

SUPPLY CHAIN

Demand for document accuracy will limit production flexibility

Anti-counterfeit measures require a balance between security and flexibility, warns **Debbie Rowland**



Debbie Rowland

In the past 12 months the supply chain has undergone a subtle change. Measures introduced by original equipment manufacturers (OEMs) to prevent counterfeit components reaching their production lines can also restrict the continuity of supply.

The first sign of the tightening supply-chain process was an increase in requests for copies of the component manufacturers' certificates of conformity to be included with product deliveries. While it has long been the standard practice in life-critical sectors such as aerospace and defence, other sectors are now adopting this more rigorous approach to component verification.

And the situation has already moved on, with the focus for many OEMs on

strict adherence to the letter of the contract with their contract electronics manufacturer (CEM) and to the bill of materials. The growing demand for 100% accuracy in documentation is creating new pressures in the supply chain. For example, a CEM may refuse a delivery if the distributor's documentation contains a product description that is slightly different to that used in the original component manufacturer's literature.

Previously, small discrepancies which could be queried and explained would often be accepted. Now, with OEMs and CEMs beginning to demand 100% accuracy, a slight discrepancy might result in a delivery being refused.

To ensure complete traceability, the customer's internal part number must

match the distributor's part number, as well as the component manufacturer's part number. Lot numbers and date codes also must be correct and the part numbers must match the product descriptions.

This demand for accuracy can lead to delays if there is a shortage of the original part. For passive components in particular it is a relatively easy process to find a substitute for a part which is on an extended leadtime.

A capacitor specified with a tolerance of 20% could be substituted, for example, by a part with a higher specification, such as a 10% tolerance. This small change, however, would affect the part number by changing the M, which represents 20% tolerance, to a K which represents 10% tolerance.

Such small but crucial changes have often been able to keep a production line running without affecting the performance of the finished product. But now, with increased pressure on traceability and absolute accuracy, customers may find that the tightening supply-chain could strangle the flexibility needed to maintain continuity of supply.

The challenge for distribution is not just to provide an accurate copy of the manufacturer's paperwork but to build customer relationships based on trust and product knowledge.

Debbie Rowland is sales manager at Charcroft Electronics