Thank you and good afternoon. Today's call will include prepared remarks by Steve Mollenkopf, Derek Aberle, and George Davis. In addition, Cristiano Amon and Don Rosenberg will join the question-and-answer session. You can access our earnings release and an executive presentation that accompany this call on our Investor Relations Web site. This call is also being webcast on qualcomm.com, and a replay will be available on the Web site later today.

During this conference call, we will use non-GAAP financial measures as defined in Regulation G, and you can find the related reconciliations to GAAP on our Web site. As well, we will make forward-looking statements regarding future events or the future business or results of the company. Actual events or results could differ materially from those projected in the forward-looking statements. Please refer to our SEC filings, including our most recent 10-Q, which contain important factors that could cause actual results to differ materially from the forward-looking statements.

And now to comments from Qualcomm's Chief Executive Officer, Steve Mollenkopf.

Steve Mollenkopf

Thank you, Warren, and good afternoon everyone.

We delivered strong results this quarter with revenues at the high end of our guidance range and earnings per share well above the high end of our guidance range on strong operating performance and progress in licensing.

Our strong fiscal third quarter results reflect good execution across our businesses as we position the company for a return to growth. We are investing to expand our technology roadmap and lead in 5G, are pursuing new opportunities in fast growing areas that build on our core technologies and are committed to operational excellence.

In QTL, we are pleased to report that we made good progress on the outstanding license negotiations this quarter and receive reports for a significant amount of prior period sales. This is a good indication of the progress we are making and we expect that momentum to continue into our fourth fiscal quarter. We now have more than 110 companies that have signed licenses consistent with the terms of the NDRC resolution.

In QCT, the favorable demand trends for our new chipsets across the mid and high-end smartphone tier, especially with the top 10 vendors in China are helping to deliver improved financial performance. We are also seeing incremental demand for our lower tier chipsets in China versus our prior expectations driven in part by our differentiated all mode and modem leadership. In the premium tier, our Snapdragon 820 now has more than 150 premium smartphone and tablet designs and we have just announced the Snapdragon 821 which offers further performance enhancements and will help set a new bar for flagship smartphones increasingly popular mobile VR head mounted displays and other new devices.

Our updated Snapdragon 600 and 400 product families are becoming the preferred choice for OEMs driving growth in the high and mid-tiers as users seek more performance and features in these segments.

We continue to expand our presence in adjacent opportunities including automotive, networking, mobile compute and IOT. These industries are rapidly adopting smartphone technologies. Our leadership across 3G, 4G, 5G, WiFi, multimedia, graphics, processor and RF front-end technologies positions us well for these new growth areas. Collectively, the addressable opportunity for these adjacent areas is expected to grow at a CAGR of 18% over the next five years from $12 billion to $29 billion according to a combination of third-party and internal estimates.

In automotive, the pace of innovation is accelerating and we are seeing a strong alignment between the industry needs and Qualcomm's technologies. We continue to build momentum and strengthen our position through significant design wins at global automakers. This includes telematics where our modem leadership is well-recognized, infotainment with our Snapdragon automobile processors and in connectivity with our WiFi Bluetooth and location products.

Our momentum in IOT continues as customers turn to our broad offering of IOT development platforms to accelerate their product innovation. At CompuTech, we introduced the Qualcomm's Snapdragon Wear 1100 processor for the fast growing targeted purpose wearable segments such as watches, fitness trackers, smart headsets and wearable accessories.

Our Snapdragon flight platform as helped OEMs quickly commercialize new smaller, lighter drones leveraging Qualcomm's integrated SOC connectivity, GPS and drone software solutions.

We are also extending our proven leadership in modem solutions into the Internet of Things with over 100 design from more than 60 manufacturers using our low power LTE IOT modems. In networking, we continue to drive the transition to the new Wave 2 11ac standard for WiFi networks and now have over 350 home and enterprise products either in production or design across mainstream and premium segments.

We are on track to close our TDK JV by early calendar 2017 and to deliver our next generation Gallium arsenide and CMOS PAs in 2017. This will enable us to provide a comprehensive set of technologies and module capability for the RF front-end positioning us well for key industry trends, complexity increases within smartphones, the proliferation of radio bands in 4G and 5G and the growth of cellular in IOT.

We are on track to deliver operating margins of 16% or better in QCT in the fourth fiscal quarter and it is important to note that our planning assumptions incorporates second sourcing at our large modem customer.

Looking forward, our global scale technology leadership and differentiated chipset roadmap across multiple tiers and regions and dozens of spectrum bands continues to position us well for the future.

Our modem expertise continues to lead the industry and as we did in both 3G and 4G, we are leading the world to 5G. 5G will make wireless broadband indistinguishable from wireline requiring devices with ultra high-speed, ultra low-latency and ultra reliable connectivity. The technology roadmap required for 5G will drive significant advancements in modem and front-end features, the technologies in which Qualcomm excels.

Let me take a moment to review a few of our core strengths that will underscore our continued wireless broadband leadership. Our gigabit LTE leadership with the Snapdragon X16 modem will pave the way to 5G. Many of the technologies enabling gigabit LTE will be common to 5G, use of more antennas, use of multiple types of spectrum simultaneously, more sophisticated signal processing et cetera. And the mastery of these features in 4G will be essential to leadership in 5G. Many of these features are already being trialed or commercially deployed in phones using our Snapdragon 820 processor X12 LTE.

Qualcomm also pioneered 802.11ad operating at 60 gigahertz, which is shipping into access points and computing devices today. The design and commercialization of this technology into smartphones is enabling the company to build leadership and expertise in the high-band known as millimeter wave to be deployed broadly in 5G.

We are also designing a new OFDM based 5G air interface that will not only enhance mobile broadband services but also enable connectivity and management for the Internet of Things and new types of mission critical services. Our 5G design is intended to get the most out of the wide array of spectrum available across regulatory paradigms in bands from low bands below 1-gigahertz to mid bands from 1-gigahertz to 6-gigahertz to millimeter wave. 5G devices will bring the next level of convergence with the ability to work on licensed and shared spectrum concurrently. We are very pleased that regulators around the world are beginning to allocate spectrum for 5G consistent with our 5G design and development efforts.

Recent spectrum regulatory decisions and movement in the U.S. and Europe combined with progress on the spectrum regulatory front in China, Japan and Korea are good indications that the world is preparing for 5G.

We recently announced our new 5G prototype system and trial platform operating in spectrum band below 6-gigahertz and showcasing multi gigabit throughput at low latency. We demonstrated a prototype system at Mobile World Congress Shanghai in collaboration with China Mobile. The new prototype adds to our existing 5G millimeter wave prototype system operating at the 28-gigahertz millimeter wave band and is capable of robust mobile broadband communications in non-line-of-sight environments.

We are utilizing these prototype systems to test and demonstrate our innovative 5G designs to drive 3GPP, 5G, new radio standardization and enable timely 5G NR trials in anticipation of future commercial network launches.

To summarize, fiscal 2016 has been a transition year for Qualcomm, which has played out largely as expected. Our strong results this quarter reflect a good progress, we have made positioning the company for improved financial performance and continued technology leadership in mobile and the many exciting new industries and product enabled by our smartphone technologies.

We are continuing to make progress in our licensing business and expect that momentum to continue positioning us well for the future.

I will now turn the call over to Derek Aberle.

Derek Aberle

Thank you, Steve, and good afternoon everyone.

As Steve noted, we made significant progress in the licensing business this quarter both in terms of new agreement signed and catch up amounts reported. As a result, QTL had a very strong fiscal third quarter with total reported device sales of approximately $62.6 billion and revenues of $2 billion driven primarily by the catch-up reporting of certain prior period sales and revenue as well as stronger than expected 3G, 4G device ASPs.

As a reminder, as a result of the resolution of our dispute with LG in April, in the fiscal third quarter we recognized over $200 million in revenue for sales reported during the prior two fiscal quarters and resumed to recognizing quarterly LG revenues for sales reported in the third quarter consistent with our prior guidance.

We continued to make steady progress in China executing new license agreements. In addition, we are still actively negotiating with a small number of the key remaining Chinese OEMs and making progress in those discussions. Based on the progress we are making, those licensees agreed to report and pay a portion of the sales and royalties they have been withholding while we continued to negotiate their new agreements. These amounts plus additional catch-up payments we received from other licensees during the quarter resulted in more than $200 million in revenues in QTL for the third fiscal quarter related to prior period activity.

QTL revenue for the quarter therefore included a total of more than $400 million in revenue related to prior period activity as a result of the LG resolution and these catch-up payments.

As we have said in the past, we are prepared to take action against OEMs that are not negotiating in good faith to conclude license agreements or underreporting to royalties they owe us. Consistent with that approach in June, we filed complaints against Meizu in the Intellectual Property Courts in both Beijing and Shanghai, China. Regrettably, we have had to turn to litigation against Meizu in order to protect our rights and importantly to maintain fairness in a level playing field for the companies that are respectful of intellectual property rights and have entered into license agreements in accordance with the resolution reached by Qualcomm and the NDRC.

We are also continuing to work hard on a number of fronts to improve compliance. We are actively implementing our compliance plans and expect them to deliver a meaningful improvements over time.

Looking ahead, we continue to estimate calendar 2016 global 3G, 4G device shipments of 1.625 to 1.725 billion devices with year-over-year unit growth of approximately 8% at the mid-point. We continue to see a strong 4G ramp in China as each of the operators pursues aggressive subscribe growth targets with their 4G plus service offerings and design momentum continues to move rapidly towards all mode devices across China.

Other emerging regions continue to be negatively impacted by macroeconomic headwinds. Outside of handsets, growth in automotive telematics is offsetting weaker tablet volumes.

We continue to expect low single-digit growth in global 3G, 4G device sales in fiscal 2016 consistent with our prior guidance reflecting strong unit growth partially offset by ASP declines that are consistent with our prior expectations. We continue to expect that the rate at which handset ASPs will decline during the fiscal 2016 will be about 50% of the rate of decline experienced in fiscal 2015.

In terms of the outlook for QTL for the fiscal year, we now expect revenue to be between $7.4 billion and $7.8 billion. We have narrowed the range to align with our current view of expected progress in China for the remainder of the fiscal year including increased confidence that we will conclude additional agreements with some other remaining key OEMs within the fiscal year.

Although, we expect to continue to see quarterly fluctuations in the externally implied royalty rate for the reasons we have previously explained, we expect the rate for fiscal 2016 to be in the range of 2.9%.

With respect to the Korean Fair Trade Commission investigation of our licensing practices, we have now submitted an extensive response to the case teams report and have entered the hearing phase with the commissioners. During this phase, the commission will conduct a series of hearings over the next few months during which we expect to have the opportunity to further present our response. The first hearing was held earlier today in Korea in contrary to the recent press reports, the commission has not reached a decision in our case.

In conclusion, we continue to make good progress in China. We are keenly focused on concluding agreements with the remaining OEMs as well as improving compliance and are working towards continued progress in the fourth fiscal quarter.

That concludes my comments. And I will now turn the call over to George.

George Davis

Thank you, Derek, and good afternoon everyone.

We are pleased to report a very strong fiscal third quarter. Revenues were $6 billion up 4% year-over-year and non-GAAP earnings per share were $1.16 up 17% year-over-year. We ended the quarter with cash and marketable securities of $31 billion reflecting strong operating cash flow of approximately 30% of revenue in the quarter and the acceleration of our share repurchase activity into the first half of the year.

Through our fiscal third quarter, we have returned approximately 120% of free cash flow or more than $5.9 billion to stockholders this fiscal year including the completion of the remainder of our 10 billion stock repurchase commitments. And we are on track to achieve our targeted 75% return to cash flow in fiscal 2016.

Our third quarter results reflect both our commitment to operational efficiency and the strong performance of our operating businesses. Performance above the high-end of our guidance range primarily came from continued progress in our licensing business in China.

In QCT, MSM shipments were $201 million approximately 9% above the mid-point of our prior guidance range reflecting greater than expected demand in the low-tier particularly in China.

QCT operating margin had 9.5% was inline with our prior expectations on higher volume and cost reductions with increased low-tier demand impacting our product mix and revenue per MSM versus expectations.

Non-GAAP combined R&D and SG&A expenses overall were lower than forecast decreasing 2% sequentially reflecting continued cost initiatives. Our non-GAAP tax rate during the quarter was 19% up modestly against expectations as a result of a higher mix of licensing revenues in the quarter. We continued to expect our non-GAAP tax rate to be approximately 18% for fiscal 2016.

Turning to our fiscal fourth quarter, we estimate revenues to be in the range of approximately $5.4 billion to $6.2 billion up approximately 6% year-over-year at the mid-point. We estimate non-GAAP earnings per share in our fiscal fourth quarter to be approximately $1.05 to $1.15 per share up approximately 21% year-over-year at the mid-point.

We expect fiscal fourth quarter non-GAAP combined R&D and SG&A expenses will be down approximately 2% to 4% sequentially reflecting further strategic realignment plan cost actions particularly in QCT.

In QTL, as Derek mentioned our fiscal year revenue outlook is $7.4 billion to $7.8 billion and we believe our recent licensing progress will continue throughout the remainder of the year. Aligned with that view, our revenue guidance for the fourth fiscal quarter assumes some additional progress in China. However, our fourth quarter guidance does not include the full potential benefit from the completion of all license agreements under negotiation and is consistent with the low-end of the QTL range for the full fiscal year.

For the fiscal fourth quarter, we estimate total reported device sales of between $57 billion and $65 billion. Our TRDS forecast reflects our estimate that global device sales will be lower year-over-year reflecting a decline in the premium tier at a large OEM partially offset by the impact of closing new licensing agreements and the resulting catch-up we expect to receive.

Like our revenue guidance, this forecast includes the impact of closing some but not all of the remaining agreements in China.

In QCT, we anticipate MSM shipments of approximately 195 million to 215 million units and operating margin to improve sequentially to 16% or better consistent with our prior operating margin target.

Our QCT operating margin forecast reflects the strength of our new product cycle, our cost actions throughout the year as well as strong demand from mid and high-tier devices.

Now, turning to fiscal 2016. We remain on track to meet the $1.4 billion reduction in spending under our strategic realignment plan and we continue to expect more than $700 million of savings in fiscal 2016 relative to the SRP baseline, ahead of our original $600 million target.

A summary of the savings program is included in the Investor presentation for this call on our Web site. We continue to expect fiscal 2015 non-GAAP combined R&D and SG&A expenses to be down approximately 2% to 4% year-over-year, which includes the full year impact of acquisition related increases of approximately 5%. Adjusting for M&A, estimated spending in these areas will be down 7% to 9% year-over-year.

We are committed to maintaining a strong discipline of cost management, while remaining extremely focused on the important role Qualcomm will play as the leading innovator in mobile technology solutions.

That concludes my comments. I will now turn the call back to Warren.

Warren Kneeshaw

Thank you, George.

Operator, we are ready for questions.

Question-and-Answer Session

Operator

Thank you. [Operator Instructions] Your first question comes from the line of Simona Jankowski with Goldman Sachs. Please go ahead.

Simona Jankowski

Hi. Thank you for breaking out the benefit to QTL from the China catch-up royalties. Would you be able to also breakout the contribution to units and the level of ASPs for that catch up? And then, is there much left in terms of the already signed agreements that is yet to be recognized?

Derek Aberle

Simona, hey, it's Derek. Yes, I think we are not in a position today to breakout the split of TRDS kind of units in ASP that came in through the catch-up payments in Q3. I think, if you look at it, you sort of look at it for the year, you will be able to see that we are sort of making progress and closing the gap and if we continue to make progress and close these key remaining agreements. We talked at the Analyst Day of being in a position to capture about 75% of the global sales from the Chinese OEMs. I think we'll actually sort of on an exit rate basis, if we can close these remaining deals, it will be better than that.

So I think it's just a continued story of progress and you are starting to see the results were all through this quarter.

George Davis

Simona in terms of the upside to guidance as we indicated our Q4 guidance is really set at the low-end of the full year range for QTL. So the upside would be the agreements in addition to the ones that we expect to sign that we put into the guidance. There is still $400 million of revenue upside that is possible for the quarter and not in our guidance.

Operator

Your next question comes from the line of Mike Walkley with Canaccord Genuity. Please go ahead.

Mike Walkley

Hi. Thank you. Derek just another question on QTL, with the progress in China certainly encouraging and as you continue to make progress with a few of these other large Chinese OEMs, how should we maybe think about the exit rate basis in terms of maybe units you believe are being underreported entering fiscal 2017, do you think it's still more than maybe 10% of the market under reporting or are you getting close to those levels?

And then, just overall high level how is this progress as you exit the year relative to your expectations towards your longer term $10 billion in QTL revenue by 2020? Thank you.

Derek Aberle

Mike, this is Derek. So I think the way to think about it is sort of if I bridge back to the answer I was just giving to Simona's question we continue to believe that if we can close these remaining agreements that the exit rate actually on the China portion of the global sales -- Chinese OEM portion will now be north of 75%. And I think, if you look that also in terms of then the global sales, it would be less than 10% on a run rate basis going forward. And what we have seen actually is, some of these key Chinese OEMs have actually been gaining share. And so we will get an even larger benefit on a run rate basis, if we can close out the remaining couple of agreements we have here.

Warren Kneeshaw

The second question.

Derek Aberle

Oh, yes. And I would say, basically we are -- I think the progress we are making in China and the view in the market we see is consistent with what we talked about in terms of the $10 billion target.

Operator

Your next question comes from the line of Tim long with BMO Capital Markets. Please go ahead.

Tim Long

Thank you. Just sticking on the same topic, it's hard to beat it too much. It looks like Derek, the markets units were only down about 4% sequential, so I'm assuming that's some prior period catch-up. So, if we were to normalize the full year 8% growth, would that be lower because of those aren't in there and maybe if you could just give us a sense, I don't know if that's breaking out those numbers too much?

And then, just on the chip side, I think I just wanted to hit on the gross margin. I guess, was it mix that caused it to be down even though the ASPs were up in the quarter and what's kind of the outlook for the next few quarters on the gross margin line for QCT? Thank you.

Derek Aberle

Hi, Tim. It's Derek. So on the first question, yes, the units in Q3 would have included some amount of catch up which rolled into the catch up number that we talked about. If we look back, you will see we have effectively held our unit call for calendar 2016, which is about as you said about an 8% year-over-year growth, obviously that has quarterly fluctuation given seasonality and other variability. I would say largely from a market standpoint things are tracking in line with what we would have expected last quarter. We talked about China being stronger, some softness in the premium tier and a little bit of weakness in some of the emerging markets but the net-net still giving us confidence that the 8% forecast was good. You may have seen China reported numbers out recently probably stronger than most people had expected and largely in line with what we thought would happen there.

George Davis

Hi, Tim. It's George. I think we don't break out the gross margin, but I think your point is on revenue per MSM. And yes, it was a little soft during the quarter than we had expected on mix. Obviously, the unit story was quite good and in particular we saw a lot of strength in the low-tier. Gross margin is going to be a good story for us as you look into the end of the year, you are going to see the impact of not only a very strong set of new products starting to get the lift in the marketplace in Q4. But, the adjacent business continues to do well, our adjacent businesses are continuing to do well. And of course, we reiterated the 16% op margin for QCT and that being said, it will also benefit from the OpEx actions that we are taking in the quarter as well. So, good story overall for QCT.

Operator

Your next question comes from the line of James Faucette with Morgan Stanley. Please go ahead.

James Faucette

Thanks. I just wanted to ask a follow-up question as it relates to the collection that you guys are doing or the payments et cetera. Derek maybe you can just talk a little bit about how we should think both timing, but also what maybe the long-term implications are. I guess just a little more color on anything that you can say as to why the negotiations with [indiscernible] the outstanding licensees are still there? And at what point do you feel like you end up having to do something along the lines of filings through with Meizu? Thank you.

Derek Aberle

Yes, James. It's Derek. So I think the way to look at it is, we have this small group of licensees that were withholding their reports and payments while they continue to negotiate. And that was inconsistent with what a lot of the other companies did. And I think the way to look at that is, given the progress that we have made within the last quarter with those companies towards closing agreements which aren't yet closed, but we are making progress towards that and sort of put them in a position to feel the right thing to do was to go ahead and report a portion of the prior period sales which is what roll through in the quarter.

Taking that up a level, as I said, for the year at the Analyst Day we talked about, if we could close these key deals, we would basically be sort of on an run rate basis collecting on about 75% of the total sales by the Chinese OEMs, and then, there would be additional compliance work we would need to do to kind of close the gap on the remainder.

I would say now as we look at that picture, if we accomplish the same goal this year meaning that closing the agreements, the exit rate will actually be north of that 75%. And then, of course, we are already actively moving on a number of fronts to improve the compliance in other areas.

So, I think that's largely tracking in line with our plans and as you can see if there are companies that we believe we are not making progress with and we won't conclude agreements with because they are not negotiating in good faith we will take action against them and that's what we did against Meizu. We don't feel like at the moment with other companies, but of course that could change in the future. Our current view though is we are making progress and we have higher confidence now than we did a quarter ago that we will be able to close those deals within the year.

Operator

Your next question comes from the line of Kulbinder Garcha with Credit Suisse. Please go ahead.

Kulbinder Garcha

Thanks. Just a couple of quick ones. Derek for you, just a clarification on the licensing side. You said that it was $400 million worth of catch-up payments from Samsung and from the Chinese OEMs. There is going to be some catch-up payments already included in your Q4 guidance and [indiscernible] for QTL, I assume and eventually those catch-up payments tail-off to zero because it's an ongoing run rate. I just want to clarify if that's the way it works.

And the second part of the QTL, is that, this move from 75% compliance to move towards the 700% is it, as you exit this year, is that more about getting your existing licensees are reporting to 100% comply under all of their units or is it signing are still further you made your vendors? Thanks.

Derek Aberle

Kulbinder, it's Derek here. On the -- we basically said the combined catch-up amounts across is actually LG not Samsung. LG and the companies that then reported some prior period activity was in the quarter north of $400 million. If you think about Q4 as George mentioned, the way we looked at that kind of throughout the year we had a little bit of a difference in the way we treated guidance meaning the QTL full year revenue guidance as always included revenues associated with closing new deals. But that, when we were just guiding one quarter out, we have been cautious and not including the benefit of what would be required to close those deals within the quarter.

Now, as we get towards the end of the year with just Q4 remaining and we look at the progress we are making, we have effectively narrowed the range brought up the low-end of the range. And as George said, while we have included some amount of benefit from closing new deals but not the full benefit. So what's rolling through our Q4 guidance is really consistent with the low-end of the full year QTL revenue guidance. And then, there is incremental revenue that would come from closing additional deals in the quarter which we -- we believe is possible which is why we have continued to have a higher range for the full year on QTL.

Going forward, I think the way to think about the run rate is, again, if we get that done, we will be north of probably 75% of the Chinese OEM sales on a run rate basis, which would mean sort of the under reporting percentage of total global sales would be less than 10%. And then, to really close the gap on that is going to be a combination of -- I would say signing up some of the smaller players as well as obviously we have the dispute with Meizu. And then, driving higher compliance from some of the companies that are already licensed and just not reporting their full sales. So it will be a kind of a combination of a few different elements there.

Operator

Your next question comes from the line of Rod Hall with JPMorgan. Please go ahead.

Rod Hall

Yes, guys. Thanks for taking the question. I just wanted to come back to QTL in the mid-point. Your mid-point guidance in QTL is down $0.5 billion and so I get all the commentary around the puts and takes. But, I'm just trying to understand what caused that shift down in the mid-point, is it demand, is it ASPs, is it the catch-up payments for quite as much as you thought? And then, can you help me understand what's going on there? And then, I have one follow-up on that was well.

George Davis

Hi, Rod. It's George. So, yes, the mid-point, if you do the 73 to the 28 versus 740, yes, it's down a 500. I wouldn't read anything into it. There is a number of agreements that were put within that space. We have tired to every quarter give an update on where we think the range is going. And even last quarter we said it looks because of the market and some other issues, the range is probably had a little more downside, but we held the low-end of the range based on progress.

So, we are constantly adjusting to make sure that we reflect what's possible. You've also seen us take some litigation action which actually puts things outside the -- potentially outside the window for the year. But, there is a number of factors that went into the range. And so, I wouldn't over read a $50 million change. And again, we are guiding to the low-end of the range, which means we have significant upside to that, if we are able to sign more agreements.

Rod Hall

Okay. And then, I just also wanted to ask you the 16% exit rate, you said that's now -- it sounds like a minimum and I just wonder how conservative it is that margin exit rate now that you know more about market share changes et cetera in the back end of this year. Can you just comment a little bit about, do you feel that's a very conservative number now or is it as conservative as when you started out with that 16% exit rate, just give us some idea there.

George Davis

We are pleased with what we have seen in the marketplace. As you know, the year probably overall has been a little softer in the premium tier than we would have thought. So, but we have also made good progress on both market share and on the -- our cost efforts relative to expectations going in. So, I think overall, we feel comfortable reiterating but I really don't want to characterize it beyond that.

Operator

Your next question comes from the line of Timothy Arcuri with Cowen & Company. Please go ahead.

Timothy Arcuri

Thank you. I had two questions. I guess the first one, Derek, I'm still trying to maybe get at what some people are asking about the pro forma royalty rate. So maybe can you -- maybe pro forma out for us, what the royalty rate was net off all the catch-up payments in June? And then, maybe what the pro forma royalty rate would be for September as well?

Derek Aberle

Yes, Tim. This is Derek. I think the way to think about it is, we -- on my script we included a statement for the full fiscal year that we believe for the full year will be around the 2.9% level. I think if you try to kind of normalize Q3 to adjust for the prior period activity things like the LG resolution which pushed the rate up. I think it would be in that range as well for the quarter.

Q4, we believe will be down sequentially but it's really hard to give you a forecast on that just because it will be fairly dependent on -- how many of the deals we get resolved within the quarter and how much catch-up comes in as you might remember some of the guys that were still negotiating with were larger -- historically larger three-mode players and the rate on three-mode devices is lower than on other devices. And so that could have within the quarter when that catch-up comes in could have a dilutive effect.

But, we are still comfortable with the longer term view on the rate that we talked about in February and also for the year that I mentioned today.

Timothy Arcuri

Got it. Thanks. And then, I guess just my follow-up is really for Steve and the team. Can you talk a little more about 5G and you guys were talking more about this every call. So, I guess the question is really about timing and your position in the standards and sort of when that will be finalized and what's your IP position will be for 5G relative to what it has been for 3G, 4G? Thanks.

Steve Mollenkopf

Sure. Time, its Steve. In general, we are obviously trying to drive 5G as quickly as we can. It's an area which we think to be a strong player in 5G, you have to be a strong player in 4G, 3G and WiFi and consequentially we think that we will maintain a very strong IP position moving forward. The standards bodies are working on that right now. So, I think we have a lot of visibility into the strength of our submissions as well as to how the industry is unfolding.

I think in general, if you'd have asked me that question, a year ago, I would have said that it would have happened closer to 2020. Certainly over the last year and accelerating here over the last quarter there has been a real pull to push that in or to pull that in closer to 2018/2019 timeframe depending on what the deployment is. And of course, we are going to support that with our products and with our standards submissions and all the R&D that we are doing. And as you would expect we are accelerating as well as protecting that R&D as we are repositioning the company for growth. And I think it will be a good story for Qualcomm here over the next decade.

Operator

Your next question comes from the line of Blayne Curtis with Barclays. Please go ahead.

Blayne Curtis

Hey, guys. Thanks for taking my question. Just a couple on QCT, you talked about outside from the China market, it's been a lot of concerns about maybe some overbuilds, you have the best perspective knowing what you shift in versus what selling through. Just your perspective on China maybe seasonality as you get into December. And then, you said, you factored in some second sourcing out of marquee phone, do you think that share that you will have ultimately on this generation is sustainable?

Cristiano Amon

Okay. This is Cristiano. Thank you for your question. First, maybe addressing China, I think as we said in addition to seeing stronger demand for high and mid and even low tier units and then it also give us a higher unit in the quarter. I think we are seeing significant traction within our new product family not only the Snapdragon 800 but more important the 600 and 400 tiers. And we see that market in China is moving up, we spoke earlier in other calls about things such as all mode and care aggregation. We see that is materializing all-mode is becoming the preferred configuration which is a multi-mode solution across all the carriers in China and I think here, China exactly moving faster to higher speeds. So we see that exactly a positive trend for Qualcomm in particular as the market in China moving up.

With regards to how we view about second sourcing and one large customer, I think we said very, very clear that's our planning assumption and we stayed within -- driving towards to meet our commitments in 2016 and I think that has no impact in our 16% projection of operating margin for QCT.

Operator

Your next question comes from the line of Stacy Rasgon with Bernstein Research. Please go ahead.

Stacy Rasgon

Hi, guys. Thanks for taking my questions. First, I was wondering if you could give us an indication of where you saw a revenue per MSM trending in Q4? And secondly, I wanted to get your thoughts on operating margins as we go into next year, do you think 15% in Q4 will be the trough for operating margins as we go through 2017, they should never drop below that?

George Davis

Hey, Stacy. It's George. Again, we would expect to see strong revenue per MSM again in the fourth quarter and so not giving a specific guide. But, if you look at the product mix and you look at where we are seeing an up tick and the positioning of our new products, it's all consistent with improved revenue per MSM, also of course the adjacent businesses contribute to that as well as they did in the third quarter.

We are not going to guide 2017 at this time and but we are pleased with the progress that we are making on the cost program and we think that will certainly carry into 2017 but we are not going to forecast margin at this time.

Operator

Your next question comes from the line of Amit Shah with Nomura. Please go ahead.

Amit Shah

Yes. Thank you. Just on the second sourcing with the key customer, just wondering if you guys can give us some feel for whether you were able to obtain majority share and looking into next year, you talked a little bit about gigabit LTE that you are going to have with the X16 Snapdragon. Is that an important factor as you all think about design wins in 2017, I think the feedback from some of the competition is that while it's ahead, 1-gigabit download this will be fairly rare in practice and not really a variable when it comes to design wins.

Cristiano Amon

Hey, Amit. Thanks for your question. This is Cristiano. So I will try to -- it's very difficult for us to comment specifically about our customer plans with regards to volume and share. I think what I can say as -- we always had second sourcing in our business in QCT throughout the year. And I think, we have always rely and to strengthen our product roadmap and technology transitions to drive value and volume from our solutions.

That I think that leads into your second question. I believe the gigabit LTE transition, it is going to get a lot of traction across all the developed markets. And also, you are going to see that as pre-deployment ahead of 5G. I think the ability to drive gigabit LTE technology with 4G using advance or other techniques is going to be key to drive a transition of 5G. And I think in addition to that we see both the WiFi and the LTE evolving at the same time across license in a licensed spectrum.

As in a licensed spectrum with 3GPP is standard, it's called LAA and license spectrum becomes available that's going to give many operators worldwide the ability to get to gigabit speeds. And we are very confident about the ability to build that with a roadmap.

Steve Mollenkopf

And this is Steve. The only thing I would add is, I think betting against feature leadership at the modem level has never been a good way to build a sustainable business. We think it continues to be a defensible franchise. And in fact, if you look at the strength that we are seeing in the business today in China, I think its good proof that that you do not want to be on a wrong side of modem feature leadership and we think that becomes continues to be important and becomes even more important as the industry transitions to 5G. So we feel like we are on a good support to maintain position on the modem franchise.

Operator

Your next question comes from the line of Tal Liani with Bank of America. Please go ahead.

Tal Liani

Hi, guys. Is there any impact on pricing of the competition with Intel? And second about QCT, when should we see the bulk of the 820 RAM hitting the numbers? I'm trying to model this properly since the ASP so much higher than the average and I don't know if you expect -- you expect it to hit the certain time or more moderate growth kind of across many quarters. Thanks.

Steve Mollenkopf

Tal, obviously, we can't specifically talk about anyone customers pricing. But I can tell you or reiterate what I said about going Q3 to Q4, part of how we are going to be getting the operating margin to 16% is a strength that both the gross margin level and across our product suite. So I think we feel very good about the positioning of our products and the ASP implications to that.

Cristiano Amon

Hi. I think Tal and to comment on the 820 RAM, I think we will continue to see 820 launches throughout the year. I think you have the normal seasonality of the holiday season. But also, you have now different seasonality in China as well. So, I think, we will continue to see 820 launches throughout the year and when we get into 2017, you are going to start to see launches regarding the next generation platform.

Operator

Your next question comes from the line of CJ Muse with Evercore ISI. Please go ahead.

CJ Muse

Good afternoon. Thank you for taking my questions. I guess two quick ones. First one, can you share what the dollar value of catch-up payment is embedded in your September Q revenue guide? And then, secondly, if I look at your EPS guide and your QCT operating margin guide, it seems to suggest that PBT margin for QTL closer to 74% versus 86% last Q. Curious, if you could walk through what's driving that down tech? Thank you.

Derek Aberle

So for QTL, we would expect obviously, we are coming down quarter-over-quarter relative to the -- because of the amount of -- kind of out of period items that were in Q3, spending, staying flat will impact operating margin not as much as certainly what you are forecasting. We haven't guided the amount of licensing that we anticipate assigning but, it's not a material amount, but there is some -- included in our guidance forecast.

Operator

Your next question comes from the line of Tavis McCourt with Raymond James. Please go ahead.

Tavis McCourt

Hey, guys. Thanks for taking my question. Derek, I wonder you gave us the catch-up payments for the fiscal third quarter embedded in the $7.4 billion to $7.8 billion guidance for QTL, can you give us the full year estimate or if it's a range of catch up payments?

And then, secondly, Steve on the gigabit LTE, I missed it before, was that in the roadmap for next year's modem, have you said that specifically? And if so, what level of carrier aggregation would be needed for that? Thanks.

Derek Aberle

Tavis, its Derek. So, we are not going to break out specifically what's in the -- how much catch-up was in the sort of in the range. The way to think about it though is, sort of the two of the larger companies that we have been negotiating with have been withholding payments. This quarter reported and we recognized more than $200 million of catch-up payments related to them. That's not the entirety of the catch-up amount, but it's obviously a significant portion.

And then, as you think about what catch-up means, there is obviously some 2015 activity but now we are half way -- essentially half-way through 2016, so there will be additional catch-up. So you have in-quarter activity plus catch-up payments related to those agreements when they get signed and if that happens in the fourth quarter that would roll through there. But, pretty hard for us to give more color than that just given the timing and uncertainty of when they will get done and how much we will roll through in the quarter.

Cristiano Amon

Hi, Tavis. This is Cristiano. To your question on gigabit LTE; gigabit LTE I think we already sampled some of the first products of gigabit LTE, you are going to see this in product throughout next calendar year, maybe some of the early products could come as early as this calendar year. And you need a three or four carrier aggregation to be able to do this. One important thing is, you have a lot of carriers today doing three carrier aggregation today. I think that plus four carrier aggregation, you can get to gigabit speeds.

Operator

Your next question comes from the line of Brett Simpson with Arete. Please go ahead.

Brett Simpson

Yes. Thanks very much. First question for Derek on QTL, so just looking at the China license agreement that you are signing off late, my understanding is, they don't include implementation patents anymore and you have an outlook for $10 billion of QTL revenue by 2020. Can you talk about how you might monetize your non-standard essential patents, your implementation patents in the future? Should we expect Qualcomm to consider separating implementation patents, are there separate license agreement with your customers as you move towards let's say 5G?

Derek Aberle

Hey, Brett. This is Derek. You are correct as it relates to China. So as part of the NDRC resolution, we committed to offer licenses to -- actually not even the entirety of our essential patent portfolio. But, the 3G, 4G standard essential patents in China. And so, in a sense that has resulted in us doing something different in China than we have done historically which is a disaggregation of the portfolio.

And as I said in the past, we do believe there is an opportunity to monetize the remainder of the portfolio. Our focus has been really sort of a sequenced approach meaning try to get through the all of the key deals covering the 3G/4G portfolio and I think we are getting towards the finish line on that. And then, once we do that, I think there is a number of different opportunities and ways that we are thinking through monetizing the remainder of the portfolio.

And as you may recall that we mentioned that wasn't built in even to the $10 billion number that we have talked about in February. So, we do think there is an opportunity there over time.

Operator

Your next question comes from the line of Ed Snyder with Charter Equity Research. Please go ahead.

Ed Snyder

Thanks a lot. Steve, you mentioned that to be strong in 5G, you really have to be strong in 4G given the legacy standard, isn't that also the case to some extent with 4G that you had to be fairly strong in 3G, and how does that impacted the second sourcing and some of your larger customers. Is this one of the things that's keep you in majority share and you think you are just going to play out that way for the rest of the 4G and then into 5G to. It's been the case, lot of folks have been in the modem business with great plans and almost all of them falling away, there seems to be most of it done because they are on the legacy software to do all the hand-off in the corner case if Qualcomm does?

So just trying to figure out, how that applies to some of the marquee phones are playing out now, and then into 5G, you see that being a big factor, we're going to go so far through reservation like IOT and all that legacy stuff is going to be as big of a deal? Thanks.

Steve Mollenkopf

Ed, you know, I actually agree with the way that you characterized it. It's been very difficult to build, I would say a high-quality modem business without having the ability to handle all the modes they come up. This becomes increasingly important when you are looking to get into SKUs that are sold, let's say worldwide because essentially you get the entire world feature set come into your product. And so what you tend to see is, people might split their products and go with one region with a particular solution, but it's difficult to get the lion share and certainly difficult I think over time to protect that those design wins. So we have seen that over a number of generations and I would say one of the reasons that we were successful in 4G besides just being ahead on 4G was the ability to make it very easy for multi-mode to occur at the chipset. Really, all the multi-mode work tends to be abstracted to the user by the chipset. That continues to be important and I would add in Wi-Fi and many different brands when you go to 5G.

So we think that's going to continue to be an important component of our business moving forward. And one of the reasons why we think it's important to invest not only in the modem but in the RF and all of the technologies that make that very easy to occur.

With IOT it even becomes more important in my opinion because the SKU that goes into these industrial applications, you're really trying to make it easy for someone to go and access cellular without having to learn about all of the complications that cellular provide. So, we think that's not only a defensible strategy for cellular products but also for the Internet of Things and the franchise moving forward.

Operator

Your next question comes from the line of David Wong with Wells Fargo. Please go ahead.

David Wong

Thanks very much. I had a question and a follow-up. The first one is that if you look at your royalty business, what is your license business China, what is your attitude to capturing all of the license business, will you in every case you can't come to an agreement seek a legal remedy or will there be many cases in which it's not worth the cost?

Steve Mollenkopf

The business in China obviously is pretty diverse. And I think we've approached it in the right way which is -- we have kind of a stage plan, the first is to get the key agreements done, I think we are making good progress as you've seen on that front. There is a number of in-country in China compliance initiatives, we have ongoing with existing licensees including active audit and other efforts to make sure we really have a clear understanding of the market landscape and who is doing what.

There will be I think a piece of the market that is sort of the long-tale piece that tends to be, lower ASP, low cost, lower featured devices. They might be a little bit harder to get after than some of the other pieces. But, we are seeing consolidation across the OEMs both in terms of share and also even some early M&A activity. So the number of players we believe will reduce over time. Beyond that, so obviously, legal proceedings will be an element of our compliance efforts and you have seen that with Meizu. But, there are many, many other things we are doing as well both in China and I talked about some of these at some length at our Analyst Day in February. But, there is a lot of activity we are also doing outside of China and a lot of the other regions in the world that we think have the ability to impact and change behavior for some of the players that have been less compliant in the past.

So litigation will be one tool, but it's not going to be the only tool. And there is other things that are less costly that we think we can do to drive higher compliance over time and big area focus obviously for the business right now.

David Wong

Okay, great. And for leading edge chip manufacturing technology in the future, do you plan to use a single foundry for any given advance mode or might you split your business between foundries, when do you expect to tape-out 10-nanometers and have the sampling?

Steve Mollenkopf

Well, I think in general, we tend to have a multi-sourcing strategy and that includes the leading node. We have already taped out 10-nanometer and sampled it to customer. So, our focus tends to be on the leading node even beyond 10 nanometers and because our business is so diverse we tend to use everything from the leading node all the down to analog processes. So it's a multi-sourcing tends to be one of the tenants of how we operate the business.

Operator

Thank you. This ends our allotted time for questions and answers. Mr. Mollenkopf, do you have anything further to add before adjourning the call?

Steve Mollenkopf

Thank you. I just wanted to thank everyone for attending the call today. We had a stronger than expected quarter and are executing well on our plans to position the company for the next phase and profitable growth. We continue to make good progress in the licensing business in China and have favorable new product momentum in QCT. Lastly, I want to thank all of the Qualcomm employees for their hard work, for the strong quarter and we look forward to the many exciting opportunities ahead. Thank you.