Intel Corporation (INTC)

Inside Intel
Recommendation: ST-Hold, LT-Buy
Analysts: Joshua Li, Matthew Cheng

Agenda

• Industry overview
• Competitive landscape
• Business analysis
• Valuation
• Q&A
Pick up of the chip sector...

- Industry experts believe that the bottom has come
  - Double-digit growth for 2002 and growth in the “high twenties” in 2003
- Companies want higher productivity but low costs
  - Low interest rates will spur high-tech capital expenditures
- “Orders have bottomed and are re-accelerating from the deepest drop they’ve had in probably 30 years”
  - Jonathan Joseph, chip analyst with SSB
...translates to Intel’s rebound

- Raised Q4 revenue targets from $6.2B - $6.8B to $6.7B - $6.9B
- Shortages in the supply line of P4
  - Expecting to ship twice as many P4 processors in Q4 than Q3
- Share price is up >64% from its low in September
  - At highest level since April

But how fast will the rebound be?

- Historically, the rebounds have been quick
- However, due to excess capacity and excess inventory, experts find it difficult to predict the speed of the recovery
  - According to U.S. Federal Reserve, U.S. semiconductors were only using 59% of their manufacturing capacity in October – the lowest level since 1975
Intel is ready for rational growth

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Intel vs. AMD

- Intel's share is about 77%
- Early this year, AMD increased its share of the PC processor market from 17% to 22%
- Intel stemmed that decline in the third quarter and gained back 0.8 points to finish with 77.5% of the market
- AMD's share of the market slipped to 21.5% from 22.2% at the end of the second quarter
- CFO Andy Bryant believes that Intel is gaining market share in this quarter

Source: Mercury Research

What is more important?

<table>
<thead>
<tr>
<th>Technology</th>
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<tbody>
<tr>
<td>Attracts high-end enthusiasts</td>
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<td>Ability to charge premium prices on those products that are superior</td>
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<tr>
<th>Size</th>
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<tr>
<td>Economies of scale</td>
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<td>Lower cost/unit</td>
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<td>Market power</td>
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<td>Access to distribution</td>
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How important is technology to the average person?
Disruptive technologies model

Performance trajectory of present technology
New performance trajectory

Most-demanding customers
Least-demanding customers

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Intel has five business units

- Intel Architecture Business
  - Constitutes more than 80% of total sales
- Wireless Communications and Computing
  - Embedded processors for handheld devices, cellular communications products, and flash memory chips
- Network Communications
  - Networking product assets
- Communications Products
  - Hubs, switches, and routers
- New Business Group

Silicon is In

- Intel is restructuring its business to capture growth in the computer industry
  - Silicon Building Block Plan
- Comparables; Microsoft Corp (MSFT)
- Value of **Vision** in creating growth
Issues in valuation

- Including mergers and acquisitions in CapEx
- Capitalizing R&D expenses
- Eliminating, and subsequently adding back, non-operating products
- Intel’s many real options in their investing in small tech companies
Capitalizing R&D

- R&D creates an asset
- Estimated life = 5 years

<table>
<thead>
<tr>
<th>($000)</th>
<th>Year</th>
<th>R&amp;D</th>
<th>Unamortized Portion</th>
<th>Amortization</th>
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<tbody>
<tr>
<td>Current</td>
<td>2000</td>
<td>4,006,000</td>
<td>1.0</td>
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<td>-1</td>
<td>1999</td>
<td>3,303,000</td>
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<td>2,602,400</td>
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<td>-2</td>
<td>1998</td>
<td>2,674,000</td>
<td>0.6</td>
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<td>-3</td>
<td>1997</td>
<td>2,347,000</td>
<td>0.4</td>
<td>938,800</td>
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<td>-4</td>
<td>1996</td>
<td>1,808,000</td>
<td>0.2</td>
<td>361,600</td>
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<td>-5</td>
<td>1995</td>
<td>1,206,000</td>
<td>0.0</td>
<td>-</td>
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<tr>
<td>Total</td>
<td></td>
<td>9,713,200</td>
<td>1,141,440</td>
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Eliminating non-operating income

- ROC is the returns from the operating assets of the company
- Therefore, one approach could be:
  1. Remove non-operating income from initial EBIT calculation
  2. Find the after-tax amount of such income as a % of after-tax EBIT
  3. Estimate, and add back, the amount when calculating FCFF
Summary of base case assumptions

Various Rates Used in Valuation (Base Case)

Intel is currently overvalued

• Sentiment in the semiconductor sector has been extremely good, leading to an upswing in the industry
• Intrinsic value per share of Intel from our base case analysis is $23.64
  • ~29% below today’s close of $33.24

The option value of Intel’s equity investments is not taken into account in our analysis
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Q&A