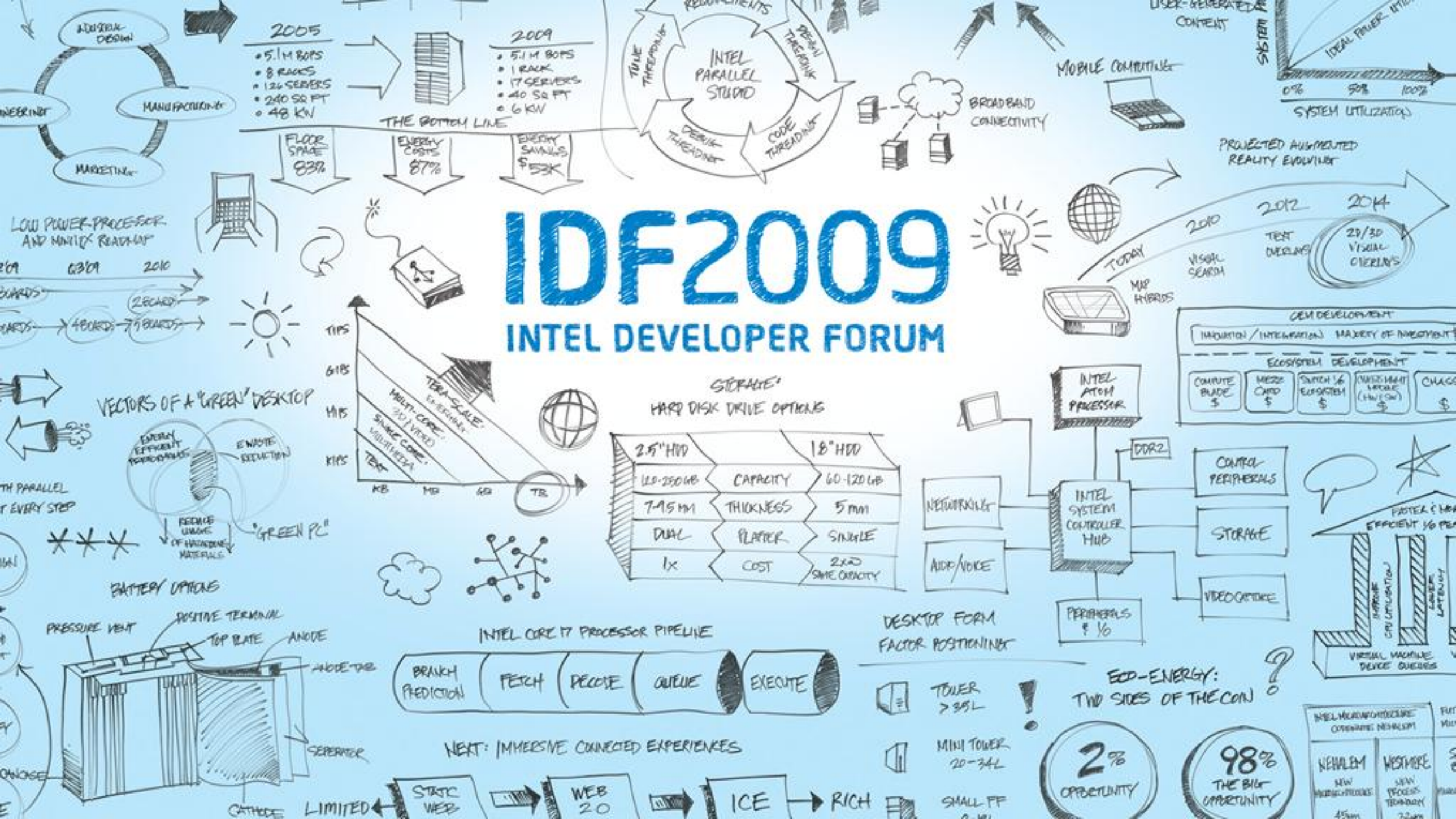
IDF2009
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SEPERATOR
CATHODE
STORAGE: HARD DISK DRIVE OPTIONS
2.5" HDD
1.8" HDD
CAPACITY
THICKNESS
PLATTER
COST
SINGLE
INTEL ATOM PROCESSOR
DDR2
INTEL SYSTEM CONTROLLER HUB
NETWORKING
AUDIO/VOICE
CONTROL PERIPHERALS
STORAGE
VIDEO CAPTURE
PERIPHERALS & I/O
INTEL CORE 17 PROCESSOR PIPELINE
BRANCH PREDICTION
FETCH
DECODE
QUEUE
EXECUTE
DESKTOP FORM FACTOR POSITIONING
TOWER >35L
MINI TOWER 20-34L
SMALL FF
ECO-ENERGY: TWO SIDES OF THE COIN
2% OPPORTUNITY
98% THE BIG OPPORTUNITY
NEXT: IMMERSIVE CONNECTED EXPERIENCES
STATIC WEB
WEB 20
ICE
RICH
LIMITED
NEHALEM
WESTMERE

Building a Continuum of Computing

Spectrum of Computing on Intel Architecture

INTERNET-CONNECTED DEVICES

Intel's Smallest Processor Built with the World's Smallest Transistors

CE

Embedded

Handheld

Netbook

PC CLIENTS

The Fastest Processor on the Planet

Laptop

Desktop

SERVERS

The Greatest Intel® Xeon® Performance Leap In History

Enterprise Server

High-Performance Computing

Internet Data Center

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CONTINUUM

Moving Seamlessly Throughout the Computing Spectrum

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IDF: Established 1997

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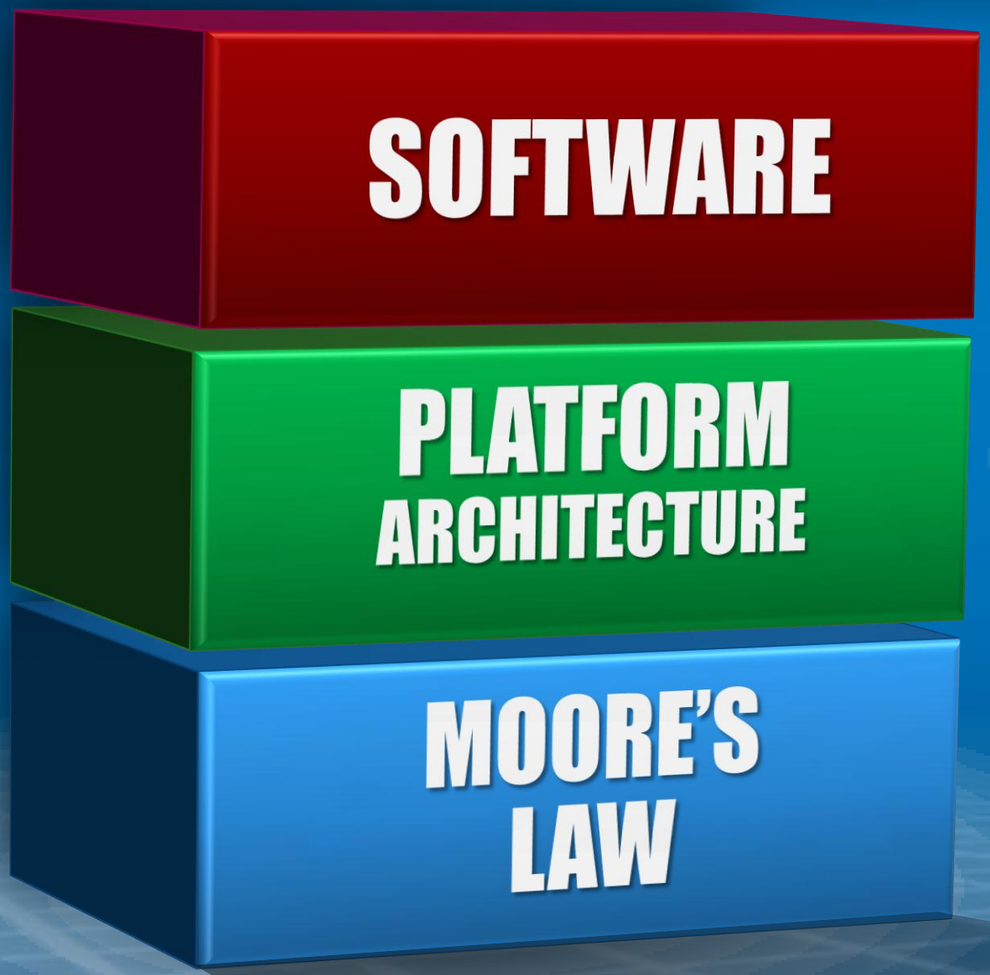
Technology

Creating the Continuum

Opportunity for Developers



Technology

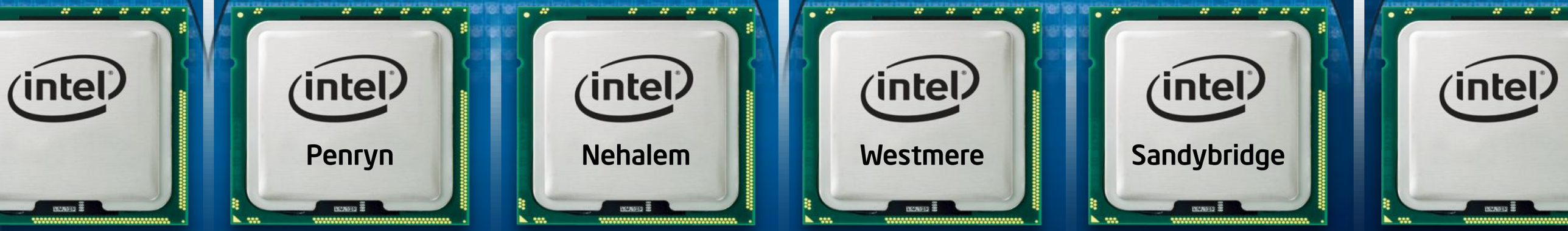
Intel's Relentless Pursuit of **Moore's Law**

Intel Platform Architecture

Mainstream PC and Server

Tick | Tock | Tick | Tock

45nm | 32nm



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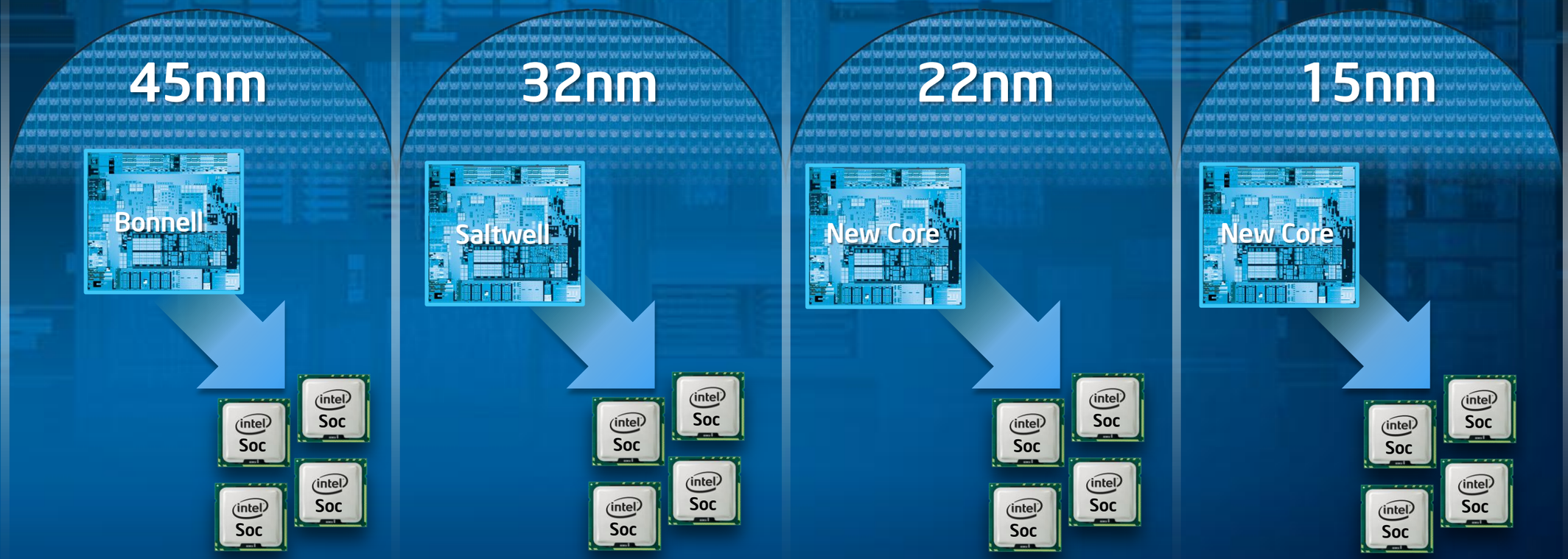
Intel's Second Platform Architecture

Internet Connected Devices

Intel® ATOM™ Processor Cores

System-on-Chip Products



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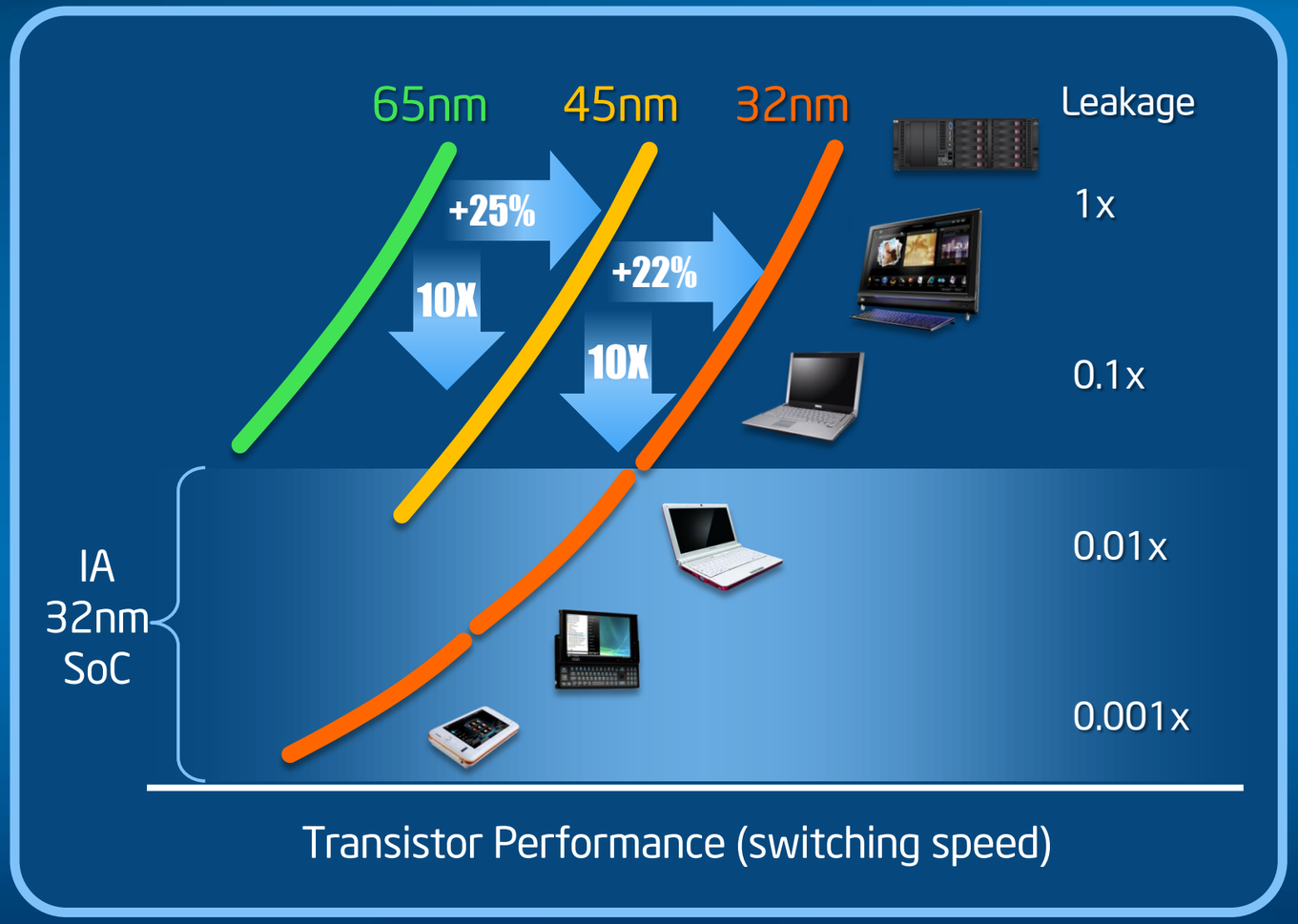
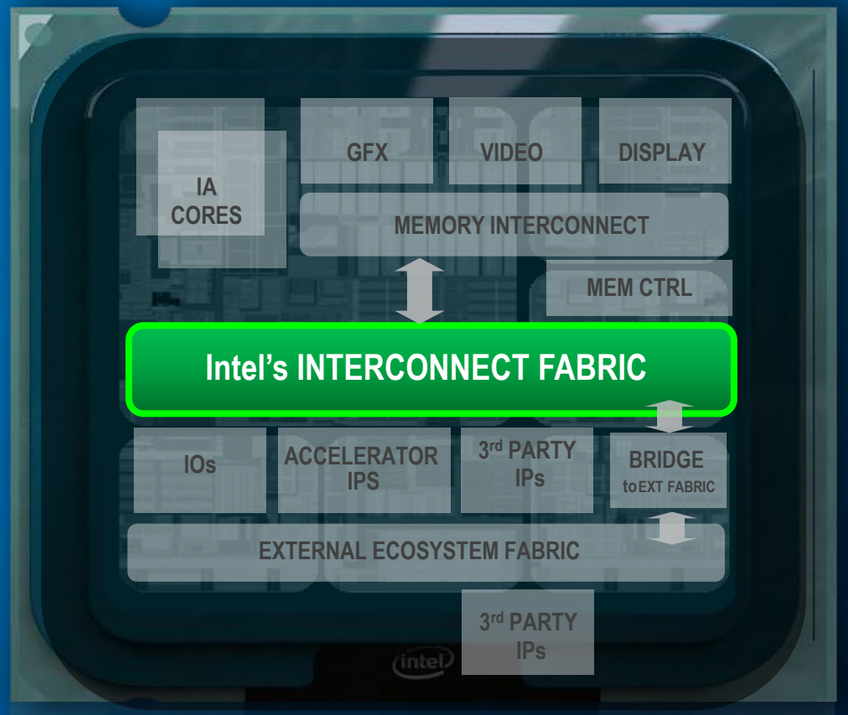
Revolutionary Change for Intel SoCs at 32nm





Software Compatibility
Modular Integration
Bridge to External Ecosystem Fabrics

Intel Software Environment

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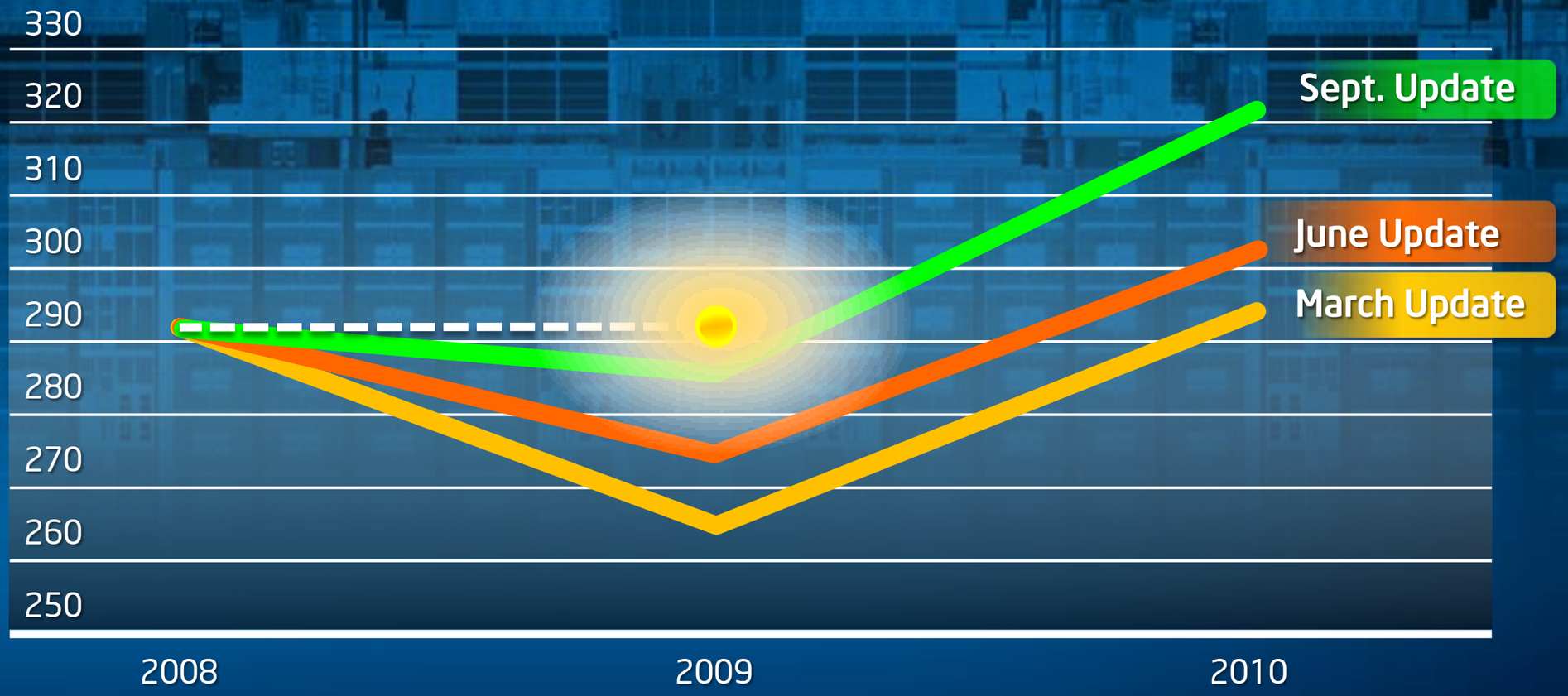
Technology
Creating the Continuum
Opportunity for Developers

Worldwide PC TAM

Units (M)



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Source: Gartner

New Intel® Core™ Processors Entering Mainstream

NEW

COMING

Windows® 7

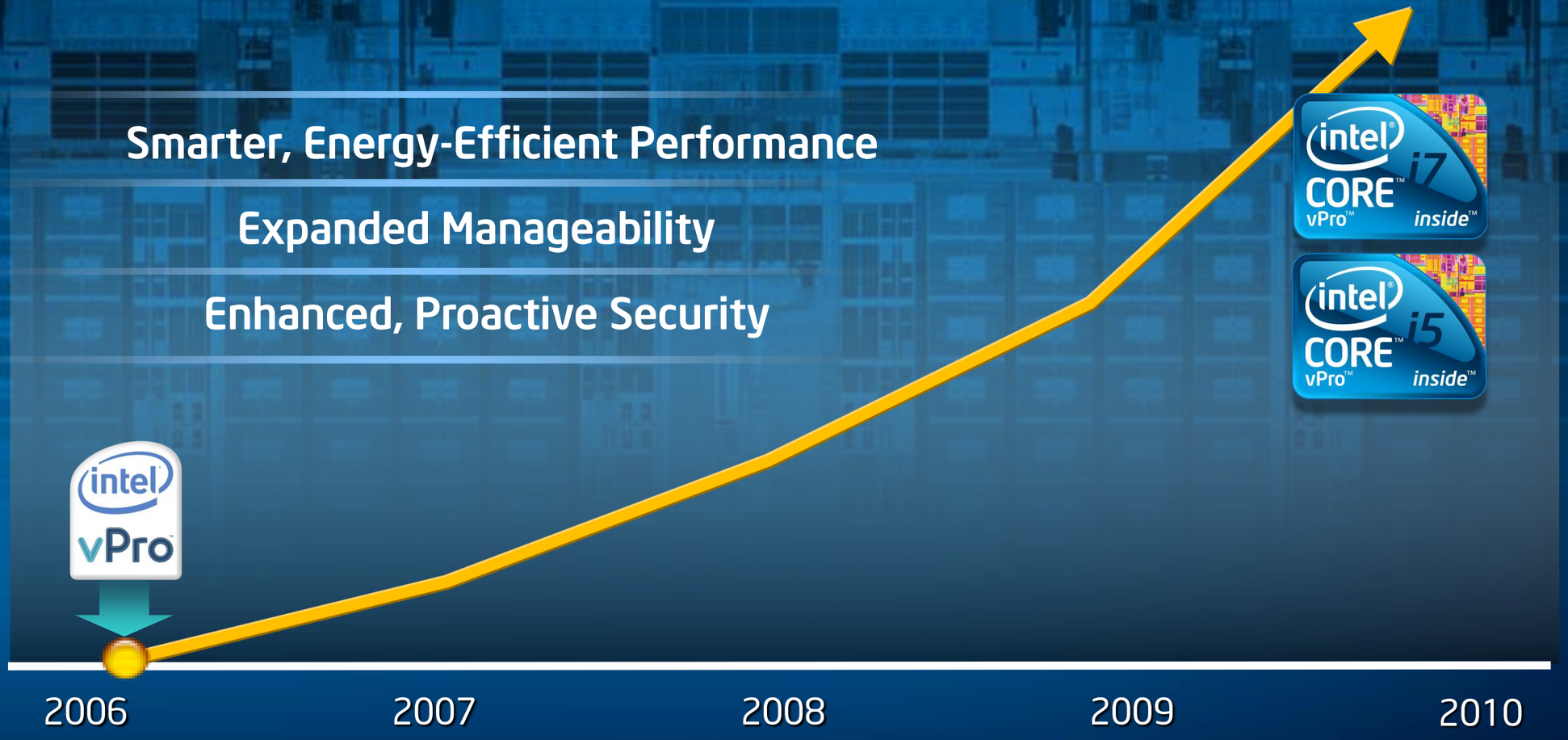
INTERNET-CONNECTED DEVICES

PC CLIENTS

SERVERS

Enterprise Clients

Intel™ vPro™ Technology Shipments



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Mainstream Consumer Computing

Create and Share Content across the Continuum

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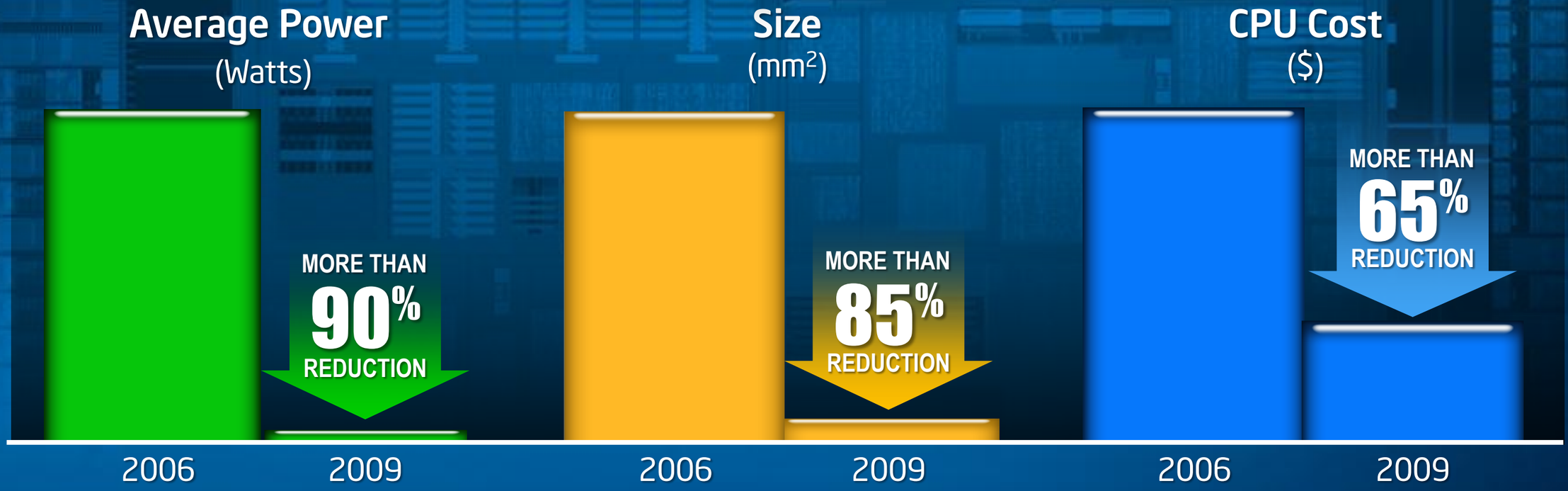
Internet Connected Devices

The Impact of Intel® Atom™ Processor

Best-in-Category IA Platform



Source: Intel

INTERNET-CONNECTED DEVICES

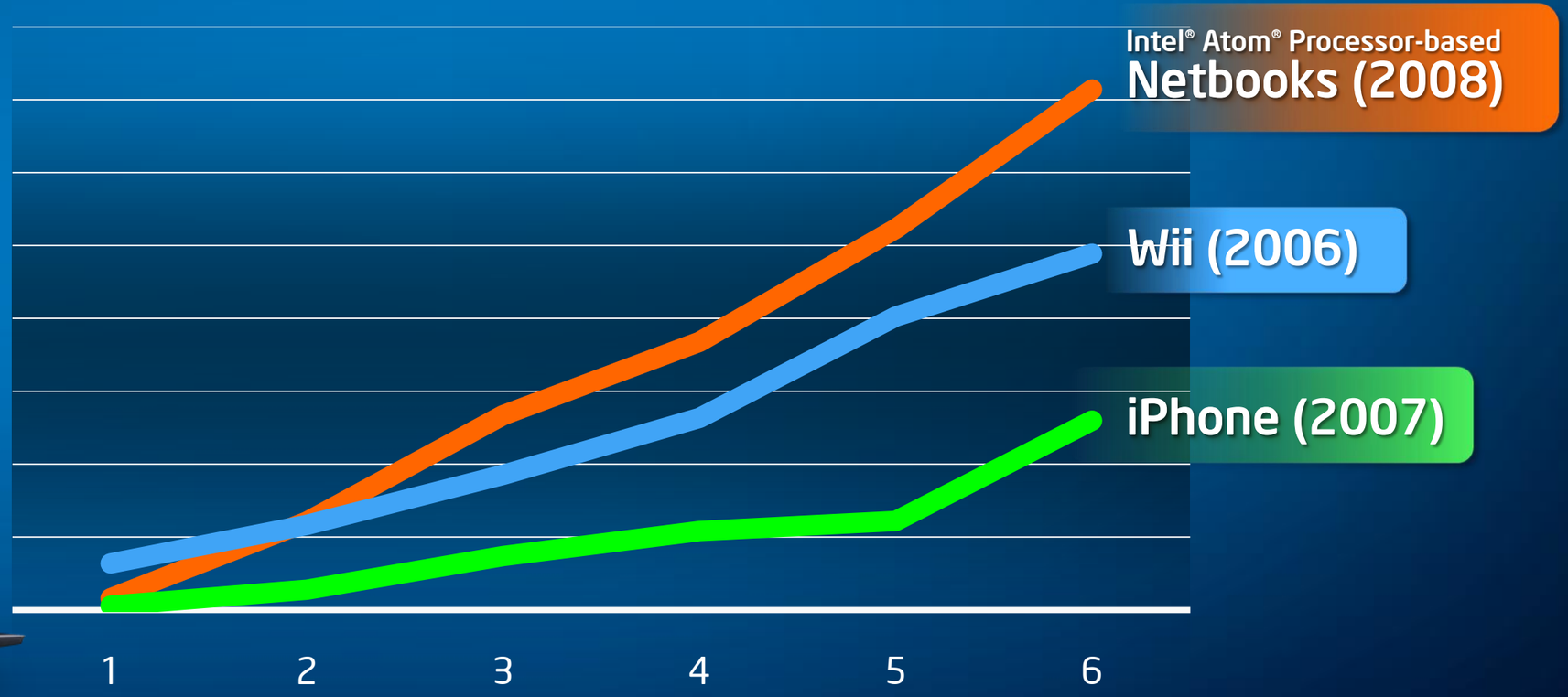
PC CLIENTS

SERVERS

The Atom Software Environment

Netbooks Take Off

Cumulative Volume (Millions of Units)



Source: Intel, ABI, Future Source

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INTEL DEVELOPER FORUM

Enabling Cross-Platform Applications

ADOBE® AIR™

intel Atom™ inside™

Microsoft® Silverlight™

moblin.org
A LINUX FOUNDATION PROJECT

Microsoft® Windows

WIND RIVER

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Introducing ...

The Intel® Atom™ Developer Program

appdeveloper.intel.com

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Connecting the Embedded World

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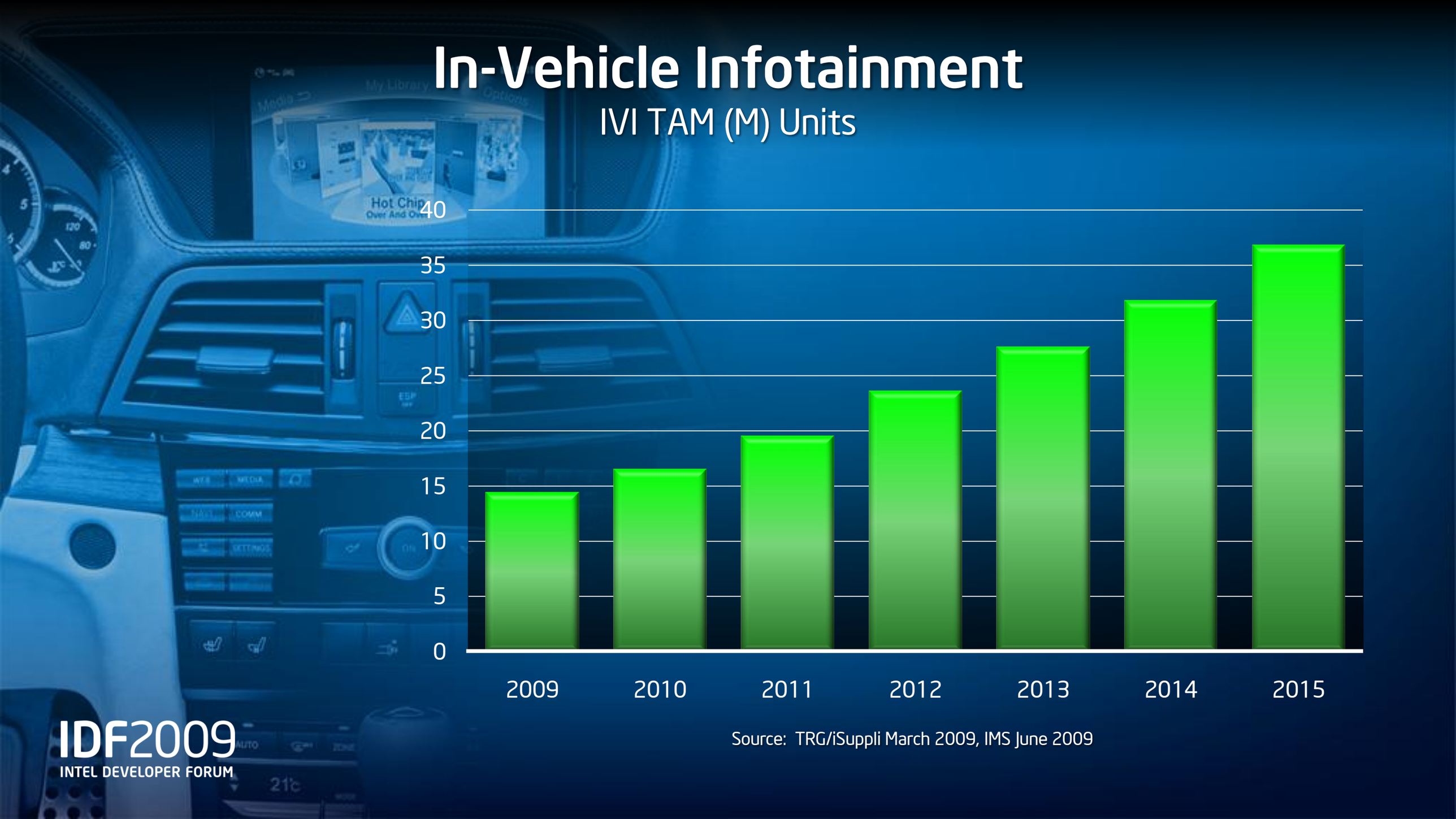
Subway Ticket Station
Biometrics Finger Print Reader
Point of Sale
Digital Weight Scale
ATM
Hotel Concierge System
Handheld Barcode Reader
Handheld Wireless Spectrum Tester
Handheld Ultrasound
Hospital Bedside Terminal
Voting Machine
Lottery Machine
Network Security Appliance
VoIP PBX
Test and Measurement Appliance
Education Terminal
Communications Gateway
Programmable Logic Controller
Computer Numeric Controllers
Industrial HMI Panel
Industrial PC
Avionics System
Wearable PC
Connected Soldier Device
Military Soldier Training Device

In-Vehicle Infotainment

IVI TAM (M) Units



Source: TRG/iSuppli March 2009, IMS June 2009

Harman International
Automotive Division

Next Generation cross-platform high-end infotainment system

Mercedes-Benz C- and S-Class

"Harman International® is able to offer fully integrated, energy efficient infotainment solutions based on the Intel® Atom™ processor in order to respond to the continuously increasing processing requirements for new media formats and connectivity in multi-seat environments. This enables us to accelerate the development and to provide leading-edge infotainment technologies for an uncompromised end-user experience at highest level."

Marek Neumann
Vice President Advanced Engineering
Harman International Automotive Division

IDF2009
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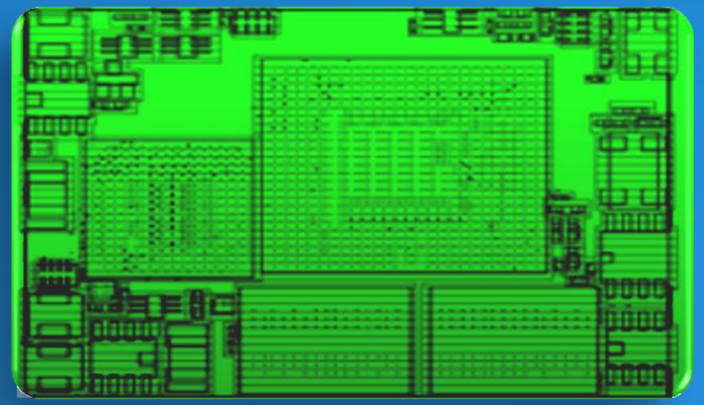
Progress Towards Handhelds

Major Reductions in Power and Form Factor

2008



Menlow

Board Size 8,500 sq mm
Standby Power 1.6W

2010

Moorestown

Board Size – Reduced 2x
Standby Power Up to 50x

2011

Medfield

Board Size - Reduced
Standby Power - Lower

Forecast

IDF2009
INTEL DEVELOPER FORUM

Moblin v2.1 User Interface

Claire Alexander

Moblin User Interaction and
User Experience Design Lead

IDF2009
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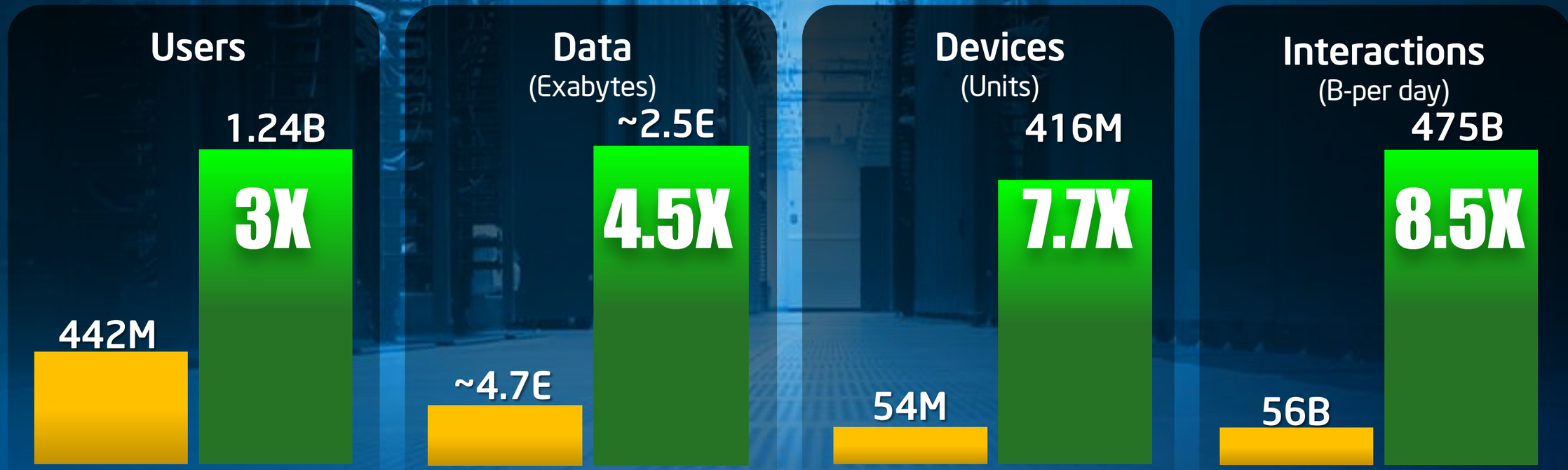
Server: The Democratization of Data

Worldwide Growth Projections

2008 -2012



Source: IDC Directions '09, iSuppl 3'09, Forrester 2'09

INTERNET-CONNECTED DEVICES

PC CLIENTS

SERVERS

Intel Architecture Scales the Server Spectrum

Small Business/
Remote Office

Comms

Cloud Services

Infrastructure

HPC

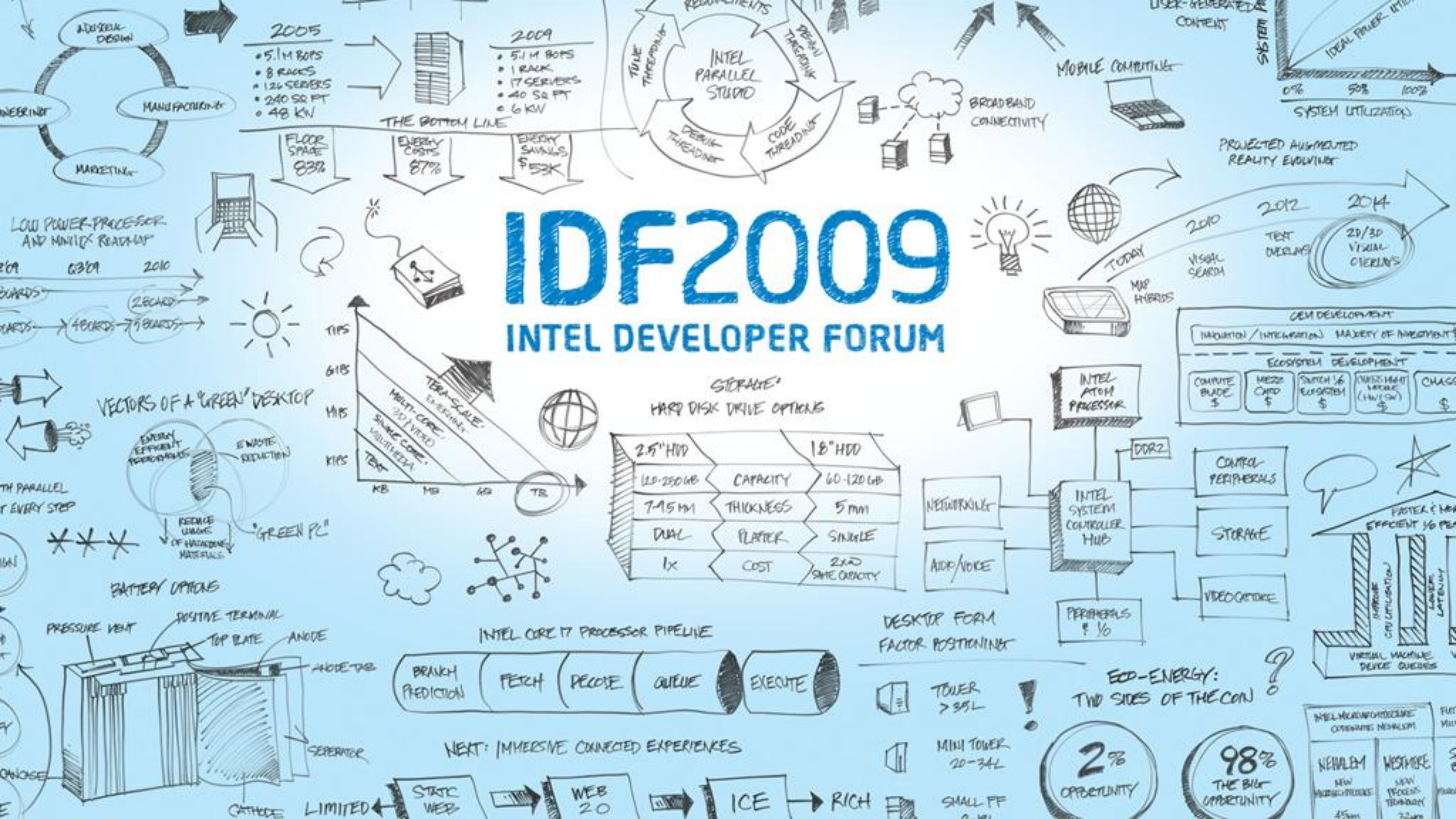
Mission Critical

Technology
Creating the Continuum
Opportunity for Developers

2004

Continuum = Opportunity

IDF2009
INTEL DEVELOPER FORUM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