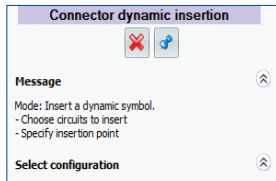# DS SOLIDWORKS

3DEXPERIENCE®

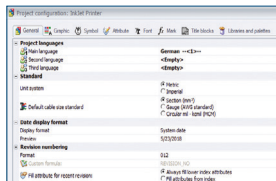# WHAT'S NEW IN SOLIDWORKS 2019—ECAD

1 ENHANCED DYNAMIC CONNECTOR CONFIGURATION

- Enhanced Dynamic connector insertion supporting graphical segmentation and mated connector pairs.

Benefits

Provides a streamlined and simplified insertion of segmented and mated connectors.
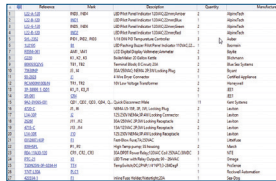
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2 ENHANCED ABILITY TO CHANGE MEASUREMENT UNITS

- You can easily change preferred measurement units. In the properties of wires, cables and manufacturer parts, you can choose to display the dimensions in millimeters or inches.

Benefits

Provides a streamlined and simplified way to define and change measurement units within the project.

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3 AUTO-GENERATED LINKS IN GENERATED REPORT DRAWINGS AND EXPORTED PDF FILES

- You can add go to links for BOM/report components for generated reports. When you manage links in reports, they are automatically generated in the report drawings.
- You can export PDF files having go to links for BOM/report components to navigate to generated PDF drawings.

Benefits

Provides a streamlined and simplified way to navigate BOM/report components in reports and PDF drawings.

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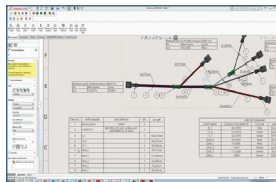
4 ENHANCED TABLES, BOM AND DOC IN FLATTENED DRAWINGS

- Auto-generation of proper and organized flattened route drawings and related tables. All information displayed in the tables like BOM, circuit summary and connector tables presented in Flattened route drawings per the schematic data.

Benefits

Provides a streamlined and simplified way to create tables and documentation for flattened documents based on schematic data.

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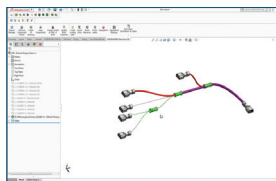
5 SPLICE IN SOLIDWORKS ELECTRICAL 3D

- Effectively use splices from SOLIDWORKS® Electrical schematics, utilizing a passing circuit symbol to represent a circuit with the same equipotential on both sides of the splice and bring that into 3D and route using the various auto-route options with effective flatten-route capability.

Benefits

Ability to use schematic-driven spices in 3D with that can be flattened and documented via automated table creation.
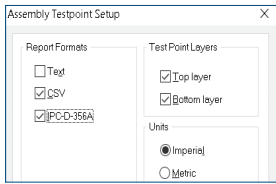
DS DASSAULT SYSTEMES
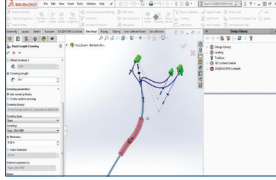
6   PARTIAL OR FIXED LENGTH COVERINGS

- Effectively create partial or fixed length coverings for various locations and elements on the route segments.

Benefits

Provides a streamlined and simplified way to create partial or fixed length coverings for Harness and inline features such as Cable socks and label tags (inline).

7   IPC NETLIST OUTPUT (SOLIDWORKS PCB)

- IPC netlist supplements Gerber output to provide, among other things, electrical connectivity information provided to the Printed Circuit Board (PCB) manufacturer as part of the fabrication package.

Benefits

Because Gerber lacks connectivity information, an IPC netlist helps the board house compare and validate that user-supplied Gerber data or Gerber data modified by the PCB manufacturer matches the source CAD design prior to fabrication.
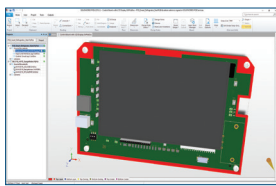
8   MECHANICALLY-DRIVEN PCB PLACEMENT BARRIERS (SOLIDWORKS PCB)

- Any required placement restrictions of electronic components on the Printed Circuit Board (PCB) can be defined in SOLIDWORKS 3D CAD and passed through SOLIDWORKS PCB Connector to SOLIDWORKS® PCB. These placement restrictions can be applied to the surface of a PCB or offset to facilitate height restrictions. Any placement restrictions from 3D CAD will appear as placement barriers in SOLIDWORKS PCB.

Benefits

SOLIDWORKS mechanical designers can electronically communicate, control and validate any required placement restrictions during the design phase to help ensure proper board and enclosure form and fit, and further streamline the ECAD-MCAD workflow.
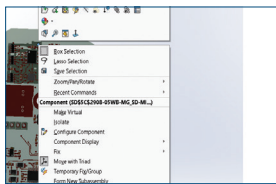
9   COLLABORATION SUPPORT OF COMPONENT LOCK/FIX STATES AND FLIPPED CHANGES 3D ANNOTATIONS FOR ALL

- ECAD-MCAD collaboration through SOLIDWORKS PCB Connector has been enhanced to support the passing of electronic components' locked/fix states as well as the ability to flip an electronic component from one side of the PCB to the other and collaborate that change in the z-axis.

Benefits

Adds additional capability for SOLIDWORKS mechanical designers to modify electronic component locations in SOLIDWORKS 3D CAD and enables a greater level of control over an electronic components desired location preventing accidental changes during PCB layout.
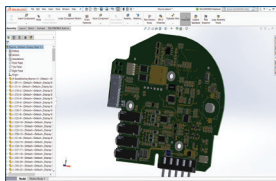
10   COPPER VISUALIZATION (SOLIDWORKS PCB)

- ECAD-MCAD collaboration through SOLIDWORKS PCB Connector has been enhanced to include the visualization of copper elements on a PCB in SOLIDWORKS 3D CAD.

Benefits

SOLIDWORKS mechanical designers can now see copper traces and pads when modifying electronic component locations in SOLIDWORKS 3D CAD to aid in the decision making process when determining the best component location.

Our **3D**EXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

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