

V22.0 Supplement

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Chapter 1. Getting Started

Installation

Backing up your files

If you already have Easy-PC installed, please remember to back up all your libraries, Technology files and any other data files before proceeding with the installation of the new version. The installer should not overwrite any of your own named files, but it can re-install new copies of our standard data files so if you have changed any of those files it is important to back them up first. If you are uncertain, check the time/date stamp on the file but in any case, make a back-up.

Of course, backing up your data is important not only for the upgrade but also at regular intervals during design.

Installation From A Download Link

If you have been provided with download link, use this to download the installation executable, named EasyPC.exe. Find it in your *Downloads* folder using Windows Explorer and double-click it. You'll need to type (or copy/paste) the password provided to unpack this file. Once the unpack password has been successful, you will be allowed to continue with the installation.

All other instructions should be followed until you click Finish to complete the installation.

The installation is the same for new and existing users alike. Existing users with versions prior to this latest version can install the new software over an existing installation without deleting the old one first.

Installation From CD

Installation is via the *autorun* setup. Insert the CD-ROM into your CD-ROM drive and wait a short time. The CD-ROM will run up to speed and an Easy-PC Welcome screen will appear. If *autorun* has been disabled on your computer you must execute the 'setup.exe' program using the **Start** menu and **Run** command from the Windows task bar.

With the installer running, once the **Welcome** screen is displayed, double-click on the **Install Easy-PC** - **Version 22.0** option, or click then press **Run**. Following the instructions on the screen, you should use the same **Destination Folder** for the Program Files as your existing Easy-PC program files.

All other instructions should be followed until you click **Finish** to complete the installation.

Installing Over Existing Easy-PC Software

If you already have an earlier version of Easy-PC installed on your system and you wish to install the new version into the same folder as the earlier one, please note that you will then end up with both versions listed in the Windows Control Panel list of installed applications.

If you don't want the earlier one to be listed in the **Control Panel**, you will need to un-install that version <u>before</u> you install the new one. If you install the new software into the same folder as the old version then try to un-install the old one, you will find that the new software will not run as the un-install will have removed many or all of the program files.

If you wish to install and use the new version without removing the old one, you will need to install the new version into a different folder. The two versions will then operate independently and either can be un-installed without preventing the other from running.

Data Files Location

There is a step in the **Setup** installation wizard that asks you where you want to place data files (for example, Libraries, Technology files, etc). The default is always to use the common documents folder, "Users\Public\Documents\Easy-PC" on Windows 7, 8 or 10 (or the local language equivalents) if you are installing for All Users, or into your own Documents folder if installing for current user only.

Running Easy-PC 22.0

As with all **Easy-PC** programs, an icon will appear in the **Number One Systems** folder, or the Start pane if using Windows 10, you may also wish to create an **Easy-PC** Shortcut icon on your desktop.

To start the program, double-click on the **Easy-PC** icon from the **Number One Systems** folder or the **Start** pane if using Windows 10.

Chapter 2. New Features in Easy-PC V22

Introduction

All features are categorised as being applicable for either products (unmarked), or (SCM) specific or (PCB) specific.

Library Integration with the Component Search Engine

Easy-PC Version 22 will be delivered with free access to the Component Search Engine.

The **Component Search Engine** web site enables you to search Components (along with Schematic and PCB Symbols) and download them to your Easy-PC application ready to use. Not only do they appear on the end of your cursor but are also automatically added to your library to use on another design.

Product Version/Build Requirements

You will need to be running Easy-PC 22.0 to benefit from the **Component Search Engine** integration. This feature will only ever run on the latest major version of Easy-PC.

Registering with Component Search Engine

To use the Component Search Engine, you will first need to register an account.

Go here - https://easypc.componentsearchengine.com/ and click Register.



On the Tools page, scroll down to the Library Loader section.

EasyPC Tools X	Θ	-		×
← → C Secure https://easypo	.componentsearchengine.com/ga/downloads.php		☆]:
<u>م</u>	ACTIVITY PROFILE TOOLS FEEDBACK			*
Nº1 Easy-PC				

Click the Download Library Loader button to start the download.

📱 🔽 📄 ᆕ		Compressed Folder Tools	LibraryLoaderSetup2v28.msi.zip				— C	x c
File Home Share	View	Extract						~ ?
Documents Order Forms libraries	E Pictu data	base ses	ICloud Drive Vision RT Supplement ▼	Extract all				
$\leftarrow \rightarrow \land \uparrow$. This	DC + D-	Extract To vnloads > LibraryLoaderS	-tur 3-30 -resi -in		ت ~	Search LibraryLo	- d - C - to o	2.2 0
	PC > DOV	vnioads > LibraryLoaders	A A A A A A A A A A A A A A A A A A A		V 0	Search LibraryLo	adersetup)2V2 p
E Desktop	2	Name	Туре		Compressed size	Password	Size	
🖊 Downloads	я	😽 LibraryLoader	Setup2v28.msi Windows	Installer Package	411 KB	No		814 KB
Documents	я	README.html	Chrome	HTML Document	1 KB	No		1 KB
Pictures	2	P						,

Once downloaded, run the LibraryLoaderSetup.msi program from your download folder.

Once the **Library Loader** has been successfully installed, open the **Library Loader** from your Windows **Start** menu.

You will be asked to either **Register** or **Login**. As you have already registered you can select the **Login** Tab and **Login** using your **User Name** and **Password**.

Account Details	×	
Register Login		
Email (User Name) Password		
	Login Aready have an account but forgot your password?	

Once logged in, select **Your ECAD Tool** as **Easy-PC** using the drop-down list box. Now select the **Settings** button next to it.

From within the **Settings** dialog you will now be able to set the destination for where new Schematic Symbols, PCB Symbols and Components will be saved to.

Easy PC Settings		
Libraries Schematic Symbols	User.ssl	
PCB Symbols	User.psl	
Components	User.cml	
	ОК	Cancel

Now you've set up the Library Loader you can now download Components from the Easy-PC Component Search Engine web site and they will load directly into your libraries and onto the end of your cursor ready for placement in a design.

Using the Easy-PC Component Search Engine

From the **Easy-PC Component Search Engine** website (<u>https://easypc.componentsearchengine.com/</u>), enter the name of your Component or a description of

it in the **Search** section. Once the search is complete you will see six columns presented including an ECAD Model, Datasheet and Pricing/Stock information for the Component from various suppliers.

Clicking the **Price/Stock** link will allow you to select and download the Part with pre-populated attributes from a specific supplier.

Image	ECAD Model↓	3D	D.S.	Description	Manufacturer	Compare Prices / Stock
	C 5	3D	PDF ↓	TDK - CGA3E2X7R1H222K080AA - CAP, MLCC, X7R, 2200PF, 50V, 0603	TDK	CGA3E2X7R1H222K080AA
۲	C 5	3D	PDF ₽	Capacitor MLCC GRM 0603 10V 220nF	Murata Electronics	<u>GRM188R11A224KA01D</u>

Clicking the **Download ECAD Model** button will download the model from the website into your libraries and onto the end of your cursor ready for placement in the design. Attributes are automatically added to the Part depending on the section you download it from, therefore if we click **Download ECAD model** from RS Components, we would then also see the RS Part Number on the Part in Easy-PC.

6	TDK 2	LonF Multilayer Ceramic Ca Dielectric 0603 (1608M)	Do Da	wnloa itashe	et MLC]⇐	
	Stock	0	F	rom	то	Cost (GBP)		
	RS Part Number	9171401		1	1+	0.023		
	Manuf Part Number	CGA3E2X7R1H222K080AA						
	Pack Size	4000						
	Minimum Order Quantity	1						
	RoHS Compliance	Unknown						

Now the Component has been downloaded, you can investigate its values from the **Edit Component** dialog in Easy-PC under the **Library Manager** to see it has inherited the values from the online model, including the Supplier name and Supplier Part number.



Updating Imported Parts to Company Standards

It is always worth remembering that imported parts may need to be updated to your company standards. For example, this may mean adding attributes to Components or changing text, pin and line styles on Symbols and Footprints to be in-line with your other library items.

Closing the Library Loader Application

As the Library Loader will run in the background, you will need to close the background application if you wish to close it completely. To do this, select the **up arrow** on your **taskbar**, select the **Library Loader** icon and from the menu displayed, click **Exit**.



Supported Web Browsers

The following browsers are support by the Component Search engine integration:

- Google Chrome
- Mozilla Firefox
- Microsoft Edge
- Apple Safari

Note: Internet Explorer is not supported for the full integrated searching and download capability.

Associated Parts

There is a new type of Library item introduced for version 22 called an **Associated Part**. This is used when a component requires additional items to be provided on the Bill Of Materials (BOM) but where you do not wish them to physically appear in the design. The additional items attached to a TO-220 transistor for example, would need to include the heatsink, nut, bolt, nylon washer and thermal paste.



There are a number of mechanisms for associating a Part with a Component; create a new list of **Associated Parts** in their own library and add these to the Component that requires it, or add an Associated Part by typing in its details on the fly when editing a Component. The advantage of using

an Associated Part from a library is that it will be more consistent and can be used again for multiple Components. You can also add Associated Part information to a Component in the design using its **Properties** or you can add design-level Associated Parts, these might be a 'higher' level than a Component, for the board construction for example, like specifying FR4 or a board part number.

Associated Parts and Libraries

For library items, a new tab for Associated Parts has been added to the Library Manager dialog:

Library Manager		×
Schematic Symbols PCB Symbols Components Associated	ed Parts 3D View Folders	
Library: Associated Parts		∨ New Lib
Library Contents: 269		
HEATSINK-5F HEATSINK-5F-2 HEATSINK-5F-3 HEATSINK-5F-6 HEATSINK-5F-11	Add File Description: Heatsink 5F Series DIP/TO-5 Thermalloy Quantity: 1 Cost: £0.00	
HEATSINK-55-12 HEATSINK-01DN-B HEATSINK-02HN-P HEATSINK-02HN-P HEATSINK-02HN-P HEATSINK-03DN-B	<u>E</u> dit	
HEATSINK-03DIN-B HEATSINK-04DIN-P HEATSINK-04DIN-P HEATSINK-04DIN-P HEATSINK-05DIN-B HEATSINK-05DIN-B HEATSINK-05DIN-B	<u>D</u> elete <u>C</u> opy To <u>M</u> ove To	
HEATSINK-06DIN-P HEATSINK-COMPOUND HEATSINK-KCOMPOUND HEATSINK-TV4 HEATSINK-TV5	Rename Value=9.5mm	
HEATSINK-TV40 HEATSINK-TV46 HEATSINK-TV47 HEATSINK-TV47	Export	

Once an **Associated Parts library** and **Associated Parts library item** have been created, this item can then be added to a **Component** using the **Associated Part** tab on the **Component Editor** dialog:



Creating New Associated Parts Libraries and Items

From the Associated Parts tab in the Library Manager select the New Item button:

Library Manager	X	
Schematic Symbols PCB Symbo	Is Components Associated Parts 3D View Folders	
Library: Associated Parts	✓ New Lib	
Library Contents: 269		
HEATSINK-5F HEATSINK-5F-2 HEATSINK-5F-3 HEATSINK-5F-6 HEATSINK-5F-11 HEATSINK-55-12	Add Rile New Item Description: Heatsink 5F Series DIP/TO-5 Thermalloy Quantity: 1 Cost: £0.00	
	Edit Associated Part X	
	Part Name: Heatsink	
	Description: Heatsink Series Plain/Black IMI Marston	
	Quantity: 1	
	Cost: £0.550	
	Values: Mfr=Marston	
	Edit	
	Delete	
	OK Cancel	

All information on this dialog is saved with the Associated Part and 'attached to the Component once associated.

Adding Associated Parts items to Components in the Library

From the Associated Parts tab of the Component Editor, use the Add button.

C:\Users\Public\Documents\Easy-PC\Library\Transistor.cml - BUK453-60A					
	Add				
	Delete				
	Edit				

This opens the Add Associated Part dialog:

Add Associated Part	×
Library:	
Associated Parts	~
Part:	Eiter Name: Apply Clear
HEATSINK-SF THERMAL-PASTE M4-HEX-FULINUT M4-HYLON-WASHER	Values:
M4-PLAIN-WASHER M4-HEXTAPPED-FF-8 NYLON-THERMAL-SHIELD	Mfr=Marston
Quantity: 1 Cost: £9.000	Add Cancel

From here, you can add an Associated Part from an Associated Parts library, or you can type in the details directly. Either way is fine, however, if you wish to use the same Associated Part again, saving it into a library might save you time later on. It might also be more efficient for consistency too.

Adding Associated Parts items to Components in the Design

For a design that does not have Associated Part, these can be added using the **Component Properties** dialog and **Associated Parts** tab.

Properties - Component		×
Component Values Nets	Associated Parts	
1 £0.003 M4-HEX-FUL 1 £3.100 Heatsink	LNUT	<u>A</u> dd Delete <u>E</u> dit

Use the Add button to add Associated Parts to the list.

Add Associated Part	×
Library:	
Associated Parts	~
Part: HEATSINK-SF THERMAL-PASTE M4-HEX-FULLNUT M4-NYLON-WASHER M4-HEXTAPPED-FF-8 NYLON-THERMAL-SHIELD	Eilter Name: Apply Clear Values: Mfr=Marston
Quantity: 1 Cost: £9,000	<u>A</u> dd Cancel

Adding Design-Level Associated Parts

Associated Parts can be added to the design, for items such as the PCB itself, board mounts etc.

To add these, use design **Properties** from the **View** menu.

Propert	ies		×
Values	Associa	ated Parts	
1 4 4 4	£0.004	FR4 PCB M4-NYLON-WASHER M4-HEX-FULLNUT M4-MOUNTING-LUG	Add Delete Edit

Easy-PC knows and reports the difference between Component Associated Parts and design-level Associated Parts.

Associated Parts

Once Associated Parts have been included in a design, they will appear as a separate section for Associated Parts in the BOM Composer report.

🐸 BOM Composer				×
Bill of Materials		- e e C 🗅 🖬 🕻 🗠	2	
Sections: Columns: ICs Capacitors Diodes Connectors Resistors Transistors Cost Cost Cost Cost Cost	t Group By: Component Value Names Quantity Cost	Component Value Quantity Cost Cost Cost Cost Cost Cost Cost Cost	p Name:	Collate by ref name Collate using name-range Collate using name-range Sub-total sections Include standard header Extra header Show Tooltips PCB Symbol: Apply Clear
Sub-total:		32		nt variant>
Associated Parts				^
Component	Value Names	Quantity	Cost	
Heatsink	CONN3	1	0.55	
FR4 PCB	Design	1	9.00	
M4-HEX-FULLNUT	Design	4		
M4-MOUNTING-LUG	Design	4		
M4-NYLON-WASHER	Design	4		
Sub-total:		14	11.37	
Grand Totals				~

Using Associated Parts in the design

Other features within Easy-PC also understand how to handle the new Associated Parts:

Translate to PCB – Components added to the PCB will have instance-level Associated Parts copied from the Schematic.

Update Component – when updating the design from the library, a new check box exists to **Keep Associated Parts.**

CAP0 (2-DSC)	Yes	06-Feb-1998 @ 12:55				
D990F (DSC)	Yes	06-Feb-1998 @ 12:55				
D2590F (DSC)	Yes	06-Feb-1998 @ 12:55				~
Only update iter	n if version	different in library				
Remove pad sty	yle exceptio	ons				
Keep existing co	omponent v	values		All	None	Selected
Keep value posi	itions					
Z K	d north			Check	Update	Cancel
	D990F (DSC) D2590F (DSC) Only update iter Remove pad st Keep existing c Keep value pos	D990F (DSC) Yes D2590F (DSC) Yes Only update item if version Remove pad style exception	D990F (DSC) Yes 06-Feb-1998 @ 12:55 D2590F (DSC) Yes 06-Feb-1998 @ 12:55 Only update item if version different in library Remove pad style exceptions Remove pad style exceptions Keep existing component values Keep value positions	D990F (DSC) Yes 06-Feb-1998 @ 12:55 D2590F (DSC) Yes 06-Feb-1998 @ 12:55 Only update item if version different in library Remove pad style exceptions Remove pad style exceptions Keep existing component values Keep value positions	D990F (DSC) Yes 06-Feb-1998 @ 12:55 D2590F (DSC) Yes 06-Feb-1998 @ 12:55 Only update item if version different in library Remove pad style exceptions Remove pad style exceptions All Keep value positions All	D990F (DSC) Yes 06-Feb-1998 @ 12:55 D2590F (DSC) Yes 06-Feb-1998 @ 12:55 Only update item if version different in library Remove pad style exceptions Remove pad style exceptions All Keep existing component values All

Duplicate/Copy/Paste – any Associated Parts defined on Component instances will also be copied across to the new Component.

Value Properties in Component Editor

For the **Properties** page in the **Component Editor**, you can now set the display of **Values** at the Component library level.

Description: 74/	AC Series	
Default Reference: U	-	
Names in Schematic	Names in PCB	Suppress
Reference	Reference	Parts Lists
Component	Component	SCM to/from PCB
Description	Description	IDF Export
Symbol	Symbol	All Plots
V Package	Package	Plotting Shapes
📝 Pin Name	Pin Name	Plotting Text
Pin Number	Pin Number	CmCm DRC
Values	Values	

↓ ↓ ▶ ↓ Pin Assignments / Packages / Gates / Values / Properties / Associated Par

Changes to Plotting and Printing Dialog

Reports in Plotting

ſ

The ability to specify **Reports** when generating a 'set' of plots has been added to the **Plotting and Printing** dialog.

From within the **Add Plot** dialog, using the new **Report** button, you can now choose the report you wish to run when generating plots.

Choose Device/PI	ot Type	×
Gerber Pen Plot Windows PDF Excellon Report	Gerber Photo Plot HP-GL Pen Plot Windows Print/Plot Adobe PDF File Excellon N. C. Drill Report DXF File	Cancel
IDF	IDF File	

Selecting the **Report** button takes you to a version of the **Report Manager** dialog from where you select which report you want to run. The list includes built-in reports, user-defined reports and BOM composer outputs.

Reports		
Built-in Reports	^	ОК
Associated Parts		
Component Height		Cancel
Connectivity Check		
Dangling Tracks		
Design Rule Check Report		
Design Status Report		
Generic Netlist		
IPC356 Testland Output		
IPC356A Testland Full Output		

Once selected. The report appears in the main **Plotting and Printing** dialog. This setting is also saved into the **Plot Job** using **Save Job**.

	Add Plot	Copy Plot	Delete	Plot	Repos	ition	Step & Repeat	Plot Pre <u>v</u> iew ✓ Sign-off Checks
	Top Silk Screen		Output	Layers	Settings	Position		
	Top Bectrical (Reiss Top Bectrical (Paste Bottom Bectrical (Paste Bottom Bectrical (Pa Bottom Bectrical (Pa Dhil Data - [Through Dhil Idata - Chawing -] Built-in Report 'Comp	; sist) iste) Hole] [Through Hole]	Setting Plot Na Plot Ty	ame:			ponent Height'	
V			<u>O</u> utput	: To:	File		\sim	

IDF and DXF in Plotting

You can now create plots that generate **DXF** and **IDF** outputs as part of the **Plotting and Printing** mechanism. This includes saving all the relevant settings from the IDF and DXF dialogs into a **Plot Job** for easy production of different outputs.

	Choose Device/P	lot Type	×
	Gerber	Gerber Photo Plot	Cancel
	Pen Plot	HP-GL Pen Plot	
	Windows	Windows Print/Plot	
	PDF	Adobe PDF File	
	Excellon	Excellon N. C. Drill	
	Report	Report	
	DXF	DXF File	
L/	IDF	IDF File	

When either of these options is selected, it will simply add a plot into your plot list. Any settings defined in the **DXF** or **IDF** options from the **Output** menu will be used.

✓ Top Silk Screen ✓ Top Electrical	Output Laye	s Settings	Position		
Top Electrical (Resist)	Settings for p	lot: DXF			
					Device Setup
Bottom Electrical (Resist)					Device Setup
Drill Data - [Through Hole]	Plot Name:	DXF			
Drill Ident Drawing - [Through Hole]	Plot Type:	DXF		~	
DXF				~	
	Output To:	File		\sim	

Note: **IDF** Export is a cost option feature and will only appear on this dialog if you have purchased it and if it is enabled from **Settings**, **Optional Features**.

Plotting Layers - Select/Deselect All

There are new buttons for **Select All** and **Deselect All** on the **Layers** tab of the settings for a plot. Use these to quickly make selections.

Name		Sele	cted	 	 	
[Boan	d Outline]	N				
Top S	ilk Screen	Ν				
Top E	lectrical	Y				
Botto	n Electrical	Ν				
Botto	n Silk Screen	Ν				
Dimer	nsions	Ν				

Output Plots to Zip file

There are two new check boxes on the **Options** dialog of the Plotting dialog. This allows you to automatically save the generated output files (Gerber, NC Drill, Reports, etc.) directly into a **Zip** file, and optionally **remove** the individual files afterwards.

Device Setup Gerber Penplot NC Drill Window	vs PDF Cance
Job File Folder	Options
C:\Program Files (x86)\Number One Systems\Easy-PC\ Brov	vse View report on completion
Where Plot Files Are Written	Write report to same folder a plot files
Same folder as design file	Close main plot dialog after producing plots
O This folder below design file:	Auto-generate plots when
Plots Comp	ose opening main dialog with no plots defined
 Always to this folder: 	Warn if no plots include the
Brow	vse board/panel outline
✓ Pack output files into a Zip	Include Sign-off Checks
	Sign-off Checks
Remove individual files after Zipping	
Pattern For File Names	Drill Ident Drawing
\$(DesignName) - \$(PlotName) (\$(Variant)) Comp	ose Setup Sizes and Symbols

Pack output files into a Zip – output files are exported as normal, then saved into a Zip file. Without the Remove check (see below) selected, all the files will remain saved on your hard drive along with the Zip file also. The Zip file will be named *DesignName -.zip* following your file name pattern for plots.

Remove individual files after Zipping – if the check box to Zip the output files has been selected, selecting this option will then remove them from your hard drive. All plots will be removed and just the Zip file (containing the plots and reports) plus the Plot Report will remain.

Customisation of Plotting File and Folder Names

Version 22 introduces user-defined formatting of **Folder** and **File** names in the **Options** dialog of **Plotting and Printing**. This uses a 'tag' scheme with user-defined key words to format the output filename. This applies to the folder name when the folder is set to 'this folder below design', and to file names for each plot.

Tags can include Design Name, Plot, Plot Job and Project Name, Device Type, etc. To help you construct the tag pattern, syntax and creation, there is a new **Compose** dialog.

Where patterns are used

These patterns are used to construct the folder name for storing plots and other files generated during **Plotting and Printing**, and also to construct the actual names for these files. This allows you to apply some quite sophisticated rules to name and organise your output files.

When composing the pattern for the output folder, the default value is simply the text "Plots" which will place the output files in the Plots folder below the design file.

When composing the pattern for actual output files, the default value combines the design name, the plot name, and (if variants are used) the variant name.

You can use the controls on this dialog to alter the pattern to suit your preferences.

From the **Options** dialog, a defined pattern is displayed:

Device Setup Gerber Penplot NC Drill Windows PDF	OK Cancel
Job File Folder Options	
C:\Program Files (x86)\Number One Systems\Easy-PC\ Browse	
Where Plot Files Are Written	same folder as
◯ Same folder as design file Close main plot producing plots	
This folder below design file: Auto-generate	
Plots Compose Opening main of plots defined	slalog with ho
Always to this folder:	
✓ Pack output files into a Zip	ff Checks
Remove individual files after Zipping	hecks
Pattern For File Names Drill Ident Drawing	
\$(DesignName) • \$(PlotName) (\$(Variant)) Compose Setup Sizes an	nd Symbols

By selecting the **Compose** button, this reveals the **Compose File Name Pattern** dialog. From here, you can make choices that will customise your output filenames.

File Name Pattern: Example Name:	\$(DesignName) - \$(PlotName) (\$ Design - Plot (Variant)	OK Cancel				
Insert Elements						
Job Name	Plot Name	Plot Device ()			
Design Name	variant Name	Date . []			
Project Name Design Type Time - #						
Project Author	~	Value				
Edit Elements						
Select Elemer	nt Delete Selected	Revert to Default Undo Chang	es			

The **File Name Pattern** box on the dialog shows you the current pattern. These patterns are made up of 'tags' or 'fields' that are replaced at runtime with the relevant values, as well as any text required to complete the name.

Example Name: will display a preview that will show you what the final composed name might look like when the current pattern is applied. This will help you to quickly see the results of manipulating the pattern by altering the text or adding or removing elements.

Click on any of the buttons in the **Insert Elements** area to add the relevant item to the pattern at the current location of the text cursor.

When you click any function button that is not a text character, you will see the relevant tag added to the pattern. The 'character' buttons are there for convenience to simply save you typing the character yourself. They do not form part of the element but are used for filename formatting.

As well as design elements, you can also choose to add a **Value** to the pattern. The drop down list will provide you with all the value names defined in your design. Not only does this give you system values but also component values should you so wish to use them.

To remove elements from the pattern, click within the tag on the pattern box, then click the **Select Element** button. The text for that tag will become selected, and you can then either click one of the **Insert** buttons to replace that tag with the one you really want, or click **Delete Selected** to remove it from the pattern.

You can also edit the pattern by hand, to insert, alter or remove plain text items.

Gerber Output File Extensions for Board Outline

When setting up custom file extensions for Gerber files (through Plotting & Printing, Device Setup, Gerber Setup, Setup, Gerber File Extensions), an extra setting on the dialog allows you to specify the file extension for a plot containing the pseudo-layer [Board Outline].

	Gerber File Ex	tensions				\times			
	Layer Classification Layers are classified by matching the text in the name of the Layer or Layer Type. Enter one or more values separated by semicolon (;). Any non-electrical layer that cannot be classified using these settings will use the Default file extension.								
	Silk Scree	n: silk							
	Solder Re	sist: resist							
	Paste Ma	sk: paste;cr	eam		Default				
	File Extensio	ons							
	Side	Туре	Extension						
	<u>T</u> op:	Copper: Silk Screen:	.gbr .gbr	Use # to represent layer	number				
		Solder Resist: Paste Mask:	.gbr						
	Battanu								
	<u>B</u> ottom:	Copper: Silk Screen:	.gbr .gbr	Use # to represent layer	number				
		Solder Resist: Paste Mask:	.gbr .gbr						
Л	Inner:	Copper:	.gbr	Use # to represent layer	number				
$ \rangle $	Board:		.gbr	Used for [Board Outline]	pseudo-layer				
Y	Default Fi	ile Extension:	.gbr	Used for all files without t	heir own setting				
	Set <u>C</u> MP	P/SOL Set TO	P/BOT Set G	TL/GBL					

Plotting - Auto Mask

The ability to automatically create mask (solder resist/paste) for Copper Shapes attached and associated to pads in PCB Symbols has been extended to work on user-created mask layers in the PCB (layers which use a layer type which has a defined over or under-size). Any shape defined on a copper layer as part of a symbol will now create an appropriate under or oversized shape on an automask layer. Previously, the Auto Mask facility was only available for pads-only plots generated at the Plotting stage.

IDF Export Dialog Changes

When using the **IDF Export** cost option, there is an extra check box to **Always output to same folder**. File names will default to the name of the design, but with this check box selected then once you have chosen a folder for your output files that folder will override the design folder next time you open the dialog.

	Export IDF	×
X	File Names Board File: C:\Users\Public\Documents\Easy-PC\Examples\CPP.idb Library File: C:\Users\Public\Documents\Easy-PC\Examples\CPP.idb	OK Cancel
	Always Output to Same Folder	
,	Board Thickness 0.000 Component Outline Layer Type:	

This will be useful for users using SolidWorks which likes to import only from one specific folder.

DXF Export Dialog Changes

There is an extra button to **Deselect** (uncheck) all the layers in the list. Initial default layer selection will check those layers that are currently used (have data present) in the design.

DXF Output		×
Layers: Top Silk Screen Top Electrical Bottom Electrical Dimensions [Through Hole]	Select All Deselect All Units Always Use Design Units thou mm Precision	OK Cancel Set From Design

Create BOM Composer Reports from Reports Dialog

The **Report Manager** dialog when selected from Outputs menu now lists saved **BOM Composer Reports**. This means you can generate BOM Composer Reports from the same dialog as all the other reports.

	Reports	×
Ν	IPC356 Testland Output IPC356A Testland Full Output Layers Report Net Completion Pad Style Exceptions Report Parts List Shortcut Keys Source Library Report Stockit Parts List Testland Report Thermal Rules Track Analysis Track Length Rules Unconnected Pins Report Variants Report Wires Wiring List	Run Close Qptions
\Box	BOM Composer Reports Bill of Materials User Reports	<u>N</u> ew Edit
	Bill Of Materials CSV	Codv

Component Bin – Highlight Nets

Within the **PCB Design** editor, Components which are attached to the currently highlighted net are highlighted in the **Component Bin** by underlining them with a coloured bar. If the net is large, such as for a GND signal, then it may be possible that multiple components are highlighted with the underline.

Component Bin ×					
LK10 - LINK3 [DSC]					
LK11 - LINK3 [DSC]					
LK12 - LINK3 [DSC]					
U40 - 74LS02 [DIL]					
U232 - 74LS138 [DIL]					

This option can be enabled in the **Preferences** dialog under **Display**. The underline colour for **Highlight Nets in Component Bin** can also be chosen here.

General Display	Cross Probe	Dual Screen	Interaction	Schematics Interact		
Drawing			AL	ito Pan		
Cursor: Curre	nt Windows	\sim		Enable Auto Pan		
Text Barring Ch (when doubled				elay Before Starting:		
View All on	Opening Desig	jn		Speed		
Detailed Tr	leType Text					
🗹 Draw in Lay	ver Order		- Pa	an		
Draw 'Empt	y' Values			Mouse Sensitivity:		
Moving Iten	ns Use Sel Col	our				
Lowlight Ina	active Layers					
I AI	In Same Color	ur		Reversed Mouse F		
Hollow Trac	ks when True	Width off	Z	oom		
Draw Pad 1	Names Inside F	ads		Sensitivity:		
	clude Net Nam	es				
Draw Net N	lame Inside Tr	acks		Reversed Mouse Z		
Cross-hatch				Centre After Zoom		
✓ Or	nly When Drille	d-Out		Allow Wheel Zoom		
Highlight Nets in	n Component E	Bin				
Highlight		~				

Colours (PCB) - Display of Poured Shapes

There is now a separate column in the **Display** (colours) dialog for **Poured Shapes** allowing them to have different colour and visibility settings from other shapes.

Di	splay											
L	Layers and Layer Spans Settings and Highlights Nets Net Classes						-					
	Layer	Display	Selecta	True W	Tracks	Routing Areas	Pour Areas	Height Areas	Pads	Shapes	Poured Shapes	Text
	Displayed				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Selectable				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	True Width				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	[AII]	Yes	Yes	Yes								1
	[Top]	Yes	Yes	Yes								
	TOUC	V	V	V								

Layers Bar – Additional Check Boxes

Additional check boxes to separate **Shapes**, **Poured Shapes** and **Symbol Shapes** have been added to the **Layers Bar**.

A new set of check boxes alongside the existing ones have been added to toggle the state of **True** width settings.

Layers ×	
 Top Silk Screen Top Electrical Bottom Electrical Bottom Silk Screen Dimensions 	
Hide << Show Pick True	1
Areas: 🗹 🗹 🗸 Connections: 🗹 🗹	
Shapes: V V Poured Shapes: V V Sym. Shapes: V V Pads: V V	

Auto Mirror Component Setting in Component Editor

From within the **Component Editor** dialog in the **Library Manager**, on the **Properties** tab, a new setting, **Auto Mirror on add to PCB** has been added. When checked, when this component is added to a PCB design (through the normal mechanisms - Add Component, Translate to PCB etc.), it will be flipped (mirrored) to the other side of the board automatically.

	Name:	AD515		
	Description:	Low Power FET Op Amp		
\	Default Reference:	U ~		
		Auto Mirror on add to PCB		
V	Names in Schemat	ic Names in PCB	Suppress	

Inserted Files and Reports into a Design

Two new features, **Insert File** and **Insert Report**, are available on the **Add** menu for both Schematic and PCB designs.

Add – Insert File

From the **Add** menu, you can use **Insert File** to insert the contents of an existing text file into the design as a visible item. This is similar to what you can already do by pasting in the text of the file into a free text item, except that this new item retains the link to the underlying file and can reload it into the design.

Once the required file has been selected using the standard Open dialog, the **Add Inserted File** dialog is displayed:

Add Inserted	File	Х
Settings		
File Name:	C: \Users \Public \Documents \Easy-PC \Report Templates \P	
	Relative to design Reload before plotting Border	
	OK Cancel	

This allows you add additional detail to the file, such as a **Border**, and to **Reload** it before plotting to ensure it is up to date.

Relative to design : check this box to specify that the application should look for the file relative to the location of the design file if the file is reloaded in the future. With this box unchecked, the application will always use the full absolute path of the file you selected.

Reload before plotting : check this box to tell the application that the file should be re-loaded and the inserted table re-generated whenever plots are run in the Plotting and Printing dialog.

Border : check this box to add a border (box) around the outside of the text.

Change settings if you wish, and press OK. The contents of the selected file will be read in, and a visible item built from free text with an enclosing border (if selected) will appear on the cursor for you to place. This will now act as one complete 'unit'.

Add – Insert Report

A similar command is also available that allows you to **Insert Reports** as visible items in the design. You can insert most built-in reports and user-defined (both custom and BOM Composer) reports.

When this option is selected, the standard Reports dialog is displayed from which to make the report selection.

Properties of Inserted Files/Reports

Corresponding commands exist to update the inserted files using the context menu for a selected report:

	Next Layer Previous Layer	
	Update Inserted Report	
	Change Style	S
÷	Explode Composite	
a	Paste	Ctrl+V

A Properties tabs for selected inserted reports provides access to the settings.

Properties - Inserted Report	\times
Inserted Report	
Position: 10525.0000 6150.0000 Rel Fixed	
Layer: Top Silk Screen ~	
Table Contents	
Dangling Tracks	
Suppress Standard Report Header Border	
Refresh Before Plotting	
<u>F</u> ootnote:	
~	

DRC Dialog Changes

Dialog Layout

New checks have been added to the **Design Rules Checking** dialog and the Manufacturing section of the dialog has been split as well as sorting it alphabetically.

Design Rule Check			
Spacing □ Iracks □ Pads + Vias □ Shapes □ Text □ Board □ Drills □ Components □ Nets ☑ Net Completion ☑ Dangling Tracks □ Track Lengths Settings □ Check Text Shapes Checking Sets Normal Sign-off Load Save Save	 Manufacturing Acid Traps Cgmponent Height Component Names Copper Shape Verification Copper Text Outside Board Drill Breakout Drill Breakout Drill Brackoff Inner Tracks on Unplated Pads Min Annylar Ring Only Where Track Exists Min Drill Hole Size Min Drill Hole Size Min Track Neck Length Min Track Width 	 Mirrored Text Routing Areas Silkscreen Board Overlap Silkscreen Overlap Stub Vias Test Land Sparation Test Land Under Component Test Land Unreachable Unplated Vias Vias In Pads Wires 	Whole [Only Se Inside B Inside S Existing Error Delete N Delete Acc Accept Es

Acid Trap Check

Acid Traps: This checks for acid traps between Track segments and between Tracks and Pads.

An acid trap is considered to be an acute angle created between design items, usually tracks and pads (as shown below).



There are two new settings on **Rules** tab of the **Design Technology** page to set up the angle and gap.

Pad Styles Text Style Spacings	s Line Styles	Hatch Styles Rules	Track Styles	Layers	Layer Types Variants	L
Powerplanes		Component Heig	ht Checks			
<default></default>	\sim	Top M	lax Allowed Hei	ght: 0.0000)	th
		Bottom M	lax Allowed Hei	ght: 0.0000)	
Prefer Orthogonal Spok	kes V	Value Name:	Height		~	
Isolation Gap:	10.0000	Component to Co	manual Casa			
Spoke Width:	12.0000	Top Side:	Imponent Space	0.0000)	
Number of Spokes:	4	Bottom Side:		0.0000)	
Minimum Spokes:	2	Boards				
Pads and Drills		Board Spacing:		0.0000)	
Drill Spacing:	0.0000	Panel to Board:		0.0000)	
Min Annular Ring:	5.0000	Test Land Check	s			
Min Paste Size:	5.0000	Minimum Pad Wi	idth:	100.00	000	
Min Via Annular Ring:	5.0000	Minimum Separa	tion:	250.00	000	
Min Hole Size:	0.0000	Probe Side:	Bottom	I	\sim	
Tracks		Acid Trap Check	s			
Minimum Track Width:	8.0000	Minimum Allowed		90.00		
Min Neck/Fatten Leng	th: 100.0000	Minimum Allowed	d Gap:	50.000		

Minimum Allowed Angle is defined between track segments or between the edge of a track segment and the pad shape it exits from. An angle of 0 disables this check. An angle greater than 90 degrees will only apply to track segments and not the exit angle from a pad.

As well as the detection of acute angles (less than the **Minimum Allowed Angle** defined), the angle also represents calculated angles based on tracks closer than the gap between the pad and the offending segment. This is defined as the **Minimum Allowed Gap**.



Minimum Allowed Gap is the gap between a pad and a track segment after the previous segment has exited the pad. If this second segment had turned to below the Maximum Allowed Angle relative to the edge of the pad, then an acid trap has been formed. Setting a gap of 0 disables this check.

Component Names Check

Component Names: checks for component names that are closer to a component other than the one to which they really belong. This is to avoid misunderstanding when the silk screen looks like the name belongs to the wrong component.

Stub Vias Check

Stub Vias: Checks for track segments which end on a via that does not appear to be connected to a Pour Area or plane. This aids the verification of the overall signal integrity to ensure no 'gaps' appear in the electrical path.

Test Land Check

Test Land: DRC checks are available for minimum separation, minimum land size, under components and unreachable side.

There are new settings on the **Rules** tab of the **Design Technology** page where you can set up the Minimum Size and Minimum Separation, and the Probe Side (top, bottom, either or both).

Design Techn	ology										
	ext Styles bacings	Line Styles	Hatch Styles Rule	Track Styles s	Layers	Layer Types Variants	La				
Powerplanes		~	Component H	Component Height Checks							
			Bottom	Max Allowed He	-						
Prefer Orthogo	onal Spokes	×	Value Name:	Height		\sim					
Spoke Width:		12.0000	Component to Top Side:	Component Spac	ing 0.000	0					
Number of Spo		4 🜩 2 🜩	Bottom Side:		0.000	0					
Pads and Drills		-	Boards Board Spacin	g:	0.000	0					
Drill Spacing:		0.0000	Panel to Boar	d:	0.000	0					
Min Annular Rin Min Paste Size	-	5.0000	Test Land Che Minimum Pad		100.0	000					
Min Via Annula	r Ring:	5.0000	Minimum Sep	aration:	250.0	000					
Min Hole Size:		0.0000	Probe Side:	Botton	ı	~					
Minimum Trac Min Neck/Fat		8.0000	Acid Trap Che Minimum Allov Minimum Allov	wed Angle:	90.00						

Test Land Separation - Checks to see if you have any items (pads or vias) marked as Test Lands that are closer together than the distance specified (**Minimum Separation**) in the **Rules** tab of the **Design Technology** page.

Test Land Width - Looks for items marked as Test Lands that are smaller than the defined **Minimum** (Test Land) **Pad Width** in the **Rules** tab of the **Design Technology** page.

Test Land Under Component - Looks for Test Lands that could be obscured by the body of a component and could thus be inaccessible to test probes.

Test Land Unreachable - Looks for Test Lands which don't exist on a layer selected as a valid **Probe Side** in the **Rules** tab of the **Design Technology** page.

Min Annular Ring Check

There is a new subsidiary check box for **Min Annular Ring check** within the **DRC** dialog to check **Only Where Track Exists**. This will flag annular ring errors only on pads/vias where there is a track connected on a layer where the annular ring is too small. In other words, it will not report errors for undersized rings when there is no track trying to connect to the ring.

Design Rule Check			
☐ Spacing ☐ Iracks ☐ Pads + Vias ☐ Shapes ☐ Text ☐ Board ☐ Dails	Manufacturing Acid Traps Component Height Component Names Copper Shape Verification Copper Text Outside Board	☐ <u>M</u> irrored Text ☐ Routing Argas ☐ Silkscreen Board Overlap ☐ Silkscreen Overlap ☑ Stub Vias	Whole [Only Se Inside S
Drills	Drill Brea <u>k</u> out	✓ Test Land Separation ✓ Test Land Size	<u> </u>
Nets ✓ Net Completion	Inner Tracks on Unplated Pads Min Annular Ring Only Where Track Exists	✓ Test Land Under Component ✓ Test Land Unreachable ☐ Unplated Vias	Existing Erro
✓ Dangling Tracks ☐ Track Lengths	☐ Min Drill Hole <u>S</u> ize ☐ Min Paste Si <u>z</u> e	☐ Vias In Pads ☐ <u>W</u> ires	Delete N

Min Hole Size and Min Via Annular Ring Checks

A new check for Min Hole Size has been added to the Design Rules Check dialog.

The existing check for **Min Annular Ring** has been expanded with new rules available under this check for checking the minimum ring size of **Vias**.

All the above new checks have a rule entry on the Rules page of the Design Technology.

Pad Styles	Text Styles	Line Styles	Hatch Styles	Track Styles	Layers	Layer Typ	pes
	Spacings		Rule	s		Vari	iants
Powerplane	s		Component H	eight Checks			tł
<default></default>		~	Пор	Max Allowed He	eight: 0.000	0	u
			Bottom	Max Allowed He	eight: 0.000	0	
Prefer Orth	nogonal Spokes	• ~	Value Name:	Height		~	
Isolation Ga	ap:	10.0000	Compared to	C			
Spoke Wid	th:	12.0000	Top Side:	Component Space	ong 0.000	0	
Number of	Spokes:	4 ≑	Bottom Side:		0.000	0	
Minimum Sp	ookes:	2 ≑	Boards				
Pads and D	Drills		Board Spacin	g:	0.000	0	
Drill Spacin	g:	0.0000	Panel to Boar	rd:	0.000	0	
Min Annula	r Ring:	5.0000	Test Land Che	ecks			
Min Paste S	Size:	5.0000	Minimum Pad	Width:	100.0	000	
Min Via Anr	nular Ring:	5.0000	Minimum Sep	aration:	250.0	000	
Min Hole S	ize:	0.0000	Probe Side:	Bottor	n	\sim	
Tracks			Acid Trap Che	oke			
Minimum T	rack Width:	8.0000	Minimum Allov		90.00		
Min Neck/	Fatten Length:	100.0000	Minimum Allov	-	50.00		

View Menu - True Width and Visibility On/Off

There are four new commands available from the **Side** submenu of the **View** menu to toggle all **True Width** and **Displayed** (Visibility) **On** or **Off**.



Add Teardrops – Add DRC Error Markers When Cannot Be Added

There is a new check box on **Apply Teardrops** dialog to **Add DRC markers when Teardrop will not fit**. This flags up places where the application cannot insert the required teardrop because it is not legal (due to shortness of track segment, pad too small, too close to other items, etc.).

Apply Teardrops	×
Apply To:	Parameters:
Vias 🗸	V-Angle: 60.00
Round Pads	Curved Sides:
Non-Round Pads	
Selected Nets Only	Add Error marker when Teardrop will not fit
Browse Nets	
Add Teardrops Apply S	Gettings Cancel

Display (Colours) for 'Composite' Items

Within the Display (colours) dialog under Settings and Highlights, the ability has been added to actually show or hide 'composite' items, such as Dimensions, Text Callouts, and Inserted Tables (Drill table, Layer Stacks, etc.), rather than simply altering their colour by highlighting them.

Display				
Layers and Layer Spans	Settings and Highlights	Nets Net Classes		
Board:	Effect Layer	Selection: Highlight: Net Highlight:		BackGround:
Connections:	— ~	🗹 Highlight Trac	ks with Stripe	Ruler Stops
Pin Names:	— ~	Dangling Tracks:	— ~	Overlay:
Pin Numbers:	— ~	Angled Tracks:		Symbol Orig
Top Wire Link:	<u> </u>	Tracks fixed for Route	er:	Placement
Bottom Wire Link:	— ~	Lowlight Fixed Items		🗹 Draw Drill H
Top Flying Wire:	— ~	Unconnected Pins:	~	
Bottom Flying Wire:	— ~	Unplated Holes:	~	
Bitmaps:		Testlands:		
		Protected Vias:	— ~	
✓ Notes		Unfitted Components:		
Dimensions:	— ~			
Text Callouts:	— ~ –	Key	Merge Colours	Show Clearance
Inserted Tables:	<u> </u>	│ Not Visible ✓ Visible	Shapes	Error:
		Not Selectable	Tracks	Warning:

HTML Report Setting in Preferences

An extra check box has been added to the **Preferences** dialog and **General** page, allowing you to suppress the text version of HTML reports – suppress Text Reports. Previously, if you enabled HTML reports, you would also get the same report in TXT format alongside every HTM file.

Pre	ferences															×	
Ge	eneral Display	Cross Probe	Dual S	creen I	nteraction	Schema	tics Inte	eraction	PCB Interactio	n PCB	Tracks						
	General						Rep	orts									
	Security Cop	ies After:	10	minutes	Locatio	n	H	leader								L	
	Design Back	ups:	3	version:	^S L <u>o</u> catio	n			orts in Report 8			ITML	Suppre	ess Text Re	ports		
	Number of Undo	Levels:	20	\sim					ts Use Same Fil							X	
	Recently Used I	Files:	10]				Write Rep	ports to Folder:	With d	esign		~				
	Enable Sour		L	1													

Proportional Text Styles for System Font

From within the **Design Technology** dialog and **Text Styles** page, text styles that use the **<System Stroke Font>** can now be set as **Proportional**. In addition, you can modify the **percentage character** width (to create 'compressed' text) and the **line spacing** (to squeeze up or spread out multi-line text).

As well as the **Text Styles** page of the **Design Technology** dialog, these changes also affect **Change Text Style** and the **Text Properties** dialog.

sign	Technology											
	Value Names		Spi	acings		Rules			Variants			
Pad	Styles Text Styles Line Styles		Line Styles	Hatch Styles	Track Styles La		ayers	Layer Types La		ayer Spans	yer Spans	
	Name	Width	Line Width	Font		Underlined	Propo	rtional	Char Percen	t Line Pero	cent	
	Dimensions	50.0000	5.0000	Arial		No	N	lo	10	0	120	
Х	Text 60	60.0000	5.0000	<system stroke<="" td=""><td>Font></td><td>No</td><td>N</td><td>lo</td><td>10</td><td>0</td><td>120</td></system>	Font>	No	N	lo	10	0	120	
	[Errors]	50.0000	5.0000	<system stroke<="" td=""><td>Font></td><td>No</td><td>N</td><td>lo</td><td>10</td><td>0</td><td>120</td></system>	Font>	No	N	lo	10	0	120	
Х	[Pin Names]	35.0000	5.0000	<system stroke<="" td=""><td>Font></td><td>No</td><td>N</td><td>lo</td><td>10</td><td>0</td><td>120</td></system>	Font>	No	N	lo	10	0	120	
Х	[Pin Numbers]	35.0000	5.0000	<system stroke<="" td=""><td>Font></td><td>No</td><td>N</td><td>lo</td><td>10</td><td>0</td><td>120</td></system>	Font>	No	N	lo	10	0	120	
Х	[Symbol Names]	35.0000	5.0000	<system stroke<="" td=""><td>Font></td><td>No</td><td>N</td><td>lo</td><td>10</td><td>0</td><td>120</td></system>	Font>	No	N	lo	10	0	120	

The three examples below show how the new settings affect the character spacing and line spacing. All three examples have the same Width and Line Width:

Layer 1				Normal:
Designed	by:	John	Smith	Char % 100
Issue: 3				Line % 120
Layer 1 Designed Issue: 3	by:	John	Smith	Char % 100 Line % 80
Layer 1 Designed by Issue: 3	: Johr	n Smith		Char % 75 Line % 120

Properties - Text Alignment

Text Properties alignment is now 3 radio buttons in place of the drop-down list for quicker access to the alignment setting.

	Properties - Te	ext X
	Text	
	<u>T</u> ext:	Layer 1 Drawn by: John Smith
	Position:	10350.0000 4975.0000 Bel
	<u>A</u> ngle:	0.00 <u>Mirrored</u> Fixed
	Style:	~
	<u>S</u> ize:	80.0000 Line <u>W</u> idth: 5.0000
	<u>C</u> har Width:	100 % Line Step: 120 %
		Underline Proportional Width
	Eont:	<system font="" stroke=""> ~</system>
<u> </u>	Layer:	Top Silk Screen \checkmark
\Box	Alignment:	● Left ○ Middle ○ Right
,	ОК	Cancel <u>A</u> pply Help

Text Alignment Changes

Three new commands have been added to the context menu for selected text. This enables you to set all text items of current selection as either Left, Centre or Right justified.



New Library option on Library Wizards

On the **Finish** page of the three library item Wizards (Schematic Symbol Wizard, PCB Symbol Wizard and Component Wizard), you can now select the **[New Library]** option from the drop down list as a choice of libraries to specify a new library file in which your new item is to be saved. When run, this will prompt you for the name and location of the new library.

Footprint Wizard - Finish	
Start Technology	Your footprint will now be created.
Туре	Footprint Name: SOIC
Pads Silkscreen Shape	Once it has been created do you want to:
Placement Outline	Save the footprint to the library:
	✓ EE [New Library] C:\Users\Public\Documents\Easy-PC\UserLib User C:\Users\Public\Documents\Easy-PC\Library Discrete Dsm Ic C Obser Qsm Relation Sm

Goto Bar Changes

Typed Names in Edit Box

The **Goto Bar** now has edit box where you can type in the name of the item you are looking for, rather than being purely a list box of items of the chosen type. The speeds up your search process in long lists where you know all or part of the name of the item you need to find and where it is at the bottom of the list, X1 or U22 for example!

Goto	×
Component	~
C34	
C9 C26 C27 C31 C32 C32 C33	^
C34 C35 C36 C37	

Copper Pour Areas Details

When listing **Copper Pour** areas in the **Goto bar**, they are now listed with details of their **Net Name**, **Layer Name** and **Pour Order** (previously they were all listed/grouped only by Net). If you have the Goto Bar displayed (locked out) and you make changes to the **Copper Pour** areas items in the design, you must use the **Refresh Find List** from the context menu (right clicking in the Goto Bar) to update it.

Goto	×
Copper Pour Area	\sim
+12V (Top Electrical) Order 2 -12V (Top Electrical) Order 1 GND (Bottom Electrical) VCC (Top Electrical) Order 1	