

**Contract Electronics
Manufacturing (CEM)**
Manufacturing at its best



TEDDINGTON

Kensa Heat Pumps



“Teddington listened to our key objectives and kept us fully informed at every stage of the development process, allowing us to work in partnership to create a solution that was to our exact requirements.”

James Standley, Operations Director, Kensa Heat Pumps



Teddington has worked with Kensa throughout the development of its new Evo range of heat pumps. A strong collaboration was established to develop and refine the requirements, design, create and prove the prototype systems and then progress through the design for manufacture stage resulting in a truly state of the art system.

Situation

Kensa asked Teddington to develop and engineer a touch screen control system for its new Evo series of heat pumps.

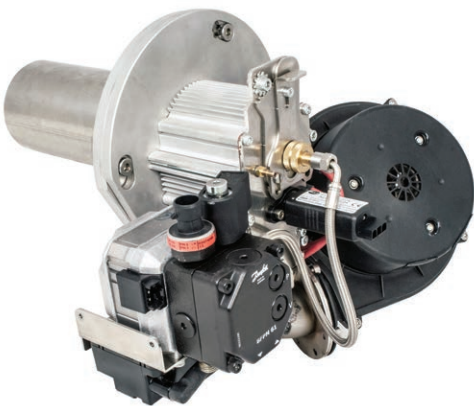
Solution

Teddington's comprehensive development process allowed engineers to work in close partnership with Kensa, developing a bespoke solution that fully met the specification.

Benefits

The proactive system pre-empts system irregularities, enabling better diagnostic and faster system resolution, reducing costs and potential call outs.

EOGB



“Over the last decade, Teddington has proved to be a professional, reliable, honest and friendly manufacturer. Their extensive CEM knowledge and experience has been patently obvious in all of our exchanges, providing a lot of reassurance, and manufacturing to the highest standards.”

Martin Cooke, Technical Director at EOGB



Background

Teddington worked with EOGB Energy Products Ltd to design and manufacture the control board for the Sapphire – EOGB's revolutionary fully-modulating blue flame domestic oil burner.

Situation

EOGB turned to long-standing and trusted design and manufacturing partner Teddington and explained the concept and functionality required for the Sapphire project.

Solution

Teddington's engineers used their expertise in measurement, control and CEM technology to develop a bespoke solution – a purpose designed control system with unique firmware that fully met the client's manufacturing specification within budget.

Benefits

Sapphire, an ultra-low NOx burner, delivers one of the best energy efficiency and carbon emission reduction systems of any domestic oil burner on the market today thanks to its advanced controller fabricated by Teddington.

CEM manufacturing at its best

Teddington has developed a strong reputation and proven track record of supplying high-quality Contract Electronics Manufacturing (CEM) services. We have a large number of customers across a range of sectors, including defence, automotive, HVAC, lighting and utilities.

From international suppliers and OEMs, to small companies with a bright idea, we aim to create a true partnership founded on collaboration, openness and dedication.

Our 'right first time' attitude ensures greater productivity and flexibility – resulting in reliable, bespoke products of the highest quality.

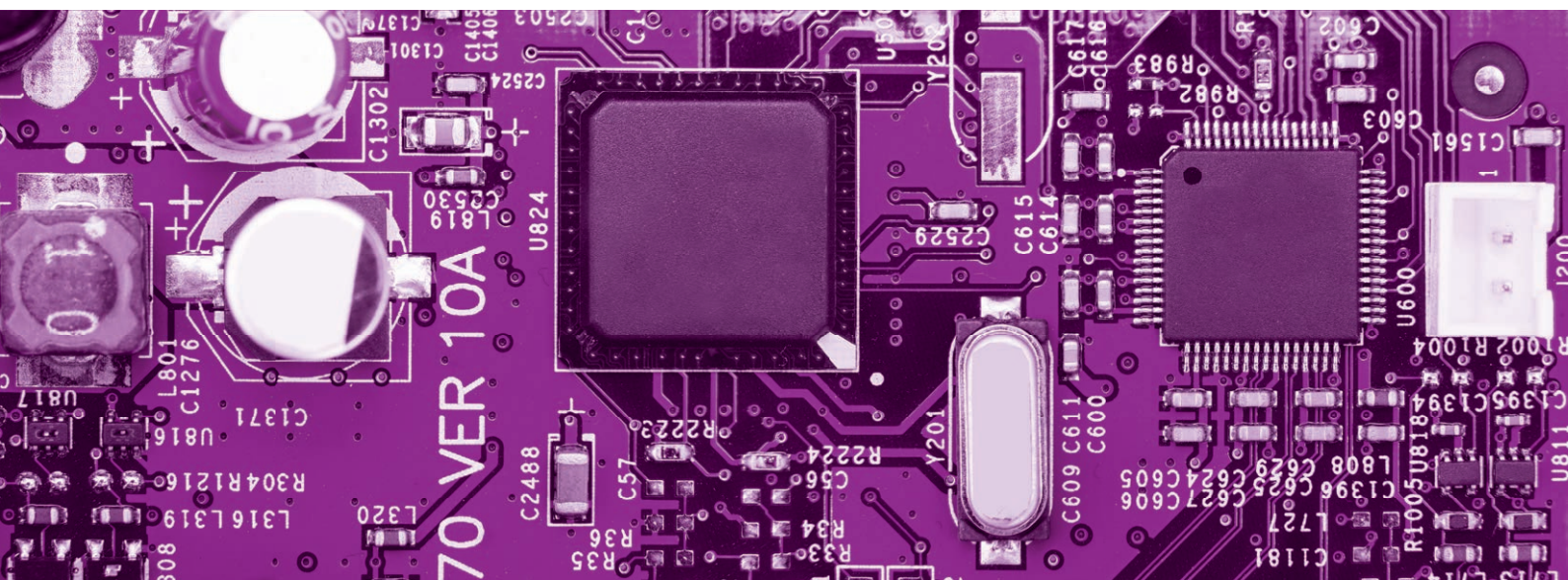
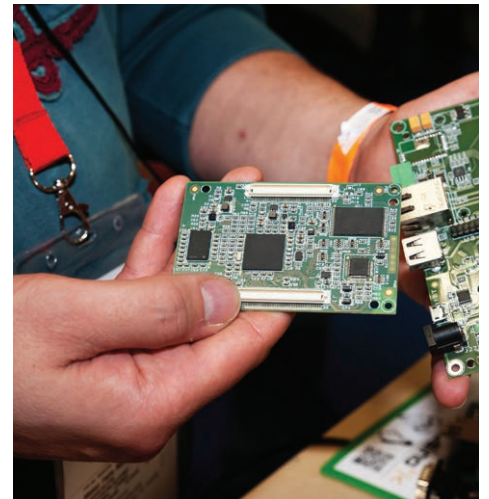
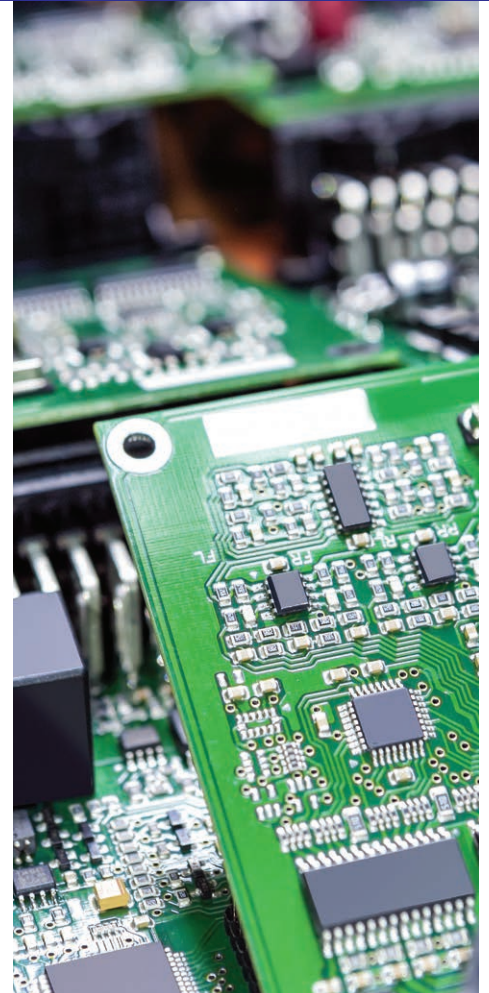
However straightforward or complex your requirements, we have a wide range of CEM equipment, capabilities and services to meet your needs.

Whether you want to reduce manufacturing costs, avoid capital equipment investment, or improve time to market, we are ready to help you today.

To find out how we can help, contact **Production Manager Derek Pollitt:**

T 01726 222516

E derek.p@teddingtonsystems.co.uk



Our capabilities

Surface Mount Technology

- Mycronic surface mount pick and place technology
- Seven stage re-flow oven
- Vapour phase soldering



We have developed the ability to place, with total precision, thousands of components per hour from 01005 packaged components to more expansive packages, according to IPC-A-610 standards.

We are fully equipped to undertake PCB batches from low to high quantities, and we constantly ensure a high level of placement accuracy and solder joint integrity is achieved throughout the process.

Through-hole Production

- Through-hole placement using hand soldering
- Precision selective soldering
- Production staff trained to IPC610



Our dedicated, highly-skilled assembly team are equally adept at hand and selective soldering, as well as fitting traditional leaded components. These methods provide extremely robust, accurate and pragmatic assembly solutions.

Our production staff are trained to the highest IPC610 standards and use our tried-and-tested systems to offer an unrivalled level of soldering ability.

Cable Assembly

- Ribbon cables
- Bespoke looms
- Wiring harnesses

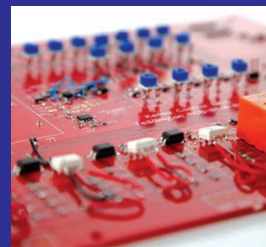


Our engineers ensure an extensive range of prepared cables, cable assemblies and wiring harnesses are designed and manufactured in accordance with customer specifications and industry expectations.

From straightforward wiring to multi-component assemblies, we can process cable from 36AWG to 2AWG for use in industries as demanding as defence and automotive.

Box Builds

- Plastics
- Decals
- Part build or full build
- Metalwork, displays and wiring

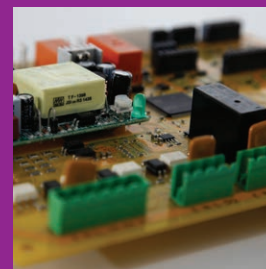


From simple ground wires and small control panels, to complex cable harnesses and systems, our flexible box build services can assemble, test and deliver almost any custom wire configuration imaginable.

In addition to installation, we can also source and procure any vital components for the build, including switches, connectors and cable markers. Our specialist engineers machine and paint enclosures to any specification and oversee all stages of production to ensure the highest quality finish. A range of assembly methods, such as bench, line and focused cell assembly, provide complete flexibility.

Test and Inspection

- Programming
- Dedicated test equipment
- Automatic optical inspection of surface mount and through-hole components
- ISO9001 accredited



Our Automated Optical Inspection (AOI) systems are some of the most powerful tools for ensuring industry-leading levels of accuracy and continuous process monitoring. Used in the production of our PCB assemblies, they provide superior fault coverage – detecting component presence, polarity and component markings – and exceptional post reflow solder inspection capability.

Alongside traditional inspection techniques, such as visual inspections, functional tests and bed of nails circuit board test fixtures, this approach maintains quality while keeping customer costs to a minimum.

Quality and service

Teddington is committed to a culture of continuous improvement, where quality and reliability play a central role.

By utilising best-in-class quality management systems and state-of-the-art technology, our dedicated team of experienced and skilled engineers offer a range of integrated and innovative services to help meet customer needs.

The result is innovative, effective and high-quality products that are delivered on time and within budget.

Our engineers are experts in their field and certified to IPC610 class III assembly and soldering standards.

By using comprehensive automated processes and adhering to a matrix of stringent quality standards, we achieve high levels of reliability from batch to batch, while electronics assembly is also carried out in accordance with industry recognised accreditations.

All processes and procedures are documented and we constantly gather customer feedback to ensure we maintain the highest of standards.

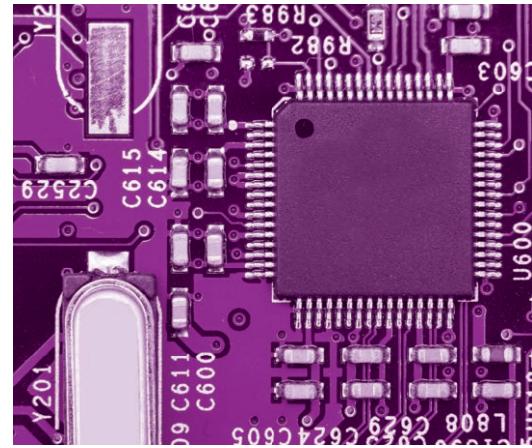


Process – from enquiry to delivery

We pride ourselves on gaining a complete understanding of our customers' individual requirements – working in partnership throughout the entire product lifecycle, from initial design and prototyping, through to production and delivery into the market place.

This client centric approach gives us the flexibility to undertake a variety of production methods, offering competitive solutions from fast turnaround through to batch and main production. Prototypes are manufactured expediently during the consultative process, and are rigorously checked and evaluated against feasibility, cost and quality requirements.

We will support and develop arrangements for safe and prompt delivery, and our in-house manufacturing capabilities support products throughout the lifecycle and beyond.



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