

4DOnline

# BOM Optimizer

Intuitive electronic component selection and advanced BOM management tool



**The Source**  
for Critical Information and Insight™

Avoid component obsolescence and compliance issues, increase component selection efficiency and improve advanced BOM analysis

**Every day you are challenged to build better products, identify, evaluate and select appropriate components, meet mission-critical deadlines, and beat the competition to market. Reliable component selection and BOM (Bill of Material) optimization are critical to tackling these challenges.**

IHS 4DOnline BOM Optimizer brings you the next dimension of intelligent component selection and strategic BOM optimization, combining the power of Parts Universe with advanced BOM management. The 4th dimension is time. With 4DOnline BOM Optimizer, you accelerate time-to-value by improving your component selection and BOM management processes.

With BOM Optimizer, you have access to a world-class electronics database that provides information on millions of electronic components from leading worldwide manufacturers.

- **Board Level Components.** Contains commercial and military integrated circuits, frequency control devices, optoelectronics, RF/microwave, resistors, capacitors, inductors, electromechanical devices and connectors. Includes alternate part information and manufacturer datasheets.
- **Obsolescence and Predictive Information.** Contains part status, current life cycle stage, life time buy information, product change notices and predicted years to end of life.

- **Environmental Information.** Includes lead-free, peak reflow temperature, moisture sensitivity level, JESD-97 codes, RoHS yes/no and detailed RoHS substance concentration and weight data.
- **Manufacturer Documentation.** Includes current and historical datasheets, product change notices, timing diagrams and application notes.
- **Advanced BOM Optimization.** Includes customizable BOM cleansing, matching and grading capabilities. Proactively receive EOL (end of life) and PCN (product change notice) email alert notifications for BOM parts. Create user-defined fields, layouts, reports and risk rules to meet your requirements. Compare BOMs to determine part duplication. Purchase additional manual cleansing services to further increase your match rates.

Leverage information to thoroughly evaluate parts lists – AVLs (Approved Vendor Lists), AMLs (Approved Manufacturer Lists) and BOMs (Bill of Materials) – and proactively monitor lists for PCNs and part status changes.

At the heart of the BOM Optimizer solution is the IHS Electronics Database (ED), delivering the underlying power to conduct design and sourcing decisions that empower enterprises to accelerate the value derived from key solutions based on business initiatives. ED provides desktop access to over 14 million electronic parts from over 500 manufacturers in 350+ categories. Through ISO registered processes and strategic relationships with our customers and manufacturers,

IHS leverages industry subject matter experts to continually build and maintain ED to change with evolving needs in the marketplace.

BOM Optimizer delivers a comprehensive real-time analysis of component and supplier information from your existing AVLs/AMLs or BOMs, resulting in a reduction in redesign and obsolescence costs.

IHS 4DOnline BOM Optimizer is a strategic tool that helps you:

- **Reduce material costs.** Locate parts quickly with one reliable information source. Find direct replacements, upgrades or downgrades and in a single click. Evaluate alternate parts side-by-side with the technical differences highlighted to meet your design requirements and determine if parts in inventory suffice. Understand if a given BOM part is a high risk sole source component. With direct access to analytical predictive lifecycle information and alert part notifications, proactively review BOM reports to avoid potential problems prior to production.
- **Minimize redesign efforts and costs.** Prevent problems before they happen; react quickly when you identify problems. Streamline the life cycle management process by mapping design and component life expectancy. Mitigate the costs associated with introducing a new part if it already exists on your internal AVL/AML. This ensures the right parts are selected the first time and suitable drop-in replacements are found when parts obsolescence issues and supply chain shortages inevitably arise. Reduce post design Engineering Change Orders (ECOs) and unnecessary new part introductions.
- **Optimize supply chain BOMs.** Analyze BOMs real-time to determine supply chain viability and mitigate unnecessary obsolescence, non-compliance and redesign costs. Quickly locate equivalent replacement parts for a discontinued or non-compliant part to meet design and time-to-market requirements.

Ensure preferred parts and suppliers are selected to promote design reuse and leverage economies of scale pricing.

- **Improve Sales and Market Insight.** Give sales and marketing access to the information they need to examine and evaluate the competition in the marketplace. If you distribute or sell components, integrate your internal supply chain data to critical detailed component information to efficiently process quotations and BOMs.
- **Save time and money monitoring BOMs.** Heighten your awareness on changes to crucial components on your active parts lists. Integrate procurement information with manufacturer information. Receive actionable end of life and part change notices on your desktop via email or online alert notifications. Emails, sent at your discretion, immediately notify you of part status changes that directly affect your parts.

The 4DOnline solution suite provides additional professional services to meet your needs today and in the future.

**4DOnline Web Services** provides the ability to interface directly to the Parts Universe Electronics Database via xml web calls based on customer-defined requirements. In addition, IHS provides interface connections to several software partners including Agile and PTC.

**4DOnline Environmental Content Services** provides the ability to source, standardize and maintain content related to RoHS/WEEE component compliance directives including JIG A & B and manufacturer's Certificate of Compliance.



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