Mentor expands unique Valor NPI automated technology solution to streamline PCB design for manufacturing

- The Valor New Product Introduction (NPI) release from Mentor completes an automated printed circuit board design-for-manufacturing flow, replacing traditional, manual error-prone processes.
- Design for manufacturing (DFM) rules’ set-up time can be reduced from weeks to days.
- Using the award-winning Valor NPI technology, critical design data is automatically extracted to derive PCB technology classifications for appropriate manufacturing process constraints.
- The new Xpedition DFM application, driven by Valor NPI, empowers PCB designers to benefit from best-in-class DFM software tools without having to learn another application, enabling true concurrent DFM.

Mentor, a Siemens business, today announced the release of the final phase of the Valor™ software NPI design-for-manufacturing (DFM) technology that automates printed circuit board (PCB) design reviews where the PCB technology and manufacturing processes are employed. This latest release completes the realization of the Valor intelligent, manufacturing process-driven DFM solution, adding assembly DFM checks to the new process flow.

This new technology was developed in response to the customers’ need for an easier way to get accurate, meaningful DFM analysis without having every user be a DFM expert. To accomplish this, Mentor began a program three years ago to re-architect the Valor DFM solution to: make it easier to set up and maintain DFM rules so that the results are relevant, simplify the execution of the DFM application, and integrate DFM into Mentor’s Xpedition™ software layout application so that designers are aware of manufacturing concerns during the concurrent design process.

“Having implemented Valor NPI 11.0 as a beta program participant, we are eagerly anticipating the production release,” commented Chris Smith, senior engineering services group manager at National Instruments. “The ability to incorporate DFM assembly analysis upstream in development should allow us insight on potential manufacturability issues before release. This will build on the first phase of our DFM upstream initiative where designers benefited from fabrication DFM analysis being run during design. The modular stages and integration with Xpedition Layout simplifies the results and allows us to scale the process to empower designers and engineers to access DFM results on demand.”
This new release provides easy set-up and maintenance of the DFM rules for PCB assembly. The Valor NPI release works with all major PCB layout tools: Xpedition and PADS™ software suites, Cadence Allegro, Zuken Board Designer, and Altium products. The integrated Xpedition DFM offering is only available with Mentor’s Xpedition.

“We aim to help our customers accelerate innovation,” said Dan Hoz, general manager of Mentor’s Valor Division. “We already know that DFM analysis is a critical element in helping reduce time to market and aiding in first-time-right production, and with the latest release of Valor NPI, we are making this cutting-edge technology accessible to PCB designers without requiring prior knowledge of PCB manufacturing. Designers can focus on their task, knowing that their designs can make it to market faster, on budget, and at higher yield.”

Product Availability

The new Valor NPI release is now available. For additional product information visit: www.mentor.com/npi.

Contact for journalists

Suzanne Graham
Phone: 503-685-7789; E-mail: suzanne_graham@mentor.com

Mentor Graphics Corporation, a Siemens business, is a world leader in electronic hardware and software design solutions, providing products, consulting services, and award-winning support for the world’s most successful electronic, semiconductor, and systems companies. Corporate headquarters are located at 8005 S.W. Boeckman Road, Wilsonville, Oregon 97070-7777. Web site: http://www.mentor.com.

Note: A list of relevant Siemens trademarks can be found here. Other trademarks belong to their respective owners.