

CAM350™ - 765

CAM350 Modules	Design Family Configurations			
	C350-765	C350-465	C350-270	C350-110
Import	✓	✓	✓	✓
Information	✓	✓	✓	✓
Export	✓	✓	✓	✓
Modification	✓	✓	✓	✓
Optimization	✓	✓	✓	✓
Design Rule Check (DRC)	✓	✓	✓	✓
Basic NC Editor	✓	✓	✓	✓
Quote Agent	✓	✓	✓	✓
Fast Array Module	✓	✓	✓	✓
ODB++ Import	✓	✓	✓	✓
ODB++ Export	✓	✓	✓	Option
DXF Interface	✓	✓	✓	Option
DFF Audit	✓	✓	✓	Option
Macro Debugger	✓	✓	✓	Option
Crossprobing - PADS	✓	✓	✓	Option
Crossprobing - Allegro	✓	✓	✓	Option
Streams Rule Check	✓	✓	✓	Option
Panel Editor	✓	✓	Option	Option
Advanced NC Editor	✓	✓	Option	Option
DirectCAD Interface (Out Only)	✓	Option	Option	Option
Reverse Engineering	✓	Option	Option	Option
Flying Probe Editor	✓	Option	Option	Option
Bed of Nails Editor	✓	Option	Option	Option
DirectCAD Interface (In Only)	Option	Option	Option	Option
Camtek AOI	Option	Option	Option	Option

Fabrication Engineering

CAM350™ – A Complete PCB Fabrication Flow for PCB Designers and PCB Fabricators

Built to meet the needs of both PCB Designers and PCB Fabricators, CAM350 is a complete PCB fabrication flow that streamlines the transition of engineering design data into physical PCBs. This powerful solution provides superior price/performance value in an easy-to-use, modular product suite.

For the PCB Designer, CAM350 can detect and correct PCB fabrication errors early in the design process. Design for Fabrication (DFF) verification drastically reduces costly design re-spins and increases PCB manufacturability.

For the PCB Fabricator, CAM350 accurately prepares and optimizes PCB design data to dramatically increase yield, quality and turnaround time of bare PCBs.

CAM350's modularity allows for the configuration of a solution to meet the exact needs of any organization. CAM350-110 and CAM350-270 are pre-configured solutions based on the typical needs of a PCB Designer. CAM350-465 and CAM350-765 are pre-configured solutions based on the typical needs of a CAM Engineer. These solutions can be purchased "as-is" or you may build a CAM350 solution based on your specific requirements.

CAM350-765 Overview

CAM350-765 module is designed for the CAM Engineer who needs to automate and optimize the process to efficiently produce bare printed circuit boards. CAM350-765 manages data input and preparation, analysis, test, mill and drill and final bare-board production while increasing productivity, quality and throughput.

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Primary Modules and Descriptions

Import & Export – Offers a wide range of import/export capabilities, plus view, query, report and measure.

Modification – Edit and change design files to your specific requirements.

Optimization – Optimize the design files using draw-to-custom, draw-to-flash, and draw-to-raster polygon conversion, netlist extraction, silkscreen clipping, redundant pad and data removal, and teardropping.

Design Rule Checking (DRC) – In order to meet the original intent of a PCB design, design rules must be verified. Checks include spacing, annular ring, histogram, copper area calculation, layer compare, net and more.

Basic NC Editor – For NC-Mill and Drill Data – Import, export, and creation capabilities are included, as well as some editing capabilities to change drill tool definitions, add basic mill paths to assembly panels, and to change break tabs.

Quote Agent – Designed to extract the necessary information from the PCB design to accurately quote manufacturing costs.

Macro Debugger – Macro Script development allows the user to set watch points and intelligent break points, analyze variables, and more.

Bi-Directional DXF Support – This feature offers bi-directional AutoCAD and DXF support. It handles filled solids, true text, blocks, nested blocks, and builds aperture tables automatically.

Fast Array Module – Automates the sub-panel process to quickly array a PCB or group of PCBs on a panel to feed fabrication and assembly processes.

DFF Audit – Analyzes the PCB design for acid traps, copper and mask slivers, solder bridges, starved thermals, etc... before the design goes to manufacturing. It uses raster-based processing that is both fast and independent of layout technique.

Streams Rule Check – Users can define a series of various verification steps (Streams) for DRC, DFF and netlist comparisons, execute all of them with a touch of button and re-use over again on other designs.

Crossprobing – Dynamic Crossprobing functionality to PADS Layout® and Allegro® Windows-based PCB design solutions. Design errors will be highlighted in CAM350 and its exact location shown in the CAD software. With Crossprobing, CAM350 can also view intelligent data in the CAD software (components, pins, nets) while at the same time, viewing the corresponding locations as Gerber data in CAM350.

Panel Editor – Automates the panelization process and allows for the creation of panel templates, intelligent coupons, pinning holes, fiducials, and title blocks. Populate panels in either an automatic stepping mode or use a spreadsheet for total control.

Advanced NC-Editor – The Advanced NC Editor allows for the manipulation of NC drill and mill data in PCB designs. Add drill hits and mill paths, as well as advanced canned NC routines such as drill text, mill circles, operator messages, pilot holes, etc.

ODB++ Import & Export – ODB++ is an intelligent format that captures all the CAD/EDA, assembly and PCB fabrication knowledge in one single database. This format takes the place of individual Gerber, drill, and aperture files, and adds details such as components and nets.

Reverse Engineering – Unique to CAM350, Reverse Engineering allows the user to start with non-intelligent Gerber data and work it back into an intelligent CAD database.

Flying Probe Editor – A powerful graphical editor and filtering option that allows the user to extract all the necessary data like nets, test-points, and adjacency information quickly and efficiently.

Bed-of-Nails Editor – Produces all files necessary to build a single- or double-sided clamshell test fixture. A graphical editor and filtering options gives the user complete interactive control of the test point information.