

Pulsonix Version 12.5 Update

Animated 3D Folding for Flexi Boards

Version 12.5 releases animated 3D bending for flexi boards. Visualise your designs where bends and curves can be seen moving in real time using realistic animation. To support the animation, bend regions can be added to your PCB design which dictate how the bending will be performed once in the 3D Viewer. The region defines the size and direction/angle of bend as well as providing a Component and Via Keepout area used for DRC checking. These regions can be clearly displayed within the PCB design and in 3D Viewer providing visual confirmation.

Bend Lines and animation not only provide DRC capabilities but also true visualisation of the final board location

Output STL File

In addition to a STEP format file for export, Version 12.5 also allows you to export an STL format file. This can be used as an alternative for import to your mechanical CAD system.

Output as a Single Merged Entity

For both the STEP and STL formats, the export can now be defined as a single merged entity. This can be used within your MCAD system where it forms part of an additional structure and where individual entities of the PCB are not required.

Use STEP Model as Enclosure

Where the STEP model of the enclosure is also defined as a Part so that it is included when a full BOM is produced, it can now be defined so that it is used as an enclosure instead of defining the enclosure within the Settings dialog.

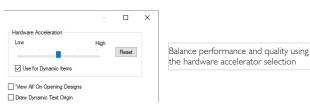
Single entity merge significantly reduces the number of elements exported for both STL and STEP format files

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Interactive graphics using GPU

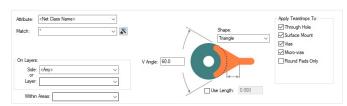
Further improving the use of GPU for graphics performance, users can now control how much hardware acceleration Pulsonix 12.5 will use. Users can balance their graphics between quality and performance to meet their needs. Also introduced is the ability to draw dynamic items such as display clearances and interactive routines using GPU graphics, thus further improving display performance.



New Technology Rules & Imports

Thermal and teardrop Rules By Layer and Area

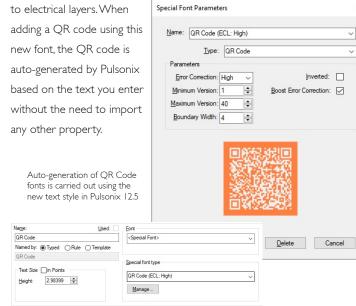
Technology rules for Copper Pour Thermals and Teardrops can now be defined by Layer and Area to provide more precision and added detail to your designs.

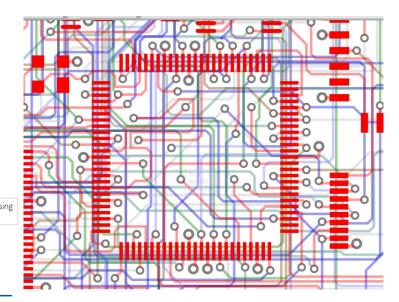


QR Code Generation as a Font Style

In addition to the existing ability to add a QR code as a bitmap, you can now generate QR codes in Pulsonix using a new Font style. The

advantage of this over a QR code bitmap is that the font can be added





Export and Import of Complex Rules

New Export CSV and Import CSV buttons have been added to the Technology dialog for: Spacings Design Level, Spacings Net Class Level, Spacings Match Pair Level, Rules High Speed Differential Pairs and Rules High Speed Signal Paths. This not only enables rules from other systems to be imported but also allows you to create complex rules fast using external tools.

Import spacing Rules from CSV file

Export CSV and Import CSV buttons have been added to the Technology dialog on the Spacing Design Level page to enable rules to be imported from other systems (where not available in the imported design) or for fast custom creation of spacing rules.

Area Keep In/Out Rules

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A new rule set for defining how objects will be kept in or out within named areas has been introduced. This means you can define one rule that covers many Areas in your design, rather than creating individual rules on each Area, such as a named area within a footprint. The rule can also be defined for Layers and Layer sets as well as within an Area. For Tracks or Vias, you can also define an area as Keep Exclusive. This keeps out Tracks or Vias, except for tracks or vias connected with a track which originates from a pad inside the area.

Segment Sha	ape Line Style Are	a Area Attributes
Name:		Design Extents
Keep In/Ou	ıt	
Tracks	Unrestricted	Copper Keep Out Drill
Vias	Unrestricted Keep In Keep Out	
Testpoints	Keep Exclusive	Mount Hole Unrestricted
Component	Pads Unrestricted	~
component	s Unrestricted	✓ If Higher Than:

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Updated Pulsonix Vault

Provided free of charge with the Pulsonix product, this updated version of the Vault releases significant enhancements:

Generic Files

Generic files that are not design or library specific can be stored as part of the Vault system. This means file types such as Gerber and Excellon NC Drill files, STEP models, Bill-of-materials (BOMs), Acceptance check reports etc. can be stored as part of the design structure and included for versioning.

Execute Attribute Hyperlinks in Vault

You can execute hyperlinks from the Attribute list in the Vault Browser dialog. This means that double-clicking on the link will perform the action associated with it, such as open a web URL, open a PDF file remotely or on your server, or a document associated with the attribute.

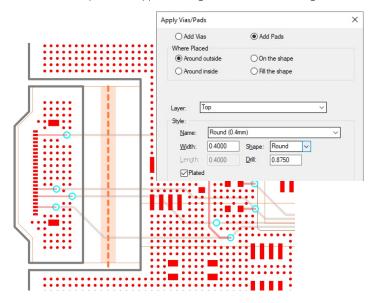
1008CS-100×GLC' <component height="">=2.03mm</component>	
<component height="">=2.03mm</component>	
a biographic sector and the sector and the sector sec	
Category=Inductor/Coilcraft 1008CS	
DCRmax = 0.08	
Description=Coilcraft Chip Inductor 10	
Freq=50MHz Irms=1000mA	tor 1008CS Seri
	tor 1008CS Seri

Plus Additional Vault Feature Summary:

- Import Libraries to Vault
- Vault Column Sorting and Order
- Splitter Controls in Browser Window
- Sign Out from Vault Available
- Performance increase for Find Components by Footprint or Symbol
- Filter Capability Added to the Check Out from Vault dialog
- Check/Copy Out Vault item preselects the item
- Show Attributes from Vault Browser
- Vault Attribute Colours
- Updated Vault Setup ODBC Drivers
- Updated Vault Postgres Server to V14.5
- Vault Database Updated for VI 2.5

Apply Pads option

Using the Apply Pads option, you can flood areas of your design with surface mount pads for copper thieving and additional shielding.



Feature Summary:

- Save/Load Partial Configuration Files
- Undo History and dropdown list
- Variant Documentation Shapes
- Force Everything Visible in Colours
- New Pin Types for Ancillary Pads and Mounting Holes
- Auto-Rename change a Prefix or Suffix
- Grouping and customisation for Inspector Bar
- New Construction Line shapes and non-infinite lines
- Edit Shape Using Construction Lines
- Dynamic Cross-Probe Mode
- Connector Part Different Symbol Name on Pins
- 3D Space Mouse Support in PCB and SCM Editors
- Splitter Controls Added to PDC Database bar
- Cut shape
- Mirror Vertically
- Multi-Threading use for Processing GenCAD Files
- DXF & GenCAD Output Settings Saved
- Library ToolKit updated
- Gerber Plot File Extensions
- Double Row Mouse (Rat) Bites creation within the Panel Editor
- Pulsonix 12.5 is fully supported under Windows 11

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