

ELECTRONICS – PCB MANUFACTURING

Elco

Making an online, affordable DFM platform available to customers and PCB designers to reduce project cycles

Products

PCBflow

Business challenges

Sync manufacturing capabilities of board manufacturers with the technical design demands of PCBs

Align expectations between PCB designers and manufacturers

Reduce design time to allow engineers to work on other projects

Keys to success

Leverage the independent DFM analysis to reduce the back-and-forth redesigns

Use PCBflow to reduce design time and develop more mature designs that are ready for production

Use PCBflow to help customers quickly check the manufacturability of their designs

Results

Made an online, affordable DFM platform available to customers and PCB designers to reduce project cycles

Elco makes PCBflow available to customers as a tool to sync board designs with its own manufacturing capabilities

Addressing PCB design challenges

Elco manufactures printed circuit boards (PCBs) and provides bare-board production services for customers in the automotive, defense, aerospace, medical, telecommunication and transportation industries worldwide. Headquartered in Carsoli, Italy, Elco maintains global reach with additional production facilities in Belgium, China and the Netherlands, with a combined staff of 240 employees.

Roberto Campri, Elco's corporate Asia manager, described one of the company's key

challenges in maintaining profitability – the gap between customer designs and manufacturing capabilities. "Initial product designs are usually quite far from what a manufacturer is capable of doing," says Campri. "Designers would like to introduce every kind of technology possible through their design software, but then there is the need to implement it."

As the manufacturer, Elco analyzes the design, understands its capabilities and then advises the customer on how to move forward. There are often multiple iterations before the final design is approved. This process can be time-consuming and burdensome for the designer and the manufacturer. For the manufacturer, it diverts attention away from current and upcoming projects.



Results (continued)

Made PCBflow available to customers as a tool to sync board designs with its own manufacturing capabilities

Accelerated project lifecycle to allow designers and manufacturers to move on to other critical projects



Since there is a trend toward, high-mix, low-volume production, the additional time and resources spent on multiple redesigns can affect project profit margins.

Using PCBflow to speed up design processes

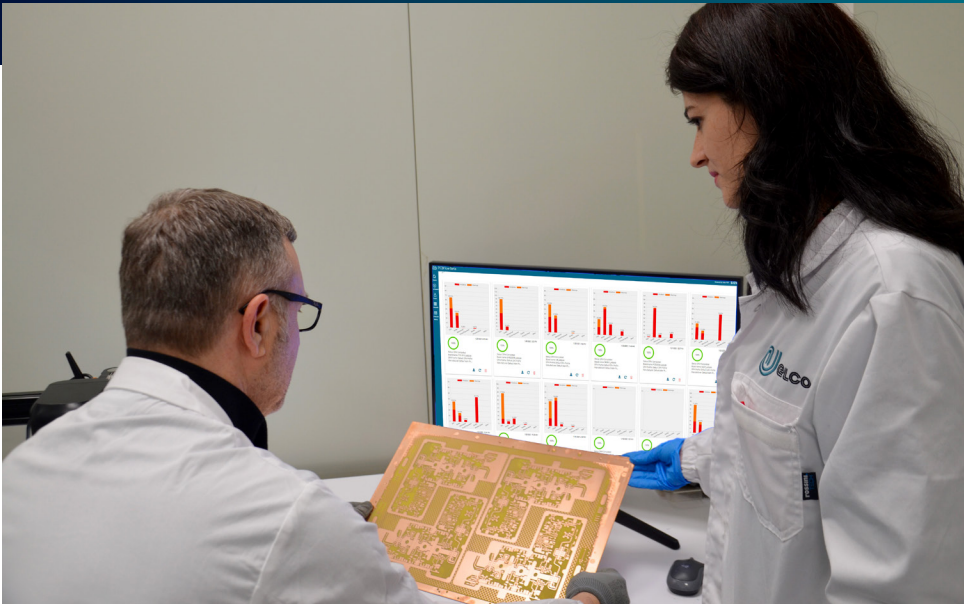
PCBflow™ software is a cloud-based PCB design for manufacturing (DFM) and software as a service (SaaS) solution that connects electronics designers to manufacturers and speeds up the design-to-manufacturing hand off by providing designers with instant DFM analysis based on actual manufacturer constraints.

PCBflow is part of the Siemens Xcelerator business platform of software, hardware and services.

Elco uses PCBflow to address some of these design challenges. “Our customers can use PCBflow to quickly check the manufacturability of their designs based on the capabilities profile submitted by the manufacturer,” says Campri. This enables the customer to independently perform a DFM analysis of their design based on characteristics that are supported in the profile by Elco. PCBflow allows our customers to make on-the-fly corrections to their design without any back-and-forth with us. It saves time and helps accelerate project lifecycles. The customer can also use PCBflow to submit a mature design that is ready for production.

// Usually there are repeated interactions between the designer and the producer in order to ensure that the design is manufacturable. Using PCBflow frees up this main bottleneck in the production flow.”

Mauro Sandri
CEO of Sales & Marketing
Elco



“Digitization has led to a different way of thinking. You can do things in new, previously unimaginable ways.”

Roberto Campri
Corporate Asia Manager
Elco

“When we first had the opportunity to use PCBflow, we discovered a great amount of potential for our clients and ourselves,” says Campri.

Initially, defining the profile requires some investment, but once completed, it adds value as it allows customers to perform a DFM analysis based on Elco’s manufacturing capabilities. Before sending Elco a design, using PCBflow, customers can identify and solve critical issues on their own, without enlisting help from Elco. The designers can, in turn, introduce

their products sooner as they perform all the relevant checks before engaging with Elco. This ultimately speeds up the design process

“DFM software tools are generally expensive,” says Mauro Sandri, Elco’s chief executive officer (CEO) of sales and marketing. “Using PCBflow is a game changer in the DFM field, as it is affordable enough to allow companies of all sizes to adopt DFM best practices.”

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Mauro Sandri
CEO of Sales & Marketing
Elco

Solutions/Services

PCBflow
pcbflow.com

Customer's primary business

Elco is a multinational producer of PCBs, serving various customers in the aerospace, automotive, defense, industrial, medical, telecommunication and transportation industries.
elcopcb.com

Customer location

Carsoli
Italy

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Roberto Campri
Corporate Asia Manager
Elco



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"If you are immersed in a 'business-as-usual' routine, it is difficult to focus on improving the manufacturing

processes," says Campri. "But digitization has led to a different way of thinking. You can do things in new, previously unimaginable ways.

Elco has used PCBflow to help various customers streamline their design process and plans to continue using PCBflow with customers in the future.

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