Teddington Systems

Engineering at its best

TEDDINGTON

Designing, developing and manufacturing intelligent control solutions for military, commercial and domestic applications.

Engineering at its best

Teddington Systems is a global leader in the design, development and manufacture of control systems, solutions and products for industry.

Starting life as the British Thermostat Co. Ltd. in 1928, Teddington continues to lead the way in the development and manufacture of systems and products where quality is a given and reliability is of paramount importance.

We aim to be the key technical partner to our clients. From simple valves, switches and other control devices to complex system design, engineering and manufacture.

Our ability to deliver from concept stages through to production for a wide range of sectors, with quality, on time and on budget, lies at the heart of what we do. Our product reliability gives you the peace of mind with solutions that you can truly 'fit and forget'.

Encompassing design, development and manufacturing, Teddington delivers by creating a true partnership with our customers, founded on collaborative working, honesty, openness and dedication.

Please contact me to find out more about how Teddington can help you achieve your goals.
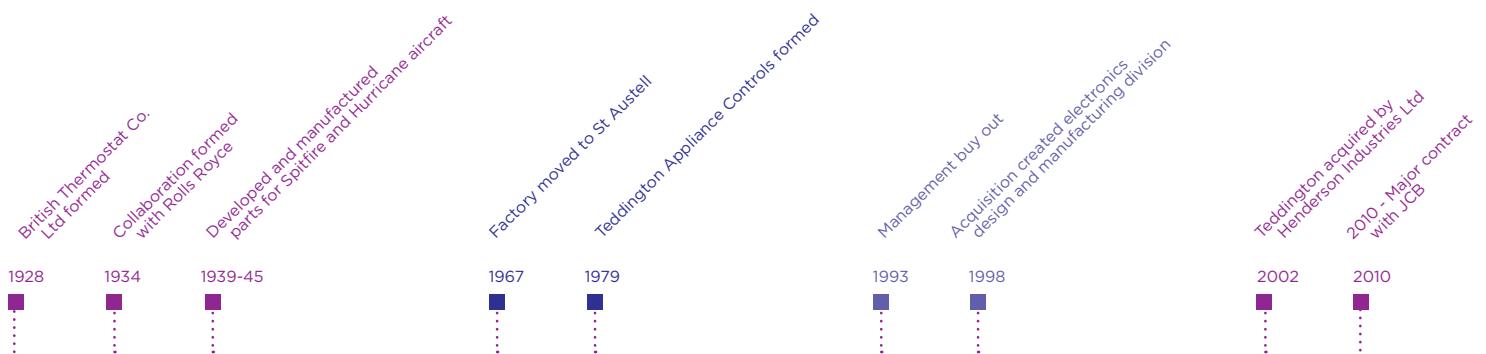
James Henderson

Managing Director

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Our core competencies:

- Temperature, pressure, flow and electrical control
- Electronics design, prototyping and manufacture
- Systems and software design
- Mechanical design, prototyping and manufacture
- Integrated, embedded and standalone control systems
- OEM and military grade manufacturing

Timeline

- **1928** — British Thermostat Co. Ltd formed
- **1934** — Collaboration formed with Rolls Royce
- **1939-45** — Developed and manufactured parts for Spitfire and Hurricane aircraft
- **1967** — Factory moved to St Austell
- **1979** — Teddington Appliance Controls formed
- **1993** — Management buy out
- **1998** — Acquisition created electronics design and manufacturing division
- **2002** — Teddington acquired by Henderson Industries Ltd
- **2010** — Major contract with JCB
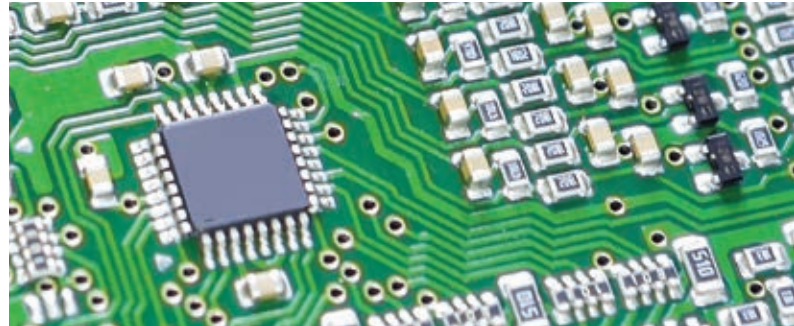
Hardware Design
Transforming your requirements into reality

At Teddington, we are fortunate to have a dedicated team of experienced and skilled engineers that can offer a range of hardware design services to meet your needs.

Using state-of-the-art tools and software, we pride ourselves on designing innovative and effective electronic hardware solutions. Our design strategy combines tried and tested technology with the best of the latest techniques.

With the aid of our 5-stage development process, we are able to take projects from the initial conceptual idea, step by step all the way through to market launch. We take pride in working closely with our clients, keeping you fully informed and involved at each stage of the development journey.

Our in-house manufacturing capability is also able to support products throughout the life cycle and beyond. The addition of design engineers, on hand to support products post-production is an additional strength from which all our clients benefit.

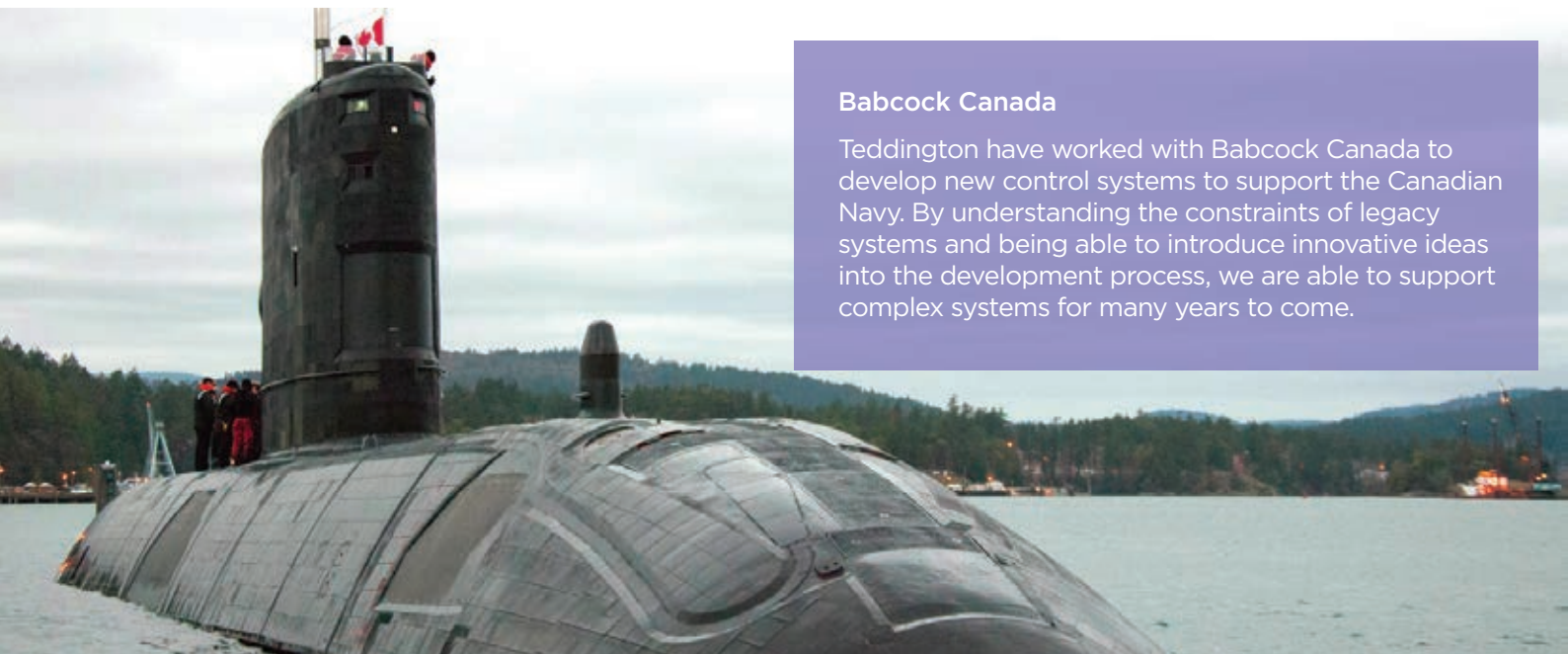**We offer the following hardware design services:**

- Analogue and digital electronic design
- CAD schematic layout and multilayer PCB design
- Embedded systems design
- Connector and loom design
- Enclosure and mechanical product design
- BOM and Kit product management

Our development process

Teddington uses an evolutionary, 5-stage development process; a tried and tested approach to product design and development that utilises the latest technologies to reduce time to market and project costs without compromising on quality.

> **"Teddington understand our needs as a business and work with us to provide the innovative products that we need to the highest quality."**
>
> **Glen Dimplex**

Babcock Canada

Teddington have worked with Babcock Canada to develop new control systems to support the Canadian Navy. By understanding the constraints of legacy systems and being able to introduce innovative ideas into the development process, we are able to support complex systems for many years to come.

Software and Firmware Design
Bringing your ideas to life

Teddington offers first-rate software and firmware design services built on the experience and programming skills of our software engineers, utilising the latest software development techniques and platforms.

We understand the trade-off between quality and efficiency when creating embedded code (firmware) at Teddington, we are able to strike that all important balance between the two.

We use the latest Integrated Development Environment's (IDE's), compilers and configuration management tools to produce efficient memory footprints, while adopting sensible coding guidelines to ensure code form and function is written with the highest integrity.
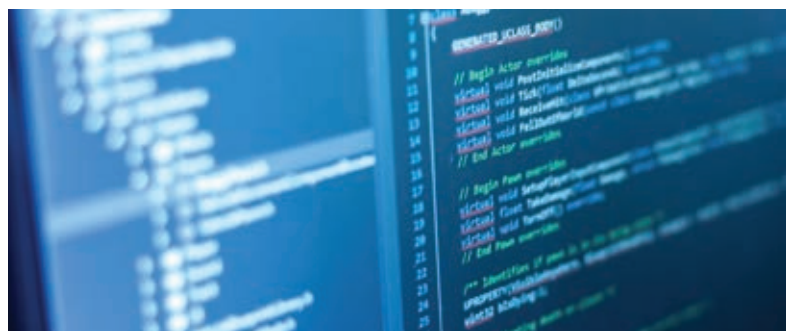
Modular approach

Firmware is often the most expensive part of a development project. With this in mind, we recognise the absolute importance of creating modular code that can easily be re-used and, as a consequence, reduce future development for your benefit.

We employ expert embedded C programmers with Object Oriented Programming (OOP) experience; C due to its unquestionably favourable efficiency and OOP for the ultimate modular approach.

Our team also includes expert app developers for both Android and iOS platforms to support enhanced functionality, integrated systems and Internet of Things (IoT) developments.

We offer the following software and firmware design services:

- State Machine and RTOS firmware design
- Fully documented ASM & C code development
- In-house coding and documented standards
- Legacy code conversion
- Fully documented Net code development
- Android and iOS app development and deployment

IRISmodular™

IRISmodular is the next generation of rapid product development technology created by Teddington. We believe that it represents a quantum-leap in system design, made specifically for ultra-long service-life products and critical-systems.

Leveraging the latest technology, the IRISmodular delivers flexible, powerful, future-proofed systems at reduced costs and with a rapid development schedule.

IRISpower™

Modular Interface

IRIScore™

Modular Interface

IRISconnect™

Generic power modules connect your external power to the IRIScore™

Centralised generic processor core is the heart of the IRISmodular™ system

Modules that connect your IRIScore™ to the real world

Fully Interchangeable between all IRISmodular™ products

Customer interface

Prototyping
From concept to reality

We believe that our business is about turning great ideas into great products and solutions, so producing a prototype is a crucial step in achieving this goal.

Teddington has the ability to produce a one-off prototype, taking your concept through testing and a pre-production run to get your product or system ready for manufacture.

By combining our highly skilled production team, the close and long-lasting relationships with our suppliers, and a flexible, responsive 'can do' attitude, we are able to produce prototypes within short timescales.

Our approach to prototyping gives us the ability to create early feedback loops that are essential to meeting our clients' needs and ensuring we deliver on time and to expectation.

We offer the following prototyping services:

- Pre-production runs/trial manufacture
- Prototyping for small to medium volumes
- Working product sample
- Design for manufacture
- Development and test
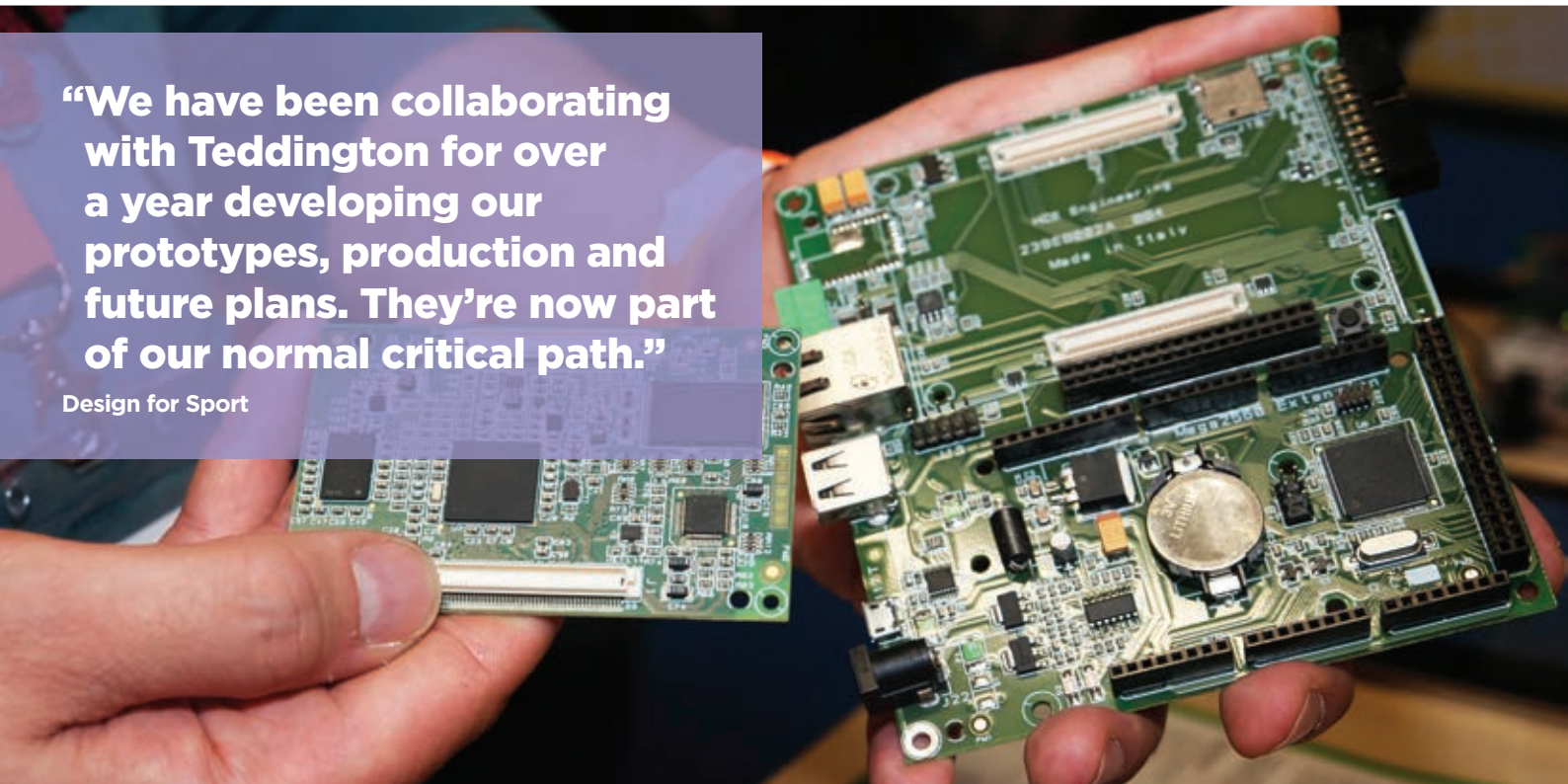- CE Marking and EMC approvals

Kensa Heat Pumps

Teddington have worked with Kensa throughout the development of their 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.

"We have been collaborating with Teddington for over a year developing our prototypes, production and future plans. They're now part of our normal critical path."

Design for Sport

Manufacture
From reality to market

As well as designing and developing products, Teddington has a fully equipped manufacturing facility to meet all your assembly needs – from electronics to mechanics.

We are constantly investing in the latest technologies to ensure the manufacture of consistently high quality, reliable products together with ever greater productivity, flexibility and cost-effectiveness.

Teddington are able to offer a wide range of services to meet your needs, whether your manufacturing requirement follows design and prototyping we have carried out for you, or to produce a product that is already established.

We offer the following manufacturing services:

- Brand new surface mount machines
- Through-hole production
- Selective soldering
- Second stage
- General assembly
- Cable assembly
- AOI with RGB lighting

- Pick and place
- Seven stage reflow
- Vapour phase soldering
- Box builds
- Test and inspection
- Programming
- Full procurement
- Logistics service

> **"I spoke with a dozen companies before I found Teddington. Their design engineers knew instinctively what was needed."**
>
> **LED Light Pulls Ltd**

Glen Dimplex

Teddington have worked closely with Glen Dimplex and its subsidiaries for over 50 years. We have recently created a new range of sliding gas valves for their Valor brand. This innovative new valve has been designed, prototyped and tested all under one roof and now joins our extensive production portfolio of high quality control valves for the domestic market.