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VICOR INTRODUCES INDUSTRY-FIRST SOLUTION FOR CREATING ON-DEMAND DATASHEETS

POWERBENCH — BASED ON QUARK SMART DATASHEETS SOLUTION — CUTS DATASHEET CREATION AND DELIVERY FROM ONE WEEK TO 30 SECONDS

Vicor Corporation designs and manufactures the modular power components that design engineers in computing, telecommunications, transportation, aerospace and defense use to convert and manage power. In this highly competitive market, designers look to Vicor for the most innovative and comprehensive options for power conversion and distribution – from bricks to semiconductor-centric solutions. With hundreds of customizable components in the product line, Vicor makes product information available to design engineers through in-depth data sheets that are critical to design projects.

Speed to market is a significant challenge for design engineers. The earlier components for a specific build can be identified, the faster the solution can move through production. Engineers rely heavily on printed data sheets from component vendors to confirm the exact specifications of chips for each project. Typically an engineer will download a product datasheet from a component vendor's Web site or,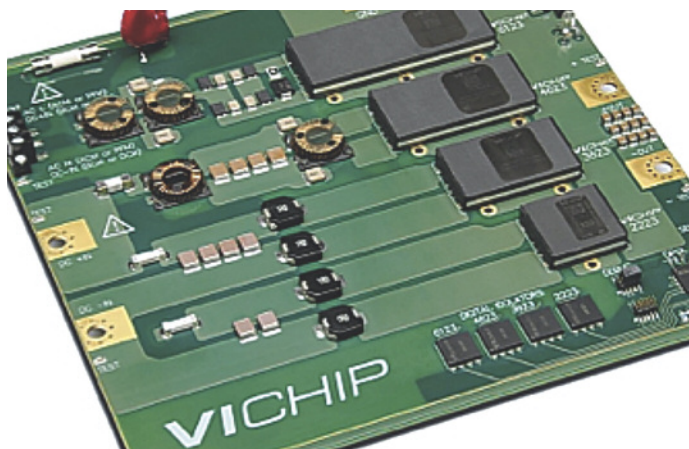 if the component needs to be customized, work with the vendor to develop the specific datasheet. The process for creating a datasheet for a custom component can take weeks.

On-Demand Datasheet Customization
A long-time leader in the design and manufacture of power components, Vicor set out to speed the production of

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datasheets to better serve their customers who must routinely specify chips that will work with their designs. "A week to develop a customized datasheet is fairly standard," said Jim Trainor, Senior Business Systems Analyst for Vicor. "We knew there had to be a better way to get highly customized product information for specific projects back to design engineers."

To improve datasheet production, Vicor would be met with two main hurdles: one, the sheer volume of datasheets requiring constant updates and two, the very specific numerical and graphical content contained within each datasheet. To speed the production of datasheets while maintaining strict accuracy, Vicor ultimately developed an

automated publishing process that allows designers to specify a chip custom to their needs and create datasheets on-demand based on the specifications. Not only do the datasheets offer all the calculations relative to the custom chip, they are delivered within seconds.

3000 Requests for Customized Datasheets per Year

The thousands of datasheets designed and maintained by Vicor include specifications such as voltage, current and protection parameters, as well as graphs that detail the component behavior in application-specific operating conditions. To develop a datasheet, a graphic designer gathers detailed calculations from the engineering team, creates graphical information with specialized applications, designs the

CHALLENGES:

- Streamline the production of product datasheets
- Reduce time and cost of delivering over 3000 customized datasheets per year
- Maintain high-fidelity output of datasheets while ensuring data accuracy

SOLUTION:

- Quark Smart Datasheets Solution

RESULTS:

- Reduced time for creating and delivering customized datasheets from one week to 30 seconds
- XML-based templates manage numerical and textual changes based on automated calculations
- Increased customer satisfaction

datasheet and routes it for review and approval. The typical turnaround is about a week per data sheet.

With 3000-4000 requests for customized datasheets per year, this process is far too labor intensive, slow and expensive for both Vicor and their customers. In fact, when it comes to creating a significant volume of datasheets, it can cost a manufacturer millions of dollars per year. Any manufacturer that has not automated the creation and production of datasheets is spending too much on the process.

High Fidelity Technical Information

Though datasheets contain highly technical information, they are not technical documents; they are sales tools that showcase product functionality. Not only do datasheets give a designer numerical calculations and extrapolations, they include graphical iterations of performance levels, text about the component and usage instructions that must be well-designed and easy to read.

To find a solution capable of handling changes in variables that affect text as well as the graphics within a datasheet, Vicor tested a range of solutions, including business analytics and HTML reporting tools. "The reporting tools we looked at were like trying to fit a square peg into a round hole," said Trainor. "We came across applications that are great at generating database reports about statistical information, but we didn't need graphs, we needed datasheets."

Trainor explained, "The design engineers we work with need datasheets they can print in 8.5x11 to read, take to trade events, share with colleagues and brand for resellers. The hard copy is important and needs to be readable. The HTML reporting tools could not produce high-enough fidelity output."

A Week to 30 Seconds

Vicor ultimately turned to Quark Software and the Quark Smart Datasheets Solution to build the company's PowerBench tool, a service that allows design engineers to visit Vicor online, specify which product they want built, enter custom specifications, and receive a customized datasheet back within 30 seconds. That is as fast as any highly-customized datasheets are being created and delivered today.

The Smart Datasheets Solution from Quark enables manufacturers like Vicor to fully automate the production of datasheets into a variety of formats and media types including PDFs, HTML, XML, mobile apps and HTML5 Web apps — all from the same structured content.

To create a customized datasheet, a designer submits an online request through Vicor's PowerBench tool including all the custom specifications. Behind the scenes and within seconds, an XML file with an average of 3,000 parameters is developed based on the calculations made with the new specifications. The XML file, which contains all the parameters needed to make performance charts, is integrated with a QuarkXPress file. QuarkXPress uses the parameters to create line graphs in real time that are automatically incorporated into the datasheet. A JPG thumbnail of the final datasheet is created and a link to a PDF of the new datasheet is immediately sent to the design engineer.

With the Quark Smart Datasheets Solution behind PowerBench, Vicor dramatically increased productivity by cutting out the manual work necessary to recreate each and every request for a customized datasheet. Design engineers get an on-demand response from Vicor and can work faster to build their solutions.

Next in Automated Datasheets

A significant undertaking, automating the creation of customized datasheets and providing on-demand delivery to customers is a competitive differentiator for Vicor. PowerBench allows designers to configure and simulate 48 V VI Chip PRM modules to meet a range of PoL power requirements. The datasheets include technical specifications, part numbers and pricing information. With Vicor's automated manufacturing process, design engineers can now receive customized components within five business days.

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"Maintaining a small set of XML-based templates across our product line – versus thousands of static documents – has exponentially improved the creation and delivery of our datasheets. With an automated publishing process we can better serve customers, which really drove the creation of PowerBench. We're now looking into how we can further improve our datasheet workflow with XML," said Trainor.

ABOUT QUARK SOFTWARE INC.

Quark's software enables organizations of all sizes to meet customer demand for engaging, relevant communications when, where and how they want them. Our solutions combine the power of XML with flexible layout and design to automate the delivery of customer communications to print, Web, and interactive experiences on the latest digital devices. Financial services firms, manufacturers, and governments around the world rely on Quark solutions to elevate customer communications to new levels, reduce time to market, and lower costs.

To find out more about Quark Enterprise Solutions visit **www.quark.com/enterprise** or contact us at **www.quark.com/contact**

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