

“Consumer-Like” Silicon Era

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Today's Agenda

- 8:00AM Opening: Mat Maloney, Silicon Valley Bank
- 8:05AM Consumer-Like Silicon Introduction
Charles DiLisio, D-Side Advisors
- 8:20AM Panelists Remarks:
 - John Paul Ho, Crimson Investments
 - Tony Fadell, Apple Computer
 - Gregg Zehr, PalmOne
 - Brad Kayton, Prismiq
- 9:00AM Open Q&A
- 9:30AM Closing Remarks: Jim Hori, Silicon Valley Bank

Consumer-Like Era What's Changed

- ▲ Silicon Integration —> Elastic Demand —> More Markets
Today: Increased integration may not result in either profit for new markets for the IC vendor. Integration most likely to only maintain market position.
- ▲ Learning Curve Was Our Friend — ASIC problems Were Absorbed in Cost Reduction “Advantages” By Bigger Wafers and Smaller Die
Today: Costs outstrip market's willingness to pay as ASIC design cost can approach \$15M to \$20M and deep sub-micron fabs cost \$3B!
- ▲ Markets Were Big and Deep and Insatiable
Today: Markets are seemingly fashion driven with consumer in charge, thus short lived, fragmented and fickle.

Non-Spousal Approval Price Point

PDA, Phone, Camera, BlueTooth, SD Slot, E-Mail, etc.



ALL UNDER \$200!

IC Cost Improvement?

Technology Has Worn-Out the Traditional Options

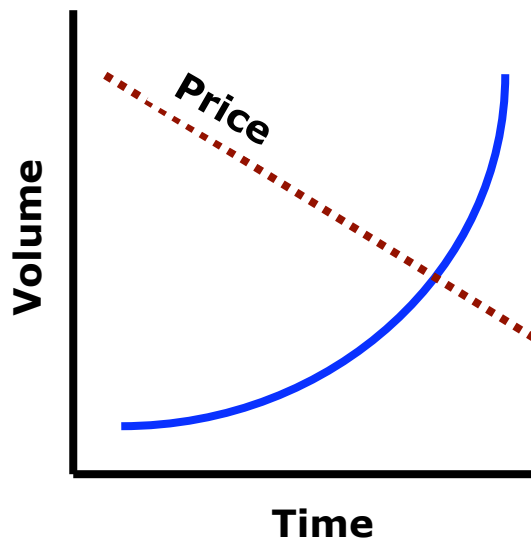
Your Value Proposition Can't Rely Solely On
Lower COST Through Greater Silicon Integration
You Have to Create Value Outside of Shrinks!

$$\text{IC Cost} = \frac{\text{Die Cost} + \text{Test Cost} + \text{Package \& Assembly}}{\text{Final Test Yield}}$$

Consumer-Like Markets

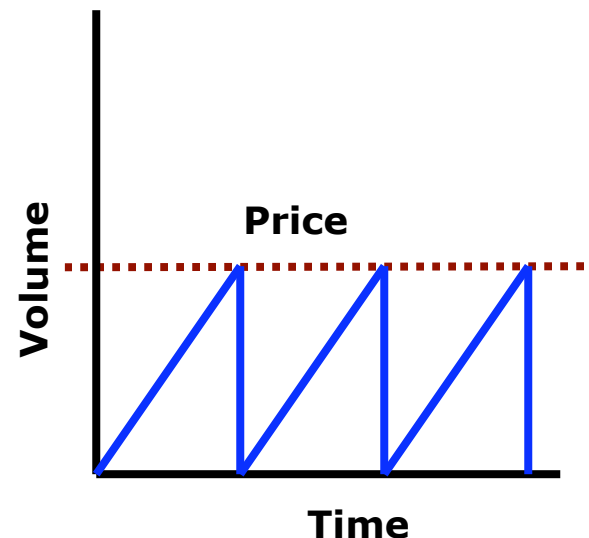
Customers Pay for Value not Technology!

Learning Curve



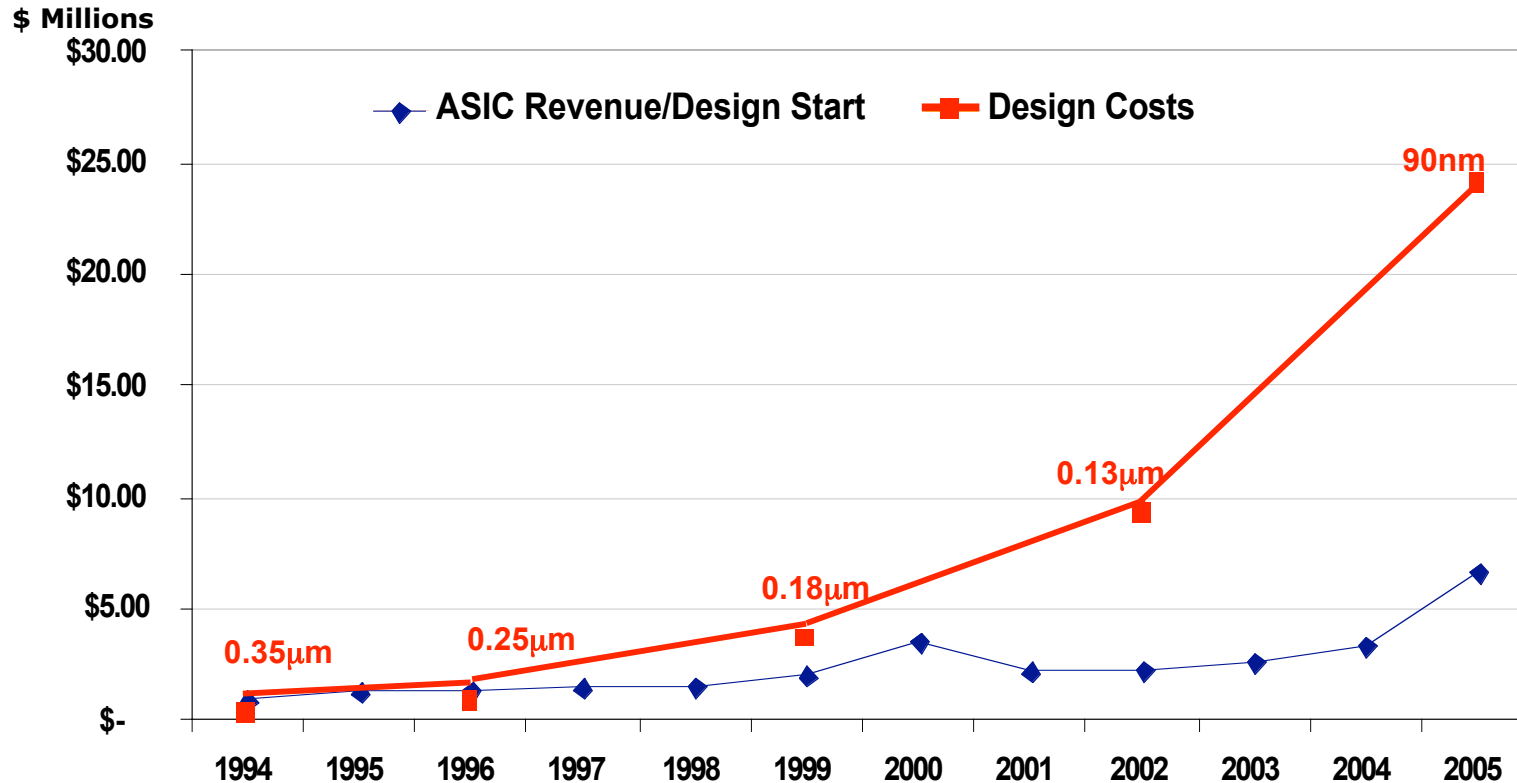
- ▲ Lower Cost, Elastic Demand
- ▲ Integration thru Silicon
- ▲ Technology is Strategic
- ▲ IDMs, Design Services and Foundry Wins

Order Stocking Model



- ▲ Fixed Price, Inelastic Demand
- ▲ TTM thru Packaging
- ▲ Supply Chain is Strategic
- ▲ EMS and OEM Wins

ASIC Design Costs Rise Faster Than Revenue SoCs Look for the Home Run!

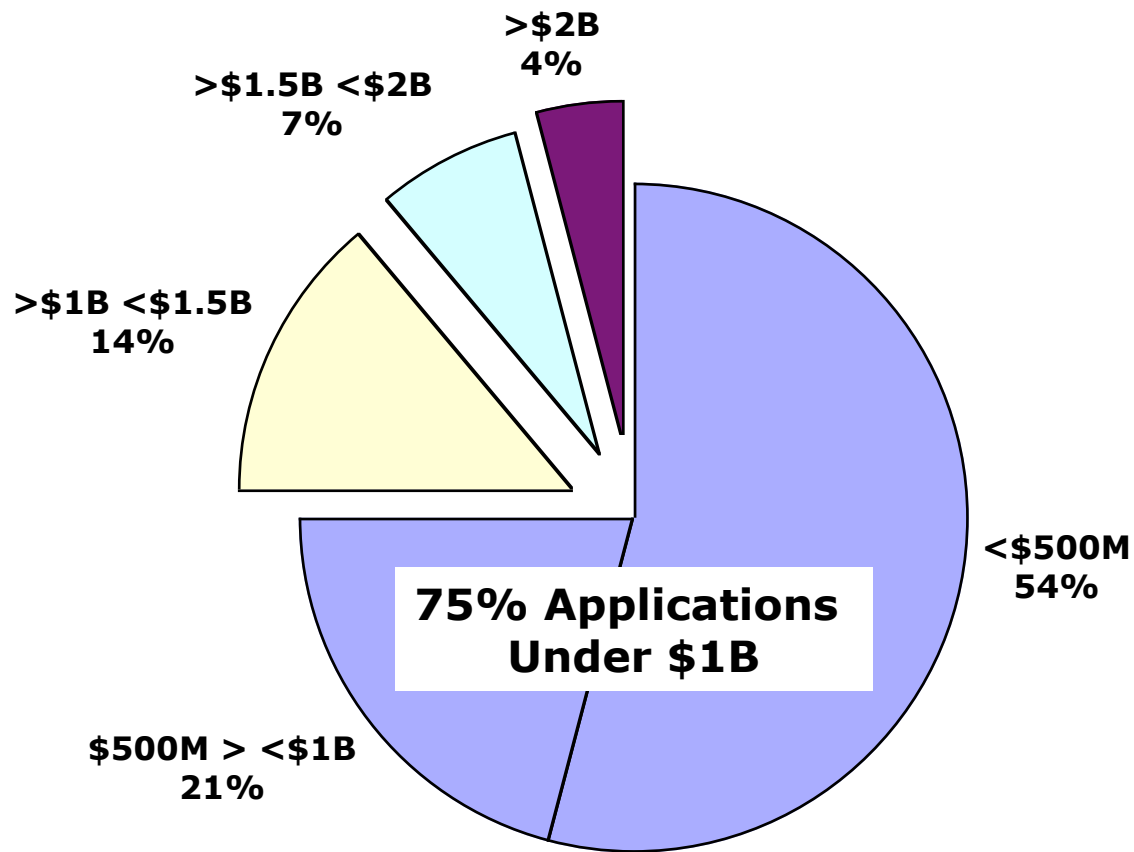


Source: Gartner Dataquest 2002/2003; I.B.S. 2002...Custom EDAC Study

The Billion Dollar Market Gamble

Lotto-like Odds For Scoring a Big Market

2003 Application Markets That Support Value Added ICs
(ASIC, ASSP, FPGA) % Count



AI Dente Marketing...

Tossing a product into the marketplace to see what sticks

Silicon Marketing Cooking Process

1. Launch a Product to Test Volume to Gauge Customer Appeal
2. Try Various Combinations of Functions to Find Interest
3. If Customer Like: Orders Roll In Causing High, Short-Cycle Demand — Pressuring Supply Chain to Ramp Quickly!
4. If Customer Dislike: Channel demands “Would You Take Back the Start Quantity?”

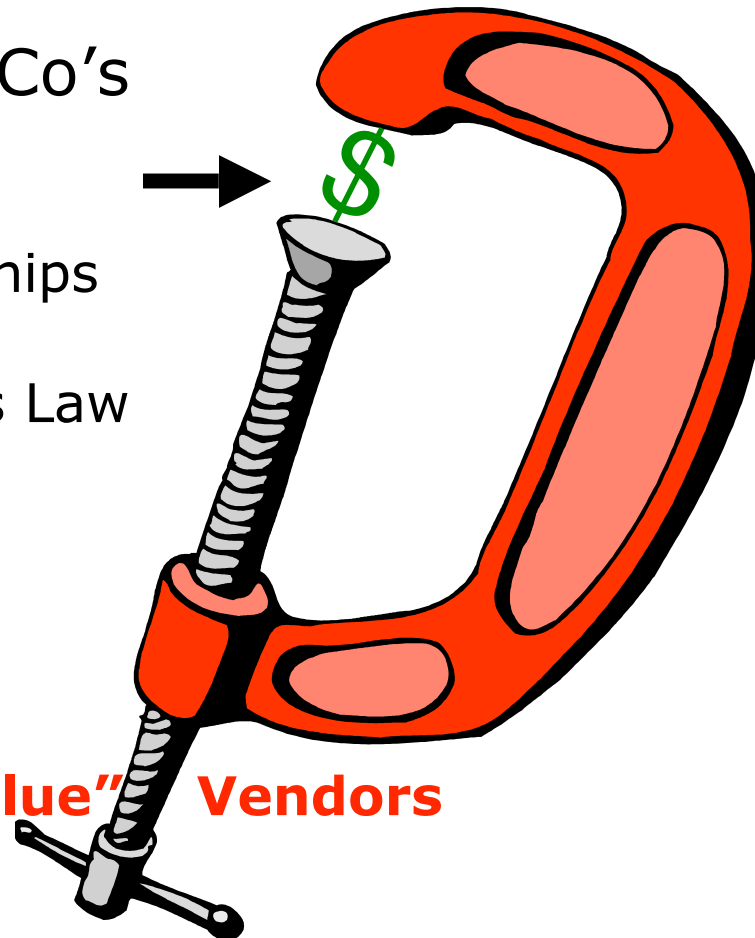
The Profit Vice...

Putting the Squeeze on Fabless IC Firms

Major IDMs and Fabless

Fate of Many Fabless IC Co's

- Few products in portfolio
- Betting on new markets
- Survival based on relationships and service
- Hope is to leverage Moore's Law

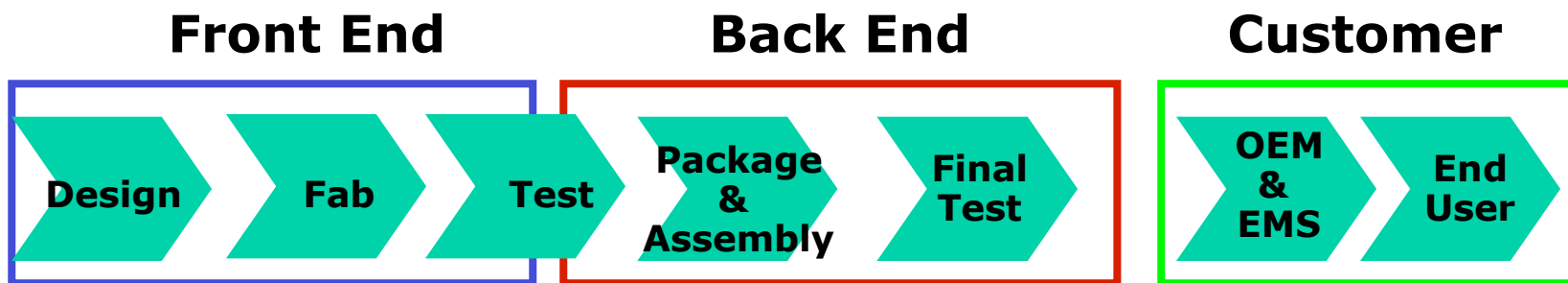


Low margin "Value" Vendors

Capturing More Value

When the Silicon Is Virtually Free!

- ▲ Historically: Value Resided In Chip and Design
- ▲ Today: System Architecture Determines Value
- ▲ Future:
 - Systems Knowledge Is Required
 - Find Opportunities Where You Bring Unique Value
 - Find Applications That Are NOT Volume Dependent



The Cure For Corporate Malaise

Think Value, Growth and Profit

- ▲ **Value:** Silicon Value Must Be Beyond Shrinks!
 - What does the customer truly value?
 - What markets can silicon be truly disruptive?
- ▲ **Growth:** Build a Billion Dollar Market With Multiple Niches
 - Which markets can be leveraged quickly for greatest return?
 - Can you build upon a market theme a niche at a time?
- ▲ **Profit:** Avoid Product Arthritis Through Early Reinvestment
 - At what lifecycle phase is your high-revenue product?
 - Given the lifecycle when should you reinvest?

Symptoms of Lost Value, Slowing Growth and Shrinking Profits

You Suffering From The Consumer-Like Flu...

- ▲ Are Your Design Cost Rising Rapidly?
- ▲ Are You Adding Functions or Features and Unable to Increase Price?
- ▲ Are You Surprised That The Competition Is Selling an Alternative Below Your Marginal Cost?
- ▲ Do You Find Yourself in an OEMs Reverse Auction?
- ▲ Is it Difficult to Get a Winning Product to Market?

Don't Ignore the Symptoms

Thank You

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Today's Panel...

- ▲ John Paul Ho, Managing Partner — Crimson Investments
- ▲ Tony Fadell, VP Special Products — Apple Computer
- ▲ Gregg Zehr, VP Hardware Development — PalmOne
- ▲ Brad Kayton, VP Marketing & Corporate Dev. — Prismiq