What is ConvertPLUS ARE?

ConvertPLUS ARE (Automated Reverse Engineering) is a full-featured, CAM software solution designed to complement ScanCAD’s family of scanner-based reverse engineering products.

This product takes Gerber and ASCII component data from the scanning process and creates rich netlists such as IPC-D-356A, IPC-258, ODB++ and other outputs that include the component pin numbering and footprint information needed for CAD upload and schematic generation.

Featured Highlights

- Accepts Gerber and Drill data from ScanFAB and Centroid and BOM from the PLACE Module for ScanFAB
- Creates component pin numbering & footprints
- Outputs include: ODB++, ODB++ (X), IPC-D 356 IPC-2581, Fabrication Drawings, FATF, ASCII
- Special macro to convert Gerber files to ScanCAD-ready files for import
- HyperNETLIST Extraction can generate Netlist information for even the largest of designs in a matter of minutes
- Import Wizard that loads ALL industry standard formats (Gerber, Drill, Mill, HPGL, DXF, and more)
- Database Navigator provides quick and easy access to all necessary information without the need for menus or toolbars
- Documentation suite provides the ability to create fabrication drawings with automatic dimension and hole chart generation, plus standard drawing notes and title blocks.

Analysis Features

- Graphical Netlist Comparison in support of ScanFAB's Flying Probe Test (FPT) independent netlist validation
- Pin-Point Netlist Errors (Quickly Locates Short and Open Errors from Netlist Comparison Results)
- Highlight the Location and Browse Errors Directly from Navigator
- Graphical Find Duplicates
- Graphical Layer Compare (Compare Any Two Layers Quickly and Accurately, Browse Differences Through the Navigator)
- Design Information Queries (Quickly check Min. Air Gap, Min. Trace Width, Number of Conductive Layers, Number of Drill Hits, and More)
- DRC w/AutoCorrect (Track-to Track, Track-to Pad, Pad-to-Pad, Min. Track, Min. Pad, Board Edge, and More)
Basic Features:

• Single file, 32-Bit “Intelligent” Database Structure
• High Speed Graphics & Integrated Printing
• 999 Layers, 9999 Apertures
• Polygon Support (POEX/POIN, G36/G37)
• Compositing (Pos & Neg Merging, Paint & Scratch)
• Import Wizard (Detects Gerber, Drill, Mill, HPGL, DXF, and other formats.
• Automatic Aperture and NC Tool List Converter
• Gerber 274D and 274X Import & Export
• MDA AutoPlot Import (Fire9XXX, Cymbolic Sciences)
• Barco DPF Import
• NC Data Import (Support for Excellon, Sieb & Meyer)
• DXF Import & Export
• HPGL, HPGL/2 Import & Export
• ODB++ Import and Export
• OffSpring Import and Export (Support for IPC-2581)
• Bitmap Out (Windows BMP, B&W, Color, up to 1000dpi)
• IPC-D-350 Export, CAM350 Import
• Editing Capabilities (Move, Copy, Delete, Rotate, Mirror, etc.)
• Adding Capabilities (Flash, Line, Arc, Circle, Rectangle, Polygon, Text, and More)
• IPC-D-356 & 356A Netlist Import and Export

Advanced Features

• Database Navigator (Quick Access to Layers, Apertures, Netlists)
• Layer Sets (Define Layer Sets for Blind & Buried Vias and MCM Stack-Up)
• Interactive Data Grouping (Group Objects Together for Fast and Easy Editing)
• HyperNETLIST Extraction (Supports SMT, Thru-Hole, Blind & Buried, and MCM)
• Layer Scaling
• Merge Multiple PCB Files
• Automatic Draw-to-Flash Conversion (Convert All Layers at once, Use Mask Layer as Guide, and More)
• Print generation including high resolution bitmap export

Automatic Reverse Engineering

• Integrated Footprint Library: Control “master” footprints, device creation & association and pin numbering
• Parts: Identify, delete, query, BOM report
• Fiducials: Identify and report
• Analysis: Device spacing, centroid, comparison and BOM compare
• BOM Import: Finalize reverse engineering with part numbers, device descriptions, values, and tolerance data

(All specifications and designs subject to change without notice.)

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