Q4 2016 Earnings Call

Company Participants

- Brian M. Krzanich, Chief Executive Officer & Director
- Mark H. Henninger, Vice President, Finance and Director, Investor Relations
- Robert Holmes Swan, Executive Vice President and Chief Financial Officer

Other Participants

- Bill Peterson, Analyst
- Blayne Curtis, Analyst
- Christopher Brett Danely, Analyst
- Joe L. Moore, Analyst
- John William Pitzer, Analyst
- Romit Shah, Analyst
- Ross C. Seymore, Analyst
- Stacy Aaron Rasgon, Analyst
- Vivek Arya, Analyst

MANAGEMENT DISCUSSION SECTION

Operator

Good day ladies and gentlemen, and welcome to the Intel Corporation Fourth Quarter 2016 Earnings Conference Call. As a reminder, this conference call is being recorded. I'd now like to introduce your host for today's conference, Mr. Mark Henninger, Head of Investor Relations. Sir, you may begin.

Mark H. Henninger {BIO 17653227 <GO>}

Thank you, Chanel, and welcome everyone to Intel's Fourth Quarter 2016 Earnings Conference Call. By now you should have received a copy of our earnings release and the CFO commentary that goes along with it. If you've not received both documents, they're available on our Investor website, intc.com.

I'm joined today by Brian Krzanich, our CEO; and Bob Swan, our Chief Financial Officer. In a moment, we'll hear brief remarks from both of them, followed by Q&A.

Before we begin, let me remind everyone that today's discussion contains forward-looking statements based on the environment as we currently see it, and as such, does include risks and uncertainties. Please refer to our press release for more information on the specific risk factors that could cause actual results to differ materially.

A brief reminder that this quarter, we have provided both GAAP and non-GAAP financial measures. Today, we will be speaking to non-GAAP financial measures when describing our consolidated results. The CFO commentary and earnings release available on intc.com include the full GAAP and non-GAAP reconciliations.

And finally, I'd like to remind everyone that we'll be hosting our annual Investor Meeting here at our Santa Clara headquarters on Thursday, February 9. If you have any questions about the event or logistics, please contact Investor Relations.

With that, let me hand it over to Brian.

Brian M. Krzanich {BIO 4634082 <GO>}

Thanks, Mark. I'd like to cover three things with you today before handing off to Bob: a brief review of our results for the year; an update on the transformation of the company; and a look ahead at 2017 and Intel's future.

First, the review of our result. Q4 was a strong finish to a record year in which we increased revenue 7% and net income 9%. The Client Computing Group, Data Center Group, Internet of Things and Intel Security all grew in 2016, with DCG and IoTG setting full-year revenue and volume records. The acquisition of Altera added three percentage points to our overall growth rate.

In the Data Center, cloud service provider revenue grew 24%, while enterprise revenue was down 3% for the full-year. Additionally, we are very excited that comm service provider revenue grew 19%, and across all of our customer categories, adjacency revenue grew an incredible 21% with strength in Ethernet controllers, Omni-Path fabric controllers and switches and network ASICs.

IoT revenue was up 15% for the full-year, driven by strength in the video, retail and industrial segment. In Q4, we launched new Apollo Lake and Kaby Lake product and we won key designs in automotive and video.

Our Memory business finished the year with record quarterly revenue, while full-year revenue was down 1%. This was an investment year for the Memory business, but MSG operating margins improved meaningfully in the fourth quarter. We are now shipping 3D NAND from our Fab 68 and we just qualified our first 3D XPoint base Optane SSDs, which we expect to ship for revenue in the first quarter. And our 3D XPoint memory DIMM, a sample to data center customers.

The Client Computing business achieved impressive result, driven by strong execution and higher ASPs as customers bought a richer mix of Intel Core products. This was also a breakout year for CCG's wireless communication product line, our 7360 LTE modem ramped into high volume and we shipped record Wi-Fi units. I'm very proud of the Client Computing business and what this team has delivered in 2016.

Our strategy of delivering consistent product leadership, segmentation and differentiation paid off. We achieved record i7 units and overall core mix in 2016. And Client Computing revenue was up 2% for the year, despite a declining PC market.

The Programmable Solutions Group was up about 7% on a non-GAAP basis over Altera's 2015 results. PSG saw strength across many segments with particular strength in compute and storage. The Programmable Solutions business tackled the industry's first and only 14-nanometer FPGA this year, known as Stratix 10. This product line has the largest demand pipeline in Altera's history.

The integration of Altera into Intel was an important milestone in what was a transformative year for Intel. This team did a great job of meeting integration objectives, while continuing to deliver new products and grow the business.

In 2016, we took other important and in some cases difficult steps to position the company for future success, improve the alignment of our resources to our strategy and accelerate our transformation to the company that powers the cloud and billions of smart connected devices.

Our restructuring initiative focused on our investments on the product and technologies that will fuel our growth, and that work, combined with improvements in 14-nanometer cost, drove a 30% operating margin improvement in our Client business.

Our decision to establish McAfee as a separate, independent company was another transformative move. This transaction will give McAfee the flexibility to invest independently, tighten our focus and allow Intel to share in McAfee's future success as the market demand for world-class security product continues to grow.

And finally, looking ahead to 2017, and Intel's future, I'm confident we're making the right investments to compete and win, not only in the segments where Intel is strong today, but also in new areas that are poised for growth driven by the emerging flood of data.

By 2020, the average person will generate about 1.5 GB of data per day, while smart and connected devices of the future will produce data at many times that rate. Autonomous cars, for example, will generate about 4,000 GB of data each day. The resulting explosion of data is creating tremendous opportunity. But data alone isn't valuable. It's the transmission, aggregation and analysis of the data that results in value and impact. Intel will play essential role in those steps because our products are key to turning raw data into high-value insight and information.

Our investments in advanced research and development are making this all possible, while significantly expanding our TAM at the same time. These investments are creating opportunities in segments from autonomous driving, where we are uniquely positioned to be the compute engine in the vehicle and the data center, to 5G where we are building on our momentum in 4G to establish leadership, to artificial intelligence where we are providing the industry's most complete range of products to accelerate all AI solutions from the edge to the data center.

We're already seeing signs of progress. In autonomous driving, we are winning key designs like BMW, Delphi and WiDi. In 5G, we are leading in the definition of standards, prototyping and field trials.

Our network business saw strong growth as infrastructure moved to Intel architecture in anticipation of 5G. Our design wins and network virtualization, innovation position us for leadership share in the wireless access market.

Other proof points of our progress include important partnerships with AT&T, SK Telecom, Korea Telecom and Verizon and the announcement earlier this month of the industry's first global 5G modem.

Finally, in Artificial Intelligence, we believe we have the industry's strongest product portfolio. Intel processors power well over 90% of servers deployed to support machine learning workload, and we are winning the vast majority of AI solution based on strong product performance and customer value.

Wrapping things up, I'm very pleased with Intel's performance in 2016. We have important work to do in 2017 as we continue to transform the company, but the progress we've made leaves me increasingly confident in Intel's growth and Intel's future.

And with that, I'll hand it over to Bob.

Robert Holmes Swan {BIO 1972621 <GO>}

Thanks, Brian. The fourth quarter was an outstanding quarter. Revenue was up 10%, operating income was up 11%, and EPS was up 4% year-over-year. Revenue set an all-time record of $16.4 billion, and operating income was $4.9 billion.

Fourth quarter operating margin was 30%, flat year-over-year. Gross margin at 63% was down two points, primarily driven by a couple of one-time events related to product warranty cost and long-term IP agreements.

Direct spending came in at $5.4 billion, up 4% year-over-year and down two points as a percent of revenue. Earnings per share of $0.79 was up $0.03 from a year-ago.

The Client Computing Group had revenue of $9.1 billion, up 4% year-over-year. During the fourth quarter, the worldwide PC supply chain remained healthy, and we saw some inventory burn during the quarter. Client ASPs were up 7% year-over-year, and core mix was at an all-time high, as a result of the success of our segmentation strategies and strength in gaming and high-end systems.

This segment had another quarter of significant profit growth, with operating profit growing 30% from a year ago as the business continues to benefit from lower spending, richer product mix and continued improvements in 14-nanometer unit cost.

The Data Center Group had record revenue of $4.7 billion, up 8% year-over-year. In the fourth quarter, we continued to see robust growth in the cloud and comm service provider segments of the business, which both grew approximately 30% year-over-year, partially offset by a 7% decline in the enterprise and government segment over the same horizon.

The Data Center Group had operating profit of $1.9 billion, down 14% year-over-year. Operating margin was impacted by the two one-time items I referred to earlier and the ramp of 14-nanometer on our server products, which we expect to generate continued cost improvements over time.

Our Internet of Things business achieved record revenue of $726 million, growing 16% year-over-year, driven by strength in both the retail and industrial segment. Operating profit for the business was $182 million, up 37% year-over-year.

Our Memory business had record revenue of $816 million, up 25% year-over-year with strong demand for data center SSD solutions with demand signals outpacing supply. We've made great progress ramping Fab 68 with yields and unit costs well ahead of expectation. This segment had an operating loss of $91 million, largely driven by cost associated with 3D XPoint and startup costs for our memory capacity.

The Programmable Solutions Group had revenue of $420 million, and operating profit was $80 million. Our Intel Security Group business had revenue of $550 million and operating profit of $103 million.

Turning to the full-year 2016, revenue grew 7%, operating margin grew 11% and EPS grew 9%. Operating margin percent improved by one point, while gross margin was approximately 63%, flat to 2015.

Spending was $21 billion, or 35.4% of revenue, down one point from 2015, primarily from the restructuring programs we began earlier in the year. Operating profit for the year was $16.5 billion. Earnings per share for the year was $2.72, up $0.23 from the prior year.

In 2016, the business generated record cash from operations of $21.8 billion. We purchased $9.6 billion in capital assets, paid $4.9 billion in dividends and repurchased about $2.6 billion of stock. Total cash balance was $17.1 billion, down $8.2 billion. Total debt was $25.3 billion. Our net cash balance, total cash less debt and inclusive of our other longer-term investments is approximately negative $2.3 billion.

Now, let me turn to guidance. First, some context. First, our guidance assumes a stable macroeconomic environment, but we have taken a more cautious view of PC consumption versus third parties, particularly in our outlook for the emerging markets including Russia, China and Latin America.

Second for the Data Center, we continue to expect similar growth rates in the cloud and comm segment, but we are not expecting an improvement in enterprise. This gets us to an expectation of high single-digit growth in the Data Center business. Third as a reminder, we have one less week as a result of the inclusion of an extra work week in 2016. And last, we have assumed the Intel Security transaction will close in Q2 and our full-year guidance reflects one full quarter of the group's consolidated results.

We have lots of work to do to close this out, and in the event the close happens at the end of the second quarter, we would update our full-year guidance by approximately an additional $500 million of revenue and $100 million of operating income.

As we look forward to the first quarter of 2017, we are forecasting a midpoint of the revenue range at $14.8 billion, up 7% year-over-year and down from the fourth quarter. This is at the lower end of our seasonal range and reflects an expectation of lower core brand mix and ASP coming off a strong holiday selling period for gaming and other premium PC systems.

For the first quarter, we expect operating margin percent to increase four points year-over-year, gross margins to be flat at approximately 63% and spending to be $5.3 billion, down 1%. We expect EPS to be approximately $0.65, up 20% year-over-year.

Turning to the full-year 2017, we're expecting revenue to be roughly flat. Revenue is expected to grow in the low single digits, after excluding the Intel Security Group from both years. We expect operating margin percent to be up one point year-over-year with flat gross margins and direct spending as a percent of revenue down one point versus 2016.

Let me provide a bit more detail on our year-over-year direct spending. Our restructuring plans are on track, including reducing our head count by approximately 15,000 heads and generating gross savings of $1.6 billion. We are reallocating investments from CCG to higher growth segments and are continuing to invest in areas that extend our leadership position in Moore's Law and expand TAM opportunities such as memory and autonomous driving.

We anticipate the net benefit of these actions to result in an additional point of improvement in direct spending as a percent of revenue in 2017. We expect EPS of approximately $2.80, up 3% year-over-year.

In 2016, we had a fairly significant gain from our Icap portfolio. Our 2017 guidance assumes that we'll have gains roughly in line with 2016 levels. The capital spending forecast for 2017 is $12 billion, up $2.5 billion from 2016 as we continue to ramp our memory capacity.

In closing, 2016 started out slow but finished strong. Our CCG business is focused and executing extremely well in a declining market and provides scale that's required to advance Moore's Law, generate significant cash flows and enables investments for growth. Our growth-oriented businesses were up 15% collectively as we continue to transform the company from PC-centric company to a company of smart and connected devices that power the cloud.

We are excited about our plans for 2017 as we continue with our transformation, and we look forward to sharing more details with you at our Investor Day in February.

With that, let me turn it over back to Mark.

Mark H. Henninger {BIO 17653227 <GO>}

Okay. Thank you, Brian and Bob. Moving on now to the Q&A, as is our normal practice we would ask each participant to ask one question and just one follow-up if you have one. Chanel, please go ahead and introduce our first questioner.

Q&A

Operator

Our first question comes from the line of Chris Danely of Citigroup. Your line is now open.

Q - Christopher Brett Danely {BIO 3509857 <GO>}

Hey. Thanks, guys. Just digging in on the segments, the CCG operating margins were I think the highest in the last few years. DCG was kind of the lowest in the last few years. Can you just talk about the trend in operating margins for those two segments for this year given the guidance?

A - Robert Holmes Swan {BIO 1972621 <GO>}

Yeah, Chris. The CCG performance – a couple of dynamics that are driving the record margins. One, higher ASPs on the strong mix that Brian referred to. Secondly, real strong unit cost. It's been on 14-nanometer for a while, so we expect that to continue. And then constrained investments in the CCG business as we focus more on investing heavier in the higher growth businesses. So real good performance, and those are the dynamics that we're expecting in 2017.

On the DCG front, good in Q4 and then project forward. Nice ASP performance in the quarter as we migrate from Haswell to Broadwell, and as we think about Skylake in 2017, we expect that to continue. Unit cost in DCG is a little bit higher because we're coming off more great unit cost performance on 22-nanometer, but as we migrate to 14-nanometer in the earlier stages of that cycle, unit costs are little bit higher. And then we're increasing our investments in DCG on a year-over-year basis.

So, dynamics are relatively good. The one – I referred to it a little bit earlier, but in terms of Q4, we had a couple one-time items that really weighed on the profitability or operating margins of DCG that we think are well-bounded and do not expect to continue in 2017. And just quickly, one, we entered into a long-term cross licensed agreement and patent purchase agreement, particularly in the comm space in the quarter, and DCG was impacted by a portion of that cost in the quarter.

But secondly, and a little bit more significant, we were observing a product quality issue in the fourth quarter with slightly higher expected failure rates under certain use and time constraints, and we established a reserve to deal with that. We think we have it relatively well-bounded with a minor design fix that we're working with our clients to resolve. So, those two one-timers in the fourth quarter weighed on DCG margins, and we do not expect that to continue in 2017.

Q - Christopher Brett Danely {BIO 3509857 <GO>}

Great. Thanks. Do I get a follow-up?

A - Mark H. Henninger {BIO 17653227 <GO>}

Yeah. Please go ahead, Chris.

Q - Christopher Brett Danely {BIO 3509857 <GO>}

Oh. Great. Maybe just to expand on the PC market, what do you see driving the strength here? How sustainable is it? Any thoughts on PC unit growth for this year?

A - Brian M. Krzanich {BIO 4634082 <GO>}

This is Brian. I can start, and then Bob can add in. If you take a look – Bob mentioned in his portion of the talk of, hey, we've taken a slightly more conservative view of 2017 then third parties for what we see the overall PC unit market as, and we had extremely strong, record Core i7, record core mix in the fourth quarter that we've, as we look at Q1 and we look at 2017, we factored a little bit of caution into that as well. Those two things put us in the PC market in the unit level in the mid-single-digit decline. That's better than if you went back a year or so ago, we were in the high single-digits, depending on how you looked at it and where you counted from the 2-in-1 devices. So, it is starting to get better, but I don't think we're back at a zero unit or a positive unit.

But as Bob said, what we've really been focusing on in that space is how do you make money, how do you sell up, how do you do a better business performance in that kind of market? And we're comfortable that we can continue that into 2017.

A - Robert Holmes Swan {BIO 1972621 <GO>}

And Chris, the only thing I'd add is we think, as Brian said, our outlook is a little more conservative than the third parties and our view is that's probably the right posture and the right caution to have as we go into the year. And obviously, the team has done a great job in adjusting its cost structure for a more cautious outlook, and then we'll see how it plays out during the course of the year.

Q - Christopher Brett Danely {BIO 3509857 <GO>}

Great. Thanks guys. Nice quarter.

A - Brian M. Krzanich {BIO 4634082 <GO>}

Thank you.

A - Mark H. Henninger {BIO 17653227 <GO>}

Thanks, Chris.

Operator

Thank you. And our next question comes from the line of Joe Moore of Morgan Stanley. Your line is now open.

Q - Joe L. Moore {BIO 17644779 <GO>}

Great. Thank you. I wonder if I could ask about the DCG commentary of being up by single-digits. Obviously that's a little bit more conservative than the longer-term numbers you had talked about. And I guess as you think about that, is there an element of the cloud spending that you think is causing the enterprise to be weaker? Or maybe just give us the qualitative underpinnings for that change?

A - Brian M. Krzanich {BIO 4634082 <GO>}

Sure. So let me start, and then again Bob can jump in on this one. As we said, we took a look at the 2017 view on enterprise to be relatively equivalent to what we saw in 2016, which says that enterprise continues to decline.

I think that certainly some of that is, that it's moving to the public cloud, it's moving to those areas at a faster rate than I think we expected. It's also been a little bit slow about developing private cloud and we're working with several partners like Microsoft, Azure and others around the private cloud segments as well for the enterprise. But if you take a look at the long-term, we still see this as the growth engine and still getting into that double-digit regime.

Remember, for us, enterprise is now less than 50% of our overall Data Center business and the areas that are growing even faster or as fast as cloud in most cases are the networking and storage space, which we have very low market share in still, and it's a great opportunity for us. And then the emerging areas like Silicon Photonics, Omni-Path fabric, Rack Scale Design and 3D XPoint, and those areas are really what we've always forecasted to be the growth engine of the Data Center Group as we exit and go towards the back half of this decade.

So for us, our view is this is, anytime you're going to a market transition, you're not going to get the cloud to enterprise mixed perfect, and this is an anomaly right now that we've forecasted, we think, accurately and adjusted for the way it is. But our long-term growth was actually based on other factors and we're still very, very confident in those growth areas. I don't know if Bob wants to add?

A - Robert Holmes Swan {BIO 1972621 <GO>}

Nope, I think that's perfect. Nothing to add. Thanks.

Q - Joe L. Moore {BIO 17644779 <GO>}

Great. Thank you for that. That's great. And then separately on the PC market, the ASP growth that you guys saw over the course of 2016, is that strictly mix shift and strength in the higher-end segments as you've been talking about? And any thoughts on your ability to continue that price momentum over the course of this year?

A - Brian M. Krzanich {BIO 4634082 <GO>}

Sure, yeah, it mostly, if not in almost every case, all mix shift and our customers buying up. And the great example was the case SKUs, the enthusiast, the 10-core systems that we put out there, and they far and away exceeded our original sales forecast for people who are out there buying 10-core gaming systems.

So we do believe that that market, that enthusiast market will continue. We factored a little bit more caution into this as we go into the 2017 in the first quarter. Some of that is seasonality. Holiday, people tend to buy lot of gaming systems, and some of it's just how much more can people buy up? And so how much more growth in ASP can we see? But we don't see a decline or anything of the average ASPs.

A - Robert Holmes Swan {BIO 1972621 <GO>}

The only thing I would add as we think about the full-year, the second half comps get a little bit tougher on ASPs, because of the strong ASP performance throughout the course of the 2016. So, that's probably the only other dynamic that I would add.

Q - Joe L. Moore {BIO 17644779 <GO>}

Great. Thank you very much.

Operator

Thank you. And our next question comes from the line of Ross Seymore of Deutsche Bank. Your line is now open.

Q - Ross C. Seymore {BIO 20902787 <GO>}

Hey, guys. Thanks for letting me ask a question. I guess the first one on OpEx, and it's more of a conceptual one for you, Brian. On flat revenues it's great to see some OpEx leverage on there, but I think some people are hoping for a little bit more as you had the restructuring only halfway done and then the McAfee sale that's pending. So, can you talk conceptually how you balance the desire to reinvest versus the desire to get the profitability up to your long-term targets?

A - Brian M. Krzanich {BIO 4634082 <GO>}

Sure. I'll let Bob talk about the McAfee financials and how that affects OpEx, because it's a little complex with Q1 into Q1 target there. But let's just talk about it in general. What we've always said is that we were going to go through the program that we went through at the middle of last year, which we called ACT, which was continued through the end of last year 2016, and we said we'd be completed about the middle of 2017. And we always said there'd be some mix between taking that to the bottom line and reinvesting it in those growth areas.

And so, as we've done acquisitions like Nervana for Artificial Intelligence, we want to invest in those businesses now to bring them onto our Silicon to integrate them into our software stack, and so we're going to make those kinds of investments in key areas. We said the key areas are around Data Center in general. We have Rack Scale Design. We have 3D XPoint. We have Artificial Intelligence around IoT, and we're making big bets around autonomous driving.

And so you see us making the investment in HERE, the investments with BMW, and that's really – when you take a look at autonomous driving and why are we doing that, it's around data and data centers again. Remember, every one of those high definition maps is going to require data centers. They're going to require small data centers at the edge.

So it's all around are we understanding and managing how data is going to flow in that system? And then Memory itself, and we're going to go make those investments around 3D XPoint and really bringing that and 3D NAND to market in a big way. And so we'll balance between those, and I think you'll see some mix of bringing it to the bottom line. But if I can invest, and think I can turn that into additional profitability in the future, I'm going to go and do that.

A - Robert Holmes Swan {BIO 1972621 <GO>}

Yeah. The only thing I'd add is just to maybe make it a little simple for people is we look at our full-year guidance that we gave, and then we extract out three quarters of McAfee. At the macro level, we're looking at low single-digit growth and mid single-digit EPS growth, so that's kind of the year-on-year apples-to-apples dynamic. On direct spending itself, we'll be down roughly half – our guidance implies we'll be down roughly $500 million year-on-year, and that's just a function of three things.

One, continued benefits from the restructuring actions that we took in 2016 and continue to execute on in the first half of 2017. Secondly, obviously the direct spend of McAfee kind of goes away. And third, as Brian mentioned, during this transformation we continue to make the investments in the higher growth businesses. We'll continue to invest in 5G and ADAS, and then we'll continue to invest in Moore's Law as we bring 10-nanometer to life in 2017 and continue to invest in 7-nanometer. So net-net, the implications of all that for direct spending was one point down as a percentage of revenue in 2016 and another point down as a percentage of revenue in 2017.

And then the only other thing I would add is in terms of the milestones that we employ during the course of the year for these big bets, we'll continue to build milestones then to make sure those bets that we're making are turning out in the medium and long term the way we expect.

Q - Ross C. Seymore {BIO 20902787 <GO>}

That's very helpful. I guess as my follow-up, you talked about the ASPs in answering a prior question. I wondered about the competitive intensity in the PC market. You're taking a more conservative tack than the third-party vendors are forecasting, but your primary x86 competitor is coming out with a new architecture for the first time in many, many years. So, I wonder whether it's on the ASP or the unit or the market share side how you're factoring that into your forecast for the year.

A - Brian M. Krzanich {BIO 4634082 <GO>}

Sure. I would tell you that we always look at this environment and say there's going to be a competitive risk in the environment. And we're always focused on really, our own product roadmap and making sure that we have the highest performance product. So, when we look at 2017, we still believe that our product roadmap is truly the best ever it's been.

And as we look at the Kaby Lake and as it really ramps up through 2017, or it came out really just at the end of 2016 and now will ramp with many more SKUs and higher-performance products as we go into 2017. And then we showed at CES the first working 10-nanometer Cannonlake product, which we're still planning to ship by the end of this year and really ramp into 2018. We still believe that our roadmap and our leadership will continue to give us the performance the customers want and desire. And so that didn't necessarily factor into that more cautious forecast. That forecast was really much more a function of where we think the PC market really is overall.

Q - Ross C. Seymore {BIO 20902787 <GO>}

Great. Thank you, guys.

Operator

Thank you. And our next question comes from the line of Stacy Rasgon of Bernstein Research. Your line is now open.

Q - Stacy Aaron Rasgon {BIO 16423886 <GO>}

Hi, guys. Thanks for taking my questions. I had a question first on the guidance for next year. Unless I'm doing the math wrong to get to $2.80, I need a fairly sizable reduction in share count. So is that true? Could you tell us how you're thinking about shares for next year? Are you intending to use the cash from McAfee to buy back shares to get to that number?

A - Robert Holmes Swan {BIO 1972621 <GO>}

First, in essence, the guidance year-on-year doesn't really anticipate any dramatic change in our share count. I think philosophically, our approach is to offset dilution from our comp-based program. So all else equal, share count relatively flat year-on-year. I think the one thing worth noting is we, in our Icap portfolio in 2016, we had a fairly significant gain. And what I indicated in the prepared remarks is we expect roughly in 2017 that gain to be in line with what 2016 generated.

Q - Stacy Aaron Rasgon {BIO 16423886 <GO>}

Okay.

A - Robert Holmes Swan {BIO 1972621 <GO>}

But I think just in terms of implied share count in our guidance, it's essentially flat year-on-year.

Q - Stacy Aaron Rasgon {BIO 16423886 <GO>}

Okay. For my follow-up, I wanted to again dig into the OpEx. So you talked about like a mix of the restructure and the cuts versus the reinvestment. But I mean if I throw the McAfee cost back in, you've actually got OpEx going up fairly sizably year-over-year. And your employee count is actually up year-over-year, even though you supposedly had a pretty big, a layoff. So I guess can you talk a little more specifically about exactly what the additional spending is going on? Is it people versus technology versus something else? Where is it going? And do you view those investments as looking to open up new markets versus being defensive in nature, or maybe a mix of both?

A - Robert Holmes Swan {BIO 1972621 <GO>}

Yeah. In terms of the type of cost, maybe two-fold. Yes, people and yes, technology slash Moore's Law at the macro level, and that expresses itself in higher depreciation year-on-year. So in our guide, our depreciation is up quite a bit and a portion of that will flow through direct spending.

Again on a more macro basis, at the risk of maybe repeating myself, we are investing more in DCG and in particular, bringing some of these adjacent products that Brian referred to, to market. We continue to invest in Memory, in particularly the 3D XPoint product, and we continue to invest in IoT. So those three businesses are getting a disproportionate share of the investment, because those are the businesses that we've seen really strong growth in 2016 and we're counting on continued growth in 2017.

The second area, and again, we talked about this a little bit, but we see real opportunities in autonomous driving that play to our strengths and our capabilities. And we are making step function increase in our investments to position ourselves very well for that industry in that market as it evolves.

And then again third, 7-nanometer technology investment in the spend associated with building a new pilot line in 2017 is also an additional investment. So, we're executing on our restructuring programs, it was – we took out roughly, we made the tough decisions in 2016 that resulted in roughly 11,000 fewer people as a result of our restructuring program. We're not quite done, but I'd say we're on track. At the same time, we're making investments both in technology and people to strengthen and enhance our competitive position in the areas that we see as real opportunities for us.

A - Brian M. Krzanich {BIO 4634082 <GO>}

The only thing I would add, Stacy, is more of a blunt answer to your question is, if you take a look at the areas that we're talking about, in almost every case these are new and expanding TAMs for us.

So even when you look at the places where we're going in the Data Center, and this was my point earlier about enterprise versus cloud. Enterprise is now less than 50% of our total makeup for the Data Center Group, and the cloud is growing great and that will continue, but if you look at the areas, the majority of the rest of the growth for the rest of this decade in the Data Center alone, it's networking and storage where we have very low market share today. But we're bringing things like software-defined networking and NFV to those and so that's a growing and expanding TAM as those markets move to Intel architecture.

And then it's going into Rack Scale Design, Omni-Path fabric, Silicon Photonics, those are all again new either nascent or expanding TAMs for us. Autonomous cars and the IoT space are new and expanding TAMs for us. 5G is a TAM that's brand new that will be really being built out over the rest of this decade.

And then Memory, if you look at the large part of the investment we're making is 3D XPoint, which we will really re-architect memory and storage and we'll create a new market in our mind and we believe we are unique in having that technology.

So to me when I look at the investment, they're all focused around data, they're all in support of how the data center ecosystem works and they're all in either expanding or new TAM or Intel. And so that's why I see the growth in those areas. It's not just enhancing the technologies that we already have. We'll do that, but the new investments are really focused on the new areas.

Q - Stacy Aaron Rasgon {BIO 16423886 <GO>}

Got it. Thank you, guys.

A - Mark H. Henninger {BIO 17653227 <GO>}

Thanks, Stacy.

Operator

Thank you. And our next question comes from the line of John Pitzer of Credit Suisse. Your line is now open.

Q - John William Pitzer {BIO 1541792 <GO>}

Yeah. Good afternoon, guys. Thanks for letting me ask the question. Brian, my first question, I want to go back to the DCG ASPs in the December quarter. They were up 4% year-over-year, which kind of reverses I think the four quarter or five quarter trend of ASPs going down.

I know that you've had some mixed headwinds that have been driving blended ASPs down, I'm kind of curious what happened in the fourth quarter to drive ASPs up? And do you think it's sustainable, is this just what we would expect to see the first quarter of the Broadwell launch and then it normalizes going forward? How do you think about ASP's from here?

A - Brian M. Krzanich {BIO 4634082 <GO>}

John, I'll let Bob start with this and then I'll come in and talk a little bit about the macro view of it.

A - Robert Holmes Swan {BIO 1972621 <GO>}

Yeah. Two dynamics in the fourth quarter where we had higher ASPs. One, the continued transition from Haswell to Broadwell, is helpful, and then as we project forward, the next transition is Skylake, we believe will be helpful as well. So those dynamics where we're delivering better performance for our customers, we're able to capture some of that in ASPs, and we saw a little bit of that in the fourth quarter.

And secondly, in the comms and network space, which is a share gain opportunity for us in DSG, getting those clients to move up the stack in terms of the high performance server CPUs is the second dynamic, both of which we think are helpful as we exit 2016 and go into 2017.

A - Brian M. Krzanich {BIO 4634082 <GO>}

Yeah. And only thing I'd add, John, is, we'll – as we go back into the second half of this year do this Skylake transition, and that is a technology that will increase performance and the performance per cost to our customers in one of the largest improvements in a long time, if not ever, on the data center. So we expect – typically when that happens, people see the value in that, and they tend to buy up. They tend to buy the better SKUs. So to my view, this trend of higher mix should continue.

Q - John William Pitzer {BIO 1541792 <GO>}

That's helpful. And then maybe as my follow-up, Brian, relative to the full-year guide you're kind of expecting a pretty significant drop in free cash flow this year with the increase in CapEx, and you highlighted that CapEx is going to the Non-Volatile Memory Group. I'm just kind of curious, given that that business, even though it made some improvements in losses in the calendar fourth quarter, is still in sort of a loss position. I'm assuming the higher CapEx is going to be a headwind to getting to profitability, but I guess, how do you think about the path to profitability, the longer term business model in Memory and what it might do to the DCG growth rate longer term if XPoint is successful?

A - Brian M. Krzanich {BIO 4634082 <GO>}

Sure. So let's talk about Memory in kind of a big picture, John, and then I'll let Bob talk a little bit about how the CapEx lays and what our view on CapEx is in the space.

But we are in this space for one reason because I understand it's a cyclical business that tends to be fairly difficult from a price capacity standpoint. But we believe we're coming at it with two very unique technologies. Our 3D NAND technology has some of the best performance and best cost in the market. Our current version of 3D NAND has a 15% cost value over the competition, and our next version, second generation, has even a higher when you look at it on a density basis.

And so we believe we're going to be able to bring differential cost and performance in 3D NAND that will give us a unique position, and that, combined with our knowledge of the data center, should allow us to really provide compelling product for data center SSDs. 3D XPoint is very different and that is a unique technology that bridges between memory and storage, and we believe it can re-architect how big data applications, artificial intelligence applications where you want large amounts of data being brought up as close to the compute as you can, will really transform not only the architecture of those systems but the performance of those systems.

And we've demonstrated on stage, even on client systems, using these types of SSDs on an equal price you can get 5x to 7x performance improvement using 3D XPoint as a large memory storage combination. So, we're investing purely because we believe we have this differential technology, and that's why we're in this business. I think if I didn't have that differential, not sure it's a business that Intel would necessarily be in, right? But with that leadership, and as we believe we can sustain that leadership, we believe it's a good business and a good investment. I'll let Bob talk about and how long and how we view the capital.

A - Robert Holmes Swan {BIO 1972621 <GO>}

John, the CapEx dynamic – first kind of at the macro level, up $2.5 billion year-on-year, driven by two things. One, Memory obviously, but also bringing 10-nanometer capacity online. If I just go down a level to Memory, roughly $1.6 billion CapEx in 2016. Expectation is that it'll be roughly $2.5 billion in 2017 as we bring the incremental capacity online. And as we look at Memory specifically in 2018, we think it begins to drop off a little bit as we focus that capacity on 3D NAND and increasingly 3D XPoint.

Q - John William Pitzer {BIO 1541792 <GO>}

Thanks, guys. Appreciate it.

A - Robert Holmes Swan {BIO 1972621 <GO>}

Thank you.

Operator

Thank you. And our next question comes from the line of Vivek Arya of Bank of America Merrill Lynch. Your line is now open.

Q - Vivek Arya {BIO 6781604 <GO>}

Thanks for taking my question. Brian, I'm curious with this new U.S. administration. There's a lot of interest in using U.S.-made products. And since you have sizable fabs here in the U.S., I'm wondering how you can take advantage of this environment, or if you're interested in making a bigger push in your foundry business.

A - Brian M. Krzanich {BIO 4634082 <GO>}

Well, we're always open for business in foundry and we're always interested. Remember, we said our foundry strategy was really to be on the leading edge, so – because we can get paid for our technology. And it really allows us to use our unique differentiation in that space.

Beyond that, I would just tell you we've always been proud. I mean it's not a new transition or new strategy for Intel. We've always been roughly between – a little bit more than half to two-thirds of our capacity in the U.S. We're the second largest exporter in the U.S. and we're proud of that position. But other than that, there's no real shift in our strategy right now.

Q - Vivek Arya {BIO 6781604 <GO>}

Got it. And as my follow-up, back to DCG. There seem to be two moving pieces. You have this declining but very profitable enterprise part, but a faster growth but perhaps less profitable networking and cloud and other areas. Is that fair characterization? And do you envision a point at which the non-enterprise parts become dominant enough, so you can actually see an acceleration in DCG back to your traditional double-digit type growth rate?

A - Brian M. Krzanich {BIO 4634082 <GO>}

So let me start and then we can see. I think – our view is that enterprise will continue to decline. A lot of that is those workloads moving to the cloud. It will get to a point though where it starts to stabilize. And those – because there are still things that – workloads that will want to be in a private cloud.

At the same time, we believe as the world becomes connected, cloud will grow at a much, much faster rate. And I made a point in the prepared remarks, where if you look at the cloud of today being mostly based on people, the average person will generate about 1.5 gig of data a day. An autonomous car, when those things start hitting the road – and we've started to build these data centers for some of the trials we're working with – I mean you're talking about petabytes of data that you're having to deal with and 4,000 gigabytes a day off is the average autonomous car. You put a couple of those on the road and you need petabytes of storage to handle that. So, we do believe that the cloud will move at a faster rate as these connected devices become basically more available. That said, the cloud is becoming bigger than the enterprise.

We said enterprise is now less than 50%, and we believe the other areas that will grow, networking and storage, the adjacencies like Omni-Path fabric, Silicon Photonics, Rack Scale Design, which we're working with our partners on, it really lowers the cost of the system and re-architects how the Rack is laid out. And 3D XPoint, should dramatically –

that will drive the growth for us as we go through the rest of this decade. We believe when you add those up together, this thing will go back to double-digits. When exactly that is because it's pretty hard – we're trying to grow these new nascent areas and manage the decline of enterprise, going to be hard to call exactly when. But we do still have a strong belief, and we believe the products are very compelling; that these will drive us to double-digit growth long-term.

A - Robert Holmes Swan {BIO 1972621 <GO>}

The only thing I'd add, Brian, is on the – on like-for-like product, ASPs have a tendency to be lower to the cloud service providers. But at the same time, the cloud service providers really value performance. And in terms of the mix of their product, they'll value performance and the higher-end products more than maybe enterprise as a whole.

Q - Vivek Arya {BIO 6781604 <GO>}

Thank you.

Operator

Thank you. And our next question comes from the line of Romit Shah of Nomura. Your line is now open.

Q - Romit Shah {BIO 16865852 <GO>}

Yes. Thank you. I just had one question. I noticed that you didn't raise the dividend in January, and Bob, I'm curious if your view on capital returns, buybacks and dividends is different than what Intel has done historically?

A - Robert Holmes Swan {BIO 1972621 <GO>}

Yeah. I think historically, the philosophy around first and foremost to invest it in organically in our capabilities has always been the first priority. That will be the same. Secondly, we'll continue to look at M&A that will strengthen our capabilities, so that's no different than the past. Third, in terms of capital returns, our expectation has been and I think we'll continue to think it this way going forward as it relates to dividend, grow it in line with non-GAAP earnings, and have it be roughly 40% of the free cash flows of the company. Those change around the margins over time, depending on the CapEx intensity of the business. But I don't expect that to change and we'll continue to look at how we move the dividend in line with that philosophy.

As I said earlier, in terms of the more holistic capital returns bucket, we will continue to offset dilution, which I think is pretty consistent with what we've done in the past. And then third, we have a great balance sheet and I do think that opportunistically when it makes sense, reducing our outstanding float is an opportunity we have as we get closer to the net cash zero position that we've been tracking forward over the last 12 months since the Altera acquisition.

So philosophically, no dramatic change, dividend in line with non-GAAP earnings growth, but trying to stay in that roughly 40% free cash flow world. And maybe if opportunities present itself, be opportunistic in share counts without limiting our financial flexibility relative to the things that matter most which is strengthening our business.

Q - Romit Shah {BIO 16865852 <GO>}

Great. Thank you. Nice quarter.

A - Robert Holmes Swan {BIO 1972621 <GO>}

Thank you.

A - Mark H. Henninger {BIO 17653227 <GO>}

Operator, I think we have time for two more questions.

Operator

Okay. And our next question comes from the line of Harlan Sur of JPMorgan. Your line is now open.

Q - Bill Peterson {BIO 18920953 <GO>}

Yeah. Hi, good afternoon. This is Bill Peterson calling for Harlan. Congratulations on a nice quarter. Coming back to the storage market, trying to understand how you view growth this year in light of obviously good sequential growth in the prior quarter, but also overlaying that with the Optane qualifications that are going on in progress. How should we view that in terms of a incremental growth driver in 2017?

A - Brian M. Krzanich {BIO 4634082 <GO>}

Sure. So, if you take a look at it, as I said this is a cyclical market. If you take a look at 2016, it started out with an over-supply, came into the back half of the year with an under-supply really of capacity. We're entering 2017 with the continued tightness in supply. That makes pricing stable to better. So we expect that at least right now the estimates are through the first half. It's pretty hard to project out through the second half, and so we've kind of kept the second half relatively calm and cautious.

If you take a look at 3D XPoint, as we said, we've qualified. We've started to ship DIMM samples to the big cloud service guys. Those are targeted for 2018 revenue shipments on an SSD basis. We'll start shipping for revenue this quarter. And if you take a look at the full year, I think the estimate is it's around 10% of our total revenue is 3D XPoint.

And you know, that'll be, it could take off and it could be a little bit more than that. It could take a little while to qualify some things if it's a little off. But you should think it's around 10% of the revenue, and really ramping much, much more into 2018. What we're proud of is you get past that first hurdle of getting the first one to production ready and starting to ship samples to their cloud guys and actually getting ready to start shipping

SSDs for revenue to the client devices and all that. We're pretty excited about just getting to that point right now with 3D XPoint.

Q - Bill Peterson {BIO 18920953 <GO>}

I appreciate the color.

A - Robert Holmes Swan {BIO 1972621 <GO>}

And just a little more tactical, the full-year for Memory was down 1% 2016 over 2015, but the momentum that you saw is that supply chain dynamic that Brian highlighted changed. And as we began to scale our own capabilities, you saw the strong exit growth of 25% in the fourth quarter. So with that going into 2017, we feel pretty good about that growth rate in the fourth quarter as we enter the new year.

Q - Bill Peterson {BIO 18920953 <GO>}

Great. Appreciate the color on that. Maybe a question on the Programmable Solutions. The group has shown sequential declines in the prior two quarters versus your main competitor that has shown sequential growth, albeit modestly. You discussed taking share, and now you have the 14-nanometer based product. Wonder if you could provide some color on maybe why that group has lagged in the prior few quarters. But more importantly, when we should see the inflection in the business and how to think about growth in that business this year.

A - Brian M. Krzanich {BIO 4634082 <GO>}

Yeah. So let's talk about that. If I look at 2016, as we showed, we had about 7% growth over what Altera had in 2015. If you take a look at it, there's a couple of big segments that are driving that, telco, data center. And we're starting to see and in the networking space as well. Those are the big three segments. And where we started to see, as we went through especially the back half of the year, good connection between our ability to go in, and we're better together with Xeon and the FPGA as we go into that networking space. So again, as our footprint grows in networking and storage, I think it also gives us an ability to continue to bring both products to those markets. So we think in 2016, we actually gained share relative to the competition.

As we look out into 2017, we forecasted again above market growth from what we understand of the current estimates, and we believe we'll gain a little bit of share again in 2017. And remember, these markets are slow moving. You don't grow 10% share instantly because the design cycles and design conversions are relatively difficult. It's again driven by data center, networking and the Telco industry. And with Stratix 10 as we said, largest design enablements in the history of Altera. So we're really excited. We believe it brings a performance and a cost to our customers that is truly industry-leading and shifting.

And so we are very comfortable or confident in that; but again, that will really start to ship in the second half of 2017. And so I think that will be really driving growth in 2018. And really, if you think about these design cycles, that product will really continue to drive growth for probably the next three years plus just because these cycles are fairly long.

Q - Bill Peterson {BIO 18920953 <GO>}

Terrific color. Thanks, and congratulations on the quarter again.

A - Mark H. Henninger {BIO 17653227 <GO>}

Thank you. And Chanel, please go ahead and introduce our last questioner.

Operator

No problem. Our next question comes from the line of Blayne Curtis of Barclays. Your line is now open.

Q - Blayne Curtis {BIO 15302785 <GO>}

Hey, guys. Thanks for squeezing me in. I just want to ask Bob on the gross margin, your full-year is equal to the Q1. Just maybe as you look into the back half, I just wanted to make sure I heard it straight. It sounded like 14-nanometer on the server side may have some initial yield, and that would be headwind. But I'm just curious on the PC client as well. If you could just talk about the puts and takes as you ramp in 10-nanometer but you still ship a lot of 14-nanometer? What are the headwinds and tailwinds to gross margin?

A - Robert Holmes Swan {BIO 1972621 <GO>}

Yeah. The two tailwinds on the year-on-year flat are ASPs being a little bit better, and we anticipate that more on the DCG side. Secondly, unit cost being a little bit better, and we anticipate that more on the CCG side. And again, as I mentioned earlier, for DCG as we transition more from 22-nanometer to 14-nanometer, all else equal, that will be a little bit of a headwind in the early stages of yield for server on 14-nanometer.

The headwinds particularly are strong growth coming from memory and modem. So, those two dynamics themselves, good growth increasing profitability, good earnings. However, they are at a lower margins so the mix dynamic of those are real on a year-over-year basis. So good ASP, good unit costs but mix is a challenge. And then year-on-year, factory ramp both 10-nanometer and memory are a headwind for the full-year, but it gets a little bit better in the second half, the dynamic to the first half, second half; it gets a little bit better in the second half.

Q - Blayne Curtis {BIO 15302785 <GO>}

Thanks. And then just maybe a clarification, the $3 billion you're getting from the sale, should I assume that that goes to debt retirement like you have been using your cash flow? And I guess you should get at some point this year potentially the end of the year to that net cash zero, should we think about buybacks at that point?

A - Robert Holmes Swan {BIO 1972621 <GO>}

I think the dynamics of the $3 billion, the intention is that roughly $1 billion comes in line at time of transaction, and that there's, we will provide our financing in the early stages, so we'll only get roughly $1 billion upfront. In terms of then just the net debt position during the course of the year, you can assume that we have some maturities in 2015 that will take out, sorry 2017, that will take out, and we believe by the end of the year, given those dynamics, will be closer to a net cash zero position.

In term of that, that gives us the much stronger balance sheet and how we think about that, we'll continue, as I said earlier, invest in business, return capital to shareholders, and opportunistically, whether it's reducing outstanding flow, that's one that we'll continue to look at, and be opportunistic as opportunities present themselves.

Q - Blayne Curtis {BIO 15302785 <GO>}

Thanks.

A - Mark H. Henninger {BIO 17653227 <GO>}

Thanks, Blayne. All right, thank you all for joining us today. Chanel, please go ahead and wrap up the call.

Operator

Ladies and gentlemen, thank you for participating in today's conference. This conclude today's program. You may all disconnect. Everyone have a great day.