Please Turn Off Cell Phones

Thank You For Your Cooperation
The Problem

How does Microsoft penetrate the highly competitive gaming console market in 15 months compared to 30 for Sony's Playstation 2?

The Solution

Flextronics
The Industry
Electronics Manufacturing Services (EMS)

Electronics Manufacturing Services
- Contracted by OEMs to “manufacture products”
  - OEM: Original Equipment Manufacturer
    - Sony, Toshiba, Ericsson, Motorola, Nokia
- Average growth rate of 25% per year
- Bear Stearns estimates:
  - 1999 Market: $73.2 billion
  - 2003 Market: $149.4 billion
  - Total Market Potential: $500 billion
What Do They Do?

- Past: Simply (sub)assemble products
- Present: Begun adding…
  - Custom components
  - Design services
  - Supply chain management
- Future: One-Stop Shop
  - Everything from concept design to ultimately taking orders from customers and then directly delivering them

Why Are They Hot?

- Margins are gaining in importance
  - OEMs stick to their best areas
    - Research & Development
    - Sales, Marketing & Branding
  - Outsource the rest
    - Manufacturing & Logistics
    - Support
- EMS industry is becoming full-featured
  - “One-Stop Shop” equates to lesser hassle
Leading Companies

- Solectron (Milipitas, California)
  - HP, Ericsson, Cisco Systems, Compaq, IBM
- Celestica (Toronto, Canada)
  - HP, IBM, NEC, Sun Microsystems
- SCI Systems (Huntsville, Alabama)
  - HP, Nortel, Nokia
Quick Company Profile

- Incorporated in Singapore in 1990
- Went public in 1994
- Active in 28 countries across 4 continents
- Clientele includes:
  - Alcatel, Cisco Systems, Compaq, Ericsson, Hewlett Packard, IBM, Lifescan, Microsoft, Nokia, Nortel, Palm, Philips, Siemens, AG, Sony, Xerox

Quick Financial Profile

- #1 EMS company in market capitalization ($11.91 billion > 9.52 billion)
- #2 EMS company in revenue
- Growth from 2000 to 2001
  - Revenue: 74% ($12.1 billion)
  - Cash operating income: 82% ($552 million)
Leader in Innovation

- Taking EMS to new levels…
  - Taking orders directly from customers
  - Producing products in multiple markets
  - Handle logistics of delivering the end result directly to customers

Acquisition Frenzy

- DII Group
  - Increase in manufacturing capacity
- Palo Alto Products, Chatam Technologies and JIT Holdings Ltd.
  - Industrial design services
- Lightning Metal Specialties
  - Injection molding, metal stamping and integration
Five Fingers On Each Hand

- **Flextronics Design**
  - Industrial, electrical and mechanical product development support
- **Flextronics Enclosure Systems**
  - Integrating custom electrical housings
- **Flextronics Semiconductor**
  - Providing new design and manufacturing services
- **Flextronics Network Services**
  - Copper and Fiber optic telecom switch installation, engineering and testing services
- **Flextronics Photonics**
  - Photonic design and manufacturing
- **Multek**
  - Printed Circuit Board (PCB) fabrication

Putting It All Together

- **Product design and technology services**
- **Logistics services**
  - Materials procurement
  - Inventory and vendor management
  - Packaging and distribution
  - Automation of key components of the supply chain through advanced information technologies
Who Needs That Anyway?

- Multiple plant closings in Fiscal 2001
  - Short-term: Loss of $534 million
  - Long-term:
    - Forced consolidation of resources
    - Better economies of scale
- Has led to multiple “one-time” charges

Product Catalog

- Exclusive manufacturer of...
  - All Ericsson cellular phones
  - All Microsoft Xboxes
  - Good percentage of Motorola phones

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Telecom</td>
<td>34%</td>
</tr>
<tr>
<td>Servers, Peripherals and PDAs</td>
<td>26%</td>
</tr>
<tr>
<td>Networking</td>
<td>19%</td>
</tr>
<tr>
<td>Consumer &amp; Medical</td>
<td>8%</td>
</tr>
<tr>
<td>Others</td>
<td>13%</td>
</tr>
</tbody>
</table>
Looking Forward

- 2002 Implementations
  - Increase design capabilities
  - Expand IT tools
  - Drive logistics management
- Industrial Parks Strategy
  - Consolidation of raw materials, suppliers and manufacturing
  - Low-cost regions (labor, land & capital)
  - Mexico, Brazil, Hungary, Poland, Czech Republic, China

Looking Smarter

- Industrial Parks should lead to...
  - Decrease logistics costs
  - Reduce time-to-market
  - Decrease shipping costs
  - Improve communication and quality
Soothing Words

- End markets are weak, but Flextronics is winning tremendous amounts of new business
  - Result: record second quarter for the ongoing fiscal year
    - $3.324 billion
  - Expects third quarter to hit $3.3 - $3.5 billion
    - Would have been higher, but…
      - Plastic enclosures supplies are limited (-$100 million)
      - Xerox deal facing regulatory issues (-$100 million)
  - Getting more wins than competitors, including Selectron
    - Example: Microsoft

Risks

More Talent Than The Los Angeles Lakers: Can They Put It Together?
Market Risks

- In a depressed economy…
  - Less demand for clients’ products
  - Resources and inventories may go to waste

Company Risks

- Dependent on…
  - Certain credible, management figures
  - Stability in foreign currencies
  - Good relations and reputation with clientele
Valuation
Three-Stage Free Cash Flow to Firm Model (FCFF)

DCF? Sure. But how?

- Revenues are the easiest to predict
  - High fixed costs cause net income to be volatile
- Heavy reinvestments are needed
  - Is EBIT (operating cashflow) enough to cover the costs?
  - How will FLEX cover Capital Expenditures in the future?

\[ \text{FCFF (not FCFE) is a much better DCF valuation method for FLEX} \]
FCFF? It is not in the Workshops?

- Allows you to valuate the whole firm
  - No need to worry about capital structure
- Once firm value is obtained, getting the equity value is easy
  - Add back cash
  - Take out value of debt

Recurring One-Time Charges

- For the past 3 years, FLEX has recorded unusual charges as a part of COGS
  - In the most recent quarter, FLEX recorded a one-time charge of $380MM
- All charges have been restructuring-related

Relocate these charges as capital expenditure
Capitalizing Operating Leases

- Operating leases are really PPE LT financing
- Find the PV, and include it in Liabilities
- Get the “interest payment” and add it into Interest Expense

<table>
<thead>
<tr>
<th>Year</th>
<th>Lease</th>
<th>PV</th>
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<tbody>
<tr>
<td>2002</td>
<td>117,171</td>
<td>106,019</td>
</tr>
<tr>
<td>2003</td>
<td>101,714</td>
<td>84,061</td>
</tr>
<tr>
<td>2004</td>
<td>70,851</td>
<td>53,194</td>
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<tr>
<td>2005</td>
<td>35,463</td>
<td>24,222</td>
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<tr>
<td>2006</td>
<td>16,456</td>
<td>10,218</td>
</tr>
<tr>
<td>Thereafter</td>
<td>16,848</td>
<td>50,737 *</td>
</tr>
</tbody>
</table>

Debt Value of Leases 328,950

* Treated as annuity lasting 8 years beyond 2006

Three-Stage FCFF

- High growth phase: Years 1-3
- Transition phase: Years 4-10
  - Revenue growth slows
  - Operating margin increases
  - Efficiency increases
- Stable growth phase: Year 11 till forever
Assumptions, Assumptions...

Inputs
- Tax Rate in High Growth Phase: 10.00%
- Tax Rate in Stable Growth Phase: 20.00%
- Cost of Debt: 7.80%
- Riskfree Rate: 4.60%
- Risk Premium: 5.50%
- Beta in high growth stage: 2.21
- Beta in stable growth stage: 1.20
- High Growth Phase Revenue Growth Rate: 70.00%
- Stable Growth Phase Revenue Growth Rate: 5.00%
- High Growth Phase Operating Margin: 4.00%
- Stable Growth Phase Operating Margin: 6.50%
- High Growth Phase Sales/Capital Ratio: 2.50
- Stable Growth Phase Sales/Capital Ratio: 5.00
- Debt Value (000): 3,870,244
- Market Value of Equity (000): 11,331,068
- Firm Value (000): 15,201,312
- Debt/Firm: 25.46%
- Equity/Firm: 74.54%

Given the Assumptions...

Equity Value Calculation
- PV of High Growth Phase and Transition Phase: (26,010,387)
- Terminal Value of Stable Growth Phase: 165,288,208
- PV of Terminal Value @ 14.5%: 42,676,324
- Intrinsic Value of FCFF: 16,665,937
- Cash: 631,588
- Debt: 3,870,244
- Value of Equity: 13,427,281
- Shares Outstanding: 482,810
- Value per Share: $27.81
GIGO / Plenty of Risks

- Model requires a lot of estimates
  - If my assumptions are wrong…
- Notice how PVs of Years 1-8 are negative
  - You are betting far out into the future
  - Extremely risky

Recommendation
Putting Our Mouth Where Our Money Is
Go Long

- ST Hold
  - Down turned economy is bad for company
  - Taking time out for restructuring
    - Lots of unusual charges
    - Supremely volatile
- LT Buy
  - Industry is still a baby
  - Leader in industry’s innovation

Any Questions?
Please Be Nice
Thank You
Come Again!