

Manufacturing Capabilities Overview ii

Tel: +44 (0) 121 746 3188

Fax: +44 (0) 121 746 3001

Eclectic Components offers you a broad range of manufacturing services, based on your needs.

Complete Manufacturing Service – including parts provision, supply chain management, supply chain development, assembly and test.

Partial Manufacture – Assembly from free-issue components or bought-in parts

Build to Kit – assembly of systems from customer supplied kits.

Design

Analogue and Digital electronics system design.

PCB and sub-assembly build to high integrity standards.

- IPC-A-610D - IPC/WHMA – A-620A - IPC class 3 build standards are required to be exceeded for certain customers. - Build by hand for high integrity
- Conventional hand assembly and wave soldering
- Heat sink and thermal management - High density population – 0201 package size - Conformal coating and potting - Product testing (functional)

Manufacturing

Box-Build

- A significant part of Eclectic Components Ltd's output is electronics and electrical systems combined into a COTS or bespoke housing.
- Commercial enclosures, plastic, or die-cast with interfaces and cables.
- Bespoke in machined Aluminium (aircraft grade and other)

Support

Ground Support Equipment

- Eclectic Components Ltd designs and builds ground support equipment for use with aircraft and oil/gas exploration equipment.
- Mechanical/Electrical devices such as parachute packing presses
- Electrical control boxes for centrifuges and other plant
- Electronic test boxes.
- Mechanical integration
- PCB Testing using in-house and 3rd party managed resource
- Thermal ESS - Vibration testing - ASMET - EMC

Eclectic Components Ltd also offers a wide spectrum of design possibilities

- Full design authority
- Involvement in design – technical input in system and/or design for manufacture.
- Configuration control – no system design, but management of the design file for manufacture.
- Compliance Design – EMC Compliance, CE Marking, Mil Spec etc

Mechanical Design

- in-house mechanical design, 3D CAD, IPC/CE/Mil Spec

19" Rack Assemblies

- Custom metalwork assemblies
- Custom Wiring
- DIN 41612 backplane assemblies
- Control Gear
- Production and test Fixtures

Software – in-house capability and bought-in partner services

- embedded systems C#/Asp.Net, C++, C, PERL, among others
- Speech Recognition

Cables and Connectivity

- small batch-size cabling harnesses where there is some bespoke requirement.
- Connectivity of all types.
- Multi-core/Multi-pole
- RF, COAX, Fibre Optics (FO is soon)

PCB Testing using in-house and 3rd party managed resource

- Thermal ESS - Vibration testing - ASMET - EMC