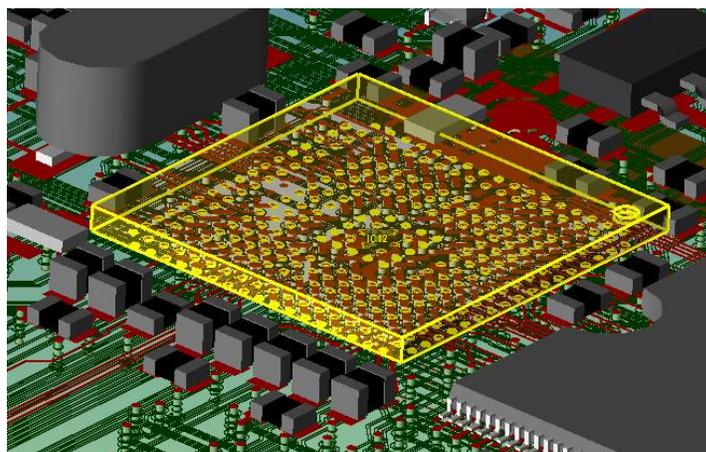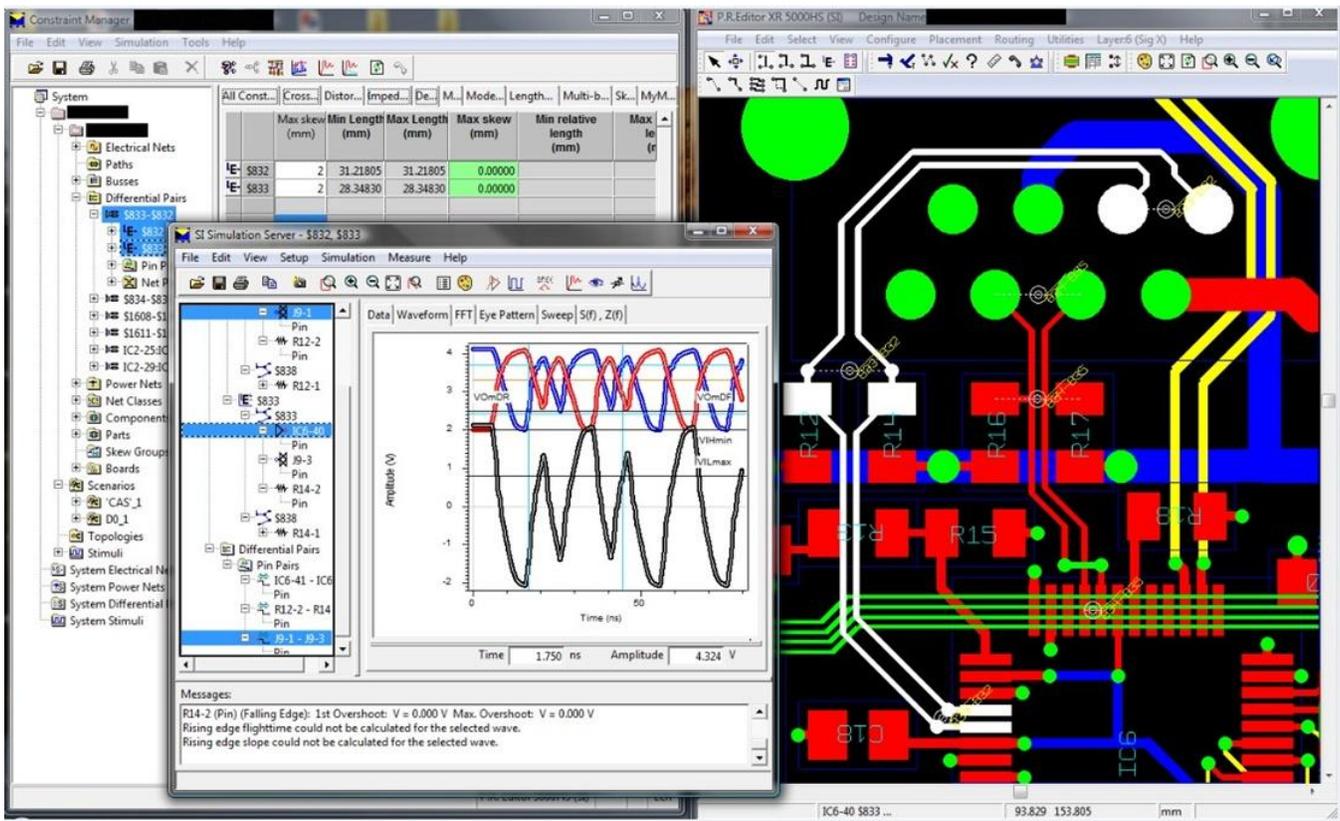# CADSTAR

CADSTAR for Layout Professionals

Speed, efficiency, power, flexibility...

Just some of the words our customers use to describe the ways that CADSTAR PCB design software helps them do their job, every day.

With more than 20 years of experience within the PCB design community, CADSTAR has built an enviable reputation for fulfilling the requirement for almost all types of design: from sub-miniature, single layer consumer goods through to high complexity, multi-layer digital switching products.

Key to its flexibility is the fully user-definable layer and assignments architecture that lets you configure the system exactly to your requirements. With an extensive set of design rules, plus the ability to set specific rules by class, template, area and more, CADSTAR ensures the output data you create meets your strict manufacturing guidelines.

Architecture, integration and automation

CADSTAR provides a full ASCII input/output facility and comes with a free translator to import data from legacy PCB design tools. The customizable GUI and built-in macro recorder lets you tune the application to your working style; while the report generator helps you generate a wide range of outputs such as machine-specific placement files and bills of materials.

The OLE interface enables anyone with basic programming skills to extract data or even create their own functionality.

Placement and routing

Powerful placement routines including interactive push-aside, alignment, group replication, variant management and block reuse let you optimize board real estate, while the gate and pin swap routine minimizes crossovers and connection length. You can even optimize equivalent pins during manual routing – especially useful when routing to high pin count devices where space is at a premium.

You probably spend at least 50% of your design time on routing the layout, so using a tool that is optimized for speed, precision and electrical accuracy can have a dramatic impact on your budget. The CADSTAR Place & Route Editor provides a range of features that help you quickly and efficiently route your design.

Verification and manufacturing outputs

CADSTAR supports physical spacing and manufacturing rules, along with high-speed constraints with the CADSTAR High-speed router, signal integrity with CADSTAR Signal Integrity Verify, power plane and decoupling analysis with Power Integrity Advance, and 3D electromechanical verification with CADSTAR Board Modeler Lite.

Generation of all standard manufacturing outputs (ODB++, Gerber, Excellon, PDF, DXF, etc.) can be automated to a single-click operation.