

FINDING THE MISSING LINK

Defence OEMs often assign internal part numbers to components, but as projects run on, the link with manufacturers' numbering can be lost. Charcroft specialises in identifying legacy passives

In the complex world of defence procurement, it is common practice for OEMs to assign their own internal part numbers to components, rather than use the part numbers that were assigned by the component manufacturer. Today, contract electronics manufacturers (CEMs) still find these legacy internal part numbers on the bill of materials (BoM) from defence OEMs and are subsequently faced with the challenge of translating an unknown part into a sourceable alternative.



Charcroft sales manager, Debbie Rowland, shows legacy catalogues

had direct access to the engineers who worked at the same location. Senior members of the design team could often help the buyers by translating the internal part number into a number which could be recognised by any supplier. Once procurement was out-sourced to the CEM sector, this connection was lost. The procurement procedures also became more formalised and rigid, as CEMs had to work to the letter of their procurement agreement and BoM.

Doing detective work

The problem of identifying legacy passive components by their internal part numbers is one that is regularly presented to Charcroft.

Often the internal part number is the CEM's only point of reference. In these cases, Charcroft will search through almost 40 years of historical sales records for orders placed by most of the major defence OEMs. Each of these historical orders still holds the vital link between the internal part number, which would be shown on the OEM's purchase order, to the corresponding manufacturer's part number.

If the BoM includes a product description, in addition to the internal part number, Charcroft consults a library of historical component catalogues and datasheets, which also goes back over 40 years. This can often provide a product description for the part number, which will be the basis for identifying an alternative.

Internal part numbers are still used today by some defence OEMs so Charcroft has decided it will continue to retain orders, indefinitely. This, of course, means that future CEMs will continue to be able to make the vital link between a personalised number and the original passive component.

Personalised part numbers

The use of internal part numbers made it easier for defence OEMs to manage BoMs and inventories at a time when the industry, and the world, was transferring manual, paper-based records onto computerised enterprise resource planning (ERP) systems. Many of the vital links between the internal part numbers and the corresponding component manufacturers' part numbers, were lost during this process.

Other links were lost as, over the years, many of the components have become obsolete. Even when the alternatives were sourced in-house by the OEMs' own procurement teams, the systems did not automatically link the internal part number to the replacement part. This was because many orders were processed as 'temporary concessions' intended for projects which were in the final stages of their operational life. The extension of projects well beyond their expected end of life has resulted in the original internal part numbers still being included in BoMs presented to CEMs.

The shift to out-sourced manufacturing added more difficulty. When procurement teams were working in-house at the OEM, they