

Ucam Xpert

The Expert's CAM Choice

- **Seamless adoption for new users:** Intuitive interface with a short learning curve.
- **Effortless transition from other CAM software:** Matching job structures and streamlined workflows ensure a smooth switch.
- **Comprehensive CAM functionality:** Support for all PCB technologies, including MLB, flex, rigid-flex, HDI, and IC substrates.
- **Versatile Workspaces:** Multiple preconfigured and fully customizable options tailored to different users and purposes.

AI-Start – Integrated AI Technology in CAM Workflow

AI-Start automates the entire data import process, allowing users to focus on critical tasks and significantly reducing manual input.

- **Streamlined Data Organization:** Maintains the processing structure of CAM data by organizing it into distinct production steps and establishing comprehensive links between them.
- **Enhanced Traceability:** Tracks all key changes with timestamps and operator details, ensuring complete accountability.
- **Reliable Data Consistency:** Features a self-contained storage system that copies essential data (e.g., fonts and coupons), preventing inconsistencies and errors.

With AI-Start, your CAM workflow becomes smarter, faster, and more reliable.

Renamed	Function	Format	Position	Polarity	
top_silk_gbr	legend	gerx2	top		
top_solder_gbr	soldermask	gerx2	top	positive	
top_gbr	1	outer	gerx2	1	positive
int1_gbr	2	inner	gerx2	2	positive
int2_gbr	3	inner	gerx2	3	positive
int3_gbr	4	inner	gerx2	4	positive
int4_gbr	5	inner	gerx2	5	positive
int5_gbr	6	inner	gerx2	6	positive
int6_gbr	7	inner	gerx2	7	positive
bottom_gbr	8	outer	gerx2	8	positive
bottom_solder_gbr	soldermask	gerx2	bottom	positive	
drill-1-2_gbr	blind	gerx2	1-2		
drill-1-8_gbr	drill	gerx2	1-8		
drill-2-7_gbr	buried	gerx2	2-7		
drill-7-8_gbr	blind	gerx2	7-8		

JobTree - Efficient Data Management and Tracking

JobTree offers an organized, visual representation of the job structure, making it easy to search and navigate.



- **Streamlined Data Processing:** Maintains the structure of CAM data by organizing it into distinct production steps and creating comprehensive links between them.
- **Enhanced Traceability:** Tracks all critical changes with timestamps and operator details, ensuring complete accountability.
- **Improved Workflow Clarity:** Provides a clear, visual overview for managing even the most complex job structures.

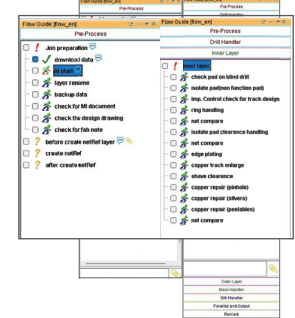
JobTree ensures efficient job management, improving traceability and simplifying the CAM workflow.

FlowGuide – Effortless Job Prep

The simplest automation tier:

- Step-by-step guidance
- Manual or automatic execution
- Real-time progress tracking

Optimize your CAM processes with Ucam Xpert's complete automation suite.



About Ucamco

Ucamco is a market leader in PCB CAM and Pre-CAM Software, Laser Photoplotters and Direct Imaging Systems. We have more than 35 years continuous experience developing and supporting leading-edge front-end tooling solutions for the global PCB industry. We help fabricators world-wide raise yields, increase factory productivity, and cut enterprise risks and costs. Ucamco is the developer of the Gerber Format, a backbone of the electronics manufacturing industry.

Markets

- Rigid PCB Mfr ✓
- Flex PCB Mfr ✓
- Flex-Rigid PCB Mfr ✓
- HDI PCB Mfr ✓
- PCB Masslam Mfr ✓
- PCB Equipment Mfr
- PCB Traders ✓
- PCB Designers
- PCB Test Centers
- IC Packaging ✓
- Chemical Milling
- High Resolution Graphic Arts
- Flat Panel Display

Product Families

- CAM ✓
- Pre-CAM and Engineering
- Electrical Test
- Equipment Front Ends
- Format Converters & RIP's
- Laser Photo Plotters
- Direct Imagers

Ucam Xpert

Powerful CAM Automation for Every Skill Level

Ucam Xpert delivers unmatched flexibility with automation solutions for all users—from no-code simplicity to advanced scripting.

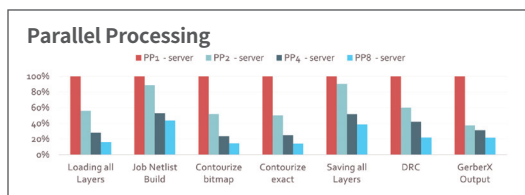
- **Hypertool – Advanced Scripting:** Harness the full power of Java and Python to automate complex workflows, integrate with business systems, and develop custom routines for next-gen PCB technologies.
- **Visual Hyperscript – Lightweight Automation:** With 1,000+ pre-built commands, easily record tasks, streamline workflows, and embed CAM functionality—no coding expertise required.

Cutting-Edge Performance Powered by Advanced Parallel Processing

At the core of Ucam Xpert lies its advanced **64-bit engine** and an innovative feature called **Parallel Processing (PP)**—the driving forces behind its exceptional performance.

- **64-bit Core Engine:** As pioneers in offering a 64-bit core over a decade ago, we leverage its ability to access more computer memory. This ensures seamless handling of high layer-count jobs and massive data volumes, eliminating processing bottlenecks.
- **Parallel Processing (PP):** This smart feature uses highly efficient algorithms to divide CPU-intensive CAM tasks across multiple CPUs in a multicore workstation. Tasks are completed in a fraction of the time required by standard CAM software. The more CPUs your system has, the faster Ucam Xpert performs.

Experience unparalleled speed and efficiency, making even the most demanding tasks effortless.



Integration into Any Environment

We offer seamless integration with all interfaces, from upstream CAD/DFM systems to downstream manufacturing and quality control processes. Ucam Xpert delivers fully automated, machine-optimized tooling for all industry-standard equipment, including electrical testers, AOI systems, photo plotters, drilling and routing machines, and direct imagers. Product parameters can be effortlessly uploaded into corporate production management databases or exported in various formats for compatibility with other CAD/CAM systems.

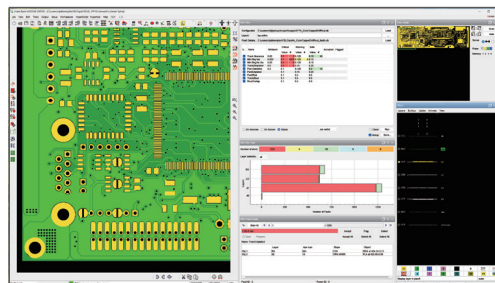
Ucamco protects your investments

Ucamco is renowned for safeguarding its customers' investments. Ucam Xpert upholds this commitment by seamlessly integrating with your existing Ucam installation, leveraging your current software configurations and the valuable automation you've developed and maintained over the years.

DRC Xpert - User Focused Design Rule Checks

DRC Xpert delivers user-centered, high-precision DRCs that instantly highlight manufacturing issues

- Customizable checks tailored to deliver crucial, detailed information
- Targeted checks, e.g., spacing between BGA pads for enhanced accuracy
- Make a repair and immediately check with localized DRC
- Graphical reporting for better understanding
- Continuously improved checks based on direct user feedback



Panel Xpert - Effortless Panel Design and Optimization

Achieve efficient and tailored production design with advanced tools for custom assembly panels:

- **Clustering Support:** Enables improved placement of multiple PCBs for enhanced efficiency.
- **Intelligent Layout Suggestions:** Automatically optimizes PCB positioning to maximize productivity.
- **Powerful Coupon Placement Tools:** Simplifies the integration of coupons into production panels.
- **Live Preview:** Provides real-time visualization of production panels for unmatched precision and accuracy.
- **Extensive Customization:** Offers pre- and post-processing scripts for fully tailored workflows.

Streamline your PCB placement and panel design process with intelligent and customizable solutions.

