IBM

**IBM Product Lifecycle Management Express
Advantage for Electronics Manufacturers**

Expedite product development

Speed product development and release. Enable innovative design. Improve collaboration and productivity. Streamline the product lifecycle. Now midsize electrical and electronics manufacturers can take advantage of the most effective product design and data management solutions. Use IBM Product Lifecycle Management Express for Electronics Manufacturers to compete and win.

Enhance development processes

The IBM Product Lifecycle Management Express Portfolio for Electronics Manufacturers combines advanced design and engineering functionality with data management and collaboration tools for the development of electronic products and components. This solution provides a centralized and comprehensive view of product data throughout the development cycle. You can affordably create the 3-D geometry of a product, as well as simulate, analyze and validate the product's behavior throughout the lifecycle. And you can easily reuse previous designs to give you a head start on new products to further speed time to market or build product platforms.

An enterprise-wide view

IBM Product Lifecycle Management Express can help you capture, manage and share product designs and requirements across your organization and beyond. Now you can near seamlessly integrate design-to-manufacturing processes to create more innovative products, proactively respond to customer demands and shorten time to market.

- Create differentiated products more easily with advanced styling, analysis and virtual prototyping functionality.
- Improve and automate specification-driven design, virtual analysis and engineering collaboration.
- Improve manufacturability of your designs and automate compliance to company standards.
- Strengthen your brand with higher quality products that you can easily customize to meet new design requirements.

Expedite product development

The IBM Product Lifecycle Management Express Portfolio was created to meet midsize electronic company requirements. Our solutions affordably integrate advanced styling applications, automated

specification-driven design, analysis and collaboration. The result is a long-term Product Lifecycle Management strategy that stimulates innovation, accelerates design-to-manufacturing transition, increases re-use and most importantly, shortens time-to-market.

A proven track record

Once only affordable to larger enterprises, the IBM Product Lifecycle Management Express Portfolio puts forth industry-leading CAD/CAM/CAE systems, which are priced and packaged especially for midsize electronics manufacturers. And with more than 10,000 successful Product Lifecycle Management implementations, you can trust IBM experience, capabilities and commitment to help you implement your Product Lifecycle Management strategy.

- We employ over 1,000 professionals dedicated to Product Lifecycle Management .
- The IBM Electronics Center of Competency works to deploy state-of-the-industry best practices and capabilities for consumer electronics, microelectronics, medical devices and industrial equipment.
- Unlike comparable software, CATIA from Dassault Systèmes can not only be used to create 3-D geometry of a product, but also to simulate, test and analyze the product's behavior throughout the lifecycle.

Lead with innovation and efficiency

Ideal for the electronics industry, as well as manufacturers that combine electronic components into their mechanical assemblies, the IBM Product Lifecycle Management Express Portfolio provides solutions to fit these key electronics industry segments.

- Computer and office equipment OEMs
- Electrical component suppliers
- Consumer electronics OEMs
- Telecommunication equipment OEMs
- Industrial OEMs, including medical devices

Product Lifecycle Management Express for Electronics Manufacturers is especially well suited to companies involved in the following areas, delivering specific benefits to each operation.

- Electronic systems that require racks and enclosures
  - o Integrated product data management for workflow, collaboration, design re-use and compliance checking
  - o Digital mock-up with multiple CAD formats for movement or clash review, and analysis
- Component design
  - o Template-based designs and morphing for derivative products
  - o Rules-driven product compliance checking and workflow-driven component release processes
  - o Interactive design rule assistant
- Styled packaging and plastic products
  - o Advanced styling products with full coverage of processes
  - o Integrated reverse engineering and rapid prototyping capabilities
  - o Engineering data and document management
  - o Managed and automated engineering design scenario for both mechanical and electrical items combined with software
  - o Full range of process templates, along with support for reference designators, approved manufacturer list and more
- Collaborative design
  - o Integration between engineering disciplines
    - ▪ Industrial design to mechanical design
    - ▪ Mechanical design to analysis, electrical design and manufacturing
  - o Cross-departmental and organizational access to design history and data exchange
  - o Version control and product configuration management

Client thinks, works differently with PLM

Among offerings in other industries, Huber + Suhner AG (H+S) provides innovative solutions for mobile communications and Internet/broadband systems with radio frequency, wireless and fiber-optic applications. Looking to reduce product development times and get products to market faster, the company wanted to implement new CAD software. To accomplish this, H+S chose an IBM Product Lifecycle Management solution, including CATIA V5 development and design software, and EnoviaSmarTeam for workflow processes. H+S also

decided to integrate its CATIA applications with their new BAAN ERP system, to provide a centralized and comprehensive view of all product data throughout the entire development cycle.

Through the integration of CATIA, EnoviaSmarTeam and ERP, the customer is experiencing the following benefits.

- More specific and higher quality drawings
- Accurate data transfer to BAAN
- Drawings stored in a central repository
- Closer collaboration with the business partner
- Ease of use
- Higher date reliability
- Less redundancy
- Increase in overall quality standards

Boost innovation, while spending less

Priced to fit midsize electrical and electronics manufacturers, the IBM Product Lifecycle Management Express Portfolio can help you to:

- Minimize wasted time and resources from a greater re-use of existing designs, parts and components.
- Replace time-consuming iterations between engineering disciplines with real-time collaboration.
- Lower the cost of manufacturing with improved collaboration between design, suppliers and manufacturing.
- Reduce purchasing costs by implementing rules and standardization.
- Cut manufacturing and maintenance costs by reducing or eliminating non-standard components and non-compliant manufacturing steps.