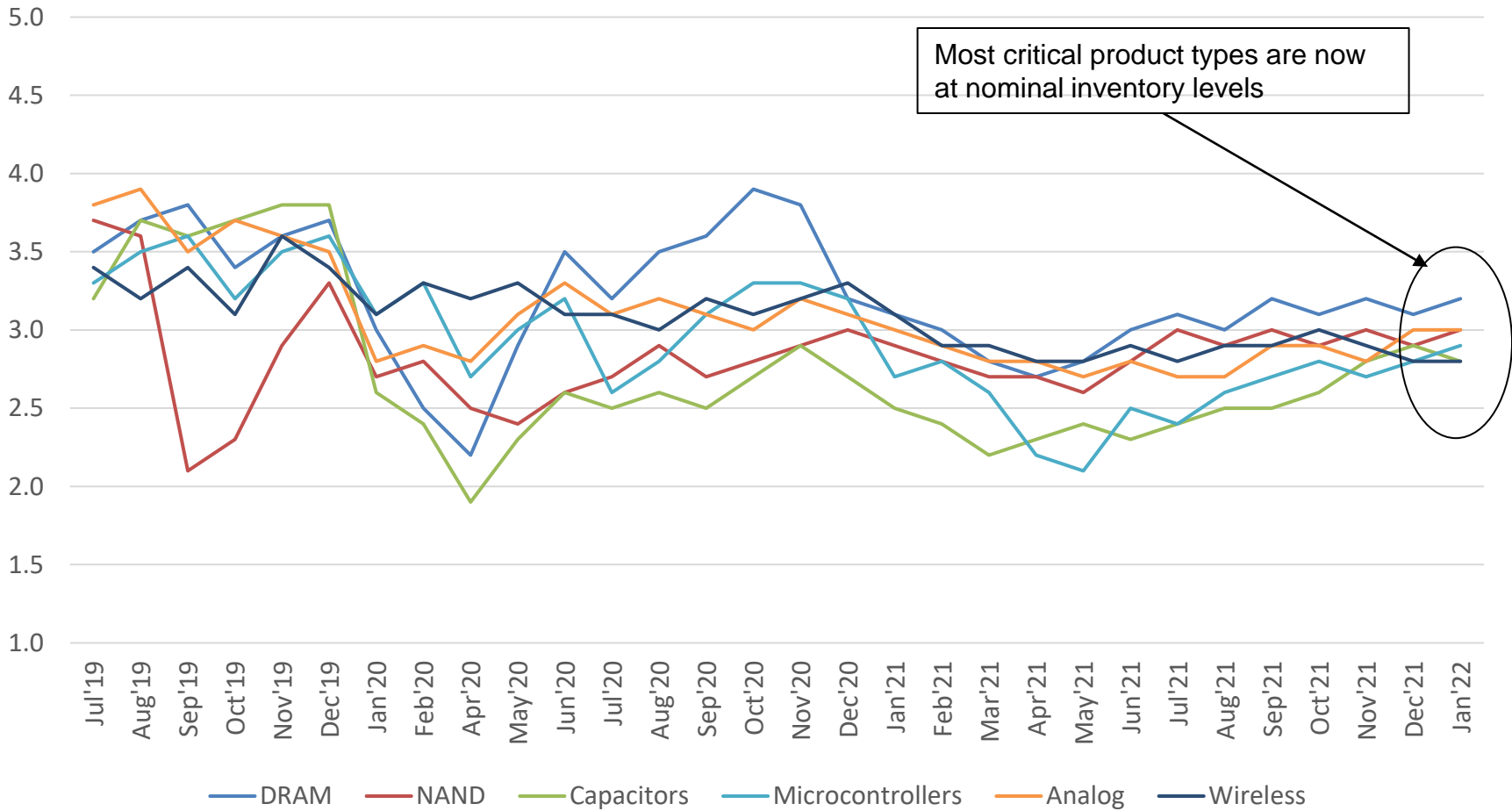
Backlog Order Push Outs/Cancellations vs. 30 Days Ago

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



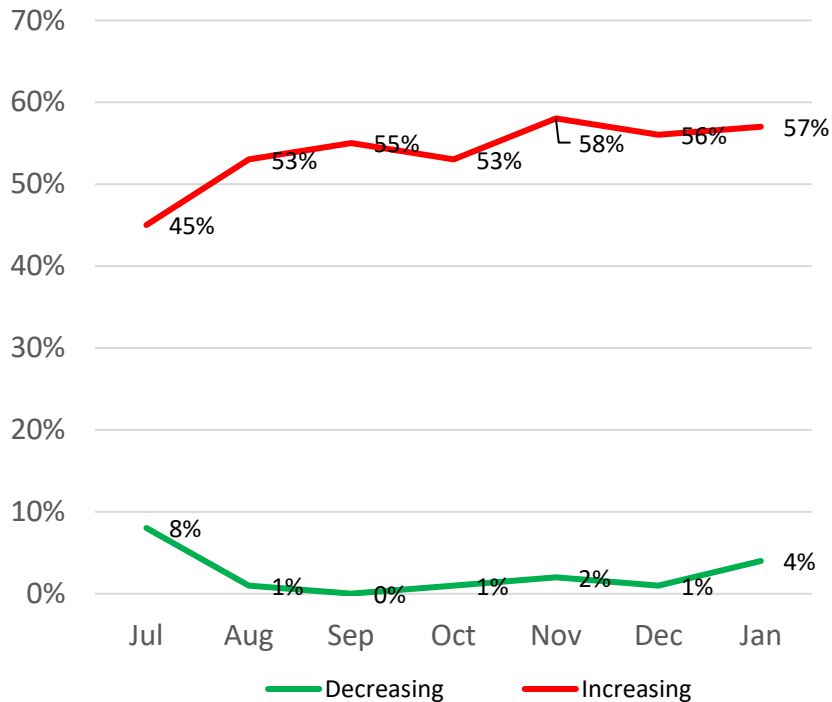
Inventory Status

(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?)

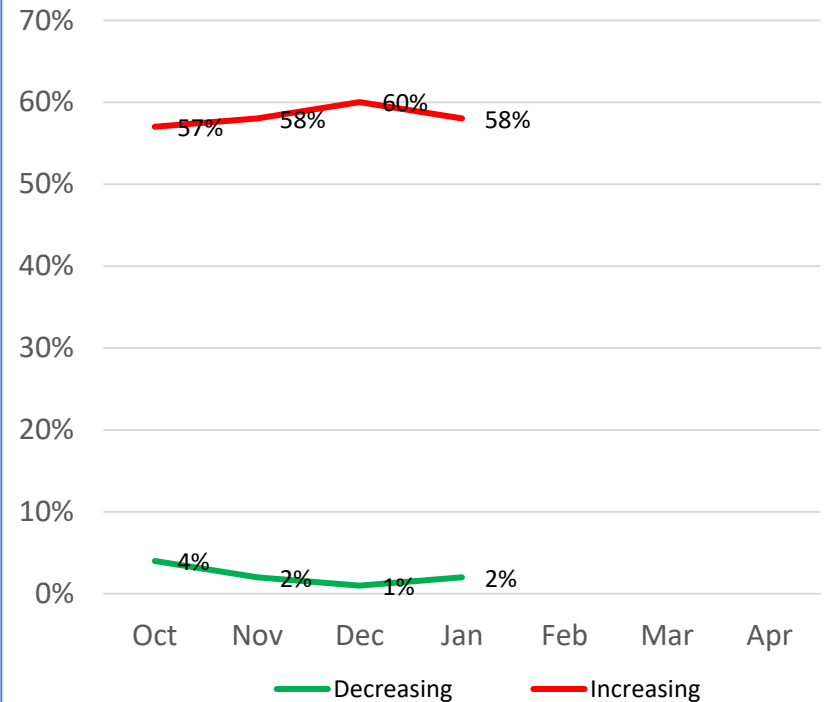


Q/Q Inventory Growth

C4Q21 Inventories vs. C3Q21

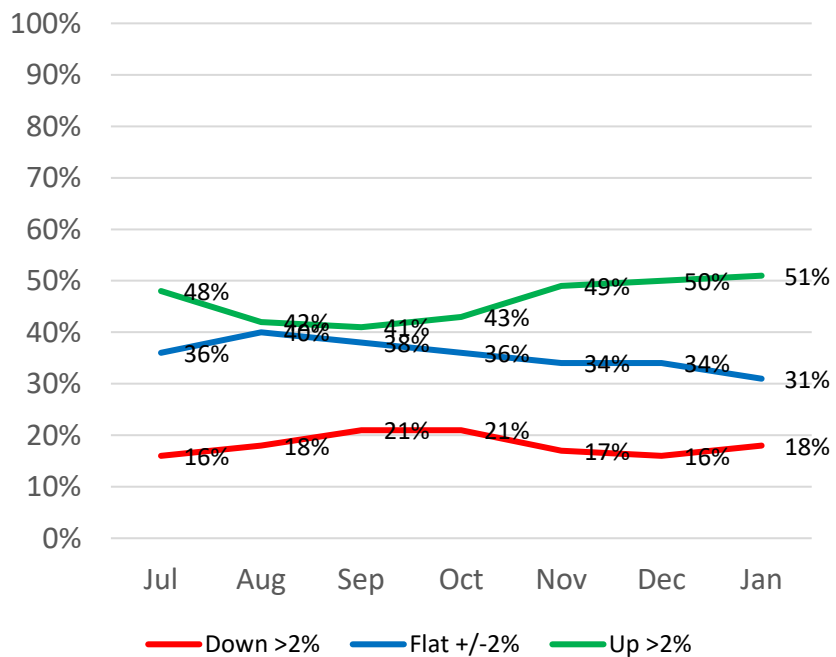


C1Q22 Inventories vs. C4Q21

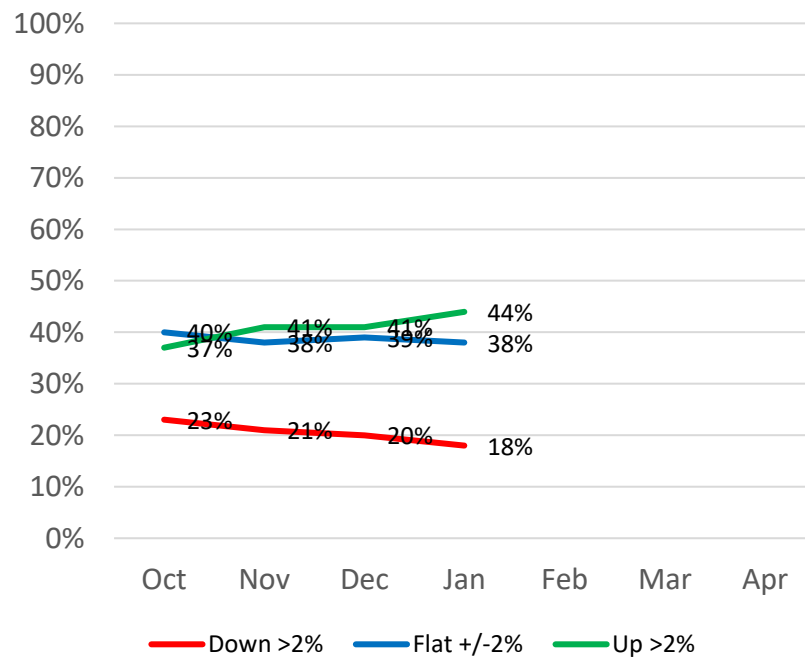


Q/Q Pricing Trends

C4Q21 Pricing vs. C3Q21



C1Q22 Pricing vs. C4Q21



Vertical Outlook

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

