# LET'S SEE WHAT DEVELOPS. IDF2013 INTEL DEVELOPER FORUM



Sponsors of Tomorrow.





# Reinventing the Computing Experience

## Kirk Skaugen

Senior Vice President & General Manager PC Client Group



Sponsors of Tomorrow.







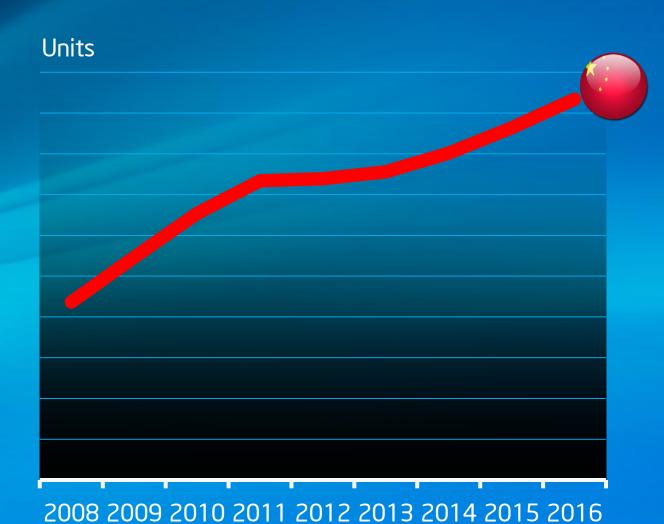




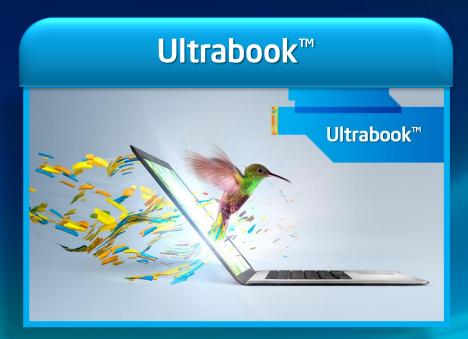




# China #1 PC Consumption Country



# Beijing IDF 2012 Making an Impact









# Agenda

Ultrabook™: Reinventing Personal Computing
New "2 for 1" Convertibles/Detachables

4th Generation Intel® Core™ Processors

Amazing New Computing Experiences



e.weibo.com/IntelIDF



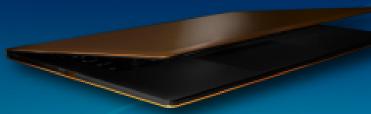
WeChat: IDF Express



### Ultrabook™

2011

Category Introduction



2nd Generation Intel® Core™ Processor 2012

Ramp into
Mainstream Price
Points + Touch

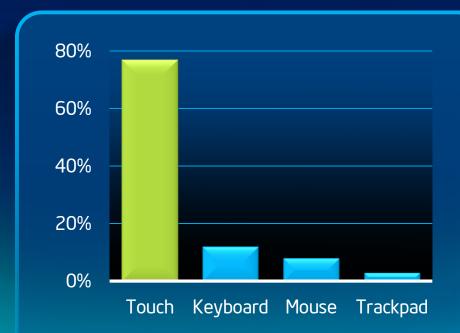
3rd Generation Intel® Core™ Processor 2013+

"2 for 1" Computing



4th Generation Intel® Core™ Processor

#### Research



Touch Was Chosen Nearly 80% of the Time

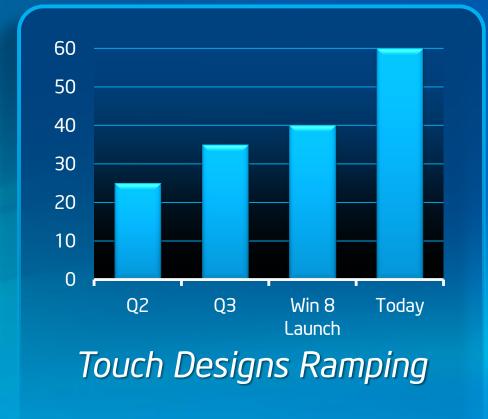
Intel® Dec 11 Touch Research Study

# Touch Capacity



Ecosystem Investment

#### **Designs**



Source: Intel Design Tracker



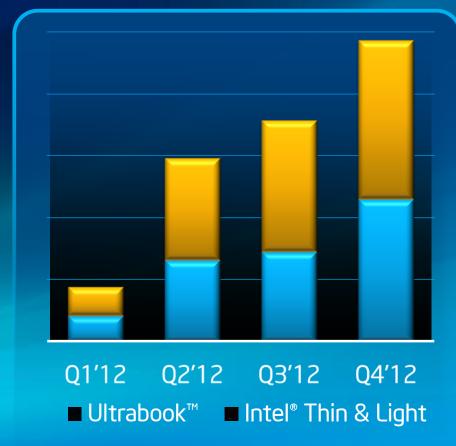
"Ultrabook...Intel's roadmap has ventured further than just thinner laptops to *genuine* innovation, with all the upheaval and rethinking that new technology requires."

## Ultrabook™ Impacting Broad Mobile Market

**Everything is Thinner** 



17W Product Ramp



**Innovations** 

Touch

2 for 1 Convertible and Detachable Form Factors

Voice

Ultrabooks Continue To Drive Mobile Innovations

# A New "2 for 1" Mobile Computing Experience

Smartphone



Tablet



Consumption Usages

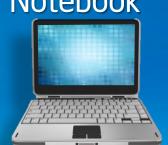
Ultrabook™ Convertible & Detachable



Ultrabook™



Notebook



Creation/Productivity

## 2 for 1 Value Proposition: A Notebook or a Tablet? YES!

Detachable

Convertible

Notebook First 15W Processor

**Additional** Differentiation Opportunity

≥13.3"

Additional Differentiation Opportunity

Tablet First 7W\* Processor



Slate



Clamshell

With Touch

New Lower Power 3rd Generation Intel® Core™ Processors

System Availability: June

lenovo





Intel® Core™ Processor Performance
Thinner & Lighter

# New Lower Power 3rd Generation Intel® Core™ Processors System Availability: Q2



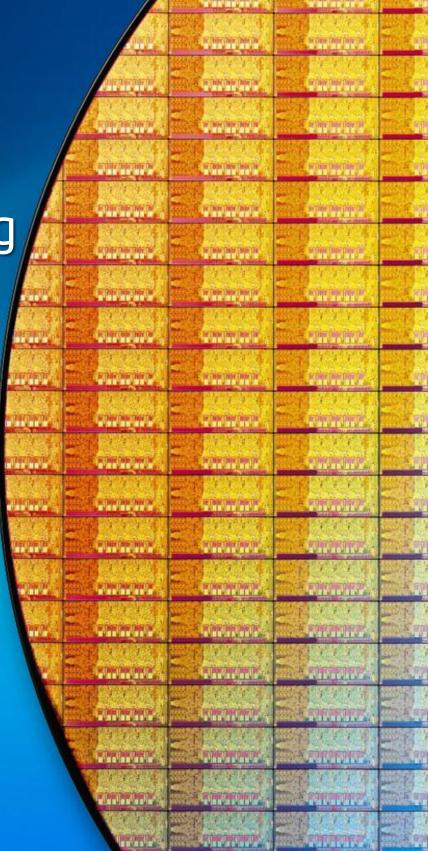
## Agenda

Ultrabook™: Reinventing Personal Computing

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#### 4th Generation Intel® Core™ Processors



**NEW** Architecture on 22nm Tri Gate

NEW Intel Power Optimizer: 20x Power Reduction vs. 2nd gen Intel® Core™ Processors

**NEW** Integrated on package PCH for amazing form factors

**NEW** Integrated Audio DSP: more battery life, higher quality

Shipping Now and On Track for Q2 2013 Launch

# 4th Generation Intel® Core™ Processors Enhanced Graphics

3D Graphics



**NEW** Up to 2x performance AGAIN

NEW Integrated on-package EDRAM Memory

NEW API Support: DX11.1, OpenCL 1.2, OpenGL 4.0

Display



**NEW** 3 Screen Collage Display

**NEW** Enhanced 4k x 2k support

NEW 2x bandwidth with Display Port 1.2

Media



**NEW** Faster Intel® Quick Sync Video

**NEW** Faster JPEG & MPEG Decode

**NEW** OpenCL 1.2 Support

# 4th Generation Intel® Core™ Processor-based Ultrabook™ Experience

#### Responsive

- Amazing Performance to Create & Consume Content
- Natural UI: Touch & Voice\*
- Always Fresh Data
- Wakes in a Flash

#### **Protected**

- Intel<sup>®</sup> Identity Protection
- Anti-virus/ Anti-malware
- Facial Log-in\*
- vPro<sup>™</sup>
- Small Business Advantage\*



#### Mobile

- All-day Battery Life
- Thinner, Lighter Designs
- Intel<sup>®</sup> Wireless Display

#### **Stylish**

- Stunning Visuals
- 2-in-1 Convertibles & Detachables\*
- High Resolution Display\*

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. Configurations and methodologies in backup. For more information go to http://www.intel.com/performance.

# Lower Power 4th Generation Intel® Core™ Ultrabook™ Reference Design 3:07







# Bay Trail-M & D

22nm, PC I/O

Low Power: All Day Battery Life Fan-less Form Factors

New Micro-architecture

Up to Quad-core Performance



**Evolution of the Desktop** 



Semi Portable





## New AIO Experiences A Broad Ecosystem

after-mouse.com



sesameworkshop.











**Multi Touch Applications** 









lenovo联想













## A Broad Intel® WiDi Ecosystem





**NETGEAR**<sup>®</sup>









**TOSHIBA** 

# Expanding WiDi in China















Perceptual Computing
Adding "Senses" for Life-like Interactions



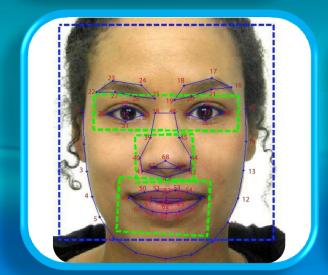
















## Summary

- "2 for 1" Ultrabook™ Convertibles & Detachables Ramping 2H 2013
  - "A Tablet When You Want It, a PC When You Need It"
- 4th Generation Intel<sup>®</sup> Core<sup>™</sup> Processors:
  - Game Changing Graphics & Media; On Track for Q2 2013 Launch
- New Bay Trail M & D for Entry Computing
- Prepare for New Immersive Experiences:
  - Touch, Voice, Gesture, Wireless Display





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