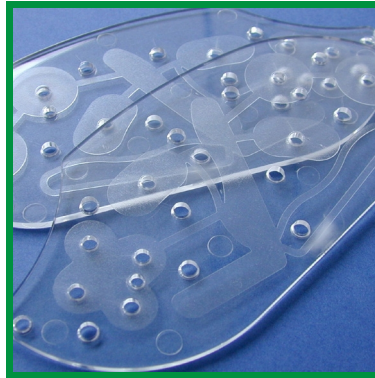


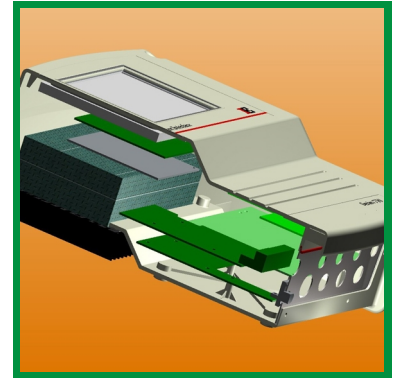
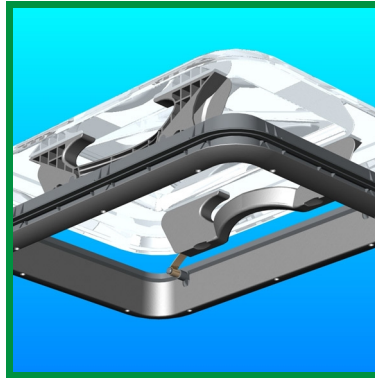
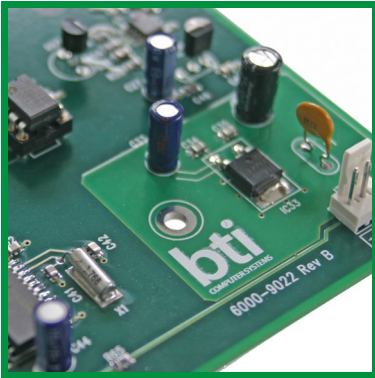
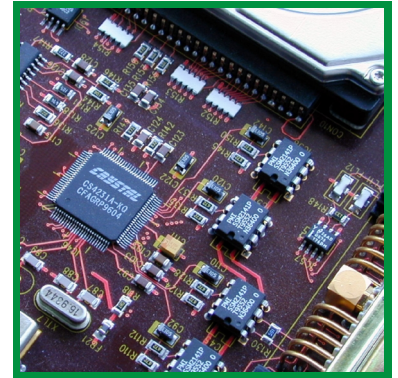
## CREATIVE INDUSTRIAL DESIGN



## ELECTRONICS DESIGN



## ENGINEERING SERVICES



- Industrial Design
- Product Graphics
- Mechanical Engineering
- Concept Visualisation
- Ergonomic Study
- Rapid Prototyping

- Electronics Engineering
- Software
- System Engineering
- Schematic & PCB Layout
- Functional Prototypes
- EMC Analysis

- Project Management
- Reverse Engineering
- 3D Modelling
- Value Engineering
- CAD Draughting
- Production Engineering

## Product Development Overview

### Why use design?

As you try to increase or maintain a share of your market you will recognise that new product development plays an important role in success.

Products must meet expectations of the user for functionality but this is often not enough. The user must also recognise desirable differences if they are going to choose your product over that of your competitors. This is where professional design input can make a difference. You have a choice, to provide that difference by making it more visually appealing, mechanically elegant, simple to use, or made from better quality materials.

Producing a product for less is always desirable if quality is not compromised but it should be a point of last resort to sell your product for less! This approach can often be a downward spiral that leaves you with no margin to create a successful business. For more information call us today on 0845 680 1024.

# Design Life Cycle

## Product development

We provide expertise in the design for manufacture of electronic control products and user interface systems. Our in house Industrial Design capability adds value to our enclosure design service that makes your products more desirable and encourages ownership from your customers.

As your development partner we offer design for complete turnkey projects or we can provide assistance in specific key skill areas as required. We pride ourselves on our creative solutions to your unique problems. We use appropriate technologies, to achieve the optimum, cost effective design. Our flexible and efficient team allows us to respond rapidly to enquiries and keep our price structure very competitive.

At 3Minds how the product looks, feels and fits together are totally integrated in our approach to design. This extends to how the electronic printed circuit boards and associated hardware interconnect. This approach leads us to develop products that are economical and simple to manufacture.

## Devise and Design

The design life cycle starts with research of your company, the product, the competition and marketplace. By working with you, we will be able to devise an in depth brief for your product idea and a project plan to deliver it.

Planning is vital to success and the avoidance of feature creep. This is how we do it;

- ▶ Specification of requirements
- ▶ Market research
- ▶ Product innovation
- ▶ Concept generation
- ▶ Research and development
- ▶ Prototyping and validation
- ▶ Certification and documentation

Conceptual designs are expressed through a variety of mediums including; styling drawings, block models and

functional hardware layouts where appropriate.

Our proposals will ensure all the elements of a product will fit and fix together and reflect the value of the product. Our decisions will be guided by your requirements for marketing, production, quality, servicing and economic factors to encourage ownership in your target market.

## Discuss and Develop

Because design is a natural process it is necessary in this phase to hold regular 'design review' meetings to discuss progress and to keep the project on track.

Engineering a 3D CAD model and developing the hardware from schematic to PCB layout follows.

The mechanical parts will be prototyped using appropriate techniques, which may include machining, fabrication or rapid technologies like stereolithography and the P.C.B.'s manufactured for validation.

## Document and Deliver

The critical path to successful manufacturing is supplier liaison, documentation and training.

Formal testing and certification ensures legal documentation is in place prior to product launch. 3Minds ensures conformance to regulations, governed by the EC Directives, (LVD, EMC, TTE and R & TTE). Conformance is achieved by our informed "designed-in" approach and not by costly and inelegant add on solutions.

Delivered with a genuine passion and commitment ensuring the success of each and every aspect of your project.

## Developing your business, by design.

3Minds actively pursues design solutions that reduce costs and time consuming operations for their customers. We strive to combine this with increased functionality and consumer benefits where possible. We offer electronics, industrial and mechanical design services.

For further information or for your free quotation please call today on 0845 680 1024 or email [sales@3minds.co.uk](mailto:sales@3minds.co.uk)



**3MINDS**

Developing  
your  
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by design.



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