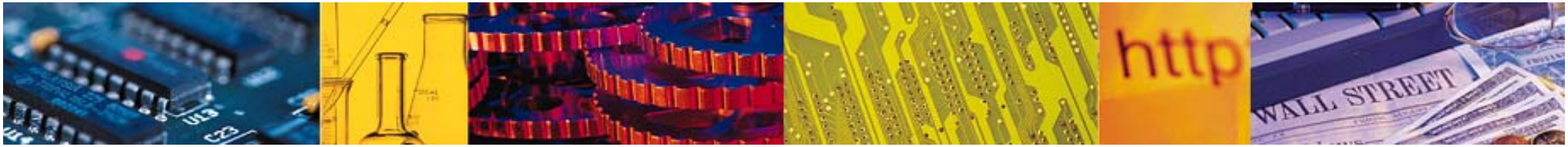

Needham & Co, LLC

SEMInvest™ Analyst Breakfast

Wall Street Looks at the Industry

March 24, 2008

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Let's Look at a Simple Framework of Capital Spending…

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Four Factors Affecting Semiconductor Spending

	Driving Force Behind:	
	More Spending	Less Spending
Economy	Expansion	Slowdown
Units Demand vs. Pricing	Explosion of Consumer Electronics – Increase Unit Demand	Pricing Pressure on Semiconductor
Logic	Moore's Law – Increase Complexity and Lower Cost	IDM Outsourcing Reduces Spending in Leading Edge
Memory	Growing Demand Attract Investments	Companies Operating at Persistent Losses

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U.S. Economy Slowdown

So far this year, we see limited capex reduction purely based on the weaker economy

It means that Semis are slow to react to economical change

2H08 & 2009 Capex

Capex could be slower even with a mild recession in 2008

Slow Capex = Semi Equip Investors Needs to be Selective

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Consumer Driven Units Demand and Pricing

Explosion of Consumer Electronics continues in 2008:

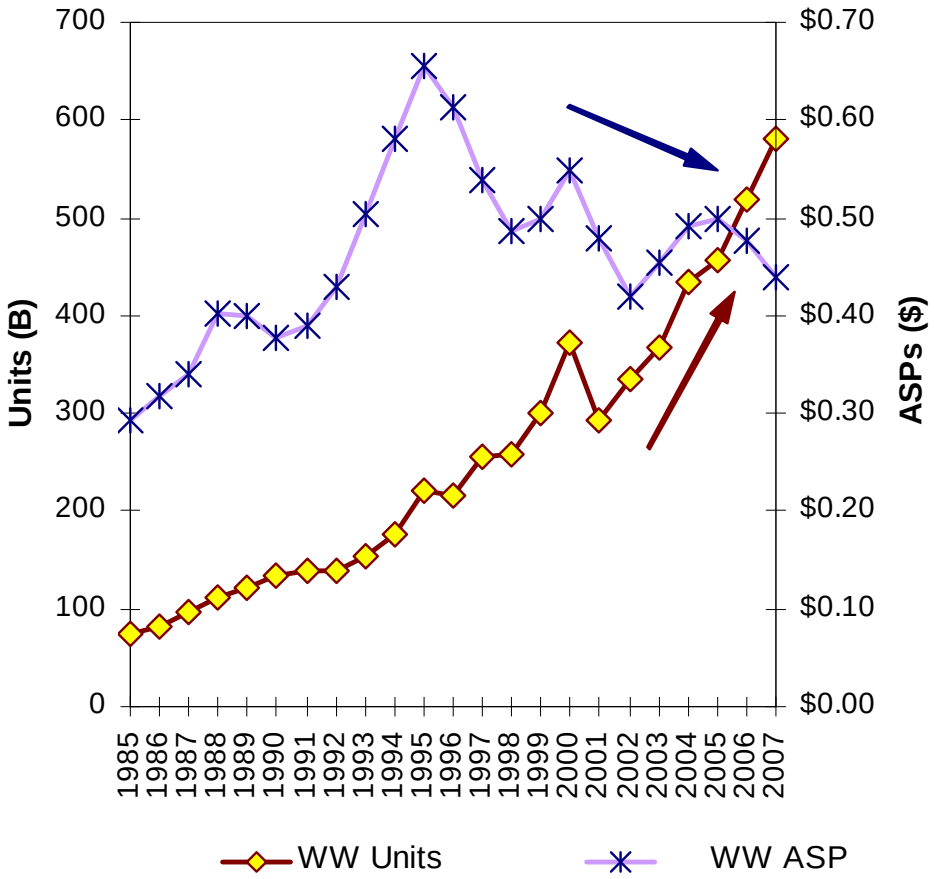
Unit demand should remain strong, but weaker economy will drive lower ASPs

Semi to maintain investments to keep up with unit demand and drive leading edge to cut costs

2H08 and 2009 Capex

Capex increase for leading edge

Unit demand drive NAND spending



Source: SIA

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Logic: Increased Complexity but Rational Spending

Moore's Law is alive and well:

- Increased complexity and lower costs

IDM going "fab-lite"

- Reduce capital intensity
- Drive up efficiency of whole industry

The Industry will need to invest in 45nm/32nm

2H08 & 2009 Capex

Foundries capex limited in 2008, then increase in 2009, but …

… IDM capex continue to decline

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Memory: Good Demand but Companies Keep Bleeding

Both DRAM and NAND markets face significant overcapacity

DRAM: supply continue to outstrip demand

Results: DRAM prices fallen below cash costs

2008 NAND market is tough, but NAND players aggressively spend through downturn to enable SSD

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Types of Memory Company

Types	Companies	Features	Capex
Diversified Electronic Makers	◆ Samsung ◆ Toshiba	◆ Other businesses augment memory spending ◆ Can afford a long downturn ◆ Committed to grow	◆ Consistent spenders
Multiple Memory Markets	◆ Hynix ◆ Micron	◆ Try to balance between products ◆ Some leverage, but limited	◆ Want to spend but limited
Pure Plays	◆ Elphia ◆ Qimonda ◆ Taiwanese	◆ At the mercy of the end market ◆ Alternative motives ◆ Wanting to do more	◆ Pressured now but may come back

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Memory: Good Demand but Companies Keep Bleeding

2H08 and 2009 Capex

NAND remains same level, could accelerate if SSD takes off

DRAM could see some up-ticks, but limited by more losses

Semi Equip

- Companies leverage to NAND will still works
- DRAM rebound may be short lived
- Transition toward leading edge to cut costs

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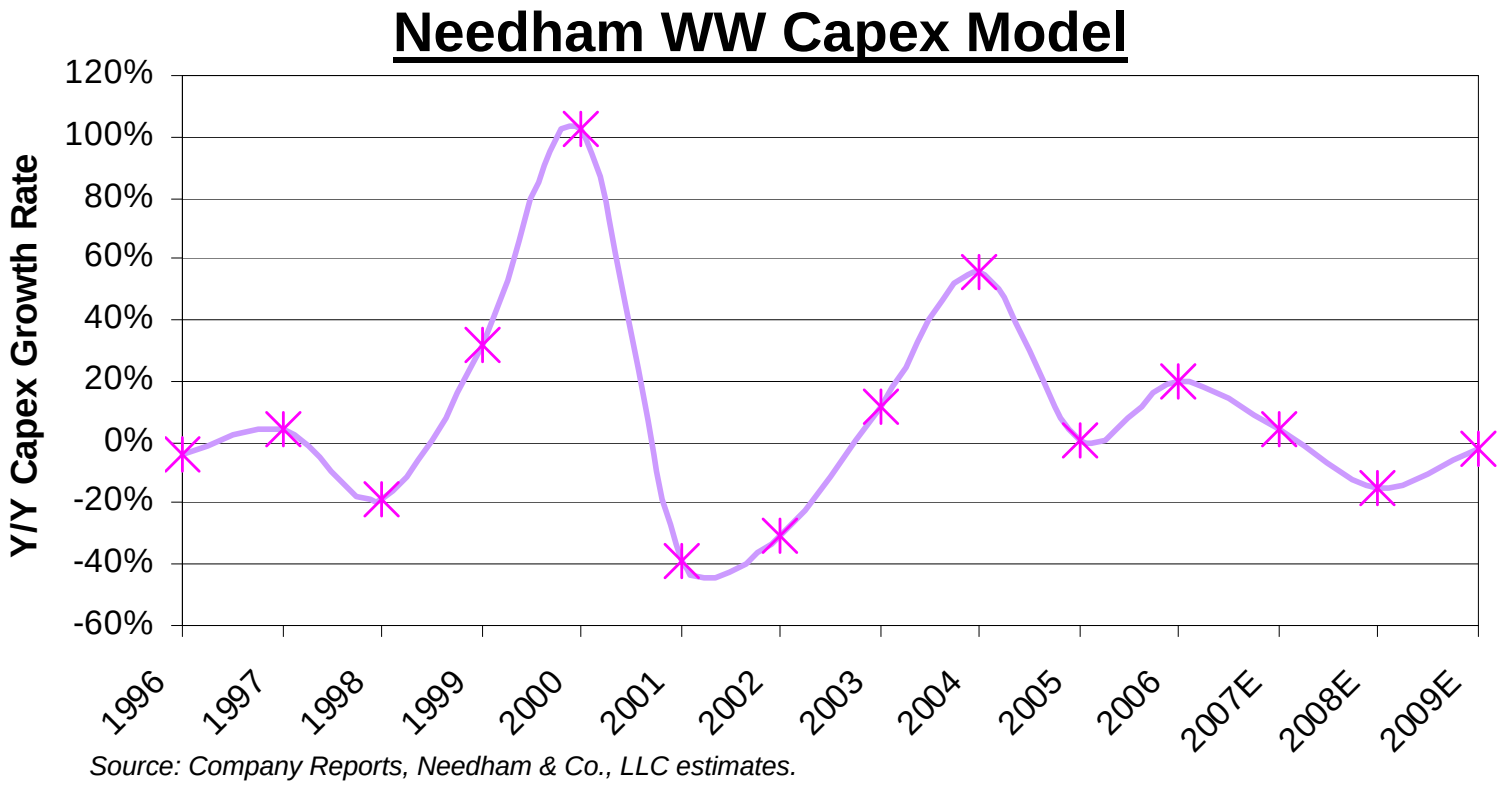
To Put it All Together …



Source: Company Reports, Needham & Co., LLC estimates.

Our View of 2008/09 Capex:

- 2008 2Q/3Q worsen, but we could see a 4Q capex rebound
- 2009 capex flat-to-down

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Without Capex Growth, What Should Semi Equip Investors Do …

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Start with These Winners …

- Top Performing Stocks:
  - These 10 stocks grew 60% or more in the last 9 years
- What do these companies have in common?
  - Leading market share – majority share and growing

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What Were the Common Theme?

- Driving Leading Edge Processes
- Highly Leverage to NAND Spending

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And the Long-term Value Plays …

Longer-term: Semi Equip Names Become Value Play

- Look for High FCF Yield: AMAT 5.1%; NVLS 6.4%; KLAC 7.6%; LRCX 8.9%
- Returning cash to investors via buybacks and/or dividend
- But Beware: Cycle impacts near-term stock performance

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Conclusion:

- Semis Capex are slow to react to economical change
- Moore's Law is still a driver - enabling lower costs and higher complexity
- The Industry is Improving efficiency – reducing capital intensity
- Memory spending could continue, but little growth
- Stocks with leading market share over performs peers
- Look for cash flow generation and buybacks

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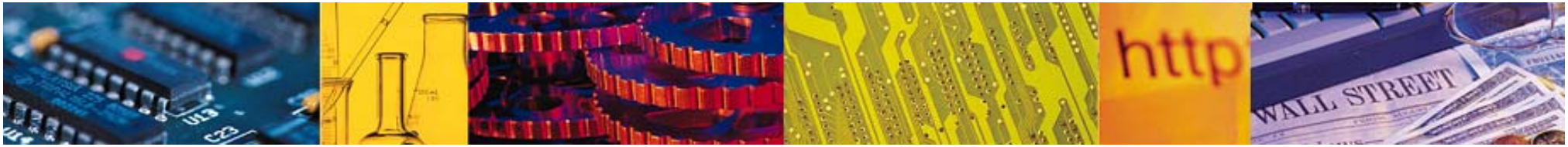

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Thank You

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