



Honeywell Case Study

A case study on how Honeywell International, Inc.—a multinational conglomerate producer of a variety of commercial products, engineering services, and aerospace systems—has utilized SiliconExpert’s Bill-of-Materials and Part Search tools to improve their component procurement process, simplify methods of updating and analyzing current component information, and aid in transitioning towards using one electronic component database to manage all of their data.

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The Challenge

As a Fortune 100 company that addresses a diverse array of both consumer and corporation needs, Honeywell International, Inc. (NYSE: HON) is a major force within the industrial sector with an intensified focus on performance, quality, delivery, and value in the products and services they provide. Tellingly, Dave Cote—Honeywell’s Chairman and CEO—outlined their company’s Five-Year Plan which highlighted “software [a]s the most consistent critical component of every single thing that we do.”

Erwan Rivet—the Director of Engineering of Building Control Systems at Honeywell in the EMEA (Europe, Middle East, and Africa) region—noticed several engineering teams he was responsible for had difficulty accessing another database to find targeted component attributes, eventually resorting to measures that were time-intensive.

“When I first moved to Honeywell, I saw a lot of members of our hardware, design, and manufacturing teams struggling with data identification,” Erwan explains. Honeywell has a different tool in place that assists them in combing through their component database, but in practice engineers used Google to cross-reference vendors. Erwan’s team also struggled to find comprehensive electronic component data: compliance certifications, years to end of life forecasts, lifecycle statuses, and PCNs. They found other resources to be inefficient.

“Sometimes, they gave up. They did not want to spend that amount of time to get access to the data needed,” Erwan revealed.

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Erwan Rivet
Director of Engineering

The Solution

Monitoring several teams across the UK, Germany, Netherlands, and Switzerland, Erwan's Engineering Leaders identified the need for a tool that would be easy to use, yet readily accessible, as Honeywell gradually transitions towards a standardization of all their data systems. With these matters at hand Erwan explored his options, eventually deciding on SiliconExpert's Bill-of-Materials (BOM) Manager along with Part Search as a capable solution.

After a two-day trial period testing SiliconExpert's capabilities, Erwan's teams found the tool's easy-to-use interface and universality as much more intuitive and useful than their prior protocol. Relating the BOM functionality as a "one-stop shop" for component data, the ability to exhaustively scrub and clean the various team's BOMs efficiently led Honeywell to choose SiliconExpert going forward.

"...SiliconExpert presented the fastest and best solution."

Erwan Rivet
Director of Engineering

“In the movement to normalize processes, our teams recognized SiliconExpert as the tool that helped them achieve a lot more than they would expect during this data transition phase,” Erwan said. With access to unparalleled amounts of unbiased and complete component data, they immediately realized how much potential time and money could be saved just with the BOM Manager alone. With everything considered, Erwan fully believed that “it was the right choice... SiliconExpert presented the fastest and best solution.”

The screenshot shows the SiliconExpert BOM Manager interface. At the top, there is a search bar with 'BAV99' entered. Below the search bar, there are navigation tabs: Home, Products, Suppliers, Parametric Search, BOM Manager, Military, PCN Search, Compare, My Briefcase, and Customize this page. The main content area is titled 'BOM Manager' and includes a search filter 'Search within BOM' and a 'Go' button. A summary table shows the results of the search:

All	Parts				Ignored	Auto Corrected	Manually Corrected	Suppliers	
	Total Parts	Exact Match	Similar Match	No Match				Exact Match	No Match
74	74	74	0	0	0	0	0	32	0
	100%	100%	0%	0%	0%	0%	0%	100%	0%

Below the summary table, there is a list of parts with columns: Row, Uploaded MPN, Uploaded Supplier, Verified MPN, Verified Supplier, Product Line, Description, and Match Status. The first three rows are visible:

Row	Uploaded MPN	Uploaded Supplier	Verified MPN	Verified Supplier	Product Line	Description	Match Status
10	06032C104KAT2A	AVX	06032C104KAT2A	AVX	Capacitor Ceramic Multilayer	Cap Ceramic 0.1uF 10VDC X7R 10% SMD 0603 Paper T/R	Exact Edit
11	C0603C104KBRACU	KEMET Electronics	C0603C104KBRACU	KEMET Electronics	Capacitor Ceramic Multilayer	Cap Ceramic 0.1uF 10VDC X7R 10% SMD 0603 Paper T/R	Exact Edit
12	AT28BV256-20TI	Atmel	AT28BV256-20TI	Atmel	EEPROM	EEPROM Parallel 256K-Bit 32K x 8 3.3V 28-Pin TSOP-I	Exact Edit

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Director of Engineering



The Impact

Among many of Honeywell's industrial concerns, RoHS compliance and keeping component data attributes as current as possible are chief points of emphasis. SiliconExpert's BOM Manager, in conjunction with Part Search's unmatched functionality to parametrically search and cross-reference over 300 million electronic parts, has transformed these concerns into valuable results.

"Because RoHS compliance affects how we have to change our actual products, BOM Manager has been invaluable in ensuring our certificates are up-to-date," Erwan details. "We also value the product change notifications that warn us of future obsolescence because it allows us to plan ahead, to gauge if we should start testing alternate parts to deal with forthcoming issues."

Additionally, merging and integrating all of SiliconExpert's component data with Honeywell's own database has yielded some tremendous results, in some cases quantifiable while in others incalculable.

For example, use of Part Search found that multiple Honeywell's divisions were ordering the same electronic part, but with different part numbers—consolidating those parts instantly saved Honeywell thousands of dollars. On another occasion, use of SiliconExpert's tools prevented a production line from shutting down, effectively avoiding the costly process to reset production.

Erwan and his teams at Honeywell have within reach every component attribute relevant in the entire lifecycle of a product, including pricing and inventory, which has led to invaluable strategic sourcing. This vital resource has enabled Honeywell teams to identify numerous alternate sources for components, the chief factor that secured continuity of the production line. In regards to that incredible saving of time and money, Erwan remarks that “you can't put an exact number on it, but you could imagine it would be very high.”

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Erwan Rivet
Director of Engineering

About Honeywell

Honeywell International, Inc. is a Fortune 100 diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes and industry; turbochargers; and performance materials. Based in Morris Township, N.J., Honeywell's shares are traded on the New York, London and Chicago Stock Exchanges. For more news and information on Honeywell, please visit www.honeywellnow.com

About SiliconExpert Technologies

Founded in 2000, SiliconExpert Technologies is a provider of electronic component data and parts management software to the electronics industry. SiliconExpert's software and data are used daily by thousands of electronic engineers, supply chain and procurement managers at leading Fortune 500 companies. SiliconExpert Technologies' Electronic Component Database is one of the most accurate, comprehensive and current in the industry covering more than 300 million electronic components in hundreds of product lines from over 15,000 manufacturers. End-of-life (EOL) forecasting, finding Cross References (form, fit and function alternatives), Lifecycle statuses, Parametric Data and Product Change Notice (PCN) alerts are a few of the features of SiliconExpert's suite of products that provide Part Search, BOM Management and Obsolescence mitigation solutions. Learn more about SiliconExpert's solutions at <http://www.siliconexpert.com>

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