



Intermec® Case Study


A case study on how Intermec Technologies Corp., an OEM (Original Equipment Manufacturer) of Supply Chain Inventory Tracking products, has utilized SiliconExpert's tools to solve its component data issues. Managing Intermec's internal database of thousands of electronic components through SiliconExpert's tools has ultimately led to increased productivity while scrubbing and monitoring bills-of-materials (BOMs) as well as significant cost savings by proactively managing component obsolescence issues.

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The Challenge

As an OEM of Inventory Tracking products, Intermec's engineering team requires data on several thousand electronic components, which are actively used to build its devices. However, the challenge lies in keeping this component data error-free and updated with the latest information from component manufacturers and their authorized distributors. "Managing our component database and keeping it updated was a daunting task. Our engineers require the latest information on the electronic components selected for our products and any lapse in the availability or freshness of the data is simply not acceptable," says John Starr, Component Engineer at Intermec. In lieu of clean or fresh component data, component engineers at Intermec have at times been forced to manually visit websites of tens of suppliers to gather the required data.

In addition, component engineers at Intermec relied heavily on direct contacts with manufacturer representatives and distributors for component status updates and change notices. Some of these direct contact points dissolved over time, as the industry took new approaches to field representation and notification methods. These changes caused the Intermec's component engineers to look for alternate methods for identifying and tracking critical elements of the thousands of components, which they were responsible for maintaining.

A decorative graphic in the top right corner consists of three thick, rounded, parallel bars. The top bar is blue, the middle bar is yellow, and the bottom bar is blue. They are arranged diagonally from top-left to bottom-right.

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Component Engineer



Intermec Technologies Corp. SiliconExpert Case Study

“There is an immediate need to receive timely alerts any time there are data or lifecycle changes associated with components in our database,” adds Starr.

Analyzing BOMs in an optimized and productive manner, in order to find multi-sourcing options, market availability and component obsolescence events for thousands of parts, has been another challenge for Intermec’s engineers. “Populating datasheets, lifecycle statuses and cross references for thousands of parts in multiple BOMs is a laborious process without an automated and reliable solution -- let alone the process of validating the part numbers and manufacturer names while scrubbing the BOMs,” says Starr.

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The Solution

Following a close analysis of the required needs, Intermec implemented site wide licenses of SiliconExpert’s Part Search & BOM Manager tools for its engineering teams. “We were able to upload our BOMs and have them validated against SiliconExpert’s much larger parts database quickly and easily. The BOM Manager tool has had an immediate impact on the way our component engineers review BOMs and seek second sources,” says Starr. Automated scrubbing of BOMs gave Intermec’s component engineers comprehensive amounts of component data, such as RoHS compliance, lifecycle statuses, market availability, last time buy dates and cross references. “With the inclusion of the BOM Manager tool, we’ve nearly doubled our productivity, while scrubbing BOMs and generating comprehensive data reports,” says Starr. “Finding the latest datasheets for all of our parts alone has reduced our data processing efforts by a factor of five.”

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Additional features that Intermec uses actively are the parametric search and research tools:

One case in particular stands out, which involved a device that had been identified by an Electrical Engineer as having an extremely long lead-time. Through the use of the parametric search function, an alternate was identified the same day, as well as some distribution channels where the part could be purchased quickly. This activity saved the company several weeks of development time, and potentially thousands of dollars of lost revenue, due to a late arrival in the market.

In addition, Cross-Referencing components to other sources has been an essential part of Intermec's obsolescence mitigation strategy using SiliconExpert's tools. John Starr explains:

A second incident involved an obsolete part. Our Component Engineers were able to use the tool to find a replacement component with improved characteristics, a smaller package, lower cost, a longer lifecycle and readily available stock. This search could have potentially spanned one of multiple weeks through phone conversations, publication reviews and internet searches. But because of SiliconExpert's tools, we were able to complete this step in a significantly shorter time span.

SiliconExpert processes tens of thousands of Product Change Notices (PCNs) a year and associates them to their



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applicable part numbers. Intermec's component engineers receive automatic alerts whenever a PCN has been issued for a part in an uploaded BOM. These email alerts for lifecycle, datasheet changes and even manufacturer acquisitions allow Intermec to stay ahead of obsolescence issues and adopt proactive approaches to manage its component data.

Intermec also works closely with SiliconExpert's customer service and data teams to procure data on components not currently listed within the database. "Responses to questions or concerns by the SiliconExpert staff are handled in a timely manner, which we've come to appreciate greatly," adds Starr.

"As far as component data management is concerned, if it weren't for SiliconExpert's tools we would still be living in the Stone Age - this tool has increased our overall effectiveness and allowed us to broaden our horizons and capabilities." SiliconExpert's tool empowered Intermec's engineering team by providing access to information critical to the health and viability of each component. Intermec's Component Engineers could now upload Bill of Materials (BOMs) into the web-based tool system and validate those parts for identification accuracy so that other technical, lifecycle, supply chain and environmental data could be generated for both internal operations management and for customers.

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The Result

Lowered Component Costs & Greater Market Leverage

By using SiliconExpert's Cross Reference & Parametric search features, Intermec is able to find alternates for obsolete and problematic components. This ultimately increases Intermec's sourcing options, yielding to greater leverage in the market.

Reduced Man-Hours Increase Productivity & Control

Intermec's component engineers have significantly reduced the number of man-hours it takes them to validate and scrub BOMs. The aggregation of data and automation of SiliconExpert's tools allow Intermec's engineers to focus on the product instead of chasing after data.

Greater Component Insight Mitigate Effects of Unexpected Issues

Automated email alerts allow Intermec's engineering team to reduce manual efforts to stay apprised of changes to their selected components. Lifecycle forecasts and risk analysis of parts also allow the engineers to flag problematic parts well in advance of obsolescence events.



About Intermec

Intermec Inc. (NYSE:IN) develops and integrates products, services and technologies that identify, track and manage supply chain assets and information. Core technologies include rugged mobile computing and data collection systems, bar code printers, label media, and RFID. The company's products and services are used by customers in many industries worldwide as a means to improve the productivity, quality and responsiveness of business operations. For more information about Intermec visit www.intermec.com

About SiliconExpert Technologies

Founded in 2000, SiliconExpert Technologies has built the world's largest electronic components database and provides this data through a secure, on-demand webservice to the electronics industry. SiliconExpert's software and data are used daily by 1000s of electronic engineers, supply chain and procurement managers at leading Fortune 500 companies. With over 250 employees worldwide, SiliconExpert maintains a global presence for its wide range of customers spanning Asia, Europe and the Americas, operating in innovative industries such as consumer electronics, telecommunications, automotive, medical and aerospace. Find out more at www.siliconexpert.com

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