

Thank you, Warren, and good afternoon, everyone. We are pleased to report another quarter of record revenues and earnings per share driven by strong demand for 3G and 3G/4G multimode-enabled devices across both developed and emerging regions.

Consistent with this performance in March, we announced the 16% increase in our dividend and a new \$4 billion share repurchase authorization.

QCT delivered another strong quarter and announced several new products, including our third generation of LTE chipsets, our family of 802.11ac solutions and our new Snapdragon S4 Pro processor featuring our latest graphics technology.

We're seeing very strong demand for our industry-leading MSM8960 and other 28-nanometer products. Although the manufacturing yields are progressing per expectation, there's a shortage of 28-nanometer capacity. And at this stage, we cannot secure enough supply to meet the increasing demand we're experiencing. We're working closely with our partners to bring additional capacity online. However, the constraints on 28-nanometer supply are limiting our potential revenue upside this fiscal year.

Looking forward, we believe we will see significant improvement in supply in the December quarter, and we will continue to work this issue aggressively.

Turning to QTL. Our Licensing business had another strong quarter with total reported device sales by our subscriber licensees driven by continued global adoption of smartphones and other 3G-connected devices. QTL continues to grow and expand its base of licensees, and we now have over 210 CDMA licensees and more than 20 OFDMA licensees. As with 3G, we believe that our 4G portfolio is the most widely licensed in the industry.

On the spectrum front, we completed the sale of our 700 megahertz spectrum in the U.S. to AT&T for \$1.9 billion. And separately, our Indian subsidiary has received its ISP license from India's Department of Telecommunications. I was in India last week, and I'm hopeful that the related spectrum will be assigned to us soon.

Looking forward, we continue to see favorable trends across the key growth drivers for our business. First, smartphone demand continues to be strong across all key regions. According to Gartner, annual worldwide smartphone sales will now exceed 1 billion units in 2014.

LTE is increasingly becoming a catalyst for multimode 3G/4G smartphone adoption. In Europe, the first LTE smartphones were sold this quarter. And here in U.S., Verizon plans to add 4G LTE capability to each of their smartphone launches during the rest of 2012.

Second, subscriber migration from 2G to 3G remains strong, particularly in emerging regions. According to Wireless Intelligence, 3G connections in emerging regions grew to approximately 850 million this quarter, representing close to a 45% year-over-year increase. And further, they reported that China recently surpassed 1 billion mobile connections, yet only 24% of those connections were 3G if we include CDMA2000 1X, leaving a long runway for 3G growth in this important region.

2G to 3G migration in emerging regions continues to be driven by smartphones. According to Gartner, smartphone sales in emerging regions nearly doubled from calendar 2010 to 2011 with demand at the high end, as well as more affordable tiers.

A third growth driver for us is the opportunity beyond handsets, including 3G/4G connectivity in nonhandset devices, as well as the opportunity for Snapdragon in the evolving computing space.

The computing landscape is in a transition period with the growth of tablets and Microsoft's plan to support Windows ARM-based solutions. According to industry analysts, annual shipments of tablets and notebooks are expected to exceed 650 million units in 2016. We are increasing our investment in mobile computing ahead of revenues and are looking forward to supporting this new opportunity.

Fourth key driver is the continued deployment of advanced network technologies. Operators are talking about significant potential increases in data demand on their networks, even as high as up to 1,000x, this decade and they'll need to deploy a variety of solutions to effectively meet this challenge.

At Mobile World Congress, we demonstrated several throughput-enhancing techniques operators can use, including femtocells, heterogeneous network optimizations for both HSPA+ and LTE, as well as LTE Broadcast services. We're continuing to invest in developing a broad set of technologies to increase -- to deliver increased bandwidth going forward that will provide cost-effective solutions to support increasing data demand.

And finally, we're moving toward a world where more and more devices around us will be connected and communicating with each other. With our broad Qualcomm Atheros product portfolio and our strong footprint in mobile, we have the opportunity to deliver a unique set of technologies for the expanding Internet of Everything.

Looking ahead, we'll be hosting our annual Uplinq conference on June 27 and 28. As you know, Uplinq is unique in that it brings together developers, device manufacturers, mobile operators and technology providers to help

identify opportunities across a variety of mobile operating systems. It should be another great event, and I look forward to seeing some of you there.

To conclude, we've completed another record quarter at Qualcomm. We're excited to see the continued growth of 3G and 3G/4G multimode smartphones, as well as new mobile computing devices. We are increasing our operating expenses to facilitate additional 28-nanometer supply and to continue to position our industry-leading chipset solutions for the opportunities ahead.

Thank you, and I'll now turn the call over to Steve Mollenkopf.

Steven M. Mollenkopf

Thank you, Paul, and good afternoon, everyone.

Our QCT business delivered another strong quarter. We shipped 152 million MSMs, up 29% year-over-year driven by increased demand for our integrated smartphone solutions and advanced modems.

Smart -- Snapdragon shipments increased by more than 70% year-over-year, driven by growth across all price tiers from Snapdragon S1 products to our latest generation of Snapdragon S4 processors. There are now more than 370 announced Snapdragon-based devices with over 400 more in design, of which over 150 are S4 designs.

As you know, we have made significant investments in recent years to establish a leadership position in LTE chipsets, and we believe we are succeeding. In parallel, industry adoption of LTE technology is growing rapidly. And with our strong portfolio of products, we are at the forefront of this technology transition.

As a result of these trends and as Paul mentioned, demand for our 28-nanometer chipsets continues to exceed available supply. To address 28-nanometer demand, we are increasing our related operating expenses and are working closely with our fab partners to bring up additional capacity.

Within this environment, it is worth noting that our current estimates for total 28-nanometer shipments this fiscal year are largely in line with our prior guidance, though our forecast for the June quarter is a bit lower. Our increased investment to bring up additional 28-nanometer capacity is expected to show results in fiscal 2013.

Across the rest of the business, demand trends are very strong, and we continue to drive our technology leadership. At Mobile World Congress in Barcelona, several leading OEMs announced their first Snapdragon S4 dual-

core devices, including ASUS, HTC, Huawei, Lenovo and Panasonic. We also demonstrated our new S4 quad-core processor, the APQ8064 running 4 separate HD video streams; and we announced our S4 Snapdragon MSM8960 Pro, which integrates our new high performance programmable Adreno 320 GPU for higher-end mobile computing devices.

We announced and demonstrated our new 802.11ac Wi-Fi solution and announced a broad family of 11 AC chipsets for mobile, computing, consumer electronics, as well as home and enterprise networking. Also, our new integrated connectivity solution, which includes digital Wi-Fi, GPS, Bluetooth and FM, continues to be designed in by our customers in the vast majority of our growing S4 pipeline.

We continue to invest in our Qualcomm reference design program to support growth of lower-tier smartphones in emerging regions. Shipments into Chinese emerging accounts are expected to grow at a strong double-digit rate quarter-over-quarter while we transition customers to 7x27A. There have been 10 OEM designs launched on our reference programs over the last quarter with more to follow. We are on track to expand the reference design programs to include a new dual-core Snapdragon processor the MSM8x25. We will do this before the end of the June quarter.

We are increasing our investments to address incremental opportunities beyond traditional cellular, including mobile computing and Windows on Snapdragon. And looking ahead, our leadership position across multiple technologies, delivered to our customers with a tiered and expanding chipset road map, positions us well for smartphone and computing trends in both emerging and developed regions.

That concludes my remarks. I would now like to turn this call over to Bill Keitel.

William E. Keitel

Thank you, Steve, and good afternoon, everyone. We are pleased to report strong financial results today. Fiscal second quarter revenues were a record \$4.9 billion. Non-GAAP operating income was a record \$1.9 billion, and non-GAAP earnings per share was a record \$1.01.

3G/4G device shipments, particularly smartphones, grew significantly in the December quarter, driving record total reported device sales of \$51.7 billion, up 25% sequentially and 29% year-over-year. And comprised of approximately 239 million to 243 million units at an average estimated selling price of approximately \$211 to \$217.

QCT shipped 152 million MSM chips. And revenue per MSM was slightly higher sequentially, both consistent with our prior guidance.

Our GAAP results reflected a \$1.2 billion gain in discontinued operations from the sale of our 700 megahertz spectrum to AT&T. During the quarter, cash and marketable securities grew by approximately \$4.6 billion, on the strength of approximately \$1.6 billion of free cash flow and approximately \$1.9 billion in cash proceeds from the AT&T spectrum sale.

Since our second fiscal quarter non-GAAP earnings per share of \$1.01 is higher than the \$0.94 midpoint of our prior guidance, I thought it might be helpful to provide an earnings walk of the \$0.07 improvement.

First, QTL and QCT combined were better by \$0.06, including \$0.04 from QTL and \$0.02 from QCT. QTL's upside reflected record 3G/4G device shipments and total reported device sales in both developed and emerging regions. QCT's upside reflected slightly higher MSM shipments and favorable product mix, partially offset by higher R&D spending.

Beyond the \$0.06 improvement from QCT and QTL, the remaining \$0.01 resulted primarily from higher investment income, largely offset by a charge for legal matters unique to the second fiscal quarter.

Turning to our updated financial guidance. We now estimate that approximately 787 million to 803 million 3G/4G devices were shipped during calendar 2011, an increase of approximately 21% year-over-year at the midpoint. We estimate that between 885 million and 945 million 3G/4G devices will be shipped in calendar 2012, driven by strong smartphone shipments in both developed and emerging regions.

Using the midpoint of our guidance, we estimate that in 2012, the number of 3G/4G devices will increase approximately 15% year-over-year. We now estimate the average selling price of 3G/4G devices for fiscal 2012 will be approximately \$207 to \$217. The \$212 midpoint is above our prior \$210 midpoint estimate, driven primarily by higher average selling prices in developed regions.

We are reiterating our fiscal 2012 revenue guidance of approximately \$18.7 billion to \$19.7 billion, up 28% year-over-year at the midpoint. We are raising our fiscal 2012 non-GAAP earnings per share guidance to a range of \$3.61 to \$3.76, up 15% year-over-year at the midpoint.

We estimate that QCT's operating margin will be towards the lower end of our prior 20% to 22% estimated range for fiscal 2012, reflecting the increased investments that Steve mentioned. We expect the combination of

non-GAAP R&D and SG&A expense for fiscal 2012 to grow approximately 23% year-over-year, driven primarily by increased QCT R&D.

For the third quarter of fiscal 2012, we estimate revenues to be in the range of approximately \$4.45 billion to \$4.85 billion, up approximately 28% year-over-year at the midpoint. We estimate non-GAAP earnings per share for the third fiscal quarter to be approximately \$0.83 to \$0.89, up approximately 18% year-over-year at the midpoint.

We estimate that our subscriber licensees will report total reported device sales of approximately \$43 billion to \$47 billion in the June quarter for shipments they made in the March quarter, up 24% year-over-year at the midpoint and down sequentially, reflecting postholiday seasonality, typical for this time of the year.

We anticipate shipments of approximately 144 million to 152 million MSM chips during the June quarter and expect a greater mix of chipsets targeted for smartphones for both lower-cost emerging regions and multimode 3G LTE in developed regions. We estimate that the 3G/4G inventory channel will exit the fiscal year at the low end of the 13- to 18-week range, consistent with our prior estimates. We estimate that fiscal third quarter combined the non-GAAP R&D and SG&A expenses will decrease sequentially, approximately 3%, primarily due to expense items that were unique to the fiscal second quarter.

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

Warren Kneeshaw

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

Question-and-Answer Session

Operator

[Operator Instructions] Mike Walkley with Canaccord Genuity.

T. Michael Walkley - Canaccord Genuity, Research Division

Steve, I wonder if you could just elaborate a little more on the 8960 ramp. Obviously, some of your customers are worried about your ability to supply, given the demand's greater than the ability to supply. So how do you manage maybe losing some share in the short term? And then also how do you manage maybe some double ordering that might come from customers trying to get that supply?

Steven M. Mollenkopf

Mike, it's Steve here. A couple of things, one is we have taken approach to spread the supply across all of the customers as best we can, and so I think everybody is dealing with this issue. And obviously, it's a pretty difficult issue to deal with. But in the near term, some of the OEMs have been looking at alternative chipsets, in particular our Fusion 2 lineup, which can be substituted in some cases. But other than that, it's really a question where we are accelerating as best we can the supply, consistent with what I was saying and what Paul was saying. We're really focused very much on getting additional supply throughout the year.

Operator

Tim Long from Bank of Montreal.

Tim Long - BMO Capital Markets U.S.

Just a 2-parter on the royalty line, if I could. It looked like the calculated rate, I know you had said it would be down, but it looked like it was down probably 10 basis points or a little bit more. Is there anything other than mix in that, tablets or LTE impacts that are bringing that down? And where is that expected to go? And then, Bill, on the ASP raise, I think last quarter, you had said kind of flat sequential, and it looked like to get to the full year of 2010, you were going to tail off the back half of the year. So now I guess there's less of a tail off. So why do we think that now? Is that just the mix of the chips that you're seeing? Because obviously, it's going to be the March, June quarter that's driving it, not necessarily what we just saw for December.

Derek K. Aberle

This is Derek. On the externally implied rate, I think last time, as you mentioned, we indicated that you should expect to see a sequential decline and basically, we gave the reason. And really the primary driver there was we had very strong growth in total reported device sales, which obviously is a positive for the business. And we have fixed or more slowly growing elements in the revenue base, such as the license fees and infrastructure royalties. And so effectively, in a rapidly growing quarter like we just had from a TRDS perspective, you'll see a decline in the implied rate. I think we're still expecting for the full year to be in the range of 3 4 to 3 5, although I think our current expectation is we're probably going to be towards at the lower end of that range given that the sort of the TRDS size for the year is larger than we initially expected. Let me make a couple of comments on ASP, and then I'll see if Bill has anything to add. I think largely, we're kind of in line with what we expected in Q2. There were some

puts and takes, but we basically came in about \$1 lower, and we had about \$1 of FX unfavorability in that. And I think the drivers for the back half of the year are largely consistent with what we expected. Although we're expecting a little stronger picture in the back half of the year than we did a few months ago. But we do expect it to trend down based on higher units out of the emerging markets, just sort of normal ASP declines from moving down tier, and then also likely a larger percentage of dongles coming in the back half of the year.

Operator

Ehud Gelblum with Morgan Stanley.

Ehud Gelblum - Morgan Stanley, Research Division

A couple of quick ones. First of all, can you explain a little bit, I guess, it's either Steve or Bill, what your -- I mean, you don't actually own fabs, you use obviously partners to work with. So what does your OpEx -- why does your OpEx have to go up to increase supply? And what is your OpEx going to? And is that temporary? If you can explain, first of all, what it goes to and is it temporary after a couple of quarters? And as you get to the December quarter and supply comes online, does that go down? Just the more we understand about what that OpEx is, we can kind of figure out how that works. And then since it's kind of relevant as to trying to figure out what percent of your chips are sort of caught up in this? Can you give us a range at least as to what percent of chips -- of shipments in the second quarter were 28-nanometer? And in your guidance for next quarter for Q3, what percent you think are going to be 28-nanometer?

Steven M. Mollenkopf

Sure. Ehud, this is Steve. With respect to OpEx related to 28-nanometer, one of the things that you do when you look in to bring on additional sources that you tend to have more unplanned tapeouts. And essentially, you're taping out at a faster rate in order to move the ramp faster than you might have had to do it earlier. That's what we're doing today. And you're seeing part of that in the OpEx increase. We're also increasing OpEx to drive the reference design program that I mentioned in my comments. So a portion of it is -- I would consider to be more of a onetime item type of issue. But then a portion of it is things that were related in investing and things for next year as well. And your second question, I think it was about the percentage of products. If you look at our S4 product lineup and all of our 28-nanometer devices, they are, of course, all impacted by this shortage. I made a comment last year -- or last quarter about the exit rate in terms of LTE devices leaving this year, and we're still in the same place. We think that the

high end of the road map and the LTE exit rate will be the same as what we mentioned before.

Ehud Gelblum - Morgan Stanley, Research Division

Can you give us a sense, too, in fiscal Q2 or Q3 what that percentage was?

Steven M. Mollenkopf

Yes, we didn't. I think I said it was -- we expected the fiscal year to exit at 1/3 of shipments.

Ehud Gelblum - Morgan Stanley, Research Division

Okay. I was just hoping to get a kind of a current spot point as to what that looked like in Q2 and what you're expecting for Q3. I think you said 1/3 by the end of the fiscal year, but I was hoping to get some sort of a where we stand, where's the limitation is on a quarterly basis.

Steven M. Mollenkopf

Yes, it's actually pretty small right now as we've been discussing. It's building throughout the year, and the multimode LTE products are starting to become -- I would consider it to be a table stakes type of feature at the high end of the portfolio. And that's what you're seeing reflected in the forward-looking mix that we're talking about.

Operator

Simona Jankowski with Goldman Sachs.

Simona Jankowski - Goldman Sachs Group Inc., Research Division

Steve, I just wanted to clarify that comment. If you still expect 1/3 of your shipments to be on LTE despite the fact that some of the -- what would have been a June quarter shipments are now pushed into the September quarter. Wouldn't we have actually expected not have a higher percentage be on LTE by the end of the September quarter? And then also the clarification. Given the shortages and the declining volumes in the June quarter, if you can just comment on why the inventory went up.

Steven M. Mollenkopf

Just to be clear, the data point that I gave was an exit rate leaving the fiscal year. And so I think there's really not a big change in that from that perspective. I don't know if we're providing -- I wouldn't expect us to provide much color either way in terms of whether that's moving up or

down. But we are chasing supply quite a bit here. And as that starts to unfold, we hope to be able to increase those shipments.

Simona Jankowski - Goldman Sachs Group Inc., Research Division

Okay. So just to make sure I understand the clarification there. So it will still be fair to assume though that even if the exit rate is the same, then the full quarter for the September quarter of LTE shipments should be higher now than what you would have expected given that some of the June quarter volume is pushed into September?

Steven M. Mollenkopf

No. I think what I was trying to -- I was trying to give you a very sort of qualitative number. I'm not even sure to what accuracy it's changed. But we expect about that same proportion to leave the year. I don't know if there's a big change there, is the point I'm trying to make.

Paul E. Jacobs

And we expect to be supply constrained through the fiscal year. It's really -- we're looking to the December quarter to see a significant improvement in supply.

Simona Jankowski - Goldman Sachs Group Inc., Research Division

And the inventory?

William E. Keitel

On the inventory -- channel inventory, we think we exit the year, the industry exit the year about the same as what we have expected previously at the lower end of what we consider the normal band. For ourselves this quarter, it's a good sign. We have grown with inventory, which is going to be helping us here going into Q3, Q4.

Operator

Rod Hall with JPMorgan.

Rod B. Hall - JP Morgan Chase & Co, Research Division

I just wanted to sort of go back to the basics on this 28-nanometer situation because it sounds like from Steve's comment that the fact that you're exiting at 1/3 of chips is more or less on track with what you had originally planned. So I'm trying to make sure that I understand whether it's supply or demand that's causing the shortage. It sounds like demand's just outpacing what you

guys had originally expected it to, and therefore, you're having to chase supply. But I want to make sure that's the correct interpretation of what's going on. And then I wanted to circle back around to the OpEx question, and see if Bill could give us any more quantification on how much OpEx you guys are having to spend over the next couple of quarters. I understood from Steve what it's being spent on, but I didn't get any idea what the amount looks like over the next couple of quarters. So if you could clarify that, that would be helpful.

Steven M. Mollenkopf

Rod, this is Steve. I think your assumption is correct. Your interpretation is correct.

Rod B. Hall - JP Morgan Chase & Co, Research Division

So, Steve, just to follow up on that. Then that means that in the December quarter, if you guys get supply on board, you're going to -- you should see a pretty rapid ramp of 28-nanometer delivery, I guess, because there's pent-up demand there?

Steven M. Mollenkopf

That's what we're driving towards...

Rod B. Hall - JP Morgan Chase & Co, Research Division

Right. And how fast do you think? Do you have any view on -- do you think it's a pretty immediate rapid ramp in the calendar Q4? Or do you think it's going to take a few quarters for things to build up?

Steven M. Mollenkopf

Well, we've been trying to match available supply with demand here. And as Paul said, we're going to see a significant increase in supply actually in the calendar year. So that's probably the most information that we can give at this point.

William E. Keitel

Rod, this is Bill. On the operating expenses, 3 months ago, we thought operating expenses would grow year-over-year approximately 18%, and now our estimate is 23%. And the bulk of -- great majority of that differential -- in fact, all the differential is really QCT. And as Paul and Steve mentioned, a lot of that is going towards trying to accelerate the availability and the ramp of 28-nanometer. But then secondarily, we are putting a bit more investment into the Windows on ARM. And then back to the 28-

nanometer one, as Steve mentioned much of that expense can get -- it comes on quickly but could get turned off quickly. It's less of a people-related, our own employee-related expense, more of an NRE.

Operator

Parag Agarwal with UBS.

Parag Agarwal - UBS Investment Bank, Research Division

Steve, can you please explain the alternative your customer have, given that the supply is constrained? And then what has been the reaction so far? I mean what -- I mean are these customers willing to go to older Snapdragon designs? Are they looking at alternatives? Are they trying to use their own set [ph] of solutions?

Steven M. Mollenkopf

Well, I think you see a combination of people. In any constrained environment, people look for any alternative they can in order to solve the problem. Now what you have, particularly in this case, is these are devices that primarily are using LTE type of chipsets, and so the alternatives are a little bit smaller than they would be, let's say, in a general allocation scenario, maybe in another industry. And we've been helping customers to see how they can swap in our Fusion 2 chipset, which is the chipset that we have been ramping over the last 8 months in production. Now in some cases also, our OEM partners are, of course, working with us very closely to try to help us accelerate our own supply, and that is primarily what we're seeing. And we do expect to see some alternative non-Qualcomm chipsets being used to solve that issue as well. But I will remind you that in addition to the 8960, right on its heels is the 8x30, as well as the APQ8064. So we're continuing to drive our tiered road map throughout the year on the same schedule, again, gated by the supply here in the near term. But I think that's a pretty attractive road map that people are interested in doing. So we need to solve the supply issues, and then we'll move the business on.

Operator

James Faucette with Pacific Crest.

James E. Faucette - Pacific Crest Securities, Inc., Research Division

I wanted to just turn quickly and tie in the Windows on ARM launch of products coming later this year. And if you can just talk about how your outlook for those products and how we should expect them to start to ramp may have changed because of supply issues, as well as any other issues.

Just trying to gauge how important the supply issue may be in that and how your outlook for -- starting to penetrate the general computing market may or may not have changed.

Paul E. Jacobs

This is Paul. So we've said before that revenues from Windows on ARM is really not this fiscal year, and so that also probably dovetails well with our ability to increase the supply of the chipsets. So we'll see how this all plays out. But those things, they aren't necessarily an -- this fiscal year kind of an issue. In terms of designs that are coming out and our enthusiasm for it, I'd say that, that is probably reflected by our continued investments. We see a lot of interesting form factors that are coming out. Microsoft continues to release more and more information about the operating system and its plans. And we continue to be excited. We see very good traction, interesting form factors, happy to see their confirmation about Office availability and so forth. So I think these are going to be great products. They're going to be thin, light, always on, always connected, the kinds of things that people expect from mobile computing these days. And we're definitely planning on delivering it and also to drive the chipset road map to continually improve the experience.

Operator

Stacy Rasgon with Sanford Bernstein.

Stacy A. Rasgon - Sanford C. Bernstein & Co., LLC., Research Division

I was wondering if we could again just move back to the guidance on chipset shipments and the supply shortages. So can you help me understand how chipset shipments in general are going down in the supply constrained situation even though overall 28-nanometer capacity, even though it's constrained is still going up, what's going on? Is there -- are there inventory issues? Is it just splitting between other customers? What's going on in the non-28-nanometer portion of your volume? Is it some trade-off between 28 and 40? Can you just give us some -- maybe a little more color on what's driving the decline in shipments even though you'd still expect the overall 28-nanometer capacity to still go up?

William E. Keitel

I'll take a stab -- this is Bill Keitel -- at your question, but maybe Steve will want to join in here. Looking at the June quarter, our revenue outlook at this point is pretty much spot on with what we were expecting 3 months ago. We're not seeing a lot of surprise here from our end. The operating expenses have been higher, as you mentioned, but revenues seemed to be pretty

much in line. The somewhat flattish outlook for MSM chipset shipments is really not a surprise for us. We think that's going to build into the September quarter and then again into the December quarter.

Stacy A. Rasgon - Sanford C. Bernstein & Co., LLC., Research Division

But again, they usually up in this quarter anyways. How can they -- how are they still, I guess, flat to down because of supply constraints, even though capacity on that, on the supply should still be going up? I guess I'm still a little bit unclear on the math part in that. What else is going on in the non-28-nanometer portions that's causing that reduction?

Steven M. Mollenkopf

Stacy, this is Steve. On the -- if you look at the demand, particularly in the high end of the portfolio in the LTE type market or the high modem feature set are enabled by the 8960. There are a number of designs who -- if we had more supply, we could ship into that. You're probably looking at a little bit of the high end not being there as much as we could supply. And as I said in my remarks, we've seen a little -- we see the same amount of chipsets broadly, or 28-nanometer chipsets broadly, throughout the year but they shifted a little bit out of the June quarter, which left a little bit of a whole there, I think, in terms of units on the 28-nanometer side.

Operator

Tal Liani with Bank of America.

Tal Liani - BofA Merrill Lynch, Research Division

The question is 2 things. First, on the finance side QTL EBIT margin for 2012, the guide is 86 to 88. This quarter, it's 89.4. Do you think EBIT margin on QTL will go down, and why that's the inferred kind of guidance? Second, the question about fab capacity. It may be a lingering issue in smaller nodes in the future. Intel is aggressively -- they have a road map and manufacturing for it, and the question is whether you're considering having your own fab for particularly this kind of smaller nodes? Is this something that strategically you think it's wise or not? Let's start with these 2 questions.

William E. Keitel

Tal, this is Bill. On the QTL margins, the bit stronger market, particularly on the TRDS and the higher ASP, that's driven upside that is showing through in revenue, but the operating expenses for the QTL segment have not gone up

in the same proportion. So we're trying it a bit higher on that QTL operating margin than what we had expected at the outset of the year.

Steven M. Mollenkopf

This is Steve. With respect to the question about fabs, if you look at the fabless model, it's really served us well as a business. And we have the majority of our R&D dollars spent on people creating products or technology that we use or patents, and it's really worked out quite well for us. Now as we move and become more of a leader in technology on the VLSI side and start to compete with people who compete in that form, I think we'll probably evolve our -- the way in which we work, and probably even become closer with our fab partners versus rethink our entire business. But I think it's just an evolution of how the industry is moving and being at the size that we are, we're happy to be able to shape it in the way that I think is best for us.

Operator

Kulbinder Garcha with Credit Suisse.

Kulbinder Garcha - Crédit Suisse AG, Research Division

I just want to clarify again on this 28-nanometer issue. Paul, Steve or Bill, with the -- normally your QCT volumes in the June quarter go up, you're guiding them slightly down. And I'm just thinking that the smartphone market is strong. You talked a lot about China being strong for a long time. And all of this sequential slight decline, just in volumes that you're maybe guiding to the low point, is all of that just the constraint you're having on 28-nanometer? That's my first question, just want to be clear on that point. And the second question is in terms of this higher level of spending, you're doing and it seems you're leaving everything for the December quarter to, let's say, go up a bit more back to normal. What confidence and visibility do you have on that? Is this -- and then just emphatically you can say that Qualcomm is saying it's not a yield issue. It's much more about bringing in more suppliers, than we spend this money and we get to calendar fourth quarter and everything goes back to, let's say, a more normal QCT volume level and margin level. Is that the right way of thinking about things?

William E. Keitel

Okay, on the first part of that question, the only supply shortage we're dealing with is the 28-nanometer. And then again, to the point that, is the June quarter abnormal? I would caution people on looking back 1, 2 years and assuming that every year afterward is going to be a similar pattern. Again, this June quarter is largely in line with what we expected even 3

months ago. We're not seeing much change here in our perspective here. There's going to be, I think, a lot a focus on product launches going into the September quarter and particularly into the December quarter. But I don't see June really as abnormal or a concern from my standpoint for our year and looking forward. On 2012, the first quarter of fiscal 2012, I'd say we feel pretty good about that -- or excuse me, excuse me, 2013. I'd say we feel pretty good about that, Kulbinder. Obviously, we've got a little ways to get there, but the customer demand is strong, and we're working our way to see if we can fill it and get caught up by that time.

Kulbinder Garcha - Crédit Suisse AG, Research Division

Bill, just to be clear on that point. If everything goes to plan by that quarter, some of this elevated level of, let's say, OpEx you're seeing largely in QCT goes away hopefully. Is that the right way of thinking about how the model works?

William E. Keitel

Well, I would say it would look much more normal in proportion to revenues at that time, but that would only been one quarter. So let's not jump too far ahead. We'll share our guidance for fiscal '13 as we normally do in November.

Operator

Brian Modoff with Deutsche Bank.

Brian T. Modoff - Deutsche Bank AG, Research Division

So I'll try to ask it a little differently. So what would the quarter look like if you weren't constrained on 28-nanometer? And then what are you doing with regard to getting that incremental capacity? Is this all TSMC? Or are you working with other vendors to bring more supply on from other sources?

William E. Keitel

I'll take the first part. On the June quarter, I mean it will be better, but I don't think it would be an increment that would be all that great. There will be a nice increment, but I think the September quarter would be much more meaningful in that respect. And then the December quarter, obviously, the demand backing up into that, our goals are pretty high there in terms of filling this customer demand.

Brian T. Modoff - Deutsche Bank AG, Research Division

So bringing that capacity on, how are you going to do it? Is it with TSMC? Or is this an other source? In other words, is there any risk to getting that new capacity online in the time frame you laid out?

Steven M. Mollenkopf

I think we are, in addition to working very, very closely with TSMC, we're also bring on several alternative sources. And it's the tapeout into those alternative sources and moving up the ramp that's actually contributing to this pulse of OpEx that we've been talking about. With respect to risk, I mean, anytime that you're on the front end of driving a node, there is risk with respect to the timing of how that comes on. But so far, so good on that. We've been pleased with the way things have been looking with respect to yield, and we've been just adding supply. But like any other time you're driving a node, these things take a little while to get running, but we're full steam ahead, multiple sources now.

Operator

Jeff Kvaal with Barclays.

Jeffrey T. Kvaal - Barclays Capital, Research Division

I think one of the implicit assumptions that many of us are making is that the pre-LTE shipments are going to be easing down a little bit over the course of the June quarter. My question is if that is in fact the case, would that mean that we should be thinking about a chipset number that is lower, an MSM number that is lower, in the September quarter than what we had in June before we then see a recovery in the December quarter? That might help us quantify how much the uptick might be in December.

William E. Keitel

We're looking for a reasonable, a healthy uptick into the September quarter on total MSMs.

Steven M. Mollenkopf

The important part to remember is we're supply limited right now, and we're ramping supply.

Jeffrey T. Kvaal - Barclays Capital, Research Division

Okay. And so should then we think that, that supply ramps in through the September quarter, and then you're at full steam entering December? Is that how we should we think about it?

Steven M. Mollenkopf

Yes. I mean anytime that you're ramping, you're ramping through the quarter. In fact, in the quarter that we're in, and we're adding a substantial amount of capacity throughout the year. So it's a ramp. It's not a shelf or some sort of a pulse.

Operator

Craig Berger with FBR Capital Markets.

Craig Berger - FBR Capital Markets & Co., Research Division

I guess one thing is if we look at QCT operating margins, what do we think of is a more normal operating margin range in a more typical environment? And then can you also just give us a sense of what you are seeing competitively in the chip space against other guys in 3G like MediaTek or Broadcom? Is that starting to weigh on ASPs? I guess I'm just wondering what's portion of baseband content in your ASPs versus other and how that's changed over time.

William E. Keitel

Operating margin, what's a normal environment. So last year, we operated in a 22% to 24%, 23% kind of band. This year, we're expecting 20% to 22% band. We do have internal goals to be improving on that over the next 5 years. But the environment today is pretty competitively intense, and we're doing well in that environment. I think we're doing, operating margin-wise, we're doing better than many other players. So I don't -- Steve, any other thoughts on that?

Steven M. Mollenkopf

Yes, I would say the mass-market smartphone tier is a pretty competitive and crowded tier today. And, however, we look at our integration strategy that we've had in place for some number of years, and we've been driving across multiple technology vectors. We think that, that's paying off in terms of demand. In fact, I think one of the reasons why we're spending so much of this call talking about 28-nanometer is because we made those investments over the last several years. This resulted in, I think, very strong demand. We believe that those trends continue into the future, and we're continuing to make those investments, not only for the home space, which is the phone space, but we also think those same trends will yield an interesting business in the computing space, as Paul talked about, on the Windows, on ARM transition that we think is going to happen in PCs. So we're investing in computing upstream of that. We think that, that's a great

place to be, and we think it's also something that is a unique capability -- or a more unique capability that we have compared to some of the competition, and you'll continue to see us do that.

Operator

Shawn Webster with Macquarie Research.

Shawn R. Webster - Macquarie Research

A couple of items on the chip side of the house. So for your MSM pricing, can you share with us your outlook, in light of some of your changing mix assumptions perhaps for the next couple of quarters, on how you expect your MSM pricing to evolve? And I was wondering if you could give us an update on trends within your Atheros Wi-Fi business. Was it flat, down, up sequentially in the March quarter and expectations for June?

William E. Keitel

Shawn, Bill Keitel here. On the average revenue per MSM, so the quarter we just reported, there was slight uptick in average revenue per MSM, pretty much in line with what we had expected at the outset of the quarter. We're looking for modest upticks between now and the end of this fiscal year on an average revenue per MSM.

Steven M. Mollenkopf

Then on the Atheros side, we're pleased with how that business has been integrated into Qualcomm. One of the things that I think would even help us more is as we work through the ramp of our S4 chipsets, those chipsets tend to use, the design-ins tend to have a very strong presence of the Atheros chipsets next to them. And so as we start to work through these supply issues with the 8960 and the S4 chipsets, we think that's a good opportunity for us to pull some of the synergies that we've been talking about on the handset side through. So similar trends in that business, and we're pleased to have it as part of the organization.

Operator

Ed Snyder with Charter Equity Research.

Edward F. Snyder - Charter Equity Research

Don't want to kick a dead horse here. But, Bill, if we go back all the way to '03, your June quarter unit volumes on MSM have been up almost every single year except for, say, maybe one. I just want to be clear because obviously with all the 28-nanometer supply issues, I think most people are

concerned that it might be masking a slowdown in any of the other businesses. So I know you said that it wasn't surprising the way it turned out for you 3 months ago, but most of the consensus estimates and most of the analysts were looking for more of a traditional increase. If we remove all the 28-nanometer from the equation, are you looking at any dislocation or slowdowns or share loss or any negative impact to either QRD or your traditional chip business? Or is everything tracking pretty much as you expected and most of this has to do with the product that -- the new products that you're trying to get out? And then I have a question about -- in terms of supply. You mentioned that there are some sockets that are going to non-Qualcomm solutions during this period of constrained supply. Is that more of the legacy products? Are you talking about -- there's not really any really compelling LTE solutions out there that I wouldn't think of. But if you can give more color on how large a group that is and what technology that is, I'd appreciate it.

William E. Keitel

I'll just say again, I'd be cautious of drawing these correlations year-over-year. I'll remind people, back to when we guided the September quarter last year people were a little surprised that our MSM guidance wasn't higher, and our messaging was pretty clear that it's going to -- we thought it was going to come through strong in the first quarter of fiscal 2012. And people were looking at historical trends and trying to infer that there may have been something wrong there. And I think you'll recall our guidance was spot on. So again, there's going to be other factors driving this market. We're not going to get into chipset family by chipset family. But other than customer demand for the 28-nanometer exceeding what we can supply, the business is humming along, I think, very, very well. And this is an opportunity that we're working hard to close up on by the end of this calendar year.

Operator

Romit Shah with Nomura Equity.

Romit J. Shah - Nomura Securities Co. Ltd., Research Division

Bill, if the manufacturing supply constraints remain ongoing, I guess what other levers can you pull to get operating margins up over the next several quarters on the chipset side?

William E. Keitel

Yes. Steve, I'll let you jump here. I don't think the levers are that short a term. The pricing typically gets set well in advance. We'll react through the year as competitors make moves. And then on the -- so that kind of speaks

to the revenues and the gross margin. On the operating expense side, it's primarily R&D, and the R&D investment we can't manage for a quarterly, given quarterly outcome we might want to see on the P&L. That has to be managed with that -- a little longer cycle in mind, and I think Qualcomm has done very well with that type of focus on R&D over the years.

Romit J. Shah - Nomura Securities Co. Ltd., Research Division

Steve, if I could just on 11ac, could we start to see that technology in mobile phones this year?

Steven M. Mollenkopf

We could. I think you probably saw at the Mobile World Congress, we did an over the year demo. In fact, I think it's the world's first over the year demo. That actually use the commercial silicon that is in our 8960. And our 11ac chipset is actually just a swap of the RF chips pin-for-pin compatible chipset. So as the industry starts to develop and the certification starts to mature, it's a fairly easy upgrade for our customers in order to enable that. And that same comment that I made about 8960 applies to the 8064 and the 8x30. So I think it's a fairly well-designed approach to enable that market, and I think you would expect that from us. We tend to try to drive the front end of technology transition, and we'll do the same thing and have done the same thing in the Atheros business.

Operator

Gus Richard with Piper Jaffray.

Auguste Gus Richard - Piper Jaffray Companies, Research Division

Sorry to keep on beating a dead horse on the OpEx. As you work with new suppliers, historically, they've been willing to tweak the process to match your design roles, the 28 that gets tougher, I don't believe Samsung is willing to do that anymore, but others may be. How much redesign work do you need to port from one set from TSMC to another foundry? And/or is the increase in OpEx just tape-out costs?

Steven M. Mollenkopf

It is. We do tailor the chips for really the different camps. And of course there are 2 camps there, depending on kind of the source of the VLSI technology. We do have to spend incremental dollars to -- and I would call them tapeout-related costs to enable additional supplies, tapeouts and then load boards and things that are used to qualify new sources of supply. And

it's those type of investments that we refer to as more of a onetime item or the items that are in the NRE type of bucket that Bill mentioned.

Auguste Gus Richard - Piper Jaffray Companies, Research Division

Got it, and then in terms of your -- as far as you have today, it does sound like they're ordering more equipment, and that should be installed in, I think the, second quarter and ramped in the fourth quarter. Is that -- have I got that correct?

Steven M. Mollenkopf

I think it's a continual increase in terms of our ability to deliver and meet our demand. So it's going to continue through the years as Paul mentioned in his comments.

Operator

Mark McKechnie with Think Equity.

Mark McKechnie - ThinkEquity LLC, Research Division

A question for Steve and then for Bill. First for Steve, 28-nanometers. Just to be crystal clear on the 8960, is that product good to go? There's really no technical testing issues or what have you, I mean it's all capacity that you're waiting for? And I'm kind of guessing that the 28-nanometers, you'll probably bring out, what, your 9615s and 9215s first, and then put the ramp over to the 8960. And then also wanted to know if -- I wonder if you expect 802.11ac to show up on the 8960? And then for Bill, just housekeepings. How much of this cash is onshore? And then also on your June guidance, if you can break out how much is on -- from investment income, how much you see there?

Steven M. Mollenkopf

Mark, it's Steve. Yes, it really is related to wafer starts and not yield or any design issue related with the chip. So we're quite pleased with how the development worked there, and your transition in terms of our road map, in terms of timing sounds accurate.

William E. Keitel

Mark, it's Bill. On the -- we've got \$26.6 billion total cash at quarter end, and the onshore component was \$10.8 billion. And then on the investment income for Q3 and Q4, for Q3, I think at this point, with the visibility we have, I would expect investment income including realized gains to be in line

with what we've seen maybe the last couple of quarters. But for Q4, fiscal Q4, we haven't included an assumption of any realized gains.

Operator

Matthew Hoffman with Cowen and Company.

Matthew Hoffman - Cowen and Company, LLC, Research Division

I think most of my questions have been answered at this point. But, Bill, could you go over the investment income line for one minute, please? The \$230 million was a little bit better than we expected. And just to follow up on some of the earlier questions. With Steve on the demand side, are you seeing any sort of pushouts from the Windows Phone manufacturers especially. Is there -- there's just no problem with demand at all?

William E. Keitel

Matt, I'll take the first one. On the investment income. Yes, in fiscal Q2, it was a little higher than normal. If you recall last year, we sold some puts in our stock. There was a \$75 million premium on those puts, and then as the stock rises, that premium is brought onto the P&L. So with the -- where the stock ended fiscal Q2, the majority of that \$75 million has come to the P&L, and a little over \$30 million of it was in fiscal Q2 alone. So there was a bit of a spike in the investment income. Exclude that, and I think fiscal Q3 looks to be similar to Q2. Again, if you exclude that mark-to-market on that -- on those puts on our stock.

Steven M. Mollenkopf

And Matt, this is Steve. My apologies, I think it'd be difficult for me to answer that question without providing information about a couple of OEMs. So if you don't mind, I'll try to not answer that one.

Operator

This concludes the allotted time for question and answers. Dr. Jacobs, do you have anything further to add before adjoining the conference?

Paul E. Jacobs

Yes. I wanted to just say thanks, everybody, for being on the call today. And really we're gratified by the strong traction we're seeing on Snapdragon, the 8960. The team that designed that product really executed on a bunch of vectors. Its new radio technology, new microprocessor technology, new graphics, new connectivity and a new process node, and that's what put that chip so far out in front of the competition and drove really tremendously

strong demand that we've seen. And we're going to drive those advantages going forward as well. We've got some really good products in the road map.

Obviously we're making the investments we talked about to improve our supply and go after this Windows opportunity and also to go after the emerging markets with the reference designs.

The growth drivers of the company continue to be very strong, and I think the big issue is that we're disappointed, I think our customers are a little disappointed with the fact that we have these supply constraints. They've all designed really exciting new devices around those things, and we're going to work as hard as we can to get more supply for the end of the year to really bring up those great devices. So there's a lot to look forward to, and we're working hard to bring all that to reality. So thanks very much, everyone.