

Thank you and good afternoon everyone. Today's call will include prepared remarks by Steven Mollenkopf, Derek Aberle, and George Davis. In addition, Cristiano Amon, Murthy Renduchintala and Don Rosenberg will join the question-and-answer session. On our Investor Relations website, you can access our earnings release and an executive presentation that accompany this call. This call is also being webcast on qualcomm.com and a replay of the call will be available on the website 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 website. As well, we will make forward-looking statements regarding future events or the future business or results of the company. Actual results or events could differ materially from those projected in the forward-looking statements. Please refer to our SEC filings including our most recent 10-K 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.

Steven M. Mollenkopf - Chief Executive Officer & Director

Good afternoon and thank you for joining us to discuss our fourth quarter results, which were at the high end of our prior expectations. Performance was better than expected in QCT, driven by stronger than expected MSM shipments. We are pleased with our progress in QCT, and we are entering 2016 with a strong product roadmap and a clear path to revenue and margin improvement.

This performance was partially offset by delays in concluding new license agreements in China and share gains by Chinese OEMs that have been under-reporting royalties in QTL. Despite near-term results, the overall QTL business remains strong with a healthy industry backdrop. And we are highly focused on taking actions to close the gap between global 3G/4G devices sales and total reported device sales.

Before we get to the details, I want to take a step back and review our progress in 2015 and key business drivers. We faced a number of challenges in fiscal 2015, and we've taken aggressive actions to address these challenges and drive meaningful change to improve performance. At the same time, we are continuing to drive innovation and growth through investments in our core businesses and emerging growth areas.

First, the NDRC resolution in February was essential milestone, removing significant uncertainty and providing a framework for our licensing business in China going forward. Second, we executed a major increase in our capital

return program, one of the largest in the tech sector, reducing our share count by 9% year over year. Third, we remained focused on addressing areas within our control, including making sure we have the right cost structure for the future, a corporate structure that maximizes value and will position us for the strategic opportunities ahead within a dynamic industry landscape, the appropriate capital structure and level of dividends and share repurchases, the optimal board composition and management incentives, and a capital allocation plan that ensures that our investment dollars are spent in areas with the most promising risk adjusted returns.

We are on track with the strategic realignment plan announced in July, and we are making excellent progress on each of the initiatives. In the fourth quarter, we made significant progress in implementing our \$1.4 billion cost reduction plan. We took action to decrease spend in QCT and reduce investments outside of QCT and QTL with the recently closed sale of Vuforia and significant reductions in areas such as display.

We are on track with a review of financial and structural alternatives and continue to expect to complete the review by the end of the calendar year. Our two new board members have already made valuable contributions and we are in the process of adding another new member to the board. We have also implemented changes to our executive compensation plans that further align our compensation with performance.

In fiscal year 2015, we remained extremely focused on driving our position in key adjacent areas. In August, we completed the acquisition of CSR, which we expect to drive meaningful growth for QCT in key adjacencies such as automotive and IoE.

Finally, QUALCOMM's innovation pipeline remains strong. Our technology and product roadmap continues to lead the industry and we are investing to drive the next wave of growth in mobile as well as in other opportunities. We are excited about our latest products, including the Snapdragon 820, and expect momentum for these products to build through fiscal 2016 and into 2017.

Before turning to the business, I want to comment on the change we've made to our approach to guidance. Going forward, we will provide quarterly financial guidance as we've always done but adjust our approach to annual guidance. We will continue to provide certain industry and financial metrics, but we will no longer provide guidance on total company annual revenue and earnings per share. To help you with this transition, we will continue to provide certain fiscal year information for 2016 which George will detail shortly. This change aligns our guidance practices more closely with our semiconductor and large-cap tech peers.

To be clear, we're not changing any of our long-term guidance metrics provided prior to this call. Specifically, our 20%-plus operating margin target for QCT, our 86% to 88% operating margin target for QTL, or our ongoing capital return commitments. We also continue to target a QCT operating margin of at least 16% in the fourth quarter of fiscal 2016.

In QTL, our path to growth is driven by continued strong unit growth in emerging regions, the replacement trends in developed regions that we have previously explained, and the adoption of 3G/4G cellular connectivity in adjacent segments.

In China, we have been working hard to implement the NDRC licensing terms and improve compliance. While we have made progress with these negotiations and concluded new agreements recently with two major Chinese OEMs, progress has been slower than we had originally anticipated. The timing of concluding new agreements and progress with compliance is inherently difficult to predict, but we fully expect to successfully conclude new agreements and improve compliance over time.

In the near-term, these factors will continue to impact our ability to grow the licensing business in line with global 3G/4G device sales. However, as we work through the compliance and licensing matters, we expect our growth rate to converge with the rate of global 3G/4G device sales growth. Depending on the amount of catch-up reporting, we could exceed global 3G/4G device sales growth for a period of time.

QTL remains a source of significant strength for QUALCOMM and we are confident in our long-term QTL business outlook based on continued growth of 3G/4G across mobile devices and new product categories, as well as our continued innovation in new mobile technologies.

Let me now turn to QCT. Fiscal 2016 will be a transition year for this business, and we expect our performance in the second half of the year to be much stronger than in the first half, which will continue to be affected by the factors that impacted 2015. Our performance improvement will be driven by our strong lineup of new chipsets across tiers, benefits from our cost reduction efforts, operational improvements, and reduced product costs as we transition to the 14 nanometer node.

Specifically, at the premium tier, we are seeing strong customer interest in Snapdragon 820 among leading OEMs with more than 60 designs overall. We have launched our fifth-generation Snapdragon X12 LTE modem, which offers industry leading throughput and power efficiency with support for all modes and the latest Cat 12 downlink and Cat 13 uplink capabilities. We

have confidence in customer traction and expect it to be a significant product for us in the second half of the fiscal year.

In addition, we are upgrading our mid and low tier roadmaps. We recently announced our new Snapdragon 430 and 617 processors which have added support for carrier aggregation with X7 and X8 LTE modems respectively, and new support for dual cameras.

We are also continuing to expand in adjacent areas where we can build off our differentiated skill set and core IP roadmap in smartphones to create new revenue opportunities. To highlight just a few examples, in the networking space we launched a Wave 2 802.11ac Wi-Fi system-on-a-chip for routers, gateways and access points. We also expanded our portfolio for smart carrier home gateways following our acquisition of Ikanos Communications.

In the IoT space, we launched a reference design for IP cameras, new LTE Cat 1 and Cat-M modems for connected devices, and the Snapdragon Flight Reference Design for consumer drones. The IoE applications for QUALCOMM technologies are vast, and I believe we are just at the beginning. We also continue to advance our position in the compute space with three tiers of Snapdragon LTE modems for Windows 10 notebooks, 2-in-1s and tablets.

Further, CSR expands our distribution channels and strengthens our position by accelerating our time to market in the key IoE and automotive segments. Revenues from our adjacent business areas, automotive, mobile compute, IoE and networking delivered approximately 10% of QCT revenues in fiscal 2015, and we expect this to grow significantly in 2016 with the addition of a full year of CSR revenues as well as through organic growth. We expect our momentum in QCT to continue into fiscal 2017 and beyond.

As we did in both 3G and 4G, we are investing to lead the industry in the development of 5G technologies such as a unified air interface with optimized OFDM-based waveforms. 5G will offer native support to unlicensed spectrum and enhanced mobile broadband performance and enable connectivity for the Internet of Everything as well as new types of services that require lower latency and higher reliability and security. Our focus on 5G, along with leadership in LTE advanced and Wi-Fi, including Wi-Fi 802.11ad in 60 gigahertz, allows us to offer integrated modem solutions that leverage licensed and unlicensed bands. We are enabling mobile operators and new wireless players such as cable companies to deploy a multitude of new services to their subscribers.

We've announced LTE-U chipset support for small cells and mobile devices, and operators in the US including Verizon, AT&T and T-Mobile are

commencing trials as early as this year, with some of them planning for initial commercial deployments in 2016. We are well positioned to address this increasing complexity of wireless networks and bands by offering integrated solutions at scale and enabling rapid worldwide deployment capability to our partners.

We are confident in our leading technology and multiyear roadmap and we are focused on improving the efficiency of our operations and taking advantage of the significant opportunities for growth available to us. We believe our business initiatives will enable QUALCOMM to drive value and growth momentum so that we exit fiscal 2016 on an improving financial trajectory.

With that, I will turn the call over to Derek.

Derek K. Aberle - President

Thank you, Steve, and good afternoon everyone. Fiscal 2015 was a record year for QTL with total reported device sales, revenues and earnings before tax all reaching record levels. We concluded the NDRC investigation and resolved a dispute with a major Chinese licensee. We launched a significant effort to implement the terms of the NDRC resolution in China, including signing licenses for 3-mode devices and to improve compliance by our licensees.

Looking ahead, the outlook for global 3G/4G device sales continues to be strong. We expect low single digit percentage growth in global 3G/4G device sales in fiscal 2016. However, longer-term we expect stronger global 3G/4G device sales growth as unit growth continues to stay strong and annual ASP declines further moderate over time.

We estimate that global 3G/4G device shipments will grow approximately 14% in calendar 2015 and 10% in calendar 2016 at the midpoint, driven primarily by the migration to 3G/4G devices in emerging regions and cellular connectivity growth in adjacent segments outside of handsets.

We expect global 3G/4G device ASPs to decline at a more moderate rate in fiscal 2016 versus fiscal 2015, although still at a higher rate than we expect over the longer term. This outlook reflects a number of factors including heavier than normal discounting of high premium tier devices in the near term and continued share gains by Chinese OEMs that are currently selling at lower prices than other licensees. Over the longer term, we expect ASP declines to moderate for a variety of reasons including OEM consolidation in China and increasing device ASPs by Chinese OEMs, as well as users in emerging regions replacing devices at higher price points.

We are continuing to aggressively seek to conclude new license agreement with Chinese OEMs on the NDRC terms and improve compliance with Chinese licensees. To date we have offered the NDRC license terms for our current 3G and 4G essential Chinese patents to our licensees and to a number of unlicensed OEMs and manufacturers. We are continuing to make progress with these negotiations and recently concluded new agreements with two major Chinese OEMs, ZTE and TCL, on terms consistent with the NDRC terms. This brings the total number of new China patent license agreements we have signed to over 60. Importantly, these agreements also include royalty bearing licenses for 3-mode devices.

While we continue to make progress in our continued interactions with the NDRC and other parts of the Chinese government give us confidence that we will be able to conclude agreements with all of the important OEMs, the negotiations with a handful of these licensees are taking longer than we previously expected. In some of these cases, although the licensees acknowledged they need to pay royalties to QUALCOMM, we believe in connection with the negotiations they have stopped reporting certain of their sales and royalties or did not report their sales and royalties in a manner that allows us to record revenue.

Similar to the dispute we resolved during fiscal 2015 with a major Chinese OEM that resulted in a catch-up payment for prior period amounts, we expect these licensees will report and pay the royalties they are improperly withholding once we conclude new license agreements with them.

While we continue to work to conclude new license agreements and improve compliance through commercial negotiations and audits, we are actively preparing to enforce our agreements and/or take other actions against OEMs that are not negotiating in good faith, under-reporting royalties, or refusing to conclude agreements within a reasonable period of time. We have a number of tools at our disposal that can be deployed both within and outside of China that we believe will ultimately resolve this activity.

For the fourth quarter of fiscal 2015, the global 3G/4G device sales were in line with our expectations but total reported device sales for the quarter came in below the low end of our guidance range, primarily as a result of the Chinese licensees I just mentioned refusing to report royalties, slower than previously expected progress on signing license agreements covering 3-mode devices, and Chinese OEMs that are either unlicensed or under-reporting royalties growing at a faster rate than the overall market and thereby gaining share. These factors resulted in approximately \$200 million less in QTL revenue for the fourth quarter as compared to our prior expectations and lower than expected QTL operating margin.

We expect QTL operating margin be flat to down quarter over quarter in the first quarter of fiscal 2016 but then improve with revenue growth throughout the rest of the year. We expect the factors that impacted our fiscal 2015 fourth quarter results will continue to impact the licensing business until we conclude additional license agreements with the remaining major Chinese OEMs and improve reporting compliance, the timing of which is difficult to predict.

Despite our expectation for continued progress, given this inherent uncertainty, we are taking a cautious approach to our QTL guidance. Under this scenario, total reported device sales for the first quarter of fiscal 2016 are expected to be in the range of \$50 billion to \$58 billion and fiscal year 2016 QTL revenue is expected to be in the range of \$7.3 billion to \$8 billion. The key drivers between the low and the high end of the fiscal 2016 range are the timing of concluding new license agreements with the remaining major Chinese OEMs and the pace at which our efforts to improve compliance deliver results.

The \$7.3 billion low end of the range assumes a meaningful year over year increase in the number of unreported device by Chinese OEMs, little to no progress on signing new license agreements or amendments with Chinese OEMs and no significant catch-up amounts related to prior periods or audit recoveries. The \$8 billion high end of the range assumes meaningful progress in a number of these areas but does not reflect the reporting of royalties on the full fiscal 2016 global 3G/4G device sales or the receipt of catch-up amounts for all prior period sales.

It is also important to understand that we expect QTL fiscal 2016 revenue growth will be impacted by the full year effect of applying the NDRC terms for sales in China as compared to only a partial year in 2015, and expected year-over-year increase in reported mix to more 3-mode sales as the year progresses and a full year effect of FX headwinds.

We are not satisfied with the gap that exists between the global 3G/4G device sales and total reported device sales, and we are highly focused on taking actions to close that gap and collect catch-up payments from prior period under-reporting as quickly as possible. We continue to expect QTL revenue to track global 3G/4G device sales growth over the longer term and catch-up payments to provide additional growth as we work through these issues.

We expect roughly similar seasonality in fiscal 2016 as in prior years with December shipments driving a stronger fiscal second quarter for QTL. Depending on the pace of progress in China, the implied royalty rate that you calculate based on the information we provide is expected to be down

modestly in fiscal 2016 as compared to where we exited fiscal 2015, based primarily on an increase in devices being reported under the NDRC terms, including 3-mode devices.

In conclusion, we continue to see favorable long-term market trends for our licensing business and remain confident that we will be able to conclude new agreements with the remaining Chinese OEMs and improve compliance over time. That concludes my comments.

I will now turn the call over to George.

George S. Davis - Chief Financial Officer & Executive Vice President

Thank you, Derek, and good afternoon everyone. I will begin with comments on our fiscal fourth quarter results, update you on our cost reduction initiatives, provide our first quarter guidance and then discuss some key metrics for fiscal 2016. In our fiscal fourth quarter, we delivered revenues of \$5.5 billion and non-GAAP earnings per share of \$0.91. In QTL, total reported device sales by our licensees were \$58.3 billion, below the low end of our guidance range for the reasons Derek described. QCT had a stronger than expected quarter with revenues of \$3.6 billion and an operating margin of 8%. While industry trends in the quarter were mostly in line with our July expectations, we also saw incremental demand strength for low tier devices, particularly at a large customer. Revenue per MSM continued to reflect the mix shift toward modem-only products at a large OEM in the premium tier.

We closed the CSR acquisition in August, which contributed approximately \$80 million in revenue in the quarter and was marginally accretive to our non-GAAP results. Non-GAAP combined R&D and SG&A expenses were down 2% sequentially on cost controls and spending reductions under our strategic realignment plan.

During the fiscal fourth quarter, we returned \$3 billion to stockholders including approximately \$738 million of dividends paid and \$2.2 billion in share repurchases. We also completed our \$5 billion accelerated share repurchase program that we launched last May. Additionally, since the end of the fiscal fourth quarter, we have repurchased an additional 24.6 million shares for approximately \$1.4 billion. During fiscal 2015, we returned over 300% of free cash flow to our stockholders on share repurchases of \$11.2 billion and dividends of \$2.9 billion, which included the 14% dividend increase we announced in March.

These actions represent significant progress on our SRP commitment to reaffirm our ongoing return of 75% of free cash flow in dividends and share repurchases in addition to our commitment of an incremental \$10 billion in share repurchases by March of 2016. We are on track to achieve the \$1.4

billion of spending reductions related to the SRP. As a reminder, the \$1.4 billion number includes a \$300 million reduction in annual employee stock grants and a \$1.1 billion, or approximately 15%, reduction in non-GAAP combined R&D and SG&A and engineering spend in cost of goods sold. This plan excludes the impact of acquisitions.

We continue to expect fiscal 2016 results to benefit from \$600 million of these cost reductions which represents approximately 8% of the SRP spending baseline. Fiscal 2015 spending came in approximately \$200 million below the SRP baseline. This includes approximately \$100 million of SRP cost reductions as well as lower than baseline variable compensation, which combined impacts the year-over-year comparison by approximately 2% relative to the baseline.

Including recent acquisitions, of which CSR is the largest, we expect non-GAAP combined R&D and SG&A expense will be down approximately 1% to 3% year over year. Without the acquisitions, we would be lower by approximately 6% to 8% year over year. Our IR website provides an updated overview of the SRP spending reductions, including the impact of acquisitions. During our fiscal fourth quarter, severance and others costs related to the plan were \$190 million and were excluded from non-GAAP earnings. We continue to expect the range of charges to be \$350 million to \$450 million. And as previously discussed, our cost actions ramp throughout fiscal 2016 and are more heavily weighted to the back half of the fiscal year.

Let's now turn to our outlook for the first quarter of fiscal 2016. We estimate revenues to be in the range of approximately \$5.2 billion to \$6 billion, up approximately 3% sequentially at the midpoint. We estimate non-GAAP earnings per share in our first fiscal quarter to be approximately \$0.80 to \$0.90 per share, down 7% sequentially at the midpoint. We anticipate fiscal first quarter non-GAAP combined R&D and SG&A expenses will be up 2% to 4% sequentially, reflecting a full quarter of CSR in our results and increased variable compensation accruals, partially offset by the early stage benefits of the SRP cost reduction program.

For the reasons Derek explained, we're taking a more cautious approach in providing our QTL guidance for the fiscal first quarter. In QTL, we expect total reported device sales for the fiscal first quarter, reflecting reports of our licensees for shipments they made in the September quarter, to be in the range of \$50 billion to \$58 billion, down approximately 7% sequentially at the midpoint, driven by the China impacts that Derek described as well as a sequential decline in the ASP, but to a lesser degree than the decline we experienced in the same quarter last year.

In QCT for our fiscal first quarter, we expect MSM shipments will be in the range of approximately 225 million to 245 million units, up approximately 16% sequentially at the midpoint, reflecting the seasonally strong fourth calendar quarter and our view of a more normalized inventory environment. We expect healthy demand growth for our modems and high and mid tier chipsets providing support for QCT operating margins to be at 10% or slightly better.

With respect to our annual guidance, we're providing our outlook for global 3G/4G adoption trends including calendar year 3G/4G unit shipments and fiscal year global 3G/4G device sales. We are also providing fiscal year guidance on operating expenses, combined interest expense and investment income, and tax rate.

We expect the industry trends we saw develop in the second half of fiscal 2015, particularly in the premium tier, to continue to impact QCT in the first half of fiscal 2016. Consistent with prior years, we expect QCT's fiscal second quarter to be down sequentially with operating margins in the low to mid single digits, driven primarily by seasonally lower MSM shipments, annual pricing resets, and increased costs tied to the ramp of new products.

We expect improving product mix from new chipset introductions, particularly in the second half of fiscal 2016, resulting in improved revenue per MSM. Combined with the benefits of our cost savings over time, this mix shift underpins the improvement we see in QCT's profitability in the fiscal fourth quarter. We continue to expect QCT to improve to at least a 16% operating margin in the fiscal fourth quarter of 2016.

In QTL, as Derek commented, our guidance reflects the timing uncertainty in China inherent in signing new licensing agreements and resolving compliance issues. This scenario implies a range of QTL revenue from \$7.3 billion at the low end of the range to \$8 billion, approximately flat year over year, at the high end of the range with progress on signing new licensing agreements and other compliance measures the key drivers of that range.

Combined interest expense and investment income is expected to be lower by approximately \$400 million year over year, with about half from interest expense related to higher average debt balances, and the other half reflecting lower expected realized gains on financial market conditions as well as lower investment balances due to our expanded return of capital initiatives. We estimate our non-GAAP fiscal 2016 tax rate to be approximately 19% to 20%.

That will conclude my comments, and I will now turn the call back to Warren.

Warren Kneeshaw - Vice President-Investor Relations

Thank you, George. Operator, we are ready for questions.

Question-and-Answer Session

Operator

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

Simona K. Jankowski - Goldman Sachs & Co.

Hi. Thank you very much. I just wanted to clarify a little bit more what is causing the hold up in the collections within QTL, especially considering that the couple of large licensees you cited are taking the NDRC terms rather than your traditional more flexible terms. So it would seem like that's little bit more cut and dry. And then as far as what you're assuming in the guidance for QTL for the first fiscal quarter, it sounded like you're not really assuming any recovery of the prior royalties even though you've just signed a couple of the licensees, ZTE and TCL. So I just wanted to clarify if the catch up for those two is included or why wouldn't you be seeing some improvement just from those two alone?

Derek K. Aberle - President

Hi, Simona. This is Derek. Yes, really in China, I think it's much of the same story that has been playing out through the year. We are making progress, as you said. We signed both ZTE and TCL this quarter, which I think is good continued traction on significant OEMs, now that's added to the list with Huawei that have accepted the NDRC terms. But there are a handful of still significant Chinese OEMs that we're continuing to negotiate with and as we noted before, these things are difficult to predict from a timing standpoint. And so we're going to continue to work through that and as we do, we expect that the picture will improve moving forward.

I would say the thing that's a little bit new this time is as the negotiations have progressed, you have discussions around 3-mode licensing where the companies were unlicensed in the past and therefore not paying while the negotiation progresses, but in most other cases, licensees have continued to report and pay on their non 3-mode devices, such as WCDMA devices. And that is a little bit different this quarter in the sense that a handful or less than a handful of these companies have actually, we think as a negotiating tactic, stopped reporting and paying similar to what we went through last year when we were dealing with the other dispute with the Chinese OEM, which ultimately got resolved as you may recall, with a catch-up payment

coming in. So again our feeling is that in the end, we will get these agreements concluded, and when that happens, these payments will come in. But we are taking a cautious approach to the guidance for Q1 as well as the full fiscal year in QTL just because the timing of these things is uncertain.

On ZTE and TCL in particular, those companies were reporting royalties while we were negotiating those deals, so even though we signed, there will not be significant catch-up payments coming through, although there will be some royalties coming in on 3-mode. Those players are not the largest players in the 3-mode space in China.

Operator

Your next question comes from the line of James Faucette with Morgan Stanley. Please go ahead. And James, please make sure that your line's not on mute.

James E. Faucette - Morgan Stanley & Co. LLC

Sorry. It was on mute. So I just want to ask a clarifying question there, Derek. On Huawei, ZTE and TCL, it sounds like then whatever catch-ups – or should we assume that all the catch-ups from those players are either quite small or already built into the reported numbers in the December quarter guide?

And then I wanted to ask quickly about chipset shipments, what drove the upside to your estimates in the December quarter? It seemed like coming out of the June quarter that you were concerned about overall channel inventory and you seemed to imply that came down in spite of the much stronger shipments. So I'm just wondering where the upside came from. And then finally, George, in the September quarter results and the December quarter outlook, how much of a contribution are you getting from CSR for those two periods? Thanks.

Derek K. Aberle - President

This is Derek. On the first one, actually Huawei was signed earlier in the year, didn't come through this quarter. And as to TCL and ZTE, there will be some catch-up payments that come through December, but they're relatively small in comparison. So you should think about the cautious Q1 guidance as really not reflecting resolution of these pending negotiated agreements or any catch-ups that would flow through there.

Steven M. Mollenkopf - Chief Executive Officer & Director

James, this is Steve. With respect to the chipset shipments in Q4, what happened was really there was a broad-based improvement in share relative to expectations in that quarter, in particular at a large customer, our mid and low tier shipments were stronger than we expected. So I think we're exiting the fiscal year a bit stronger than we would have said we were going to exit in July. So we're pleased with that.

George S. Davis - Chief Financial Officer & Executive Vice President

James, this is George. On CSR contribution, it was \$80 million in revenue in the quarter. It was very modestly accretive, so if you back that out, you can see that we were above the midpoints of our guidance without consideration of CSR.

Operator

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

Tim Long - BMO Capital Markets (United States)

Thank you. Maybe just give China a break, over to the chips again. Two things on the margins here. First, could you just talk a little bit – it looks to us like the gross margin did improve in the quarter. Was that just a mix thing or are we starting to see either better pricing discipline or some of the benefits of the restructuring program taking effect and could we expect that to continue? And then related to it, talking about \$400 million in OpEx coming on from the acquisitions, seems a bit large. Is that a number that will be subject to the similar type of analysis about a restructuring program that the rest of the QCT business went through? So in other words, is there opportunity to move that number lower being combined with the broader QUALCOMM? Thanks.

George S. Davis - Chief Financial Officer & Executive Vice President

Hey, Tim, it's George. On gross margin, I would say it was more a function of mix that you were seeing in the quarter. And if I look at acquisitions, that includes, I should point out since we were talking about it in the context of the baseline for the strategic realignment plan that that was, includes the engineering spend within cost of goods sold as well. So now again, the majority is OpEx. We will have synergy plans and we do have synergy plans for both of the acquisitions that are included in that, and again CSR being the largest. We're going to talk about our view on these acquisitions and the synergy plans as part of the Analyst Meeting which we expect to be in the first quarter, and we'll give you little more color there. So we will execute on the synergy plans, but it is not part of the strategic realignment plan.

Operator

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

T. Michael Walkley - Canaccord Genuity, Inc.

Great, thanks. Derek, just going back to the units, can you ballpark for us how many units you think you weren't paid for in fiscal 2015 and where you think that gap can close to? Has it been as much as 20% of units under-reported in the last one or two quarters?

Derek K. Aberle - President

Mike, without really getting into the units, because I don't think we have broken that out, if you actually look at the metrics we did give, we gave you a global 3G/4G device sales number for the fiscal 2015 year and the midpoint of that is about \$275 billion-ish, and if you look at where we rolled up for the reported TRDS at about \$251 billion-ish. You can see that the gap there's a little more than \$24 billion of TRDS for fiscal 2015. That probably was a little more back half weighted versus front half weighted, but the delta is more in the range of approximately 9%.

Operator

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

Blayne Curtis - Barclays Capital, Inc.

Hey, guys. Thanks for taking my question. I just want to understand, it seems like ASP for MSM is down. Obviously more thin modems may contribute to that in the December quarter. And then as you look into next year, if you just comment on the progress of the 820. You said customer acceptance, there has obviously been some talk again about issues with that. You would think that would have a positive impact for your MSM ASPs. When would you expect to get a more material contribution from that product?

George S. Davis - Chief Financial Officer & Executive Vice President

Hi, Blayne. It's George. I'll just give you the quick overview. We do think revenue per MSM improves throughout the year on mix. It is driven by our view of the premium tier improving in the second half, and first part of the year, we see much more of a weighting of the impact on the modem on the business driving the mix effects in the first part of the year. Steve?

Steven M. Mollenkopf - Chief Executive Officer & Director

On the 820, it's looking great and the customer feedback is quite strong on it. It's going to be something that contributes in the second half of the year. It's certainly not going to be in the first quarter necessarily. But we have high hopes for that product, and you heard me say that customer traction is quite strong. It's over 60 designs. I think it's going to be a good product for us.

Operator

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

Rod B. Hall - JPMorgan Securities LLC

Yeah, hi guys. Thanks for the question. I just wanted to ask about the QTL margins. They were depressed in the September quarter and then the guidance on our math anyway seems to suggest that they're at least flat and probably down in the fiscal Q1. I wonder first of all if we got that right on the QTL margins. And then could you comment on what those margins are likely to do next year? Are they likely to stay at these same depressed levels or do you think they bounce back as you recover more of the unreported revenue? Just kind of give us some idea for what the trajectory of that looks like. Thanks.

Derek K. Aberle - President

Rod, this is Derek. Yes, I think you got it right. It's really largely a revenue driven story. There's a little bit of the OpEx that rolls through in the current quarter that we wouldn't expect to see again in next quarter. But you know, it's really a revenue story. So as the year progresses and we make progress, we do believe the margins will be stronger kind of as we move forward through the year.

Operator

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

Kulbinder S. Garcha - Credit Suisse Securities ([USA](#)) LLC (Broker)

Thanks. A question for Derek. Just on the QTL business, as I look at it from a fiscal year perspective, you're basically implying it's going to shrink. The overall TAM is expanding, which you talked about. And then I've got to assume that in fiscal year 2016 versus 2015 you're having more of the

under-reported units that were there paying you. So it should kind of grow, I think. So is it because the people that are under-reporting last year are gaining so much share that that's having a negative impact on the QTL revenue line? Is that one of the drivers I'm missing? Or is something happening to the actual royalty rate going down for some sort of mix? Can you just comment on, is there something wrong with that high level way of thinking about fiscal year 2016 from fiscal year 2015 numbers on the QTL side? Or is there any other facts I should think about? Thanks.

Derek K. Aberle - President

Kulbinder, this is Derek. Yeah, let me try to break it down. So if you think about the end market, the global TRDS we expect will grow kind of low single digit over fiscal 2015. So there will be some growth there, but not as strong as we saw last year. We think that that actually picks up over time as the ASP declines further moderate and we continue to see good unit growth. But in 2016 in particular, the growth is somewhat muted.

On top of that, you do have some headwinds facing the business and I mentioned them in my remarks. One is that in 2015 we had a partial year effect of the Chinese companies that accepted the new NDRC terms, reporting under those terms as opposed to the old ones, which were higher. In 2016 we would have a full year impact of that. In addition we had some FX headwinds in fiscal 2015 that were really a partial year effect that we expect will actually be a full year effect in 2016. And finally we expect within the China market a higher mix of 3-mode devices, which under the NDRC terms come through at a lower revenue per unit, is one way to think about it.

So when you roll all that up just from a nonstructural standpoint, that gives you a growth picture for the business. On top of that, there is obviously an impact from the negotiation process where these handful of licensees that were in negotiations with stopped reporting, and we've rolled a cautious approach to that through our guidance. And as we make progress on those negotiations, we expect that to improve.

So if everything came together and we were able to get the remaining agreements done and resolve some of the other compliance issues and recover the catch-ups, we would come in above the high end of our range. It's just that's a lot to promise within fiscal 2016, so we haven't built all of that upside into the guidance range.

Operator

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

Stacy A. Rasgon - Sanford C. Bernstein & Co. LLC

Hi, guys. Thanks for taking my questions. I got to say, I'm a little confused. I was hoping you can clear this up for me. So it seems like you've been holding your outlook for the global market flat to even up over the last few quarters and yet you've been stepping what you're capturing down, which implies to me that your ability to get paid in China has been getting even worse and worse after you signed the NDRC settlement, which to me just doesn't make a lot of sense. Why would your ability to get paid get worse after you settled with the government? How do you know you're not just underestimating the market growth itself rather than your ability to get paid in that market? Like how can we get comfort around that?

Derek K. Aberle - President

Stacy, this is Derek. So listen, we have a view on the market. We think that that's a pretty well informed view and it is modest growth year over year, 2015 to 2016. I think what you're seeing in China is a picture play out that was not all that unexpected, meaning once the resolution happened with China, we had to go through the process of implementing the agreed-upon terms with our licensees, and we knew that that process would take some time.

We have made a lot of progress on that. As I mentioned, we've got a number of agreement signed up, but there are still a handful of significant ones that are under negotiation. So what's played out through the course of this year really are a few different things. One is we have made slower than expected progress in these negotiations which means that we're not getting paid on as large amount of the 3-mode volume that we expected. And that's really a negotiating dynamic from our perspective. Once we get these agreements done, we will get paid.

The second is as I mentioned, more recently the handful of negotiations that we are involved in, we've had some of the licensees take probably a little more aggressive negotiating stance and start withholding payments while we're negotiating. We do have confidence, they acknowledge that they owe the royalties and that we will get paid on these once the agreements are concluded. But the timing of that's uncertain and so we're being cautious about the guidance on that.

Finally, if you look at the share of the Chinese OEMs worldwide, the Chinese OEMs have continued to gain share throughout 2015 and we believe that will be the case in fiscal 2016 as well. And so you essentially have a piece of the market that has very high compliance losing share to another part of the

market that has some compliance challenges and the issues that I just mentioned.

So that's really what's driving the gap between the end market and what's getting reported to us. And we believe we have a well-thought-out aggressive plan for how to deal with that. It's just a question of when that will all get resolved.

Operator

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

Tavis C. McCourt - Analyst, Raymond James & Associates, Inc.

Hey. Thanks for taking my question, got a couple. First for George, if you could outline the onshore cash position at the end of the year. And then two for you, Steve. In terms of the Snapdragon 820, obviously 60 design wins sounds impressive, but equally obviously there's a handful that really matter, right. So I'm trying to figure out based on your full year guidance of improving trend, how much of that is still business to be won versus business that's in hand, design wins on the high volume projects? And then also, if you could talk a little bit about 5G. You mentioned OFDMA. In terms of a near (49:36) interface, is there debate about that at this point? Or are pretty much all sides of the industry firmly aligned with OFDMA at this point? Thanks.

George S. Davis - Chief Financial Officer & Executive Vice President

Hi. This is George. In terms of onshore and offshore, we ended the year with \$31 billion in cash, \$5.3 billion of which was onshore.

Steven M. Mollenkopf - Chief Executive Officer & Director

On the 820, this is Steve. On the 820, I feel like we've got broad-based design wins there and we feel good about it. It's certainly a component of the improving trend that we think is going to play out in 2016 in QCT. There are also a number of other products that we have upgraded that will also contribute to that, but on the product side, we feel good about that product, as I said. And I think that will be a good story as we roll through the year if we continue to execute. In terms of the timing of these products, as you know it continues to move throughout the year. So from everything that we see so far, we're pleased with how we see it.

On 5G, a couple things on 5G. First, when we look at 5G, we look at that as an area where it will be a continuation of – we think the strength that we've

had in 4G will also transition over to 5G. One of the reasons is that the anchor bands or the anchor, 5G actually uses a 4G anchor. I think there's pretty well – a pretty good alignment at the physical layer on how we put things together. We are obviously contributing a lot on 5G. 5G compared to maybe 3G and 4G, there are probably fewer companies really carrying the load there. We're certainly one of them. And then upstream of that will be we think a number of products that deliver on 4G and Wi-Fi together. And so from the modem perspective, I think it's going to roll out and be a pretty good dynamic moving forward. It will be more complex, but we think complexity is something that we're equipped to handle and handle at scale for the industry.

Operator

Your next question comes from the line of Mark Sue with RBC Capital Markets. Please go ahead.

Mark Sue - RBC Capital Markets LLC

Thank you. On QCT, if I consider your qualitative comments today, the worst seems to be over and next year will show a return to growth. The renewed optimism aside from the product competitiveness and the diversification, do you feel that you are winning back a lot of the OEMs? And also in terms of quantifying IoT, is there an opportunity to take a leadership pole position in IoT considering the rapid growth that we should see in this segment over the next few years?

Steven M. Mollenkopf - Chief Executive Officer & Director

Mark, yeah I would agree with your characterization. I think this year was a real transition year for the structure of the QCT business. We had to change two things. One is we changed our cost structure. We're obviously executing on that and we will be throughout the fiscal year. The other one is that we've restructured the way in which we are organized to enable us to go after new markets yet still leverage the same IP roadmap that we build and continued to develop to service smartphones and mobile.

And in particular in the area of IoE and such, it's really become an interesting story. I mean we have created products that from an engineering perspective feel like derivative products, but now they are products that enable us to take our modem leadership and to deliver it into new markets. I talked about a couple of our modem upgrades where we take products, we focus them on some of the machine-to-machine applications that exist in the 3GPP standard, and it really opens up our ability now to sell products into things like Chinese white good manufacturers or into automobiles and machine-to-machine products. So I think there's a good pipeline and a good

fan-out for our IP roadmap and we'll start to deliver that more and more as we go through fiscal year 2016, and it will be one of the reasons why we think we'll be on an improving trajectory as we exit the fiscal year.

Mark Sue - RBC Capital Markets LLC

Okay.

Operator

Next question comes from the line of Alex Gauna with JMP Securities. Please go ahead.

Alex D. Gauna - JMP Securities LLC

Thanks very much for taking my question. Steve, just to return to that topic we were just on. Even though I think the 820 probably gives you a great chance to recapture some share in the market, the trend seems to be towards the lower end now, and where the high end does exist, it seems to be captured or dominated largely by the iPhone right now where you don't have the apps processor attached. What is the risk that when we do move into the back half of the year, this same dynamic exists and challenges your ability to show those improvements you're looking forward to?

Steven M. Mollenkopf - Chief Executive Officer & Director

Well, I think a couple of things, Alex. One is that we do participate in I think a broader cross-section of the market than just the high tier Snapdragon products and that's obviously something that's helped us in Q4 right now. And we've also taken our cost structure and made fundamental changes to it really to desensitize the business to some of the concentration impacts that you've seen in fiscal year 2015. Taken a lot of work from the team to do that. I think that will isolate or at least insulate us a bit from those things in the future.

That being said, I'll tell you I'm looking at what's happening in the industry and the share shifts and the design-in momentum and it's probably a little bit more optimistic a view from our view looking at the customer space than some of the narratives that you'll hear about the products. I mean we've upgraded the product line from top to bottom here in the last six months and we're very pleased with how we're getting traction and I hope the market will support that as the products move forward. And we've got the things that we can control hopefully in the right spot as well. We're clearly executing on those things and we're going to keep people up to date as to how we're doing.

Operator

Your next question comes from the line of George Iwanyc with Oppenheimer. Please go ahead.

George M. Iwanyc - Oppenheimer & Co., Inc. (Broker)

Thank you for taking my question. Steve, following up on those line of questions, how do you feel about your relationship with Samsung right now and how broadly are you exposed to their product mix?

Steven M. Mollenkopf - Chief Executive Officer & Director

Well, I think we have a very good relationship with Samsung. I think also the relationship with Samsung is much broader than perhaps people ask us about. We are a strong foundry partner and foundry customer of theirs. We obviously have an IP arrangement as well as a product arrangement. We also have partnerships with products that we put on our Reference Design, so it's a very broad relationship. And the way I would characterize it is that it's getting stronger versus moving the other direction. So it's good to have the scale and the breadth of products that we have. I think it gives us probably a little bit more to bring to the table when we talk to large multinational companies.

Operator

Your next question comes from the line of Vijay Rakesh with Mizuho. Please go ahead.

Vijay R. Rakesh - Mizuho Securities USA, Inc.

Hey, guys. Thanks. Just on the handset ASPs, I was wondering since you talked about China being a drag longer term, where do you see handsets ASPs exiting fiscal 2016 and fiscal 2017? Thanks.

Derek K. Aberle - President

This is Derek. Yeah, so I think what you're seeing is the trends that we've talked about for some time playing out broadly in line with what we expected, meaning we did expect ASPs to moderate over time and if you look at what we're projecting to happen in fiscal 2016 as compared to 2015, we do expect further declines, but probably at about half the rate that we saw in 2015. And over time we expect that that will moderate further for a lot of the reasons we've already explained including the fact that there will be further concentration we think within the Chinese OEM base. And we are continuing to see evidence that the Chinese OEMs' ASPs are increasing over

time to come closer in line with some of the non-Chinese suppliers. And that's a trend that we think will continue going forward.

And then importantly, as we see more of the growth in the future coming from the emerging regions, we're going to get to a place, probably starting next year, where there's more of a replacement market in the emerging regions as opposed to the first migration from 2G to 3G/4G. And that will have a moderating effect on ASP declines over time. So again, I think like I said, broadly in line with what we've been expecting and we'll definitely be updating this picture when we do our Analyst Day early in the next calendar year.

Operator

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

Edward F. Snyder - Charter Equity Research, Inc.

Thank you very much. In terms of the competitive environment in A6 (59:20) as it stands now, I know that there were some struggles with the ASP erosion in this period and it sounds like you're going to continue that maybe the next too. What is 2016? I know you've got a new product roadmap coming out here, but if you look at both the emerging market products coming out of MediaTek and Intel, and the internal solutions which seem to be spreading at least to their own OEMs and Samsung, Huawei and Xiaomi, how does that change next year? Do these OEMs continue to use these products and will they propagate out? And will 5G help you at all since most of that is probably RF driven more so than basebands? I'm just trying to get an arm around how the dynamic that's causing some of the problems in QCT changes in the next year or so. Thanks.

Steven M. Mollenkopf - Chief Executive Officer & Director

Ed, this is Steve. I think the competitive dynamic, it's still a very competitive market, particularly at the low tier. We consider ourselves to be in a very strong position there. I feel good about our competitive position. At the higher tiers and particularly in the areas where people want to have international launches, I think our position, it feels quite comfortable. That being said, there are a lot of people going after this market. It's an attractive market, but I think it's getting harder and harder for people to have the breadth of technology to deliver on all of these products. But you know, the competitive marketplace, it's still a lot of people that want to enter into it. But we feel good about our competitive position.

Operator

Your next question comes from the line of Srini Pajjuri with CLSA Securities. Please go ahead.

Srini R. Pajjuri - CLSA Americas LLC

Thank you. Steve, I had a question on your modem business. I'm just curious as to how much visibility do you have into your design wins, and based on what you see out there, how you feel about your market share in the high tier modem segment?

Steven M. Mollenkopf - Chief Executive Officer & Director

Yeah, on the modem side, it's obviously a strength of QUALCOMM's. We tend to be several if not multiple generations ahead of our competitors, primarily on feature set, but also on maturity, geographical breadth. And those are important things when you're talking about dealing particularly with worldwide OEMs, and it's an area that we obviously defend very rigorously. The other aspect that's happening and will play out over the next couple of years is that the importance of having RF, the access to multiple bands, the ability to deliver products not only in the licensed bands but in the unlicensed bands will continue to become, actually will increasingly become more important, and those things will be table stakes by the time you get to 5G. Now we're driving to have those things happen as quickly as we can.

In terms of visibility into design wins, I think probably the most important thing is we have visibility into the competitive positions of where we sit relative maybe to some of the competitive or the competing chipsets, and I think we feel good about those positions. That being said, we do try to manage our business to never take those things for granted and keep driving it forward, and hopefully you're hearing that tone from us on the call today. We're continuing to invest in what we think are the things that drive benefit to the business, and this is certainly one of them.

Operator

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

Steven M. Mollenkopf - Chief Executive Officer & Director

Thank you. Yeah, I just want thank our employees really for delivering a strong quarter in a period of difficult decisions and realigning the company for the future. So this year, 2016, will be an important transition year for us. We're focusing on a great set of products. We're clearly focused strongly on improving our licensing compliance, as Derek said, and then we're executing on the strategic realignment plan. So I just want to thank the employees for

all their hard work, and it's an important year for us, and I'm optimistic about it. And I just want to thank everybody for coming and listening to the call. Thank you very much.