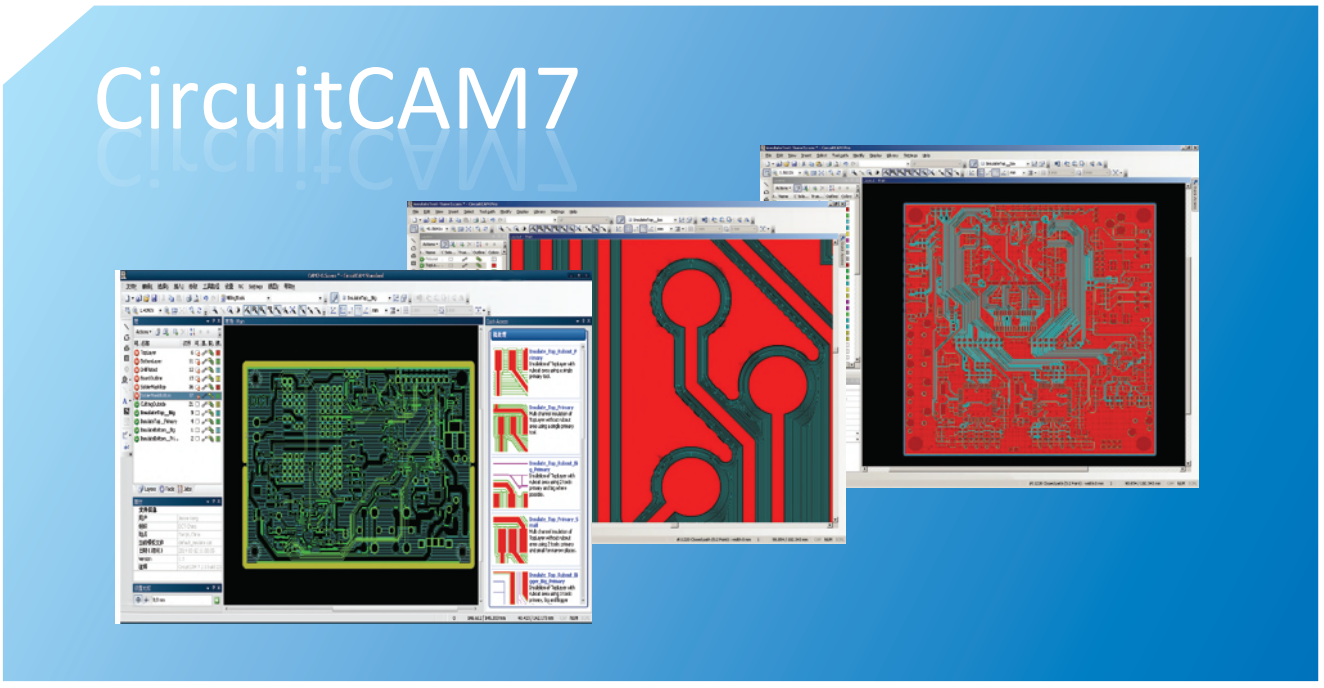
Data Processing Software CircuitCAM7

Used to generate processing path, based on innovative methods and expert data, be applicable to various direct mechanical and direct laser processing equipment for circuit boards and SMT stencils



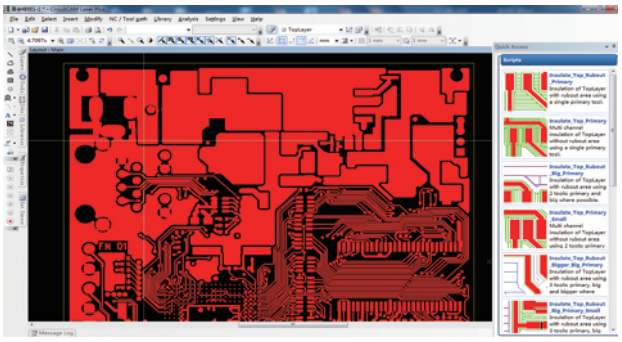
Digitized experience and knowledge, upgrading to the 7th version step by step, best choice for precise stencil design, with more automated data processing performance

Programmed technology & know-how, concentrating over 30 years on perfection, pioneered circuit board dry processing method, innovation again in generating tool path

- Made in Germany, has a long history with orderly inheritance, based on CAD kernel, professional CAM software in electronics industry
- Improving constantly, keeping pace with the technology, striving for excellence, experienced test of various applications, mature and stable
- Major industry formats compatible, templates according to CAD/EDA station, convert design to tool path with easy
- Powerful in functions, with the algorithm based on innovative technology, most optimum tool path, quality and speed double improved
- Simple and easy to use, intuitive and clear interface, smooth data processing flow, enjoy the joy of self-taught
- Implicit value package, expert technique and know-how integrated, examples available for common, special and difficult work task
- Worth for possessing, amplifying functions of hardware, performance more than initial meaning of Computer -Aided Manufacture
- Worry-free service, independent help menu and manual, reliable support and upgrade system as well as sustainable development

德中DCT
Design Comes True

CircuitCAM7 is a software for processing data from CAD/EDA station according to the requirement of the production technology, including receiving and displaying the design, checking and editing the design according to manufacturability, generating processing procedure and related tool path. It is applicable to PCB and relevant component and device technical fields from prototype, small batch manufacturing to mass production.



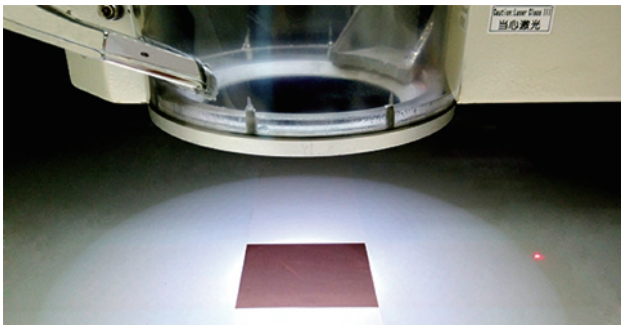
Based on direct processing technology, CircuitCAM7 has unique performances in dry processing of circuit boards. 1. Calculate and generate the engineering data for tool path of the mechanically manufactured circuit boards, such as milling off copper foil within preferred depth, drilling holes, and routing contour; 2. Calculate and generate the engineering data for Laser circuit board processing, including engineering data for hole drilling and precision contour cutting, engineering data for Direct Laser Solderability, especially processing data necessary for direct laser circuit pattern based on Striping&Stripping technology; 3. Design SMT solder paste stencil, including shapes of opening and routes of optimum processing. In addition, as an excellent data processing software, CircuitCAM7 is also used in conventional PCB manufacturing technology for inspection, photo-plotting, calculating and generating technological parameters used in dry and wet processing.

Data is one of the most important resource today, direct processing helps us to improve our environment, the application of advanced technology and software can produce enormous social and economic benefits. DCT welcomes customers, schools, peers and the industry to try out CircuitCAM7, download website: www .circuitcam.com. Among them, CircuitCAM7 Viewer is used to view data generated by CAM and CAD/EDA station, which can be used free of charge.

Developer-backstage hero on the riverside of Fulda Fluss

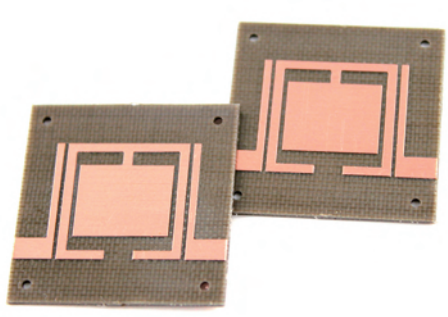
In Hesse, central German, lies the quiet and beautiful Fulda, a small town with gravel streets and castle. In the past thirty years, LKSoftWare GmbH (www.lksoft.com) has been hammering at software development pertaining to circuit board design and manufacture. Time passes, he continuously focuses on data processing software CircuitCAM (www.circuitcam.com) without distractions.

It is with the help of CircuitCAM7 from LKSoftWare, design data is translated into processing route. Computerized Numerical Control (CNC) on mechanical drilling and milling of circuit board manufacture is possible to realize. Technology of making SMT stencil by laser cutting, and making circuit board by direct laser rubout of copper become practical from theory.



As a backstage hero, in 1983, the age of enlightenment of personal computer, the founder of LKSoftWare GmbH, Mr. Lothar Klein, successfully developed the software for circuit board design - ColorCAM(http://en.wikipedia.org /wiki/ColorCAM). This CAD software, is one of the earliest EDA software running on personal computers in the

world, which transplants functions of large computers/ workstations to computers taking Motorola 6809 CPU as the core. The software is economical, practical and powerful, met the hungry and thirsty needs of many electronic products for computer-aided design tool at that time, which also made an invention from its consignee - LPKF, upgrade to advanced CNC technology from electric one. Within the subsequent period of less than 10 years, more than 1,000 sets software above-mentioned installed based on global license.

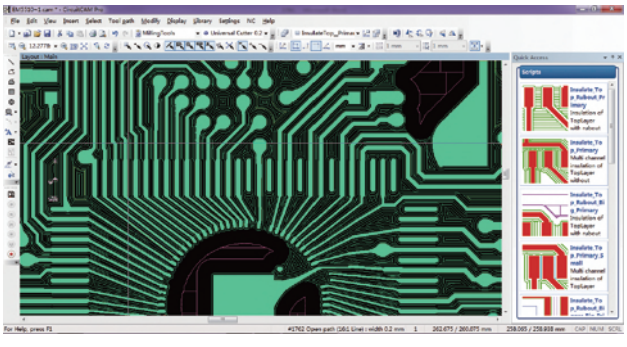


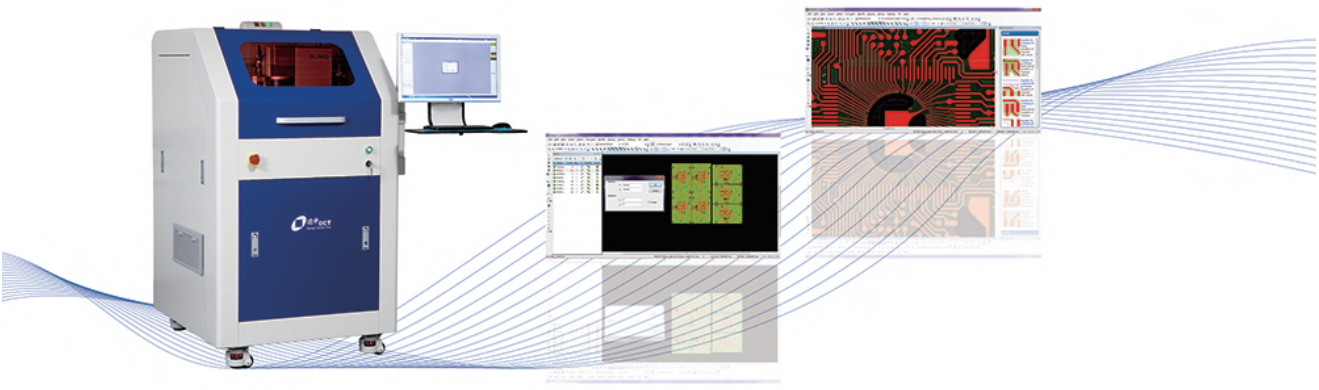
In the practice of deeper development for the software, Mr. Lothar Klein realized practical value of CAM (Computer Aided Manufacturing) function: it not only generates milling tool path for CNC equipment, but also makes equipment faster and better processing quality. All this needs scientific and rational independent architecture, and needs as well as perfection for professional details on application based on advancing with the times. In 1991, Mr. Lothar Klein put his cognition into practice and stripped post-processing module in ColorCAM and reconstructed it into professional computer-aided -manufacturing software. And then the first software characterized by direct processing of circuit board– CircuitCAM, was born in the Lothar Klein Engineer Office.

Special Features - resulting from specialty and concentration for 30 years

From glorious ColorCAM in the past to classic CircuitCAM of today, 30 years are only an instant in the long history of human civilization, but in the changing electronic information industry, it is a serial nugget era with constant and rapidly changing of events and ups and downs of time.

Being very different algorithm and function from conventional CAM software used in traditional PCB industry, CircuitCAM, derived from circuit board design software ColorCAM, write new technology and practical know-how into software. It is with the data prepared by CircuitCAM, computer digital controlled dry processing is realized, for production of electronic products such as circuit boards by means of machinery and laser, instead of wet processing such as chemical etching technology. It not only processes the pattern provide by the design station, but also carries out inverse calculation for conductive tracks and pads of circuit boards, and optimizes technology and know -how for different equipment and its processing tasks, generates corresponding tool path on this basis, significantly improves processing efficiency and simplification. As independent new type of software, the emergence of CircuitCAM sets a foundation for the development of direct processing technology and creates several of the world records.





— making circuit board based on direct mechanical processing replaces the chemical etching technique, with the maximum installed capacity, far more than 10,000 sets;

— Unique commercial SMT stencil data processing software. Most of stencils of electronic products in the world are designed by CircuitCAM;

— making circuit board by the means of direct laser stripping copper foil, striping & Stripping, a kind of technology could replace chemical etching technology in mass production, unique in the world.

Union matched by heaven – a new movement of software development

For decades, CircuitCAM software has taken a step by step growth path. Since the fourth generation, CircuitCAM has no more relation with LPKF and adopts a total new tool path algorithm.

In Nov. 2012, both parties involving the interest decided to repeal the legal indictment against the opposite party, reached an agreement worth EUR 0.15 million and confirmed right-belonging relationship anew: LKSoftWare GmbH markets new version – CircuitCAM V7 by himself; exclusive marketing right of CircuitCAM V6 is transferred to LPKF and LPKF is allowed to issue usage license to his laser equipment user. However, LKSoftWare GmbH stops technical support, maintenance and upgrading for CircuitCAM V6; except for program segments-Insulate, StencilCut and ProtoLaser Rubout, all others of CircuitCAM, including trademark and Polygon Package, belongs to LKSoftWare GmbH.

Opportunity favors only the prepared mind. In 1986, entrepreneurs of DCT, who were users of ColorCAM, kept up regular correspondence with Mr. Lothar Klein to make multinational exchange of views regarding direct processing of circuit board based on mechanical milling technology, and application of CAD technology on electronic products. Two partners in China and in Germany, and two teams in China and in Europe, have

different cultural background, not only blend their careers together, but also integrate intelligence, power and resources of both parties to set a solid foundation for the development and perfection of software.

The coincidence is up to the God, the success is up to the human. In 2012, entrepreneur team of LPKF China also converted the track and started an undertaking in the electron industry based on DCT again.

Wonder cooperation relationship is formed on the basis of doing right things at right time. LKSoftWare and DCT took further development of CircuitCAM as an opportunity and established the partnership for starting a business. At the beginning of 2014, industrial and commercial registration of changes with contributions made by LKSoftWare GmbH was completed, DCT Company owned source code, trademark, etc. of CircuitCAM, opened a new chapter of the development of CircuitCAM.

Vitality - operating experience, hardware platform and application requirements

In the process of CircuitCAM development, we realize that when developing software, exquisite software technology is important, while only application, hardware and customers can bring software vitality.

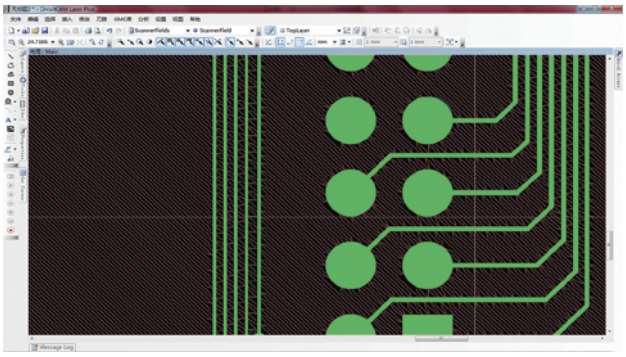
CircuitCAM7 particularly cherishes customers' application feeling, adopts the intelligent structure and uses common Windows tool for operation. Menu, dialog box, especially customizable toolbar, intuitive and vivid graphical interfaces and picturesque operation makes data processing simple and fast. Even the beginner can master the software quickly and succeed in data processing necessary for circuit board drilling and milling equipment and laser precise material processing equipment.

The product can survive only after/by acceptance of customers. As the bridge/converter of design and manufacture, the data processing software is exactly the most sensitive part of the total production system. Compared to the old version- CircuitCAM v6, which isstopped more than ten years ago, the biggest difference lies in the vitality of CircuitCAM7 keeping up with the times:

— Suitable for current and future computer and operating system with continuous maintenance, upgrading and technical support to protect customers' investment;

— Write know-how into software, such as S&S technology. Even by common hardware platforms, the processing quality and efficiency on will be greatly improved when the data is generated by CircuitCAM7;

— By using of artificial intelligence technology, the needs of human intervention are reduced, working intensity of data processing is descended and efficiency is improved, and the operation get more and more automatic based on template, individual library and expert's information;



— Flexible sales. No longer restricted to service for equipment only of one company, CircuitCAM7 can be used by any customer adopting direct processing technical equipment in the world:

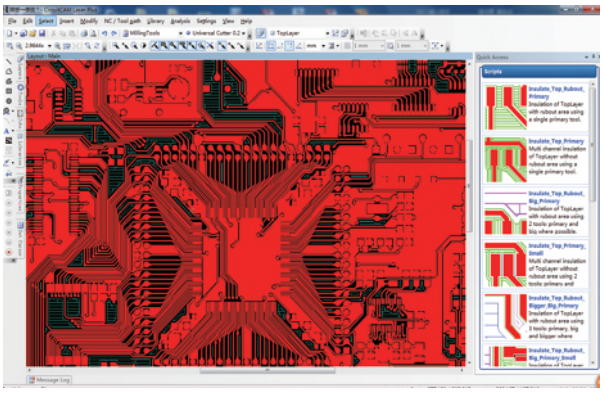
— Adopt script edition technology to provide the customer with the possibility of secondary development. According to different processing tasks, professional algorithm can be freely selected or customized to generate special tool path and form special template;

— Integrated with more application experience from frontline operators, form characteristic technological functions for different applications and processing details, CircuitCAM7 is available together with direct processing equipment of DCT or supplied against separated purchase order.

Variants of CircuitCAM7:

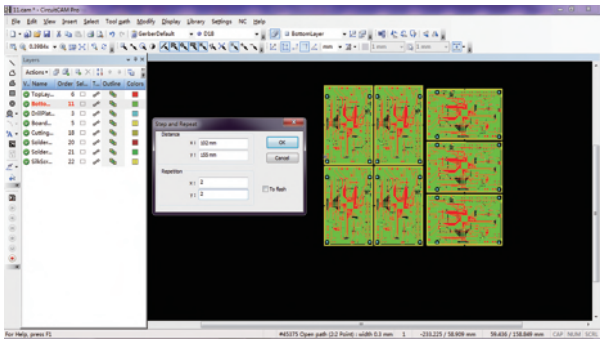
CircuitCAM7 Basic is applicable to engineering data preparation for conventional PCB production, and for direct mechanical producing of circuit boards. Based on the design document in GerberX/X2, or in ODB++ formats, CircuitCAM7 Basic could be used in wet processing PCB manufacturing technology, to generate processing data for photo plotting, drilling, contour routing, galvanic plating, automatic optical inspection, open and short testing, etc. For rapid prototyping and trial production of PCB, CircuitCAM7 Basic can generate machining tool paths for CNC drilling and milling system. Through mechanical depth-controlled milling, copper foil on CCL/Copper-clad Laminate can be selectively removed, and circuit patterns such as conductors and pads can be obtained, without chemical etching process. In addition to the DirectMaker-Direct Mechanical circuit board equipment of DCT, with the tool path data generated by CircuitCAM7 Basic, even ordinary CNC drilling and milling equipment, by doing some necessary configuration, could also be used for making prototype PCB.

Its core is one function similar to auto routing, but the calculation resultant is insulation patterns constituted by insulation channels other than patterns of tracks, pads and other conductive elements. That is, by an inverse computation of the conductive pattern, based on the envelope line of tracks, pads and other conductive patterns, which should be stayed on the insulate laminate, to get the parts to be removed-insulating patterns/negative pattern of the PCB, and then, to calculate the tool path for removing the copper foils for getting circuit by making the insulation pattern on the CCL/copper-clad laminate.



This CAM software, mainly used for manufacturing PCB with subtractive process. For making PCB with mechanical CNC, it generates optimized engineering data for different kinds of tools with different diameters, such as drilling bit, depth milling tool and routing cutter. As a CAM station for PCB industry, CircuitCAM7 Basic possess all function needed for making PCB quick, easy and of high quality, such as data management including: open, import, save and export data in many formats; serials of graphic operate functions including: edit, modify and design geometric shape of the patterns. There are templates which could be used directly, customized templates could also be generated according to the application. For making full use of materials and getting accuracy results, there are functions such as, define size of materials, prepare fiducial mark, positioning and fixed holes, step and

repeat for panel processing. With the software tool path for different processes could be generated easily, including: tool path for depth-controlled milling of insulate patterns, for milling of stepped or blind slot, for through routing of contour and inner profile, for de-paneling/partitioning the panel. In addition, the software also allows operator editing and modifying tool path for very fine processing results.



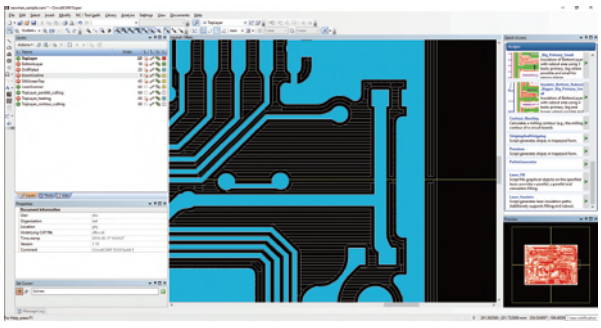
CircuitCAM7 Basic can define copper foil stripping areas in different shapes such as circular shape, rectangle and polygon as per welding method, reliability and other demands. When large-area of copper need to be removed, by the insulation pattern calculation the combination of four copper foil stripping tools with different diameters can be used. Furthermore, in accordance with the characteristics of conductive pattern distribution, in accordance with the density of tracks and size of the copper foil to be removed, different insulation channel schemes can be configured in different areas on the circuit board.

In CircuitCAM version 7, data engine is upgraded anew. The routing algorithm cuts down unnecessary times lifting and lowering of tool head by inspection, calculation and optimization. The distance of tool head moving is also reduced as short as possible. Removal of dead copper, disposal of corner, routing path optimization globally and locally, and other functions decrease processing time and ensure processing quality based on consciousness of detail.

The latest version of CircuitCAM7 Basic released in 2017 opens many functions which are only possessed by CircuitCAM7 Standard before, making its cost performance raised substantially anew, the latest version becomes a really stand-alone CAM workstation. The new version supports more apertures, can import and export a wider variety of data formats, furthermore, the graphic editing function is more powerful. Operation such as controlling, generating, inspecting, editing and modifying production data can be done by means of graphical interfaces.

Serial functions are available not only for prototyping, but also for PCB production with conventional technology, such as shape transform, pattern in drawing or painting mode converting into flash mode, the True Type font can be selected to beautify the design; generating tool path for depth controlled milling, through route and V-Cutting, generating negative or positive pattern in the power supply and ground layer; perform DRC/design rule check and manufacturability checking, data for photo plotter machine can be generated for making mask film, step and repeat can be easily done for makeup single PCB onto a panel for easy quick production.

In addition, the new CircuitCAM7 Basic could be used a data converter. For example, it can convert DXF format data into Gerber format, thus convenient customers using AutoCAD™ or other mechanical CAD software to design microwave, millimeter wave board or other product.



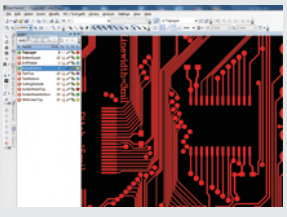
Furthermore, the new version also has the Script edit function, that makes the software expandable, the operator can edit and configure quite a few of functions other than standard function in accordance with special process requirements. Therefore, CircuitCAM7 Basic not only applies to general software operation task, but also becomes the platform for professional data processing activities, for example, used for some special data processing tasks with difficult requirements， or for technology which customized processing are needed; likewise, it could be taken as teaching aide software of CAM course for engineering study and vocational training.

CircuitCAM7 Standard, in addition to all the functions of CircuitCAM7 Basic, is strengthened with function of engineering data preparation for direct laser producing of circuit boards. The standard version of software supports direct laser processing equipment, used for precisive laser cutting, laser structuring, laser drilling of circuit board. In addition to the DirectLaser-Direct Laser circuit board equipment of DCT, with the laser path data generated by CircuitCAM7 Standard, even ordinary computer numerical controlled laser machine, by doing some necessary configuration, could also be used for making PCB.

CircuitCAM7 Standard supports laser flying processing and divided-area processing, is suitable for laser processing equipment, which deliver laser beam by high-speed scanner. In divided-area mode, in accordance with different processing task and equipment configuration, the software distributes and divides processing pattern into different scanning areas automatically and in a reasonable way, so that to get smooth and clean processing result after splicing the area and joining the graphic elements together.

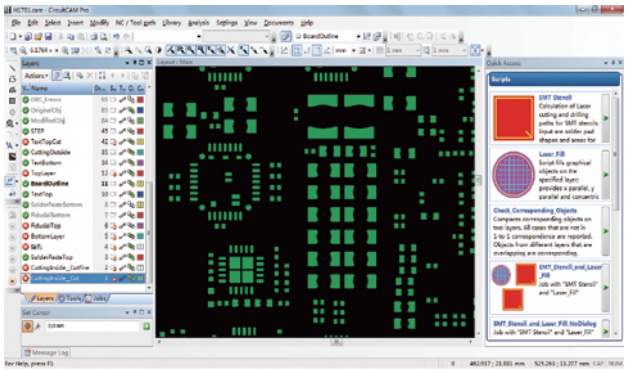
For the processing of workpiece consisting of composite material, laser path could be generated for each specific material layers, steps, zones and be exported at one time. With such kind of data, it is easy to allocate laser parameter according to different material characteristic for better processing result and efficiency. In the meantime, according to the requirements of processing tasks, the processing steps can be further divided and in detail refined. By adjusting the parameters for path calculation, the laser energy distribution in the projection area can be improved, and unnecessary beam overlap be avoided, so that the overheating of material caused by repeated projection of laser are dramatical reduced.

Laser is a multifunction processing tool, could be used for heating of material, for removal of material, and the reaction range with material could also be changed for different purpose. The advantages of tools can only be brought into play when they are combined with software, CircuitCAM7 Standard provide customer with various laser parameters and processing paths, which can be selected in line with material nature and processing requirements, and could significantly improve processing quality and speed. Based on years of practice, DCT has developed several laser material micro-processing technologies, such as Direct Laser Solderability technology, which can reduce the production process, reduce the cost of materials and manufacturing of electronic products. CircuitCAM7 Standard can generate processing data suitable for this technology.



CircuitCAM7 Pro, is used to design the opening of solder paste printing stencil, is a necessary software for laser precision stencil cutting machine. Besides professional data processing personnel, SMT engineers can also use it to design solder paste stencil by themselves. In the SMT industry, CircuitCAM is a classic professional software, got widely used. Comparing with the Standard version, the Pro version is strengthened with graphics editing and library function,

including GMC-Geometric Graphics Manipulation Center, which is used to systematically modify the shape of open holes globally or locally. Compared with the old version of CircuitCAM, CircuitCAM7 Pro has substantially improved its performance and user experience, is more automatic and easier to use.



The smooth operation experience can create a joyful working atmosphere to some extent. CircuitCAM7 Pro can add a quick action bar of the icon and allows the operator to make personalized CircuitCAM desktop. The software sets a preview window which can be easily positioned one concrete detail of multiple graphic data， the function allows operator keeping in global overview status while doing detailed graphic operation, so as is released from repetitive operation of zooming out, moving and zooming in for detail positioning.

As a professional software, CircuitCAM7 Pro has unique functions in SMT stencil data processing and opening design for high quality solder paste printing. For example, in view of the hole quality problems commonly existing in laser processing, there are special functions to adjust the tool path in the cut in and cut out area; And design rule checking function for SMD printing stencil according to predetermined criteria, and IPC 7525A standards; In design rules checking, if the spacing is too small, a graphics correspondingly will be automatically generated, which can be used for graphics operation to obtain the results satisfying the minimum spacing requirements； For the trivial and complex opening design and processing tasks, CircuitCAM7Pro provides its customer a powerful hierarchical entity pattern function, generates and edits higher-level entity patterns using existing entity patterns; An automatic library management function for entity patterns is added, patterns in the library can be automatically applied to the design being processed; There are also professional electronic Packaging libraries and Footprint libraries, which could be created, managed and automatically identified.

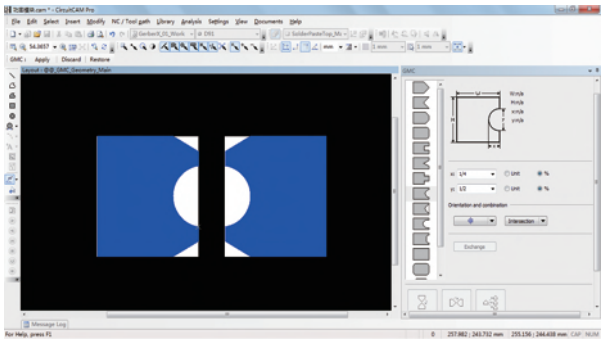
Difficult, intensive and error-prone, it is data processing that is the bottle neck of SMT stencil manufacturing. Automation function of CircuitCAM7 Pro makes these troubles history. For example, after importing the design data, the software compares the graphics with the graphics in the device package library, which is established in advance, and automatically amend the relevant graphic pattern according to the pattern in library. the matching and amendment could be automatically conducted without manual intervention, and the work on graphic pattern could be truly complete only with one key, if libraries are available and well set. For another example, the software could inspect whether there are unnecessary holes, missing holes, hole integrated into one from several holes, and several holes divided from one hole after the graphics amendment, and the inspection result is clean intuitionistic at a glance.

For another example, after modification, data in GerberX format, which can be interpreted by most customers, has to be exported for confirmation; At the same time, Data in LMD format for laser cutting machine needs to be exported; In addition, data in the format for stencil checking, for solder paste checking/SPI equipment needs also to be generated; It is really a tedious, boring and time-consuming process, if the task is done one by one. Circuit CAM7 provides multi-task batch Processing engine, slightly edited as long as according to the demand, a special customized function will be available, to achieve the one-key completion of a number of tasks, the operator could be truly released from the uninteresting work!

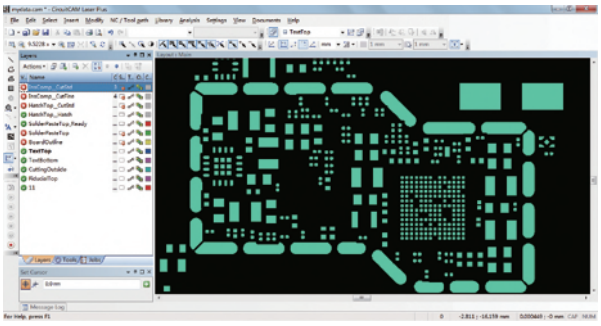
Circuit CAM7 LaserPlus, on the basis of Stanard version, is strengthened with function of stripping copper foil piece by piece for making circuit pattern. The software is suitable for CircuitLaser of DCT's direct laser equipment series. The core of software is unique Striping & Stripping algorithm of DCT's Direct Laser Circuit Technology, namely the stripping and striping technology, S&S for short. Compared with common algorithms, which removes copper point by point, CircuitCAM7 LaserPlus generates laser path, which removes copper piece by piece in blocks, results high quality and high-speed production of conductive pattern. With the laser path data generated by CircuitCAM7 LaserPlus, even ordinary computer numerical controlled laser machine, by doing some necessary configuration, the quality and speed of producing conductive patterns can be greatly improved.

With ordinary laser ablation technology, there are two bottlenecks in removing copper foil to make conductive patterns on copper clad laminate: poor quality and low efficiency. First, during processing, the laser energy cannot be controlled accurate enough to remove only copper layer without damaging the insulating medium. If the energy is insufficient, the conductive layer cannot be completely removed, there will be residual copper, result electrical insulation problem, even cause short circuit; if the energy is too large, excessive laser will burn through both insulation and conductive layer, lead to blackening and discoloration, damage of the base material, at the same time further affect the conductivity and insulation performance. Second, in the ordinary laser ablation process, the removal is achieved by the interaction between the light beam and the removed material, only when the laser beam is projected on all the surface of the workpiece, point by point, and line by line, can the copper foil be removed. Since the diameter of laser beams is very small, the speed of copper removal per minute is generally not more than 2 square centimeters, that is too slow and has no economic benefit.

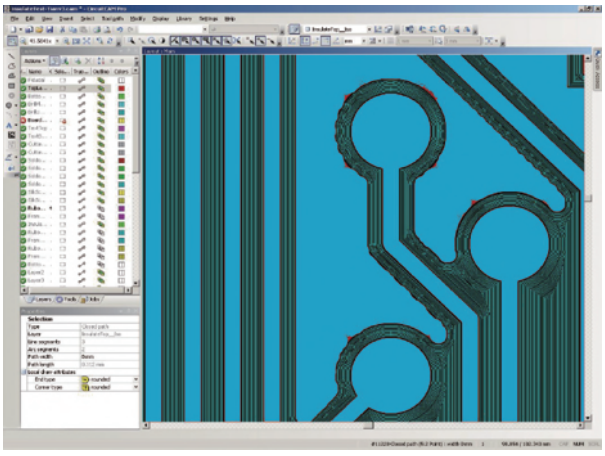
Fortunately, there are many kinds of lasers, and even for the same laser source, the effects of interaction with materials are different under different settings. DCT's Striping & Stripping solves the above problems by calculating and generating laser processing paths under different laser parameters. Firstly, S&S module of CircuitCAM7 LaserPlus subdivides the copper foil, which will be removed, into small pieces of suitable size and shape, and generates processing path. Then, the copper foil will be cut through along the contour of small pieces by laser beam under depth control cutting mode, so that each piece of copper foil is thermal insulated/adiabatic to each other, that is Striping. Finally, the laser will be changed to heating model, and heat small pieces, so that small pieces of copper foil is separated from the copper clad substrate, and stripped off at one time, that is Stripping.



Stipping&Striping is an innovation which combines software, hardware and technology. Based on the properties of materials, it makes full use of the unique performance of laser, which can both remove and heat material, and achieves the optimized processing effect. This method not only avoids the disadvantage of burning insulating substrates when ordinary laser ablation technology removes copper foil, but also solves the problem of low geometric accuracy caused by side etching and indirect processing of conventional chemical etching technology. In addition, it can peel copper foil in blocks, which overcomes the problems of small laser spot and slow speed of removing copper foil point by point and line by line. The cost of making circuit with laser has been greatly reduced, and the Direct Laser Circuit Technology has been promoted to the stage of large-scale application.



In CircuitCAM7 LaserPlus, there is an expert database, operator can directly use the one according to the material used and the laser parameters possessed; For the special quality and efficiency requirements, operator can also manually configure the conditions for S&S calculating, such as setting the size of small blocks and laser parameters; All the settings of manual operation above, as well as the configuration for new materials, new hardware conditions and new laser sources, can be saved as template, add to own database.



Features of CircuitCAM7

CircuitCAM7	
Import	LLMD, standard Gerber (RS-274-D), expansion Gerber (RS-274-X), GerberX2, DXF, Excellon, Sieb & Meier, HP-GL, Barco DPF, ODB++
Supported Apertures	circular, square, rectangle, rounded and beveled rectangle, octagon, oval, alignment mark, IEC 1182 shape (1000-1024, thermal relief, fiducial mark, etc.), special shape(user-defined)
Export	LMD, standard Gerber (RS-274-D), expansion Gerber (RS-274-X), DXF, Excellon, HP-GL, G-Code, Barco DPF, Postscript
Editing	setup original point, movement, copy, rotating/mirroring, deletion, setup anchor point coordinates, setup mouse coordinates, increase& decrease node/joint point and divide/cut of polyline, zooming in and out of line/track/pad and other entities, drag line/line segment of graphics, convert line/entity into polygon(filling), mergence/closing of curve
Special	generate contour with breaking points, the quantity and size of the breaking points could be set, batch operation, Boolean operation of entity and entity set, step-and-repeat, makeup operation, cut out of polygon and other graphics, large-area copper filling, batch processing
View	Operation display with mouse wheel, with keyboard, zoom in/out, panning, full-screen, refreshing; display by layers, display of solid line/frame and center line with pre-defined 16 colors (16 million colors at most); tracks and pads on the same physical layer, and the insulation channel formed with different diameter tools could be set in different colors
Selecting	click selection, box selection of single or grouping pad, tracks, characters, graphics and other entities; complete selection or no selection of entities of certain aperture, or in certain layer, or in all layers; adding and subtracting entities to or from the selected entities; complementary (inverse) selection of entities selected; setting of selectable or un-selectable category and size attributes of entities
Drawing	that is, adding graphics with drawing function, including, drawing line(open/close), rectangle, circle, polygon, track, pad, hole, text (TTF and TTC), etc. to form front panel or simple PCB layout or other graphical entities
Data processing and tool path generation	generate tool paths of mechanical and laser processing, and divide the processing area into sub-area according to the scanner parameters; select the physical layer or virtual layer freely according to the actual process or virtual process, and set the parameters respectively, generate and export processing tool path by layers; the insulation channel parameters around the pad can be set separately, small pieces of dead copper are removed automatically, size and shape can be defined freely for large area copper stripping; the stripping mode and direction can be selected, tools with different diameters are automatically combined and optimized according to the size and shape of area to be processed, and the minimum distance of insulation channels is guaranteed according to the rules
Customized function with Script	some processing engines in the software are opened, operator can edit, configure and develop personalized functions other than standard function in accordance with the task requirements and his/her own operation preference, such as batch treatment, combination processing according to specified sequence and conditions, way of tool cut- in and out or special form of tool path, etc.
Other functions	DRC/Design Rule Checks of PCB, DRC/Design Rule Checks of SMT stencil; Quick access function to view lists available jobs with pictures and explanatory text, preview/world view function always tell you where you are; Controlling the order of graphical objects such as tool paths, drill holes, including automatic sequence sorting capabilities during export, and manual sequence controlling
Language	English, Chinese and Japanese
Software and hardware requirements	Microsoft Windows 2000/XP/WIN7/WIN8, processor with frequency over 1.5GHz, 1GB memory at least (2GB memory or over recommend), screen display resolution 1024x768 minimum

All specifications subject to change

德中DCT
Design Comes True

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