

An Integrated Approach to EEE (Electrical, Electronic, and Electromechanical) Components Supply Chain Assurance

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In the ever-changing landscape of geopolitical uncertainty and unforeseen global supply chain disruptions, manufacturers must be proactive when making procurement and residual asset disposition decisions. Vulnerabilities exist throughout the complex global semiconductor supply chain. The COVID-19 pandemic is just one example of an unforeseen situation that brought manufacturing to a standstill in many industries.

Reduced production capacity will have rippling effects on an organization, ultimately resulting in inflated costs and risks to the end-user. Combine this with short-lived product lifecycles driven by rapid technological innovation and you have a recipe that calls for a reliable supply chain partner that can offer an integrated approach to supply chain assurance.

One approach to combat external threats and weather future disruptions is to reduce reliance on the global supply chain by maintaining larger levels of inventory on-site. While this might temporarily alleviate the concern of unpredictable lead time extensions and product obsolescence, it gradually develops into another problem of excessive balance sheet inventory liabilities, overbuys, and crowded storage space.

EEE Component Supply Chain Assurance – What Do You Need?

A more robust and sustainable solution is to engage a strategic partner that provides a total supply chain support solution:

- End-to-end requirements of EEE part procurement
- Proper storage, handling, and management of sensitive electronic devices
- Apply the appropriate level of authentication for materials sourced from both authorized channels and independent distribution
- Ensure compliance to applicable flow-downs and standards
- Management of precise delivery schedules to fulfil a particular bill of materials (BOM management)
- Offer a lucrative, yet sensible, outlet for excess product.

BOM inventory management is an aspect of the supply chain that must be aligned with your asset procurement and disposition strategy. Overbuying a commodity can result in unjustified costs and excess inventory. On the flip side, purchasing too little of a commodity can interfere in the form of production setbacks if demand for your finished product exceeds expectations.



25 April 2024

The latter experience was felt quite recently by just about every company globally that populates chips onto printed circuits boards because of major semiconductor supply chain disruptions. Shortages and enormously drawn-out lead times on the most common active and passive devices at authorized distribution led to ubiquitous supplier price gouging in the spot markets. Not to mention the opportunity for vast amounts of counterfeit and substandard parts to enter the open market and allow unscrupulous vendors to capitalize on the demand surge. The most recent supply chain disruption, triggered by the pandemic, is by no means a unique once in a lifetime event. There are currently several threats that could trigger another global supply chain meltdown including the instability in the Red Sea region, China's desire for "reunification" with Taiwan, raw material constraints, and escalating trade wars, to name a few.

By leveraging the expertise of a strategic supply chain partner who offers a BOM sourcing and management program, utilizes a trusted and verified supplier network, and offers a comprehensive range of complementary in-house services, product manufacturers can greatly enhance their procurement initiatives.

Bill Of Materials Inventory Management

With the support of a strategic supply chain partner, shipments of select parts can be sent to be fully managed or BOM's can simply be provided as a 'shopping list'. On-hand inventory minimums can be set to ensure that stock is replenished to desired levels and parts can be shipped on schedule directly to production sites. By providing authentication testing or value-added services as needed prior to shipment, your company's flowdown requirements will be maintained and followed. Modifications to the procedures and parameters can be made as necessary on a line-item basis.

On the excess and obsolete asset disposition front, customers should utilize a partner that offers various excess inventory resale programs to relieve balance sheet burdens and establish alternative streams of revenue. Excess buy-out purchases provide quick liquidation of residual inventory, and consignment and revenue-sharing programs can be designed to yield the greatest ROI on inventory investments.

Integrating inventory management solutions into your company's supply chain provides much greater assurance that your immediate and future needs are met. There's no telling when the next global disruption or transportation delay will impact the delivery or product life status of the necessary parts on your BOM, but the inevitability stresses the importance of prudent decision making.

SMT Corp – Total Supply Chain Assurance

As the global leader for sourcing and counterfeit EEE parts mitigation, SMT Corp is a prime candidate for offering total supply chain assurance services. We provide a full chain of custody solution, from procurement through to delivery.



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SMT's state-of-the-art, custom built facility offers climate controlled and electrostatic discharge (ESD) secure storage. Workstations are constantly monitored to confirm the continuous integrity of ESD mitigation.

In-house ISO17025 accredited authentication test labs feature the latest counterfeit detection equipment operated by fully certified inspectors to meet AS6081 sourcing and AS6171 testing standards. Additional services are also performed on-site that include taping & reeling, baking & sealing, dry-packing, and solderability testing to name a few. All of these services under one roof greatly complement and enhance the value of supply chain integration.

SMT Corp also offer a range of inventory resale programs that can be tailored to meet your specific needs and are supported by seasoned sales staff dedicated to maximize resale value. Better yet, if a particular line item is ever needed back to satisfy an assembly constraint, manufacturers possess the flexibility to recall items free of charge. You can also view your currently held inventory and any sales history with 24/7/365 access through a secure web-portal.

About SMT, Corp

SMT Corp is the industry leader for sourcing & authentication of DMSMS and hard-to-find electronics components, electrical testing services, and inventory management solutions. SMT Corp is a highly accredited and recognized expert with full on-site sourcing (AS6081), authentication (AS6171), and electrical testing to mitigate the risk of counterfeit, cloned, altered and substandard products from entering the critical infrastructure supply chain.

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Certify Holdings is a full lifecycle strategic partner for the defense and aerospace market, and other markets requiring high reliability electronic solutions. Certify Holdings supports our customers through the early project design stage with design-in support leveraging a wide range of Hi-Rel and RF electronic modules and components, throughout production with sourcing and distribution services, and into obsolescence / end of life with sourcing and authentication of hard-to-find electronics. Throughout the project lifecycle, Certify Holdings supports our customers with test solutions and services. <https://certifyholdings.com/>