

## Corporate Media Contact

Rochelle Adamson  
Altium Limited  
3 Minna Close  
Belrose, NSW 2085  
Australia  
[www.altium.com](http://www.altium.com)  
Telephone: +61 2 8622 8100  
Email: [rochelle.adamson@altium.com](mailto:rochelle.adamson@altium.com)

## Using Altium Designer

**Santa Clara, United States – February 2, 2010** – Engineers create their functional device intelligence using Altium Designer, which comes with extensive ready-to-use, royalty-free software and hardware IP. They then use Altium's desktop NanoBoard to instantly prototype and 'snap together' their designs for testing.

Live links instantly provide a view of pricing and parts availability while in the design, and find the best deals for components. Designers drag and drop any parameter, even multiple parameters from the Supplier Data panel, onto the components in their designs. They drop data sheets and embed references into components to give them access to the parts documentation from the schematic.

On-demand licensing means that specific licenses need no longer be matched to individual users. Web-based on-demand license management allows a license to be used on any computer without the need to move license files or activate them on each machine.

Software development is done using C or C++, complete with full compilation and debugging capabilities direct on the NanoBoards. Designers can use classes, objects, templates, overload operators and functions to exploit the world of software IP available via the web and other sources.

Altium Designer's 3D PCB design environment gives board designers realistic views of what they are designing in real time. They work more intuitively and bring mechanical CAD information into the PCB design space to make true electronic-mechanical co-design possible. They do this in real time.

Texture mapping of 3D models adds realistic surface finishes to components and boards.

Designers route multiple related traces in a single action. They can 'walk around' existing objects, 'hug' new traces to existing traces, push aside existing objects (including vias) and automatically complete traces.

Designers intelligently swap pins on-the-fly with both differential pair and single-ended signals during interactive routing. This is particularly useful with FPGA devices, which often allow a particular signal to be brought out on a range of pins.

A stand-alone instrument viewer overcomes some of the challenges of testing or remotely monitoring designs inside programmable devices. Designers create and build instruments inside FPGAs as part of the application; the new instrument viewer lets designers stimulate and probe their design live inside the device. The remote viewer (it can be downloaded and installed on any PC, without having to run a full license of Altium Designer) interacts with the instruments programmed inside the FPGA by the designer. Users can test or service the device, or add advanced services to the product once it's in the field.

When designers prepare a design to go to manufacture, they produce a large number of files in various formats for different groups of people in the manufacturing chain. The information comes from a variety of sources: schematic documents, PCB files, bills of materials, component data, FPGA and software source and object files, reports from the

design process, and so on. Some people need printouts, while others require PDFs of the same documents.

Altium Designer centralizes the definition and generation of output files to allow simpler processing of outputs. Documents can be created in a variety of formats, most notably as smart PDFs and in online formats.

These features link to Altium's 3D PCB design environment, which aids the path to manufacture by allowing designers to see and visually check their designs before they generate the manufacturing files.

A Design Release Manager provides a Wizard-style interface for managing the entire process of releasing a design to people beyond the design team. It provides a central control panel for creating all the various output files in the various formats, and distributing them to the people that need them. The Design Release Manager also takes a 'snapshot' of designs so that designers can retrieve, modify and re-release the design, complete with the correct file dependencies. Multiple releases can be created for a design, providing a complete and traceable release history for the project.

Manufacturing rules at the PCB layout stage in Altium Designer help prevent common manufacturing issues becoming design problems. A range of constraints can be checked in real-time during the design process and before the fabrication of files, helping avoid unnecessary design re-spins and getting to market faster.

A Plug-n-Play Software Platform Builder 'snaps' together the basic software platforms needed to run on the hardware. This covers the design elements common to many electronic designs: the peripherals, the communications, and the associated protocols and drivers needed to make these basic design elements work (which come with the NanoBoard). This reduces the task of creating these basic, but necessary, software

blocks to one of dragging and dropping preconfigured software blocks into a design, freeing the designer to focus on creating the application (the 'smarts' of the product) itself.

Altium is on stand #409 at DesignCon 2010, at the Santa Clara Convention Center, February 2-3, 2010.

ENDS

## **About Altium**

Altium Limited (ASX:ALU) provides next generation electronics design software that breaks down the barriers to innovation. Altium's unified electronics design environment links all aspects of electronics product design into one process, in a single application. This helps electronics designers harness the latest devices and technologies, manage their projects across broad design 'ecosystems', and create connected, intelligent designs.

Founded in 1985, Altium has headquarters in Sydney, sales offices in the United States, Europe, China, and resellers in all other major markets. For more information, visit [www.altium.com](http://www.altium.com).

Altium, Altium Designer and LiveDesign, and their respective logos, are trademarks or registered trademarks of Altium Limited, or its subsidiaries. All other registered or unregistered trademarks mentioned in this release are the property of their respective owners, and no trademark rights to the same are claimed.