Company Name: Qualcomm
Company Ticker: QCOM US
Date: 2018-01-31
Event Description: Q1 2018 Earnings Call

Market Cap: 101,034.80
Current PX: 68.25
YTD Change($): +4.23
YTD Change(%): +6.607

Bloomberg Estimates - EPS
Current Quarter: 0.752
Current Year: 3.457
Bloomberg Estimates - Sales
Current Quarter: 5304.125
Current Year: 22543.667

Q1 2018 Earnings Call

Company Participants

- John T. Sinnott
- Steven M. Mollenkopf
- George S. Davis
- Alexander H. Rogers
- Cristiano R. Amon
- Donald J. Rosenberg

Other Participants

- Timothy Patrick Long
- T. Michael Walkley
- Amit Daryanani
- Stacy Aaron Rasgon
- Romit Jitendra Shah
- Srini Pajjuri
- James E. Faucette
- Brett Simpson
- Ross C. Seymore
- John William Pitzer

MANAGEMENT DISCUSSION SECTION

John T. Sinnott

GAAP and Non-GAAP Financial Measures

During the call today, we will use non-GAAP financial measures, as defined in Regulation G, and you can find the related reconciliations to GAAP on our website

Steven M. Mollenkopf

Q1 Highlights

Opening Remarks

- We are pleased to report a strong set of results in our first fiscal quarter with non-GAAP EPS above the high end of our prior guidance range, driven by better than expected ASPs and units reported by our Chinese licensees and stronger than expected demand for MSMs
- Our strong results reflect the actions we've taken to drive our strategic objectives and improve profitability
- We are benefiting from our technology and product leadership in mobile, and leveraging that leadership into a growing set of opportunities across RF front-end, auto, IoT, mobile compute, and networking

- Our fiscal second quarter guidance reflect some higher than normal seasonality due to near-term inventory build in the handset market, consistent with what others are reporting, as well as the ongoing impact of our non-paying licensees

QCT

- In QCT, we expect the strong y-over-y performance to continue in our fiscal second quarter, driven by favorable mix and product cost actions
- Longer term, our outlook for our business remains unchanged as we continue to see positive trends with higher than expected global smartphone ASPs in QTL, and stronger share and product trends in QCT across multiple growth areas
  - We made two very important announcements today that expand and strengthen our overall relationship with Samsung

Licensing Business

- In our licensing business, we announced that we have amended and expanding our long-term licensing agreement
- The license remains at the device level and continues through 2023
- It is important to note that the amended agreement reached with Samsung is fully consistent with FRAND licensing practices and is consistent with our long-term model
- More importantly, it provides the foundation for a long-term stable licensing relationship with Samsung, following the KFTC investigation

KFTC's Order

- And importantly, as part of the agreement, Samsung is withdrawing its opposition to our appeal of the KFTC's order
- We look forward to continuing our long and mutually beneficial relationship with Samsung for many years ahead

Product Business

- In our product business, we also announced a multi-year strategic agreement with Samsung in various technology areas and across a range of mobile devices
- This agreement expands the company's longstanding relationship as technology and business partners into 2018 and beyond as we transition to 5G
- QCT had another very successful consumer electronics show earlier this month with important product and partner announcements across RF front-end, auto, networking, mobile compute, and IoT
- QCT and its partners were awarded 52 best of CES awards this year, up from 17 last year, clearly indicating execution in adjacent opportunities and the strength of our design pipeline

Automotive

- In automotive, we now have more than $3B of order backlog, including more than $1B of order backlog in infotainment alone

- At CES, we announced new auto designs with Honda, Jaguar Land Rover and BYD in China, as well as the collaboration with Ford on cellular V2X

New Flagship RF Front-End Design

- We also announced new flagship RF front-end design wins with Google, HTC, LG, Motorola, Samsung and Sony, as we expand our share position, including filter-rich modules and newly designed gallium arsenide power amplifiers
- We also introduced our unique 5G Tunable front-end solution, which utilizes modem intelligence at a system level to dynamically tune multimode RF performance and power efficiency when sharing radio frequencies and components across 3G, 4G and 5G.
- We believe this disruptive technology will transition RF front-end design leadership from dedicated component suppliers back to the system solution provider in 5G, consistent with what happened with prior wireless generation transitions

Networking

- In networking, we announced solutions with expanded Wi-Fi mesh capabilities, as well as a new and upgraded mesh networking platform
- We are the number one provider of retail and enterprise Wi-Fi and we are reshaping the carrier segment with our mesh solutions while gaining share from key incumbents
- Our success in networking is the result of a deliberate investment several years ago to position our Wi-Fi business for the structural changes we anticipated in the market

China Technology Summit

- Last week, we also made some significant announcements at our China Technology Summit in Beijing, further demonstrating our strong ecosystem partnerships and product leadership in China
- Lenovo, OPPO, vivo and Xiaomi joined us at the summit to announce that each had signed non-binding MoUs for the multi-year purchase of our RF front-end solutions totaling at least $2B, which would represent a substantial increase in our RF front-end share at these accounts

Collaboration Agreements

  - The scope of our broad RF front-end platform includes gallium arsenide PAs, envelope trackers, LNAs, multimode PA, and modules, RF switches, discrete filters, and filter-rich modules, and antenna tuners across cellular and connectivity technologies
  - We also announced collaboration agreements in China called the 5G Pioneer initiative with Lenovo, OPPO, vivo, Xiaomi, ZTE and Wind Tre for the development of advanced 5G mobile devices targeting the 2019 timeframe
    - 5G represents a market discontinuity in the mobile ecosystem and it coincides with China-based OEM's plans to expand globally in the premium tier

Dispute with Apple

- In our dispute with Apple, we continue to move closer toward a number of key legal milestones later this year and early next year
- In various jurisdictions around the world, in cases concerning Apple's infringement of Qualcomm's patents, there will be hearings and determinations on whether Qualcomm should be entitled to injunctive relief and exclusion orders

License Agreements

- Also, Qualcomm's case against Apple's contract manufacturers for breach of their license agreements continues to move toward resolution in the same timeframe, as does Qualcomm's case against Apple for improperly interfering with those license agreements
- We value Apple as a customer and would like to continue that relationship into the future, but it is in our stockholders' best interest that we ensure that Apple pay a fair and reasonable royalty and operate on a level playing field with the other OEMs
  - While the litigation with Apple is necessary to protect our IP assets and our contract rights, we remain open to finding a path to resolution and collaboration with Apple as a partner

3G/4G Devices

- Turning to demand trends for 3G/4G devices around the world
- Consistent with what others have been reporting, we are forecasting some short-term end market softness, driven by larger than typical sequential correction in orders from a thin modem customer and near-term smartphone trends in China
- George will provide more details on our updated forecast, but we continue to see favorable long-term trends, including flagship handset launches later this year and the ramp of 5G device shipments beginning in early calendar 2019

Pending Acquisition of NXP

- Turning to our pending acquisition of NXP, with recent approvals in both Europe and Korea, only Chinese regulatory approval remains and we hope to receive that soon
- We continue to see this as an attractive deal for both our stockholders and NXP stockholders at $110 per share, as the combination brings together a comprehensive set of capabilities to address next generation auto and IoT devices and provides us with greater scale in auto, IoT, security and networking with their highly complementary products and world-class sales channel

Stockholders

- On January 16, we released an Investor Presentation that outlined the near-term and long-term value opportunity for our stockholders and our plan to deliver $6.75 to $7.50 in non-GAAP EPS in FY2019
- We believe this appropriately frames the core earnings power of Qualcomm and the multiple levers we have within our control to achieve this, along with the significant value for our shareholders, as we work through our outstanding licensing disputes

Earnings Target

- We took a conservative approach to modeling our FY2019 earnings target, and our management team is very committed to driving this result for our shareholders
- We outlined a huge opportunity for growth and diversification through our expansion into new, complementary, adjacent opportunities
  - This growth is underpinned by the expansion of our service addressable market from $23B in 2015 to approximately $150B in 2020, or more than six times the size of Qualcomm's 2015 SAM

Network Operator

- Another important area of value creation is 5G, and Qualcomm is leading the industry
- Whether you are a phone maker, an infrastructure company, or a network operator, Qualcomm is already identified as the key partner for accelerating your roadmap to 5G commercialization around the world
- We're partnering with leaders across the globe as we work to bring 5G to market, including Verizon, AT&T, Nokia, Ericsson, China Mobile, SK Telecom, Telstra, Vodafone, Orange, NTT DOCOMO, T-Mobile, Sprint and now Samsung
- Our announced 5G Pioneer initiative further builds on this strong global momentum

Closing Remarks

In closing, we reported a very strong set of results this quarter and our products and technologies are leading in their respective categories and are set to lead as we enter the 5G generation

These generation changes have always provided us with the opportunity to benefit from our significant technology lead, and this will be true again to an even greater degree in 5G

Our technologies will expand into many industries as we enter the age of IoT, autonomous vehicles, always-on mobile computing, and ubiquitous networking

George S. Davis

Q1 Highlights

Non-GAAP Revenue and EPS

- Fiscal first quarter non-GAAP results were very strong
- Non-GAAP revenues were $6B, just above the midpoint of our prior guidance range
- And non-GAAP EPS were $0.98, $0.08 above the midpoint of our guidance range, reflecting strong performance in both QCT and QTL

QCT

- In QCT, MSM chip shipments were 237mm, towards the high end of our guidance range
- Overall performance in QCT was above expectations, driven primarily by the higher unit volume on a build ahead for a customer's flagship launch

- QCT's earning before tax in the first fiscal quarter was up 32% y-over-y, the seventh consecutive quarter of y-over-y growth, reflecting the strong MSM demand, improved product mix, and product cost initiatives
- QCT EBT margin was 21% for the quarter, above our prior guidance on the higher MSM volume and up more than 280BPS over the same period last year

QTL

- In QTL, revenues were $1.3B, at the high end of our prior guidance range, driven primarily by stronger than expected 3G/4G device ASPs and units reported by OEMs in China for the September quarter
- Recall that this excludes royalty revenues from Apple's products and the other licensee in dispute

EBT Margin

- QTL EBT margin was 68%, at the low end of our prior guidance
- EBT margin would have been 72% or at the high end of prior guidance if not for bad debt expense recorded in the quarter related to a licensee that is facing significant financial difficulties
  - This charge also accounted for the modestly higher than forecasted OpEx expense in the quarter

GAAP Loss

- The GAAP loss this quarter reflected the impact of $6B charge related to the enactment of U.S. tax reform legislation and the accrual of the European Commission's $1.2B fine announced last week
- These two charges impacted fiscal first quarter GAAP EPS by $4.79 per share and were excluded from non-GAAP results
- The $6B book charge largely relates to the one-time repatriation tax on our offshore deemed repatriated earnings and profits
- After application of applicable tax credits, we expect to pay $3.3B in cash taxes back end loaded over eight years, beginning in January 2019

U.S. Tax Reform

- In general, we expect U.S. tax reform in the longer term to result in a modest positive improvement in our effective tax rate, as the increase in tax on offshore earnings is more than offset by the benefit to onshore earnings

European Commission

- The European Commission fine relates to a decision on its investigation of a modem chip agreement that was in effect from 2011 through 2016
- While we disagree with the decision and will immediately appeal it to the General Court of the European Union, it is important to note that the decision does not relate to our licensing business and has no impact on ongoing operations
  - We will post a bond in lieu of paying the fine during the appeal period

Return of Capital

- Turning to return of capital, we returned $1.1B to stockholders in the quarter in the form of dividends and buybacks
- Turning to our financial guidance for the fiscal second quarter, we estimate revenues to be in the range of approximately $4.8B to $5.6B; and non-GAAP EPS to be in the range of approximately $0.65 to $0.75 per share
    - These expectations are reflecting weaker than forecasted smartphone demand in the December quarter

QTL EBT Margin

- As a reminder, fiscal second quarter is normally the seasonally high quarter for QTL revenues, absent the two disputes, and the seasonally low quarter for QCT
- In QTL, we estimate revenues of $1.15B to $1.35B in the fiscal second quarter, down approximately 4% sequentially at the midpoint
- We expect QTL EBT margin to be approximately 64% to 68%, down sequentially at the midpoint on lower revenues and increased litigation expenses

Apple Products

- It is important to note the impact of Apple non-payment is more pronounced in the fiscal second quarter as it is typically an outsized quarter for royalties related to Apple products relative to other licensees, given the timing of their product launch cycle
- Our QTL revenue forecasts for our second quarter is also being impacted by softer sell-through, as demand in China in the December quarter was down on a y-over-y basis
- We will be closely watching Chinese New Year device sell-through results to assess the time period necessary for the supply and demand dynamics to rebalance

Chip Business

- Turning to the chip business, we expect MSM shipments of approximately 170mm to 190mm units
- This outlook includes the normal seasonal effects of lower demand in the calendar first quarter, a larger-than-normal reduction in orders sequentially from a large modem customer, as well as near-term lower than expected orders from customers, particularly in China, on inventory concerns from the demand dynamics
    - This forecast is consistent with continued strong chip share in the quarter

MSM

- We expect QCT revenue per MSM to be up on a sequential basis in the fiscal second quarter, driven by seasonal factors and favorable product mix
- We expect QCT's fiscal second quarter EBT margin to be approximately 13% to 15%, down sequentially on lower MSM volumes, offset by benefits from product cost initiatives, but up 100BPS y-over-y at the midpoint
- We anticipate fiscal second quarter non-GAAP combined R&D and SG&A expenses will be flat to down approximately 2% sequentially, as increased litigation expenses and the reset of employee benefit taxes are more than offset by the absence of the prior bad debt charge

Cost Reduction Initiatives

- We will be implementing the cost reduction initiatives in the quarter and are in the process of determining the expected charges for severance and other related costs
- We will provide that information once that estimate is finalized
- Non-GAAP interest expense, net of investment income, in the fiscal second quarter is expected to be roughly flat sequentially at approximately $60mm

Market Dynamics

- Given the market dynamics we have described, we are updating our unit outlook for CY global 3G/4G devices for both 2017 and 2018
- For CY2017, we've adjusted the midpoint lower and narrowed our range
- We now expect 3G/4G device shipments of approximately 1.75B to 1.8B units, up approximately 4% at the midpoint y-over-y

CY2018

- For CY2018, we are bringing down our estimate modestly to reflect the lower 2017 base
- We now estimate a range of 1.85B to 1.95B 3G/4G device shipments for calendar 2018, or up approximately 7% from the midpoint of our expectations for calendar 2017
- With respect to FY2018 global 3G/4G device sales, we now expect global device ASPs will increase y-over-y based on the strength at the mid and premium tiers, as opposed to our previous expectation of a low-single digit percentage decline
    - We are not revising our estimate for FY2018 device sales until we get a clear picture of whether the ASP pickup will more than offset the sell-through issues discussed earlier

Outlook

Non-GAAP EPS

- Turning to 2019, we continue to be highly confident in our outlook for FY2019, as recently disclosed in our Investor Presentation, with base non-GAAP EPS of $5.25 growing to between $6.75 and $7.50 per share upon resolution of the licensing disputes

QUESTION AND ANSWER SECTION

<Q - Timothy Patrick Long>: Just wanted a little more color on the Samsung arrangements here. It sounds like you extended with FRAND terms. Just talk to us a little bit – I know the prior deal had an upfront payment. It had some technology IPR transfers as well. So if you could just talk a little bit about how those two in the new collaborations factor into the FRAND rate discussion for Samsung. And then, I have a follow-up after that.

<A - Alexander H. Rogers>: Tim, this is Alex. So the amended and the expanded agreement basically takes the prior deal and just adds some changes to it. So a lot of what was in the prior deal remains in place, so, for example, the upfront payment that you talked about. The key things to keep in mind about this Samsung amended license agreement is that it's consistent with our FRAND licensing practices. It remains a license at the handset level. This is not a chipset level royalty-bearing license.

And so, one key element also is an expansion of rights back to Qualcomm to Samsung's patent portfolio. And one of the key factors to keep in mind is that, as part of this amendment and this new arrangement with Samsung, Samsung is going to be withdrawing from its intervention in the KFTC appeal, adverse to Qualcomm. So they'll no longer participate in that matter, adverse to Qualcomm.

And from a financial perspective, it supports the numbers that we put out for 2019 FY and beyond and provides strong foundation for Qualcomm and its relationship with Samsung through 2023.

<Q - Timothy Patrick Long>: Okay. Thank you. And then, just if I could just follow-up on the China business. It sounds like a lot of moving parts there. September was really strong for the device manufacturers, then weakening. Could you just talk a little bit about what you think is going on with the reason for the change in demand there?

And, second, could you talk – it's been a pretty good market share gain region for you. Can you talk about if you still think you're taking share in the Chinese end market? Thank you.

<A - Cristiano R. Amon>: Hi, Tim. This is Cristiano. I think we talk about a near-term weakness in the domestic channel market based on the sell-through data in the December quarter, and that was contemplated in our guidance. I think you need to – when you think about, there was a super – expect a Super Cycle and I think of one of the flagships and you think that the Chinese OEMs didn't want to go ahead, and most of the new products are going to launch in the Chinese New Year. So that's one thing on the demand sell-through in the December quarter. I think we will monitor the Chinese New Year data. And whatever could be inventory into the quarter, we should rebalance in H1.

We also see that the forecast is consistent with two things happening for QCT, I think, both a strong chip share with those OEMs, as well as mix improvements. So we can't really talk about H2, but the Chinese New Year launch is just ahead of us.

<Q - T. Michael Walkley>: Cristiano, just talking about 5G, Qualcomm historically gains share with new wireless technologies. Can you just update us on how you see 5G ramping and why Qualcomm is ahead of the competition? Maybe what technology areas you see the competitors might lack? And also, just on the China side, also a follow-up question. Just can you talk about some of these RF agreements and how you see your RF business ramping over the next two years?

<A - Cristiano R. Amon>: Yes, Mike. So let me start with 5G. We have been pretty consistent talking about a 5G acceleration in the industry. And we now probably have line of sight of a number of deployments that are going to happen off the network of the 3GPP global 5G New Radio standard in the later part of this year. And we are working with a number of OEMs to have smartphone launches in H1 2019.

And part of that I think we also announced in China last week a 5G Pioneer, I think, program of a number of OEMs of the China market that see 5G as a discontinuity to basically enable their expansion plans to become global players leveraging their 5G transition. So I think the motivation to have early launches in H1 2019 is high, and we're marching towards that date.

So your second question is about competitiveness of 5G. 5G brings a number of complex technologies. One is, you have the foundation, which is Gigabit LTE, which is we've been investing, and 4G continues to evolve. There are 17 smartphones in the market today with that capability using a Qualcomm modem.

We also have the addition of two other frequencies, sub-6 and millimeter wave, and we continue to see complexities in the RF. So we're looking at our position as being a company that have been in a good position for the 4G, which continues to evolve, and been supporting multiple global activities with 5G.

We have announced probably trials in over-the-air, I think, test with all of the infrastructure vendors across all of the operators' launch. So I think scale is going to be an advantage for us, and we're optimistic about the prospect.

Your last question is RF front-end. We announced a total of $2B in RF front-end purchase across four OEMs. We're starting to ramp designs. I think it's probably a second set of announcement. The first one was CES when we announced a number of OEMs, and then Chinese OEMs was in the second wave.

We also feel good about the 5G story in front-end. When 5G technology gets launched, I believe, the baseband and the system platform, the reference design, plays a stronger role in defining the RF front-end configuration. As part of the same discussion, we saw support in China for our Tunable front-end solution. Thank you.

<Q - Amit Daryanani>: I think it's couple for me as well. Maybe to start with, could you maybe just help us understand how much of an impact are you seeing on your revenue line from the China inventories that you guys talked about? And do you think this is something that gets worked out through the March quarter, or could it persist through the June quarter as well?

<A - George S. Davis>: Yes. No, clearly, I think two major factors when we think about Q2. One is, the China weakness really impacted customers that felt they were going to have a stronger sell-through at the end of December. And so, as Cristiano said, we're going to be watching very closely the Chinese New Year sales to see how much of that gets absorbed in Q2. So we don't know yet. There may be some activity that carries on beyond that.

But for our revenue overall in Q2, there are some other factors that are also at play. One, in the licensing business. Normally, obviously, this is the very strong quarter for licensing, but it also happens to have usually a very heavy-weighting of Apple because their flagship launch tends to take place, as you know, in the fourth calendar quarter, which is the second fiscal quarter for our licensing business. The absence of that, we're not seeing as much of a seasonal pickup as we would normally see there. Plus, the licensing estimates reflect the lower sell-through that we ended up seeing in December that really didn't impact the chip business.

<Q - Amit Daryanani>: It's very helpful. And I guess if I could follow-up, the OpEx guide that you guys have on March quarter, if my math is working correctly, the implication is OpEx as a percent of sales would be something north of 35% and I realize there are some one-time variables there. But could you maybe talk about what are these one-time variables? What's the right way to think about OpEx as a percent of revenues? And when do you get to realize all the $1B cost takeout benefits you've talked about?

<A - George S. Davis>: Yes. I think the OpEx as a percent of revenue certainly had a little bit of a bounce, but that was more in Q1 relative to the bad debt charge. When I think about OpEx for the company, I think you've seen really, since the strategic realignment plan, the major drivers of any pickup have either been our investment in pre-commercial 5G or the increase that you've seen in SG&A to support the higher litigation and model defense spending that we have.

We think, under the $1B plan, we can absorb the 5G cost that you've seen. We think as we move our focus further into these new served available markets we've talked about, we're going to be able to reprioritize our investment portfolio and take additional costs out. But really the biggest savings are going to come out of SG&A, which has been a big driver of our growth in OpEx over the last four or five years, in particular in the licensing area and in this model defense. And we think we have a clear path by 2019 to getting some of those costs taken back out. Of course, we'll have a real focus on overhead cost as well as part of the SG&A.

<Q - Stacy Aaron Rasgon>: I had a question on the 2019 guidance. So you're talking a lot about 5G ramping and everything else, which sounds great. But at the same time, if I take a look at that guide, $5.25 without fixing licensing, $3.75 without the – or without NXP or the buyback, if I take out the $1B cost cut that isn't really in numbers right now, it's more like $3.15, which seems to be quite a bit worse than where the Street is and, I would say, inconsistent with some of your commentary on some of the good things coming down the pipe.

So I guess can we talk a little bit more about what's actually in that guide? What are you assuming is getting worse between now and then? You mentioned Samsung's new royalty payment in line with your numbers. Are those getting worse vs. where they are now? What are you assuming for Apple share? Any color you can give us on that would be helpful. And then, I have a follow-on.

<A - George S. Davis>: Sure, Stacy. This is George. I think your math is generally good. But I think what's missing is, we've said we're going to put some conservative assumptions into the numbers that, quite frankly, if you did the math based on our run rate today, you would say would be a lower run rate than we're experiencing today. And that is by taking out all Apple revenue related to new products, including both the modem and the front-end and saying, if for whatever reason we're still litigating or pursuing an agreement with Apple and haven't reached it, and they decide to take the decision to carve us out completely, what does that look like.

So, again, the purpose of that estimate was really to provide stockholders with a high confidence base number before resolution of the licensing, so as they consider alternatives that they can understand what does the kind of core earnings look like on a conservative basis. But you're right, it would be below the run rate today, and it was purposefully conservative.

We also have some tax impact in the $5.25 number. Tax reform, for us, is a little higher tax on offshore earnings, lower tax on onshore. Net-net, it's slightly positive. But when you break it out the way we did in that analysis, it's negative in the $5.25 and it's positive on the resolution basis.

<Q - Stacy Aaron Rasgon>: Got it. Thank you. That's helpful. So my follow-up, you mentioned a lot of the $1B coming out of SG&A and, obviously, you have a lot of accelerated litigation and other [ph] charges there (35:49). Is it imperative that you actually do settle out licensing in time for 2019 in order to realize that full $1B?

<A - George S. Davis>: No. We think there is some contribution, but that's not the primary driver. Again, we've grown SG&A within the licensing business. Beyond that, as part of the process of addressing the many other challenges leading up to this, we think we have some opportunities there. We certainly believe that, as we look at the road map that we had to reduce overhead-related SG&A over time, that we'll take the steps necessary to accelerate that. So we're not highly dependent solely on a piece dividend to get this number. We think we'll be able to deliver the number.

<Q - Romit Jitendra Shah>: I had two, George, just on the tax rate. There's a lot there. Could you just tell us, within the FY2019 EPS guide, what's the tax rate that you're assuming?

And then the other question I had was just on NXPI. It would seem that closing this deal in a timely manner would be an important part of your value creation story. And so, assuming you close or you get regulatory approval from China, could you give us a feel for what the timeline would look like from there to the actual closure of the deal? Thank you.

<A - George S. Davis>: So on tax, we've guided the tax rate this year for non-GAAP at 8%. Obviously, with the impact of tax reform and the fine, which is not tax deductible, the GAAP number doesn't really hold a lot of information. For 2019, as I said, long-term we expect the tax rate to be somewhat accretive relative to our history. We have not guided, but we were in the mid-teens before in our tax rate. And I would be closer to that number than I would to the guide for 2018.

And then, on NXP, not a lot we can say at this time other than we're very focused on working with MOFCOM to secure the final approval. Shortly after regulatory approval, the tender process will begin. And then, depending on – there's two tender processes anticipated – depending on how that process goes, then you could close within, say, three weeks of the approval of regulatory.

<Q - Srini Pajjuri>: Cristiano, just a question on the RF strategy. It looks like you're winning a lot of designs out there. If I look at the landscape out there, the margin profile in that business is quite strong, at least at the operating margin level. As you expand your footprint, how should we think about QCT margins? Do you see an expansion potential here? Or are you being a little bit aggressive on the pricing side, given that you're starting very early?

<A - Cristiano R. Amon>: Hi. Thank you for the question. Look, we talk about in our 2019 projections, I think, this could contribute $2B to $3B in revenue. And I think we are starting to – as we have the complete portfolio and particularly the ones that have higher value such as the PA and the high filter content modules, we see as an opportunity for us to grow faster than the market because we attach an existing MSM and an expansion of margin contribution in the device. And I think that's consistent with the strategy we have pursued of diversifying and growing in other areas, leveraging our existing channel.

<Q - James E. Faucette>: I had a couple of quick follow-up questions. I guess, the first one for Cristiano. You talked about bringing to market a mobile device 5G in 2019. At the same time, we've heard a range of comments from carriers on their own outlooks for 5G. So maybe you can help us understand kind of the circumstances and the geographies where 5G starts to make sense first and then where we would see it develop from there.

And then, I guess, my second follow-up question is just on the cost containment or reduction program. What are the things that would allow you to expand that further and further reduce expenses vs. what are the competing elements that may limit it to that roughly $1B target? Thank you very much.

<A - Cristiano R. Amon>: Thank you, James, for the question. I'll take the first one and I'll ask George to answer the second question. So on 5G, I think 5G, as it becomes a significant contributor of volumes are really looking at the FY2020, but early launches in 2019 are very important. In particular, for our position in the chipset, I think early launch is an ability to cover that globally define your competitive position and the ability to have a mature product, so you can ramp volumes in premium devices towards FY2020.

As you think about the launches in geographies, we see activity across all the developed markets. We see activity in the United States with at least two of the four carriers. That is consistent with the timeline of starting to have the devices launching in H1 2019. We see in Europe at least three operators. You should expect in markets such as the UK and markets such as Germany [indiscernible] (42:36) you're going to see a high degree of activity.

Many of those operators we had announced trial activities, and the timeline is the same as H1 2019. Of course, you have Korea with all of the operators driving to the timeframe. You do have a technology race there. You have Australia in the same timeframe. And you have Japan towards H2 2019, beginning of 2020.

The most significant data point is the one that I'm providing last, which is China Mobile. In an event that we had in China last week, I think, the executive management of China Mobile made a presentation together with Qualcomm talking about a very large scale activity in H2 2019. The reason China is important is because China, it's a very technology-focused and harder-focused market. And as you look at the position that the Chinese OEMs have in the market, that enables an acceleration of the scale for the smartphone market. So China is likely going to be a significant development in H2 2019. Thank you.

<A - George S. Davis>: Again, on OpEx, I think if you think about our R&D, we're always going to be focused on making the level of R&D investment that is necessary to keep us ahead in things like generation transistors what you're seeing today. So the biggest part of the ramp in spending over the last couple of years has really been tied to 5G. It's absolutely critical, not only to the ability of the chip business to come out very strong and in a leadership position in the early phase of the generation, but it's also why the value of our licensing program remains strong throughout the ecosystem. So you're going to see us take actions that are consistent with maintaining a strong level of R&D to preserve that position over time.

We do think that SG&A has been inflated by a number of the challenges that we've seen over time. We think we have the opportunity to take that down, something in the order of 200BPS to 300BPS on a stabilized basis. And we will look very strong within the industry with SG&A at that level. It'll look like a very appropriate cost structure. But we'll always have a little more focus on R&D because, quite frankly, we have the channels to get a return on that R&D, not only from the chip business and the licensing business, but we're now seeing an even greater return on R&D as we expand into automotive, IoT, networking, mobile compute.

All of these markets are looking to the technologies that we lead in, in mobile as part of their next road map. And so, we think that's ahead of us. We think that's part of the growth. And we think anything we to do on this $1B OpEx action will be consistent with that outlook.

<Q - Brett Simpson>: I just had a question about the margin structure in QCT long-term. I guess when you look at leadership franchises in semiconductor, you've seen margins structurally rise over the last few years; typically, leadership franchises that are returning 40% or so operating margins. And if I look at your QCT PBT margins, they've been relatively disappointing in the 4G era. So just wondering when you look to 5G and you believe you have a competitive advantage in structural, competitive advantage in this market and you're going to be selling more platforms into the RF and baseband, and RF has been a much higher returns business than QCT over the years. Is it a path where you see the QCT margins starting to inflect and you can reflect the returns of a real leadership franchise long-term? Thank you. And I've got a follow-up.

<A - George S. Davis>: Sure, Brett. This is George. As we said, we expect QCT margins to continue to improve over time and rise above the 20% level. But one of the things I would point out, we've said that the growth in adjacencies has been a positive in that respect, and it's certainly growing. It is accretive to the margin profile. And I think it's getting us into markets where the margin structure is more attractive over time. And so, we'll continue to push hard on margin expansion.

And I should point out the 2019 performance that we put out for the company doesn't include the margin benefit that we would expect to see as we enter the 5G era, where we get both improvements in share and improvements in ASPs in the new devices. And that's part of even in the core business where we're going to see expansion of margin.

<Q - Brett Simpson>: Okay. Thanks, George. And maybe just to follow-up on the Samsung arrangement that you announced. Does it have any bearing on how you think about foundry relationships long-term? I think in the last couple years, you've been exclusively using Samsung LSI at 14-nanometer. And I'm wondering whether that's something you think will continue as you move to 7-nanometer, particularly with this recent agreement with Samsung? Or will you be multi-sourcing at leading edge going forward? Thank you.

<A - Steven M. Mollenkopf>: Brett, it's Steve. In terms of sourcing agreements, I would say, we make them on an individual basis depending on what node and the details of the node. So it really just depends on the generation in terms of where we go. Now, that being said, I think it is advantageous for us to have a broader set of assets in the company to be able to resolve issues with companies. And so, we view our wafer volume and the fact that we have wafer volume from RF to the leading node as being a strategic asset for us. It's actually proven to be that way over the last several years. So I won't talk about where we're going. But I do think it is something that helps us strategically.

<Q - Ross C. Seymore>: Two quick questions here. First, on the QTL side. When you put your FY2019 earnings targets out there, it looks like you have a high level of confidence that the licensing issues will be resolved. So my first question is what gives you that confidence?

And then, the second question that's somewhat related is, I wondered if we could get an update, if any, on the unnamed dispute that is going on. And I assume, given the arrangements today and agreements, that that second dispute is not with Samsung. So those are the two questions. Thanks.

<A - Steven M. Mollenkopf>: Ross, maybe I'll start and I'll kick it to Don to provide some detail here. But on the disputes, couple things. I think there are a number of legal milestones that occur this year that are helpful. Typically, in a licensing dispute, legal milestones provide an opportunity and a forcing function for the parties to sit down and to finally work things out. We've seen that in the case of our past history, both recently and over the last decade, which I think is helpful. Don, with any follow-up, can answer that pretty well. I'm sorry, you had another question toward the end.

<A - Donald J. Rosenberg>: So on the unnamed other licensee, our practice has been that while we still believe it's productive to continue with negotiations, that we don't name the licensee in a dispute. It's only when we get to the point where we feel like we've exhausted all practical activities there. And so , you should take that as we're still negotiating to see if we can resolve the dispute.

<A - Steven M. Mollenkopf>: And I would say also – this is Steve again – I think that the significance of the agreements that we announced today with Samsung, I think, they're pretty evident. But we're quite pleased with those agreements. They're consistent with what we have done in the past in our forward-looking plan. And I think they also provide a good benchmark or reference point for our general licensing program moving forward as well. So I think those things to us provide good indicators that I think we're headed in the right direction as a business.

<Q - John William Pitzer>: I guess my first question is for Cristiano. Cristiano, I just want to make sure I understand the RF market opportunity. To what extent can you guys drive revenue on the 4G node vs. the 5G node? And I guess, as you think about 5G, and it sounds like your value proposition goes up significantly as 5G. How are you guys thinking about sort of the dollar capture potential per phone or the incremental dollar capture?

<A - Cristiano R. Amon>: Hi, John. Thank you for the question. In 4G, we have been in the process to complete our product portfolio. We have been players within the antenna tuner and the envelope tracker. And I think now we add into the portfolio starting to have designs and get ready to ship volume with our GaAs PAs and filters and actually going after the higher value segment, which is the multimode PA and the payment modules.

And I think you're going to start – that traction starting to happen within H2. That's the reason we talk about China and the China announcement with our OEMs. I think the China nature of the market, they look more of a system solution. I think, as we establish our business there, we see a power for MSM platform and be able to actually have a complete platform. And so, it's natural that you see that reaction coming from the China OEMs. And that's how it's going to start building the business in 4G.

As you said, 5G changes the landscape significantly because it changes giving a little bit more voice to the system solution provider and the baseband provider about what [ph] sectors the (53:49) technology and the RF design that goes in the technology launch configuration, as well as the opportunity for innovation with the Tunable front-end. And as we said earlier, I think we expect that to be an expansion of margins for QCT and allow us to grow faster than the market.

<Q - John William Pitzer>: That's helpful. And then, George, maybe as my follow-up, in your comments around the chipset guidance being below seasonal for March, you called out both thin modems and China. I'm just kind of curious, of the two, which one's sort of the bigger driver of the below seasonal for the March quarter on the chipset business?

<A - Steven M. Mollenkopf>: Yes. I would say from a below seasonal, China certainly is a factor because the drop off at the end of December was more significant than expected. I would say, sequentially, clearly the big pullback by the modem customer is an important factor as I look sequentially for the chip business.