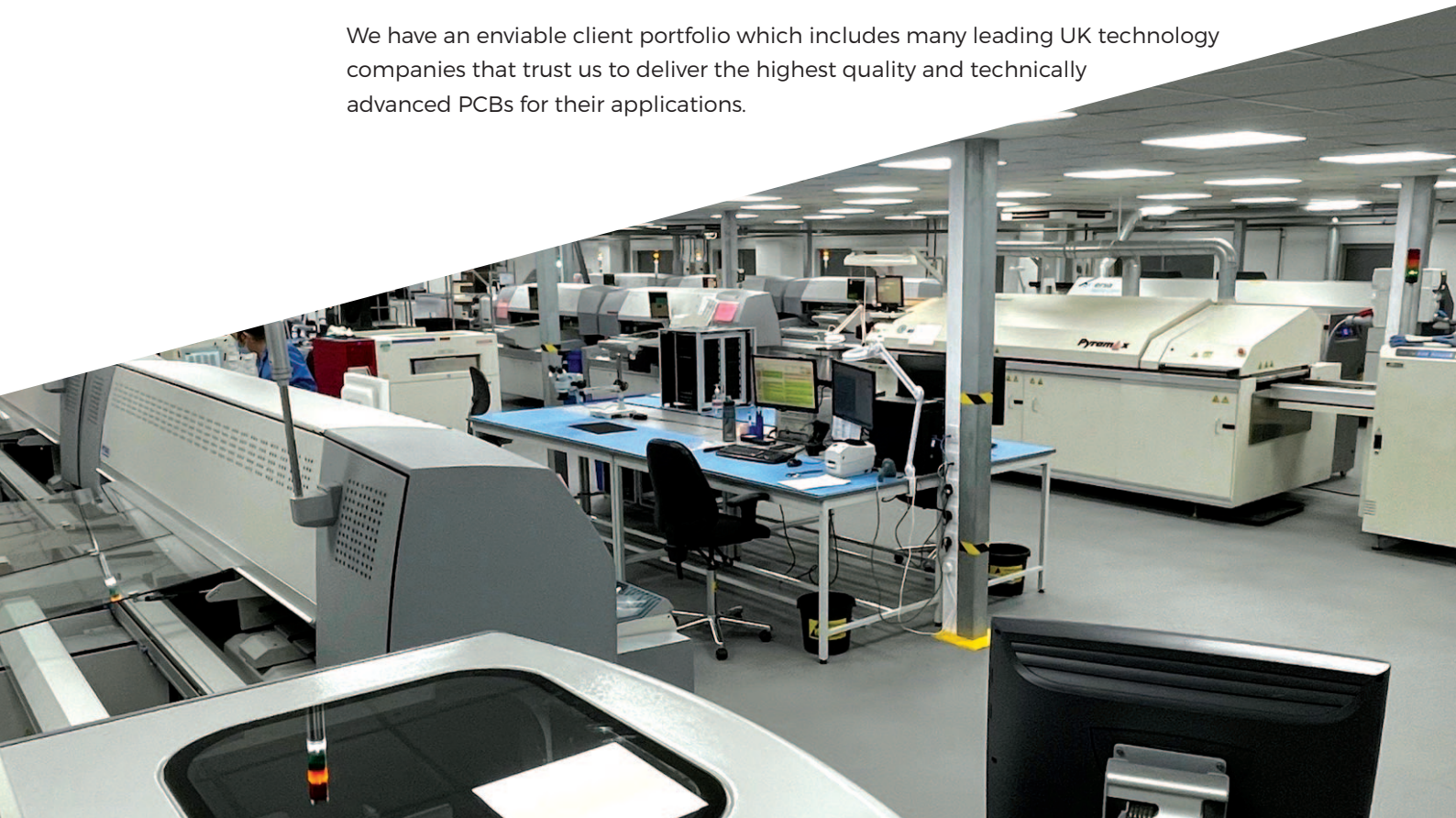
Advanced Electronic Manufacturing

Gemini Tec, the leading innovators in CEM manufacture, is a privately owned company with strong core values and a focused approach to long-term sustainability.

Providing our professional services to the electronics market for over 40 years, we have recently undergone a strategic programme of investment to remain at the forefront of the industry and exceed the expectations of our customers.

We have an enviable client portfolio which includes many leading UK technology companies that trust us to deliver the highest quality and technically advanced PCBs for their applications.



Why Choose Us?

As a fully inclusive CEM service provider, we work with you from concept to completion starting with the PCB design layout, through to NPI and finally production. Using our unrivalled experience, we can recommend improved design features and source and manage component and material inventory for your needs.

We are specialists in the low-medium volume, high mix production arena and provide our clients with a tailored, agile, and responsive service. Bringing our customer centric approach and expertise to each project, we thrive on delivering the right solution for even the most complex requirements.

Working in partnership with our clients, as part of your extended team, is part of our business ethos. We actively encourage collaboration to develop concepts and designs that maximise the value we bring to you.

We work across many sectors including:

- Commercial High Reliability
- Aerospace & Defence
- Oil & Gas Sub-Sea
- Applied Technologies & IP development
- Automotive & Motorsport
- Scientific Instruments
- Communications
- Broadcast

Our Technical Expertise

We believe in continual improvement ensuring our colleagues have the very best technical capability in the UK.

Our experienced specialist engineering teams use industry recognised programmes including Altium to create your project requirements and turn them into production ready data before our engineers manufacture your ideas into reality.

At our advanced manufacturing centre, we produce surface mount PCB products, for high reliability applications using the latest techniques and typically engineer and implement 500 projects each year.

We have the flexibility to adapt to the needs of our customers, whether that is working on a single board solution or a fully integrated service, the highest levels of attention are guaranteed. Our internal structure is perfectly placed to deliver small to medium batch production.

Why We Are an Industry Leader

At Gemini Tec we pride ourselves on being pioneers in our field by developing new production methods and adapting quickly to changes in the market. We were the first CEM in the UK to adopt solder jet paste printing, a process that accurately and consistently applies solder paste directly to the PCB pad, eliminating the need for stencil tooling. Providing granular level control of all paste typologies removes typical production flaws and allows us to achieve optimum reflow conditions first time and every time.

Our production process is supported with vapour phase, nitrogen (N2) and convection reflow enabling us to work with a wide range of standard and advanced materials. These reflow technologies allows us to seamlessly match processes and achieve a higher level of joint integrity for small and complex SMT components.

Our Asset Register

Our fully calibrated manufacturing equipment includes:

- 7 x Mycronic SMT Machines
- 3 x Solder Jet Printing Platforms
- Vapour Phase + Vacuum Reflow
- Nitrogen (N2) Reflow
- 3D Automated Optical Inspection
- Advanced X-Ray Inspection

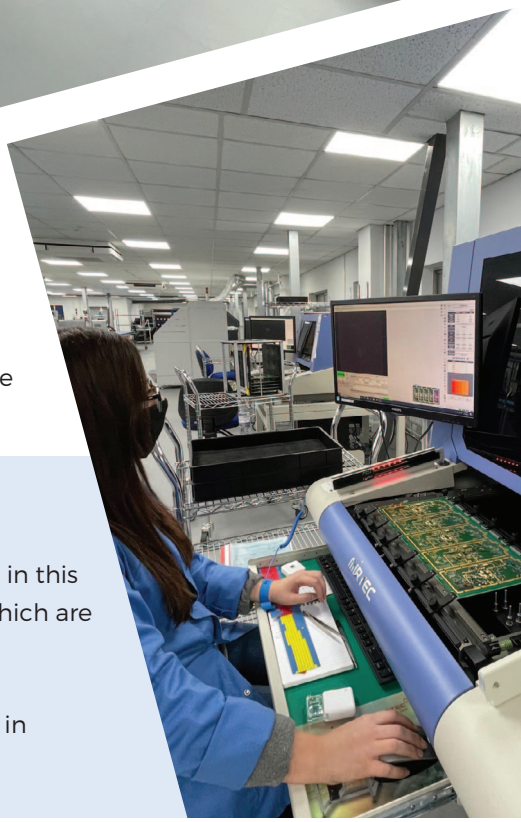
What Makes us Different

Our manufacturing services use the widest range of component technology available, including devices with short process windows and small pad geometry. Our focus on technical capability provides our customers with unique advantages when building complex/HDI PCBA products.

We meticulously tag, scan and track every component on our customers bill of materials, allowing all items to be controlled, checked and presented correctly for assembly whilst creating an audit trail of our activities.

We have applied our bespoke eTMR system across our production processes which efficiently configures customer data to provide control and visibility across the business. Tracking and recording all operations via unique barcoding provides project updates in real time and provides traceability for product conformance.

Our engineering department use powerful tools, such as Aegis Factory Logix and Ucamco, to ensure board level data is converted into the correct format relative to the production process for ultimate reliability.



Accuracy & Quality Focus

Achieving conformance in our production processes is key to our success. To assist us in this we use advanced tools such as 3D optical inspection and advanced X-Ray systems which are operated by our fully qualified IPC engineers.

For your reassurance, our company has held ISO 9001 certification for over forty years in addition Cyber Essentials.

Integrated Service

Our fully integrated manufacturing testing includes cleaning via ultrasonic or aqueous washing and we also offer conformal coating undertaken in house using our automated system. Our test department can undertake full product assembly and flying probe and functional testing to configure products for customer integration or box build.

Our build and test processes include:

- Manual & Automated Assembly
- Cable Assembly
- Box Build
- IPC-A-610 Class 3 Workmanship
- Press Fit Applications
- Conformal Coating
- System Level Test

Our passionate teams deliver a first class service, committed to providing the highest quality products and put our customers at the heart of everything we do. If you would like to discuss working with us, then please contact us.

We look forward to working with you soon.

sales@geminitec.co.uk | +44 (0) 1252 333 444

Unit 5 Brook Trading Estate | Deadbrook Lane | Aldershot | Hampshire | GU12 4XB | United Kingdom