



**Magnetic
Component
Alternate Source
Strategies**

W H I T E P A P E R

Magnetic Component Alternate Source Strategies

Introduction

Due to the complexities of circuit design and the highly customizable nature of magnetic components, such as transformers and inductors, they are often overlooked by OEMs when it comes to alternate or second source strategies. Magnetic components can be difficult to specify in the first place, and once a supplier is in place there is often a concern that bringing in a second source could be a time-consuming and expensive process.

The consequences, however, of relying on a single source supplier for a critical magnetic component (a custom or semi-custom device not available off-the-shelf from multiple sources) can leave OEMs in a vulnerable position. There are three possible sources of problems:

- > Competitive Prices – when you sole-source the supplier knows there are barriers to substitution that diminish your negotiating strength.
- > Responsive Service – when you sole-source the supplier knows that you will wait because you have nowhere else to go if there is a problem.
- > Delivery Lead Times – when you sole-source you really can't be sure that you are receiving the shortest lead-time available.

Sourcing Strategies

Best practice procurement strategies attempt to avoid sole-sourcing except in the case of the most critical components. There are valid reasons to sole-source advanced ASICs, for example, because they are critical to the unique function of your product design, which differentiates your device from the competition. Sometimes the OEM and supplier jointly develop specialty IC devices to gain performance advantages, which is a true partnership and deserving of a sole-source status.

With respect to many passive components, such as resistors and capacitors, however, these are generally commodity products and there are strong cost and service considerations for consolidating vendors. Transformers and inductors often fall somewhere in between custom device and commodity. While they don't provide unique performance features in an OEM product, their specialized design in support of critical circuits means that in an emergency that you can't necessarily call up your local distributor and expect overnight shipment.

Supplier Strategies

So when it comes to magnetic components, there are dozens and dozens of suppliers. If you need a commodity inductor, for example, you won't have any trouble finding any number of suppliers or distributors. On the other hand if you need a special or custom transformer, that narrows the field of suppliers a bit more to those companies with stronger engineering, testing and manufacturing capabilities.

There are suppliers of special and custom transformers and inductors ranging again from small to large multi-national, multi-business unit companies. Most OEMs are purchasing more than magnetic components – and for this reason the large vertically-integrated company that supplies memories, connectors, capacitors, resistors and more may provide highly attractive capabilities and pricing. When it comes to special or custom transformers and inductors, you may want to ask yourself a few questions before you commit all your resources:

- > How much pricing leverage will I really have if my magnetics supplier is part of a multi-business holding company that's as big or bigger than my company?
- > Do they really want my magnetic components business and is it a core technology competency, or is it just part of a package deal to get my other business?
- > If there is a problem with my magnetic components, will it get the responsive attention and care that I think it deserves from specialists with deep experience in transformers and inductors?

Magnetics Sourcing

If there are compelling cost reasons to use a large, multi-business supplier, then most OEMs will definitely do so and justifiably so. The question is, "How can you reduce the risk of purchasing all your special or custom magnetic components from a company in which magnetics is not its core competency or primary business focus?" The answer is to develop an alternative, second source relationship with a true magnetics company.

There are advantages to working with a highly capable second-tier, specialized supplier:

- > Design and performance are superior – because magnetic components is the company's primary technology and business
- > Quality is excellent – for the same reason
- > Service is highly responsive – for the same reason
- > Pricing is highly competitive – for the same reason
- > Delivery is highly predictable – for the same reason
- > Problem resolution is fast – for the same reason

When you add it all up: performance, quality, delivery, service and attention to your needs and problems, small to mid size magnetics companies can help OEMs achieve their cost goals without the risk of sole-sourcing critical components that can stop an assembly line or lead to product performance problems.

Datatronics -- Your Alternate Source Pro

Datatronics is a 30-year-plus global supplier of magnetic components with a reputation for technology innovation, world class manufacturing, superior quality, highly responsive service and value. In the U.S., the company's facilities in Romoland, California, include complete design engineering, testing, manufacturing, sales and service. The company also maintains design engineering and manufacturing facilities in both Hong Kong, as well as mainland China.

Our broad magnetics product line finds application today in a wide range of industries, including aerospace, aviation, automotive, computers and peripherals, industrial controls, instrumentation, life-saving medical devices, telecommunication and more. Magnetic devices available include both standard and custom gate drives, current sense, RF switching, flybacks, pulse, LAN, isolation, networking, delay lines, chokes and more.

Datatronics is certified for QS9000 applications within the automotive industry. It is also certified to ISO 9001/9002. Its products meet a wide range of other industry standards, including UL, BABT, CSA, VDE, MIL-PRF-27, MIL-PRF-21038, MIL-STD-981 and NASA Space Station Approved.

No matter whether you need a primary magnetic components supplier or an alternative source, Datatronics is your magnetics pro source. You can count on us for performance, quality, service and value.