



ENGINEERING | MANUFACTURING | PARTS | LOGISTICS

# Increasing the Lifespan of High-Tech Electronics through Reverse Engineering



In the high-tech industry, the guarantee that electronic and electromechanical components will perform as intended throughout an equitable lifespan is paramount but not likely. Manufacturers of electronic and electromechanical products are required to plan for future stock levels for EOL product support. Once the ODM purchasing availability period has concluded many corporations are left with the dilemma of performing a very costly last time buy or locate a cost effective solution such as DEX's EOL Product Manufacturing Program. Failure or underperformance in procuring a solution could be very detrimental to a business's profitability, causing losses in revenue, customer satisfaction, and brand accountability. DEX provides options in extending the lifespan of electronic products and components such as product reverse engineering which can optionally lead to EOL Product Manufacturing. Reverse engineering a product allows for a greater potential of increasing a components lifespan and could be the difference between a costly resource drain and an innovative solution that can extend a products lifespan many more years than the OEM intended.

In an industry that is looking ever forward toward the next big innovation, it's easy to forget the cost savings potential in applying top-tier engineering solutions to aging technologies.



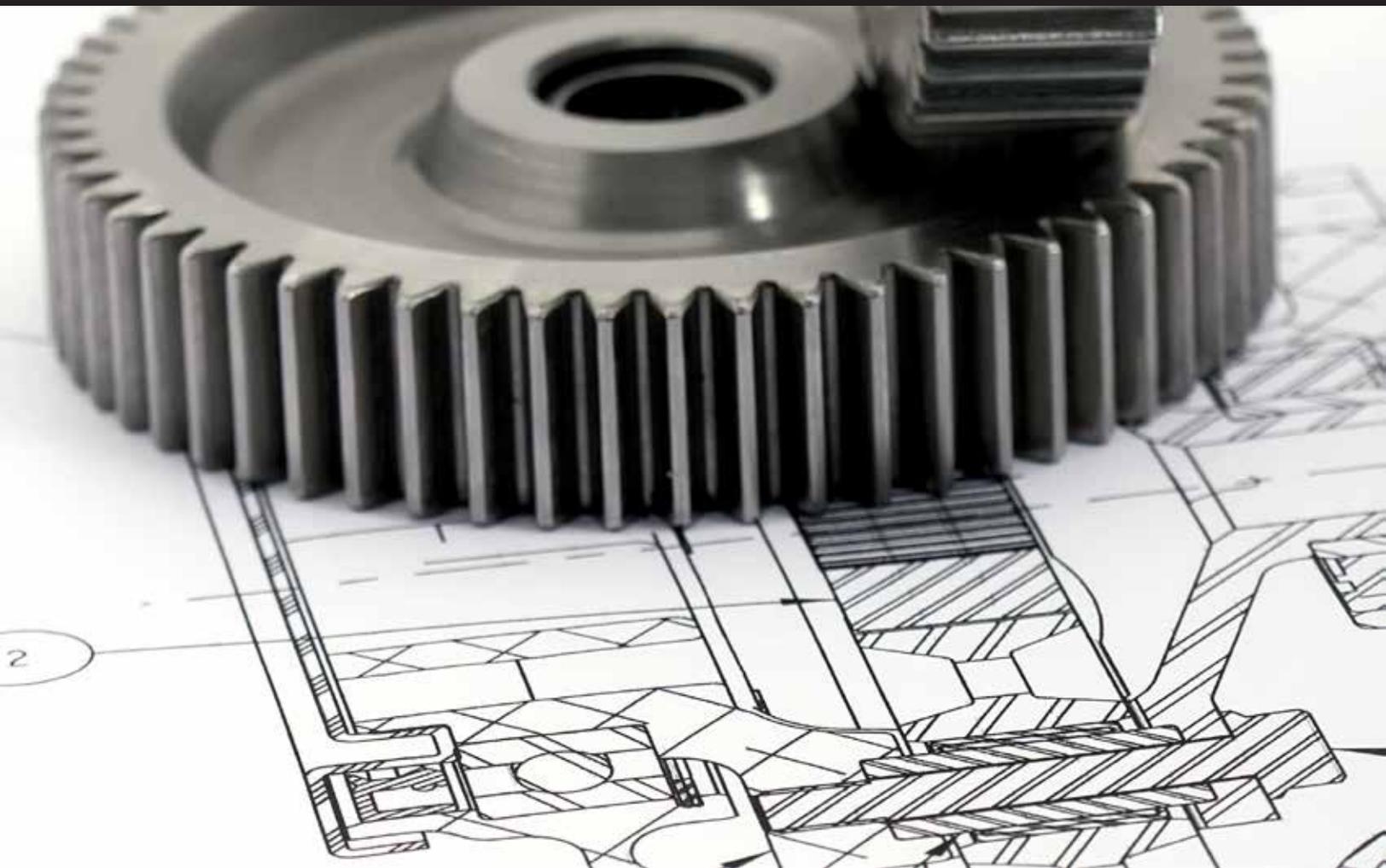
# Moving in Reverse Makes it Easier to Move Forward

Essentially, reverse engineering is a deconstruction and analysis dual-process that provides a comprehensive understanding of all aspects of a component or system. However, in addition to understanding how these technologies function, reverse engineering is extremely valuable for understanding why they do not function and why they fail. Failure analysis is one of reverse engineering's most valuable capabilities; understanding why an electronic component failed or under-performed is the first act in effecting a solution for creating a higher functioning, longer-lasting part. Additionally, you don't need to wait for failure to benefit from reverse engineering. Simply revisiting an older component in order to analyze its potential can yield valuable opportunities for improvement. In any scenario, better-functioning electronic systems and components save businesses significant resources through longevity and positively affect revenue.



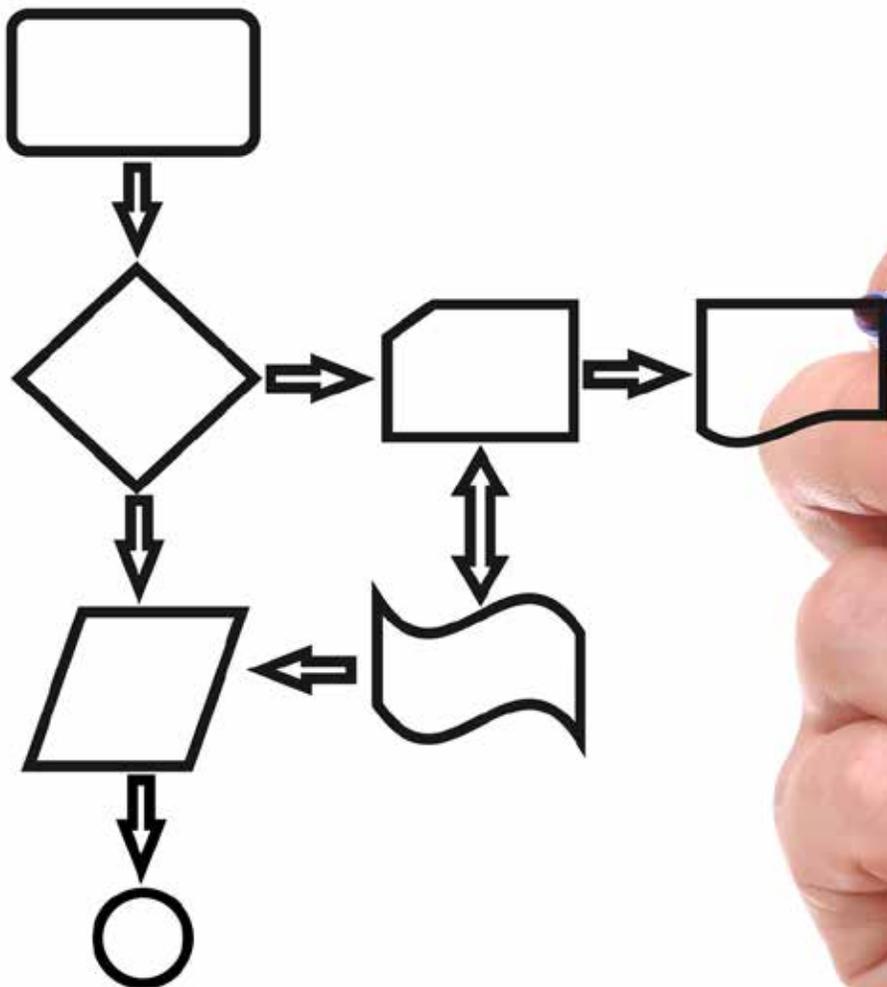
# Reverse Engineering Solutions as Over-Looked Alternatives

In the high-tech industry, it's inevitable that certain parts and components will become obsolete and expensive to replace. These transitions occur because manufacturers are constantly moving toward newer better technology, but this often leaves businesses with only costly options for meeting their fulfillment needs. Reverse engineering offers alternative solutions to costly procurement due to short lifespans, by identifying cost-effective methods of manufacturing a value-added version of a component or a comparable substitute with greater remunerative potential.



# Document the Path to Innovation

A component or system's effective lifespan can be extended by comprehensively documenting the processes for reproduction and improvement. Extensive documentation will provide an enterprise with a roadmap of how to manufacture or remanufacture a component in order to meet their business needs, and comprehensive documentation begins with comprehensive understanding, which is acquired most effectively through reverse engineering. When a component nears the end of its lifespan, a decision must be made about how an enterprise will continue to fulfill the demand for that component's functionality. The comprehensive documentation gained through reverse engineering a component can provide expedient and low-investment opportunities to add longevity and value to an aging piece of technology, which allows a business to meet that demand at a much lower cost than a full replacement.



# About DEX

Whether you are looking for a specific repair solution, service parts management options, product reverse engineering, or product manufacturing, our comprehensive suite of services is fully optimized to the specific requirements of our customers, operating within the renewable, information technology, consumer electronics, industrial, and medical markets.

DEX is dedicated to delivering end-to-end service lifecycle solutions at the lowest sustainable cost, enabling our customers to keep their commitments and stand out in their various industry segments. Our expertise is in engineering hi-tech electronic and electromechanical components, manufacturing, repair, and supply chain management services. We offer solutions that span the entire product lifecycle—from concept, through production and after-market support.

Contact us (888) 678-9201 or visit us on the web at [www.dex.com](http://www.dex.com) to learn more about how DEX can help you achieve your business goals.



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