



Delkin Devices, located in Poway, California has been manufacturing Industrial storage products for some of the largest companies in the world, for more than 24 years, and is one of the top 25 manufacturers in Southern California.

Delkin Devices has been a long-time user of Altium products. It originally used PCAD, but decided to make the change to Altium Designer in 2004. Then again, after five years on the same product, Delkin Devices decided to upgrade to the latest version of Altium Designer. It was a decision that has significantly improved Delkin Device's productivity.

**“ With Altium, it's all there in one tool. ”**

*Steven Powers, PCB Design Engineer, Delkin Devices*

Steven Powers, PCB Design Engineer at Delkin Devices, explains why the team decided to upgrade. “We had been using Altium Designer 2004 for five years. Since then electronics design has changed and the software was no longer meeting our design needs. We knew it was time to make the switch.”

Upgrading to the latest Altium Designer provided Delkin Devices with productivity-enhancing features such as Design Rules Check, Differential Pair Routing and the MCAD ECAD 3D Collaboration tool, all new to the designers but all provided in a familiar software application.

And there was also no steep learning curve. “Updating to our Altium Designer license was very easy. The best part was that we were able to open all our older project files, designs that were done years ago in either Tango or PCAD,” comments Steven.

## **Making board design easier**

When asked about what was the biggest benefit to upgrading to Altium Designer Summer 09, Steven quickly answers, “board design is quicker and easier”.

“Altium has changed the way you route nets, it's a lot faster than Altium Designer 2004. There is not as much set-up time. I can just grab a net and go.”

According to Steven, Altium Designer's latest design features have doubled his PCB throughput, with improved Design Rule Checks (DRC) being the most significant time saver.

“In Altium, the DRC never gets turned off. It makes the design process smoother, ensuring I have fewer errors. Before upgrading I would dedicate 1-2 days cleaning up clearance violations. This now takes me an hour,” comments Steven.

## **Bridging the divide - MCAD ECAD design collaboration**

Steven also likes Altium Designer's 3D MCAD ECAD design capabilities.

Introduced in Altium Designer Summer 08, MCAD/ECAD design capabilities create an environment where ECAD and MCAD designers can co-operate on their designs. Using this feature, Steven can view his PCBs in 3D, in its final form, inside its mechanical casing. It also lets him make real-time adjustments, allowing for better collaboration with the mechanical team and fewer design iterations.

“There is just more clarity between the two teams.”

## **Concept to manufacturing with Altium Designer**

Being a PCB Design Engineer at Delkin Devices, Steven uses Altium Designer from the very beginning of the design, all the way to the qualification process and releasing it to production. By using one tool, Steve can keep his design data in one place and provide comprehensive documentation for Delkin Device's in-house manufacturing team.

In particular, Steve finds Output Job editor in Altium Designer to be most useful. This feature lets Steven consolidate the board's manufacturing information into a single document, such as a PDF.

“With the Output Job editor, you have everything pulled together in one large file. You don't have to go into every document and print it. It's all contained in the project file.

“With Altium, it's all there in one tool.”

## **In summary**

Steven upgraded to the latest version of Altium Designer in June 2009 and hasn't looked back since. When asked how he would sum up his experience, Steven replies: “I couldn't be happier with the software. I can't imagine going back now.”