



Product Sourcing

i2 capabilities for product sourcing are designed to bridge product development with procurement and the supply chain. i2 Product Sourcing™ can help project teams optimize products for supply and cost by selecting the best parts and suppliers in alignment with material reuse and global sourcing strategies. The solution can enable rapid product change, bill of material (BOM) collaboration, and execution of shared workflows with the continuous involvement of suppliers and partners. Using its advanced analysis capabilities, products can be sourced and optimized for total cost and supply chain constraints.

In many industries, more than 70 percent of a product's total cost is determined during the design and sourcing processes, long before the product is passed on to manufacturing (Aberdeen, "Component Supply Management: Saving Time and Money, Party by Part," March 2002). In order to drive costs down, commodity sourcing teams can convert their global commodity strategies to localized part and supplier preferences and then communicate those to product design. Guiding product development and component engineers in the selection of the optimal parts, materials, and suppliers can drive impact to the bottom line and help to minimize supply risk.

Once preliminary design BOMs are established, a comprehensive solution for BOM cost analysis and an interface to BOM request for quote (RFQ) is needed to model total product cost with the ability to track drifting values over time, while obtaining commitments in the form of supplier quotes.

Manage Information on Parts and Suppliers

i2 Product Sourcing helps improve productivity by providing product developers with a single solution to access part and supplier information and incorporate items into the product BOM. The foundation is a part and supplier management solution that can aggregate information from multiple disparate systems and normalize the data to enable powerful parametric searching on the corporate item master, as well as reference catalogs such as IHS Electronics Database and external part databases.

The solution can be deployed with i2's content services that can identify and eliminate duplicates and apply cross-referencing rules to bring users to the best source for a given part. A project workspace can facilitate effective product team collaboration on change proposals by utilizing a BOM redlining tool and configurable workflow templates capable of referencing any item in the SRM database. By reducing time spent on non-value-added activities with i2 Product Sourcing, product teams can meet program budgets while focusing more on issues related to performance and timing.

Key Features

- Secure project workspace for BOM/AML changes for use within company or with extended supply chain
- BOM and product cost analysis
- Obsolescence management

Extend Product Development to Sourcing Processes

Achieving benefits from design-related business initiatives such as design for supply, or design for total cost, requires cross-functional teamwork between the traditional design and procurement/sourcing functions. i2 Product Sourcing extends the powerful analysis and decision-support functionality with a collaborative workspace where multi-enterprise product teams can simultaneously evaluate various design scenarios before committing to one that delivers the best cost position. i2 Product Sourcing can also integrate with i2 Negotiate,[™] linking the initial BOM sourcing process to the creation of RFQs, enabling design and purchasing to collaborate at all stages of the design cycle.

Parts Reuse and Sourcing Processes

i2 Product Sourcing works within the overall design process to promote parts reuse as well as ensure collaboration with purchasing in the sourcing process during the product development phases.

Rationalize Part and Supplier Masters

Product development organizations constantly struggle to meet cost, time, and performance goals for their projects. Yet too often valuable time is spent on non-value-added activities, such as searching for part and supplier information in disparate databases, catalogs, journals, or web sites. Procurement and new product buyers are faced with the challenge of dealing with vast amounts of part and supplier content in different file formats, with various description schemes that make it difficult to manage the quote process for fast, accurate pricing.

Companies growing through acquisition often rush to create data warehouses that aggregate disparate part and supplier information, but often the result is thousands of duplicate part numbers and supplier names that lack any intelligent cross-referencing to filter searches.

Maximize Part Reuse

In order to leverage technology investments and increase purchasing volumes for better negotiated direct material prices, companies need to utilize existing parts in new products and across multiple platforms. Manufacturers that have experienced rapid growth through acquisition often suffer from the inefficiencies of disparate “islands of information.” Engineers often work on CAD systems that vary by workgroup or different product data management (PDM) systems.

Meanwhile, procurement and manufacturing professionals utilize ERP/MRP systems that may have uniquely configured instances for each geographic location. Without a corporate item master that aggregates and normalizes component and supplier information, manufacturers can have a difficult time leveraging existing components and subassemblies across their enterprise.

Manage Part Preference and Obsolescence

While PDM or product lifecycle management can help organize and control design information, these systems often lack critical sourcing and supply chain dimensions to tie engineers and detailed part data into the business processes for strategic sourcing, price negotiation, and procurement. i2 Product Sourcing can fill this gap through its ability to optimize the product BOM with intelligent selection of components and suppliers that minimize supply chain risks.

Proactive Part Analysis

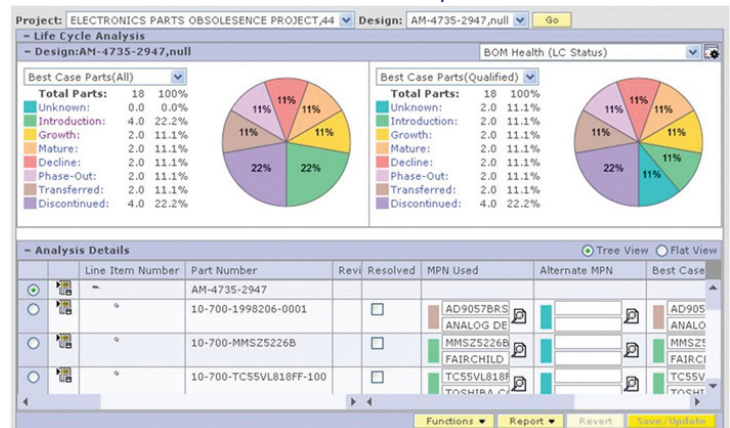
i2 Product Sourcing can enable powerful proactive analysis of BOMs from a total cost and supply chain risk perspective, linking procurement with engineering functions, as well as with external suppliers and contract manufacturers. The solution can consider factors such as component obsolescence, supplier rating, availability of alternates, and single sourcing, so that sound sourcing strategies can be established early on.

A powerful dynamic expression engine can enable the modeling of several supply chain constraints, as well as the monitoring of each component's preference and obsolescence status. Comprehensive part lifecycle analysis and the ability to assess "what-if" scenarios can enable engineers to generate the obsolescence profile of parts and products to evaluate potential part obsolescence risks and then quickly identify alternates and a purchasing strategy to mitigate these problems.

Electronic component data may be enriched with lifecycle reference data in order to avoid supply shortages or overstocking. With this data, the solution can enable both proactive and reactive resolutions to obsolescence issues.

Accelerate Manufacturing Outsourcing and Quoting

Being first to market can increase overall program revenue and profit margin, so manufacturers strive to compress time-to-market, as well as time-to-volume. With an ever-increasing portion of products manufactured through outsourcing arrangements, the time-to-volume challenge now has extended from just optimizing a company's internal product development and launch process to requiring a fully coordinated process throughout the extended supply chain.



Obsolescence desktop provides side-by-side analytics with color-coded AVL detail

Supply chain partners need the ability to share part and material information, as well as agree on from which suppliers and contracts to source. This can then be used for each BOM, across multiple sites and periods. i2 Product Sourcing enables material and product sourcing throughout the supply chain. The solution includes world-class capabilities for loading and matching external BOM and AML information to minimize the often lengthy and manual process to identify relevant parts.

Furthermore, the solution can provide an end-to-end workflow for analyzing total sourcing costs for one or several BOMs, comparing with multiple cost sources such as recent POs, contracts, standard costs, and RFQs. i2 Product Sourcing can integrate with i2 Negotiate to link the initial BOM sourcing process to creating RFQs, ensuring cross-functional collaboration among product design and sourcing departments. The solution can include numerous wizards and configurable alerts to make it easy to use even for novice users.

Capabilities and Features

- Comprehensive part and supplier master, including intelligent search methods and dynamic filtering and sorting of search results
- Ease of use and flexibility supported by multiple pre-configured views, a soft modeling mechanism, and configurable workflow processes and alerts system
- Design for supply analysis that includes grading for parts and BOMs, configurable enterprise reporting, and an automated alternate component finder
- Flexible integration framework for data exchange with external systems (PDM, ERP, CAD) and import/export capabilities to Microsoft Excel® (.CSV) and XML product data files
- Project and BOM collaboration, as well as cost and obsolescence analysis

For more information on i2 Product Sourcing and other i2 solutions, visit www.i2.com.



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