



Gemini Tec Ltd. Leading innovators for complex & high reliability electronics in the CEM sector.

Providing our professional services to the electronics market for over 45 years, we design and manufacture complex PCB hardware for leading technology companies.

We have an enviable client portfolio which includes many market leading OEM's and progressive 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.

We support customers with a full PCB design layout service, through rapid NPI and finally with series and batch production. Using our unrivalled sector experience, we are able to greatly reduce risk and ensure the application of best practice in electronics manufacturing. Our fully supported service includes the provision of materials and inventory in accordance with AS9100 and AS6081.

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, & Aegis 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 of excellence, we produce surface mount PCB products for high reliability applications, using the very latest techniques. We are a high mix CEM implementing over 500 projects a year, placing in excess of 30 million SMT devices across 180,000 PCBA's.

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 fully calibrated manufacturing equipment includes:

- 8 x Mycronic SMT Machines
- 3 x Mycronic Solder Jet Printers
- 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 have applied a bespoke MES system across our entire operation to efficiently control every technical parameter of the product and deliver a vast range of control and visibility across the business.

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 for traceability for product conformance.

Tracking and recording all operations provides project updates in real time and captures critical data and information to deliver continuous improvement.

Our engineering department use powerful tools, such as Aegis Factory Logix and Ucamco, to ensure board level data & ODB++ is correctly engineered to suit the production process and provide 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. Fully certified in house by IPC-A-610 trainers (CIT) allowing us to instill a quality focused operation.

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

Integrated Service

Our fully integrated manufacturing service includes product cleaning with ROSE testing to IPC-TM-650, 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 a full box build or customer integration.

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
- PPAP Approval (L3)



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.



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