



PCB Assembly

PCB assembly forms a core part of our manufacturing capability. This capability can be utilised at all levels from the initial production of very low volume, rapid prototype products, through to the ongoing manufacture of complex, multi-technology, multi-configuration PCB assemblies.

Prototype & Rapid Turn-Around Assembly

Given our capability in product innovation and development, we have the ability to offer prototype and rapid turn around PCB assembly for surface mount, mixed technology and conventional PCB assemblies.

BGA and Surface Mount Assembly

Our surface mount PCB assembly capability includes BGA, uBGA and flip chip assembly. Automated assembly processes are utilised throughout all stages of the manufacturing cycle to ensure consistent, sustained quality coupled with optimum manufacturing costs.

Mixed Technology & Through-Hole Assembly

We have full capability for assembling both through-hole and mixed technology PCBs and can offer a number of peripheral services such as conformal coating and potting etc. We can also undertake device programming and the configuring of PCBs prior to system integration or despatch.

Fixtureless PCB Testing

We utilise both AOI and flying probe test systems so as to ensure any manufacturing defects are identified and corrected prior to despatch. Utilising fixtureless testing, ultimately removes the need for expensive bespoke fixturing to be produced for every PCB assembly, thereby ensuring re-tooling costs are minimised when product designs change.

Bespoke Test Fixture Design

Bespoke functional test fixtures can be designed and manufactured for specific PCB testing requirements. This permits complex testing to be undertaken prior to despatch or system integration.





Principal Markets

We operate within a wide variety of market sectors, and have considerable experience in producing products incorporating core technologies such as infrared and microwave. Our customers are typically market leaders within their respective sectors. Consequently, they demand only the highest levels of ongoing quality, coupled with the most cost efficient and lean manufacturing processes. Our aim is to achieve and where possible exceed the expectations of our customers by delivering excellence at all levels throughout our business activity.

Process Control Instrumentation

We have considerable expertise manufacturing products associated with a wide variety of process control applications. These markets include food and beverage production, animal feed production, dairy powders, concrete production, rolled steel inspection systems and combustion and environmental monitoring systems. These products use a variety of core technologies, of which infra-red and microwave are amongst the most common.

Military Communications & Marine Instrumentation

We produce many communication products for the defence industry and are involved with products associated with ship management systems, including data acquisition and integrated control systems.

Laboratory Analysis Equipment & Scientific Instrumentation

We produce equipment for a number of laboratory and pharmaceutical analysis applications, including areas such as moisture measurement, web thickness measurement and PAT measurement. We also are actively involved in manufacturing gas analysis equipment, and have wide ranging experience in producing electro-mechanical, electro-pneumatic and electro-optical systems.

EPOS & Printing Products

We produce equipment associated with electronic point of sale applications, particularly impact and thermal printers, as well as many other peripheral devices.





Box Build & TurnKey Solutions

The epitome of our manufacturing capability is the ability to produce a completed product or product range thereby taking on board the entire product build process. Box build solutions typically focus on high complexity, high quality products, with high degrees of configuration and system integration prior to despatch. Our warehousing and logistics capability enable us to offer a KanBan approach to product deliveries, therefore ensuring that precisely the right amount of product is configured and despatched to the right end location at precisely the right time.

Box Build

We have considerable expertise in product and instrumentation manufacture with the bulk of product supplied being as completed turnkey solutions. Our skills not only include electronics assembly, but extend to electro-mechanical assembly, electro-optical assembly, electrical cabling and panel wiring, electro-pneumatic and gas analysis systems.

Product Testing

We have the ability to fully test product prior to release, where necessary bespoke test solutions can be designed and implemented to ensure ongoing product compliance.

Product Configuration, Warehousing & Logistics

Our systems are such that managing high variant, application specific product, is easily controlled and ensures that we are able to respond quickly to rapidly changing customer demands. KanBan and pull type manufacturing, stock buffering and finished product management can be implemented to ensure product flow is maintained. End-user system configuration prior to despatch ensures that where possible that customer configuration is kept to a minimum.

Relationship Management

We have considerable expertise in managing ongoing relationships with our customers and providing bespoke solutions geared to individual customer requirements. The relationship is core to our business activity, and once established, forms the basis to drive both ongoing cost and quality improvements.





Capability Summary

The outsourcing process encompasses many skills and in order to be a truly effective business partner, any contract manufacturing provider must be able to demonstrate competence in all its business activities. Our skills enable us to take on board the entire manufacturing process, thereby offering a seamless transition from initial design through to sustained, ongoing production.

Innovation & Product Design

We have the ability to take conceptual ideas and turn them into reality. We are able to rationalise existing designs by value engineering them to reduce cost and improve quality. We also offer prototype and rapid turnaround production to assist with new product introductions and short turn-around design changes.

Sourcing & Supply Chain Management

Our extensive vendor base and supply chain management capability enable us to globally source a wide variety of materials and services. This extends to an offshore sourcing capability, thereby giving customers a choice of procurement options tailored to their individual cost and quality requirements.

Manufacture, Inspection & Test

Extensive PCB assembly capability (encompassing SMD, BGA, thru-hole and mixed technology), box build and system configuration capabilities enable us to produce a wide variety of products to the most demanding of standards. Automated assembly, inspection and test facilities ensure that product is fully functional and end-user configured prior to despatch.

Logistics

We have the ability to manage products and materials at all levels before, during and after the manufacturing process. In many cases we ship completed product directly to our customer's end-users.

Quality

We maintain both ISO-9000 and IPC-A-610 quality approvals as a minimum requirement. We continually strive for ongoing excellence and for continued improvements and maximum efficiency.





Company Overview

Since 1985, Kingfield Electronics has been providing electronic contract manufacturing solutions delivered to its customers via strategic business partnerships. This relationship is core to the outsourcing process, and once established, drives efficiency, cost saving and continuous process improvement.

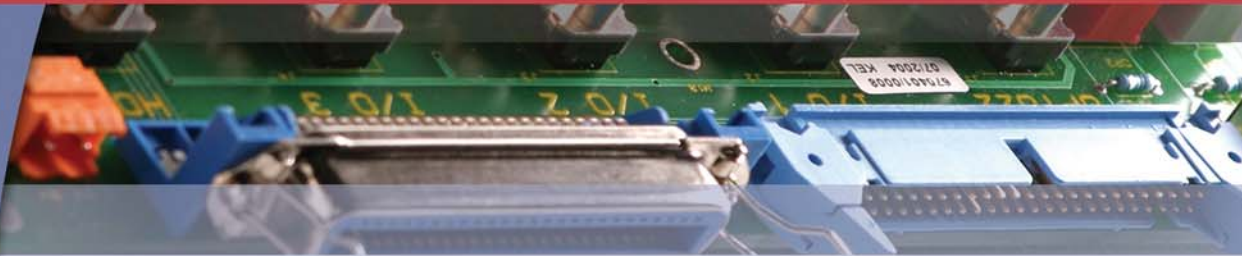
Our abilities encompass a wide variety of skills, commencing with the initial design and innovation of a product and culminating in the ongoing manufacture of a complete product or assembly. These turnkey solutions are individually tailored and are designed around each customer's specific requirements.

Conveniently located in Derbyshire, England and in close proximity to road, rail and airport facilities, Kingfield Electronics remains a privately owned business. Its specific aim is to provide bespoke contract manufacturing solutions to market leading companies within the industrial, scientific, instrumentation, medical and military market sectors.

Continued investment in equipment, people and technology, as well as the development of bespoke systems and software, has resulted in an unparalleled ability to react to the rapidly changing demands of our customers and their respective markets. ISO-9000 and IPC-A-610 form the basis of our quality management systems and are integrated at all stages throughout the entire production process. Supply chain management is also a key area of excellence, and with this in mind the establishment of offshore vendors gives us the ability to offer a choice of manufacturing options depending on customers' quality and quantity requirements.

Many companies offer electronic manufacturing services, providing a variety of PCB assembly and box build solutions. Our primary focus has been to offer box build, system integration and configuration solutions to high technology, market leading companies. This gives us considerable skill and experience in producing complex, high mix, high variant type product to the most exacting of quality requirements.





Key Features

Kingfield Electronics has been providing contract manufacturing solutions to its customers since 1985. The decision to outsource the design and manufacturing processes to an external vendor is never an easy one, and is never undertaken lightly. However, some key advantages to this philosophy can be summed up as follows:

Extensive Experience in Design & Manufacturing

We have built up considerable experience providing design and manufacturing solutions geared to meet the precise needs of our customers. This experience spans many different technologies and many different markets sectors, but we have particular expertise within the scientific instrumentation, industrial equipment and military market sectors.

Wide Ranging Capability

The wide range of services we offer are such that we can undertake the entire design and manufacturing process, providing a complete "one-stop-shop" capability. This enables ease of management and communication and results in vendor management (from a customer's perspective at least) being reduced to a single provider. Whatever the requirement, we are able to develop an appropriate solution to complement a customer's existing capability. This in turn enables companies to focus purely on their own particular core strengths, which leads to increased efficiency and improved business performance.

Established Processes & Infrastructure

Continued investment in new equipment, technology and processes means that we continue to meet the rapidly changing demands of our customers and of the industry in general. In many cases companies cannot justify either the capital outlay or the overhead of skilled operatives to run those processes, and by utilising an external provider with such equipment and skill base already in place, it can prove to be a highly cost effective solution.

Flexible Resource

Having access to an established resource provides, above all, flexibility. Flexibility in capacity required to meet seasonal demand and rapid fluctuations in workload and the ability to provide KanBan type manufacturing solutions, which result in just in time deliveries and reduced stock holding and warehousing costs.

