# **Bloomberg Trading Room Analysis Intel v.s. Advanced Micro Devices Inc. (AMD)**

Intel and AMD are in the semiconductor industry. They build chips that are vital to the architecture and workings of computers.

# **Company Summaries**

# **Intel Corporation**

Ticker Symbol: INTC

Location: Santa Clara, CA

Fiscal Year Ends: December

Intel is the world's top semiconductor maker and makes several times as much from chips than any of its competitors. Most computer makers use Intel processors including Dell computers, Intel's largest customer. The company attempted to diversify itself by stemming out into other businesses besides chips. However, many speculated that this chaotic strategic roadmap was hampering Intel. Therefore, Intel's CEO Craig Barret launched a company wide initiative to refocus Intel on flawless execution. In following this new initiative, Intel recently increased and restructured the research and development department, got rid of Web services, and discontinued its consumer electronics offerings. Intel continues to far outspend its competitors by plowing billions and billions of dollars into research and capital expansion.

#### Advanced Micro Devices, Inc.

Ticker Symbol: AMD

Location: Sunnyvale, CA

Fiscal Year Ends: December

AMD is ranked #2 in PC microprocessors, but is still far behind its archrival Intel. AMD managed to erode Intel's dominance of the market only to see Intel strike back with steep price cuts and faster introduction of new models. AMD is also a top maker of flash memory chips, embedded processors, and other chips for communications and networking applications. AMD has experienced recent set backs due to design flaws and other manufacturing problems, including lack of production capacity. After a stellar year in 2000, the company announced job layoffs and plant closings in 2001. In 2003, AMD announced forming a new company, FASL, with long-time joint-venture partner Fujitsu to pool the two chip makers' flash memory operations. This new venture stands to be the world's #2 maker of flash devices when in begins operations in the end of 2003.

#### **Income Statement Analysis**

Intel's Income Statement for the past five years shows fairly consistent amounts that stay constant over the period. In net sales, Intel experienced a slight peak of about four billion dollars in the year 2000. However, sales drop back to 26 billion again and remain at 26 billion for 2001 and 2002. Cost of goods rises steadily over the five year period as well as interest expense. This would probably help explain partially for the drop in net income. However, it does not fully explain the huge decrease in net income from 2000 to 2001. Despite the decrease, net income seems to be on the rise again for Intel with an increase of about two billion dollars in 2002.

AMD's Income Statement shows a company that seems to be headed for trouble. In the past five years, AMD saw a rise in sales at first and hit a peak in 2000 also with about 4.6 billion. However, sales steadily decrease and are back to about 2.6 billion in 2002. Cost of goods sold rose in 2000, and remains fairly constant through 2002. Interest expenses were fairly consistent over the years, but have risen by about 10 million in 2002. Net income experienced the greatest amount of change over the years. The company experienced losses in 1998 and 1999, but AMD saw a positive net income of almost a billion in 2000. However, AMD again sees a loss of net income in 2001 and a dramatic loss in 2002. The company looks to be heading for more losses. This could be due to many factors, including the steady performance of its competitor, Intel.

Both companies experienced a peak of profit in the year 2000. This could be due to Moore's law. Moore's law states that every four years a new, smaller, and more powerful transistor will be created. These new transistors allow for smaller and more powerful processor chips (semiconductor industry's main product). It is quite possible that the year 2000 was the fourth year when a new transistor was developed allowing for new, higher performing products for each company to sell and a greater demand among their consumer markets.

# **Balance Sheet Analysis**

For Intel, the Balance Sheet shows about as much as the Income Statement. From 1998 to 2000, Intel has a gain in current assets. However, starting in 2001 to 2002 the current assets decrease back to about 17 billion and increase to 18 billion. This shows that Intel's current assets are again on the rise. Liabilities and equity perform the same way. From 1998 to 2000, they steadily increase and peak in 2000. Then in 2001 and 2002 they decrease and remain mostly constant.

AMD's Balance Sheet shows changing asset values that seem unpredictable. From 1998 to 1999, the current assets decrease. However, in 2000 the assets increase by about a billion dollars. Then in 2001, the current assets decrease slightly and stay constant through 2002. Liabilities and equities increase steadily all throughout the five year period, and can be estimated to increase in the coming years. While AMD has increasing assets and are considered a competitor of Intel, they still have a significantly lower amount of assets.

#### **Cash Flow Summary**

From 1998 till 2000, Intel's operating cash flow increases and peaks in 2000 with about 12 billion dollars. Again, in 2001 there is a decrease and then a rise into 2002 to about 9.1 billion. Intel invested from 6 billion to 5 billion in cash in 1998 and 1999. In 2000, Intel invested a much larger amount of cash, 10 billion. In 2001, Intel only invested 195 million dollars, which is a huge drop from 2000. The investment increases again in 2002 to 5.7 billion. Financing activities tend to stay in the 4 billion to 3 billion range over the time period, but shows a trend towards increase in 2002. Finally, Intel has over 1 billion in free cash flow over the entire five year period, with a peak of 7.9 billion in 1999 and a low of 1.3 in 2001. However, 2002 shows a tendency towards increasing.

AMD's cash flow statement is not as promising as Intel's cash flow. First off, AMD has low amounts of operating cash flow with a sharp increase in 2000 with 1.2 billion and a negative value in 2002 of 88 million. With losses in net income over most of the analysis period, AMD also has very low values of investing cash flow amounts. Finally, AMD has little free cash flow except for in 2000 when they had a high 400 million. The other years see negative cash flow. Comparing AMD to Intel based on cash flow, AMD has the disadvantage.

# **Stock Price History**

Intel's stock prices have significantly increased over the past five years. From 1997 till 2000, Intel saw a steady rise in stock price from \$25 to \$75. Starting in 2001, Intel's stock price dropped significantly to \$38, but rose slightly to \$40 in 2002. Intel's stock price could reflect the company's performance in sales and net income, having the peak in 2000. Like the stock price, earnings per share increased steadily till 2000, then decreased in 2001 and rose slightly in 2002. Finally, dividends per share increased steadily for Intel over the five year analysis period.

AMD has a different stock price history than that of Intel. From 1997 till 1999, AMD's stock price dropped from \$24 to a low \$16. However, in 2000 AMD saw a large rise in its stock price to \$48. Despite this dramatic increase, from 2001 to 2002, AMD's stock price continued to fall. One can estimate that the stock price will continue to decrease, but it is hard to tell due to the stock behavior from the previous five years. Earnings per share were all negative, except for in 2000 when the stock price was the highest. Finally, no dividends at all were paid out over the past five years.

#### Conclusion

When deciding between Intel and AMD to invest in, one has to first decide how much of a risk he or she is willing to take. AMD would be the highest risk investment. AMD has proven that with great effort they can pull a significant amount of the market away from conglomerate Intel. Another positive point for AMD is its recent investment in the flash memory market. However, AMD is high risk because of its shaky performance as a company. AMD has experienced design flaws, manufacturing problems, and lack of strong leadership. AMD's financial numbers show a strong trend of decreasing values, and the company looks to be headed into trouble while Intel stays strong.

Intel, on the other hand, is the less risky investment option. Intel has been around much longer than AMD and is more so the 'household' name with consumers. Intel has had and will continue to have a significantly large dominance over the industry. While numbers have decreased over the past two years financially for Intel, it continues to stay strong and produce steady profit. With Intel's new focus and direction and the numerous new developments Intel has made, Intel is sure to see more growth and hence more profit. Therefore, my recommendation for investment would be with the low risk guarantee, Intel Corporation.