



# **The Research and Development Tax Credit**

**or**

**How your company could be losing hundreds of  
thousands of dollars (by not taking advantage of  
the R&D Tax Credit provisions)**

---

A White Paper published by the IPC  
Government Relations Committee in  
association with McGuire Sponsel, LLC  
and Blackman Kallick

## The High Cost of Lead Free Implementation

Remember the European Union's Restriction of Hazardous Substances (RoHS) and lead free? How could you forget? The demand to implement lead-free electronics assembly impacted the entire electronics supply chain — from the development of new lead-free solders, high temperature laminates and surface finishes to more complex material management processes to handle lead-free and leaded parts.

It safe to say that RoHS and lead free implementation cost the electronics assembly supply chain hundreds of millions if not billions of dollars.

Tom Ellison and James Szabo of Finisar Corporation in their paper titled "RoHS Implementation Challenges for Small and Medium Sized Companies"<sup>1</sup> reported that it cost their company \$2.1 million in conversion of their products to meet RoHS requirements. These costs included qualification and tin whisker testing; screening and chemical test audits; data management software; pilot assembly runs; mechanical part conversion and purchased part conversion.

This white paper though is not about the significant costs of RoHS and lead free implementation. Rather, it is about how your conversion to RoHS and lead-free assembly is one of many examples of how you and your company might take advantage of the Federal Government's Research and Development (R&D) — formally called Research and Experimentation — Tax Credit to reduce your taxes.

Before you put this paper aside thinking, "We don't do research, so this doesn't apply to me," take a minute to read a little further — you may be surprised to find that you are likely conducting activities that the government considers to be eligible for the R&D Tax Credit.

## IRS Defines Research and Development to include Process Improvements

Each year, manufacturers have claimed billions of dollars in federal and state tax credits by taking advantage of incentives to invest in R&D.

But unlike what you might think of as an R&D expense, a taxpayer is actually allowed to claim credit for qualified research expenditures (QREs) — costs associated with investments in innovation and improvements that go

well beyond product R&D. For example, investments made in process improvements may qualify, and many manufacturers invest far more in improving their processes than in developing products.

Another example is wages paid to line employees involved in research activities. Suppose an employee spent a month investigating ways to achieve an improvement (like evaluation of lead-free solders or surface finishes). The employee's wages may be considered a QRE.

Other areas in which QREs often hide in the company include quality assurance, engineering, product design, and in-house software development. Many, if not all, of the activities listed by Finisar's Ellison and Szabo in meeting their RoHS requirements might be claimed as a credit under a QRE.

## Significant Savings

Will pursuing the credit pay off for your company? If your company invests in advancing your products or innovating your processes, your pursuit of the credit could yield significant current and future year tax savings.

For many companies, their investment in R&D activities yield returns of up to six and one half percent (6.5%) in the form of a federal tax credit. **As an example, if your company spent \$750,000 in wages, supplies and contract research developing a new product or evolving your existing manufacturing processes, your federal tax credit could reach \$49,000.** Because many states have provided similar tax incentives, your benefits could be even greater.

In addition to establishing this tax strategy, the law generally allows you to look back and file amended federal and state income tax returns for the prior three years, so you may be entitled to substantial refunds for 2004–2007.

Whether you have been taking the credit or have previously decided not to, you should be aware of some important changes that took place in 2007.

On January 1, 2007, the IRS added a fourth option for calculating tax QREs. The Alternative Simplified Credit allows companies to use the previous three years' QREs as a baseline for their current year credit.

---

<sup>1</sup> Tom Ellison and James Szabo (March 8, 2006) RoHS Implementation Challenges for Small and Medium Sized Companies Santa Clara Valley Chapter, Components, Packaging & Mfg Technology Society, IEEE retrieved March 15, 2008, from [www.ewh.ieee.org/soc/cpmt/presentations/cpmt0603b.pdf](http://www.ewh.ieee.org/soc/cpmt/presentations/cpmt0603b.pdf)

Previously, a company's only option to qualify for the credit was determined based on a percentage of annual revenues. In many cases, this diluted the annual benefit due to substantial revenue growth. With the new calculation option, the revenue factor is removed, allowing many fast-growing companies to claim larger credits.

## Need for Due Diligence

Because the IRS typically places the emphasis on the qualification process to determine if a company's activities meet the definition of "Section 41 Research & Experimentation," a company's engineering staff is the epicenter of the company's ability to qualify for the credit. In most cases, qualification for the credit is much more scrutinized by the IRS or state regulatory agency than the actual quantification of the credit.

Having QREs is only part of the picture. The IRS subjects research tax credits to much more scrutiny, so you need detailed documentation demonstrating that each QRE meets the criteria. An extensive case must be built prior to a company claiming the credit. The case should include a detailed explanation of the arguments for qualification and should provide all the necessary documentation in an easy-to-follow format.

In determining whether your company's activities qualify for the Research & Experimentation Tax Credit, ask yourself — and your professional tax advisor — if your activities pass the four part test:

- The goal has to be to discover some technological information that does not already exist within your company and/or industry.
- There must be a level of uncertainty related to the product or process development.
- Any costs must be directly attributable to what the IRS calls a "process of experimentation," with no assurance of success.
- The research must have a general business purpose, which could include the pursuit of federal, state, or industry certification.

If you feel that your company meets these criteria, ask your CPA about their experience with the credit. If they don't have experience, contact a firm that specializes in the Research and Experimentation Tax Credit.

## Legislation to Extend the Credit

The R&D credit enhances a company's ability to bring more products and services to market. Benefits to society range from new medical treatments that save lives to new and better consumer products that raise America's standard of living.

While significant Congressional support exists for this valuable tax credit, it has often lapsed temporarily (only to later be extended for short periods of time) due to its significant price tag and the way Congress calculates the cost of tax incentives.

In 1981, the Section 41 Research & Experimentation Tax Credit was signed into law, mainly as a temporary measure to provide companies incentive to keep high-tech jobs in the United States and help fuel corporate growth. Since then, the tax credit has been extended 12 times. In December 2006, after a nearly year-long lapse, Congress passed a seamless extension of current law and prospectively strengthened the credit in the Tax Relief and Health Care Act of 2006. The credit lapsed again on December 31, 2007.

If Congress does not extend the R&D Tax Credit retroactively — as it has previously — IPC members will no longer be able to take advantage of this significant tax savings. A retroactive extension (to January 1, 2008) would allow companies to simplify their financial accounting, help maintain and create high value-add research jobs in America, and continue to facilitate the innovations necessary to compete in our global economy.

While it would be preferable for industry to be able to plan for and rely upon a permanent R&D Tax Credit, achieving even a temporary extension from Congress in an election year will require a concerted effort by affected industries.

The R&D Tax Credit is not the only major piece of tax legislation that Congress has let expire without action. In fact, over 40 major pieces of the tax code await extension in 2008. As the House and the Senate set their priorities, it is important to let members of Congress know that R&D should remain a priority.

Two pieces of legislation would extend the R&D credit permanently: H.R. 2138 in the House and S.2209 in the Senate. While both have attracted significant support, neither has yet achieved sufficient momentum needed to bring the issue to a vote. IPC's members can help support this legislation by visiting [www.ipc.org/R&Dcredit](http://www.ipc.org/R&Dcredit). If you have further questions, please contact **Fern Abrams** at [fabrams@ipc.org](mailto:fabrams@ipc.org).

***This article is provided with the understanding that the author is not engaged in rendering legal, accounting or other professional services through its distribution. If legal advice or other expert assistance is required, the services of a competent professional should be sought.***