

# Your SOLIDWORKS Files are Only Half of the Picture

A 8-point checklist for engineering teams that have outgrown BOM spreadsheets, shared drive, and disconnected files.

SOLIDWORKS is excellent for design work. But it was never meant to be the full product memory for your business.



Product memory is the complete, connected record of the product: CAD files, BOMs, part properties, revisions, supplier data, related documents, and the history of what changed, when, and why. It is the information other teams need after design moves forward.

When that product memory is scattered across spreadsheets, shared drives, file packages, email threads, and tribal knowledge, the risk rises quickly. Engineering may still know what is correct, but procurement, manufacturing, and suppliers often work from copies, partial exports, or outdated assumptions. That is when release mistakes, delays, and version confusion start to compound.



# Built for:

- Lead engineers, senior engineers, engineering managers, and manufacturing managers at manufacturing companies using SolidWorks.
- Companies that are too complex for spreadsheets but not interested in a heavy, slow PLM rollout as the first step.
- Teams of roughly 5–50 engineers that are running into five common product data problems:
  1. Engineering design data still lives in files rather than in a connected, shared product record.
  2. Managing multi-disciplinary product information is difficult as mechanical, electrical, and software data grow more interconnected.
  3. Supply chain complexity is now a design problem because sourcing, availability, and vendor choices affect engineering decisions earlier.
  4. ERP integration remains a long-standing friction point between engineering data and downstream business processes.
  5. Collaboration with contract manufacturers is still painful when files, BOMs, and revisions have to be packaged and sent manually

## What this PDF does:

- Gives teams using SOLIDWORKS a fast self-assessment they can skim in minutes.
- Maps each pain point to current OpenBOM capabilities that matter to manage CAD files and downstream data.
- Ends with a trial checklist so a team can test value quickly instead of scheduling a long evaluation cycle.

A simple rule of thumb: if procurement, operations, suppliers, and engineering are all looking at different versions of the product record, your team has a data problem, not just a documentation problem.



# How to use this checklist

Score each question honestly. The more “no” answers you have, the more risk is hiding in your current SolidWorks-to-release workflow.

## If most answers are “yes”

You already have a reasonably connected process. OpenBOM may still help reduce friction, especially around revisions, supplier handoff, and connected product data.

## If most answers are “no”

You are probably relying on manual exports, local folders, or disconnected systems to bridge a gap that keeps growing as products, teams, and suppliers get more complex.

## Typical symptoms SolidWorks teams name first

- Engineering keeps the “real” BOM, but everyone else works from copies.
- Files and drawing packages are assembled by hand right before release.
- Part numbers or custom properties are not reliable across the workflow.
- Change history is hard to reconstruct when somebody asks “what changed?”
- Costs, quantities, and supplier data are managed outside the design context.
- The team knows a better process is needed, but does not want a heavyweight rollout.

## What changes after design

### Disconnected after design

#### SOLIDWORKS Assembly

Geometry is current, but downstream data lives elsewhere

#### Spreadsheet BOMs

Exports drift fast and every team keeps its own copy.

#### Shared folders & email

Files, drawings, and supplier packages are assembled manually

### Connected after design

#### OpenBOM

##### +SOLIDWORKS

- Live BOMs
- Linked files
- Revision visibility
- Vendor and cost context
- Connected data



## Checklist questions 1-3

These first questions test whether your BOM is still an Excel export or already behaving like connected product data.

### Can everyone on your team see the same current BOM without asking engineering for a fresh export?

**01 Why it matters:** If not, procurement, suppliers, and operations are working from snapshots. Every handoff increases the chance that someone buys, builds, or quotes from stale data.

**What OpenBOM adds:** Direct BOM extraction from SolidWorks, multi-level BOMs, automatic subassembly BOM creation, and a connected catalog structure instead of ad hoc spreadsheet copies.

### Are your part numbers, descriptions, and custom properties consistent across CAD, BOM, and shared data?

**02 Why it matters:** If these fields drift, nobody trusts the record. Teams end up cleaning data repeatedly instead of reusing it.

**What OpenBOM adds:** Central catalogs, Property mapping, support for SolidWorks part number methods and custom properties, automatic part number generation, and bi-directional property exchange between OpenBOM and SOLIDWORKS.

### Are your CAD files still stored on shared drives or local folders without clear access control, revision visibility, or version management?

**Why it matters:** If so, your team is depending on folders to manage product knowledge. That makes it too easy for the wrong person to edit, copy, share, or release the wrong version of a file. As the team grows, shared drives create confusion instead of control.

**What OpenBOM adds:** A connected product record that links files to BOM items, revisions, and release context; controlled sharing by role and permission; visibility into change history; and easier traceability across files, items, and downstream teams.



## Checklist questions 4-5

This is where disconnected file management and weak change visibility usually start to hurt.

### Can a buyer, supplier, or manufacturing partner get the right files and derivatives directly from the BOM context?

**04**

**Why it matters:** If not, teams end up packaging drawings, PDFs, STEP files, and models manually at the worst possible moment – right before release or order placement.

**What OpenBOM adds:** Automatic upload and share of CAD files and derivatives such as PDF, STEP, DWG, and DXF; links stored in the BOM; ZIP export of linked files for selected items; and design-file visibility through Workspace Manager and Connected Items

### When a part changes, can you quickly see where it is used and what release or order will be affected?

**05**

**Why it matters:** If not, change management becomes a memory test. Engineers know something moved, but the impact across assemblies, revisions, and teams is slow to reconstruct.

**What OpenBOM adds:** Where-used queries, graph navigation, history tracking, immutable revisions, change reports, BOM compare, and role-based approval workflows.

Release risk usually appears here first. Most teams can produce a BOM once. The real problems show up later, when revisions, supplier changes, and file packages need to stay aligned.



## Checklist questions 6–8

These questions test whether your SOLIDWORKS data is usable for commercial and operational decisions, not just geometry.

### Can you roll up cost, quantity, and mass without building fragile spreadsheet formulas?

**06 Why it matters:** If not, every design review turns into a manual reconciliation exercise. Even simple questions such as “what does this change do to total cost?” take too long to answer.

**What OpenBOM adds:** Single- and multi-level rollups, formulas, calculated properties, and support for treating purchased assemblies as single line items when needed.

### Can procurement turn your engineering BOM into ordering work without retyping or restructuring the data?

**07 Why it matters:** If not, your downstream process starts over from scratch after engineering is done. That is slow, error-prone, and hard to audit.

**What OpenBOM adds:** Catalogs, quantity on hand, vendor lists, order BOMs, purchase orders, and browser-based data sharing with suppliers and partners. Integrations with financial packages and ERPs keeps data up to date.

### Is your product data structured enough to support products that combine mechanical design, electronics, and software?

**08 Why it matters:** If not, your product record stays trapped inside files, exports, and disconnected systems. That limits search, analytics, collaboration, and any serious AI use.

**What OpenBOM adds:** OpenBOM's xBOM and structured product memory approach helps companies treat hardware and software as part of the same product structure, maintain traceable relationships between components, support collaboration across mechanical, electrical, and software teams, manage product data as it evolves, and preserve change history through revisions and baselines. Modern BOM management also needs to connect engineering tools, including MCAD, ECAD, PCB, PDM, and ALM environments.



# What OpenBOM adds to SOLIDWORKS

Need	OpenBOM capability for SOLIDWORKS teams	Why it matters
<b>SOLIDWORKS-native workflow</b>	Embedded Workspace Manager inside SOLIDWORKS and automatic Connected Items linking BOM items to design files.	Keeps users in the CAD context longer while improving traceability.
<b>Current BOM from CAD</b>	Direct BOM extraction from SOLIDWORKS; multi-level BOMs; automatic subassembly BOMs, support for SOLIDWORKS features like sheet metal, configurations, weldments, and other features	Cuts manual export work and keeps product structure closer to the design.
<b>Clean properties and part numbers</b>	Property mapping, custom-property support, part number generation, bi-directional property exchange.	Keeps engineering data reusable across BOMs, catalogs, and downstream teams.
<b>Files in context</b>	Automatic upload of CAD files and derivatives such as PDF, STEP, DWG, and DXF; links stored in the BOM.	Makes it easier to hand the right package to manufacturing, suppliers, or service teams.
<b>Change visibility</b>	History, revisions, change reports, BOM compare, and approvals.	Reduces release risk and helps teams understand exactly what changed.
<b>Impact analysis</b>	Where-used and graph navigation across connected data.	Shows what else is affected before a component or supplier decision ripples outward.
<b>Rollups</b>	Single- and multi-level rollups for cost, quantity, mass, and calculated properties.	Gives engineering and operations usable totals without fragile spreadsheet formulas.
<b>Procurement handoff</b>	Catalogs, vendors, quantity on hand, order BOMs, purchase orders, and supplier sharing.	Turns engineering BOMs into actionable purchasing data without retyping.
<b>Data available for AI agents and assistants</b>	Structured, connected product data on a knowledge-graph foundation.	Creates better context for search, analytics, for the use of modern AI agents.

SOLIDWORKS is where the product is designed. OpenBOM is where the BOM, files, revisions, purchasing context, and downstream coordination become usable across the business.



## From CAD to release – and the objections teams raise



## Recent SOLIDWORKS-specific updates worth highlighting

- Embedded Workspace Manager inside SolidWorks, so users can manage Design Projects without leaving the CAD environment.
- Automatic Connected Items linking BOM items to their design files in Design Projects.
- Flexible handling of the TYPE property, useful for teams that already use TYPE for BUILD/BUY or another process meaning.

## Objections to handle directly

- **“We already have SolidWorks PDM.”** OpenBOM can extend the process beyond file control and connect design to BOM, suppliers, and purchasing. It does not have to be framed as a day-one rip-and-replace.
- **“Cloud is not safe enough.”** OpenBOM says sharing is permission-based, traffic is encrypted, data is encrypted at rest with AES-256, and SOC 2 Type 2 documentation is available via support under NDA.
- **“We do not have time for a big rollout.”** The best first trial is narrow: one representative assembly, one BOM, one supplier/package handoff, one revision compare, one cost rollup.

## Recommended hands-on checklist

- Connect one representative SOLIDWORKS assembly, (optionally) save files and create versions.
- Create an initial multi-level BOM, check data visualization.
- Define the property mapping and confirm part number behavior.
- Generate or link derivative files (PDF, STEP, DWG, DXF, drawings) and verify they appear in context.
- Add a few cost, vendor, and quantity-on-hand fields in the catalog.
- Run at least one rollup that management actually cares about, such as cost or mass.
- Create a revision, then compare what changed.
- Export a ZIP package for a supplier, contract manufacturer, or shop-floor handoff.
- Optionally create an Order BOM or purchase order to test design-to-procurement flow.

Try a 14-day **FREE**  
trial at OpenBOM

Start your free 14-day trial and see whether your SOLIDWORKS BOM and file chaos can turn into a connected product record in one working session.

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