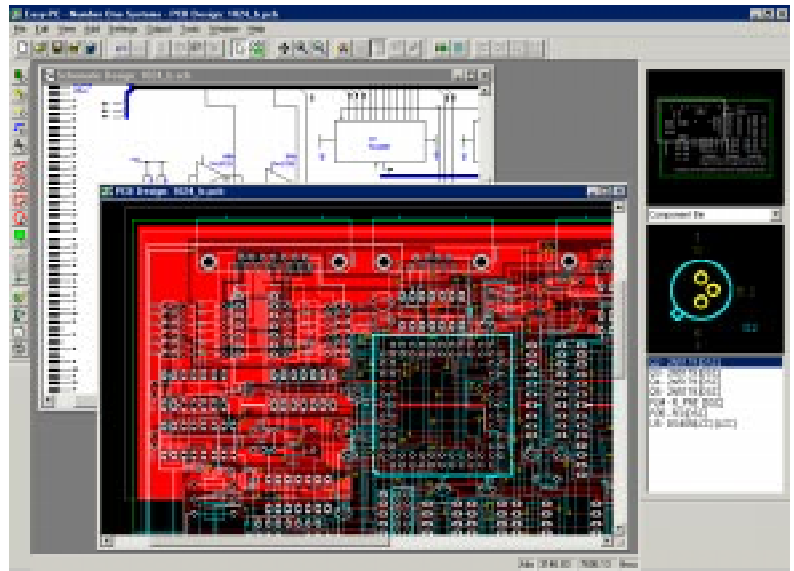


**Runs Under  
Windows 2000, ME  
& XP**



# Easy-PC For Windows

## Schematic Capture and PCB Layout For Windows

Easy-PC For Windows is an advanced printed circuit board and schematic design system that combines a simple and intuitive user interface with a set of powerful features normally found only in the most expensive packages.

### True Windows User Interface

At all stages of the design and implementation of Easy-PC For Windows, Microsoft development tools and methodologies have been used to create this application. This means a true and absolutely standardised user interface emulating, where possible, common menus and menu option locations as found on other office software. You will feel instantly at home with this product, whether you're an occasional user or a professional PCB designer using the system every day.

### Multiple Document Interface

Another standard feature of office tools is the ability to load one product but be able to run multiple applications within it. Within Easy-PC this is made possible by the implementation of the Microsoft multiple document interface (MDI) allowing multiple sheets of a schematic, the PCB design and libraries as well as the library creation tools to be opened simultaneously. One of the biggest advantages of this system is the convenience of not having to open many applications thus saving system memory, and the ability to have all required tasks available in one window.

### Fast Design 'Start-up'

The use of technology files (like style sheets in a word processor) makes it easy to configure new designs in a matter of seconds and allows you to impose a "house style" on your designs if you wish to. The technology file also contains all the manufacturing information relating to the design minimising the chances of costly errors occurring when the board is made.

### Multi-sheet And Project Management

Easy-PC can manage complex design projects including Multi-sheet schematics, copying and renaming all the associated files automatically if a layout or schematic is saved under a different name. This makes it very easy to re-use older projects as templates for new designs.

### Shape Based Copper Pour

Powerful shape based copper pour enables you to create true partial power planes or areas of copper which are unconnected. Using this feature on power plane layers you can create true split power planes of different net names.

### Multi-level Undo And Redo

Multi-level Undo and redo allows design iterations to be retained while creating the design. Recovery of information accidentally deleted can be simply achieved using Undo, even many levels previous.

### Upgrade Your Existing Easy-PC DOS /Pro XM Systems

Easy-PC is the only system which can directly import your Easy-PC, Professional or XM schematic and PCB designs and libraries (*Easy-PC libraries cannot be transferred but can be rebuilt from the design*). This feature alone enables you to retain the investment made in time and effort in libraries and designs and is of paramount importance.

### Update Your PCB From Schematic

Easy-PC supports ECO updates and design changes through its Design Changes facility. Minimal design changes - modify the Schematic, pass only the changes through to PCB without disrupting what has already been created.

### Intelligent Autoplace

Easy-PC For Windows brings a wealth of productivity features aimed at getting your designs into production as soon as possible.

International Edition

Release of Easy-PC V7.0

NEW library Databook  
announcedNEW Connection Swap  
ModeMany exciting new  
features

Release News...

Release News...

Release News...

Release News...

Release News...

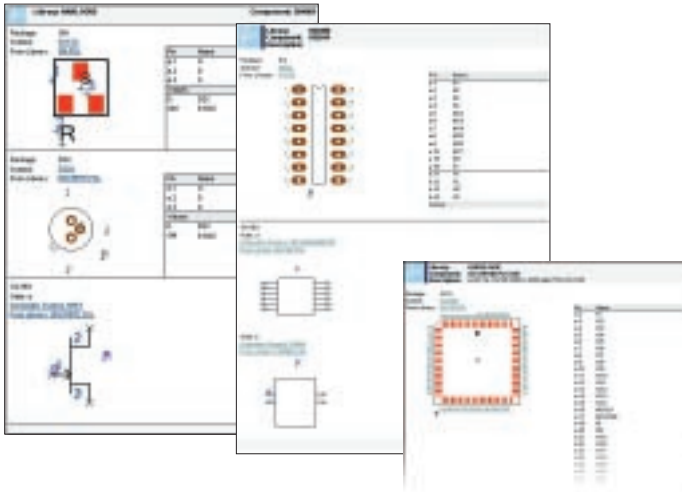
Release News...

Release News...

## Easy-PC Version 7.0 Released !!

**Exciting new features in Easy-PC for Windows to make the PCB Design & layout task that much easier and increase design efficiency in your department and company.**

Number One Systems maintains its on-going commitment to its customers in development of Easy-PC with another set of excellent new features for Version 7.0 at an extremely cost-effective upgrade price...



## New... Library Databook

**Datasheets automatically created for all your library data**

Now you can automatically produce professional standard databook information on all your library components

New in Version 7.0, the Library Databook enables automatic creation of datasheets for all of your libraries, and for every component or symbol in these libraries. Datasheets contain detailed component specification information, including pin assignments and PCB and schematic symbol pictures laid out in an easy-to-read style. Then if required, the datasheets can be printed individually or in a set. The Library Databook can format data using predefined standard templates, or you can even modify the templates so the datasheets match your existing company standards.

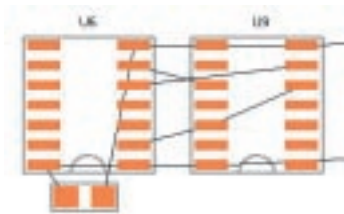
Plus! Easy Library Browsing - Library Databook also acts as a library browser. Search your library contents to find the component or symbol you want to use, and open it for editing - or add it to your current schematic or PCB design - all at the click of a button!

## New... Connection Swap Mode

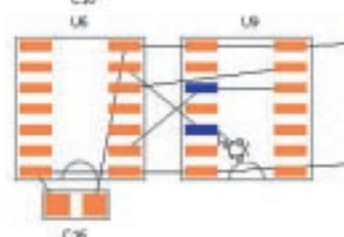
**Manual connection swap is now available in Version 7.0**

In Version 7.0 you can now manually identify pairs of pins within a component and swap their connections over. These connection swaps can then be back annotated to the schematic design using the automatic option available.

*Before connection swap*



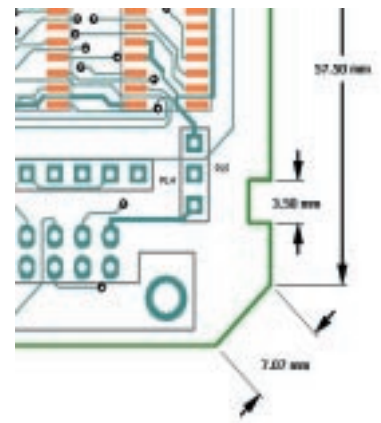
*After connection swap*



## New... Dimensioning

**With Version 7.0 you can annotate your Easy-PC designs with horizontal, vertical and angled dimensions.**

The new Add Dimension tool is used to dimension items within the design, or gaps between items within the design. Just a simple click on the start and finish points will insert a dimension in metric or imperial units, optionally snapping to selected design items. The style of dimensions can be predefined using the Remembered Styles dialog, these includes its layer, arrow head style, line and text styles.



**More Version 7.0 features overleaf...**



# Additional features included in Version 7.0...

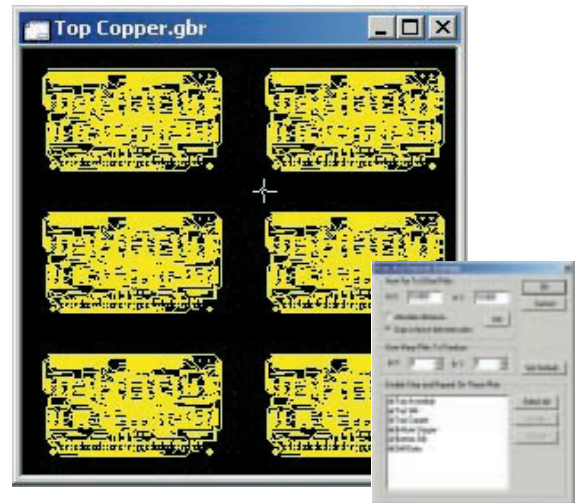
Page 2

## NEW... Step & Repeat Plotting

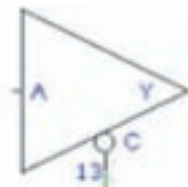
Version 7.0 provides the ability to define repeat copies of your plots on one board 'panel' ready for manufacturing. Panalisation can be simply achieved using the Step & Repeat setup dialog. This allows the number of copies in both the X and Y directions to be defined plus the gaps required between them.

## NEW... Copy to Windows Metafile output

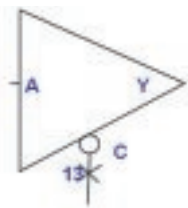
In Version 7.0 you can create a picture of your Easy-PC design as a Windows Enhanced Metafile - the benefit of creating a Metafile (vector graphics) in comparison with creating a Windows Bitmap (raster graphics) is you may then scale the resultant image without the degradation commonly associated with bitmaps. This has particular benefit when using copy & paste to produce handbooks and specification sheets where the graphics are to be scaled.



*Scaled with Bitmap  
result can be degraded*



*Scaled with Metafile  
result remains sharp*



## New... Cyclic picking

Version 7.0 delivers cyclic picking to improve your design efficiency when selecting items on a densely packed board - using cyclic picking you can easily select elements even on the most densely packed multi-layer board by merely selecting an element and clicking the 'N' key or selecting Next on the shortcut menu. Each time the 'N' key is pressed, the system selects the next element within a selection area thus cycling through a sequence of possible elements. This may even involve switching layers, the cyclic picking mode is 3-dimensional through all layers of your design. When the required element is selected you can then execute another command on it.



## New... Increased Colour Palette

In Version 7.0 you can use all the available colours using the standard Windows colours dialog. This gives you full control on how the design will look on the screen. It is only restricted by your graphics card's colour set, for example 256 or 64,000 colours, and your eye-sight!

## New... Fast Layer Toggling

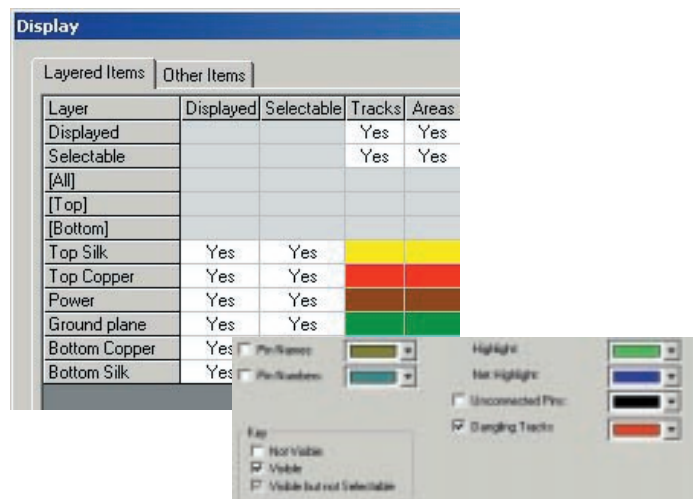
Version 7.0 introduces more toolbar icons for fast layer toggling when in the Easy-PC PCB design editor. New modes include switching off all layers except the current one, switching between the current layer and its opposite layer, e.g. Top with Bottom Electrical so that only information on that layer is displayed.

## New... Selection Mask

Version 7.0 enables you to control the selection of layers and elements in the design - in order to improve the editing process you may now make design elements visible but not selectable. For example, if you wish you can ensure that tracks on the Top layer are visible and can be selected, but that tracks on the bottom layer are only visible and not selectable.

## Feature summary for version 7.0:

- Library Documentor tool
- Connection Swap Mode
- Dimensioning
- Step & Repeating plotting output
- Copy to Windows metafile output
- Cyclic Picking
- Increased Colour Palette
- Selection Mask
- Fast Layer toggling



*Toggle through each element until the one required is selected.*

## Product Variants

- Easy-PC For Windows unlimited
- Easy-PC 2000 For Windows
- Easy-PC 1000 For Windows
- Easy-PC 500 For Windows

All variants have identical features, including Schematics but are different in their component pin capacities (component pins do not include Vias).

## Cost Options

At Number One Systems we realise that customers do not always have the budget immediately or perhaps do not have a requirement for some of the specialist options, this is why we've created a complimentary tool-set which gives you the flexibility to 'mix-and-match' as required.

These options currently include:

- Easy-Router - Our shape based, multi-layer autorouter
- Gerber In - A Gerber import facility for Easy-PC PCB
- IDF Out - Export in IDF 2 & 3 format for use with mechanical CAD products.
- IPC-SM-782 surface mount library
- Easy-Spice - Spice based A/D mixed mode simulator
- Enhanced Library - over 6500 additional library items

## System Requirements

- Pentium PC
- Windows 95/98/ME, NT4.0, 2000 or XP
- 32MB of RAM
- 20MB hard disk space for program files plus 17Mb for Easy-Spice
- CD-ROM drive
- Mouse

Number One Systems  
Oak Lane  
Bredon  
Tewkesbury  
Glos  
GL20 7LR

Phone: 01684 773662  
Fax: 01684 773664  
Email: [info@numberone.com](mailto:info@numberone.com)  
Web: [www.numberone.com](http://www.numberone.com)

The autoplacement facility provides you with an intelligent tool for automatically placing components into the design without the need for preplacing any components first. With user defined selections possible from an easy-to-use dialog the tool is also configurable to allow for different design types. With this much control the end result is a placement pattern which is balanced and which maximises use of available space.

## Shape Based Gridless Autorouting

The Autorouter is a shape based gridless orthogonal router designed to handle analogue and digital designs. Using a shape based technology model ensures that the router is not forced to route on an artificial grid, this means more intelligent use of available space and a better overall routing result. This equals an automatically routed design which is manufacturable, saving you many hours of manual routing and potential lost manufacturing yield because of costly mistakes. At all times while autorouting the design spacing rules you set are maintained. Also included as standard is an interface to the Cadence SPECCTRA range of autorouters.

## Cut, Copy And Paste

Intelligent cut, copy and paste of design information and text allows sections to be copied within designs and across designs minimising the risk of errors duplicating existing circuitry and designs. This allows designs to be merged by simply opening them and copying the relevant sections. Any duplicate connections, net names and component names are resolved using automatic re-numbering and user preferences.

## Automatic Links

Easy-PC can be linked to a full range of optional circuit simulators including **Analysr** and **Pulsar** for linear and digital circuits, and our revolutionary electromagnetic simulator, **Layan**, can even be used to simulate the electrical effects of the actual physical layout itself.

## Component Libraries

Easy-PC is shipped with a set of component libraries. New components can quickly and easily be added to your own libraries. There is also an optional library available containing surface mount libraries created using the IPC-SM-782 standard.

## Professional Manufacturing Outputs

Easy-PC is supplied with all outputs to create professional PCB designs. Manufacturing support for Gerber RS474-D and 274-X formats, Excellon NC Drill output, Pen plotting, Windows print including bubble-jet, ink-jet, laser-jet and many more. Also included is an assembly machine report suitable for pick & place machines or insertion machines. Easy-PC also supports home board production and prototype designs.

## Dedicated Support

Dedicated support is available through our hotline support centre free of charge for the current major version. Updates are charged for

at a nominal rate.

## Product Features

- 32 bit Windows application
- True Windows interface
- Runs under all 32 bit Windows O/S
- Schematic and PCB Design included
- Design in Imperial or Metric units, no rounding errors
- Drawing area up to 1.0 m by 1.0 m (39"x 39")
- Database resolution down to 10 µm
- Rotation to 0.1 (1/10th) degree
- Shape Based Copper Pour
- True Split Power Plane Creation
- Cut, Copy and Paste
- Multi-level Undo and Redo
- Supports SMT, Through-hole and mixed technologies
- User Configurable Parts List Output
- Full 256-Character Font Support
- SMT supported on both sides of the board
- Unlimited number of Layers
- User defined layer types
- Dynamic Pan, Zoom In and Out and Frame
- Change Component on-the-fly
- Intelligent Cut, Copy & Paste - Internal & external to the design
- Integrated component Autoplacement onto board
- Integrated optional Automatic track router
- Intelligent bussing in Schematics
- Maximum elements per design for Text strings, Components, Tracks, Pads, Polygons
- Maximum Pins per Component: Unlimited
- Block, Circle and Polygon Fill
- Dynamic Drag and Drop Move
- Graphical Design Rule Checker
- Integrity & Connectivity Checking
- Back annotation of net and component changes to Schematics
- Annotate forward design changes to PCB
- Automatic component renumber in PCB
- Cross probing between Schematics, PCB and Projects
- Net Highlight and Find
- Relative & Absolute measurements
- Dynamic Net Optimiser
- User-defined Components: Unlimited
- Utilises Windows drivers for printing to all types of printers e.g. LaserJet, Bubble jet etc.
- Plotting to HPGL A/B plotter types
- Gerber Photo-plotter to RS274-D & RS274-X
- Excellon NC Drill output
- Parts List and Bill of Materials in text and CSV format
- DXF o/p (to AutoCAD and other drawing Packages)
- Optional IDF 2.0/3.0 output
- Optional IPC-SM-782 surface mount library
- Technology Files for 'fast-start' and creating design profiles
- Import Formats:
  - EASY-PC (DOS)
  - EASY-PC Professional
  - EASY-PC Professional XM
  - OrCAD Native EDIF Netlist
  - EDA Workbench and MultiSIM netlist
- Links to:
  - Cadence's SPECCTRA autorouter
  - Layan electromagnetic simulator
  - Analysr Linear circuit simulator