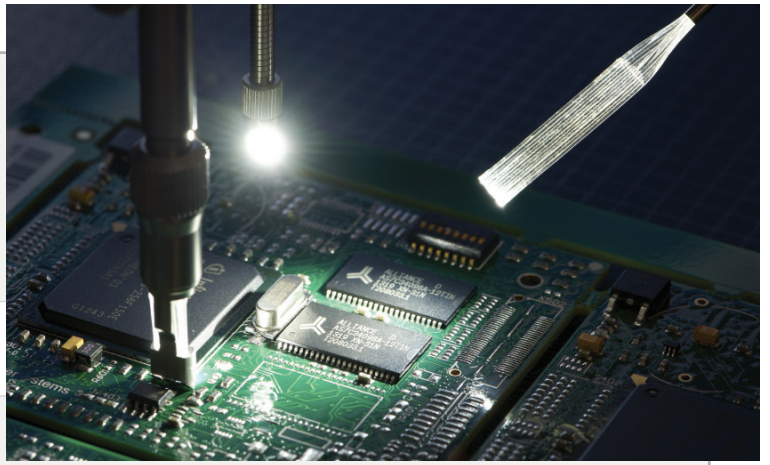


A CEM's core competencies should utilise the latest, most technologically advanced plant



Make smart outsourcing decisions

There are many factors to weigh up for any original equipment manufacturer making the switch from in-house to subcontract manufacturing. Selecting a suitable manufacturing partner is key.

Assess equipment

To appeal to the widest possible customer base, a CEM must meet, or preferably exceed, its clients' expectations in terms of manufacturing and support capabilities. Typically, CEMs serve a variety of market sectors, with enormous diversity in the technology required to manufacture the resulting range of products.

Bearing this in mind, few CEMs are entirely self-sufficient and some specialist processes are likely to be outsourced to third party suppliers such as bare PCB manufacture, metalwork and plastic enclosures. A CEM's core competencies, however, should utilise the latest, most technologically advanced plant and equipment available in order to provide the highest possible quality, while also offering competitive costs and the most comprehensive range of services. A competitive CEM will typically demonstrate a policy of continuing investment in the latest manufacturing technologies.

When considering a manufacturing partner, it is essential to ensure it has the capability and capacity to produce a specific product to the necessary standard. As well as basic manufacturing requirements, consider if any other processes could be carried out by the subcontractor in a way that could improve on in-house capabilities. Services such as selective soldering, 3D optical inspection, environmental test, resin encapsulation and conformal coating, automated and custom test, labelling, packaging and shipping requirements may all be offered by the CEM and could minimise time-to-market and cost.

Discuss procurement

A CEM's efficiency can only ever be as good as its supply chain. This is because it relies on having material consistently available for the production team to schedule and thereby achieve customers' target delivery dates.

Most successful CEMs will have a dedicated team of purchasing professionals constantly seeking the most effective and appropriate sources. They will follow rigorous procurement processes and develop strong relationships with a rationalised base of suppliers. They should also keep up with market trends and product developments, giving ample warning to customers of

Sales and marketing director of contract electronics manufacturer, Wilson Process Systems, Nick Jones, considers some of the factors involved in selecting the right outsourcing partner



Ensure prospective CEMs have the capability and capacity to produce a specific product to the necessary standard

impending component obsolescence issues, as well as recommending possible alternatives with plenty of time to make appropriate design changes.

A CEM's purchasing inventory will cover a vast array of components. It is therefore essential that its strategy ensures inventory is sourced from traceable franchised suppliers. Buffer stock levels should be negotiated and agreements for extended lead-time and sole source components must be in place to ensure continuity of supply.

Performance of key suppliers should be monitored, with regular assessments being carried out, usually in conjunction with the quality department.

Look for accreditation

Many OEMs will have their own requirements in terms of quality standards and accreditations that must be met by a prospective CEM; they may even have an auditing procedure in place to ensure these requirements are met.

A current BSi certificate is normally considered a prerequisite and the BSi system is extremely stringent. Accreditation is regularly renewed and revised and is therefore a dependable indication that a compliant quality management system is in place and maintained. In many cases this may mean that independent audits are not required.

The IPC standard is also a useful tool in defining and agreeing appropriate standards of assembly workmanship and bare PCB manufacture, as well as ensuring that they are maintained.

With these standards in place, and having assessed the criteria discussed above, OEMs will be in a much better position to decide on whether to outsource and, more importantly, to whom.

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