Hello. Good afternoon, everyone. Thank you for joining us. This is Vivek Arya, senior semiconductor and semi-cap equipment analyst at Bank of America Securities. Really delighted to have Dave Pahl, Head of Investor Relations for Texas Instruments joining us this afternoon to share his insights about TI and the industry. And logistics wise, we will go through some prepared questions from my side. But if you have any question, please feel free to e-mail it to me through that console text box that you have, and I’ll be sure to weave it in, in the Q&A.

But with that, welcome, Dave, and to maybe kick it off, perhaps give us a state of the union in terms of what TI has seen so far in terms of just any near-term demand or supply impact from the COVID pandemic, and then we will go into the longer-term trend.

Sure, Vivek. Well, first of all, thanks for inviting and having us today. We appreciate that. And I think maybe just to frame things and many have listened to our earnings call and not providing any update from that call. So all the references will be from what we saw at that point. But just to put in context, as we operate the company, there’s really 3 things that we want to keep in mind is, the first thing is we want to operate the company as owners and really owners with a long-term investment horizon. The other 2 ambitions just adapt and change and certainly, with COVID-19 coming, just having that ability to be able to move quickly is important. And the last thing is just having a company that you’re proud to work at and would want to have as a labor. And if we can do those 3 things, really all of our constituents, owners and employees of the company, I think will all benefit. As we talked about, when we look at the environment, more specific to your question, we really looked back to 2008 and the GFC is the most recent exogenous event that happened to look at, to learn from, not because we believe that that’s the shape of this curve and trying to get into the debate of the shapes of the curve. But just a model of -- that we could learn from. And so we’re taking that learning, it’s informing how we’re running the operations from that learning. It’s going into our decisions on continuing our OpEx investments in R&D, as we talked about on the call, keeping those steady also from a CapEx standpoint. The CapEx that we’re investing in this year is mainly going into infrastructure investments that will have capacity implications in the 2022-2025 time frame. So those are also remaining steady. So we’re not trying to predict what the shape of the curve looks like here as in the near-term and what the recovery will look like, but really trying to, from an operational standpoint, ensure we’ve got as many options to support that curve and be ready for whatever the economy is going to throw at us. So that’s what we’re trying to do as a management team here in the short term.

Sure, Vivek. Well, first of all, thanks for inviting and having us today. We appreciate that. And I think maybe just to frame things and many have listened to our earnings call and not providing any update from that call. So all the references will be from what we saw at that point. But just to put in context, as we operate the company, there’s really 3 things that we want to keep in mind is, the first thing is we want to operate the company as owners and really owners with a long-term investment horizon. The other 2 ambitions just adapt and change and certainly, with COVID-19 coming, just having that ability to be able to move quickly is important. And the last thing is just having a company that you’re proud to work at and would want to have as a labor. And if we can do those 3 things, really all of our constituents, owners and employees of the company, I think will all benefit. As we talked about, when we look at the environment, more specific to your question, we really looked back to 2008 and the GFC is the most recent exogenous event that happened to look at, to learn from, not because we believe that that’s the shape of this curve and trying to get into the debate of the shapes of the curve. But just a model of -- that we could learn from. And so we’re taking that learning, it’s informing how we’re running the operations from that learning. It’s going into our decisions on continuing our OpEx investments in R&D, as we talked about on the call, keeping those steady also from a CapEx standpoint. The CapEx that we’re investing in this year is mainly going into infrastructure investments that will have capacity implications in the 2022-2025 time frame. So those are also remaining steady. So we’re not trying to predict what the shape of the curve looks like here as in the near-term and what the recovery will look like, but really trying to, from an operational standpoint, ensure we’ve got as many options to support that curve and be ready for whatever the economy is going to throw at us. So that’s what we’re trying to do as a management team here in the short term.

Then maybe, Dave, just to kind of go one level deeper in that. How are -- how is TI from a supply perspective? Are you able to fulfill all customer orders? Have you seen any disruption from the supply perspective? And then then we will talk about the different demand side drivers?
Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes, yes. And I think we had Rich on our call, and I think he framed it as luck is when opportunity meets preparation. And I think we were prepared for the unforeseen events that COVID provided. And back in late March, as the industry was struggling to meet supply, many of our peers had to extend lead times or had difficulties with supply. And as we saw some unusual order patterns from our customers, we actually put a communication out on our website towards the end of March. And I think we’ve recently updated it in May, still out on the main page of our website, if anyone is interested in what that communication look like. But basically said, try to reassure customers, we’ve got the product available. Our lead times remain stable. That’s really for 3 things. And Vivek, you and I have had many discussions about how we view inventory and the importance of it, and how -- the actions that we’ve taken to only control that inventory and investments that we’ve made there. So we came into this time period with a good position on inventory, number one. The second thing is, that we own and control our manufacturing facility. So we’ve got a dozen wafer fabs. We’ve got half a dozen assembly test sites. Those not by accident, are in geographically diverse locations. And so that allows us to have the third thing, which is a very robust business continuity plan. So as the world goes into lockdown and just as New York had more restrictive lockdown requirements than say, Dallas. There are parts of the Philippines as an example. We’ve got 2 assembly test sites in the Philippines. Those that were near Malaysia were different than our operations in Baguio, we’ve got parts that are multi-sourced across those sites. So that has allowed us to continue to keep our lead time steady and offer product to our customers.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Got it. And in terms of the different end market drivers from a demand perspective, I appreciate that autos is probably weak across the board for everyone. But outside of autos, can you give us some qualitative sense of what has head up better and what has been worse than expectations so far this year?

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes. I think even to put it into context, I think that it’s helpful to even go back to third quarter of ’18 when we saw demand begin to weaken cyclically and as you know, we’re working our way and trying to find a bottom. And really, we began to see what we saw -- would be described, if you remember, in January as signs of stabilization in fourth quarter of ’19. So we started the year, January, as normal as whatever a normal January can be from a demand standpoint. And as we moved into February, we’ve got some charts that we look at revenue on a 5, 10-year basis that we look at Chinese New Year revenue going in and coming out. It clearly was very weak as we came out of Chinese New Year. It just as factories in China struggled to come back online because of COVID-19. And then as we moved into March, I mentioned earlier, we began to see some unusual order activities just as customers got concern due to the supply constraints and that unusual order activity and strength continued into early April. And the only exception there was -- and I just described that as broad based. And the only exception, of course, was in automotive, is automotive factories began closing around the world because of COVID-19 in March. So after about the first week or so in April, we then began to see things decelerate broadly. And our assumption was that things would continue to decelerate through the quarter and such that May would be weaker than April and June would be stronger than May, and that’s essentially how you’d get to the midpoint of the guidance. And of course, we’re in the period of uncertainty, and we put a plus or minus 10% confidence interval around that midpoint, just given the uncertainty. So we’re going to finish up the quarter. And as we normally do, we’ll update how things have gone so far, say for this quarter.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Got it. So last evening, when you saw one of your competitors positively preannounced, was your first reaction, yes, that makes sense, or doesn’t make any sense?

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Dave

I read those reports. I read them last quarter as they came out. And so we’ll put that all in context, I guess, when we report.
Got it. Okay. That’s fair. The next topic, Dave, I wanted to discuss with you is the whole U.S.-China trade tension dynamic and you guys are one of the largest semiconductor companies, the largest one in analog, for sure. Give us a sense for how these trade tensions have impacted you so far? And then going forward, does TI need to change anything to take into account these new restrictions that the U.S. Department of Commerce is trying to put on the industry.

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes. So I think at the highest level, I think we would rather see both of our governments working together to get the GDP growing in both economies and the world economies versus the direction that we’re going. And I think Rich, our CEO, describes it as no one calls him to have him influence that direction. So we’re likely not going to have a strong voice in that outcome. So — and he’s also a student of world history. And if you studied world history as he has, if you’ve got a rising economic power that’s challenging an existing economic power, those are probably the trade tensions that — or tensions in general that will last for decades. So our job is just over it and figure out how to be successful in that environment and not wait for some trade agreement or some agreement that is hopefully going to solve all the problems. More specifically, there’s been a couple of different recent rulings and regulations that have come out from the commerce department here, the most recent of which was fairly narrowly targeted, and they don’t directly impact us.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

All right. So can you remind us of what the remaining exposure is to Huawei? I imagine it’s probably very modest. But let’s say, in the hypothetical or which could be real, that if, let’s say, Huawei just cannot build its own base stations or its smartphones, will that have any significant impact on TI going forward?

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes, so — Yes, so last year, Huawei was a 3% to 4% customer. They were a 3% to 4% customer in 2019 as well. And if you remember the shape of the comms equipment, market for us or sector, it grew very strongly, had a very strong back half 2019 and a very strong first half ’20 and then decelerated from there. So — and about 2/3 of our Huawei revenue was tied into that comms equipment market. So it exited — started much higher than a 3 -- 2 to 3 -- 3% to 4% and exited much lower, as you might expect.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Got it. Is there any indirect exposure? That you might be shipping to somebody who might ship to Huawei and some other — I’m just trying to get a --

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

No. That’s inclusive of if we ship to a distributor, if that’s what you mean or a third-party manufacturer that is channel independent number, yes.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Got it. Next thing, as it relates to the trade tension is just China’s desire to become more self-sufficient in semiconductors. Have you seen any share shifts to their domestic suppliers, do you think that the risk will grow for TI over time?
Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes. I think as someone that is an owner of the company and thinking about our competitive advantages, certainly, that’s a risk that has to be on the radar screen and something that you think about. But because of the competitive moats that are around analogue, the dynamics of the market, the diversity of the revenue and the product set, just the structure of the market itself, it’s just not something where market share moves quickly. It’s not something that will sneak up on anyone. And it’s not the type of place where big governments can spend big dollars to move quickly into our industry, right? It’s typically a memory markets or processors or baseband or those big shiny objects in our industry where governments and regions of the world have moved first. So no, we haven’t seen any evidence of that. I think it -- again, beyond the list, it’s not something that you would want to ignore, but it’s just not something that would happen overnight.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Got it. I know, Dave, we have discussed this issue a few times before, but I think it will be helpful for the audience to understand what is so hard about analogue that someone in China will find it tougher to copy because it doesn’t really use the most leading edge manufacturing. So what is so tough about analogue that raises the barriers to entry in that business?

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes. It’s got a lot of just -- I think one of the things is just the diversity, right? So we’ve got 60,000, 70,000 products in our portfolio. We have 100,000-plus customers. And you look at the requirement of any one product, and you just drive down into power as an example. And any system will have a varying number of semiconductor components on it. And depending on how many parts and what parts that are on that piece of electronics. Those parts will have different voltage requirements and different current requirements. So that will drive the need for different power chips to supply the right current and voltages to it. Which then drives the diversity of power products. So by its very nature, drives a diversity of the number of products that you need to develop. The technologies that are developed are not standard. And so if you talk to the technologists from our teams or from our peers’ teams, they’ll go into great detail of why the technology is very unique, and it brings us competitive advantages, which it does. But the key is, it’s unique. You can’t use industry standard tools to develop our products and our peers and someone in China could also develop those products. But our engineers couldn’t go to someone else’s design shop and just do the same thing and use the same tools because they just don’t exist, where on the digital side, you’re using 5-nanometer or 7-nanometer or 10-nanometer digital process technologies. You’re using tools from standard design tools from a Cadence or Mentor, Synopsys, those types of companies. And you can go from one semiconductor company to the next, and you’re going to use the same tools and the same basic process technologies, and you’re going to output it. You need to know what factory you’re going to output it to. And you’re going to build it on -- in factories that are going to use the exact same manufacturing process flows from tool companies that are all developing on the same materials in the same material science. So there’s a lot more standardization on the digital side than what there is on the analog side. So oftentimes, the design and the process side in analog is described as an art, where on the digital side, it really is more of a science. And because on the digital side, you’re only looking for 0 and the 1 outcome. So that all can be abstracted and therefore, can be put into a tool where on the analog side, really, those designers have to be down at very, very low levels and it just can’t be automated. Is that -- and you’re an engineer, the fact that I do a decent job of trying to summarize that. You could add any color to it because I know you’re pretty good at it as well, but...

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Absolutely. No, it’s been a while since I’ve been at engineering, but it makes absolute sense. Dave, maybe going to the other part, important part of your business on the embedded side. Last year, we saw a very big discrepancy between or big delta between your business, which was down somewhat in the mid-teens versus at least what the SIA said, the broader microcontroller industry was down closer to kind of the 6%, 7%, 8% range. I’m curious, what explains that big delta, and do you think that will reverse at some point? So just give us a look back on why there was that big share shift last year because it’s much bigger than what we have seen at any other previous time? And then what will it take to kind of get back in line or even get back to TI’s historical trend, which has been of taking share in those markets?
Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Dave

Yes. And Vivek, I think it’s a good point, as you -- as you look at that in that particular year, you almost have to go back to the previous couple of years, where ’16, ’17 and really 3 quarters of ’18, there was a significant amount of outperformance. So -- and really began fourth quarter of ’18 and through 2019, there was some share that was given back. So in that embedded market, microcontrollers or processors because the performance wasn’t that much difference between either one of those. Share just doesn’t move very quickly over -- measured over longer periods of time. So I’m just real cautious to make a comment about even 1 quarter or 1 year. When you look at over that period of time, performance is more stable. But certainly, we’ve got work to do to ensure that performance over longer periods of time do continue to -- we do continue to gain 30, 40 basis points of share that we’re -- we’ve got good solid road maps of products that customers want. We’re engaging with customers, really just doing the basic blocking and tackling that you have to do in those businesses. So that’s what we’re focused on, and the team’s -- there’s a lot of attention being brought to bear on that execution.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Got it. Could you help maybe remind our audience on what the different parts are of your embedded business? And which parts were perhaps in more competitive situations last year?

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes. So about 60% is connected microcontroller, 40% is in processors. And there’s not that much of a performance difference between the two of those. And connected microcontrollers as the word the description would give it. We support across that product family, about a dozen wireless standards, everything from WiFi to Bluetooth to ZigBee to Z-wave to Thread to 6LoWPAN, you want to name the alphabet soup inside of that, our team pretty much supports it as well as a host of wired standards, and our industry gets pretty excited about all the wireless stuff, when you’re connecting things. But the wired portion is very important as well for customers. And then the processor stuff is also very, very important. And we’ve got a full array of processors that are intended for embedded applications in automotive. We’ve got processors that do ADAS processing infotainment, industrial, millimeter waves or sensors or those types of processors.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Got it. Dave, as we look at the broader economy starting to open up, do you think the recovery in your end markets will be coincident with that opening up of the broader economy? Or do you think there was perhaps some level of pull in, whereby the recovery in the diversified semiconductor industry would actually lag the recovery in the broader macro economy.

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

It’s -- the simple answer is we can’t predict that, Vivek. I think that as I’ve kind of made in my opening remarks, what we’re trying to do is make sure that we’re ready with it, number one. And we’ve talked about the importance of owning and controlling our inventory in the channels. You’ve seen us take actions over a number of years to move to consignment, where we own and control more of that inventory that’s in the channel. More recently, we’ve taken actions to go to essentially a single distributor as we exit this year. That will give us more control of that inventory. And more importantly, move us closer and have more direct relationships with our customers as we exit this year, and it’s just a great time to do that transition when demand is weaker. And what we’re doing internally from an inventory standpoint to position ourselves when that -- when things do recover. So we just -- we won’t be able to predict it, but we can be ready for it when it does come back.
All right. So when do you think the industry would get to a point where one can say, look, Q2 is the trough of this cycle. Do you think the industry is there yet? Because we have seen a range of views. I think TI has kind of not expressed a specific view, we have had such -- somebody like NXP, who said outside of auto, their businesses are growing in Q2 could grow again. Q3, Microchip obviously expressed a view about Q2. When do you think TI gets into a position where you are able to say with somewhat more confidence that, yes, Q2 is -- or Q3 is the bottom of the cycle. What needs to happen?

Yes. And Vivek, you know our style. We just stick to reporting the facts. And I think that, that's just served us well. That's our style. We just try to stick to the facts and report them and just -- we'll stay out of the debates and report what we can see and not enter into speculating on what things could be. So that's just, I think, served us well in the past, and we'll stick with that.

Got it. Makes sense. Then on the distribution side that you've bought up Dave. So you have adopted a very different strategy versus your peers and that you have pulled back a lot from distribution. So if we look at where Q2 is in terms of just the midpoint of your outlook. Do you think it already embeds all the possible headwinds in terms of pulling back from distribution? Or do you think there are some other impacts that can be felt over the next several quarters?

Well, we're going to pull out somewhere between $200 million and $250 million worth of inventory that's in the channel between now and the end of the year. So that -- part of that is inclusive of the second quarter number. There's more to be done in third and fourth quarters as we continue to move through. So now as you know, we are moving revenue to consignment last year. It's a different type of action, but the result to revenue is really essentially the same. So from a year-on-year compare and a sequential compare, those effects aren't significant. They are there, but it's not significant. So but those numbers are there. It's -- they're baked into the numbers, if you will. So that doesn't change in demand, of course. It's just moving the inventory from 1 bucket into -- onto our balance sheet.

Got it. So just to kind of put a pin in it, if, let's say, Q3 happens to be seasonal, then does it mean that your revenues grow in a seasonal way or they grow somewhat less than that? Because you're still accommodating the lower distribution?

Well, yes, another way to say it is, yes, that if we were not making this transition, our revenues would be higher. If we're -- let's say, we're transitioning, make up a number, $75 million of that $200 million in the third quarter, it would be $75 million higher, right?

Got it. Okay. Next thing is where is TI in terms of your 300-millimeter plans? And just given all the macro headwinds that we have seen this year and some of the market share differences we saw in the embedded business. Has that altered how you think about the rollout of additional 300-millimeter capacity?
Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes. So the simple answer is that our plans have remained unchanged. Those investments are really longer-term capacity investments, as we had talked about as even as we made the site selection and began to break ground at the site to put up the parking garage, which is now complete and the old parking lot has been torn up, and they've begun to dig the foundation of the building, and that process has started. So those plans just remain unchanged. It's a great time as other things slow down to be able to do construction. And as you know, I was a manager -- program manager in development for a number of years and you always -- as a program manager, you've got 3 big variables you're always managing, it's price and scope and our cost scope in schedule. So -- and certainly, we don't have -- we're not under the gun from a schedule standpoint, so we can optimize the other two things. So roughly, we'll plan to finish that up somewhere around the end of 2021 or so. It'd probably be 12 to 24 months from now, something like that.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Got it. And I know it wouldn't be today, I call, unless I mentioned the magic words around free cash flow per share and free cash flow per share growth. Maybe give us a sense for how you are thinking about dividend growth. TI has had a very solid record of -- among the best. In the industry, not just in semis, but I imagine in the S&P 500 as well. How are you thinking about dividend growth? And just kind of modulating buybacks given the pressure -- potential pressure on free cash flows this year.

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Yes. I think -- and I think you set it up very well for me to answer that question. I think as we act like owners and think like owners, we allocate capital, I mentioned earlier that our investments in things like R&D are remaining steady in this period because those investments are on 3- and 5-year horizons. And as we look to grow free cash flow per share, 3 and 5 years from now, we want to have revenue growth. And so those investments are staying steady. On the SG&A front, most of the SG&A goes to things that will strengthen our competitive advantages, whether that's in the transitions to consignment or distribution strategy or investments in ti.com or virtual selling. So we want to keep those things steady. And we'll be prudent and cut back where we can in more difficult times like this. But the other areas, we want to continue those investments. CapEx we already talked about, again, our infrastructure investments to support growth longer term. So we want to have all those things still continuing, and that will serve us well with that longer-term growth. And the cash that we have left over, we've got the commitment, and we've got a 15-plus or even longer track record now of returning all that to our owners, and the first priority is dividends. And we'll look back, and we'll look forward at what that free cash flow growth will look like and make a decision of what to grow that dividend with. And the priority there, #1 is sustainability. And we certainly, I think our dividend last quarter was around I have to the check the math, it was somewhere between 50% to 60% of our trailing 12-month free cash flow so certainly very sustainable. And so that's the first priority. The second one is we want to have a dividend that will continue to grow. So even if free cash flow is flat or down a little bit, we'd still like to grow it. That's what the objective is. And then the balance of the free cash flow will return with buybacks. So that's basically how we think of it, and that hasn't changed.

Vivek Arya - BofA Merrill Lynch, Research Division - Director

Great. Very good. With that, we are at the end of our time. Thank you so much, Dave, for spending a little bit of your afternoon with us. Really appreciate your taking the time, and thank you to the audience as well for joining us. If you have any follow-ups, please always feel free to call or write to me, but we'll close the session there. Thank you so much, again, Dave.

Dave Pahl - Texas Instruments Incorporated - Head of IR & VP

Vivek Arya - BofA Merrill Lynch, Research Division - Director

All the best.