The Supply Chain Company®

# **Connecting and Optimizing Worldwide Business Processes at Fairchild Semiconductor**

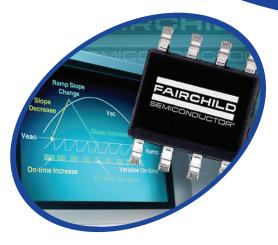
While managing growth in the face of the high-volume and cyclical nature of the semiconductor industry, Fairchild Semiconductor recognized the need to utilize an advanced planning system to elevate customer service. Through its implementation of i2 solutions, Fairchild standardized its global planning and forecasting processes, increased inventory turns, and is on target to achieve a full return on its investment.

The high-volume and cyclical nature of the semiconductor business presents a tremendous challenge to the industry's manufacturers.

Exponential growth compounded these challenges for Fairchild Semiconductor. Growing from \$700 million in revenue to \$1.4 billion in the span of five years, Fairchild knew that its customer service levels needed to keep pace with increasing customer demand.

Fairchild's legacy order-promising system could not provide fast, reliable promise dates to incoming orders. The legacy system gave fixed lead-time promises for new near-term orders in spite of the up-to-date inventory snapshot available in the company's ERP system.

Without an integrated system that simultaneously considered material and available capacity before a near-term order commit or quote response was made, Fairchild had to manually override the process. These manual overrides often took many hours to complete and at times even caused disruption within the supply chain, which sometimes led to lost sales opportunities.





#### Challenges

- Eliminate manual order manipulations and lost sales opportunities
- Enhance ability to match supply with demand
- Establish standardized systems for global planning processes

#### Solutions

- · Gain global visibility into planning and forecasting
- Transform the company's approach to supply chain optimization
- Leverage i2's experience in the semiconductor industry

### Results

- On target to achieve full ROI
- Increased inventory turns by 20%
- · Gained visibility into subcontractors' inventory

### **Company Description**

With annual sales of \$1.4 billion, **Fairchild Semiconductor** is a leading global supplier of high-performance products used in computing, communications, consumer, industrial, and automotive applications. Fairchild's 10,000 employees design, manufacture, and market products from its headquarters in South Portland, Maine, and locations around the world.



"The ROI is there and the inventory turns are up. When you consider our turns prior to i2 solutions, we have clearly made significant strides. Ultimately, we expect to achieve an inventory turn improvement of about 30 to 40 percent."

> *— John Watkins* Senior Vice President and CIO



Fairchild executives realized that it was vital to implement a supply chain optimization system to enhance their ability to match supply with demand.

"We were experiencing circumstances that may have led us to deny the customer product in one location, thinking that it wasn't available, while generating excess inventory at another location, all because we didn't have inventory visibility," said John Watkins, Fairchild Semiconductor's Senior Vice President and Chief Information Officer. "It became a priority of Fairchild Semiconductor to find a solution to optimize our supply chain and business processes so all of our planners were on the same page."

# Why i2?

Fairchild sought to identify a supply chain solutions provider that could do more than just offer software.

"With the understanding that we were looking for a strategic partner, Fairchild representatives met with i2's leadership," Watkins said. "We asked i2 to commit to helping us leverage its experience with other companies in our industry to bring us the same benefits. i2 made the commitment and said they would stand on the stage with us, hold our hand, and launch it with us and they did." "We're very proud of the fact that we can go back and conduct an audit trail of what the commitments were for this project and then demonstrate that we have met those commitments along the way," Watkins said. "Fairchild's i2 implementation was one that did not have to be sold to the rest of the company it sold itself."

i2 is the undisputed leader in high-tech supply chain solutions, serving more than 70 percent of the industry. i2 is the only solutions provider that can deliver an end-to-end supply chain management solution that helps high-tech companies and their partners become more responsive to market demands while simultaneously lowering their costs to serve the market.

# i2's Contribution

Fairchild implemented i2 Demand Planner,<sup>™</sup> i2 Demand Fulfillment,<sup>™</sup> and i2 Supply Chain Planner.<sup>™</sup> The solutions help companies to respond to demand variability, to profitably manage their supply, and to satisfy their customers better than the competition.

Fairchild is using i2 solutions to normalize its business processes, to identify and satisfy customer demand, to reduce inventory, and to improve its turn business.

"i2 came in to kick off the program for us," Watkins said. "It was the absolute best way to approach the implementation, because it changed the fundamental fabric of how we do supply chain optimization." With i2 solutions, Fairchild has gained global visibility into demand planning and fulfillment.

"Fairchild Semiconductor is pretty much all over the globe in terms of a factory footprint," Watkins said.

"We use i2 solutions as tools to quickly take our forecasts, move them into a plan, and get buy-in from all of the people who are going to execute it around the world. We then work with the customer base to make sure we can get the product to them and fulfill their needs."

# **Fairchild Semiconductor's Results**

Through its implementation of i2 solutions, Fairchild is enabling its employees to operate under a standardized system.

"We've been able to get the entire supply chain group at Fairchild on the same business plan with regard to managing the product," Watkins said. "They will tell you that they are no longer lacking any information. I'm not talking about data, I'm talking about information that is needed to run the company—they can see it, and i2 is a strategic part of that vision for them."

## i2 CUSTOMER SUCCESS STORY

Fairchild is leveraging its enhanced planning capabilities throughout its global operations.

"Whether you go to Korea or any other Fairchild factory, the planning community is using the same tool," Watkins said. "Now, we take that information and link it to our other investments, such as our ERP system, where again, we're normalizing the business process throughout the company."

That normalization has enabled Fairchild to increase its inventory turns, resulting in significant cost reductions.

"The ROI is there, and the inventory turns are up. When you consider our turns prior to i2 solutions, we have clearly made significant strides. Ultimately, we expect to achieve an inventory turn improvement of about 30 to 40 percent."

i2 solutions also have provided Fairchild with increased visibility to the back-end functions of its business, which are conducted through subcontractors.

"Before i2 solutions, Fairchild was never really able to see our subcontractors' inventory," Watkins said. "But now, we have visibility into their inventory, just as though we're seeing our own. Tremendous benefits have come out of that."

The company also recognizes that i2 solutions have positioned Fairchild to gain more market share as the semiconductor industry recovers.

"We're realizing the ability to take a customer order and book, schedule, ship, and bill the order within the same day," Watkins said. "Ultimately, when the semiconductor industry pulls out of the downturn, we believe we are going to generate market share for ourselves by leveraging our capabilities, taking on the customers' business that can't be satisfied any place else, and turning it around very rapidly."

In addition, Fairchild is pleased with the time to value that it experienced with its implementation of i2 solutions.

"We're very proud of the fact that we can go back and conduct an audit trail of what the commitments were for this project and then demonstrate that we have met those commitments along the way," Watkins said. "Fairchild's i2 implementation was one that did not have to be sold to the rest of the company—it sold itself."



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