Company Name: Broadcom Ltd
Company Ticker: AVGO US
Date: 2016-12-08
Event Description: Q4 2016 Earnings Call

Market Cap: 68,680.41
Current PX: 170.71
YTD Change($): +25.56
YTD Change(%): +17.609

Bloomberg Estimates - EPS
Current Quarter: 3.175
Current Year: 13.782
Bloomberg Estimates - Sales
Current Quarter: 4012.038
Current Year: 16403.710

Q4 2016 Earnings Call

Company Participants

- Ashish Saran
- Hock E. Tan
- Thomas Krause

Other Participants

- Craig M. Hettenbach
- Blayne Curtis
- Ross C. Seymore
- Vivek Arya
- John William Pitzer
- Harlan Sur
- William Stein
- Stacy Aaron Rasgon
- Ian L. Ing
- Jeriel Ong

MANAGEMENT DISCUSSION SECTION

Ashish Saran

Financial Measures

In addition to U.S. GAAP reporting, Broadcom reports certain financial measures on a non-GAAP basis

A reconciliation between GAAP and non-GAAP measures is included in the tables attached to today's press release

Comments made during today's call will primarily refer to our non-GAAP financial results

Please refer to our press release today and our recent filings with the SEC for information on the specific risk factors that could cause our actual results to differ materially from the forward-looking statements made on this call

Hock E. Tan

Acquisition Update

FY2016 was a very transformational year for our company as we complete the acquisition of Broadcom Corporation

This acquisition and integration significantly increased our scale added seven businesses to Avago's existing portfolio of 12 businesses and roughly double revenue

Anticipated Margins

- Since closing the acquisition at the start of our second fiscal quarter, we've made great strides in integrating classic Broadcom
- As you may recall, going into the Broadcom acquisition, we had introduced an operating model targeting 60% gross margin and 40% operating margin that we had expected, planned I should say, to progress over the long term
- I'm very pleased that we were able to make good progress towards this target in FY2016 and in fact since closing the acquisition February 1, 2016, we have driven significant improvement in product margin and spending and exited the FY exceeding this long-term target
- More recently also, on November 28, we have also made good progress on another major milestone with the integration of the Avago's and Broadcom's financial reporting systems

Long-Term Operating Margin Target

- Looking at 2017, and beyond, we expect our business to be continuing to be sustainable and in fact becoming much more profitable
- We are raising our long-term operating margin target to 45%, a significant increase from our prior model
  - We expect to drive to this long-term target through a combination of the full realization of material cost synergies and operating leverage on a larger scale

Shareholders Return

- Reflecting expected improvement in profitability, we announced earlier today a doubling of our dividends
- We are comfortable that our projected FCF generation was, importantly, significantly higher return to shareholders while still preserving flexibility on our balance sheet for future M&A opportunities
  - As and when these new M&A opportunities materialize, they will enable us to further increase capital returns to shareholders

Operating Results

Earnings Summary

- Let me now turn to a discussion of what happened in Q4
- We delivered strong results for fourth fiscal quarter of 2016 with revenue at $4.15B, up 9% sequentially
  - This result was at the top end of our guidance, primarily due to better seasonality from our wireless and enterprise storage segments
- EPS of $3.47 grew by 20% sequentially

Wired Business

- Talking about wired, our larger segment, in Q4 revenue came in at $2.08B meeting expectations totally and the wired segment represented 50% of our total revenue
- Revenue for this segment during the quarter was up slightly on a sequential basis

- We benefited from increased demand for networking ASICs into data centers as well as strong fiber-optic shipments into access and Metro networks
- Our recently launched Jericho standard product line that target aggregation and edge routing applications continue its ramp during this quarter
    - We were also able to address the supply chain constraints we experienced in the prior quarter, allowing us to catch up to customers' demand in our set-top box business

Q1 Outlook

- As we look to Q1 for wired segment, despite expected seasonal declines, I should add, in broadband carrier access and set-top box businesses
    - We anticipate continuing growth in fiber optics and strong increased demand from several cloud data center operators, which will keep our wired revenue in total at least flat sequentially

Wireless Business

- Moving on to wireless, in Q4 wireless revenue came in at about $1.35B, and the wireless segment represented 32% of total revenue
- Revenue for this segment was up 34% sequentially, a bit stronger than expectations
- Growth was primarily driven by the full ramp of the new phone generation at our North American smartphone customer
    - Further enhanced by an increase in Broadcom's cellular RF content and wireless connectivity content in this new generation of phones
- We've made great progress in relieving FBAR [Film Bulk Acoustic Resonator] filter capacity constraints we experienced in late 2015
- Over the course of 2016 FY, we were able to increase FBAR filter capacity in our Fort Collins fab by approximately 50%
    - This increase was enabled by our new 8-inch wafer manufacturing process that came online with very good yields

Business Outlook

- As we look forward, we intend to add more capacity by continuing to convert existing 6-inch lines to 8-inch lines
- This very capital-efficient conversion approach will allow us to theoretically add another 70% of capacity over our existing 6-inch footprint within Fort Collins fab over the next few years
    - Because of this, we no longer need to keep the idle facility we have purchased in 2005 in Eugene, Oregon as a backstop pending the outcome of this 6 to 8-inch capacity expansion
- Turning now to our projection for first quarter FY2017, similar to last year, we expect to see some decline in demand and expect our wireless revenue to sequentially decline in the mid-teens on a percentage basis at least

Enterprise Storage Business

- Turning to enterprise storage, which is going through something of a resurgence that we expect will continue into Q1 FY2017, in Q4, enterprise storage revenue came in at $561mm, and this segment represented 14% of our total revenue
- Segment revenue grew 6% sequentially and came in better than expectation
- We benefited from the strengthening demand both for our HDD, hard disk drive, and RAID host bus adapter products

Q1 Outlook

- Looking into Q1, we expect the strength in the storage end market to continue to show momentum and drive enterprise storage revenue growth to 20% on a sequential basis
- We're expecting growth from all our enterprise storage products
- In particular, we're expecting a strong ramp in shipments of our custom flash controllers for SAS enterprise solid-state drives that are increasingly being used in place of high-performance hard disk drives in data centers

Industrial Segment Business

- Finally, let's move on to our last segment, industrial
- In Q4, industrial segment revenue came in at $162mm, down 20% sequentially
- This segment represented 4% of our total revenue, as expected
- We reduced shipments sharply into our channel as we headed towards the seasonally weaker end of the CY
- Industrial product resales did decline, but only in the mid-single digits sequentially, resulting in a sharp reduction in our channel inventory

Q1 Outlook

- Accordingly, as we look in Q1, we plan on rebuilding depleted channel inventory and anticipate increasing shipments to our distributors
    - As a result, we expect revenue first quarter from our industrial segment to increase sequentially in the mid-single digits

Business Summary

- In summary, after a strong close to our FY2016, we expect a solid start to FY2017, as the demand environment for our entire portfolio of products continues to be very firm
- In fact, we expect in Q1 to largely offset the seasonal decline in wireless revenue through sustained strength from wired products benefiting from:
    - Growth in cloud
    - Broad strength in enterprise storage
    - And a recovery in industrial

Thomas Krause

Future Operating Model and Capital Allocation

My comments today will focus primarily on our non-GAAP results from continuing operations unless otherwise specifically noted

A reconciliation of our GAAP and non-GAAP data is included with the earnings release issued today and is also available on our website at broadcom.com

Long-Term Target Operating Margin

- Let me start by providing some comments on our long-term operating model and an update on our capital allocation return strategy
- As Hock highlighted, the integration of classic Broadcom with Avago is going very well, and we have made rapid progress towards achieving our original target operating model objectives
- Looking forward to a fully integrated Broadcom, we recently announced an increase in our long-term target operating margin from 40% to 45%
- We expect to make progress towards the new operating margin target through a combination of operating leverage driven by long-term revenue growth, which we continue to target at approximately 5% per year, and the full realization of acquisition-related cost synergies from the Broadcom acquisition, all while maintaining a significant investment in research and development
    - In addition, we recently announced the acquisition of Brocade, which we expect to complete in H2 FY2017

Anticipated EBITDA

- We expect that Brocade's Fibre Channel SAN switching business will generate approximately $900mm in EBITDA by FY2018

Balance Sheet

- Turning to our balance sheet, we currently intend to maintain liquidity from cash on hand of approximately $3B to cover expected working capital needs and projected annualized dividends
- As we've discussed in the past, we expect to continue to target gross leverage of approximately two times EBITDA as long as the cost of that leverage remains attractive
- Given our current EBITDA run rate, we don't intend to pay down additional debt going forward beyond the amortization obligations in our loan agreements

CapEx

- Finally, long term we expect CapEx to run at about 3% of net revenue, consistent with our largely fabless business model
- However, you'll see, for FY2017 we expect CapEx to run at an elevated level of approximately $1.2B
    - This includes about $500mm towards campus construction, primarily at our Irvine and San Jose locations and about $200mm towards purchasing test equipment to consign the contract manufacturers to support classic Broadcom businesses

- In summary, as we reflect on all of this, we are comfortable that we can generate long-term FCF margins of better than 35%

Dividend Plan

- Turning to M&A, and as Hock highlighted in his opening remarks, as we look at the landscape vs. the scale of our projected FCF generation, we feel that we've reached the point where it makes the most sense to return a more meaningful portion of our cash flow to shareholders in the form of dividends
- The substantial increase in our dividend announced today is the first step
- Long-term, we plan to target aggregate dividends of approximately 50% of FCF on a trailing 12-month basis
  - Given our FCF generation, we believe that this will also allow us sufficient balance sheet flexibility to pursue opportunistic acquisitions that are consistent with our proven business model
- One note on the dividend, our board has decided to set dividend policy and the projected quarterly dividend amount for the full FY rather than on a quarter-by-quarter basis as it did previously
  - However, the declaration and the payment of any particular quarterly dividend, if any, is subject to the approval of the board at the time of distribution

Tax Update

- Now looking below the operating line, I want to pause for a minute to provide you a quick update and some color on our tax situation
- As you are aware, we are a Singapore company and our IP is predominantly located in Singapore pursuant to our agreement with the Singapore government
- When we acquired classic Broadcom, we intend to align the acquired operations with classic Avago's existing processes and structure as that structure has demonstrated long-term sustainability and relatively higher flexibility to deploy cash globally
  - This integration of IP occurred in Q1 FY2017
- As a result of acquisition accounting, at the time we closed the Broadcom acquisition, we established a deferred tax liability on our balance sheet associated with the potential tax liability from our planned IP integration
  - This tax liability will only become payable upon the actual distribution of any earnings resulting from integrating the IP and may be partially offset by any qualifying tax credits and deductions available to us at the time of distribution
- We expect to distribute these earnings over several years
- The payment of these cash taxes will be in addition to the cash taxes that we pay on our regular operations and will over time reduce the deferred tax liability that you see on our balance sheet today
  - As a result, in FY2017, we expect to pay approximately $400mm in cash taxes, which will include the impact of cash taxes, if any, associated with the IP integration

Q4 Financial Results

Revenue and Gross Margin

- With that, let me quickly summarize our results for Q4
- Revenue for Q4 came in at $4.15B, growing 9% sequentially, Foxconn was a greater than 10% direct customer in the fourth fiscal quarter
- Our fourth quarter gross margin from continuing operations was 60.8%, about 30BPS above the midpoint of guidance primarily due to better than expected operational efficiency

OpEx and Operating Income

- Turning to OpEx, R&D expenses were $666mm and SG&A expenses were $137mm
  - This resulted in total operating expenses for Q4 $803mm, slightly below guidance reflecting the benefits from the ongoing realization of acquisition related cost synergies, offset by higher bonus accruals due to higher profitability
- Operating income from continuing operations for the quarter was $1.72B and represented 41.5% of net revenue
- Provision for taxes came in at $73mm, slightly above our guidance
  - This was primarily due to higher than expected net income
- Fourth quarter interest expense was $106mm and other income net was $9mm

Net Income and EPS

- Fourth quarter net income was $1.55B and earnings per diluted share were $3.47
- Our share based compensation expense in Q4 was $208mm

Balance Sheet Summary

- Moving on to the balance sheet, our DSO were 48 days, a decrease of four days from the prior quarter due to better linearity of revenue in the quarter
- Our inventory ended at $1.4B, an increase of $92mm from the beginning of the quarter
- I would note that the starting inventory for the quarter included the impact of $86mm of step-up charges to reflect the impact of purchase accounting
- However, our non-GAAP results exclude the impact of these step-up charges
  - Therefore, non-GAAP inventory days on hand reflected an aggregate change in inventory of $178mm in the quarter, an increase from 74 days to 78 days
- We increased inventory for some of our classic Broadcom products to improve operational flexibility to better meet customer demand

Cash Flow

- We generated $1.35B in operational cash flow, which reflected the impact of approximately $124mm in cash expended primarily on classic Broadcom restructuring and integration activities including discontinued operations
- We ended the quarter with a cash balance of approximately $3.1B

- In Q4, we spent $193mm on CapExs
  - A total of $213mm in cash was spent on company dividend and partnership distribution payments in Q4

Q1 FY2017 Guidance

Now let me turn to our non-GAAP guidance for Q1 FY2017

This guidance reflects our current assessment of business conditions and we do not intend to update this guidance

This guidance is for results from continuing operations only

Revenue and Gross Margin

- Net revenue is expected to be $4.075B +/- $75mm
- Gross margin is expected to be 61.5%, +/- 1 percentage point

OpEx and Tax Rate

- Operating expenses are estimated to be approximately $785mm
- Tax provision is forecasted to be approximately $73mm

Net Interest Expense and Share Count

- Net interest expense and other is expected to be approximately $101mm
- The diluted share count forecast is for 446mm shares
- Share-based compensation expense will be approximately $210mm

CapEx

- CapEx will be approximately $330mm
- And as a reminder, our first quarter is generally a weaker quarter for operating cash flow due to the payment of our annual employee bonuses relating to the prior FY

QUESTION AND ANSWER SECTION

<Q - Craig M. Hettenbach>: Hock, a question on networking. And you mentioned some strength in ASICs. I know over a number of years, you guys have done well in terms of taking share. Can you talk about where you are in that and just kind of maybe the legs of that share gain story on the ASIC side?

<A - Hock E. Tan>: Well, over the years, you're correct, we have been gaining share. And as we talk generally about those shares, generally these ASICs have a long product life cycle, and gaining share tends to take a while, a few years before you show up – it shows up in revenues. And I guess, what we're seeing now is the outcome – the revenue outcome of share we had gained in previous years. And we continue to gain share, especially on very, very high-speed, high-performance networking switches, routers, even vector processing machines.

<Q - Craig M. Hettenbach>: Got it. And then as a follow up, on the wireless front, you mentioned kind of getting caught up on capacity and the 8-inch transition is going well. Up until this point, you've been mostly servicing the two high-end smartphone OEMs. Any thoughts in terms of the approach going forward on the China smartphone OEM market in terms of is it sizable enough for you guys to engage more on that front?

<A - Hock E. Tan>: It is sizable. It’s just that, see, our strength, our basic strategy in wireless, be it RF cellular, analog or wireless connectivity, Wi-Fi that is Bluetooth combo is about the features, the engineering advances, the innovation we provide with those solutions. And we continue to do that generation after generation.

However, this tends to be very expensive, relatively speaking, products, but they offer very, very unique differentiated features to our customers. So it’s usually only a very high-end segment of the market that takes this on, and you’re right, it would include the Chinese to the extent that’s very high-end flagship status, premium status phones. But it’s a much smaller percentage than our core business, which is largely the flagship phones from our North American customer and our big Korean customer.

<Q - Blayne Curtis>: Great results. Maybe just following up on that last question. On the wireless segment, you’re guiding basically what you did last year. I’m just curious if the moving pieces within that are about the same. If you can just give any comments on what you’re seeing in the January vs. last year?

<A - Hock E. Tan>: Pretty much the same, Blayne. You hit it right on. Our wireless business is very, very – more predictable. There’s a product roadmap. Every generation we come up with – every generation of phone, which is every year virtually, we come up with a new set of new product, a new set of features, capabilities that our solution provides for our flagship phone customers, and with it typically more content, as we call it, because there are more bands or there are more features or there are more channels that wireless connectivity needs in delivering the high-performance data signals that phones are rapidly becoming. So it is, but other than that the fact that it keeps innovating, it keeps becoming a much more and more an engineered product, but it’s very much the same kind of business we had.

<Q - Blayne Curtis>: Great. Then on just the guidance for storage is up quite strongly. You mentioned the ASICs for SSDs. Just wondering within that guidance how much of that was contributing, in just broad strokes. And what else if you had to rank the drivers getting that 20% growth?

<A - Hock E. Tan>: It’s no surprise to you guys. Right now, I suspect the – not suspect, the strong seasonality in consumer PCs and hard disk drives are running very strong. It’s also partly because enterprises cloud are buying a lot of hard disk drives because of enterprise-grade NAND shortages too. So we benefit a lot on that on the storage side, but also we’re seeing a lot of cloud spending on the storage side of the business, which is where our MegaRAID, our SAS storage connectivity, our server storage connectivity side of the business is also showing renewed strength, even at this late stage of the Grantley generation. See, Purley is coming middle of next year, when we expect a big lift, but it’s interesting to see this lift also happening at this time. So we’re seeing across, as I mentioned, pretty much all sectors in our enterprise storage portfolio.

<Q - Ross C. Seymore>: I guess the first one on the cash return policy, congrats on doubling the dividend. I’m just wondering if you could give a little color on how the 50% of FCF target was given. And, Hock, does that have any implications about your view on the appetite and/or availability of good M&A targets and that you’re going to more equally balance return of cash to shareholders and M&A?

<A - Thomas Krause>: Ross, let me hit that first and then if Hock wants to add something more, he should. At the end of the day, it’s a balance. We look at the scale of the FCF. We look at the M&A landscape relative to that scale. And we wanted to maintain flexibility on the balance sheet and remain in and around our target of 2 times EBITDA in terms of leverage. And so when we put that together and in light of the fact that we’re very focused on the dividend relative to any buybacks, 50% made sense.

<A - Hock E. Tan>: What is implied here, Ross, the other side to it is our appetite in acquisition hasn’t changed at all. If there are interesting businesses out there that are actionable, we will consider and we will act prudently and appropriately. But one of these things says in terms of our new capital allocation policy is we’re basically taking the view that we’re taking on a significant amount of our debt effectively as part of our long-term capital. And we feel comfortable in continuing to support that, which then basically opens ourselves up for the opportunity to really create a lot of flexibility on our balance sheet and our ability to translate a lot of our operating cash flow into cash return for our shareholders while not at all diminishing our ability to act on transactions that make plenty of sense.

<Q - Ross C. Seymore>: But I guess in my one follow-up, it's very helpful to have the updated target of 45% on the operating margin, if I pulled that together with the last couple quarters where you've nicely beaten the gross margin side of the equation. Gross margin wasn't mentioned in the levers you're going to use to get to that 45% operating margin, so I just wondered what your thoughts are on at least the direction of gross margin going forward. Thanks.

<A - Hock E. Tan>: No, I didn't mention it. I didn't mention it. A key part of our realization of a benefit through all this and particular in gross margin is our gross margin continues to expand. You have seen that since February 1 this year quarter after quarter, and we continue to expand even as we guide Q1 FY2017. Q4 FY2016 was 60.8% gross margin. We're guiding it up to 61.5%. And if you look at it closely, by stepping up, we were trying to tell you that's a long-term trend. We have been stepping it up about 50BPS every quarter sequentially. And the reason where that's coming from is simply because very simple, we're getting synergies from material costs. Tom talked about investing CapEx into testers, a lot of testers of our silicon-based products. These are very expensive testers. We're talking of investing $200mm on a lot of testers because we believe we have a more efficient way of doing it. We do our testing through consignment of our test equipment, which we are adopting. Basically the idea on the whole thing to all of that is we're getting a lot of synergies on material costs, not just on our SG&A line.

<Q - Vivek Arya>: Thanks for taking my question and congratulations on the consistently good execution and for doubling the dividend. I have one question on wired and one on wireless. So, Hock, on the wired one, just on an apples-to-apples basis, how do you think your wired business has done relative to what you thought when you acquired classic Broadcom? I know there is a perception that you have stood firm on pricing. Do you think this has distracted from growth in any way? Just how do you think your networking and the cable sides have done in your wired business over the past year?

<A - Hock E. Tan>: Okay. Our wired business has done very, very well. In fact, to be direct about it, from just before we closed the transaction, that means in the final due diligence stage and all that to today, looking from that point, starting point, over the last nine months, it's done much better than we had expected it to have done. We have seen this product has been very, very sustainable with our customers, been very, very strategic to a lot of our OEM customers and continuing to be that way.

We continue to invest a lot in those areas that we particularly find them to be very, very core and sustainable, and we haven't spent on any investment there and we are seeing it paid back a lot. And by the way, when I say investment, it's not just hardware, we're investing a lot in firmware, software and support. So that business has done much better than we had originally thought we could get out of it.

<Q - Vivek Arya>: I see. And in my follow-up, looking forward, on your wireless business, usually April is the seasonally trough quarter for your largest customer, but there is often some positive offset from your Korean customer. Can you give us some color on how you're thinking about how April might shape up this time around? Thank you.

<A - Hock E. Tan>: To be honest, we have no clue. Part of it is how resale is doing, especially through this holiday season. That's when we start to know about it in the January timeframe. December is a bit too early to figure it out. But you're right, typically in spring, we have – the other large OEM customer in Korea has a nice counterbalance, and that helps. But overall for wireless, we expect Q2, as always, to be almost, I call it, the bottom of the seasonality.

What's very nice for us right now is the strength that I purposely indicated to you guys in my remarks, opening remarks, in wired. And a strong recovery now early recovery in bookings on our broadband set-top box and carrier access in bookings recovery would actually help cushion that seasonality we expect in that March/April timeframe, which is our Q2. But that's looking very far ahead, of course which we, as always, never try to venture and much of have an opinion on.

<Q - John William Pitzer>: Congratulations on the strong results. I guess guys, my first question just around CapEx. Tom, you gave a lot of detail for the FY coming up, but it looks like you guys under-spent in the calendar fourth quarter by quite a bit relative to guidance. What drove that? And as you answer that question, I'm just curious, Hock, I want to make sure I completely understand your commentary around the Oregon fab. Is it that the 6-inch to 8-inch transition for FBAR has gone so well that you don't need to build out capacity in Oregon to the extent you thought? If you could just help me understand that, that would be helpful.

<A - Thomas Krause>: Let me hit the first one quickly, John, and then I'll pass it to Hock. The answer is just timing of payments. We had a lot of obligations that we've placed orders and ended up making the payments rolling into Q1 as opposed making payments in Q4. So it's pretty straightforward. Q1 will be your high watermark for CapEx likely in this FY.

<A - Hock E. Tan>: Okay. It's just timing slippages, or payments from Q4 to Q1 basically. But back to Oregon fab, yeah, I know there have a lot of concerns, comments or chatter out there, at least I hear that from Ashish about why are we selling off this idle potential facility in Eugene, Oregon. As I said my remarks, and you hit it right on, John is, and I say that right at the get-go when we bought this fab. It's an insurance policy, best way to describe it.

It's an insurance policy because we were in the midst of increasing our capacity in Fort Collins by taking all our 6-inch lines which is entire line a year plus ago, two years ago, and converting them into 8-inch in phases, but we're converting them to 8-inch. And by the time we finished converting all 6-inch, we'll get a 72% increase in capacity without any further expansion of the footprint, which is pretty cool, which will be pretty much what we need over the next two years, 72% increase. And our initial couple of phases of conversion, which has happened over the last year or year-and-a-half has gone very, very well. Yields are up to normal. Everything is running very well. So we feel very comfortable and in my usual way of making sure we don't overspend money, we don't want to hold onto an idle facility that we pay some operating expenses on on an ongoing basis. In other words, I don't need an insurance policy anymore. Let it go.

<Q - John William Pitzer>: And then as my follow up, just to follow on to Blayne's question earlier. I'm just kind of curious, within enterprise storage, how large is the SSD business now and can you help us kind of understand how big that business should get? Is this going to be a similar sized market to HDD controllers over time? Are the dynamics in this market the same? Or how are you thinking about this over a longer period of time?

<A - Hock E. Tan>: To be honest with you, first and foremost, I don't have the data in front of me. And if I do, as a policy, we generally don't try to break it down because then you'd be torturing me every of this earnings call about why has this number gone there now. But broadly, it's not the size of HDD re-channel at this point. And do we hope to cushion some the long-term gradual decline in HDD SoC? Yes, we do. That's why we go into this because that has similar capabilities in designs that we transfer engineers from our SoC to this area, very nicely.

And so we're seeing two streams of revenue in our, so to speak, our storage drive business right now, and it's just that in this season where flash seems to be – enterprise flash seems to be in short supply, we're seeing enormous demand from couple of OEM customers for flash controllers. We do customized flash control that, I should add, we do for these OEMs that are used for SAS-based enterprise drives, which are the high-performance enterprise drives. So it's very interesting and it is significantly enough to be rather meaningful in overall mix.

<Q - Harlan Sur>: Solid results and great to see the strong dividend rates here. On the data center routing side, strong results. We're still early in the ramp with Jericho and Qumran here. Port deployments, I think, by your cloud customers are still trending about less than 10%. From a silicon port shipment perspective, though, I think that the penetration numbers are obviously higher. So I guess the question is where do you think we are in terms of silicon port shipment penetration for Jericho and Qumran. And then on the routing side, just sticking with that, is the team also benefiting from the data center routing port build out via some of your ASIC engagements as well?

<A - Hock E. Tan>: Interesting question. Yeah. But one thing you did say is very correct. The two are running almost – the two will be running in parallel down the road. You're right, most of this routing program – routing, core or edge routing and aggregation to a larger extent data centers now are using, used to be using a lot of ASICs, which is great for my ASIC business. What we're also seeing is in some of these cloud guys they're moving to merchant silicon, which is Jericho, Qumran, as you put it. And that's early stage compared to the ASIC side. So we're very well positioned on the ASIC side and we are well positioned now as we ramp up Jericho in edge and certain parts of carrier aggregation especially. And to answer your question, it's very early. That Qumran, Jericho side is barely – you say 10%, I'm surprised. I think, it's a bit more than that at this point. But then it could be that we may be looking at different parts of different sets of data.

But it's definitely not one-third yet. It's in the range of, I would call it, 20% to 35% of those parts available because there's still a lot of ASIC being used. But that push, that trend over the long term we're seeing is towards standard open merchant silicon, you're right. And we're seeing that, especially not just only in the hyper cloud tier one guys, we're seeing that among the operators who are pushing for standard silicon, standard source for their networks and data centers. And that's also putting a lot of pressure in driving up use of Jericho, especially but it's also interesting in the sense that many OEMs are now working with us on both sets in parallel, which is why I think there will be coexistence of the two approaches in ASIC, silicon for routing and together with merchant silicon.

<Q - Harlan Sur>: Okay, thanks for the insights there. And then on the broadband connected home, it seems like the Pay TV service providers in developed countries are getting ready to make a more aggressive push out of 4K UHD services, which I think should result in a set-top box upgrade cycle. So given your leadership in satellite, cable, IP set-tops, is this going to start to be a growth tailwind for the team in 2017?

<A - Hock E. Tan>: I'd like to believe that. One replaces the other though, but you're right. And for once, they can't just use software to upgrade it. They actually need a relatively new chip, which is good for us. But we're seeing it, but it's a gradual trend. It's not an avalanche. It will be a gradual trend, and we are in the midst of it or the beginning, the early part of the uptrend on 4K.

<Q - William Stein>: Let me add my congratulations on the excellent results. My question relates to carrier aggregation. You've cited this in the past as one of the future drivers of your RF content. and I'm wondering if you can update us to better understand where we are in the growth of that phenomenon driving that part of your business.

<A - Hock E. Tan>: We're in the midst of carrier aggregation, as you know now. It's happening a lot in the U.S. It's happening in China in spades still, which is by the way a good way for us to sell our chips even to the low cost sensitive Chinese phone makers. There's certainly carrier aggregation in China, and those are very difficult chips to do, and we have the best-performing chips, so we've got a very good share in that even in China, where they're even cost sensitive. In other words, they have chips up everywhere except the carrier aggregation chip, which is interesting.

But in terms of the big flagship phone makers that I mentioned earlier they have it all and in spades. This is usually downlink carrier aggregation. In another year or two, we will see uplink carrier aggregation in addition, all towards saving infrastructure costs, base station costs and power. And that will be another lift. That's why I say year by year as I look over the next several years, that RF cellular [ph] payments (46:04) that we develop and sell to those flagship phone makers continues to get more and more complex, more and more content.

<Q - William Stein>: Great, thanks. If I can follow up with one more on the pending Brocade acquisition, any update on the anticipated timing or on the process to sell the piece of that business that you're planning to divest.

<A - Hock E. Tan>: Tom, go ahead.

<A - Thomas Krause>: No, no. Just as we discussed when we announced the deal, we are targeting H2 our FY, and all the regulatory filing processes that have to take place are on track. As to the divestiture, we don't have any specifics to report at this point, but we remain pretty confident that we're going to be able to have a successful outcome there, and that's off to a very good start and progressing well and hope to report on that relatively soon.

<Q - Stacy Aaron Rasgon>: I had a question on your margin target. You obviously got to the 40% operating margin target pretty quickly, raised it to 45%. Do you need the Brocade deal and the benefits in that in order to reach that 45%, or do you think you can get there even without Brocade?

<A - Hock E. Tan>: The Brocade deal may accelerate it somewhat, but not really make a difference. We are trending towards it. It may take us a bit longer without Brocade, may or may not, but we'll get there. We're very confident. This model now is a long-term model. Obviously, it's not a model just for 2017, FY2017. I would say it's a model over the next three years that we would meet or exceed that 45% operating margin with or without Brocade.

<Q - Stacy Aaron Rasgon>: Got it, thank you. That's helpful. For my follow-up, just a quick on your debt balance, obviously, you're going to be holding on the debt for now, but as far as I understand, it's mostly or even all floating rate. How do you think about that situation in what may potentially be a reflationary environment that we're heading into?

<A - Thomas Krause>: It's a good question. It's something we monitor and focus on, as you might expect. I think the key takeaway is that our credit quality continues to improve, and I think that's going to drive a lot of our decision-making around how we think about floating vs. fixed in our long-term capital structure. But I've got to leave it there in terms of talking about specifics on how we might think about solving the floating rate risk going forward.

<A - Hock E. Tan>: But we do recognize it.

<Q - Stacy Aaron Rasgon>: Sorry, go ahead.

<A - Hock E. Tan>: But we do recognize it.

<Q - Ian L. Ing>: You've done a great job of targeting big OEMs of the world. What are your thoughts on automotive OEMs? Is this something potentially to go after one day? It seems every semiconductor company, large ones like Intel and Qualcomm and Samsung are talking about it. Thanks.

<A - Hock E. Tan>: I assume you mean targeting OEMs as customers.

<Q - Ian L. Ing>: Automotive OEMs.

<A - Hock E. Tan>: Because we see OEMs as our customers. See, our business model is very financially driven. We sell components. We sell very engineering-based components where in each of our product lines, business units, we are not just the market leader, we're the technology leader, very, very clearly. This can be niche market that some of them have become, and big end markets regardless of our business model. And our acquisitions, as you put it, is not about targeting any specific area. It's more about targeting businesses out there that become available that have a very strong potential to meet those criteria I mentioned about, established markets, technology leader, and very successful in the markets they're in, be it niche or mass. And if automotive is one, we might in automotive if there are potential opportunities there, but we don't stretch and go out of our way to look at specific end markets where we want to play in.

<Q - Ian L. Ing>: Thanks. And for my follow-up, perhaps more of an update on the IT back end consolidation and an update on the synergies there. You talked about financial systems in the prepared comments and does that go into Q2 and Q3 of this year?

<A - Hock E. Tan>: Yeah. We're not done with our synergies yet, especially on the operating synergies, OpEx synergies in below the line SG&A. We will start having – we are now running on one ERP system, which is great, which would be – which would help us a lot in terms of headcounts and expenses to be able to run it much more efficiently. And we will also see other synergies in other areas that's in IT, workplace services that really fit in a few other areas, and they all will come in over the course of at least the next six months, if not nine months.

<Q - Jeriel Ong>: Just two quick questions, and thanks for squeezing us in. I think first off, it looks like just based on modeling to the midpoint of guidance that operating margins could be about slightly north of 42%. I know you guys just talked about 45% as a long-term target. Going forward, is the – getting to that 45% number, is it going to be more gross margin or operating or OpEx in terms of synergies?

<A - Hock E. Tan>: Both. We expect our long-term – to answer your question where the 45% comes from, it comes from both places. As you see us keep expanding our gross margin, and we see that continuing for some period of time, we will start to approach, particularly product mix as well together with cost synergies and scale on manufacturing overheads as we broaden our product lines, scale our product lines over the same set of manufacturing support teams to come closer and closer to 65%.

Our OpEx, R&D and SG&A will run closer and closer to 20%, if it's not already there. R&D will continue to be at 16% – 17%. I think it's a basic thing. And our SG&A is ahead of itself, less than 4% now closer and closer to 3%. So you can see where our 45% is. Now that's not going to happen in 2017, guys, but it's where over time we will be able to drive this whole thing.

<A - Thomas Krause>: And let me add also the revenue trajectory and how the revenue bumps around, especially related to the 5% targets we have also will help drive that number.

<A - Hock E. Tan>: Yes.

<Q - Jeriel Ong>: Thanks for that clarity. I think that helps quite a bit. Next question, just congrats on the dividend increase. And probably I'm not trying to push my luck here, but I would say the two other factors that investors struggle with is the lack of buybacks and not including option expenses in the model. Can you just talk to your process around those two dynamics?

<A - Thomas Krause>: Sure, I'll take it. On the latter question around SBC, we certainly break it out very explicitly in our comments and our results. So we think we're addressing that pretty much head on. In terms of the buybacks, I mean, we've addressed this a number of times. We look at dividends as a more permanent return to capital, a better indication of how we feel about our business. Obviously, we talk a lot about the sustainability of the franchises that we own, and I think that's consistent with our model.