The PC Today and Tomorrow

The Facts

The PC is 30 years old in 2011 and its brains, the microprocessor – is even older, a staggering 40 years old. The first microprocessor – the Intel® 4004 – saw the light in 1971. Since then, the PC has been undergoing a transformation to become the phenomenal tool is today and has experienced a meteoric rise in popularity and pervasiveness. Is there still room for expansion and what shape will future incarnations take? Here are a few facts to help shed light on these topics.

The PC market

– On average almost one million PCs were shipped every day during 2010.[1] Growth is likely to continue when you consider that PCs are much more affordable today; the weeks of average income to buy an average PC have dropped from 5.5 weeks in 2000 to 1 week in Western Europe[2].

– A survey among 1,000 adults in the US revealed that in 2008, 2009 and 2010 consumers placed notebooks/laptop PCs at the top of their consumer electronics wish lists.[3]

– Forrester predicts that by 2015 there will be 2.25 billion PCs in use across the world (compared to one billion PCs at the end of 2008) and this will be driven largely by emerging markets such as Brazil, Russia, India and China accounting for more than 800 million new PCs by 2015.[4]

– Gartner forecasts a 10.5% increase in PC shipments in 2011 (rising to 387.8m units) and a 13.6% growth in 2012 (to 440.6m units). While this is down on a previous forecast, the signs are still very much of a healthy growth market on the global stage.

– Intel projections for PC segment growth in 2011 remain in the low double digit range based on the early sell-through strength we witnessed at the beginning of 2011 and the great reception to our 2nd generation Intel® Core™ processor based PCs.

PC market growth and processor performance

– PC growth is increasingly driven by the huge rise in user-generated content. For example, the use of video sharing sites has doubled from 2006 to 2010. Each month alone, 12 billion videos are viewed on YouTube.[5] People are predominantly viewing and uploading this content onto their PCs and understand that as 3D content becomes computing power is required to view and edit 3D content.

– The recently released 2nd generation Intel® Core™ processors are designed to support PC growth by responding to demand in terms of functionality PC users want. For example, they incorporate technology that can convert a four-minute HD video file on a laptop to play on an iPod in only 16 seconds.

– Extra processor performance translates into real user benefits; today these are:

- o Uninterrupted flow in your activities – whether you are watching a movie, creating content or using social media.
- o An immersive experience – where the quality of what you see and hear makes you feel connected
- o A simple and seamless experience in terms of managing your devices

The shape of things to come: the Ultrabook™

- Intel is working on redefining the consumer PC experience by delivering sought after user benefits such as: instant on, all day battery life, security, touch interface, seamless interconnectivity between devices, support for all OSs, security and best class graphics - all at mainstream price points.

- Intel plans to evolve the notebook into an ultra-simple, ultra-thin, ultra-versatile internet device.

- In May 2011 Intel announced a new category of mainstream thin and light mobile computers, called Ultrabook™. These computers will marry the performance and capabilities of today's laptops with tablet-like features and deliver a highly responsive and secure experience, in a thin, light and elegant design. The Ultrabook™ will be shaped by Moore's Law and silicon technology in the same way they have shaped the traditional PC for the past 40 years. Intel expects 40% of consumers laptops to be in the Ultrabook™ category by end of 2012.

- By the 2013 timeframe, we anticipate that market as a whole will have undergone the conversion, and that exceptionally thin, sleek, fast, secure, and robustly capable systems will be the new norm across the range of volume prices points.

- Intel's leadership in silicon innovation will benefit more users as computing becomes more pervasive across multiple devices.

- More demanding usages require more capable yet portable devices what in turn necessitate power-efficient processors. Intel's roadmap is focussed on delivering the best power-performance computing solutions to users

1: Intel estimate
2: IDC Worldwide Quarterly PC Tracker – January 2011
3: Consumer Electronics Association 2010 Holiday Survey
4: Forrester, Worldwide PC Adoption Forecast 2007 to 2015. June 11, 2007
5: Analysis Mason: Overview of recent changes in the IP interconnection ecosystem, May 2011