



Microsoft Customer Solution Manufacturing Industry Case Study



Customer: Open-Silicon
Web Site: www.open-silicon.com
Customer Size: 105 employees
Country or Region: United States
Industry: Manufacturing–Technology
Partner: Tensoft
Partner Web site: www.tensoft.com

Customer Profile

Open-Silicon, based in Milpitas, California, delivers cost-effective, predictable, and reliable custom ASIC solutions to electronics product customers worldwide.

Software and Services

- Microsoft Dynamics
 - Microsoft Dynamics GP
- Microsoft Office
 - Microsoft Office SharePoint Server 2007

For more information about other Microsoft customer successes, please visit:
www.microsoft.com/casestudies

Supply-Chain Solution Cuts Costs 15 Percent, Boosts Customer Service for ASIC Maker

“We now have the tools to provide a new level of service to our customers. We’re providing more information on customer orders, and more quickly than before.”

Ron Beeson, Corporate Controller, Open-Silicon

ASIC manufacturer Open-Silicon needed a better way to track yields. So, it turned to an integrated financial and supply-chain management solution from Microsoft® Gold Certified Partner Tensoft. The solution, including Microsoft Dynamics® GP and Tensoft Fabless Semiconductor Management, reduces costs by up to 15 percent or more, gives customers visibility into order status, and provides better customer service more cost-effectively.

Business Needs

“If you’re not hypersensitive to manufacturing cost, you can go from making money to losing money in the blink of an eye,” says Ron Beeson, Corporate Controller, Open-Silicon.

Beeson knows what he’s talking about. Open-Silicon—which offers an end-to-end custom application-specific integrated circuit (ASIC) solution to electronics products customers worldwide—is a success story in the fabless ASIC segment of the semiconductor industry, where margins are razor-thin. The company has grown rapidly

since its founding in 2003.

But growth hasn’t come easily. Key to Open-Silicon’s business is managing the product supply chain, including taking responsibility for production. When yields fail to meet customer requirements, or when there’s an inventory loss, Open-Silicon is responsible.

“Yield is the key factor in determining cost,” says Beeson. “Tracking yields you get from manufacturers means you can drive costs back to those manufacturers. You can negotiate better supply chains, higher yields. This is key for negotiating with suppliers.”

When Open-Silicon started out, it ran its business using QuickBooks for its general ledger and a Microsoft® Access® database to track work in process (WIP). That was fine when the company was small, but, as it grew, it outgrew this software. “We didn’t just grow; we expanded our business to include more customers, more product designs, and a more sophisticated business model,” says Ted Tresch, Senior Operations Manager, Open-Silicon. “The more we expanded, the more difficult it was to quickly understand the ramifications of supply-chain changes given the software we were using.”

The company needed a solution that would track those changes, provide analysis, and enable Open-Silicon to put that analysis to use for the benefit of its customers.

Solution

Open-Silicon considered but rejected a UNIX-based solution because of cost. “The UNIX-based solution wasn’t targeted to the fabless semiconductor model,” says Beeson. “And it was expensive. We’d have spent too much money to get it to work.”

Also, Open-Silicon was a “Microsoft shop,” and the company didn’t look forward to having to maintain two systems—including maintaining dual staffs, hardware, training, and code upgrades. Fortunately, it didn’t have to.

The company turned to Tensoft, a Microsoft Gold Certified Partner, for an end-to-end integrated solution including Microsoft Dynamics® GP for financial accounting and Tensoft Fabless Semiconductor Management (FSM) for industry-specific supply chain and manufacturing operations management. Tensoft FSM provides product cost and variance analysis; full-product genealogy tracking; inventory calculation, reporting, and

location tracking; real-time WIP data imports, and more.

“We needed an integrated financial and operations system, one that would span the process from purchase order through production through accounting,” says Beeson. “The combination of Microsoft and Tensoft was ideal.”

The semiconductor operations processes managed by this Microsoft and Tensoft solution start with customer orders, which are entered into Microsoft Dynamics GP. The orders are immediately visible to Open-Silicon operations staff in Tensoft FSM, where the entire supply-chain and outsourced manufacturing process is managed. The company can track any order as it moves through the supply chain, from vendor to vendor, until the order is shipped to the customer.

“Many systems match purchase orders to invoices and receivers,” says Tresch. “One of the things we like about Tensoft FSM is that it does ‘quad’ matching. That is, it also matches the PO, invoice, and receiver to the lot number. That’s essential to tracking lots through the process. From an operations standpoint, we use the lot number for failure analysis and quality control. From a financial standpoint, tracking the lot numbers is key to our contractual arrangements with suppliers and holding them responsible for their work.”

Benefits

Open-Silicon has been able to control costs more effectively thanks to the Microsoft and Tensoft solution. By matching problems with yield rates to the exact lots in which those problems occurred, the company has been able to negotiate better rates with suppliers, saving Open-Silicon and its customers 15

percent on some jobs, a savings of U.S.\$1 million or more per job. Beyond reducing cost, Open-Silicon has been able to reduce inventory losses by tracking inventory more closely and reducing unplanned delays.

And it’s not just Open-Silicon that has greater visibility into its supply-chain process. The company makes the Tensoft FSM tracking and analysis information available to its customers through the Tensoft FSM Shipper Portal, an extranet based on Microsoft Office SharePoint® Server 2007. Customers can track and audit their orders and the costs associated with those orders. They can see data on a project-by-project basis, view all purchase orders over the previous 30 days, view shipped and non-shipped orders, and so on.

“We now have the tools to provide a new level of service to our customers,” says Beeson. “We’re providing more information on customer orders, and more quickly than before. In a highly competitive business, that’s an important advantage.”

The Microsoft and Tensoft solution not only gives Open-Silicon customers full visibility into their orders, but it does so more cost-effectively. By providing this information over the Web 24 hours a day, 7 days a week, Open-Silicon has been able to reduce its costs by two full-time customer support people—out of a total of three—while providing better service.

The solution also provides efficiencies in other ways. For example, the Tensoft Multi-National Consolidation module automatically performs currency translations, making it faster and easier for Open-Silicon to see a consolidated financial statement that includes its operations in the United States, India, Israel, and Taiwan.