

## **Operator**

Good day ladies and gentlemen and welcome to the First Quarter 2015 Intel Corporation Earnings Conference Call. At this time, all participants are in a listen-only mode. Later, we will conduct a question-and-answer session and instructions will be given at that time [Operator Instructions]. As a reminder, today's conference is being recorded.

I would now like to turn the call over to Mark Henninger, Head of Intel Investor Relations. Please go ahead, sir.

## **Mark Henninger**

Thank you, Jenny and welcome everyone, to Intel's first quarter 2015 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 are available on our Investor Web site, [intc.com](http://intc.com). I am joined today by Brian Krzanich, our CEO; and Stacy Smith, our Chief Financial Officer. In a moment, we'll hear brief remarks from both of them, followed by the 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. Also if during this call, we use any non-GAAP financial measures or references, we will post the appropriate GAAP financial reconciliation to our Web site, [intc.com](http://intc.com).

With that, let me hand it over to Brian.

## **Brian Krzanich**

Thanks Mark. Following a reset to our outlook in March, the first quarter finished roughly as expected. Our PC business was impacted by slowing desktop sales, particularly in small and medium business. At the same time, challenging macroeconomic conditions and an appreciating U.S. dollar weighed on our business in important geographic markets. Despite this, revenue was flat year-over-year as our Data Center, Internet of Things, and NAND business all delivered double-digit growth.

The diversity and scale of Intel products today puts us in a position to compete across the breadth of devices that compute and connect.

I'll take just a moment to review each of these businesses before sharing my expectations for the rest of the year. Our newly formed Client Computing

Group results reflected weakness in desktop demand and the depletion of PC supply-chain inventories. And while desktop volume declined, notebook volume grew year-over-year for the fifth consecutive quarter. Our silicon technology leadership remains a valuable competitive advantage, and the percentage mix of our latest 14 nanometer processors, the 5th Gen Core and Core M processor, is just ahead of our expectations.

In addition to launching the high volume, 5th Gen Core products at CES, the CCG Group also reached some important product milestones. We launched our newest Broadwell based vPro notebook SKUs that feature aspects of the Company's No Wires vision to help us all work better. We also expanded our mobile product portfolio to adjust a range of price points and form factors. This includes the Intel Atom X5 and X7 for mainstream and premium tablet, formerly called, Cherry Trail, which is powering the new Microsoft Surface 3. We also started shipping the Atom X3, formerly SoFIA 3G, the Company's first single-chip integrated baseband and apps processor, designed for entry in value-smartphones and tablets. This product was not even on our roadmap a year and a half ago, but is now launched in the market. This is a great example of the velocity of the new Intel.

In the Data Center, our manufacturing and architectural leadership combined with opportunities driven by the values of cloud-computing in each PC usages, continue to yield impressive results. DCG revenue grew 19% year-over-year and our Xeon E5 Version 3 product line, formerly known as Grantley platform, now represents more than 50% of our two-socket volume. New products like Grantley and our increased support of custom versions of the product helped us achieve record cloud revenue. And in the Telco segment, we continue to significantly outpace the market with the adoption of Intel architecture.

We also introduced our first Xeon based SoC processor, optimized for micro servers, storage, network and IoT devices. This product is an example of our strategy to reuse IT from our core business in complementary and profitable segments. Many of the secular turns underpinning our growth in the Data Center also benefited our NAND business, which grew 14% year-over-year.

Just three weeks ago, Intel and Micron, formally announced our jointly developed 3D NAND technology. Intel 3D NAND will be available in the second-half of this year, and offers roughly three-times the stated capacity of computing technologies, which aren't expected until 2016. 3D NAND, for example, can provide greater than 10 terabytes of storage in a 2.5-inch solid state drive and is the first 3D NAND solution to be architected to be lower cost than 2D NAND. And finally, the Internet of Things Group grew 11% over the first quarter of last year, based on strength in the retail and digital security market segments.

Our first quarter results, combined with a variety of third-party insights from across the industry, and form our thinking for the balance of 2015. We expect the PC market to remain challenging, leading to a mid single-digit decline in the overall full year PC TAM. That said, we are excited about the launch of our 14-nanometer Skylake microprocessor and the capability that this product family will enable on a variety of operating systems. In particular, we are enthusiastic about the release of Windows 10 this summer, especially when combined with Skylake.

We continue to be confident in our strategy to drive growth. We're focused on innovating in our client business, improving mobile profitability and investing in and growing profitable adjacent markets. We are applying our process technology leadership, silicon integration expertise and the efficient use of shared intellectual property. This strategy is delivering results as evidenced by the growth we saw this quarter in the Data Center, IoT and NAND segments.

The performance of those businesses remains strong, and is expected to roughly offset weakness in [PC] [ph]. As we move forward, we will continue to work to ensure that it is smart and connected its best with Intel.

And with that, let me turn the call over to Stacy.

### **Stacy Smith**

Thanks Brian. Revenue for the first quarter was \$12.8 billion, flat year-over-year and in line with the downward revision to outlook provided on March 12. As a reminder, the change in revenue outlook was a result of weaker than expected demand from business desktop PCs and lower than expected inventory levels across the PC supply-chain. While the PC market was challenging in the first quarter, we continue to see strength in the Data Center, Internet of things, and NAND business.

First quarter gross margin of 60.5% was slightly above the original outlook provided on the January earnings call. Spending on R&D and MG&A was \$4.9 billion, down \$100 million from the fourth quarter and in-line with our guidance. Operating income of \$2.6 billion was up 4% from a year ago. Earnings per share of \$0.41 was up over 8% from a year ago.

The newly created Client Computing Group had revenue of \$7.4 billion an 8% decline year-over-year, driven by a 16% decline in desktop unit volumes, partially offset by a 3% increase in notebook volumes. Tablet unit volumes were over 7 million units, up 45% year-over-year. We are on track to our annual goal of improving mobile profitability by \$800 million with the majority of improvements to be realized in the back half of the year.

Operating profit for the overall Client Computing Group was \$1.4 billion, down 24% from a year-ago. The decrease was driven primarily by lower desktop revenue and higher unit costs. The Data Center Group had revenue of approximately \$3.7 billion, 19% growth on a year-over-year basis, driven by 15% unit growth. The Data Center Group had operating profit of \$1.7 billion. This was up 27% year-over-year driven by unit growth, a richer mix and lower unit costs.

Additionally, year-over-year, Internet of Things segment achieved revenue growth of 11%, and the NAND business grew at a fast pace. The business continues to generate significant cash with \$4.4 billion of cash from operations in the first quarter. We purchased \$2 billion in capital assets, paid \$1.1 billion in dividend and repurchased \$750 million of stock in the first quarter.

Total cash balances, at the end of the quarter, is roughly \$14 billion down approximately \$5 billion from a year ago. Our net cash balances, total cash less debt is below \$1 billion, and inclusive of our other longer-term investments, is more than \$4 billion.

As we look forward to the second quarter of 2015, we are forecasting the midpoint of the revenue range at \$13.2 billion, up 3% from the first quarter. This forecast is in line with the average seasonal increase for the second quarter. We believe there was an inventory burn across the worldwide PC supply-chain in the first quarter and we expect a further reduction in inventory supply-chain levels in the second quarter in anticipation of Windows 10 launch in summer. We are forecasting the midpoint of the gross margin range to be 62%, plus or minus a couple of points, 1.5 point increase from the first quarter.

Turning to the full year 2015. We expect revenue to be approximately flat to 2014, down from the prior guidance mid-single-digit percentage growth. We're now projecting a mid-single-digit decline in the overall PC market. We continue to forecast robust growth rates in the Data Center Group, Internet of Things Group and NAND businesses which we expect to offset the decline in the Client Computing Group. As a result of lower than expected demand and reduced growth rates this year, we are lowering capital spending, spending on R&D and MG&A. We are moving to reuse capital by rolling a forward to 14-nanometer and to align overall capacity with demand. We are now forecasting the midpoint of capital spending at \$8.7 billion, down \$1.3 billion from the prior outlook.

We are also forecasting the midpoint of our gross margin range of 61%, down 1 point from our prior guidance as a result of temporarily lower utilization rates and lower platform volumes. And we are forecasting the

midpoint of R&D and MG&A spending for the year at \$19.7 billion, down \$300 million from the prior outlook.

We are prudently managing our cost capacity in inventory to address the changes in expected PC demand. We're using our manufacturing leadership to transform the Company by developing leadership products across a broad range of end-markets. That product leadership is driving growth in revenue, profits, Data Center, Internet of Things and NAND businesses. We've illustrated this transformation. In the first quarter, almost 40% of our revenue came from the combination of these businesses and these businesses accounted for more than two-thirds of the Company's overall operating profit in the first quarter. Our work is far from done, but the transformation of the Company is well underway.

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

### **Mark Henninger**

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

### **Question-and-Answer Session**

#### **Operator**

[Operator Instructions] The first question comes from John Pitzer from Credit Suisse.

#### **John Pitzer**

Stacy, my first question is, relative to your full year gross margin guidance of 61%, it sort of assumes that the back-half of the year is coming in around 61%. I am kind of curious given the revenue guidance implies a pretty steep ramp in back half of the year, i.e. utilization going up. Can you just help me understand why you wouldn't get better leveraging gross margins in the second half?

#### **Stacy Smith**

You are doing the algebra correctly there. We're averaging about 61% in the first-half, we've guided 61% for the year. And my expectation is the average over the back-half is in that range of about [inaudible]. You see some offsetting trends going on. So first, we do expect we'll see some benefit associated with just seasonally stronger volume in the back-half of the year.

Offsetting that is two things; one is, we'll start to see -- we're seeing 10-nanometer start-up cost today but they'll ramp pretty significantly when we get into Q3 and Q4. So, that's one element.

And then the other is, we're bringing down the utilization rates on our 22-nanometer factory network and have now and through the Q2, maybe a little bit into Q3 those products will go into inventory and they will ship in the back-half of the year. And so we'll see a little bit of elevated cost relative to what we thought in the back-half, associated with bringing down the utilization rates in the factory. You've watched us for a while, we do that so that we can free-up some capacity and roll it forward to 14-nanometer and offset some of the capital investment there. So, that's why we're doing it. But the impact of that is higher costs.

### **John Pitzer**

And then just my follow-up Brian, there's been sort of a lot of speculation in the press about potential M&A activity. And I doubt you can address specific speculation. But I am kind of curious, can you just step back and give us a sense of broadly what your acquisition strategy will look like, what areas do you feel like you need to augment? And importantly, as you think about use of cash, does any potential acquisition have to be more accretive than actually buying back your own stock?

### **Brian Krzanich**

You're right, John, I am not going to comment on any of the rumors and all in the press. Our strategy on investing in this business or what we do with our cash hasn't changed. And it's really the same strategy that's been before me and that is always first investment of business, firmly believe in that, and that investment, Moore's Law, new architectures, technology, things like that and M&A at times and then share buybacks and dividends.

So those are always our priorities. We're stewards of our shareholders' cash and we always feel like that's always the first thing we do. And if we can invest in the business and get a better return in that, then we do that, no matter how we can invest in that. But yes, I am not going to speculate on any of the rumors.

### **Stacy Smith**

And just coming on the last part of your question, John, we -- as Brian said, our priority is to invest in the business first, dividend second, and then we use the buyback to modulate cash balances. We really don't try to time the buyback to specific stock prices. We use it as the second mechanism to return cash to shareholders, that's how we view.

## **Operator**

The next question comes from Romit Shah from Nomura.

## **Romit Shah**

Stacy, the revenue outlook for 2015, now it sort of assumes a similar recovery as your original guidance just off a lower base and back in early March, you talked about things like weaker business PC demand, the macro-environment and currency impact in the quarter. So, is it implicit in the new outlook that you think these issues will go away?

## **Stacy Smith**

No, and maybe I am not completely grokking your question. We were projecting mid-single digit revenue growth for the Company on the back of a relatively flat PC unit demand. Now we're projecting mid-single digit PC decline and that's leading to relatively flat revenue growth year-on-year. But it has changed my view of your -- so maybe you can define your question a little better and I'll try to answer little bit.

## **Romit Shah**

Just to get to flat for 2015 it assumes pretty healthy sequential growth for the next couple of quarters. And I was wondering if the issues that hurt you in the first quarter do you see those issues becoming less of a headwind as we move through the year?

## **Stacy Smith**

I understand your question, it's about linearity. So yes, let me put the PC market in the context and we can go from there. Again, we're expecting mid single digit decline overall in the PC market. We're seeing a little bit of shift in linearity over the course of the -- we saw a fairly significant inventory burn in Q1. Normally in Q2, we would expect to see customer strive to put inventory in place for the back-half.

Our guide for Q2 is assuming that we'll see a continued inventory burn in the quarter and that's because of the timing of Windows 10, it's sitting in the summer. And so what we think is going to happen is that our customers will lean-out inventory levels in the second quarter and then they'll rebuild inventory levels in the third quarter. And if you do the math, it's just a point or two of growth from the first half to the second half as a result to that in the quarter.

## **Romit Shah**

As my follow-up, Brian, I was hoping you could elaborate on the \$8.7 billion in CapEx and this idea of increased reuse of equipment. Is that just a repurposing of 22-nanometer? Does it at all impact the timing of 10-nanometer? Thank you.

**Brian Krzanich**

Sure, I think you've got it mostly right, each one of these product ramps or these technology ramps have a personality and a image on their own. And what you're seeing, as we move through 2015, is just that. You did see that we shifted our overall view of the market from single digit growth to single digit decline, so that has one impact. You are seeing us be able to move more capital now as a result of that, plus I'll give you some other things. Move more capital from 22-nanometers to 14-nanometers.

We also said that 14-nanometer, the ramps of our Broadwell products, are slightly ahead of our forecast. So we're seeing a very nice migration of our product demand over to the 14-nanoemters. And we're seeing some things like better yields, better utilization out of our 14-nanometer as it continues to get healthier. And so all of those combined have led us adjust our capital. So you're seeing better utilization, better efficiency, but also the ability to move more 22-nanoemter capacity over the 14-nanometer.

**Operator**

The next question comes from Joe Moore from Morgan Stanley.

**Joe Moore**

Just wondering if you could talk about your inventory level kind of barely went up I guess \$140 million sequentially despite being \$900 million below where you thought you'd be on revenue. Can you just talk about how that transpired and how you thought maybe you'd have to work that inventory down in second quarter? Why isn't there a little bit of an inventory overhang after the magnitude of the shortfall in Q1?

**Stacy Smith**

We were expecting inventory levels actually to come down in Q2, Joe, as Broadwell came down, so it wasn't so much a unit comment as much as the dollar comment, but we expect the dollar values to come down because 14-nanometer costs are coming down the costs curve pretty steeply and we ended up top, so there is a -- from our perspective, a pretty significant shift. And then as we think about the rest of the year, we will -- as we said, we'll bring utilization rates down on 22-nanometer, we'll roll forward some of that



capacity to 14-nanometer and we should bring inventory rates -- levels down by the time we get to the end of fall.

**Joe Moore**

Okay, great. And then my follow up, with regards to the buyback, how do you think about what the net cash level should be? Is there still a target of sort of I think you said historically you could feel comfortable at around zero net cash. And then how do you factor in any potential M&A into that equation? Does that mean that M&A would require to slow the buyback or just how should we think about those trade-offs, again not asking but any specific stories. But just how should we think about the balance sheet in that context?

**Brian Krzanich**

Its Brian, we're not going to answer any questions on M&A and those -- one of the speculations out there. In terms of net cash balances just we have said that we're targeting approximately zero net cash I also said it's impossible for me to manage it so tightly that we mathematically ever get to exactly zero. You can see we brought down cash balances a lot over the year and in Q1 we will serve \$1 billion in net cash and when you include in some of the longer term portion of the portfolio we were pretty flat with \$4 billion so it's -- we're kind of comfortably where we want to be and comfortably where we communicated.

**Operator**

The next question comes from David Wong from Wells Fargo.

**David Wong**

Stacy given your comment about start-up charges for 10-nanometers towards the end of this year are you facing ahead of your original plan on 10-nanometers or are things tracking roughly according to what you expected?

**Brian Krzanich**

I can answer that one just from a technology standpoint. First we've said nothing about our timing of 10-nanometers. And we'll give all of our timing for 10-nanometers at a later date. And the adjustments that talked about, does not have anything to be really with the 10-nanometer capital or spending or timing. So, they are completely disconnected.

**David Wong**

And given what -- you were saying on SoFIA. Do you expect to be incurring any contra revenues on tablet processor sales by the fourth quarter of this year? And can you give us some of idea as to how contra revenue payments might trend through this year?

**Stacy Smith**

Sure. And let me if I may, and let me just take it all the way up to the commitment Brian and I made around moving -- making \$800 million improvement to the mobility portion. We are on track to that. There is two big buckets, if you will, one is the improvements in product margin and it's a combination of the cost structure we get with SoFIA and having a great product that's targeted at the interim value segments of the phone and tablet market. And a chunk of it is the reduction in contra revenue dollars again the build materials around SoFIA we make it a competitive build materials cost. And so we are planning to pay contra revenue dollars associated with the SoFIA shipment.

SoFIA is not shipping in the market so on track from a timing standpoint Brian highlighted how fast we're able to execute to this product line. And again it really is an example of the changes going on inside the Company. As I think about those playing out over the course of the year. Then the other big bucket is just reductions in investment level that we talked about at the Investor Meeting. That second bucket plays out kind of linearly across the air. It will grow but it's giving us a benefit in each quarter. The product mix, SoFIA reduction in contra revenue dollars, really kicks-in in the back half of the year. So, it's more a back-end loaded of course based on the SoFIA ramp.

**Operator**

The next question comes from Harlan Sur from JP Morgan.

**Harlan Sur**

DCG was up 18% in 2014, it grew 19% here in Q1. I assume much of this growth was you cloud and Web 2.0 customers. As you think about the pipeline of cloud in HPC programs, are you anticipating continued strong spend here in Q2, or should we expect some lumpiness? How confident is the team about driving double-digits growth in DCG this year?

**Brian Krzanich**

Harlan, I'll start the answer and then Stacy can jump in. So, we've always said in times when the growth is high or I'd assume the growth is a little bit less. But this tends to be lumpy. There are large cloud providers. They tend

to come in with big bps and they're purchasing. So don't be surprised if there is a very high quarter and not as high. What we said though is that, overtime, we believe we can continue to grow this business at a mid double-digit -- mid-teens kind of growth rate, so 14%, 15%, 16%, somewhere in there, growth rate, over the rest -- several year of period moving forward.

We continue to have that view. We look at the products we're bringing, the growth that we're seeing in cloud, cloud 2.0, as you say. Big Data is driving some of this growth as the cloud generates this data and the cloud providers realize it. They can utilize it to improve their cloud performance and their cloud offering. So, all of these things are working together and then that gives us confidence things that we can continue to grow this business segment.

### **Harlan Sur**

And then the team started ramping its Core M product, just before the holiday season in discussions with your customers and partners. What's been the sell-through trend and uptake of 2-in-1 platforms to the holiday season and into the first half of the year? Just wondering what's the view on adoption and adoption rates with this form factor on a go forward basis? Thank you.

### **Brian Krzanich**

As you said, Core M was introduced right before the holidays. I'd say that we had a limited number of SKUs available at holiday. And the amount of time we could get in front of it with marketing and all was limited as well. That said, we were very happy with the sales we saw in the holidays. Core M is really designed to provide the first truly fanless core product capability very soon and light form factors. As we've moved through the first quarter you're starting to see a lot more. There are several designs that have come out during this quarter. The uptake has been good and we're continuing to market and make the product awareness.

As we move through this first half, you're going to see a remainder of products come out on Core M that continue this thin light fanless device 2-in-1s. And so far the uptake has been very good. We think those, combined with our tablet offerings, provide a very -- lot of choices for the consumer in this mobile space. And then as we move through into the second half for the year, as we introduce Skylake, Skylake will have an additional Core M version which drives even the performance the battery life to the second generation for Core M. And again, we expect to see form factors, thin light, long better life fanless designs that are quite compelling.

### **Operator**

The next question comes from Stacy Rasgon from Bernstein.

**Stacy Rasgon**

I wanted to try to verify something, just so I understand it. So, is that gross margin is down in the second half were your 14-nanometer start ups are coming down, your revenues up a bunch, your tablet profit-loss is again lot worse, obviously you've 10-nanometer ramping. And you talked about reducing your 22-nanometer utilization in building inventory. So, that suggests that utilization has to be coming down a lot in the second half. You got to be building inventory a lot in Q2, but it's mostly 22-nanometers that you'll then be selling in the second half when Windows 10 and Skylake are launching. Do I have those dynamics correct? And then what is the risk that you're going to be building inventory I guess in the first half for Q2 that will be tougher to sale in the second-half given the new products that ought to be launching at that that point?

**Stacy Smith**

I think that the thing in that isn't accurate and is confusing...

**Stacy Rasgon**

Okay.

**Stacy Smith**

It is the inventory piece. So, what we're doing is in Q2, we're cutting the utilization rates of the 22-nanometer factories to avoid putting the product in it -- always bring it down, we've seen this -- some of this in the past, when we have downturn or an opportunity to roll forward capacity we want to do it, we certainly don't want to put all the generation inventory into inventory if we can help it. But we're going to be cutting utilizations we're actually cutting them at the peak. The impact of that is we'll have some higher costs that are sitting in it because those products that we're producing in Q2 will sell through in Q3 and Q4, a little bit about cost headwind in the back half of the year. The utilization rates will bottom in Q2 and then we think to start to build backup because we'll take capacity offline on 22-nanometer. So build back in the back half.

**Stacy Rasgon**

So then why are you not calling out utilization as a negative margin driver for Q2 versus Q1, and gross margins are going up in Q2?

**Stacy Smith**

Because we're not cutting to the point that we have excess capacity charges, so what's happening is you will see production cost going up but that sits in inventory and it fills out in the back half. So that's why the way you will see it is a cost increase in the back half as opposed to a period charge in Q.

**Stacy Rasgon**

If you're basically reducing it early and you're taking the cost, it's actually hitting your P&L and the back half. So you're almost like smoothing your loadings in your margin outlook for the year. You're taking Q2 up and taking the back half down versus prior guidance?

**Stacy Smith**

I would say, what we're doing is we're trying to react fast on bringing -- taking capacity offline and then rolling that forward and that was the same playbook we've had whenever we have a demand.

**Stacy Rasgon**

Got it. Thanks. Can I ask my follow up?

**Mark Henninger**

I think we just covered it, Stacy, we'd like to....

**Stacy Rasgon**

Okay. Thank you.

**Operator**

The next question comes from Chris Danely from Citigroup.

**Chris Danely**

So, I guess just a hypothetical question on M&A then. Can you think of any scenario? I guess your previous biggest acquisition was McAfee, which was like 8 billion or something. Can you think of any scenario that would make you feel like you need it or want it or desired to do a \$10 billion, \$15 billion acquisition insurance like taking the company or a big product line or something like that? Will that ever come into play?

**Brian Krzanich**

Chris, I'll give you that question back so let me give you the same answer which is we're not going to speculate on actual M&A questions, we're not going to speculate on hypothetical questions.

**Chris Danelly**

Okay, that's fine.

**Brian Krzanich**

But you can try a different one, if you want.

**Chris Danelly**

That's okay. I'll stop for the line somewhat behind.

**Brian Krzanich**

You are not behind.

**Chris Danelly**

Next one will be more mainstream, so if we kind of do the math on your revenue guidance, we get like, I guess, basically high single digit revenue growth for Q3 and Q4. You've talked about taking the PC gross rate down, so if we just look at straight desktop notebook that's 58% of the business or something like that. So I guess, how can we get to high single-digit sequential revenue growth for Q3 and Q4 with the PC business a little slow, when I look at the last 10 quarters, Q3, Q4 in high single-digit revenue growth has only happened once, so just wondering how we can get to the math?

**Brian Krzanich**

I guess I'd say like, you're seeing -- I would say not seeing anything unusual in the growth rates of DCG, IOTG, the memory business, they're growing at a robust rate, we're not expecting that to accelerate or decelerate in the back half. So just with the exception of DCG we had a higher than what our average is in Q1, so maybe that comes down a little bit. The little issue here is on the PC segment, we think we grew, we reduced inventories in Q1, what's unusual is we're predicting that we're going to reduce the worldwide PC supply chain, we'll reduce inventories more in Q2. But think of that as you shift a few million units from Q2 and they get replenished in Q3 and that shifts when the billings happen, it's not so much to comment on the end market. It's just a comment on when inventories get built up for the backend foundry.

We think the driver there is Windows 10, it's sitting in the summer and given that plus economic volatility and currency volatility we think customers will reduce inventory levels into the summer and then replenish back to kind of more normal rates after Windows 10 is available.

## **Operator**

The next question comes from Christopher Rolland from FBR Capital Markets.

## **Christopher Rolland**

So I'm thinking, my question is a little bit more big picture here. So PC industry volumes are now going to fall, probably mid single-digits along with you guys and some including myself believe that tablet volumes might also fall this year. So overall total compute units might in fact be flatter or perhaps falling this year. So I guess I'm trying to figure out what the missing piece here is. Are they really going to fall, is this a timing issue or is there something else here, is it PC lifespan for example that might be expanding, I know you guys track that. How do you look at it in terms of total computing and what's going on here?

## **Brian Krzanich**

I'll start and Stacy can jump in as well. I think interestingly you're probably not too far, you said that the PC will be down mid single-digits, I would agree most people are thinking that tablets will likely be down, we've all heard a variety of forecasts, a little more difficult to forecast the tablet space. Just as a reference point, our tablet number for Q1 came in right online with what we had projected. So, and it's up from our Q1 of 2014 significantly.

When we look at this for the full year and we look at compute there's a variety of things that we look out, when we look out at this, there is share growth, there is -- what's happening in compute and there's also sell up as we continue to have newer and better performance as our products get better and better at the higher end especially and then look like the introduction of Core M and the number of people coming with entry level systems with Core M. You put all those together and that's how we formed our view of this year. But as you said it is formed around a view that when you probably look at the total computes from those products it declined. We still think phones and tablets continue to grow and then there's a growth in the data center, the growth in the Internet of Things and our memory business which will all grow in that teens kind of range and they'll vary quarter-to-quarter.

## **Christopher Rolland**

Also if you could address PC lifespan for example, if you do have specifics there? And then the other question I had was, a major bear thesis looking at least cash flow for Intel was around increasing cap intensity as we move

down Moore's law, but your CapEx guidance implies the lowest spend that we've had since 2010 and we're pretty much on record revenue here. So in your opinion does this speak against that capital intensity argument or is this really just sort of a timing issue?

### **Brian Krzanich**

Those are kind of two questions. Let me answer the first and I'll let Stacy answer the capital intensity one. The first one was around what is happening to system longevity or system lifespan. Data is continuing to grow, our estimates are that there's something approximating 600 million PCs out there and that's growing somewhat by the day that are greater than four years old. You could look at that as this is continuing to grow and push, you can also look at this as this is a great opportunity. And we still believe that at some point those systems will flip over. Windows 10, Skylake, all of those things are opportunities that we think we can start to move some of those units. But the approximation is 600 million of unit is greater than four years. So I'll let Stacy handle the capital intensity.

### **Stacy Smith**

On the capital intensity I will give you the long-term answer and then come back to what we're seeing in 2015. The longer term answer and I'll refer you to some of the stuff we showed at the investor meeting. We do agree capital intensity is going to go up as measured by capital cost per square inch of silicon. We believe that through 14, 10 and with some insight all the way down the 7 nanometer we can offset that increase in capital cost per square inch of silicon by improving our density. And so we can keep the cost per transistor coming down at the historical close.

So for us we don't think that we're going to be impacted by at least over the next two to three generations by the increase in capital intensity. And that's what I showed at the investor meeting there is kind of this \$7 billion to \$8 billion normalized run rate where we can respond to some unit growth with manufacturing CapEx and on top of that we put some other capital things across this building, fabs and specific then to what's happening this year is we were planning for -- if you all look back to the investor meeting last year we've seen two big buckets of improvement, one is as Brian said our confidence around 14 nanometer has improved and second our desktop units have come down and so versus flat, I think we're down in the mid single-digits. And the combination of those two things has allowed us to have more reuse for 22 nanometer or 40 nanometer. And we've driven some efficiency in the factory network. And so I'd characterize this as being an unusually low level of CapEx relative to the size of the business because



we're driving efficiency at a faster rate and we are getting more reuse than we expect.

## **Operator**

The next question comes from Jim Covello from Goldman Sachs.

## **Jim Covello**

Guys you've talked about how the mobile losses declined in the back half of the year that was very helpful color. Could you talk a little bit about the strategy or the thought process behind combining the categorization of the groups and the reporting structure? What was the thought there?

## **Brian Krzanich**

Sure I'll start Jim and Stacy can voice in some of this as well because there is financial side to this. But in general we first made this move based on our customers and how we look at the architecture in the business. So our customers you walk into whoever that customer is Lenovo, Acer or some of the ODMs, they look at the platform from the phablet especially up through at least the tablet and instead of low end entry level PC whether it be a window based system or Chromebook or Android. They look at all of those platforms as the same type of hardware. And they want to have a single group that they interface with and so our customers wanted this.

Secondly from an engineering perspective from our side, the silicon, the cost improvement, the software work, the drivers all of those things again a lot of overlaps. So by driving these two organizations together we are getting efficiencies, that are helping contribute to that \$800 million cost reduction that Stacy and I've committed to. So it was first and foremost our customers and our efficiency were driven by this. This is not anything else. At that point then Stacy, what he does is that the financials need to represent how you're running the business and making decisions by it. So we also made the reporting structure that same way, but I'll let Stacy jump on that.

## **Stacy Smith**

I think Brian said the only two pieces of commentary I would add to that I'll take you back to Chris's question earlier. We're seeing this blurring of lines between different devices and we were doing some unnatural things to try to categorize them. I think the Microsoft Surface is a perfect example of that. When you look at partners in IDCs, where they characterize the market, they count that as a tablet. We were including that in the PC revenue line and we've realized that the customer is reviewing this as one category of

devices, we wished manages as one category devices and we would be more efficient and more accurate I think of client broadly.

The other comment I make is, as we showed in the investor meeting and Brian had some specific materials on this. We're also finding that the IP that we were developing was shared across these different groups. So again we were having to categorize things that ultimately came down to judgments and we realized it was one set of customers one set of products and one set of IP that we're playing across the different products.

### **Jim Covello**

Follow up would be on the NAND market. I know what you said, NAND is going to fall on same secular trends as DCG. Is there ever going to be a time period where it makes sense to expand that opportunity for you? It's a good growth market, you're making good margins on it those up to factories. What would be the pros and cons of expanding your business in that segment?

### **Brian Krzanich**

First you're right Jim. As we said at our colors Jim especially for us because the majority of the NAND that we sell goes into enterprise level products mainly the data centre greater than 50% of what we sell in the net half the NAND is in enterprise class device. We also announced our 3D NAND, which we think really is a game changer. We talked about the density, the cost, putting 10 terabytes or more into an SSD, we think is pretty compelling. And we're constantly looking at these businesses, the NAND especially and asking ourselves what are the level of investments.

Right now we have a great partnerships with Micron where we jointly developed these, the majority of the manufacturing is done, all the manufacturing on these technologies is done by them, and that relationship works very well. We're able to invest and invest through them and there you have the efficiency of having factories that they can offset loadings with other products that they have and it's a very efficient model in the memory market to have basically two companies with two very different business models to be officially using the same factories network.

What would drive us outside that? Would be if we start some unique growth or some unique situation to where it make sense for us to manufacture. But right now this model works very well and efficiency that we get out of working together with them, I think is really what has been a game changer in the market for us.

### **Operator**

The next question comes from Ambrish Srivastava from Bank of Montreal.

**Ambrish Srivastava**

I just had two questions one on the DCG, you've referenced a 50% for Xeon E5 if I remember correctly on Grantley. Just help us understand, what has that done in terms of driving growth so far for the business? And my second question, my follow-up is on the PC side Brian. You have mentioned Windows 10 a couple of times, are you expecting a big bump up in demand from that? And if so why?

**Brian Krzanich**

So, we'll into these one at a time and let me start with the Grantley one, as Stacy can voice in for the Window 10. In all of these cases, our new products as you said the Grantley platform which is our E5 series of products provides a new level of performance and when you look at this business there are some segments of this business that's replacement with each one of these new generation we look at the fact that the total cost of ownership for a cloud provider, an enterprise provider to come in and do a replacement from an older generation Intel product to a new generation Intel product tends to have a positive total cost of ownership return.

It has a replacement function not each one of these new generations have a lot of which the increased density in performance that a cloud provider can get with a new product like the Grantley allows them to grow their business without having to grow their footprint as much. And so that allows cloud growth at a much more efficient and effective capacity. So if we look at new platforms like Grantley, the fast we do get a very fast transition as we said greater than 50% now is on Grantley. It's just an example of how fast people see the economics that these products deliver. So that would be my answer to this, it's really performance which then drive economics, which then drive both replacement and overall data center growth. Stacy had a comment on that.

**Stacy Smith**

Just -- activity in the place you see it is in our mix and this is a place where if we can drive technology faster than everybody else we get paid for it because as we bring more powerful products then people buy higher in the stack because they get an increasing return on that. And when you look at the DCG results year-on-year you see that units were up 15%, ASP was up 5%. So you see it in both of those that drives this replacement cycle and it drives in increasing mix.

**Ambrish Srivastava**

I guess what I was trying to get to, sorry Stacy, what I wanted to get to is how much of the growth is -- are you able to handicap on the number, how much is that growth came from the Grantley?

**Stacy Smith**

So how much of the 19% growth was due to Grantley? We don't go through and put those things on separations. Primarily as we said, the growth in Grantley in general, tends to be lumpy and it's based on orders by some of the big cloud providers. And as we said, more than 50% of the volume is now on Grantley. So just by the math you'd say sure, so there is more than 50% of the 19% growth was probably on Grantley, but I am not sure as necessarily that factor driving this, it's one of the factors.

**Brian Krzanich**

Keep in mind, we bring out a new product in the data center every 12 months and then that product rolls out over the course of a year, right. So, Grantley has been shifting for since -- been shipping since Q3 of last year and it started in the cloud. So it's not like an event, it's you bring out a product and starting a segment and we bring out products that are appropriate to different segments and we bring out a new micro architecture, and then we bring out the second generation of micro architecture. So it's always a product evolution happening in this.

**Stacy Smith**

With regards same question as we said in the script and in some of these questions, we're not really, currently forecasting a big recovery or boom in second half. What we said is there is some push out of the inventory that would normally be present in second quarter. As people mean that so that they're in preparation for Windows 10, so Windows 10 Launch is in the summer as it's been announced. As that occurs and we move into Q3, we anticipate that inventories will simply recover back to a normal level and that leaned out, and so we'll see growth in that inventory recovery at that point. But if you took a look at the sell through and our overall year we're actually projecting as we said relatively seasonal mid single-digit decline in the PC business and we've just got this inventory shifts on a moving in the center of the near allowance that.

**Operator**

The final question comes from C.J. Muse from Evercore ISI.

**C.J. Muse**

I guess first question on the PC side in terms of the single-digit decline. Curious if you could walk through what assumptions you're marking around mixed shift from enterprise to consumer ASPs as well as the impact of U.S. dollar strength?

### **Brian Krzanich**

It's a tough one, so I'll start with the second part, it's really impossible to detangle what we're seeing in the PC market and separate out what's happening from a macroeconomic standpoint, a currency volatility kind of XP hangover and then Window 10 shift is just kind of all wrapped up together. So I don't think I can give you a lot of color on that. Our view of the year when we started the year is that we would see particularly a little less strength in the enterprise segment of the market and the little less weakness in the consumer segment of the market. I think we revised that statement now to say we're going from strengthen in the enterprise segment to probably little bit of weakness in the enterprise segment and consumer was weak last year as prior little less weak this year, but expected to be down and you take the combination of two things and I'll tell you that's a minus 5% kind of mid single-digit decline.

### **C.J. Muse**

And again as a follow-up, in terms of the cut for CapEx curious if this is a new steady state for you guys. And then I guess as the question that follows that, how do we think about impact to construction in progress if it all? And then as well wouldn't we go down to 10 nanometer the rising cap intensity there do we see a stair-step higher in terms of that number and depreciation or how should we think about those moving parts?

### **Brian Krzanich**

So let me start and then I'll let Stacy jump in. What we said was that this year's capital is a little bit less than what we would have normally projected for the year. We were able to get as we said better yields better utilization and we're able to -- and this happens from time-to-time. You can look back at our past it happened in the '08, '09 and from there we get that there is a slight increase in our projections for total volume at the same time we're going to a transition we're able to move capital very-very quickly.

One other things we've made as an improvement within cloud, our ability to shift capital from 1 million to another very quickly and that has all to do with the copy exactly and how we design our architectures and technologies to be able to reduce. That said again separate out capital intensity of a technology with the absolute unit cost of a technology. And the real fundamental of Moore's Law is one is economic and on the 58th Anniversary of Moore's Law

which this year is we should remember that Moore's Law is an economic law and that we're going to reduce the cost as well as we're improving the performance of these parts.

So we believe the 10 nanometer, yes that capital per wafer start does go up but it goes up less than the density does and so we believe our unit costs and when we measure that in transistor costs which is probably the best way to measure one-to-one or our overall product cost on a same day equivalent is what skylight part on one technology of the other. We get an improvement in that cost greater than the capital intensity.

So the bottom line is I don't expect this always to have this lower level CapEx. That said we're continuously trying to reduce and be as efficient in CapEx as we can just the capital intensity will go up in some nanometers where we've got them, we feel like it goes up less but as we say it goes up less than density and cost improvements of the product.

All right thank you all for joining us for today. Jamie please go ahead and wrap up the call.