



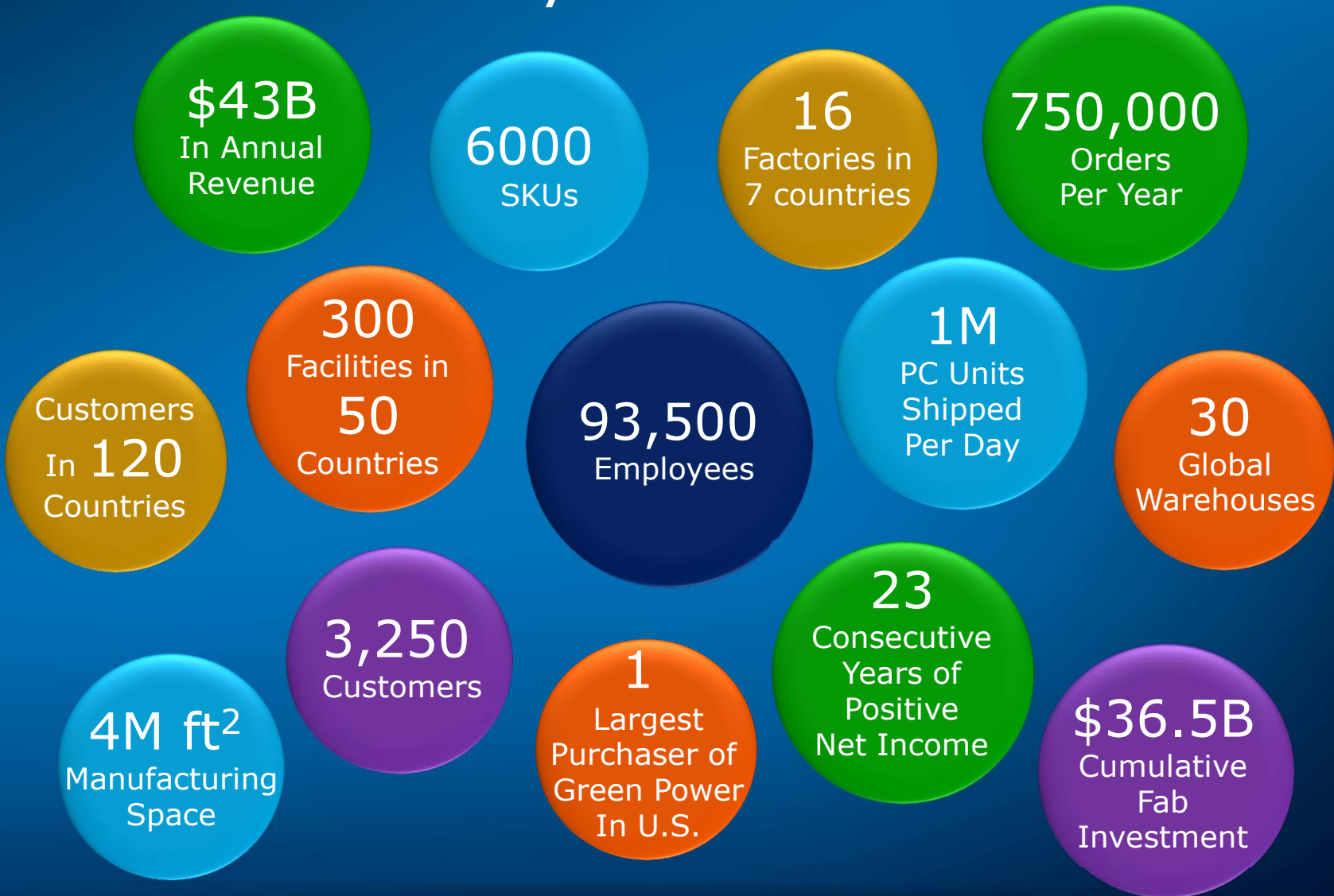
APICS Portland  
April 2011  
Professional Development  
Meeting

# Top Management Night

**Frank Jones**

Vice President and General Manager  
Customer Fulfillment Planning and Logistics Group  
Intel Corporation

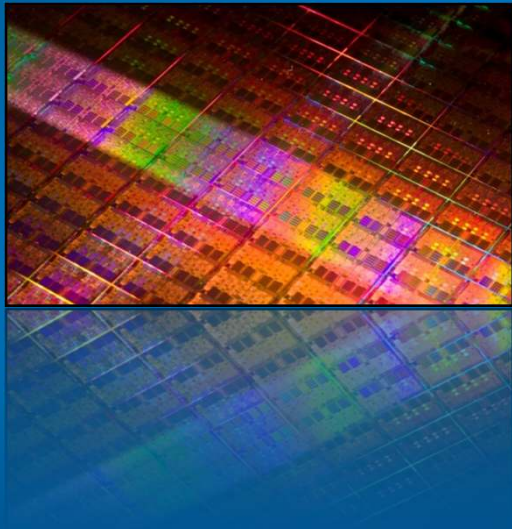
# Intel by the Numbers



The World's Largest Semiconductor Manufacturer!

# Intel Delivers

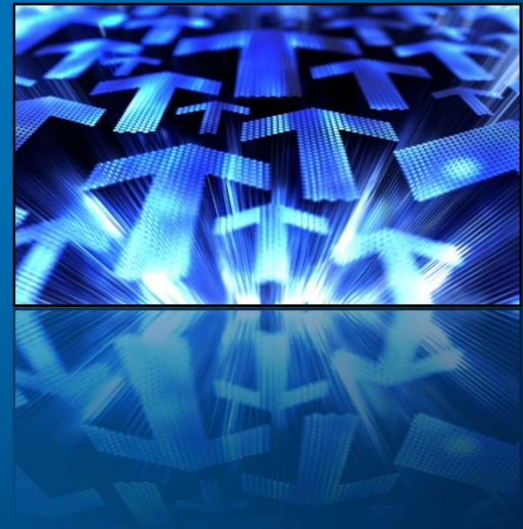
Leading-edge  
Technology



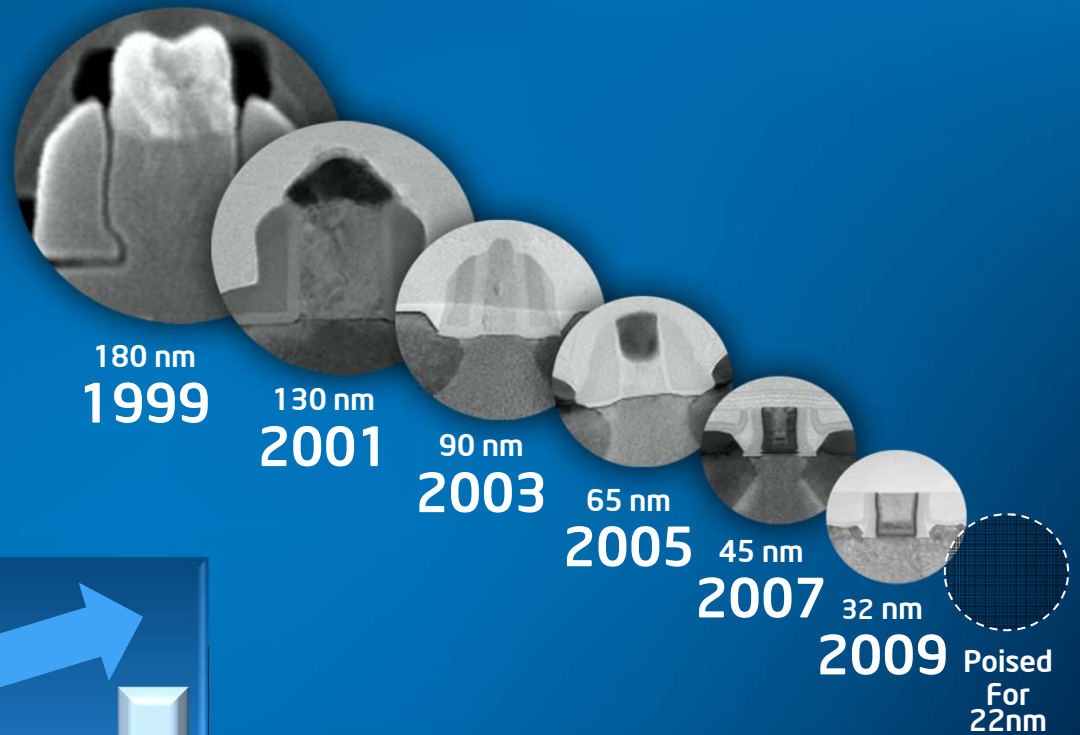
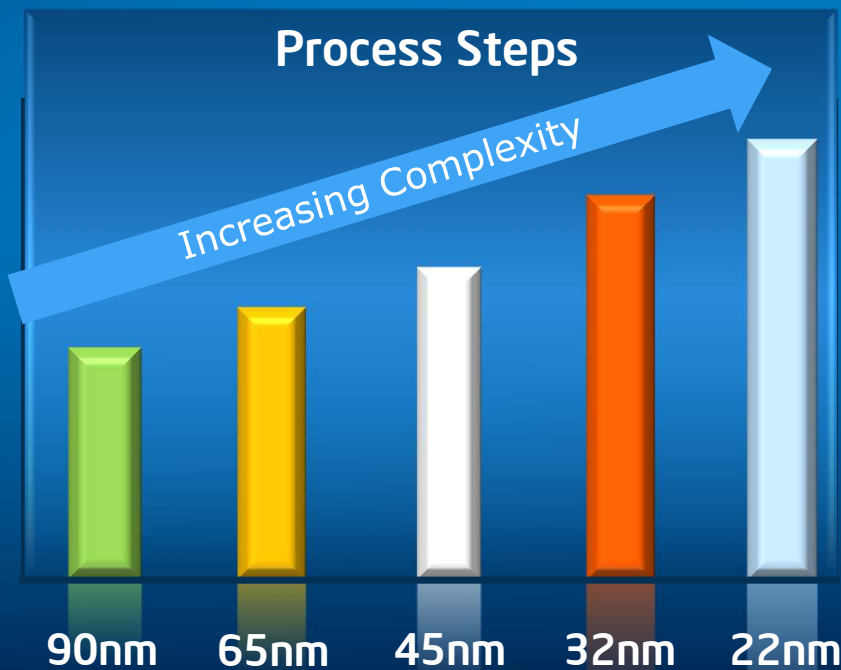
Complex  
Manufacturing



Supply Chain  
Excellence



# Executing to Moore's Law: Technology Leadership Drives Supply Chain Complexity



Enabling new devices with  
higher functionality & complexity  
while controlling  
power, cost and size

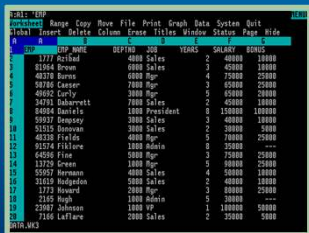


# The History of "Smart"

## The Smart Revolution, Powered By the Microprocessor

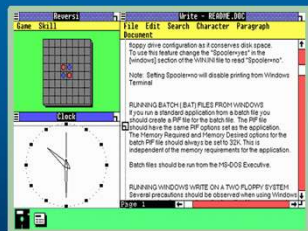
286

Typewriter/  
Calculator



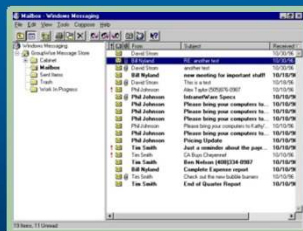
i386

Graphical  
User Interface



i486

Information  
and Networking



Entertainment  
and Multimedia



User-Generated  
Content



# Intel's New Capabilities Enable the Future of "Smart"



**PCs**



**Personal  
Devices**



**Smart-  
phones**



**Smart  
TVs**



**In-Vehicle  
Infotainment**



**Digital  
Signage**



**Home Energy  
Management**



...

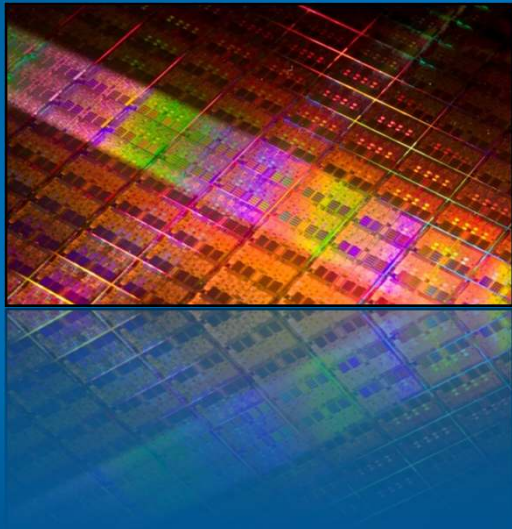
# Connectivity

## Becoming Pervasive in the Supply Chain



# Intel Delivers

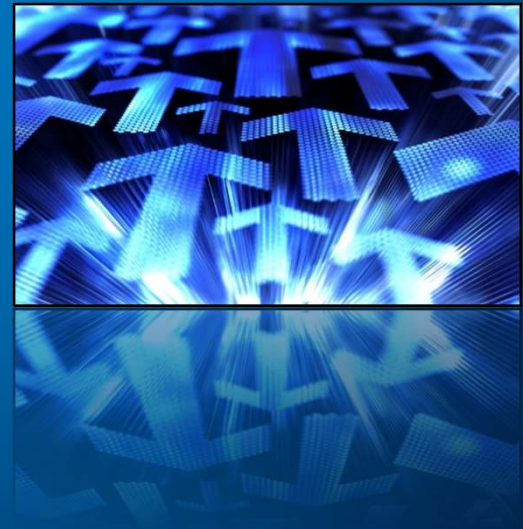
Leading-edge  
Technology



**Complex  
Manufacturing**

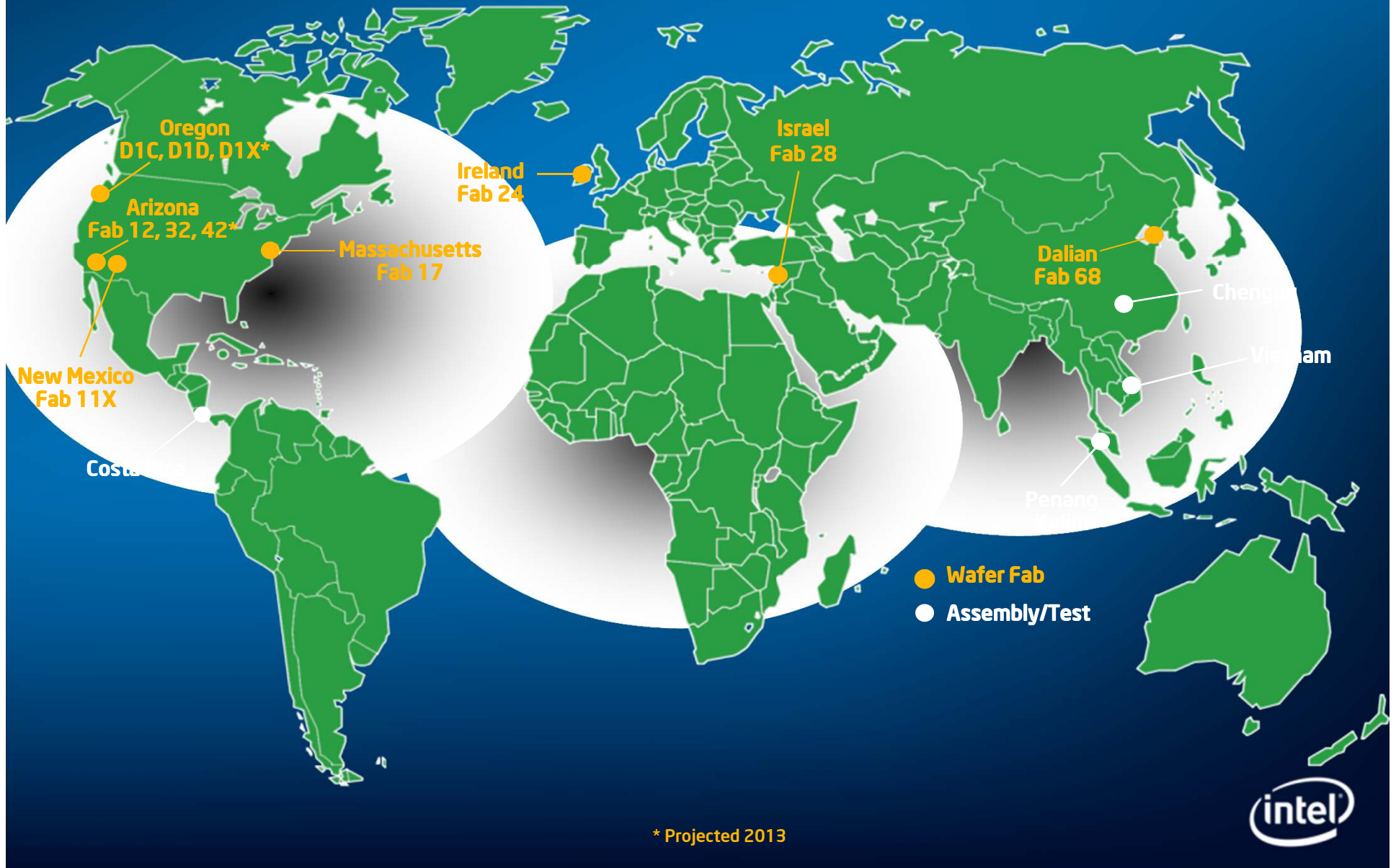


Supply Chain  
Excellence

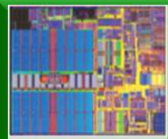




# Intel's Worldwide Manufacturing Network



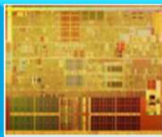
# Intel is Manufacturing Many Process Generations in High Volume



**200mm  
130nm  
2001**



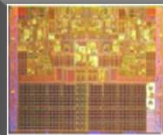
**Fab 17, Massachusetts**



**300mm  
90nm  
2003**



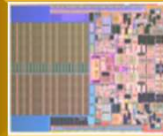
**Fab 24, Ireland**



**300mm  
65nm  
2005**



**Fab 12, Arizona  
Fab 24, Ireland  
Fab 68, China**



**300mm  
45nm  
2007**



**Fab 11X, New Mexico  
Fab 28, Israel**



**300mm  
32nm  
2009**



**D1C, Oregon**



**Fab 32, Arizona**

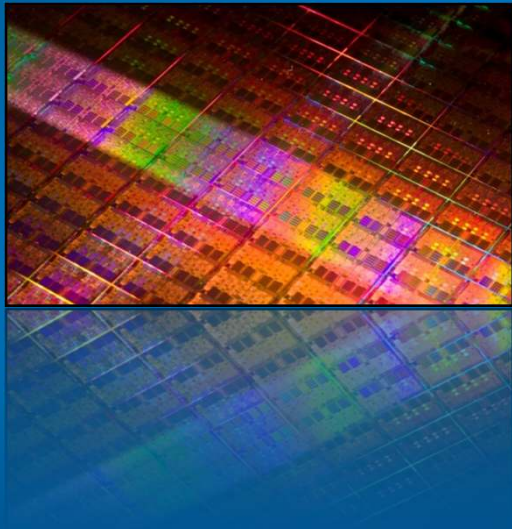


**Fab 11X, NM**

Multiple technologies available to meet customer needs

# Intel Delivers

Leading-edge  
Technology



Complex  
Manufacturing



**Supply Chain  
Excellence**



# Intel's Supply Chain Leadership Vision

## Internal Alignment

Break down functional silos

Improve efficiency and effectiveness

## Just Say Yes

Customer Responsiveness & Delivery Performance  
Inventory Optimization

## Cost Competitive & Agile

Flexibility & Lower Complexity  
Supply Chain Segmentation

2005

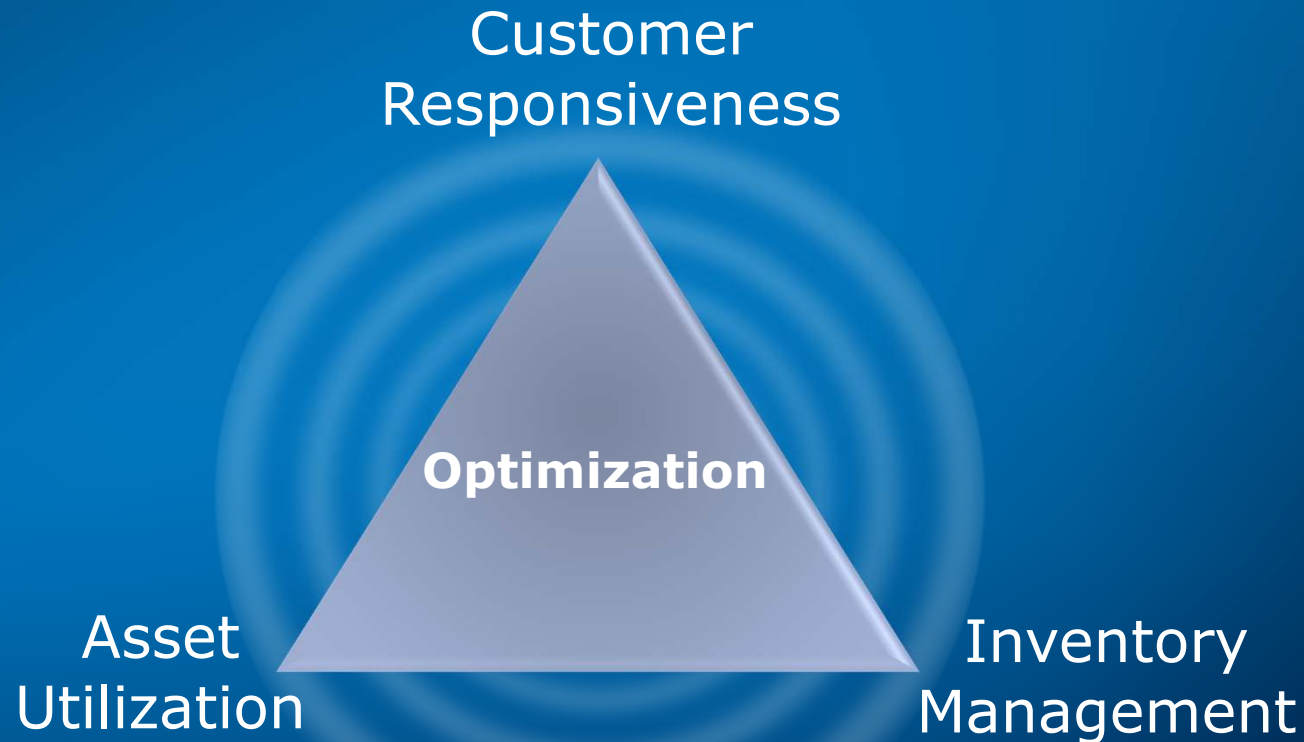
2012+



Long Semiconductor Cycle Times  
+  
High Demand Variability  
+  
Technology and Manufacturing Complexity  
=  
Supply Chain Challenges



# Supply Chain Optimization Challenge



Significant paradigm shifts on these vectors  
are transforming Intel's supply chain

# Shifting The Efficiency Frontier On Inventory At Intel

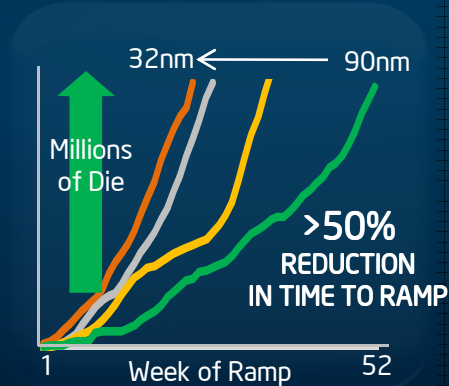
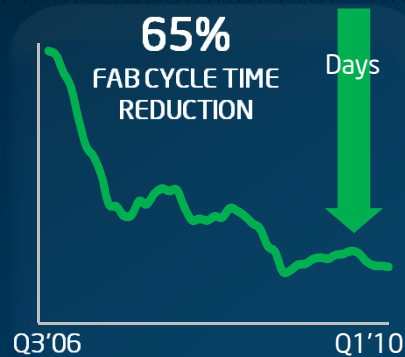
1. Cycle Time Reduction In & Out of the Factory
2. “Utilization Versus Inventory” Tough Calls
3. Innovative Deployment of Vendor Managed Inventory
4. Starting to Move From “Push” To “Pull”
5. Efficient Planning Systems, Tools and Processes

Lowered net inventory while improving service levels

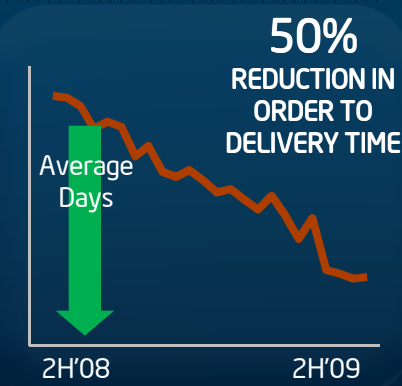
# Making Supply Chain Excellence A Reality

## Intel Results

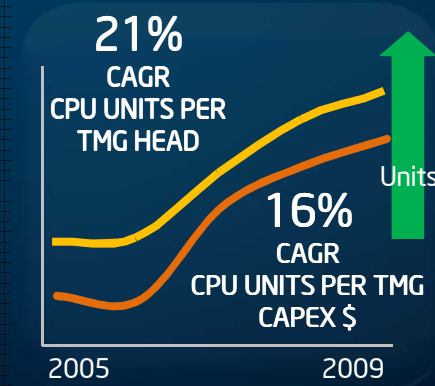
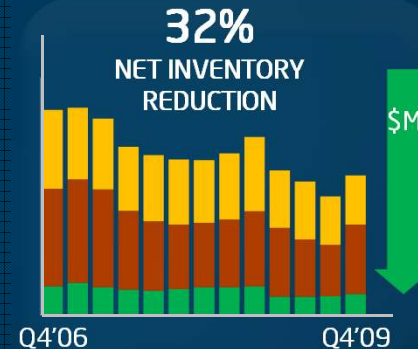
### Velocity



### Responsiveness



### Efficiency



### Social Responsibility



Leading the effort for **CONFLICT FREE** minerals for manufacturing



Largest purchaser of **GREEN POWER** in the U.S.



~2.5MW of new solar installations in 4 states





# Industry Acknowledgment

The biggest jump was accomplished by Intel, which rose from No. 25 in 2009 all the way to No. 18 this year. Intel accomplished an extremely ambitious effort to remake itself as a customer-centric supply chain.

AMR/Gartner Research  
May 2010

SUPPLY CHAIN TOP 25 <small>AMR Research</small>		
1		6  PEPSICO
2		7  SAMSUNG
3		8 
4		9 
5		10 
		11 
		12 
		13 
		14 
		15 
		16 
		17  COLGATE-PALMOLIVE
		18 
		19 
		20 
		21 
		22 
		23 
		24 
		25 

*"JUST SAY YES: Innovating Customer Responsiveness at Intel"*

Receives

**Supply Chain Innovation Award**

For Innovation demonstrated by quantifiable and sustainable cost-savings, revenue-generating, or customer-satisfaction achievements



# The Right Parts At The Right Time Make A Difference *What Might Have Been...*

\$B



\$B



# Intel's Supply Chain Transformation Will Continue

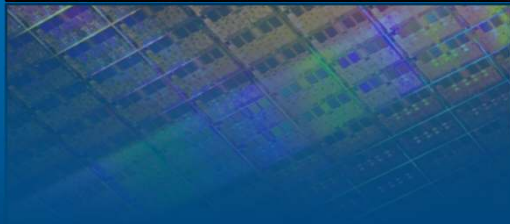
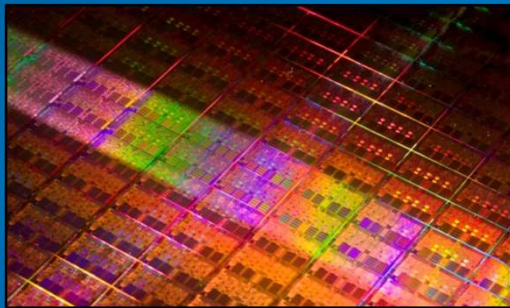


Will need to shift the efficiency frontier yet again

# Summary

## Leading-edge Technology

*Enabling new devices with higher functionality and more complexity*



## Complex Manufacturing

*Worldwide operations manufacturing many process generations in high volume*



## Supply Chain Excellence

*Efficient and responsive operations delivering what our customers want*

