



Approved Quality Management System

Intercole operate a Quality Management system to ensure Customer satisfaction from initial order through to delivery and beyond.

Manufacturing standards comply with IPC-A-610 covering Consumer, General Industrial and High Reliability Products

To find ways in which the skills, experience and resources of Intercole can benefit your manufacturing application, please contact Intercole Sales at the address below.

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Sub-Contract Services to the Electronics Industry

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contract electronic manufacture



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Sub-Contract Services to the Electronics Industry

Introduction

Intercole Sub-Contract Services is a UK company based at Chandlers Ford, Hampshire, committed to offering an effective range of Contract Electronic Manufacturing and associated services to electronics and technology based industries. With over 35 years experience and a solid commitment to investment in people, systems and equipment we are uniquely placed to provide optimum performance in design, purchasing and manufacturing allowing you to confidently outsource complete product manufacture and concentrate on core business activities.

We consistently demonstrate an in depth understanding of customer needs by virtue of our experienced professional engineering and production teams, who collectively offer a range of multi-disciplined skills, coupled with a resolute belief in the importance of Total Customer Satisfaction. Add to this an 'Open Door' policy as an extension to your own facilities and you will soon experience the many benefits enjoyed by all our customers in establishing an enviable reputation for product reliability, quality of build and cost effectiveness.

This process of establishing a working partnership to evolve, develop and implement our customers products and manufacturing strategies has resulted in Intercole becoming an established and highly respected supplier and partner to a wide range of organisations and industries, including those in:

Telecommunications, Medical, Automotive, Aerospace, Defence, Entertainment, Power Generation and Distribution, Nuclear Research, Process and Manufacturing.

PCB Manufacture

Often seen as a mere commodity item, the PCB is the critical foundation for effective and reliable component assembly and final product manufacture.

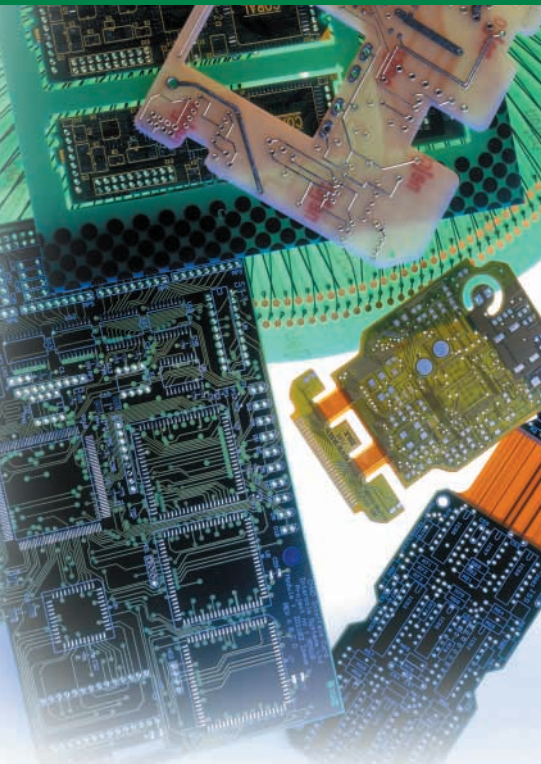
Accordingly we provide a quality PCB manufacturing service supported by BS, UL, CECC and other product and supplier approvals as appropriate.

A wide spectrum of PCB types can be manufactured and assembled all with specialist shapes, profiles and finishes as required, eg:

- **Multilayer boards**
- **Flexrigid boards**
- **Single Sided Conventional boards**
- **Plated Through Hole (PTH) boards**

Procurement

When required, Customers may take advantage of our component and materials purchasing expertise to provide full procurement and bill of materials control.



In doing so you are guaranteed a competitive and quality service for both prototype and production quantities managed with the aid of an integrated purchasing and inventory control computer system.

Strategic alliances are in place with franchised distributors as well as established relationships with world-wide component sourcing specialists and manufacturers. This, together with the experience of our own production and procurement engineers often allows difficult components to be sourced. Where component obsolescence is a problem we can also advise alternatives to assist in maintaining the critical flow of your production.

Through Hole Assembly

Our conventional Through Hole Component assembly facility is staffed with highly experienced assemblers who have access to a comprehensive range of component forming, placement and cropping tools and machinery.



Soldering is either by hand or automated wave soldering as appropriate to the board complexity and batch size.

The wave soldering machine is microprocessor controlled and operates within precisely controlled parameters using 'no clean' minimal residue fluxes to provide reliable high throughput production.

Surface mount Assembly

Surface Mount Component assembly is a continually developing part of the company's business strategy. Equipment investment is carefully planned to respond to developing component technologies and the growing need for more complex placement and alignment tolerances.



Automated screen printing of solder paste ensures precise component alignment. Automated pick and place machines provide an excellent placement rate and fast configuration times to readily accommodate the extensive product range and varying batch sizes required from our customers.

Fully equipped manual re-work stations allow low volume prototyping work or product repair to be undertaken to the same high standards of our automated systems.

Inspection and Board Test

Following PCB assembly, each module is 100% inspected against original design and manufacturing data. Trained Inspectors utilise Automated Optical Inspection (AOI) and comparascopes to ensure that product build quality is achieved every time.

ATE can be used to cycle hardware modules through stringent test conditions and calibration procedures. Environmental testing services are also available for accelerated life testing (BURN-IN) of components and to confirm that modules conform to specification under varying environmental conditions.



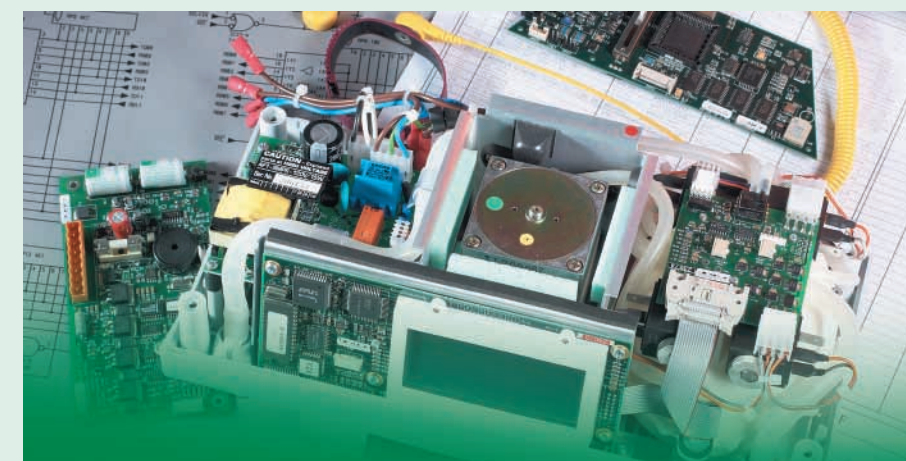
Final Product Test

Where manufacturing includes final product build, extensive testing to customer supplied specification can help ensure faultless operation and in-service reliability.

Testing may be undertaken on customer supplied rigs or alternatively we can design and manufacture appropriate test rigs and fixtures from the simple to the sophisticated with PC control and auto print-out.

Cabling and Mechanical Assembly

Our total manufacturing capability also extends to final product equipment assembly. This includes fabrication of enclosures, cubicles and all associated internal metalwork, fittings, fixtures, wiring and cable harnesses as appropriate.



Production Engineering Services

To ensure the issues often encountered in the production of complex electronic based products are effectively handled, each customer order is managed by a dedicated Production Engineer.

All Production Engineers are multi-disciplined with immediate access to other specialist engineers, all of whom are on hand to provide advice during the development of new products or to optimise the design of existing products for all levels of production capacity.

This will ensure you have a design suitable for production that can be manufactured in the most efficient way possible, so helping to maintain your cost advantage without sacrificing quality in today's competitive and demanding market place.

Design Engineering Services

Where required, a comprehensive range of design engineering services are available to compliment our primary manufacturing function. These can include hardware and software design together with production of the attendant electronic, electrical and mechanical engineering drawing packages.

Hardware design includes Analogue, Digital and Microprocessor design as well as consideration of production engineering issues to assist with ease of manufacture, maintainability and product ergonomics.

Software design extends to various computer platforms and associated operating systems and languages as well as primary microprocessor devices for embedded applications.

