

A Real and Present Danger in the Electronics Supply Chain

From the Editors of Supply & Demand Chain Executive

This magazine has written in the past about the real and present danger of counterfeit and inferior components entering the supply chain, and we have sounded the clarion call regarding the relationship between issues like supply/demand volatility, obsolescence and counterfeits. We have noted industry estimates that, in the electronics supply chain, up to 10 percent of technology products worldwide are counterfeit, equating to roughly \$100 billion in global product sales. As a result of the recent economic downturn, the volatility in demand and supply engendered has exacerbated this issue. A recent survey by the Bureau of Industry & Security of the U.S. Department of Commerce points to a growing incidence of counterfeits over the past four years.

Mark Snider has seen the counterfeits problem grow persistently over the course of his 20 years in the electronics industry. Snider comes from the world of independent distributors of electronic parts. He also is the founder of ERAI, a privately held global information services organization that monitors, investigates and reports issues that are affecting the global supply chain of electronics – including counterfeits. ERAI offers in-depth information on counterfeit, substandard and high-risk parts, and its subscribers include original component manufacturers (OCMs), original equipment manufacturers (OEMs), distributors (franchised and independent), contract manufacturers

(CMs), government agencies and associations serving the industry.

Snider says that the problem of counterfeits is inherently linked to the ups and downs in the market for electronic components. “There are always peaks and valleys in supply,” he notes. That volatility creates challenges for OEMs and contract manufacturers that rely on consistent supplies of parts – when parts are end-of-lifed or are in short supply as a result of high demand, manufacturers frequently turn to independent distributors to obtain the supply they need. “There has to be a source of supply somewhere,” Snider says plainly. Unfortunately, Snider continues, buyers under pressure to get parts onto the plant floor on time might not always adhere to commonsense approaches to obtaining components when those parts are in short supply or when time is of the essence. They might simply go to Google, put in a part number and go with the supplier that says he’s got the parts, not thinking about whether the parts are legitimate or not.

Standards development and research organization SAE has moved to help companies deal with the challenge of counterfeits through its G-19 Counterfeit Electronic Parts Committee, which includes representatives of each link in the electronics supply chain. The committee developed the SAE AS5553 standard (“Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition”), which

aims to arm enterprises with guidelines to help reduce the risks of counterfeits. Additional standards are in the works covering independent distributors and facilities that test parts to determine whether they are counterfeits.

ERAI participates in the G-19 Committee, but Snider notes that enterprises must take a comprehensive approach to counterfeits that includes standards as one component. Senior management at companies affected by counterfeits, he says, must adopt a proactive approach to counterfeits. Leaders in addressing these risks build an internal team to establish and enforce policies around preferred parts and vendor lists, and they provide funding to arm engineers and procurement staff with the tools they need to “scrub” bills of materials through databases offered by organizations like ERAI or companies like IHS, exposing parts at risk for counterfeits or obsolescence – optimally, before a new product BOM is approved and sent to Procurement. Snider also recommends constantly reevaluating the vendor base, paying particular attention in cases when you have to go to the open market. And he notes that senior management must ensure that policies get driven across the company.

Snider says that perhaps the biggest challenge in dealing with counterfeits is getting senior management to grasp the seriousness of the issue and devote resources to addressing it. “They know it’s out there, they know it’s real, but it might not have affected them, at least on a large scale,” he says. “People don’t want to be proactive until it bites them, when they’ve got tens or hundreds of thousands in rework charges because they put some bad parts on a board. There’s a lot at stake here, and not just financial aspects, because brand reputation is the biggest concern.” ■

*More information on ERAI
at www.era.com.*