

SECURITY AND DEFENCE:

Delivering a Safe Environment
for Your PCB Assembly



INTRODUCTION

Electronics sit at the heart of modern defence, with mission success often relying on highly advanced detection, protection and attack systems. Put simply, having cutting-edge technology at your fingertips isn't just an advantage – it's essential. Naturally, defence customers expect top-tier expertise, discretion and precision from their CEM partner.

That's where Offshore comes in.

We're owned and run by a team of veteran electronics engineers with decades of experience across a range of industries, with defence being one of our key areas. Every member of our highly skilled team is trained to an IPC Class 3 standard, allowing us scale-up production of complex assemblies at short notice when needed.



Our focus is simple:

Offshore adds value and minimises production costs for its customers. Working closely with your design and commercial teams, we streamline the manufacturing process to ensure you receive the highest-quality components at the best possible price, assembled and shipped with a consistently high degree of repeatability.

We take pride in being known as THE CONTRACT ELECTRONICS PEOPLE – experts in what we do, with work delivered by a team you can trust. From the moment we're introduced to your product, our mission is to guarantee customer support and exceptional aftersales service.



And when it comes to IP protection, you're in safe hands. As a Guernsey-based CEM, we operate within a secure legal framework designed to safeguard your business interests and protect your IP – minimising risk and ensuring stability in a jurisdiction known for its reliability.

CAPABILITY AND EXPERTISE



For surface mount, we offer separate Yamaha/Philips lines. These are:

- The Yamaha YSM20R and YSM10 high-speed precision placement line with DEK neo horizon screen printer and Heller 1707 MKiii reflow oven, capable of 96,000 placements per hour.
- The Yamaha YS12 and YS12F high speed precision placement line with YCP10 screen printer and Heller 1707 MKiii reflow oven, capable of 56,000 placements per hour.
- The Yamaha/Philips Topaz and Emerald placement line with DEK 265 screen printer and Heller 1707 MKiii reflow oven, capable of 21,000 placements per hour.

For conventional through hole and mixed technology assembly, we also offer a range of options, including:

- Southern Machinery S4040 axial insertion machine.
- Amistar AI6448 high speed axial component insertion machine.
- Universal Multi-mod 6772a automatic DIP insertion machine.

We are unique among CEMs, in that we are owned and managed by a dedicated team of experienced electronics engineers. This gives our customers access to a wealth of knowledge, with our team having many years' experience working across a broad range of industries and technologies.

Our state-of-the-art manufacturing facility offers modern infrastructure, cutting-edge production technology and highly efficient work flows.

To complete the assembly process, we offer:

- Teradyne Z1888 and Teradyne Z1890 ATE, J-Tag and fully functional testing facility.
- Novastar Gold Wave soldering system for repair and rework solutions.
- Kerry robotic solvent board washing equipment.
- Asymteck automated conformal coating machine.
- Mixflow epoxy potting machine.
- Inspex HD digital inspection cameras.
- Mechanical assembly and full 'box build'.
- Shipping and logistics.
- A skilled and dedicated workforce of 60, who are all IPC-A-610 class 3 trained and certified.

QUALITY ASSURANCE



Our facilities are designed to meet the highest quality standards, with a highly experienced and skilled workforce to match. Core to our philosophy is a process of continuous investment in the most advanced electronics manufacturing technologies to maximise quality, precision, and repeatable productivity.

Our fully integrated Quality Management System (QMS) is accredited to BS EN ISO9001:2015, certified by Interface. We are also regularly audited. Workmanship standards comply with IPC-A-610 to provide the consistently high build standards that are required by worldwide OEMs and end users.

We are able to provide advice and technical support to ensure that component sourcing, use and disposal complies with the Restriction of Hazardous Substances Directive (RoHS) and environmental legislation. Offshore is also working towards BS EN ISO14001 environmental accreditation to ensure we are compliant with our customers' Corporate Social Responsibility (CSR) policies, as well as ISO 9001 for quality management systems.

Recognising the importance of robust in-house security for defence builds, Offshore is also working towards Cyber Essentials certification.



Offshore's carbon footprint is significantly lower than a typical manufacturing site. This is afforded by Guernsey's community power that is mostly derived from imported sources, of which 95% is generated from hydro, wind and solar. By relying on this source, we are capable of producing PCB assemblies with a much lower level of embodied carbon, especially when compared with competitors in other regions using grid power derived from coal or natural gas. Our sustainability credentials are bolstered by a major solar PV installation, fitted to our factory roof in late 2023, which produces more than 44,000kWh per year.

Quality control and testing are critical elements of our service, providing full accountability and confidence in our procurement, prototyping, and engineering processes. We manage all quality approvals for electronics assembly and production, providing each customer with a fully validated and fit-for-purpose product.

COMPLIANCE AND SECURITY

We are compliant with both BS EN ISO9001:2015 and the IPC-A-610 class 3, denoting that we work to the highest standard of workmanship. Our facility is capable of manufacturing RoHS/RoHS (2)/RoHS (3) compliant assemblies, and we will produce a statement to this effect where required for any assembly or group of assemblies. What's more, we understand the requirements of REACH, and are committed to helping customers demonstrate their compliance.

While ensuring that IP is kept secure throughout the manufacturing process is vital in all industries, there are few sectors where this need is clearer than in defence. However, our customers can rest assured of the level of security that Guernsey offers, with its robust international IP protections and established legal framework. Its laws are designed to safeguard business interests, ensuring IP is protected in a secure jurisdiction with a low risk of disputes or regulatory changes. As such, OEMs know that their designs and processes are safe on the island, and well out of reach for those who would seek to copy, lift, or exploit key features.



What's more, with Guernsey not subject to frequent political upheaval, it offers a secure environment to businesses, making it a perfect location for long-term planning and operations.

SCALABILITY



We understand that our customers will occasionally need to amend existing orders, or make additional requests, at short notice. As such, we always seek to accommodate any way we can, with the capability to scale-up placements as required.

While many of our competitors in the manufacturing industry are governed by rigid policies and processes that stifle both agility and scalability, we are proud to take a much more fluid approach to our service offering. This 'extra as standard' mindset allows us to increase labour hours when necessary, ensuring your build is delivered on time. Our continued investment in automation also supports our response times, with the company having made several major additions to its production line since 2021.

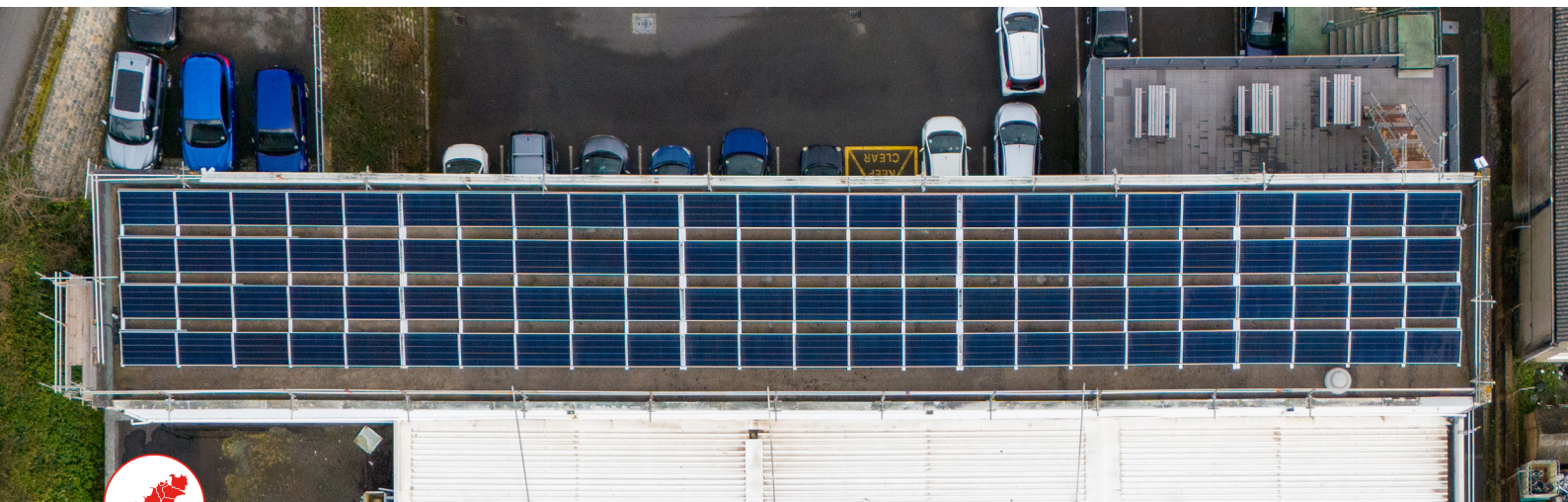
COST AND EFFICIENCY

For every project we carry out, our primary focus is to engineer value in and cost out. Our pre-production teams work closely with our client's design and commercial staff to explore ways to optimise the manufacturing process.

This allows us to improve component procurement, ensuring customers have the right part at the best possible price. This process is also aided by our ability to consolidate purchasing across our entire customer base.

Guernsey's status as an offshore jurisdiction gives businesses a high degree of regulatory flexibility, as well as a number of key tax advantages. This includes a zero-rate corporate tax policy, as well as exemptions from both capital gains tax and VAT, all of which allow us to invest more in our own services and cost reduction measures for customers.

With import tariffs and rising delivery costs on the horizon, our location will only become more advantageous, especially for OEMs dealing with suppliers in other regions of the world. Our team can mitigate these uncertainties for you.



With rail and air freight having become particularly expensive in recent years, businesses have increasingly looked to sea freight as the most viable and cost-effective way to ship goods. Guernsey's strategic position within the English Channel means it is an easy and inexpensive location to ship from and to for businesses based in the UK, as well as across Central Europe. What's more, the island's use of the Great British Pound – one of the world's strongest currencies – helps to keep importing costs to the UK mainland to an absolute minimum.

RELIABILITY AND DELIVERY



We provide continuity of supply throughout the entire lifetime of our products, offering peace of mind to customers that they can get whatever they need, whenever they need it where possible. On top of this, we are able to support legacy products, enabling users to retain their tried and tested systems and processes, instead of feeling forced to update.

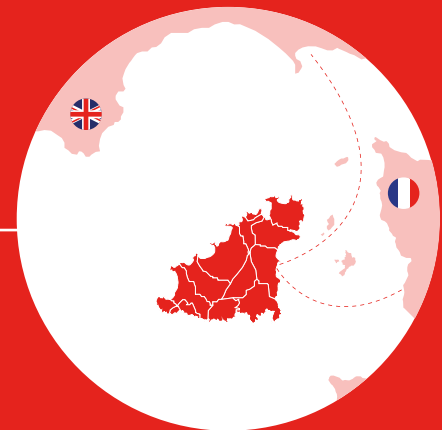
Meanwhile, our daily shipments to Portsmouth allow us to compete with CEMs based on the mainland, providing easy access to factory, and our two-day product delivery service means customer receive orders both speedily and reliably.

GEOGRAPHICAL AND STRATEGIC ALIGNMENT

In recent years, many OEMs have repatriated their manufacturing to overseas suppliers, and we at Offshore are proud to be playing a key part in this process. With its status as a British Crown dependency, Guernsey retains a strong connection with – and operates within the same time zone as – the rest of the UK. As such, customers based on the mainland can synchronise their transactions and operations far easier with us than they could by outsourcing further afield.

Despite its close ties to the UK, Guernsey is an independent entity with its own government and policymakers. This gives Offshore direct access to key people, allowing us to benefit from responsive government policies and support that's specifically tailored to our needs as a manufacturing company.

Moreover, our strong relationships with government representatives enable both efficient communication and the swift resolution of any issues that may arise.



Alongside its connections with mainland UK, Guernsey is only around 30 miles off the coast of France, meaning we can also engage seamlessly with – and ship to – customers right across Central Europe.

With daily flights from most UK airports, you can visit our manufacturing site in as little as 30 minutes. We'll be happy to show your product being made. Alternatively, one of our team can visit your headquarters for face-to-face meetings, if required.

FINANCIAL STABILITY



Guernsey stands as a leading global financial sector, boasting a thriving industry of specialists working across investment, asset management and insurance.

As a business, this gives us access to a wide range of sophisticated financial services, such as capital raising, international trade finance, and regulatory expertise; benefits that we pass onto our customers in the form of reduced costs, as well as a greater degree of agility and efficiency.

Offshore itself is also financially secure, owned by a local team of engineers. Each member of this team worked at least 30 years in the industry, growing the business throughout that period. They have now passed on their daily responsibilities to their successors, who form Offshore's current senior team.

Their continued ownership offers invaluable knowledge and experience for those running Offshore day-to-day. It also gives the business solid foundations and forward-thinking approach, allowing capital to be raised quickly for investments in automation. Our ownership model means we are not reliant on loans, grants or credit.



Meanwhile, Guernsey's economic stability is enforced further by the government's prudent fiscal management, as well as its commitment to maintaining a sustainable economy.



REPUTATION

At Offshore, we have solidified our position as a key player in the UK's manufacturing base. Guernsey's proximity to the mainland means we can tap into established networks and resources across the country's broader manufacturing mix, enabling us to compete with the industry's key players.

This connection to the rest of the UK also boosts the island's global manufacturing credibility, and opens doors for us forge crucial and mutually beneficial alliances with international partners. Indeed, we have a myriad of longstanding relationships with many of the world's leading component manufacturers and suppliers.

Our aim is to provide an unrivalled contract electronics manufacturing service, providing customers with a manufacturing partner who provides design for manufacturing, prototyping, pre-production, and a full-production resource that delivers real value to each and every project.

And that's why we call ourselves
THE CONTRACT ELECTRONICS PEOPLE.



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