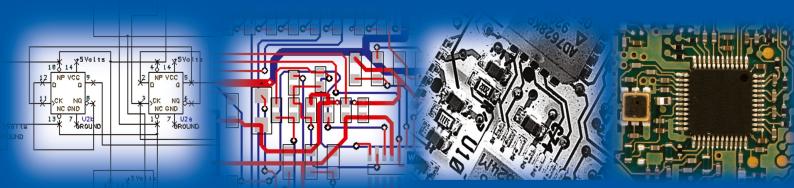
# Easy-PC



# Schematic Capture and PCB Layout Software

# Performance and Value

Delivering performance in Schematic Capture and PCB Layout normally associated with products at ten or even twenty times the price. Easy-PC has been created by a team of software professionals with significant man years experience in development of leading-edge Electronic Design Automation solutions. The team has rewritten the rule book for EDA tools to provide the optimum design experience. Easy-PC is packed with time saving features to make the task of PCB design and layout so much quicker and pleasurable.

# Simple to learn and understand, yet packed with powerful features

Easy-PC was designed to be simple to learn so that you, the customer, are productive within no time at all. Frequently, new customers report they are producing their first board within hours of installing the software - it really is that simple and intuitive!

## Take a look at Easy-PC...

We're sure you will be impressed!

Just a glance at the following pages will show immediately the extensive range of capability within this exciting product. We hope to include you as a much valued customer in the near future.

## Number One Systems' commitment to the future

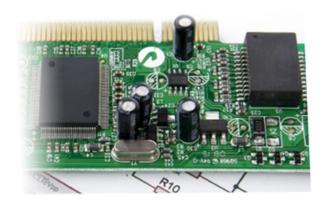
Another reason for the remarkable enthusiasm for Easy-PC is the Number One Systems commitment to continual development and expansion of the product. Every year we offer our existing customers a new version of the product at a very reasonable upgrade price, including a package of new features and enhancements. Many of these are new developments based on feedback from the many thousands of customers using Easy-PC on a daily basis. Thus we ensure our customer's investment in software design tools are kept up-to-date and abreast of changes in technology.

## What our customers say about Easy-PC -

"Each version has been an improvement on the last one, in my view it represents the best value for money on the market"

- Custom Cameras Ltd., Mr R Harris
- "We never expected such a professional PCB system at this price, Easy-PC exceeds are expectations"
- CMS (UK) Ltd., Mr John Miles
- "You have very good customer service, impressive"
- AC/DC Lighting Systems, Mr John Gallagher





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#### Unlimited Schematic Capture included as standard on all PCB Layout variants

Runs on standard 'shop' hardware, no special graphics card or processor required

#### **Application Precision**

With design resolution down to 0.1 micron, Easy-PC is precise and accurte with no rounding errors

#### Fully Customisable Interface

Toolbars, the user interface and keyboard shortcut keys are all fully and easily customisable in Easy-PC using a simple dialog.

#### Technology Support

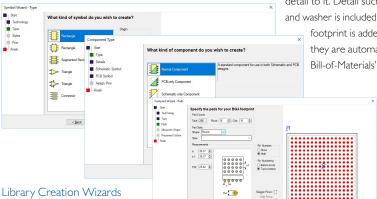
Easy-PC fully supports throughhole designs, surface mounted components and mixed technologies.

#### Import Eagle Designs & Libraries

You can accurately import designs and libraries from Eagle. Imported designs are rebuilt as though they had been created from scratch in Easy-PC. A BoardMaker II importer is also available.

#### HTML Reports

As well as text reports, formatting to HTML enables your reports to be presented professionally.



<Beck Next> Cancel Help

Create Schematic Symbols, PCB footprints and Parts simply and

efficiently. Easy-to-use wizards guide you step-by-step through a sequence of operations resulting in the automatic generation of new library items. Many Schematic symbol types are quickly created saving time. Intricate and often, fine-pitched PCB Footprints are created using parameter driven dialogs. The Component Wizard marries the Symbols and Footprints together in the component library.

#### Integrated SCM/PCB Designs

Easy-PC Schematic and PCB designs are kept fully synchronised at all times ensuring full design integrity without the use of netlists. Easy-PC also allows you design your PCB without a Schematic; simply create your PCB on-the-fly in the layout editor.

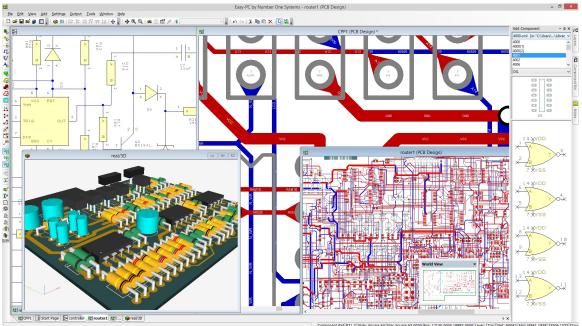
#### Instant Cross Probing

#### Being a fully integrated application, Easy PC provides instant cross-probing. Just click on the component or connection in Schematics and see the corresponding component instantly highlighted in the PCB, or click on a footprint or track in PCB and see it highlighted in the Schematic.

# Component Search Engine

As standard with Easy-PC is the Component Search Engine; an external web site that has some 13 million Parts available for searching and use. Once selected, drag the located Part onto your open Easy-PC design, it will then be ready to use on the end of your cursor. At this point, the Part is also added to your library for subsequent use in your next design.

#### This provides a very convenient 'off-design' location for Schematic and PCB components during the design process as well as decluttering the design area. Components are stored here ready to be dragged into the design by selecting them in the browser.



Component Bin

#### Associated Parts

An item within the library of Associated Parts can be attached to any regular Component to add additional detail to it. Detail such as a heatsink, nut, bolt and washer is included when a TO-220 transistor

> footprint is added to the design ensuring they are automatically included in your

#### Notes

Add notes to annotate your design. The Note Marker can be given a style, this provides the shape, size and colour, that means different uses of the Note can be tailored for use in the design. Notes can be categorised so give them extra relevance. View Notes in a sliding Browser.

#### **BOM** Composer

The BOM Composer option enables you to create details reports, Bill of Materials (BOMs) using a simple drag & drop interface. Reports can be previewed and written in HTML format for clarity.

#### What our customers say about Easy-PC:

"Very user-friendly system with unlimited possibilities to create the finest PCB designs. Easy and logical, time saving - that's Easy-PC for you''

- AudioX PX, Mr Alex Vaas. Finland
- "I had to write and say how impressed I am with Easy-
- PC. This tool just keeps getting better and better.
- Thank you and congratulations on a great product"
- Pride Embedded LLC, Mr Bruce M. Pride. USA "Great product!"
- Active Robots Ltd., Mr Anthony Lovedale. UK

# Easy-PC

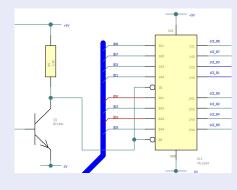
# Integrated Schematic Capture & PCB Layout

#### **Create Clear & Concise Schematics**

The Easy-PC Schematic editor allows you to create clear and concise schematic drawings. Multi-sheet drawings can be easily combined within a Project file, allowing all net names and component names to be managed and synchronised. The design tools have been produced with influence from our existing professional user base.

#### Intelligent Busses

Intelligent bus items can be drawn in the design with ease. These busses can be 'closed' containing specific net names, or they can be left 'open' to give you flexibility. Bus nets can be drawn with connective nets or left named for full implied (invisible) connectivity.



#### Online Design Rules Checking

With Online DRC switched on, error markers instantly indicate design rule spacing errors and the error location during the design layout process.

#### Shape Based Copper Pour

Easy-PC provides fast copper pouring

with control on thermal relief, isolation gap and number of spokes, plus removal of unwanted copper 'islands'. Flexible, powerful and easy-to-use, add copper of any shape to the design.

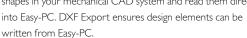
#### Split Powerplanes & View Powerplanes

Full support for split and partial powerplanes is

provided. Full planes can be viewed in the design using the View Powerplane option, whilst split planes can be created using the fast, shapebased copper pouring utility. Parameters to define thermal relief, isolation gap and number of spokes, plus removal of unwanted copper 'islands' ensures total control.

#### Import/Export DXF

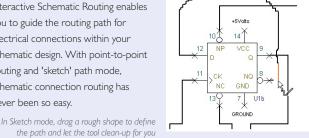
Create those complex board shapes in your mechanical CAD system and read them directly

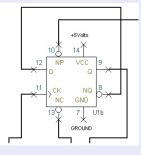


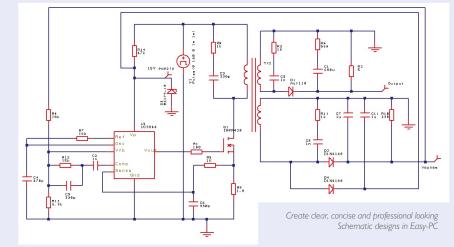
#### **Sketch Connections**

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Interactive Schematic Routing enables you to guide the routing path for electrical connections within your schematic design. With point-to-point routing and 'sketch' path mode, schematic connection routing has never been so easy.







#### Forwards & Backwards Design Annotation

Updates and modifications to Schematics can be passed forward to PCB with name changes in PCB being back annotated to the Schematic design.

# User Defined Parts List and Pick &

Customisable Parts Lists and Pick & Place machine outputs can be quickly and easily created. Standard reports are

also supplied to get you started.

Create accurate PCB designs

right first time using Easy-PC

What our customers say about Easy-PC:

Single Shot Postprocessing

Easy-PC delivers the latest technology in

single button press plotting. You can

build 'job files' to generate all the plots

produced with a single mouse 'click'. All

plots can be created on this one easy-to-

required for a design which can be

"An incredible package for the price - well done, thanks''

- ATC Systems, Mr Alex Chater. UK

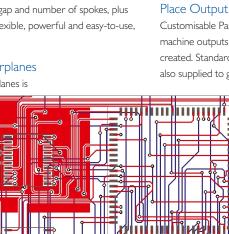
use dialog.

"And again 'officially', thank-you for the excellent tech support line. It is a major factor in my ongoing investment in your software"

- Mr T K Boyd, Chichester, UK
- "Excellent value for money and very intuitive..."
- Soul Technology Ltd., Mr Paul Jennings. UK

"I had struggled for 12 years with Eagle, then I changed to Easy-PC for Windows. It has been worth the trouble. 'Easy' is the best description of the PCB program."

- BAM, Mr Thomas Berstein. Germany



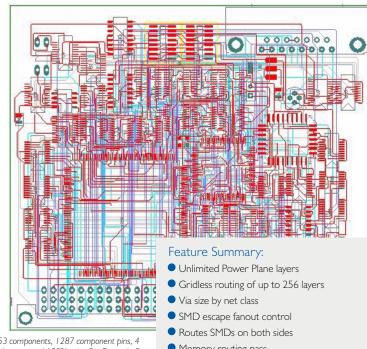
# Add-on Options Easy-PC

# Enhance Easy-PC with low cost add-ons

#### Pro Router

Pro-Router delivers a higher dimension of autorouting performance for Easy-PC users with fast, high completion rate auto-routing on the most densely packed, multi-layer PCB designs. A high performance router delivering minimal overall track lengths and via counts; Pro-Router provides the ideal routing solution for large or complex designs. Pro-Router is a new generation of autorouting software using a multi-pass cost-based conflict reduction algorithm to find a routing solution adapting to the natural flow of the nets. Adaptive routing algorithm is the only proven approach to reach high completion rates on the modern generation of designs. It gives you the quality of routing results frequently associated with manually routed designs. Plus, speed and completion rates normally only associated with auto-routers at 20x to 40x the price of Pro-Router.

With 5 variants, Pro-Router is available to suit all budgets and design complexities. Please view the web site for the full list.



53 components, 1287 component pins, 4 layer, routed 100% using Pro-Router in 3 minutes on an i5 Pentium PC

- Memory routing pass
- Split Plane/Ground Planes support
- Customisable cost factors
- Post-route cleanup optimisation
- Runs under Windows 10 & 11

## Intelligent Gerber Import

Rebuild your Gerber files intelligently and effortlessly as though they originated from Easy-PC. This powerful option allows track paths, vias, pads and pad stacks as well as full connectivity and net names to be rebuilt. Components can be rebuilt back to libraries for reuse. Once you have the design rebuilt, reverse engineer it back to a Schematics. This important link ensures full integrity between the Schematic and PCB designs as well as matching net names.

#### Library Solutions

#### **Optional Libraries**

Easy-PC is supplied with a set of libraries which cater for 'everyday' generic and general use components. These will help you get started with the design process. However, as is generally the case, it may not contain everything you require immediately. You may create your own library items and add them to the existing libraries. The optional libraries available provide you with sets of specific manufacturers' components in a ready-to-use library format. Each set has been created around the manufacturer's datasheets to save you time sourcing and creating the devices.

# GenCAD Export

When your manufacturer requires an advanced manufacturing output for driving assembly or test machines, the GenCAD format is often specified. To facilitate this requirement, this cost option interface writes an ASCII text file in GenCAD format. Pre-formatted to an exact specification, this format is reliable and proven in the industry.

Over 17,300 Components

## IDF 3.0 Export

The IDF Export option allows you to export your designs into your mechanical CAD (MCAD) system using the industry standard IDF format. IDF provides an alternative format to DXF for systems which do not support the AutoCAD DXF format or where 3D component data is required.

# Pro Library Over 123,000 Components Connector Library Over 15,900 connectors

Micro Library



Full details of the contents of these libraries can be viewed on our web site

#### Component Search Engine

As standard with Easy-PC is the Component Search Engine; an external web site that has some 15 million Parts available for searching and use. Once selected, drag the located Part onto your open Easy-PC design, it will then be ready to use on the end of your cursor. At this point, the Part is also added to your library for subsequent use in your next design.

# www.numberone.com





### Quick Summary:

#### System

- Integrated Schematic capture and PCB Design
- Database resolution down to 10 μm
- Rotation to 0.01 (1/100th) degree
- Drawing area up to 1.0 m by 1.0 m (39" by 39")
- Design in Imperial or Metric units, no rounding errors
- Unlimited number of Electrical/Documentation Layers
- Unlimited elements per design
- Technology files for rapid design setup
- Multi-level Undo and Redo
- Cut, Copy, Paste and Duplicate of all design data
- Assembly Variants
- Cross probing between Schematics and PCB
- Component/PCB Footprint/Schematic Symbol Wizards
- Document libraries using Databook Designer feature
- Customisable toolbars and shortcut keys
- World View and Component Bin windows
- Save/Restore Colour files
- User defined grids
- Component attribute values editor
- Dynamic Pan, Zoom In and Out and Frame Views
- Move any items using simple drag & drop methodology
- Relative and Absolute design measurements
- Component Search Engine
- Associated Parts
- Sticky Notes

#### Schematic Capture

- Fast to create professional Schematics
- Schematic Hierarchy
- Electrical & Design Rules Checking
- Intelligent Schematic bussing
- 'Sketch' connection mode
- Spice netlist export
- Automatic component rename
- BOM Composer for user configurable Parts List output
- Auto update of PCB with design changes from Schematics
- Back annotation of Net & Component names to Schematic design

#### PCB Layout

- Manual PCB design routing 'sketch' mode
- On-line Design Rules Checking (DRC)
- Extensive design & manufacturing checks in DRC
- Integrated Autoplace
- True split & partial power planes
- Automatic component rename
- Support for Slotted pads
- 3D Viewer
- Fast find of nets/comps
- User defined layer types
- Change Component for another on-the-fly
- Dimensioning
- Text Callouts for documenting your design
- Integrity and Connectivity Checking
- Sketch router for guided routing
- Teardrop support
- Automatic Via stitching into Copper Areas and Tracks
- Net Optimiser (simplifies manual routing)
- Panel Editor for panelisation of final PCB
- Two optional integrated Autorouters

#### Manufacturing Outputs

- Fast, single button click manufacturing data writer
- Supplied with PDF driver for active PDF output
- Gerber Photo-plotter for RS-274-D, RS-274-X and X2
- Excellon NC Drill output
- ODB++ manufacturing output
- IPC-2581 output
- Automatic generation of power & Ground plane plots
- Plotting of solder mask, silk screen and other special plots
- Plotting to HPGL A and B pen plotter types
- Parts List and Bill of Materials in text and CSV format
- User definable Parts/Net list creation
- Pick and Place assembly outputs
- DXF export (to AutoCAD and other drawing packages)
- DXF import of mechanical data
- Optional IDF output (to mechanical drawing packages)

For information on pricing contact: Number One Systems

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Tel: +44 (0)1684 296 501 Email: sales@numberone.com Further information on all products and prices available at: WWW.NUMberone.com