

2006 Technology Analyst Day

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Leadership in Process Technology and Manufacturing

Process Technology

- **SOI Technology**
 - Power-efficient building blocks for our industry leading architectures and designs
- **Optimum technology development model**
 - Partnering to leverage resources and knowledge

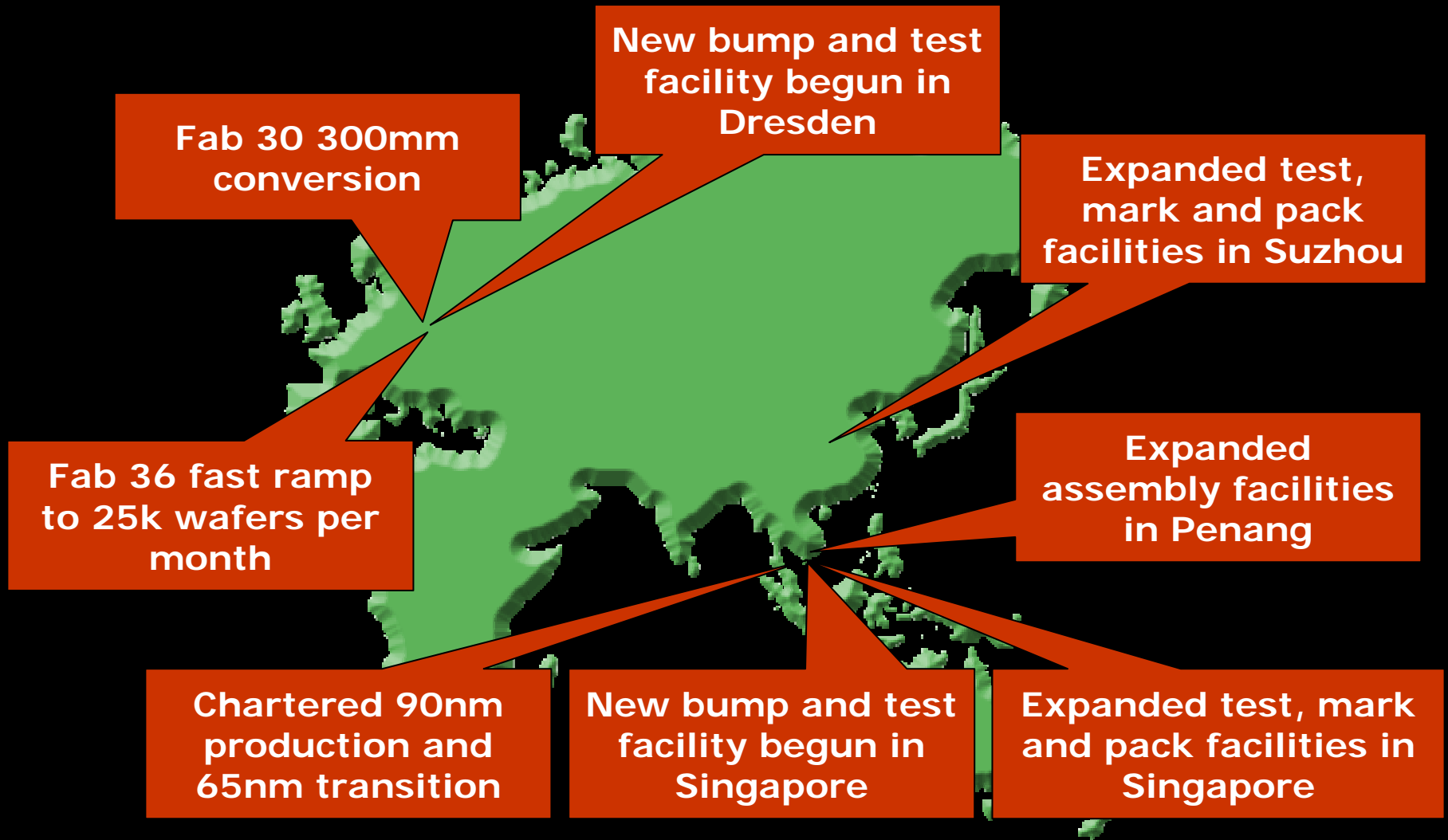
Manufacturing

- **Capacity to equal customer demand**
- **Leading Manufacturing Capability**
 - Industry leading manufacturing metrics
 - Taking it to the next level with Lean Manufacturing



**Better
Customer
Experience**
Better Products
*Dependable
Quality and
Delivery*

Comprehensive Global Capacity Expansion



Dresden Capacity Expansion to Meet the Anticipated Increase in Customer Demand

Conversion of Fab 30 to 300mm Fab 38

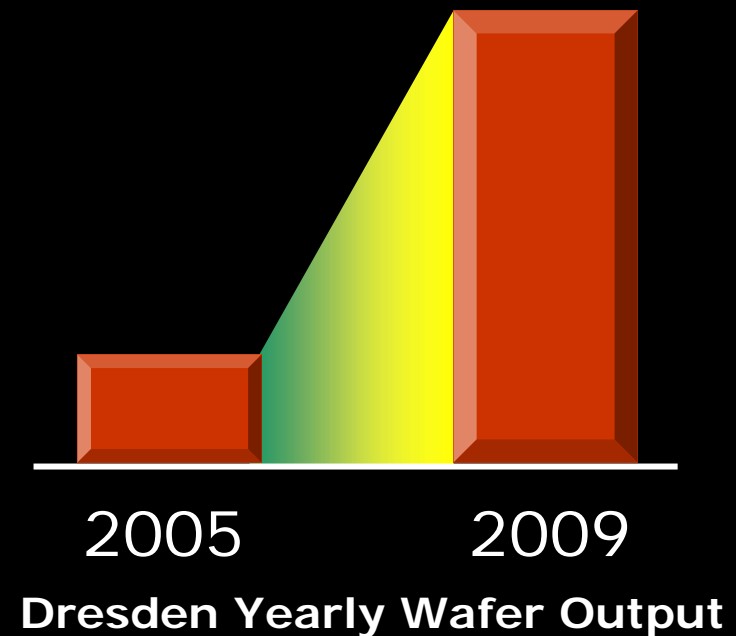
First wafer outs planned for first Q1 2008
20K wafers/month expected by Q4 2008
~\$2 billion investment

Fab 36 expanded to 25K wafers per month capability

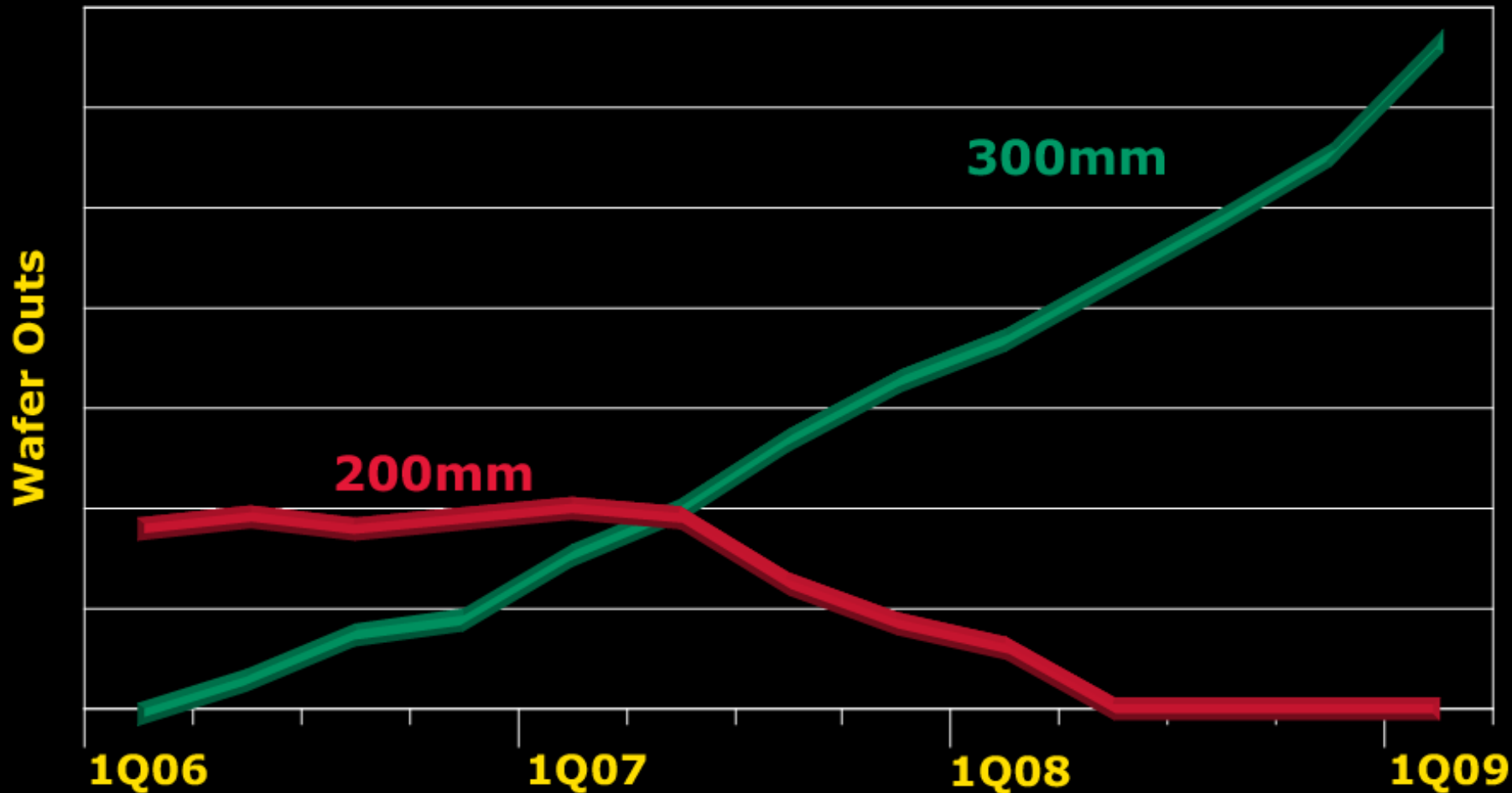
25K wafers/month expected by Q4 2007
~\$500M investment

New onsite dedicated bump and test facility

Up to 4x Capacity Increase Potential



Fab 38 Drives Total 300mm Production Increase in Dresden



Fab 36: Highly Successful Ramp and 65nm Conversion On-Track

- First 90nm revenue shipments started 2Q 2006, on plan
- Fastest new fab ramp, started production at mature yields
- 65nm production shipments scheduled for 4Q 2006
- 65nm crossover expected in 1Q 2007, full conversion expected to be achieved in July 2007
- On track for volume 45nm production by mid-2008 – 1.5 years after 65nm

AMD Fab 36

AMD Fab 30/38



Increased Chartered Capacity and 65nm Conversion

90nm production underway at Chartered six weeks ahead of schedule

Work with IBM and implementation of selected advanced process control capabilities at Fab 7 delivering excellent results

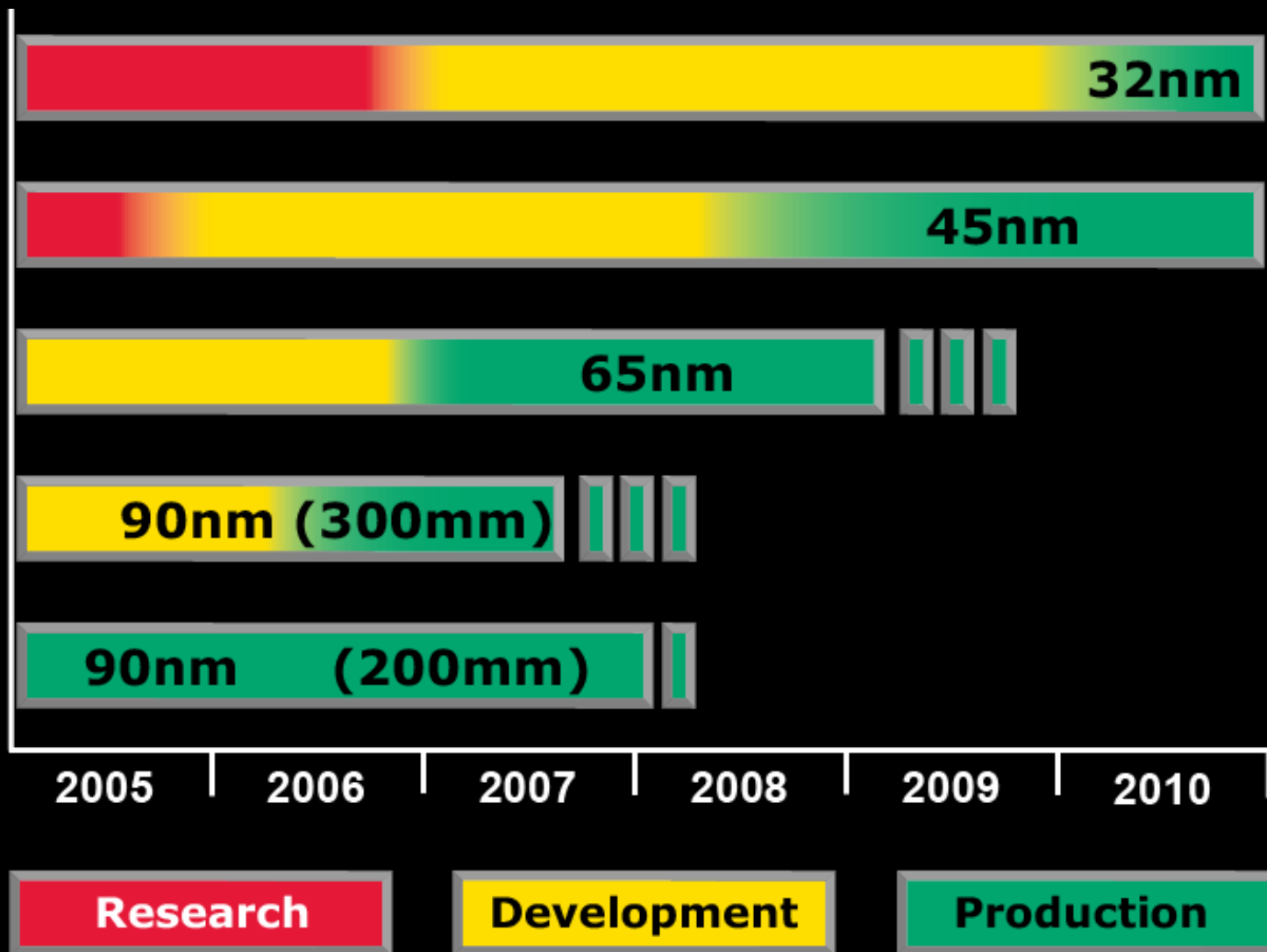
Plan to transition to 65nm in mid-2007

Foundry volumes a function of demand and pricing



Chartered Fab 7

Technology Roadmap



Technology Agreement with IBM Continues to Be Highly Beneficial to AMD

Consistent achievement of development objectives

Announced extension through 2011*, expanded to include early exploratory research

AMD expanding its R&D staff significantly

65nm development complete

Currently working on 45nm, 32nm and 22nm technology generations



*Capital purchases by IBM necessary for the continued development of process development projects past December 31, 2008 are conditioned upon the approval of IBM's board of directors



65nm Volume Production On Track for Second Half 2006

Technology transfer to Fab 36 has been completed

Jointly developed by IBM and AMD in East Fishkill, NY and Dresden, Germany

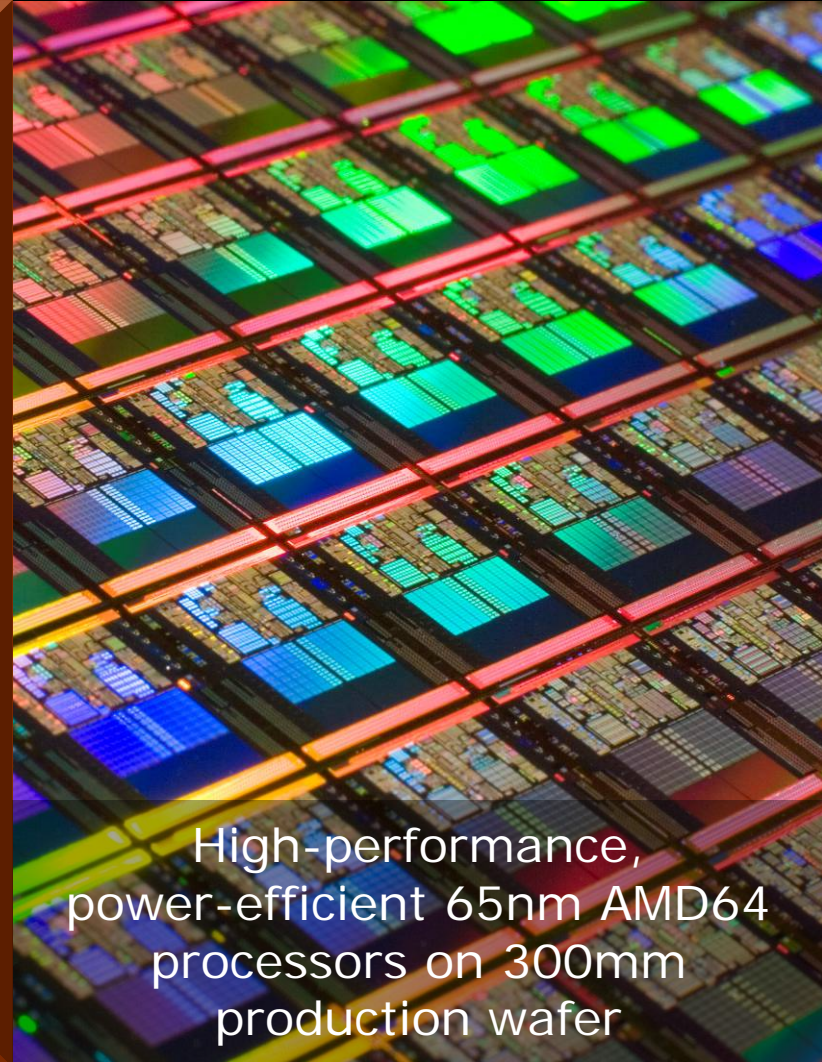
SRAM yields at mature defect densities

Internal Revision G samples generated and production ready

Seamless production transition

Use of 90nm-proven, high-performance SOI transistor

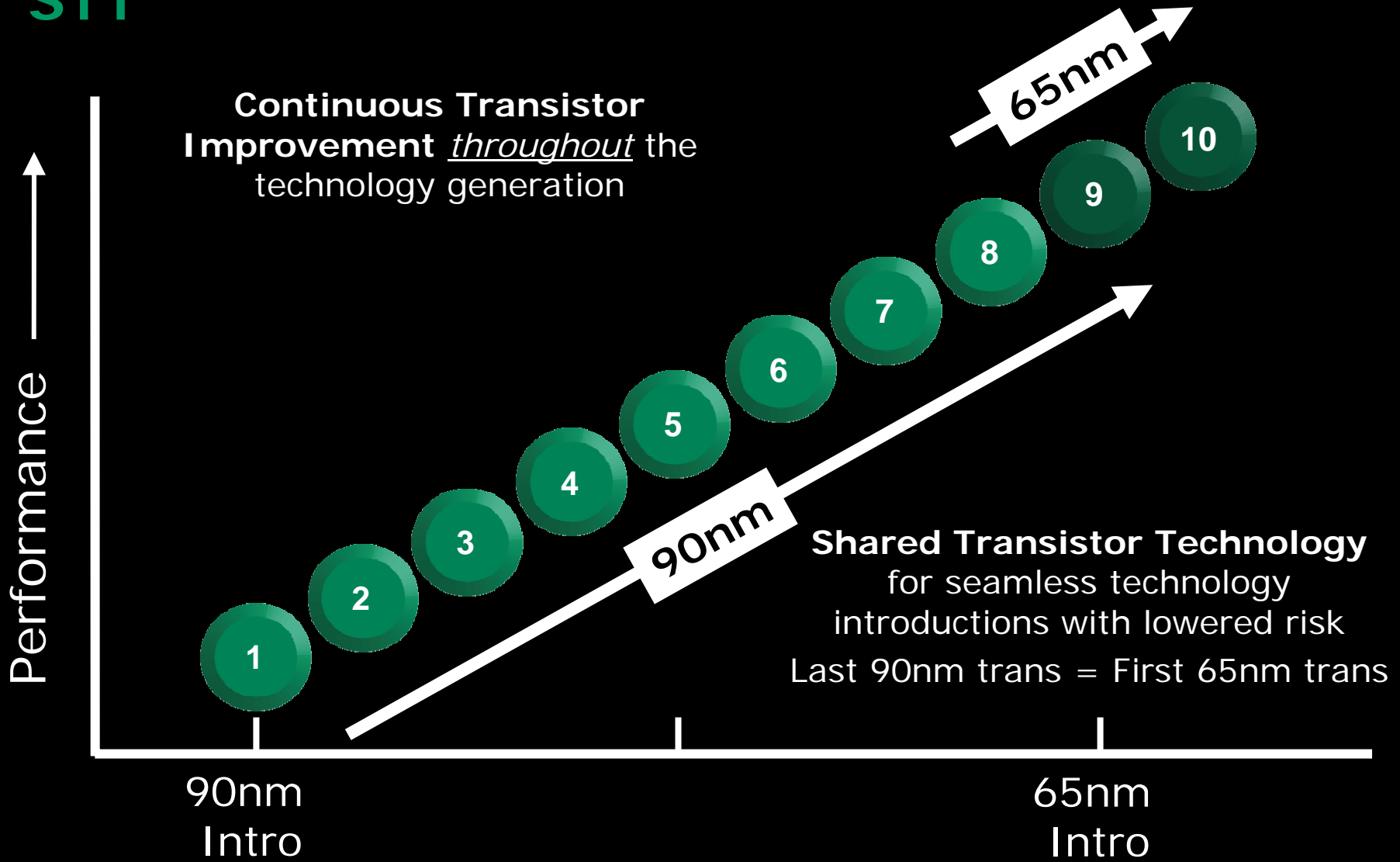
Next generation transistor in 3 months



High-performance, power-efficient 65nm AMD64 processors on 300mm production wafer



Smooth Transition to 65nm Using CTI and STT

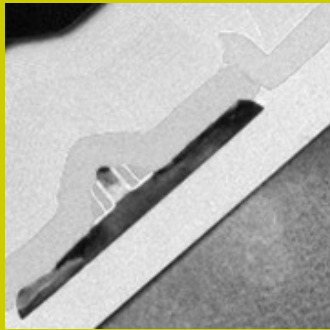


Using CTI to Maximize Transistor Performance and Power Efficiency

AMD makes relatively small, yet high-value changes to transistors on a regular basis for non-stop improvement with lowered risk

90nm

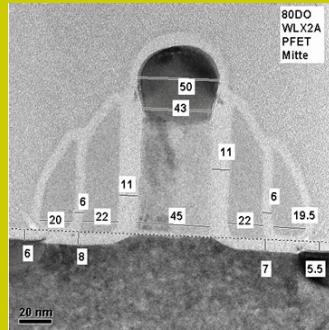
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Improvement:
Dual-Stress Liners

90nm/65nm

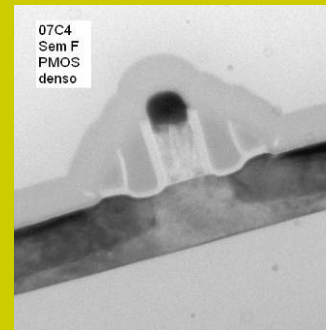
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Improvement:
Enhanced strain,
advanced silicide

90nm/65nm

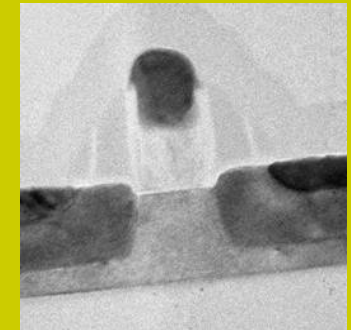
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Improvement:
Embedded Silicon-
Germanium

65nm

9



Improvement:
Enhanced
Silicon-Germanium

Great Progress on 45nm!

Continuing to take full advantage of Silicon-on-Insulator for high-performance and increased power efficiency

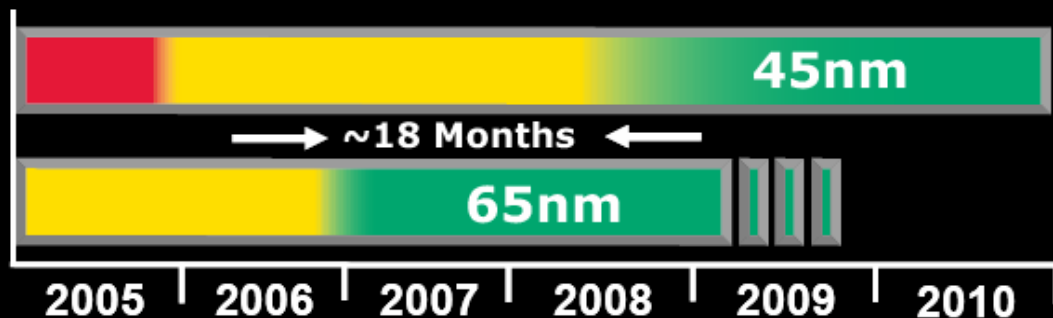
Excellent progress on all development milestones working with IBM

Transistor performance milestones tracking to plan

Working SRAMs achieved in January 2006

Excellent progress on Immersion Lithography

Aggressive schedule for first 45nm product introduction



Research

Development

Production

AMD

Leading the Industry to a New and Better Manufacturing Model



AMD's Manufacturing Advantage

For over a decade, AMD has been creating a new and differentiated model focused on increasing operational speed, accuracy, agility and efficiency to maximize customer value

Speed

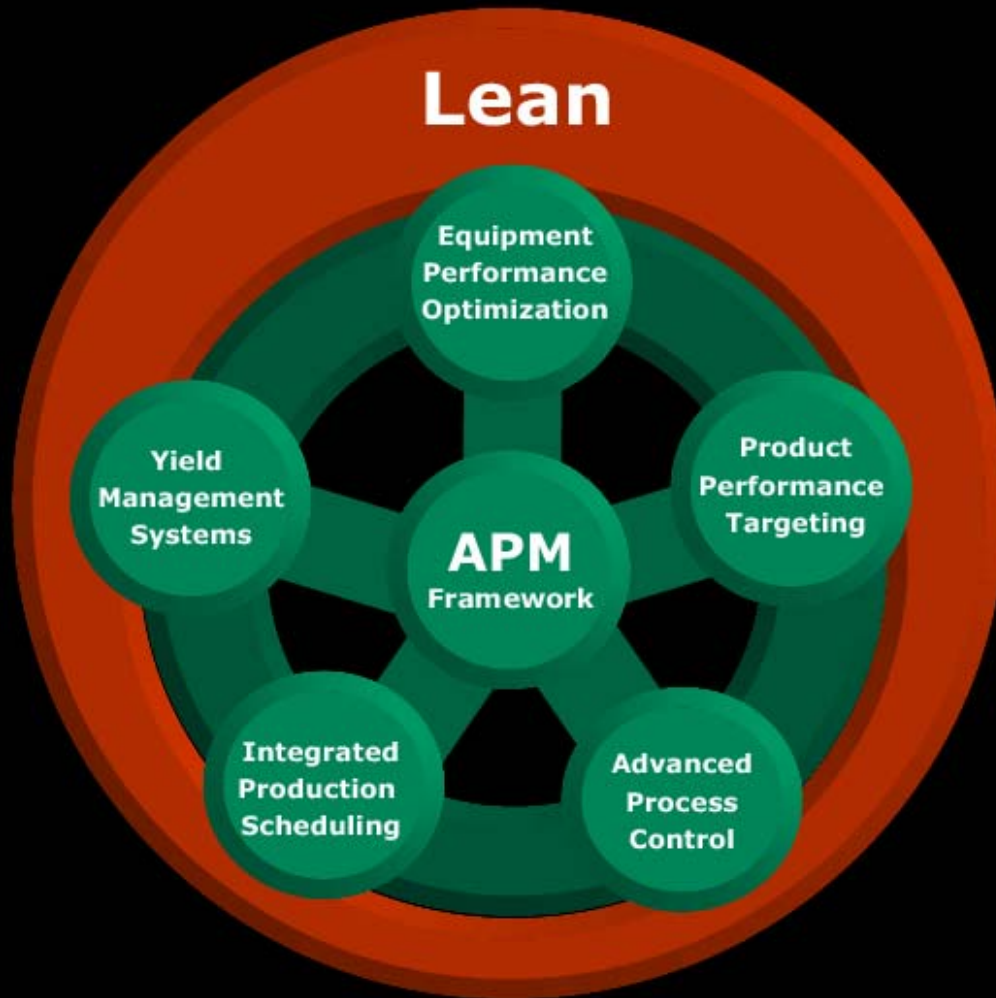
Accuracy

Agility

**Maximum Operational
Efficiency**

Increased Customer Value

APM: Unique Technology Framework Bridging Front- and Back-End Operations



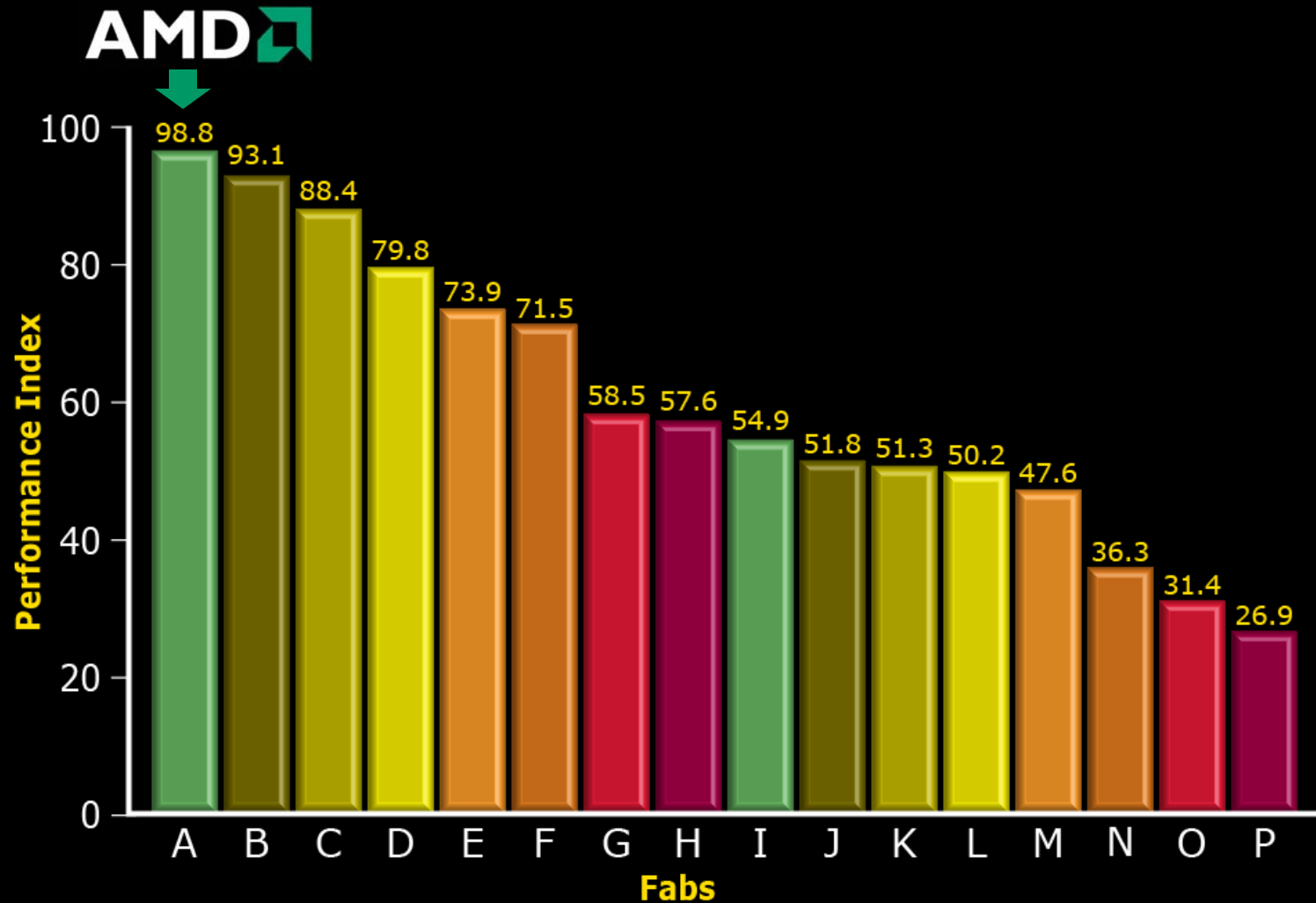
Highly automated and synchronized decision making

Five integrated algorithmic analysis systems — much more than just APC

Includes proprietary technologies, logic and business processes

Introduction of lean methodologies for increased efficiency and agility

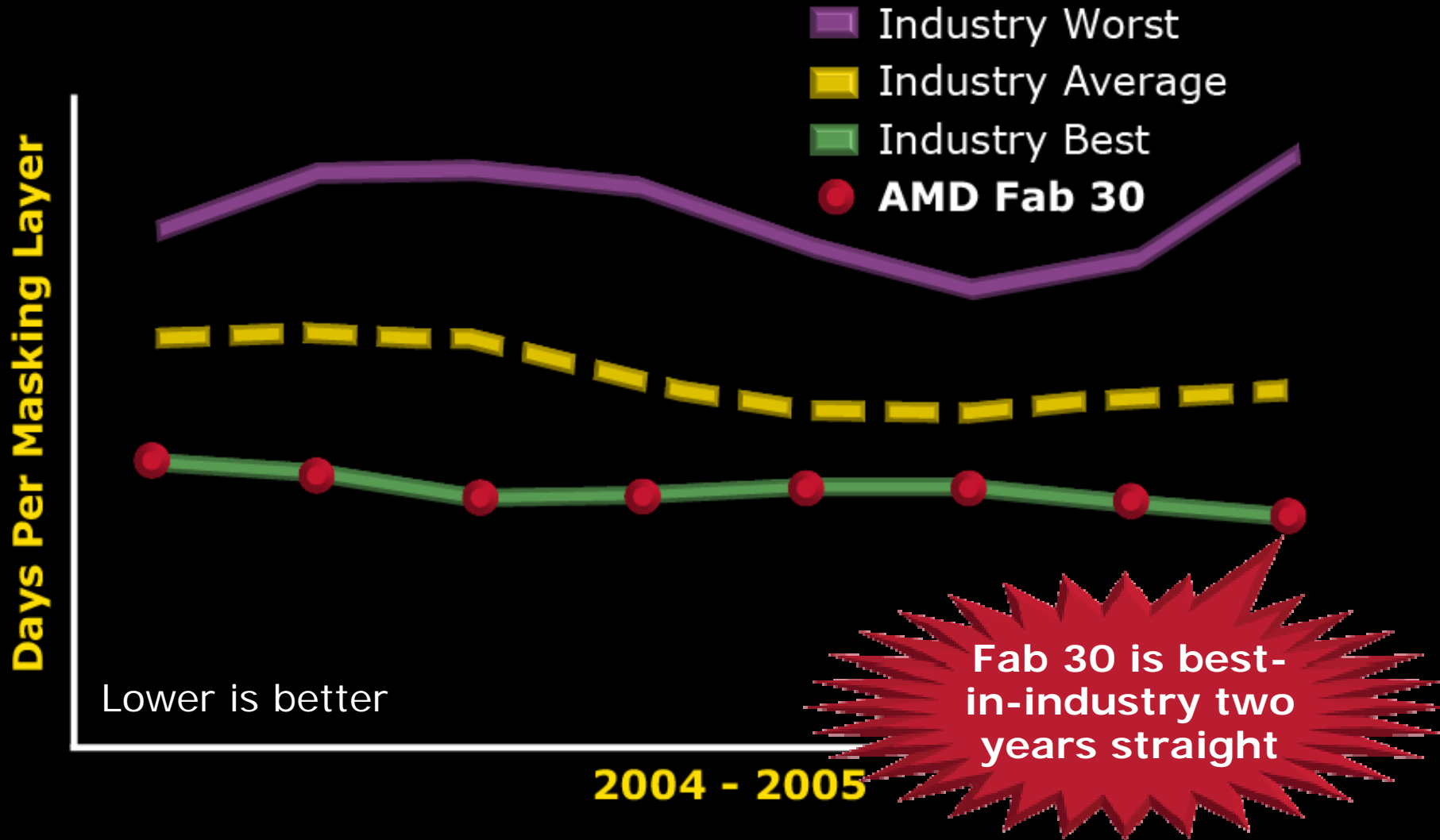
Fab 30: Highest Performing Fab Six Years Running (1Q 1999 - 1Q 2005)



Source: Sematech



Best-in-Class Production Cycle Times



Sources: AMD & Sematech

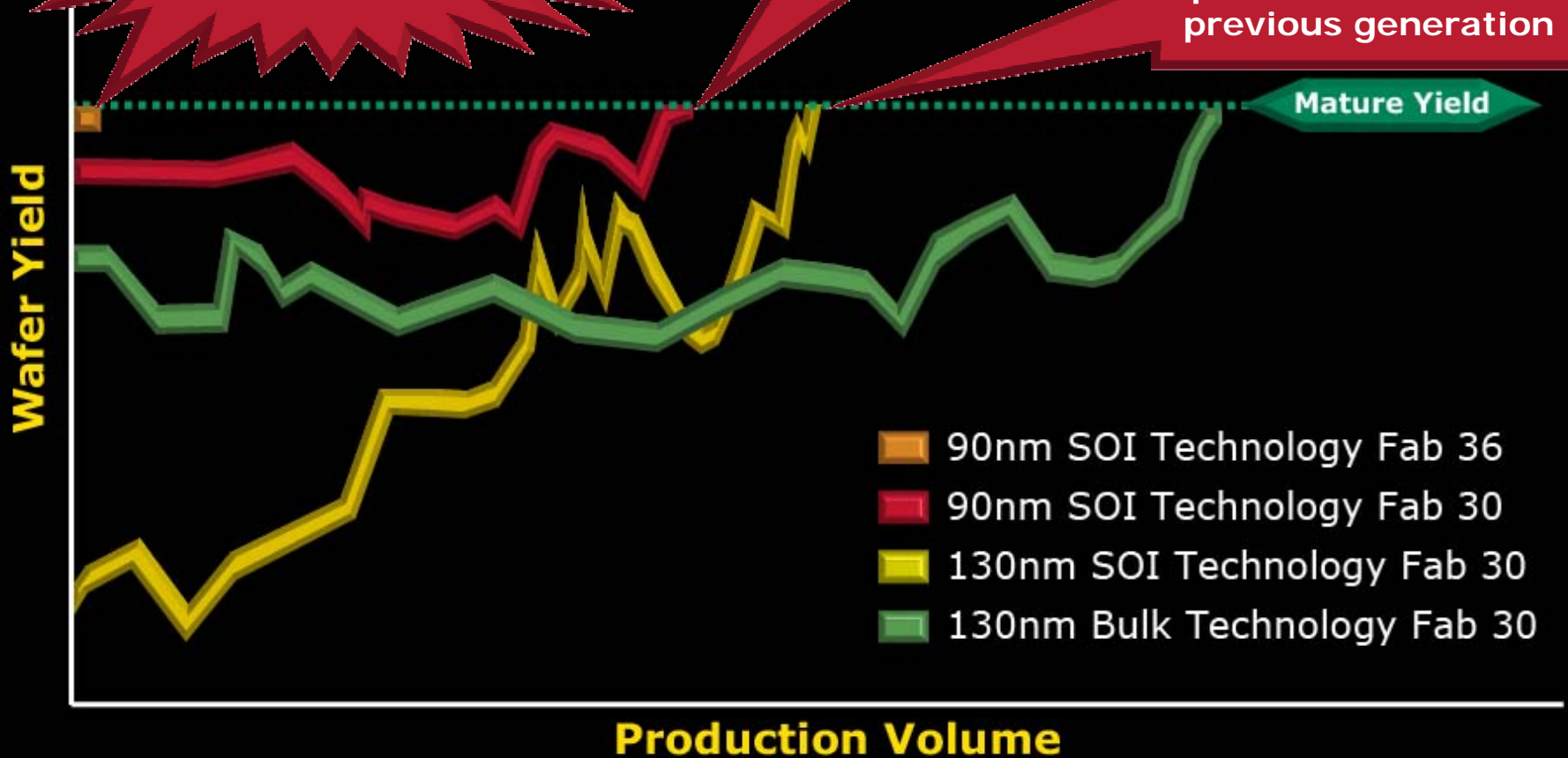


Accelerated Yield Ramps

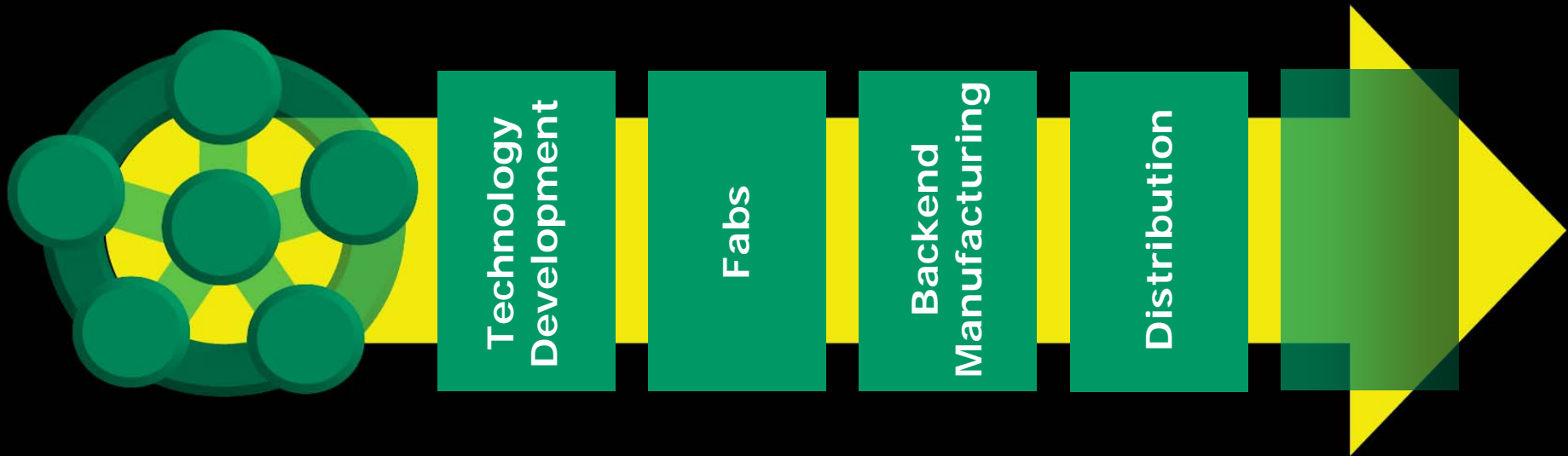
Began production at mature yields in Fab 36

Mature yield achieved ~40 percent faster than previous generation

Mature yield achieved ~66 percent faster than previous generation



Extending the Reach and Benefits of APM



Vision:

Maximizing operational efficiency and customer value-add, both within and outside of AMD owned facilities, using APM as the enabler for true end-to-end synchronization

Our Industry Needs to Think Differently About the Role of Manufacturing

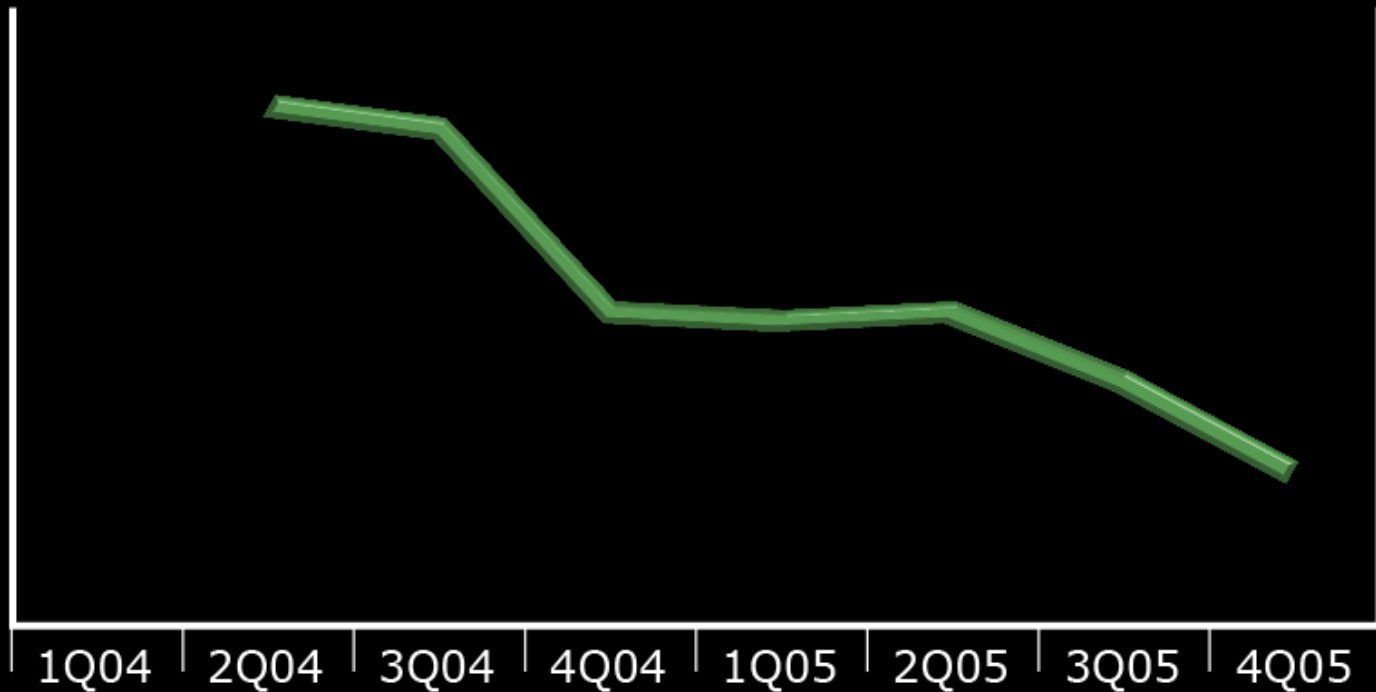
Manufacturing must play a concrete role in increasing value for customers and improving the customer experience

- 1 Specify the Value
- 2 Understand the Value Stream
- 3 Create Streamlined Process Flows
- 4 Let Customers Pull Product through the Value Stream
- 5 Strive for Perfection

Improved Cycle Time and Productivity

**Operational Improvements
Achieved in Fab Wafer Output and Cycle Time Concurrently**

Fab30 - Continuous Cycle Time Improvement



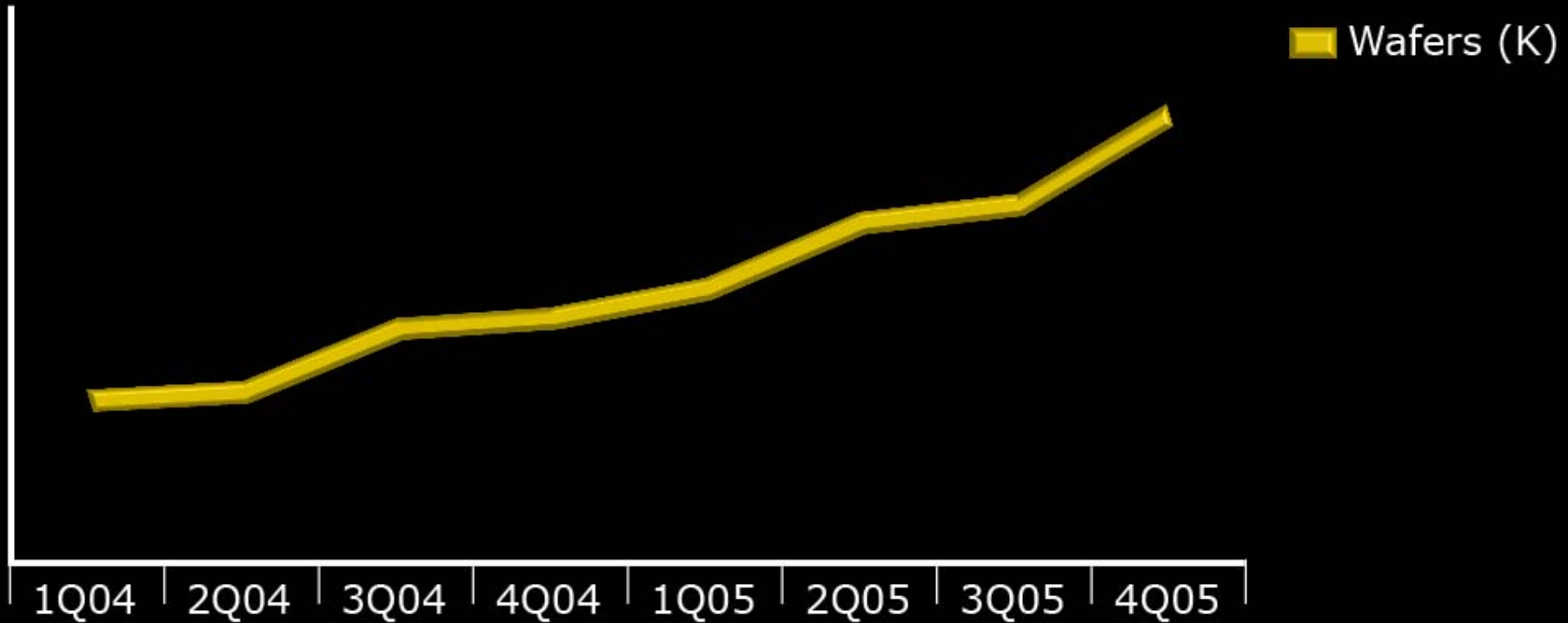
Cycle Time Improved 20%

Improved Cycle Time and Productivity

Operational Improvements

Achieved in Fab Wafer Output and Cycle Time Concurrently

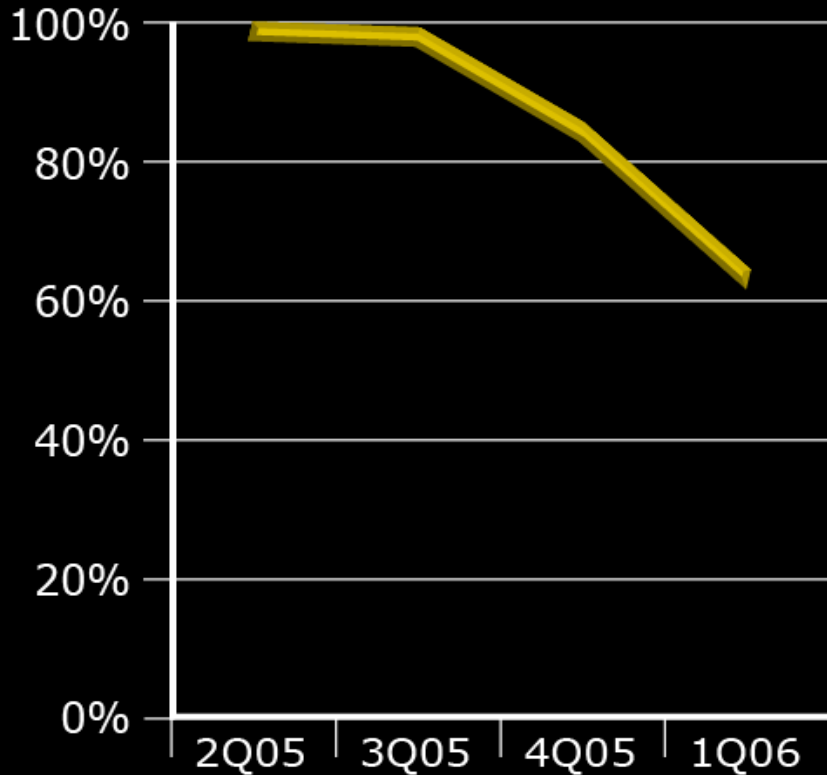
Fab30 - Continuous Productivity Improvement



Wafer Output Improved 47%

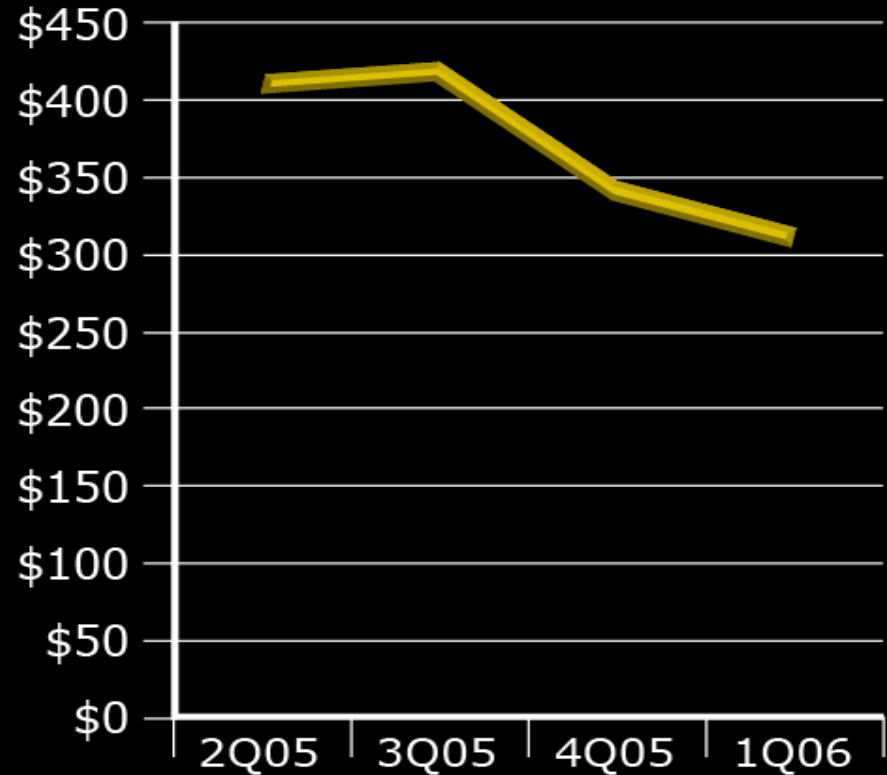
Opportunity meets Lean Preparedness

Total Inventory



**Total Inventory
Improved 35%**

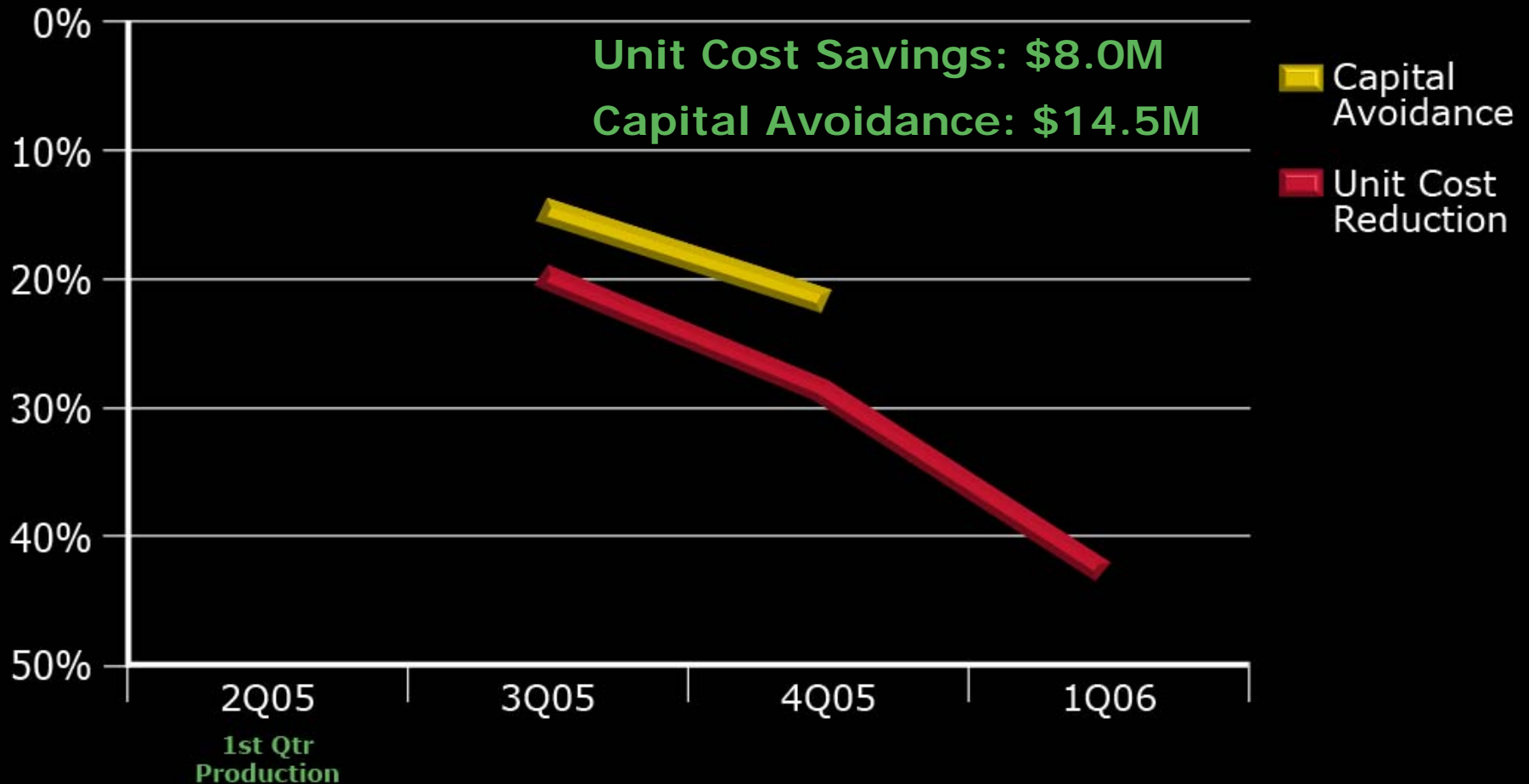
MP \$ Gross Inventory



**Improvement in Sales
\$ / Cash Flow \$238M**

**Improvement in
Operating Profit \$48M**

Desktop Capital Avoidance and Unit Cost Reduction For Assembly and Test Operations



AMD's Manufacturing Strategy - Flawless Execution Continues

Solid plans for increasing Dresden capacity by up to 4x in next three years

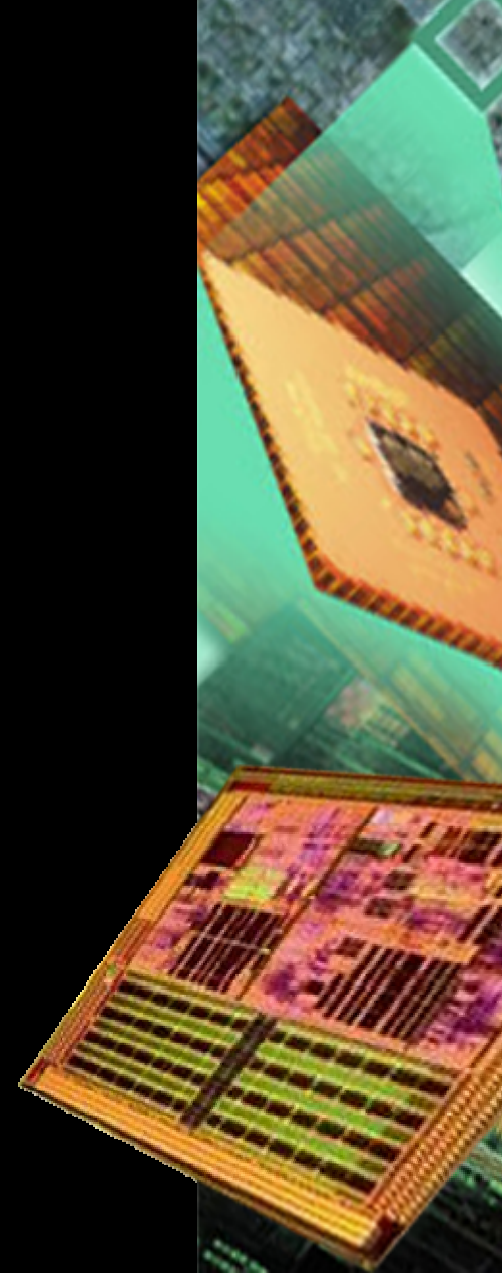
Highly Successful R&D relationships

65nm technology qualification on track

Expect mid-2008 45nm introduction

Taking our unique manufacturing advantage to the next level - Lean Manufacturing

Fully positioned to service 1/3 of the market by 2008





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