



Prepare for a moving target

With lead-times increasing, counterfeiting is set to rise and could affect parts that were previously untargeted, advises Electronic Components Industry Association chief operating officer, Robin B. Gray Jr.

Electronic component counterfeiting continues to evolve, even as the industry implements anti-counterfeiting measures against it. Customers, government and industry have made strides in combating counterfeit electronic components, but the counterfeiters keep changing their methods. Furthermore, counterfeiting is likely to increase significantly as lead-times grow for many parts, providing new opportunities for a range of components that may not have been counterfeited before. Here, we examine recent industry responses, the latest trends, and the ongoing risks of buying from unauthorized sources.

Adhere to standards

Several years ago, distributors

worked with aerospace and government to develop an anti-counterfeiting standard for authorized distribution. While this standard, AS6496, was adopted four years ago, it is only in recent months that a compliance audit was adopted. Successful completion of the audit certifies that a distributor is operating in compliance with AS6496. More information about the audit criteria is available at www.eAuditNet.com.

For those independents or brokers not performing authorized distribution, the standard is AS6081. Unauthorized sellers seeking to comply with AS6081 must, among other things, test components to reduce the risk of introducing counterfeit

electronics into the supply chain.

The Federal government, specifically the Department of Defense and NASA, have also issued several regulations seeking to reduce the risk of counterfeit electronic components entering the supply chain.

The key regulation, DFARS Case 2014-D005, requires the DoD to buy parts that are in production or currently available in stock from the original manufacturer, their authorized suppliers, or from suppliers that obtain such parts exclusively from the original manufacturer or their authorized suppliers. In this context, authorized supplier

▶▶ *continued on page 14*



When buying from unauthorized sellers, purchasers should be wary of claims about inspections, lab testing and traceability



► is defined as a supplier, distributor, or an aftermarket manufacturer with a contractual arrangement with the original manufacturer. The regulation also sets forth when the DoD can buy from unauthorized sources and what criteria the seller must meet.

Counterfeiting evolves

Despite industry and government efforts to develop standards for the detection and avoidance of counterfeit components, counterfeiters have introduced new techniques and increasingly sophisticated manufacturing. The latest counterfeiting trends include the introduction of 'blanks,' re-manufacturing, and aftermarket manufacturing. One way that counterfeiters avoid customs scrutiny and seizures, is by shipping parts that are devoid of trademarks or logos. Once in this country, the counterfeiter adds the name brand and trademark to the part and sells the counterfeit as genuine.

Re-manufacturing involves replacing the brand or trademark from a genuine part and replacing it with the re-manufacturer's name. The counterfeiter then sells the part as new or as a substitute for the original component.

Finally, aftermarket

manufacturing attempts to make a substitute part that claims to meet the specifications of the original. In most cases, aftermarket manufacturers don't have access to the original manufacturer's specifications and are, therefore, unable to exactly match the specifications. Be aware, however, that many semiconductor manufacturers do actually have authorized aftermarket manufacturers that produce authorized components that fully meet the correct specifications.

Testing limitations

When buying from unauthorized sellers, purchasers should be wary of claims about inspections, lab testing and traceability. None of these methods for detecting counterfeit components is fool-proof and each contain risks.

Visual inspection only detects the most blatant counterfeiting. Lab testing may reduce the risk, but only if carried out by certified testing facilities. Even then, these labs are unlikely to have the original manufacturer's specifications to use as a basis for comparison. One emerging trend is for counterfeiters and unauthorized sellers to create 'testing labs.' Traceability techniques and processes provide accurate traceability,

but they cannot account for quality and performance. Specifically, such procedures are unable to show how the product was stored, handled, or packaged.

Lastly, bear in mind that although you may find genuine parts from unauthorized sellers, there are still risks. These risks include product reliability, depending on whether the part was properly handled prior to sale and whether you can make repeat buys. Consider whether this is a one-and-done source or a reliable, on-going source for a specific component. Finally, think about support; manufacturers rarely provide support and warranty coverage for parts bought from unauthorized sources.

As these factors stack up, it's clear that buying electronic components from authorized sources remains the best way to reduce the risk of obtaining counterfeit parts.

www.eciaauthorized.com



Chief operating officer and General Counsel, Electronic Components Industry Association, Robin B. Gray Jr.



Traceability techniques and processes provide accurate traceability, but they cannot account for quality and performance

ELECTRONICS sourcing | NEXT ISSUE
September 2018

SEMICONDUCTORS | SUPPLY CHAIN | CONFERENCE PREVIEW

**Editorial content is subject to changes and can be changed or shifted without prior announcement*