Sean Maloney
Executive Vice President
Faster Ramps With Each Generation

Millions of Die

Week of Production Ramp

- 32 nm
- 45 nm
- 65 nm
- 90 nm

>50% Reduction in time to ramp from 90nm to 32 nm

... And 22 nm will be faster!
Energy-Efficient PERFORMANCE
Built on Moore’s Law

Lower Transistor Leakage

Higher Transistor Performance (Switching Speed)

Source: Intel
Computing is Growing ... In All Forms

2011 TAM Forecast

- Smartphone
- PC
- Tablet
- Netbook

Source: Intel

2014 TAM Forecast

- Smartphone
- PC
- Tablet
- Netbook

Source: Intel
New Netbook Capabilities
Brought to You by Cedar Trail

Cedar Trail Platform Features

- Sleek/Slim
- Fanless
- HD Video
- Better Performance
- Long Battery Life

Experience Features

- Intel® Rapid Start Technology
- Intel® Wireless Display
- PC Sync\WLAN
- Quick Connect
- 3G

Cedar Trail Enabling Innovation in Design and Features
Intel® Atom™ Z670 Tablet Platform

Platform Features
- Port of Choice: MeeGo
- Better Battery Life
- HD Video

OEMs
- Fujitsu
- Lenovo
- Toshiba
- NEC
- Dell
- Motion Computing
- WeTab
- Evolve
- NextPC
- ViewSonic

ODMs
- Compal
- Foxconn
- Inventec
- Pegatron
- Inventec
- Clevo
- Quanta Computer
- BYD
- Bitland
- MSI
- Wistron
First 32 nm Smartphone and Tablet Platform
Tablet reference design enabling sub 9mm designs that weigh less than 1.5 lbs.
Product shipping in the next 6-9 months
Intel® Atom™ Processor Evolution

1st Gen 45 nm
Architectural Improvements
10X CPU Thermal Power Reduction*

2nd Gen 45 nm
Process Technology Improvements
50X Platform Idle Power Reduction*

3rd Gen 32 nm
10X Lower Leakage Transistors*

4th Gen 22 nm
~2X Lower Active Power Transistors*
~2X Density Improvements*

*Compared to previous generation
Healthy Room for PC GROWTH

- Can’t Afford: 3.5B
- Own a PC: 1B
- Can Afford But Don’t Own: 2.2B

... room for others as well

Source: MS&F
Affordability is a Key to PC Penetration

2010 Actuals
PC Penetration

North America
W. Euro
Japan
E. Euro
China
M. East
India
Brazil

0% 20% 40% 60% 80% 100%

WOI to Purchase a Notebook PC (@ $672-1098 SPP)

Sources: WOI to buy NB PC - Market Sizing & Forecasting (MS&F) Installed PCs - Market Sizing & Forecasting (MS&F) Population by GEO - Economist Intelligence Unit (EIU)
Affordability is a Key to PC Penetration

2015 Forecast
PC Penetration

WOI to Purchase a Notebook PC (@ $473-643 SPP)

Sources: WOI to buy NB PC - Market Sizing & Forecasting (MS&F) Installed PCs - Market Sizing & Forecasting (MS&F) Population by GEO - Economist Intelligence Unit (EIU)
Evolution of the PC

NOW is the Time to Reinvent the PC Platform AGAIN!
The 2nd Generation Intel® Core™ i5 Processor is our 1st Step in that Direction
Intel® Smart Connect Technology
Content continuously updated while the notebook is asleep!

Intel® Rapid Start Technology
~5-6 seconds from hibernate!
Ultrabook™

Ultra Thin

Ultra Secure

Ultra Responsive

Smart Visual Experience

Long Battery Life

The Attributes of a Tablet, the Performance of a PC.
NO COMPROMISE
Creation of the Ultrabook™

40% of Consumer Market
By End of 2012
The Next Evolution is Just Around the Corner ...
2012 - Ivy Bridge

**Smart Performance and Responsiveness**

**The Best Visual Experience**

**Security for Consumers**

22 nm
Thunderbolt™ Technology
Transformational high-speed, dual-protocol, PC I/O

Leading Performance in PC I/O
- Faster speed & multi-tasking with bidirectional, dual-channel, 10Gbps per port
- Pro-class A/V creation with time-synchronized low-latency streaming
- Connect to more devices with data + display on ONE cable and ability to daisy chain

The Fastest Connection to Your PC Experience*

* As compared to other PC I/O connection technologies including eSATA, USB, and IEEE 1394 Firewire**. Performance will vary depending on the specific hardware and software used. For more information go to http://www.intel.com/technology/io/thunderbolt/index.htm

*FASTCOMPANY*
“It could change everything, right down to device design”
April 11
Thunderbolt™ Technology
Industry Participation

*Other names, brands and logos may be claimed as the property of others.
Sandy Bridge and Ivy Bridge

Steps 1 and 2 of transformation

Making It Mainstream!

System Price Points

HIGH

ULTRABOOK™

LOW
Lowering Notebook Power

Power
40W
30W
20W
10W
0W

35W
Lowering Notebook Power

>50% DECREASE

Ultrabook™

Power

40W
30W
20W
10W
0W
New Optimization Point – Haswell in 2013

Mobility & Style

Ease of Use

Security & Privacy

Connected & Aware

Efficient Performance

New Architecture to Drive Ultrabook™ Category
Intel’s Cloud 2015 Vision

FEDERATED

AUTOMATED

CLIENT AWARE

Desktops
Laptops
Netbooks
Tablets
Smartphones
Smart TVs
Embedded
There’s Money in the Cloud!

Cloud-based services for storage, synchronization and entertainment will explode as more and more devices connect.

MORE SERVERS!

Source: IDC 2010
For Every ~600 Smartphones Deployed, 1 New Server is Purchased!
Intel & Taiwan: 30 Years of Building the Future
Touch • Future
平佈親雲 指點未來
e21FORUM 2011