Good day, ladies and gentlemen. Welcome to the Quarter 3 2011 Intel Corporation's Earnings Conference Call. My name is Misty, and I'll be your coordinator for today. [Operator Instructions] As a reminder, this conference is being recorded for replay purposes.

I would now like to turn the presentation over to your host for today's call, Mr. Kevin Sellers, Vice President of Investor Relations. Please proceed, sir.

R. Kevin Sellers

Thank you, Misty, and welcome, everyone, to Intel's Third Quarter 2011 Earnings Conference Call. By now, you should have received a copy of our earnings release and the CFO commentary that goes along with that. If you've not received both documents, they're currently available on our Investor website, intc.com. I'm joined today by Paul Otellini, our President and CEO; and Stacy Smith, our Chief Financial Officer. In a moment, we'll hear brief remarks from both of them followed by the normal 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'll post the appropriate GAAP financial reconciliations to our website, intc.com.

So with that, now let me hand it over to Paul.

Paul S. Otellini

Thanks, Kevin, and good afternoon, everyone. I am very pleased to report another very strong quarter for the company with the highest quarterly revenue, earnings, earnings per share and microprocessor unit shipments in Intel's history. In particular, we were very pleased with the momentum in our notebook PC business and consumer demand for our industry-leading second-generation Intel Core processor family. Relative to the third quarter of last year, our notebook business saw double-digit unit growth, leading to record microprocessor unit volume and revenue.

Trends inside the quarter played out largely as we expected. While consumer demand in mature markets like Western Europe and North America remained soft, Enterprise PC demand remained strong and consumer demand in emerging markets continued to rise year-over-year. China was up 12%, India 21%, Turkey 14% and Indonesia 23%.

The Global PC landscape is being reshaped. Emerging markets now represent 2 of the top 3 consumption PC markets in the world. China is now the #1 PC consumption market in the world, while Brazil has become #3.

In total, we grew the business by 28%, adding more than $3 billion in quarterly revenue year-on-year. Even excluding the acquisitions of McAfee and Intel Mobile Communications, revenue grew by a full 18% over our Q3 2010 results, which were a record at the time. We have now had 6 consecutive record revenue quarters, and our financial performance is allowing us to return significant cash to our owners via both dividends and buybacks. Our investments to expand our capabilities and create long-term opportunities across the computing continuum are already paying off. Let me give you a few examples.

The Data Center continues to be a key source of growth, with revenues up 15% year-on-year in Q3. During the third quarter, the Data Center business also set an all-time record for storage units. We also announced that our Sandy Bridge-based 2 socket server product, code-named Romley, is shipping for revenue. Demand for Romley is forecasted to be 20x that of Nehalem at the same point of its life cycle, and we expect to launch early next year with almost 2x the design wins Nehalem had at its launch. In addition, we closed our acquisition of Fulcrum Systems, an ethernet switch silicon provider. The deal advances our strategy to deliver comprehensive building blocks across the Data Center from servers to storage and networking.

Turning to mobile computing. At IDF, we were proud to announce an extension of the long-standing collaboration between Intel and Google, which will enable time-to-market optimization of Android on Intel architecture. Work on Medfield-based smartphones and tablet designs continues, and we remain on track for Medfield-based devices to launch in the first half of next year.

I'd like to give a short update on our acquisitions. McAfee and Intel Mobile Communications, for example, contributed revenues of $1.1 billion in the third quarter. Sampling is imminent for Intel Mobile Communications' LTE product, and earlier today, McAfee launched Deep Defender. This groundbreaking new security product is the first fruit of the collaboration between Intel and McAfee.

In PCs, we are beginning to see the first generation of Ultrabooks come to market for the holiday selling season. Industry and consumer interest in Ultrabooks is high, and these early designs offer compelling, thin and light form factors with instant on capability, enhanced security and excellent battery life starting at less than $1,000. And yet, this is just the beginning.

Over the next 2 generations, we expect that Ultrabooks will evolve to include features like touch screens and an always-on, always-connected capability, all at mainstream price points, offering a truly exceptional PC experience. With more than 70 designs in the pipeline, we are excited about the future of Ultrabooks.

During the third quarter, we began volume production of Ivy Bridge on our 22 nanometer process technology. 22 nanometers will usher-in the era of 3-D transistors, which will pay dividends in power, performance and density for generations to come. The midpoint of our outlook for the quarter puts us on pace to deliver nearly $55 billion in revenue for 2011, after crossing $40 billion for the first time in 2010, representing a year-over-year increase of 26% or more than $11 billion.

In closing, we are very pleased with the results and accomplishments of this record-setting quarter and year-to-date. We remain very confident in our growth strategy and are excited about our new product pipeline.

With that, let me turn the meeting over to Stacy.

Stacy J. Smith

Thanks, Paul. Revenue in the third quarter was a record, and it was our most profitable quarter ever. You can see the growth of our business by looking at a year-to-date comparison versus 2010. At the end of the third quarter, our revenue of $40.1 billion is $7.9 billion higher than the corresponding first 3 quarters of last year.

Third quarter revenue of over $14 billion is up over $3 billion when compared to the third quarter of 2010, equating to 28% growth year-on-year. McAfee and the Intel Mobile Communications Group contributed $1.1 billion of the $3.1 billion increase from a year ago.

Intel-owned inventories were slightly down from the second quarter. As we look more broadly at the worldwide PC supply chain, we believe inventories stayed at healthy levels and continue to be tightly managed by our customers.

Gross margin in the third quarter was 63%, up nearly 3 points from the second quarter. As expected, gross margin benefited from seasonally higher volume, lower unit costs as we ramped 32 nanometer factories, lower factory startup costs as we started 22 nanometer production and lower charges related to the Cougar Point product issue from earlier in the year.

Across all measures of profit, the third quarter was our best ever. Operating income of $4.8 billion was 34% of revenue, up over 3 points from the second quarter. Third quarter net income of $3.5 billion and earnings per share of $0.65 are up 17% and 25% respectively from a year ago. After excluding acquisition-related accounting impacts, non-GAAP earnings per share of $0.69 was up 1/3 from a year ago.

In 2011, we have increased our employment by approximately 17,000 people, driven by acquisitions and hiring in research and development and manufacturing. And while business levels remain strong, the uncertainty around 2012 GDP growth rates has caused us a slow hiring for the rest of this year. As a result of this, our R&D and MG&A for the third quarter came in $150 million lower than the outlook we gave in July, reducing our spending as a percent of revenue to 29%.

As we look forward to the fourth quarter of 2011, we are forecasting the midpoint of the revenue range of $14.7 billion. Year-over-year revenue growth is expected to remain strong, growing 28% from the fourth quarter of 2010. The midpoint of the fourth quarter range is up 3% from the third quarter, lower than average historical seasonality based on concerns about economic growth in Europe.

We are forecasting the midpoint of the gross margin range to be up a couple of points from the third quarter at 65% as a result of higher volume, lower unit costs and lower startup costs. The fourth quarter gross margin forecast assumes a late quarter qualification for sale of Ivy Bridge, our first product on 22 nanometer.

The cash generation of our business remains strong, and in fact, increased significantly in the third quarter, with record cash flow from operations of $6.3 billion. Over the course of the year, we have made both significant investments in our business and have systematically increased the return of cash to our shareholders via increases in the amount of free cash flow we allocate to the dividend and via buybacks. Additionally, in the third quarter, we took advantage of record-low interest rates and borrowed $5 billion, primarily for the purpose of repurchasing stock. This was one of those rare opportunities where the weighted average after-tax cost of the debt was approximately 1/2 that of our dividend yield on the date of issuance.

Total cash investments ended the quarter at $15.2 billion, up $3.7 billion from the second quarter. So far this year, we have generated over $14 billion in cash from operations, paid approximately $3 billion in dividends, purchased nearly $8 billion in capital assets and repurchased $10 billion in stock.

Since restarting our share repurchase program in the fourth quarter of 2010, we have purchased over 500 million shares and reduced diluted shares outstanding by over 350 million shares. Additionally, we're announcing today that our Board of Directors has approved a $10 billion increase to the authorization limit for share repurchases.

The third quarter results illustrate several of the business drivers that we articulated at our investor meeting in May. Emerging markets are growing as a result of increased affordability of the technology that we sell. Our Notebook business saw strong unit growth at a very healthy mix. Our enterprise business continues to grow rapidly and generate high returns as data centers are built to support the explosion of devices that are computing and connecting to the Internet. The integration of both the Intel Mobile Communications Group and McAfee went well. Each had strong quarters and offered new opportunities to differentiate our core business as well as grow in new areas. And lastly, we are generating increasing shareholder return via increases in our dividend and we are contributing to record earnings per share via our buybacks. These trends have us on track to achieve record revenue and record profit in 2011.

And with that, let me turn it back over to Kevin.

R. Kevin Sellers

Okay. Thank you, Stacy and Paul. We'll now move to Q&A. [Operator Instructions] Before we poll our first questioner, Stacy has a brief announcement that he would like to make.

Paul S. Otellini

Yes. Before we begin the Q&A, I want to announce the change in our Investor Relations team here at Intel. When Kevin started in the role of Director of Investor Relations nearly 5 years ago, I told him he couldn't leave until our revenue was over $50 billion. Our revenue is on track to $55 billion this year, so it's time to announce that Kevin will be moving into a new role in marketing, where he'll be responsible for global advertising, online marketing and corporate events for the company. Therefore, I'm pleased to announce that Mark Henninger is taking over the role of Director of Investor Relations. Mark is known by many of you already and brings over 15 years of Intel experience with over 3 years of IR experience to the position. Of note, I'd like to say that I plan to hold Mark to the same standard as Kevin, which means that he can't leave the role until we're up another 55% and hit $85 billion in revenue.

With that, I'd like to thank Kevin for his leadership and welcome Mark to the role. We will now have Mark take us through the Q&A portion of the meeting.

Mark Henninger

Great. Thank you, Stacy. Operator, if you can go ahead and pool the line and introduce our first questioner.

Question-and-Answer Session

Operator

[Operator Instructions] Your first question comes from the line of Uche Orji with UBS.

Uche X. Orji - UBS Investment Bank, Research Division

First of all, Paul, let me ask you, ASPs have been stable so far, and as you start to look to drive Ultrabooks, is there any likelihood that this might be something that may -- you might have concede on as a way to drive that market, and obviously because a pushback in Ultrabook [indiscernible] on pricing, even at $1,000, do you think that is enough demand to drive this or do you have to make some concessions to drive the penetration?

Paul S. Otellini

Well, there are a couple of things. But the short answer to your question is that everything we envision for Ultrabook presumes that this happens at mainstream price points. Right? And so we don't think that people are going to spend more money on average for computers tomorrow than they spend today. So that's built into our model. Having said that, when you look at where Ultrabooks are this holiday season, they're in the $899, to $1,000, maybe $1,100 at the high end some of them. I think a year from now, you'll see them at, say, $699 and up. And at those price points, that there's plenty of room for Intel's Core Processor family to be in there. Second of all, as the form factor comes down, Intel's built-in materials in these Ultrabooks has a chance to go up, integrated graphics is used more often that not, solid-state drives will be used more often that not. And then the third point I'd make is around the ecosystem. Today, thin costs more. And so a lot of the components, not necessarily chips, but other things like the touchscreens or the batteries or the low-profile hard drives or solid-state drives cost a little bit more. And so what Intel's $300 million Ultrabook fund is aimed at is really accelerating the volume price points through volume commitments and investments for those components such that the industry can't collectively hit those price points. So I think that we've really thought this through in terms of how to get volume and profitably at the same time.

Uche X. Orji - UBS Investment Bank, Research Division

Just a quick follow-up. In terms of all the events happening in Thailand now and the comments from the [indiscernible] manufacturers, what is your sense as to what impact this will have on the PC supply chain? Obviously, I know it's early days, but do you have any thoughts you can share with us on how this may affect your guidance for the fourth quarter?

Stacy J. Smith

Yes. This is Stacy, Uche. We don't think it's going to have an impact on the PC market sales in the fourth quarter. Their combination of alternate supplies and inventory levels will carry us through.

Operator

Your next question comes from the line of Mark Lipacis with Jefferies.

Mark Lipacis - Jefferies & Company, Inc., Research Division

The question is most semiconductor companies are cutting their forecast and your 3Q is pretty close to seasonal, if not better. What do you think is going on? Are you gaining share from AMD? Are you gaining share of silicon content in the PC? Is this just what we should expect for an organic growth in PCs? Any clarification there would be helpful.

Stacy J. Smith

This is Stacy. I think it's really a continuation of the trends that we've been talking about. The emerging market demand was strong across the board. The Enterprise segment of the business was strong and it offset slower sales in the mature market consumer segment of the market. To your question on share gain with AMD, we'll wait and see their results. Our sense is we may have picked up a little bit of revenue share at the end of the quarter. But just to quantify that, I think it was probably on the order of $50 million to $100 million of impact to our business. I think the broader impact there is the leading-edge process technology becomes more and more complex, and we believe, becomes more of a competitive differentiator going forward. And not just with AMD, we're seeing this across-the-board. We're solving these problems a full generation ahead of everybody else. They're very difficult problems to solve. By being ahead of the rest in the industry, we can bring more features, more performance, bring cost down, be more power efficient. I think that has been a big driver of our business, and I think it will continue to be so.

Mark Lipacis - Jefferies & Company, Inc., Research Division

That's a great set-up for the follow-up question, which is there's a debate about x86 versus ARM in mobile and notebook processors. And I guess, if you could just share with us your view on the important vectors to compare x86 or Medfield or whatever the proper processor name for you guys is versus ARM, and when should we expect to see you guys shipping x86 into volume handsets?

Paul S. Otellini

Sure. Well, the short answer to your question, the last part of your question, is what I said earlier, which is you'll see Intel-based phones in the first half of next year from a variety of suppliers. And we won't make any announcements until those phones are ready to be shown in public. But the other answer to your question is that there is -- just like there's no one ARM, there's no one version of Atom going into these devices. We have -- Intel has tailored Atom for low-end PCs, it's now tailoring it for tablets. We're tailoring different versions of it for handsets and cellphones, and other versions for embedded and automotive implementations. And the ARM guys have done a lot of that in the past with different derivatives of their products. As the need for computing performance goes up, both the Intel architecture and the ARM architectures face the same fundamental physics problems, which is more performance requires more transistors. So at the end of the day, to deliver multi-core performance, better graphics performance in a battery-constrained environment is going to be a function of the transistors more than the microarchitecture. And that's where Stacy's comments on our transistor advantage, today and going forward, become critically important in understanding how this will play out.

Stacy J. Smith

Okay. Mark, let me just -- let me also add to that. I hear this argument a lot about ARM coming into the PC segment of the market, and the way I hear it articulated from some of our competitors is they're talking about they're going to come into that segment of the market, which is the low -- very low end of the PC market with a $30 processor to compete against our $100 processor and therefore, they win. I think if you look at the low end of the market today, it's pretty instructive. We're there today with $30 processors where we make a very good product margin on, actually, $30 kits in that segment of the market. AMD, our prime competitor, is in there, well under our pricing. They're selling at a $20-kit pricing. We still win the lion share of that market, and we win the lion share of that market because we bring more performance, we bring features, we're a reliable supplier, we have high quality levels. All of the benefits of doing business with Intel shine through there. It's going to be the same issue with ARM. All of those advantages will be even more so against ARM. And with AMD, they're socket and application compatible. With ARM, they're not. And so the cost and the complexity to our consumers is quite a bit higher. So I'm really confident in our play in that space. And as Paul said, at the end, it all comes down to we're solving these problems of physics 2 years ahead of the rest of the industry, that gives us a cause-to-performance a future advantage that become very difficult for people to match.

Operator

Your next question comes from the line of C.J. Muse with Barclays Capital.

Christopher J. Muse - Barclays Capital, Research Division

I guess, first question, in terms of your revenue guide up 3% sequentially at the midpoint, can you help me understand kind of the moving parts there? What's outperforming, what's underperforming within your various segments?

Stacy J. Smith

Sure. I'd be happy to. So first, I want to put that in perspective. It's 28% revenue growth year-on-year off of the back of a strong 2010. 2010 was a strong year for us. But you would look at the 3% and say against a kind of wide range of seasonal outcomes, that's kind of at the lower end or below the seasonal average. When you deconstruct what's going on, I think that we're a little cautious on Q4 based on, as I said in my prepared remarks, just macroeconomic concerns, particularly in Europe. And you have to remember that Q4 is a very strong consumer quarter and that has been a section of the market that has been sluggish really all year. So that's one. We're hearing from our customers that they're going to manage inventory to very lean levels, supply chain inventory very lean levels. So that also is, I think, a little bit of a headwind, assuming that in-demand ends up where we're predicting it to be. And then third, our IMC business, Intel Mobile Communications group, is down a bit. We have one key customer that's moved to a multi-source strategy. By the way, we knew that when we did the deal, but it's now coming to fruition, and so they'll be down a couple of hundred million dollars as we go from very a strong Q3 to Q4.

Christopher J. Muse - Barclays Capital, Research Division

And I guess, as my follow-up, in terms of CapEx, your budget is unchanged this year, and I think you've made sort of some internal changes as you think about cutting your 1270, 1272 roadmaps. And I guess my question there is, are you pulling in the 1272 so that, that will actually come in faster? Is that still on track for where you thought it would be 6, 9 months ago?

Stacy J. Smith

It's on track to where we thought it was 6 to 9 months ago. And remember, the capital we're spending this year is kind of 22 nanometer peak, it's the front edge of 14 nanometer, it's putting in place the space to support the fact that we're now a $55 billion business that's growing. So the kind of short-term movements don't really impact the capital budget. But to your question, 20 nanometer is similar to what we have believed all year.

Operator

Your next question comes from the line of John Pitzer from Credit Suisse.

John Pitzer - Crédit Suisse AG, Research Division

And I guess as my first question, Paul, can you talk a little bit about DCG? A lot of buckets within that. What's been kind of outperforming versus kind of underperforming? And as you think about maybe that maintaining at 15% top line year-over-year growth rate, you kind of had been flat here for the last couple of quarters. What's the drive to kind of the next leg of growth there?

Paul S. Otellini

Well, I think there's 3 elements of the business. There's the classic enterprise data center, which has been going through a sort of secular consolidation over several years now, starting with Nehalem, where people are moving from older generations of 1 and 2P servers to MP virtualized machines. And that, we've only begun to see the impact of that and some of the early hints on Romley that I talked about are indicative of the upside we still have in corporate enterprise data centers. The second big clump is in the Internet data centers. And those -- that growth rate, which is basically tracking the cloud growth rate, is really quite strong. Those customers tend to buy in a more lumpy pattern, around our best technology. So you might imagine that some of those large customers may be waiting for our next generation products to be deployed, which are being shipped now, but they'll start deploying in the next several months. And then the third one is in things around servers in the data center, networking and enterprise, and those businesses have been quite strong. You saw EMC's announcement this morning and our announcement that we had a record quarter in storage. There's really no difference in that. People are adding storage capacity as fast as they're having cloud computing capacity because they go hand and glove. I think that the biggest issue relative to the quarterly trends is probably this lumpiness in the Internet data centers.

Stacy J. Smith

I was surprised when I looked at the data -- John just said, give a little more color on that, how quickly these guys convert to our newest technology. We looked back at Westmere, and what we saw is in the first 90 days, they converted, that 90% of our sales to them we're on the new technology. And so as Paul said, I think we saw a little bit of a stall in Q3 as they were waiting for the Sandy Bridge version, and that's now telling for revenue and we're seeing acceleration in the business. So I think that skews those quarterly results somewhat.

John Pitzer - Crédit Suisse AG, Research Division

That's helpful. And then as my follow-up, Stacy, you gave us ASPs at the platform level. I'm kind of curious when you look within the PC client group, with MPU revenue up 15% versus chipset up 6% sequentially, can you help me understand on the MPU side, what was unit driven versus ASP and are you benefiting as you're tucking in integrated graphics? And how do we think about that going forward?

Stacy J. Smith

Yes, so first of all, it becomes increasingly difficult, if not misleading to try to separate out the CPU from the chipset. We're selling this as a platform of capabilities. And so I think that the most intellectually honest way for us to talk about it is at a platform level. In terms of what drove the Q3 results, it was really all units. Quarter-on-quarter pricing was relatively flat. It was a unit-driven story. We saw double-digit growth across PC units, and notebooks were notably stronger than the average.

Operator

Your next question comes from the line of Tristan Gerra with Robert W. Baird.

Tristan Gerra - Robert W. Baird & Co. Incorporated, Research Division

Could you talk about the assumption that's built around Ultrabooks in your Q4 guidance? Is it material?

Paul S. Otellini

No, it's not.

Stacy J. Smith

Yes, from a revenue standpoint, no.

Tristan Gerra - Robert W. Baird & Co. Incorporated, Research Division

And also you've previously talked about the expectation of say lower cost of sales outlook for next year. Assuming stable ASPs, you've mentioned several times now multiple design wins in mobile phone. Does that lead us to change any ASP assumption potentially for next year?

Paul S. Otellini

I'm not sure I understood the question. Are you talking about an average between our client ASP and phones? Is that where you're heading?

Tristan Gerra - Robert W. Baird & Co. Incorporated, Research Division

Well, whether the ASP outlook could change next year on the basis of your mix and, of course, this having some derivatives regarding your gross margin outlook.

Stacy J. Smith

Yes. I'll provide an ASP forecast to you in January for 2012. If you go back to the stuff from the investor meeting, what I showed was we've upped the range and I'm pretty confident that we're in the top half of the range in 2012, that hasn't changed, which is 60% to 65% or so.

Operator

Your next question comes from the line of Christopher Danely with JPMorgan.

Christopher B. Danely - JP Morgan Chase & Co, Research Division

In terms of the Q4 forecast, how much of the below seasonal sales would you say is due to just an inventory drawdown versus softening demand? And then any commentary from your customers on the demand environment would be great as well.

Stacy J. Smith

Yes, we don't think that there's an inventory drawdown. We ended Q3 lean and they all continue to be lean. So, I guess, what articulated is I think we're a bit below -- when I say we, the worldwide PC supply chain, kind of a bit below model today. It's healthy to lean, and we don't think that they're going to grow inventory levels in the fourth quarter.

Paul S. Otellini

Let me just add on customers as a development. Let me add something you didn't ask, but wanted to color my comments, which is the shape of Q3. And as we went through Q3, we saw September being very strong. So we didn't see a tail off at all in the third quarter. In terms of customer forecast, it's really -- it's an interesting dynamic that they are, obviously, moving very rapidly around the enterprise sales, but everyone is cautious around consumer sales, particularly in the U.S. and Western Europe. And not less so obviously in emerging markets. The other dynamic that's here is that there seems to be an adequate supply of components to build, in particular, laptops. So screens, power supplies, hard drives, all the stuff that a quarter ago was a little empty because of the tsunami, seems to be in more than adequate supply. At the same time, for other reasons, macroeconomic reasons, it's now cheaper to ship by air than it was in prior quarters. So our customers have more flexibility on the upside for taking turns environment should they see opportunity over the course of this quarter than we've seen in a couple of quarters. And so I think what you've got is them just staging to be cautious and not get caught on the downside with inventory, but to be ready to pounce on any upside opportunity.

Christopher B. Danely - JP Morgan Chase & Co, Research Division

And for my follow-up, I'll completely switch gears. This year, you guys have really made a statement through increasing the dividend and the buyback. If you could just maybe talk about sort of what drove that change? And then also any sort of metrics you look at as far as how you allocate cash either way and what is your sort of long-term goal for cash at Intel versus debt level? Anything like that would be helpful.

Stacy J. Smith

Yes, I'll take a shot and forgive me in advance. We tend to not talk about the level of cash that we're targeting, nor do we talk about, on a prospective basis, buybacks. But I'll go back and talk about our strategy and put it in place. I think you're right. You have identified, we -- between Paul and I and the Board have had robust conversations, made a very conscious decision to prioritize and articulate the strategy of what we're going to do with cash. And as I've said before, it's first and foremost invest in our business. You can see we're doing that in areas where we think we get tremendous value, it's leading-edge process technology, it's buying companies like McAfee and IMC where we think we generate important differentiated capabilities. Second is the dividend. And I will try to be very explicit that we are allocating more of our free cash flow to the dividend, and what I said at the investor meeting is that I'm targeting something on the order of 40% of free cash flow via dividend payout. And then we continue to use the buyback then as the third way that we return cash to shareholders and the combination of generating a lot of cash in 2011 and the fact that we were bringing down our cash balances sum from where they were to where they are, led to a pretty significant buyback to date. And I'm sure it didn't escape your notice that we also announced today that the Board has authorized, at Paul's and my request, another $10 billion buyback authorization.

Operator

Your next question comes from the line of Glen Yeung with Citigroup.

Glen Yeung - Citigroup Inc, Research Division

Now that emerging markets is becoming an increasing part of your business, can you talk about the changes we may expect to see in the next, call it, 4 to 8 quarters in terms of mix and form factor, but also in terms of new product uptake and the kind of visibility that you get from the emerging markets?

Paul S. Otellini

Well, there's about 3 variants of that. So in terms of mix and uptake of new products, in the last 4, 5 years, the emerging markets, at least, have not behaved materially different than our mature markets. That is the Tier 1 cities in China or Brazil tend to buy essentially the same products that you buy in Tier 1 cities of North America or Europe. And there's a very rich mix of products. In fact, for a while China was actually a richer mix than the United States on average. But now we're seeing Tier 3, Tier 4 cities come on. So that's being mitigated a bit. In terms of being able to have visibility, I think the visibility is as good, if not better. In these markets, there is still a reasonably large amount of the business that is still desktop and that is distribution related. And that business, we have almost realtime a visibility into because we don't recognize revenue until a unit is sold out of distribution, which means it goes into a PC, being built that day basically. So I like our visibility in these markets, I like the buying pattern, and I like the rich mix and I like, obviously, the upside opportunity of new buyers.

Glen Yeung - Citigroup Inc, Research Division

Second question is on Ultrabook. The commentary often centers around what's ARM going to do to Intel next year. But by the same token, do you think that Ultrabook stimulates overall PC growth to maybe be above what we would have expected without Ultrabook and does that growth, even if ARM takes some share, offset any potential they may have?

Paul S. Otellini

Well, I would hope so. And I think there's a couple of things next year that are intriguing. One is the growth of Ultrabook, and the other is a new release of Windows. And historically, a new release of Windows has benefited Intel nicely. I think that we -- while there is certainly some possibility of ARM incursion into PC space, I think it's going to be minimal for the reasons that Stacy said earlier. I actually look at it the other way around, which is to date, our presence in tablets has not been that large. With Windows 8, you have a monolithic operating system across PCs and tablets that Intel can participate in and bring in the advantage of legacy support for applications and device drivers. And in that dynamic, I think we have, net, more upside than downside.

Operator

Your next question comes from the line of James Covello with Goldman Sachs.

James Covello - Goldman Sachs Group Inc., Research Division

In terms of the market, you guys have given us a great articulation of why your business is growing so much faster than the third-party data suggests, and I think a lot of that is the emerging markets that you guys have been very helpful in, in allowing us to understand. What I don't understand as easily is your business versus the other component companies that theoretically should sell into those same emerging markets: DRAM, panels, power management, hard disk drives. I mean, all of those things also would sell into those same emerging markets. So can you give us a little bit of perspective on why your business is so much better than theirs?

Paul S. Otellini

At the end of the day, it can't be. For every laptop, there's a chip and a panel. There is a bit higher fraction of desktops in emerging markets, but not so much that we would throw the data off along the line that you're suggesting. My sense is that -- those industries are far less concentrated. And so it's probably harder for the third-party to get their arms around the dynamics, particularly as there may be some differential quality going into parts selection to some of these markets. People may sell their off-spec panels into cheaper notebooks going into some of these markets, or off-spec memory and things like that. I don't know that that's a big factor, but it's the only thing that comes to mind in trying to explain that economy.

Stacy J. Smith

It might also be, and I'm speculating here, but we have seen people manage inventory levels on CPUs very low. And so it's possible that what you see as inventory builds up on something, there's a correction here, a correction there, whereas with CPUs because of hubs and the cost of the CPU relative to the overall system, we get more realtime sales. But that's speculation, Jim. At the end of the day, as Paul said, over time, they have to match.

James Covello - Goldman Sachs Group Inc., Research Division

That's helpful. And for my follow-up, if I could ask, can you guys give us an estimate on how much unit capacity might increase in 2012 and then when that capacity ramp would start vis-à-vis the new fab coming online?

Paul S. Otellini

Yes, I'll provide a forecast for 2012 in January, Jim. I'm not going to go there yet.

Operator

Your next question comes from the line of David Wong with Wells Fargo.

David M. Wong - Wells Fargo Securities, LLC, Research Division

When might we expect the launch of your 32 nanometer chip for Android tablets? I guess that's close with you?

Stacy J. Smith

No, 32 nanometer is Medfield and...

Paul S. Otellini

The tablet. Yes, it's the Medfield core.

Stacy J. Smith

It's the Medfield core.

Paul S. Otellini

Yes, you'll see those shipping at first half next year.

David M. Wong - Wells Fargo Securities, LLC, Research Division

And the other thing is that you talked about a stall in Q3 waiting for Sandy Bridge for storage and Internet data centers. So similarly, do you expect a jump in server processor sales in the first half of next year when Romley-based enterprise servers start shipping?

Paul S. Otellini

Well, I gave you my -- the pent-up metrics for Romley, and that's about as far as we can go. I mean, we're 20x the kind of design activity and 2x or 3x the backlog activity of Nehalem.

Stacy J. Smith

Yes. I think it would be safe to say a rapid start for Romley. The question is macroeconomic and we'll provide that.

Paul S. Otellini

But we have mobile versions of the Sandy Bridge server products. So they all start phasing in over the next several months.

David M. Wong - Wells Fargo Securities, LLC, Research Division

My final thing, when might we expect the first PCs with Ivy Bridge chips to be on shelves?

Paul S. Otellini

Spring.

Operator

Your next question comes from the line of Vivek Arya with Bank of America Merrill Lynch.

Vivek Arya - BofA Merrill Lynch, Research Division

Now my question, Paul, a number of foundries seem to be struggling at the 28 nanometer node, and obviously, one of Intel's strengths is in process and manufacturing in your roadmap at 22 nanometer and then 14 nanometer. I'm curious, how is that benefiting your discussion with potential tablet and smartphone customers about long-term relationships? Any color would be helpful.

Paul S. Otellini

Well, as you can imagine, it only helps having those conversations. And I said earlier, I think at the end of the day in these markets, transistors are going to be a defining point of differentiation. And when we look at these long-term customers in this area, people making long-term design commitments, the fact that we're operating at 22 today and have great line of sight to 14, and they see our internal roadmaps on what we can do on System on Chip at those 2 generations, it becomes pretty compelling. And I understand the proof's in the pudding here so to some extent you're going to have to wait until we bring a phone up on stage and run it through its paces and bring a tablet up on stage and run it through its paces vis-à-vis the competition to be able to be convinced to this.

Arnab K. Chanda - Roth Capital Partners, LLC, Research Division

And one follow-up for Stacy. Stacy, Q3 gross margins were a tad below the expectations. I think the benefits of the 22 nanometer startup cost declines are not as quickly as I think you had previously hoped. What is behind that? And just in sort of a related question, do you expect any additional startup cost as you start thinking about SoC's next year?

Stacy J. Smith

Yes. So let me just take you -- let me do the Q3 gross margin walk. It wasn't exactly as you stated. I caught several small things. But we had anticipated that we would get benefit from higher volume, lower unit cost, lower startup cost and less impact associated with the Cougar Point product issue that we've had in the first half. We got all of that. We got a point for volume, we got a point for unit cost, we got about 0.5 point for startup cost, 0.5 point of having less Cougar Point. When I go back to the forecast I made, you probably had 3 things that moved in different directions. We got a little more good news than I expected on product cost. I got a little less good news than I expected on startup costs and Cougar Point. None of those were equal to 0.5 point of gross margin. So they're all relatively small, and the combination of them just caused me to round down. So it's kind of as simple as that. In terms of impact of 22 nanometer SoC startup cost, I struggle to answer that question a little bit. We have startup costs all the time. As I've shown in the past, we have a baseline of startup costs and then when we're launching a new process technology, which is for us odd years, you tend to see an elevation in those startup costs. So that hasn't changed. I'd expect startup costs to be less next year, and then they'll elevate again in 2013 as we're starting to bring 14 nanometer to the marketplace. And SoCs don't change that equation for me.

Mark Henninger

And operator, we'll take 2 more questions, please.

Operator

Your next question comes from the line of Stacy Rasgon with Stanford Bernstein.

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

A question on your guidance, particularly weakness in Europe. What does your European strength look like this quarter, at least from an end-market standpoint? I was actually kind of surprised that your direct sales into Europe were up 16%. But I find it hard to believe, that I guess your total end-market demand in Europe was hugely strong this quarter. And do you expect it to be significantly weaker in Q4 versus Q3, which is driving, I guess, the full amount of the sub-seasonal guidance? Or what does this actually imply, I guess, for outlook in other regions, particularly areas where you're currently seeing strength?

Stacy J. Smith

So first, Stacy, you have to separate out what we report to you as billings versus the strength of end markets. And remember, our billings data, as Paul was talking about earlier, will capture typically the channel sales, which is more desktop-oriented -- actually it's almost all desktop-oriented, and it captures server builds, which sometimes are done inside the market. The rest are built by big MNCs, it tends to be build in either Taiwan or China, and then is shipped into Europe. And so our comment on weakness in Europe was more of an end-market comment based on mature market consumer that does intend to be built inside of Europe. I'll pause there and pause for your other questions.

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

So what did your end-market demand in Europe actually look like in Q3 and how do you expect that to be different in Q4? Was your end-market demand in Europe significantly strong in Q3?

Stacy J. Smith

No, it was -- again, it paralleled the high-level comments. It was, for EMEA, it was strong in the emerging markets of EMEA. So central Eastern Europe, Middle East. For Enterprise, it was relatively good. We saw much slower growth in mature market consumer in EMEA and you'd say it was sub-seasonal growth in that segment. We would expect those trends to continue into Q4. The difference is in Q4, it is the big consumer selling season in Europe, and so the impact on our business is going to be bigger.

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

So you just had a stronger, I guess, enterprise demand across, which gave you very strong results versus your guidance this quarter, and the enterprise lift eases in Q4 and you get exposed to consumer weaknesses. Is that how I ought to be thinking about this?

Paul S. Otellini

We saw strong emerging markets and enterprise, we expect that to continue, so it doesn't lessen the differences, as Q4 is a much bigger consumer, mature market consumer selling season, which is why we're below season.

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

And for my follow-up, I just want to see if I can get a little color around your depreciation. So it looks like you took your depreciation guidance for the end of the year up from where it's been. And I would assume that is related to CapEx and among other things. Can you give us some feeling for where you expect, I guess, depreciation run rates to go in 2012 versus where they've been running for much of 2011 and maybe where they're running versus Q4?

Stacy J. Smith

Yes, I don't think we took our depreciation forecast up. I think we were right...

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

Was it 1.4 versus 1.3 or 1.2 the quarter before?

Stacy J. Smith

We may have a round that caused it to round from 1.3 to 1.4. But in essence, depreciation for the quarter and for the year is right on what we expected. And I'll provide a depreciation forecast for 2012 in January. I just looked at the data, there's no change, Stacy, to the depreciation forecast.

Mark Henninger

Operator, this will be our last question.

Operator

Your final question comes from the line of Ross Seymore with Deutsche Bank.

Ross Seymore - Deutsche Bank AG, Research Division

The first question, Paul, in 2011, the enterprise side of things and the demand was very strong, and the emerging markets were as well. As we look into 2012, especially giving Ultrabooks and potentially what Windows 8 is going to do, how should we think about the enterprise versus the consumer in aggregate and what that may or may not mean to Intel's mix, gross margin and ASPs?

Paul S. Otellini

Well, the overall pattern hasn't changed. Enterprise -- big business enterprise, as opposed to small, medium business, represents about 1/3 of our PC sales. And that hasn't changed. That's a large installed base. That installed base is not going to be an early adopter of Windows 8. Enterprise always adopts it after this first service pack is out, which will be sometime in 2013. So I think we've got another year of conversion to Windows 7 ahead of us. As you remember, it is still -- we're not even halfway through the XP and Windows 95 conversion to Win7 right now. So I think that will continue over the course of next year. People will buy machines that are, of course, Win8 ready in their buying patterns as they -- in enterprise next year. In terms of Ultrabook and Win 8, I just -- that really is a function of the health of the consumer market a year from now. And you've seen the same GDP forecast I have. I think it's too early to call that. I will point out that we have been pleasantly -- we've enjoyed good unit growth and good revenue growth the last couple of years in the middle of difficult economic times. And that really speaks to the nature of what our products do for people and businesses. They're tools of productivity. So even in bad times, we've done pretty well. So even if you have -- if you project another year of difficult GDP environment in the mature markets, I would think we could do equally as well, as we have the last couple of years here.

Ross Seymore - Deutsche Bank AG, Research Division

And I guess then for my follow-up, changing gears completely, on the Atom side of things, down a bunch in this last quarter. How much of that is still Netbooks? And where should we think about that Atom revenue bottoming, and then how should we think about it going up as the embedded side of Atom starts to gain even further revenue traction versus the design win traction you've talked about before?

Stacy J. Smith

Yes, the quarter-on-quarter change is almost all Netbooks. Actually it is, the downward change is all Netbooks. In terms of your question about embedded, like others that play in the industrial and automotive segment of that market, we saw weak results in the third quarter. It's pretty clear there was an inventory overhang out there that people had to work through. When I dig in, in the Embedded business, the data we showed you in May, where we're looking at the design wins that we're engaged in, the design wins that have been won, the architectural conversions, if anything, it looks like we're accelerating in terms of conversions coming to us from MIPS or ARM to Atom. And so I think the long-term pieces of growth in that business is still intact.

Mark Henninger

Thanks Ross, and thank all of you for joining us on our call today. As a reminder, our Quiet Period for the fourth quarter of 2011 will begin Friday, December 16. Additionally, certain of our smaller business outlook items, the forecast for amortization of acquisition-related intangibles, impact of equity investments, interest and other and tax rate will be pulled from guidance at the close of business, October 25, and not subject to update by the company after that time. Our Fourth Quarter Earnings Conference Call is scheduled for Thursday, January 19, 2012. Thank you, and goodnight.