

## Manufacturing Capabilities Overview i

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**Eclectic Components offers you a broad range of manufacturing services, based on your needs. If you need something more specific, then talk to us.**

- 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.

**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)

**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 .

### **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.

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

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

### **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)
- Speech Recognition

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

- Thermal ESS
- Vibration testing
- ASMET
- EMC

### **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

### **19" Rack Assemblies**

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

### **Mechanical Design**

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